

Click Pronouns in N|uu
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Abstract: First and second person pronouns in N|uu have both a simple form and a click form. I show that this distinction does not correspond to the weak pronoun versus strong pronoun distinction found in other languages. Rather, the distribution of simple pronouns and click pronouns is determined by the linker. I propose that pronouns in N|uu involve a Part node that can either be empty or filled by a dental click (amongst other possibilities), and that an empty Part node cannot immediately follow the linker (the Simple Pronoun Constraint).

Keywords: linker, structure of pronouns, participant head, strong and weak pronouns.

1. Introduction

N|uu has two series of pronouns, which I will label the simple pronouns (1) and the click pronouns (2). In (2a), the click pronoun is the subject of a yes-no question. In (2b), the click pronoun follows the linker.

- (1) η ke si lʔae (simple pronoun)
 1SG DECL FUT go
 “I will go.”
- (2) a. η|η si lʔae (click pronoun)
 1SG FUT go
 “Will I go?”
- b. ku-a ʔʔii η η|η (click pronoun)
 3SG-DECL think LK 1SG
 “He is thinking about me.”

The click pronouns all start with a dental click. The main goal of this paper is to give an account of the distribution of the simple pronouns and the click pronouns.

Putting aside third person pronouns and the 1EXCL.PL pronoun (see (4) below), the simple pronouns do not appear as the subject of a yes-no question, nor can they directly follow the linker. I argue that there is a constraint which prohibits a linker preceding simple 1st or 2nd person pronouns:

- (3) The Simple Pronoun Constraint
 *LK + simple pronoun [1st or 2nd person]

The outline of the paper is as follows. Section 2 presents a brief overview of the N|uu pronominal system. Section 3 shows that both simple pronouns and click pronouns can appear in contexts reserved for strong pronouns cross-linguistically. Section 4 argues that the Simple Pronoun Constraint determines the distribution of click pronouns. Section

5 discusses the syntactic position of the clause initial linker in questions. Section 6 presents an analysis of the structure of click pronouns and identifies the dental click in click pronouns as a separate morpheme. Section 7 discusses the Gap Constraint. Section 8 discusses third person pronouns. Section 9 is the conclusion.

N|uu is a Khoisan language spoken in and around Upington in the Northern Cape of South Africa. All of the data for this paper was collected during summer fieldwork trips to South Africa in 2004, 2005, and 2007. Some information about pronouns in N|uu is contained in Collins 2004 and Collins and Namaseb 2007. Background information on linkers can be found in Collins 2003, 2004, 2014 and Baker and Collins 2006.

2. Overview of the Pronouns of N|uu

Part of the pronominal paradigm of N|uu is presented below (for the complete paradigm see Collins and Namaseb 2007: 26)

(4)	Pronouns	Simple Pronouns	A-Pronouns	Click Pronouns
	1SG	ŋ	na	ŋ ŋ
	2SG	a	a	g a
	3SG			
	human	ku	kua	
	non-human	ki	kia	
	1PL (incl)	i	ca	gli
	1PL (EXCL)	si	sa	
	2PL	u	ba	g u
	3PL			
	general	kin	kina	
	object	kike	kika	

The A-pronouns in the above table are really a combination of the simple pronoun and the declarative marker *-a* (plus a few phonological changes). The simple pronouns are called “simple” since they do not involve the dental click of the click pronouns.

The click pronouns are formed by adding a dental click to the simple pronouns:

(5)	1SG:	g	+	ŋ	→	ŋ ŋ
	2SG:	g	+	a	→	g a
	1PL:	g	+	i	→	gli
	2PL:	g	+	u	→	g u

I suspect that the phonetic voicing of the dental clicks in the click pronouns is correlated to tone. As noted by Collins and Namaseb (2011: 26), the click pronouns are pronounced with a low tone, as opposed to the non-click pronouns which are pronounced with high tone. Furthermore, note that in the first line, we might expect *ŋg|ŋ* or *g|ŋ* but get *ŋ|ŋ* instead. I will not pursue this phonological issue here.

All the simple pronouns are pronounced with a glottal stop (not indicated in the transcriptions in this paper). When the dental click combines with the simple pronouns

(to form the click pronouns), the glottal stop is not retained. If it were, the resulting clicks would be as in (6), but these are not the correct forms:

(6)	1SG:	g	+	ʔη	→	*η ʔη
	2SG:	g	+	ʔa	→	*g ʔa
	1PL:	g	+	ʔi	→	*g ʔi
	2PL:	g	+	ʔu	→	*g ʔu

These facts suggest that N|uu pronouns must phonetically have a consonant C onset. The distinction between the simple pronouns and the click pronouns is that in the case of the simple pronouns C is filled by a glottal stop. In the case of the click pronouns C is filled by a dental click.

My conclusions about the glottal stop here coincide with the conclusions of Miller et. al. (2009: 133): “Finally, the glottal stop occurs only in word-initial position and in a few lexicalized forms, and is phonetically weak. We take it to be a prosodically conditioned sound, rather than a separate phoneme. That is, it is inserted in onsetless syllables so that every syllable has an onset.”

3. Both Simple and Click Pronouns Appear in Strong Contexts

In many languages there are two sets of pronouns: weak/clitic pronouns vs. strong pronouns. These two sets of pronouns differ in syntactic distribution (see Cardinaletti and Starke 1999: 150-152). In particular, strong but not weak/clitic pronouns appear in left peripheral positions and may be modified and coordinated. Furthermore, in many languages the strong forms of pronouns are transparently more morphologically complex than the weak forms (see Cardinaletti and Starke 1999: 174). For this reason, a plausible hypothesis would be that the simple pronouns in N|uu are weak pronouns, while the click pronouns are strong pronouns.

To get an idea of the distinction between weak pronouns (including clitic pronouns) and strong pronouns, consider the case of English: *you* vs. *ya*, and *them* vs. *em*. The latter are weak (or perhaps clitic) forms, and correspondingly, they cannot be clefted:

- (7)
- a. I saw you/ya
 - b. I saw them/em
 - c. It is you/*ya that I saw
 - d. It is them/*em that I saw

Although it is true that click pronouns in N|uu are strong in a phonological sense (in that the dental click could be characterized as a stronger consonant than the glottal stop), I will show that syntactically it is not possible to describe click pronouns as strong and simple pronouns as weak. I will show that both simple and click pronouns in N|uu can appear in contexts which normally rule out weak pronouns in other languages. In particular, I will show that both simple pronouns and click pronouns can be modified and coordinated and appear in left peripheral positions.

In the focus construction in Nluu, the simple pronouns are used. The examples in (8) illustrate subject focus, and the examples in (9) illustrate object focus (see Collins and Namaseb 2014: 69):

- (8) a. a kee ɭu sisen
 2SG it.is not work
 ‘‘It is you who does not work.’’
- b. i kee ɭu sisen
 1PL it.is not work
 ‘‘It is us who do not work.’’
- (9) a. ŋ kee caʼbakusi !ʔai
 1SG it.is Caqbakusi call
 ‘‘It is me who Caqbakusi is calling.’’
- b. u kee caʼbakusi !ʔai
 2PL it.is Caqbakusi call
 ‘‘It is y’all who Caqbakusi is calling.’’

The simple pronouns can also be used as vocatives in the context of imperatives:

- (10) a ŋ loba, khu-ɭʔŋ-a
 2SG 1SG child stand-up-IMP
 ‘‘You my child, stand up!’’
- (11) Hey a, !ai-a
 Hey 2SG run-IMP
 ‘‘Hey you, run!’’

The simple pronouns can be used in coordination:

- (12) a. ŋ ŋ|a siso ke ɭqhõʼo
 1SG and Siso DECL dance
 ‘‘Me and Siso are dancing.’’
- b. a ŋ|a siso ke si se
 2SG and Siso DECL FUT come
 ‘‘You and Siso will come.’’

The simple pronouns can be modified by numerals and quantifiers in subject and object position:

- (13) a. u !ʔuu-ko ke si kaŋlla ki-ʔa
 2PL two-pl DECL FUT stay here

“You two will stay here.”

- b. i huniki ke si !ʔae
 1PL all DECL FUT go
 “We all will go.”
- (14) a. ku-a !ʔai u !ʔuu-ko
 3SG-DECL call 2PL two-PL
 “He is calling you two.”
- b. ku-a !ʔai u huniki
 3SG-DECL call 2PL all
 “He is calling you all.”

There is some evidence that [you two] and [you all] form constituents in the above examples. The object form of the pronoun is *kike*. When the object pronoun is modified by “two” and “all”, it becomes *kin*.

- (15) a. ku-a !ʔai kike
 3SG-DECL call 3PL.OBJ
 “He is calling them.”
- b. ku-a !ʔai kin !ʔuu-ko
 3SG-DECL call 3PL two-PL
 “He is calling them two.”
- c. ku-a !ʔai kin huniki
 3PL-DECL call 3PL all
 “He is calling them all.”

If [kin !ʔuu-ko] and [kin huniki] were not constituents in the examples above, then the 3rd person plural pronoun would be the direct object, and *kike* would be chosen.

Lastly, the simple pronouns can be modified by “only”:

- (16) a. ŋ !ʔooke ke si ʋun
 1SG only DECL FUT sleep
 “Only I will sleep.”
- b. a !ʔooke ke si !ʔa |x’oa
 2SG only DECL FUT go hunt
 “Only you will go hunting.”

The click pronouns appear in the same contexts as the simple pronouns. Click pronouns can be focused in the context of a yes-no question, as shown below.

- (17) gla xe lu s̥sen

2SG FOC.Q NEG work
 “Is it you who does not work?”

- (18) $\eta\eta$ xe ca^hbakusi !^hai
 1SG FOC.Q Caqbakusi call
 “Is it me who Caqbakusi is calling?”

I have not been able to find click pronouns in the context of a vocative. A vocative pronoun preceding a yes-no question is still in the simple form. I return to an explanation of this fact in section 4.2.

- (19) Hey a, gla lhaa ki
 Hey 2SG 2SG break 3SG.NH
 “Hey you did you break it?”

When a coordination involving a pronoun appears as the subject of a yes-no question, there is much variation between speakers as to the correct form. The two options offered by the informants are given below:

- (20) a. gla si se η la siso
 2SG FUT come and Siso
 “Will you come with Siso?”
- b. a η la siso (xe) si se
 2SG and Siso FOC.Q FUT come
 “Will you and Siso come?”

(20a) shows that some informants simply preferred to break up the coordinate structure, putting one conjunct at the end of the sentence in a comitative construction. Under this option, the subject is a click pronoun. (20b) is a yes-no question, but the first conjunct does not appear in the click form. I return to this fact at the end of section 4.2.

Click pronouns appears in coordination following a linker:

- (21) a. na ^h?ii η gla η la siso
 1SG-DECL think LK 2SG and Siso
 “I am thinking of you and Siso.”
- b. n-a !auke-a η gla η la a ^hhun
 1SG-DECL afraid-PFV LK 2SG and 2SG dog
 “I am afraid of you and your dog.”

Click pronouns in subject position can be modified by numerals and quantifiers in the context of a yes-no question:

- (22) a. glu !^huu-ko (xe) si ka^h η la ki-^ha

2PL two-PL FOC.Q FUT stay here
 “Will you two stay?”

- b. gli huniki xe si !ʔae
 1PL all FOC.Q FUT go
 “Will we all go?”

When a click pronoun follows a linker, it can also be modified by a numeral or a quantifier:

- (23) a. ku-a †ʔii ŋ gli !ʔuu-ko
 3SG-DECL think LK 1PL two-PL
 “He is thinking of us two.”
- b. ku-a †ʔii ŋ gli huniki
 3SG-DECL think LK 1PL all
 “He is thinking of us all.”

Click pronouns can also be modified by “only” when the modified pronoun is the subject of a yes-no question:

- (24) gla !ʔooke xe si !ʔaa lx’oa
 2SG only FOC.Q FUT go hunt
 “Will only you go hunting?”

In sum, the simple pronouns and click pronouns appear in the same contexts, including contexts where strong pronouns appear cross-linguistically. Therefore it is not possible to explain the different syntactic distributions of simple pronouns and click pronouns in terms of a syntactic difference in strength (clitic/weak versus strong).

Furthermore, trying to elicit click pronouns in the context of contrastive focus in object position fails:

- (25) siso ke lu !ʔai a, a ha !ʔai ŋ
 Siso DECL NEG call 2SG and 3SG call 1SG
 “Siso is not calling you, he is calling me.”

Similarly, a focused object associating with “only” also appears in the simple form:

- (26) siso ke neti !ʔai ŋ
 Siso DECL only call 1SG
 “Siso is calling only me.”

In fact, I have never come across a click pronoun in the subject position of a declarative clause in over 10,000 sentences of data elicited from my informants, nor in four fully transcribed folk tales. Nor have I heard a click pronoun being used in this

position in discussions between the informants. Similar remarks hold for the use of click pronouns in direct object position.

4. The Simple Pronoun Constraint

The generalization governing the use of click pronouns in N|uu is the following (see Collins and Namaseb 2014: 30):

- (27)
- a. If a first or second person pronoun immediately follows a linker, the pronoun must take the click form.
 - b. If a question starts with a first or second person pronoun, the pronoun must take the click form.
 - c. In all other contexts, a first or second person pronoun must take the simple form.

In this section, I will give examples illustrating the two parts of this generalization and show how (27a,b) can be accounted for in terms of one constraint.

4.1. Non-Question Contexts

I propose that the distribution of simple pronouns is governed by the constraint in (28). I return to a possible motivation for this constraint in section 6:

- (28) **Simple Pronoun Constraint**
 *LK + simple pronoun [1st or 2nd person]

In order to avoid a violation of this constraint, a click pronoun is used. Consider again the example in (2b), repeated below as (29):

- (29) ku-a ʔii ŋ ŋ|ŋ
 3SG-DECL think LK me
 “He is thinking about me.”

In this example, use of a simple pronoun following the linker would have violated the Simple Pronoun Constraint, so a click pronoun is used instead.

A similar explanation holds for pronouns modified by numerals and quantifiers:

- (30) a. n-a ʔii ŋ glu !ʔuuko
 1SG-DECL think LK 2PL two
 “I am thinking about you two.”
- b. ku-a ʔii ŋ gli huniki
 3SG-DECL think LK 1PL all
 “He is thinking of us all.”

The Simple Pronoun Constraint does not require that there be any syntactic relationship other than adjacency between the linker and the simple pronoun. This explains why the possessor of a noun phrase following the linker must be a click pronoun:

- (31) a. n-a #ʔii ŋ gla xaŋki
 1SG-DECL think LK 2SG mother
 “I am thinking about your mother.”
- b. n-a !auke-a ŋ gla #hun
 1SG-DECL afraid-PFV LK 2SG dog
 “I am afraid of your dog.”

In fact even if the possessor of a possessor is a first or second person pronoun and it immediately follows the linker, it must be a click pronoun:

- (32) ku-a #ʔii ŋ ŋ|ŋ xanki se #hun
 3SG-DECL think LK 1SG mother POSS dog
 “He is thinking about my mother’s dog.”

The subject of a relative clause modifying the post-linker noun phrase is not a click pronoun, as predicted, since it is not adjacent to the linker:

- (33) ku-a #ʔii ŋ #hun he ŋ xa !ʔama-a
 3SG-DECL think LK dog REL 1SG PST buy-PFV
 “He is thinking of the dog I bought.”

If a pronoun is extracted away from the linker, it no longer appears in the click form, as predicted, since it is no longer right adjacent to the linker:

- (34) a kee ku #ʔii ŋ|la
 2SG it.is 3SG think LK
 “It is you he is thinking about.”

Note that in the above example the linker has changed from *ŋ* to *ŋ|la*. I return to this fact in section 7.

Lastly, (21a,b) show that in the first conjunct of a coordination immediately following the linker, the click pronoun is used. However, (21b) also shows that when the pronoun is in the second conjunct (“your dog”) and therefore is not adjacent to the linker preceding the coordination, the simple form is used.

4.2. Questions

The above account of the distribution of click pronouns in terms of the Simple Pronoun Constraint leaves unanswered the question of why click pronouns are normally

needed in the subject position yes-no questions. The answer to this question comes from an analysis of embedded questions, which are always preceded by a linker.

- (35) η $\parallel u$ $\parallel hae-a$ η $g|a$ $ts'a?a$ η
 1SG NEG know-PFV LK 2SG like 1SG
 “I don’t know if you like me.”
- (36) η $\parallel u$ $\parallel hae$ η cui xe a $\sharp ao-a$
 1SG NEG know LK what FOC.Q 2SG want-PFV
 “I don’t know what you want.”
- (37) $\parallel ala^e$ ke $kacuu-?i$ η $g|a$ $\sharp ao-a$ $\tilde{a}aki$
 $\parallel A\parallel aqe$ DECL ask LK 2SG want-PFV food
 “ $\parallel A\parallel aqe$ is asking if you want some food.”

DP complements to the same verb “know” do not take a linker:

- (38) a. η $\parallel u$ $\parallel hae-a$ a $kali$
 1SG NEG know-PFV 2SG name
 “I don’t know your name.”
- b. $n-a$ $\parallel hae-a$ ku
 1SG-DECL know-PFV 3SG
 “I know him.”

Furthermore, declarative clausal complements are never preceded by a linker:

- (39) $n-a$ $\parallel hae-a$ a $ts'a?a$ η
 1SG-DECL know-PFV 2SG like 1SG
 “I know you like me.”
- (40) a xa $ku-a$ a $\sharp ao-a$ $\tilde{a}aki$
 2SG-DECL PST say-PFV 2SG want-PFV food
 “You said you wanted food.”
- (41) $n-a$ $\sharp ?ii$ i si $\parallel ?ae$
 1SG-DECL think 1PL FUT go
 “I think we should go.”

I propose that even in matrix (non-embedded) questions, there is a pre-clausal linker. This would explain the fact that a subject in a yes-no question must be a click pronoun, as shown in (42) repeated from (2a) above:

- (42) $\eta|\eta$ si $\parallel ?ae$

1SG FUT go
 “Will I go?”

Such an analysis supposes that if the linker is initial in the sentence, it is not pronounced (indicated by \emptyset in the examples below). The analysis of a matrix (main clause) yes-no question is sketched in (43) and (44). (43) is disallowed by the Simple Pronoun Constraint. In (44), there is a phonologically null linker followed by a click pronoun.

(43) \emptyset [ŋ si lʔae] (* by Simple Pronoun Constraint)
 LK 1SG FUT go
 “Will I go?”

(44) \emptyset [ŋ|ŋ si lʔae] (OK by Simple Pronoun Constraint)
 LK 1SG FUT go

In (43, 44), I postulate a phonologically null linker. One question about this analysis is how the linker comes to be phonologically null. One possibility is that the linker is phonologically deleted in (43, 44). The other possibility is that there are two forms of the linker (\emptyset and ŋ) subject to different syntactic conditions. Since I do not know of any other ŋ deletion processes in Nluu, I will adopt the latter analysis. However, both analyses leave open the question of why the linker must be phonologically null preceding the main clause, but not preceding an embedded clause. I will not pursue this issue here.

The above analysis extends to the pronominal possessor of a noun phrase in the subject position of a yes-no question:

(45) gla xaŋki lʔae-a
 2SG mother go-PFV
 “Did your mother go?”

Since the possessor of the subject is adjacent to the clause initial (phonologically null) linker, it needs to be a click pronoun.

From the perspective of this analysis, consider other possible syntactic positions for a pronoun (other than subject position). First, the direct object of a yes-no question (or the possessor of a direct object) is never a click pronoun:

(46) a. ŋ|angusi !ʔai ŋ
 N|angusi call me
 “Is N|angusi calling me?”
 b. ŋ|angusi !ʔai ŋ xaŋki
 N|angusi call 1SG mother
 “Is N|angusi calling my mother?”

The facts in (46) are explained by my analysis since neither the direct object pronoun, nor the possessor of the direct object are adjacent to the clause initial linker.

Consider now focus in yes-no question. If the object is focused in a yes-no question, and the object is a first or second person pronoun, then it must be a click pronoun.

- (47) a. η | η xe a !?ai
 1SG FOC.Q 2SG call
 “Is it me who you are calling?”
- b. gla xe ku !?ai
 2SG FOC.Q 3SG call
 “Is it you who he is calling?”

Once again, this fact follows directly from my analysis, on the assumption that the linker is higher than the position of the focused constituent:

- (48) \emptyset [_{CP} η | η xe a !?ai]
 LK 1SG FOC.Q 2SG call

In fact, embedded interrogatives involving focus show exactly the ordering where the linker precedes the focused constituent:

- (49) η \parallel u \parallel hae-a η gla xe ku !?ai
 1SG NEG know-PFV LK 2SG FOC.Q 3SG call
 “I don’t know if it is you that he is calling.”

Note that in (47a) the subject is no longer a click pronoun, although normally the subject of a yes-no question does take the click form (see (2a)). On my analysis, the reason the subject is a simple pronoun in (47a) is that it is not clause initial (since there is a focused constituent preceding the subject). Since the simple pronoun in (47a) is not clause initial, it will not be adjacent to the clause initial linker.

The above analysis of focused pronouns extends to the possessor of a focused object. When the focused object has a pronominal possessor in a yes-no question the pronominal possessor is a click pronoun as shown in (50b).

- (50) a. η xa η ki kee a !?ai
 1SG mother it.is 2SG call
 “It is my mother who you are calling.”
- b. η | η xa η ki xe a !?ai
 1SG mother FOC.Q 2SG calling
 “Is it my mother who you are calling?”

The possessor in (50b) is a click pronoun since it immediately follows the clause initial linker (which is phonologically null). Note that the subject in (50b) is a simple pronoun since it is not clause initial, and it is not adjacent to the linker.

The Simple Pronoun Constraint explains an asymmetry between how-questions and other types of questions with respect to the use of click pronouns. Consider first a wh-question where the wh-word moves to Spec CP:

- (51) cui xe a kx'u
 what FOC.Q 2SG do
 “What are you doing?”

In the above example, the 2SG simple pronoun is used, since it is not adjacent to the clause initial linker. How-questions on the other do not involve movement of a wh-word to Spec CP, and as predicted the 2SG click pronoun must be used:

- (52) a. gla jee ŋ khu -lʔŋ-a
 2SG how MANN khu go.out-PFV
 “How did you get up?”
- b. gla si jee ŋ lʔae ŋ g!ari
 2SG FUT how MANN go LK Upington
 “How will you go to Upington?”

The difference seen above between how-questions and other types of questions is mirrored in the difference between where-questions involving wh-in-situ and where-questions involving movement.

- (53) a. kija xe a hoo ŋla
 where FOC.Q 2SG come.from LK
 “Where do you come from?”
- b. gla hoo ŋ kija
 2SG come.from LK where
 “Where do you come from?”

When “where” is clausal initial (in Spec CP), the simple pronoun is used in subject position. When “where” is in-situ, the click pronoun is used. This follows directly from the Simple Pronoun Constraint, since only in (53b) is the pronoun adjacent to the clause initial linker. In (53a), “where” intervenes between the clause initial linker and the simple pronoun.

Returning to the vocatives with yes-no questions, repeated below in (54):

- (54) Hey a, gla lhaa ki
 Hey 2SG 2SG break 3SG.NH
 “Hey you did you break it?”

The question is why the vocative pronoun is a simple pronoun. One possibility is that the vocative appears outside the scope of the clause initial linker, as in the following representation:

- (55) Hey a, [Ø gla lhaa ki]
 Hey 2SG LK 2SG break 3SG.NH]
 “Hey you did you break it?”

Such an analysis is supported by the fact that in (54) the subject is a click pronoun, indicating that it is immediately preceded by a phonologically null linker.

The only counter-example that I know of to the Simple Pronoun Constraint is (20b). Since (20b) is a question, there is a clause initial (phonologically null) linker. However, the first conjunct of the focused subject is a simple pronoun (instead of the expected click pronoun). It may be that there is an analysis of (20b) along the lines of (55), where the simple pronoun appears preceding the clause initial linker. The data that I have on the use of pronouns in coordinate structures is limited, so I will not pursue this issue here.

Lastly, consider yes-no questions of sentences containing an embedded declarative. Only the subject of the matrix clause is a click pronoun, since only the subject of the matrix clause is adjacent to the clause initial linker.

- (56) gla xa ku-a a †ao-a ãaki
 2SG past say-PFV 2SG want-PFV food
 “Did you say you wanted food?”

5. The Syntactic Position of the Linker

The account of the distribution of click pronouns in questions in section 4 crucially relied on the assumption that there is a clause initial linker in both matrix and embedded questions. In matrix questions, the linker is phonologically null. I have yet to address the structural position of the linker in clause initial position. In this section, I will compare two views. On one view the clausal initial linker plays the role of a complementizer. On the other view, the clause initial linker plays the same syntactic role as all other linkers (and in particular, it is not a complementizer). I argue that the evidence favors the latter view.

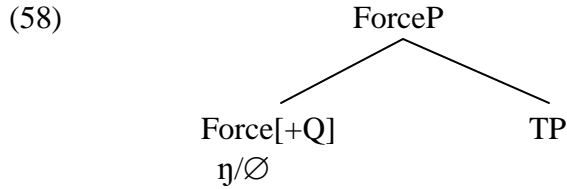
5.1. The Linker as a Complementizer

One possibility is that the linker in the clause initial position of questions is a kind of interrogative complementizer, comparable to *if* in English.

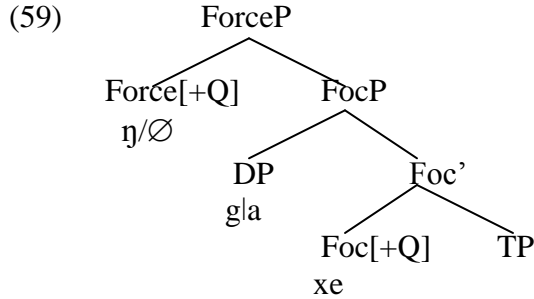
- (57) I wonder if John is here.

One difference between *if* and the linker in questions is that *if* does not appear with any kind of wh-phrase (where some wh-phrase has moved to clause initial position).

However, putting this difference aside, I propose that the linker heads a ForceP projection, which has a TP complement.



Examples such as (47a) and (49) shows that the interrogative complementizer appears outside of the position of a focused constituent. *xe* is the head of a focus functional projection used in interrogative clauses. Assuming the structure of the left periphery argued for in Rizzi 1997, the interrogative nature of the clause is encoded twice, once in the force head, and again in the focus head. The syntactic structure for the embedded clause of (49) is illustrated below:



5.2. The Linker Introduces Interrogative CP

A different possibility for analyzing the linker that introduces questions is that it is analogous to the linker that introduces subject matter arguments in N|uu (example from Collins and Namaseb 2011: 25):

- (60) a ku neti #ʔii η gao a
 and 3SG only think LK thing this
 “and he just thinks about this thing.”

In other words just as the linker introduces a subject matter argument, the linker would also introduce an embedded question. On this view, the linker would not be an interrogative complementizer, but it would be analogous to a preposition introducing a question (e.g., the preposition *about* in “I asked about whether John was coming home.”).

On this view, there is no reason to say that the linker also plays a role as a complementizer. In other words, the analysis laid out in section 5.1 assumes that there are two separate morphemes, a linker LK and a complementizer Force, which is implausible (in part because both LK and Force would have exactly the same effect on the following pronouns).

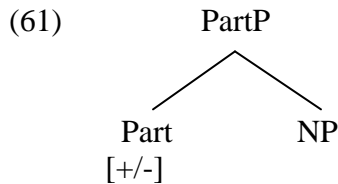
The problem with the account of the linker as a clause introducer is that it does not naturally account for how the linker appears with matrix questions. In all other cases

in N|uu and other languages, the linker is part of the syntax of the verb phrase (see Collins 2014 for an overview of the syntax of the linker in Khoisan). One possibility is that one could invoke Ross' 1970 performative analysis, where even matrix clauses are introduced by a null performative verb (*such as say or ask*). Under such an analysis, the linker would be introduced as part of the verb phrase of the performative verb.

6. The Structure of N|uu Pronouns

Clearly, click pronouns are internally complex. The dental click appears to be a separate morpheme in the 1SG, 1PL, 2SG and 2PL pronouns. If the dental click is a morpheme, then what does it mean and what is its syntactic role? In this section, I will give an analysis of the internal structure of N|uu pronouns. The internal structure that I give will be instrumental in helping to explain the Simple Pronoun Constraint.

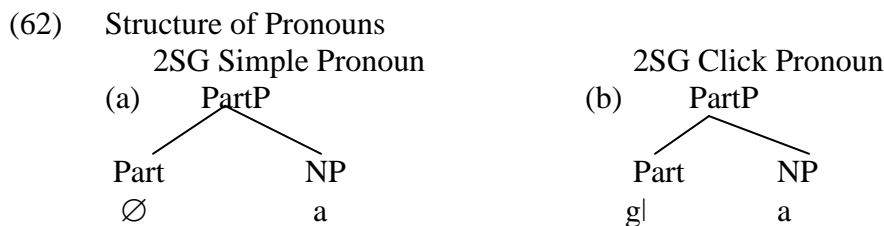
The fact that the dental click only appears in first and second person pronouns suggests there should be a single syntactic feature that covers both first and second person, both in the singular and plural. Harley and Ritter (2002) make reference to the feature “participant”, which encompasses first and second person. I propose there is a syntactic node Part (“participant”) and that the dental click fills this node.



I take the PartP in (61) to be part of the DP, but I do not pursue the issue of the exact structural relation of PartP to D and to other DP internal function heads here.

A [+] value of Part is realized as either null (yielding the simple pronouns) or as the dental click (yielding the click pronouns). A [-] value of Part is realized as [k], which is found with all third person pronouns (see section 8).

The structures of the 2SG simple pronoun and 2SG click pronoun are shown below.



The Simple Pronoun Constraint explains why simple pronouns do not appear after the linker. However, I have not addressed the issue of why click pronouns only appear following the linker. In other words, even with the Simple Pronoun Constraint, nothing stops the click pronouns from having a wider distribution. I propose that the following constraint holds:

(63) **The Click Pronoun Constraint**

*Click Pronoun, unless immediately right adjacent to LK.

A possible explanation of (63) is that the use of click pronouns is like do-support in English, in that it is a Last Resort process. Unless the Simple Pronoun Constraint forces the structure (62b), the structure in (62a) is obligatory.

An alternative analysis to the one I have given here would be to analyze the dental click that is found after the linker as part of the linker itself. So consider again (31a). On the alternative analysis, one form of the linker would be $\eta g|$. This is the form of the linker that would be used preceding simple pronouns. When used preceding a simple pronoun (such as *a* 2SG), the $g|$ would resyllabify as the onset of the pronoun. Such an analysis would account for the fact that the click pronouns are only found when there is an immediately preceding linker (since it is the immediately preceding linker that supplies the dental click).

So the alternatives are: in (31a) the linker is $\eta g|$ followed by the simple pronoun, or (as argued in this paper), the linker is η followed by the click pronoun. I will call the former the complex linker hypothesis.

There are a number of problems with the complex linker hypothesis. First, the dental click only shows up with pronouns, not other words, not even vowel initial words following the linker (see Collins and Namaseb 2011: 50). Therefore, no simple phonological context (e.g., the linker preceding a vowel initial word) determines the presence of the $g|$. So this suggests that the dental click is part of the pronoun, not part of the linker itself.

Second, as noted in section 7, the linker has a non-reduced form used in extraction contexts: $\eta||a$. If the linker itself introduced a click before the simple pronouns, then one wonders why the lateral click is not selected. In that case, the linker would have (contrary to fact) two forms (amongst others): $\eta||a$ (for extraction contexts) and $\eta|$ (before simple pronouns). This fact suggests that the dental click is not part of the linker itself, but is part of the pronouns.

Third, on the complex linker hypothesis, the differing forms of the linker would be: $\eta||a$ (extraction contexts), $\eta g|$ (before simple pronouns), \emptyset (clause initial), η (all other contexts). $\eta||a$ for extraction contexts is pronounced as a single syllable (a nasalized lateral click). On the other hand, η followed by $g|a$ in (31a) is pronounced as two syllables. Saying that the linker is of the form $\eta g|$ would make the claim that the linker has a phonological shape (engma followed by click) different from any other morpheme in the language. On the analysis in this paper, one form of the linker is η (engma) which is also the simple form of the 1SG pronoun.

Fourth, on the analysis given here, there are three forms of the linker: $\eta||a$, \emptyset , η . On the complex linker hypothesis, there are four forms: $\eta||a$, $\eta g|$, \emptyset , η . Two of the four forms involve the syllabic η . This fact suggests that η is in fact a separate morpheme, contrary to the complex linker hypothesis, where $\eta g|$ is a single morpheme (a form of the linker).

These four arguments together argue against the complex linker hypothesis and hence for the analysis given in this paper.

Yet another alternative analysis is that in (31a), there are three separate components: the linker, the dental click and the simple pronoun: [LK -- g| -- Simple Pronoun]. On this view, there would not be any click pronouns, and the dental click would not be the filler of a Part node in the pronoun. Rather, when the linker precedes the simple pronoun, an extra morpheme needs to be inserted between them. Richard Kayne (personal communication) suggests that there is an analogy with the fact that in Italian “certain (more locative-like) prepositions either optionally or obligatorily take *di* before a simple strong pronoun, as in Italian *su di lui*.” In this example, *su* is “on”, *di* is “of” and *lui* is “him”. A further relevant fact is that the *di* is not used if the following DP is a lexical (non-pronominal) DP.

There are number of problems with this hypothesis, which I will call the independent morpheme hypothesis (since the dental click is hypothesized to be a morpheme that is independent of the pronoun).

First, the putative independent morpheme g| has no other use in Nluu. This is unlike the Italian example, where *di* appears in many different contexts. In other words, the alternative analysis fails to account for the fact that g| is used as a morpheme only with a following first or second person pronoun. This fact is accounted for by analyzing g| as the head of the Part node.

Second, the independent morpheme hypothesis fails to account for the fact that when a third person pronoun (which all start with *k-* in Nluu, see section 8) immediately follows the linker, no g| is used. On the account given in this paper, the *k-* found in third person pronouns also occupies Part, hence blocking the use of g|.

Third, the independent morpheme analysis receives no support from the syntax of the linker in other Khoisan languages (see Baker and Collins 2006, Collins 2003, 2004, 2014, Collins and Gruber (to appear), Collins and Namaseb 2011). Although there are many similarities in the distribution of the linker in the various Khoisan languages, no other Khoisan language inserts an independent morpheme between the linker and a following pronoun (or between the linker and any other kind of immediately following constituent). This means that there is no independent support (from the syntax of the linkers in other Khoisan languages) for the independent morpheme hypothesis.

These three arguments together argue against the independent morpheme hypothesis and hence for the analysis given in this paper.

7. The Gap Constraint

In order to understand the Simple Pronoun Constraint, it is necessary to take a closer look at the linker. Consider the following paradigm where the DP immediately following the linker is extracted:

- (64) a. ŋ !uu ke xa |ʔaa ŋ g!ari
 1SG grandfather DECL PST die LK Upington
 “My grandfather died in Upington.”
- b. ku -a |qhōʼo ŋ ku ŋ|ŋ llaʔe
 3SG DECL dance LK 3SG house in
 “He is dancing in the house.”

- (65) a. *kija xe ku !uu xŋ lʔaa ŋla*
 where FOC.Q 3SG grandfather PST die LK
 “Where did his grandfather die?”
- b. *kija xe ku lqhōʼo ŋla*
 where FOC.Q 3SG dance LK
 “Where is he dancing?”
- (66) a. *ku-a ʔii ŋ ku*
 3SG-DECL think LK 3SG
 “He is thinking about him.”
- b. *cu xe ku ʔii ŋla*
 who FOC.Q 3SG think LK
 “Who is he thinking about?”

These sentences show that when the DP following the linker is extracted, the linker takes the form *ŋla* which is also the locative verb “be”. The sentences in (66) show that the alternation between the two forms of the linker even occurs with extracted non-locatives. For this reason, I will gloss *ŋla* as LK instead of LOC when used in place of the linker *ŋ* in extraction contexts, as in (65) and (66).

The relevant constraint is stated as follows:

(67) **Gap Constraint**

**ŋ*[Lk] + gap

(if the clitic form of the linker is used, it is not followed by a gap)

This constraint resembles the Simple Pronoun Constraint:

(68) **Simple Pronoun Constraint**

*LK + simple pronoun [1st or 2nd person]

On the analysis of simple pronouns proposed in the preceding section, the Simple Pronoun Constraint reduces to the fact that the linker cannot be used when there is a null Part morpheme. This fact is parallel to the fact that the clitic form of the linker cannot be used with a following gap. The difference between the two constraints is how N|uu avoids violating them. In order to avoid a violation of the Gap-Constraint, the linker takes on a non-reduced form *ŋla*. In order to avoid a violation of the Simple Pronoun Constraint, the click pronoun must be used.

The remaining question is why the non-reduced form of the linker *ŋla* is not used with a following simple pronoun, unlike how *ŋla* is used with a following gap. I do not have an answer to this question at present.

One piece of evidence that the constraints in (67) and (68) are related to the linker is that instrumental prepositions allow extraction and can have a simple pronoun as complement:

- (69) a. cu xe ku !q'ora ŋ|a
 who FOC.Q 3SG play with
 “Who is he playing with?”
- b. cu xe ku #hoa ŋ|a
 who FOC.Q 3SG speak with
 “Who is he speaking with?”
- (70) a. ku-a #hoa ŋ|a ŋ
 3SG-DECL speak with 1SG
 “He is speaking with me.”
- b. ku-a #hoa ŋ|a a
 3SG-DECL speak with 2SG
 “He is speaking with you.”

Is the Simple Pronoun Constraint a phonological or syntactic constraint? The fact that the distribution of simple pronouns is stated in terms of immediate adjacency suggests that it is a phonological constraint. However, the fact that the Simple Pronoun Constraint applies even when the preceding linker is phonologically null (see section 4.2) suggests that it is a syntactic constraint. I speculate that the Simple Pronoun Constraint is a purely syntactic constraint related to the licensing of null elements in syntactic representations.

8. Third Person Pronouns

The third person pronouns (third person human singular, third person non-human singular, third person plural) do not show the alternation between simple form and click form shown by the first and second person pronouns. The facts are illustrated below.

The following sentences show that third person pronouns appear in the subject position of declarative clauses:

- (71) a. ku ke si !ʔae
 3SG DECL FUT go
 “He will go.”
- b. ki ke si !ʔae
 3SG.NH DECL FUT go
 “It will go.”
- c. kin ke si !ʔae
 3PL DECL FUT go

“They will go.”

The following set of sentences show that the third person pronouns appear as the subject of a yes-no question:

- (72) a. ku si lʔae
3SG FUT go
“Will he/she go?”
- b. ki si lʔae
3SG.NH FUT go
“Will it go?”
- c. kin si lʔae
3PL FUT go
“Will they go?”

The following sentences show that the third person pronouns can appear as direct object, with no preceding linker:

- (73) a. lʔaʔe ke !ʔai ku
lʔaʔe DECL call 3SG
“lʔaʔe is calling him/her.”
- b. lʔaʔe ke !ʔai ki
lʔaʔe DECL call 3SG.NH
“lʔaʔe is calling it.”
- c. lʔaʔe ke !ʔai kike
lʔaʔe DECL call 3PL
“lʔaʔe is calling them.”

The following sentences show that the third person pronouns can be immediately preceded by the linker:

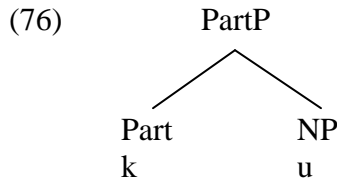
- (74) a. ku-a ʔʔii ŋ ku
3SG-DECL think LK 3SG
“He is thinking about him.”
- b. ku-a ʔʔii ŋ ki
3SG-DECL think LK 3SG.NH
“He is thinking about it.”
- c. ku-a ʔʔii ŋ kike
3SG-DECL think LK 3PL

“He is thinking about them.”

How can these facts be understood in terms of the Simple Pronoun Constraint? One difference between the third person pronouns and the other pronouns is that the third person pronouns have the onset [k]. Therefore, it is natural to analyze [k] as being a realization the participant head, Part. Given this analysis, the third person pronouns have the form:

- (75)
- | | | | |
|------|---|---------|-----------------------------|
| ku | = | k + u | 3person + human |
| ki | = | k + i | 3person + non-human |
| kin | = | k + in | 3person + plural general |
| kike | = | k + ike | 3person + plural accusative |

The structure of the 3SG human pronoun is give below:



On this analysis, the third person pronouns are morphologically complex. In section 7, I suggested that the Simple Pronoun Constraint reduces to the fact that a PartP with a null head cannot follow the linker. But since the 3rd person pronouns do not involve a null Part head, they are not subject to the same constraint.

The prenominal distal demonstrative is *kea*, also beginning with a k- (see Collins and Namaseb 2011: 36). It may be possible to analyze the distal demonstrative as containing a [-participant] component. Compare my proposal to Bernstein 2008 who argues that “...English *th-* forms encode third person...” (pg. 1261) (e.g., for *the*, *they*, *this*). Unfortunately, I do not have any data on whether or not the linker can be followed by the demonstrative *kea*. The prediction of my analysis is that no dental click will intervene between the linker η and the demonstrative in this case.

I will now briefly consider the 1EXCL.PL pronoun *si*. It is possible for 1PL *si* to appear in a context requiring a click pronoun:

- (77)
- a.
- | | | | |
|-----|-------|------------------------|------|
| si | xe | ca ^h bakusi | !ʔai |
| 1PL | FOC.Q | Caqbakusi | call |
- “Is it us who Caqbakusi is calling?”
- b.
- | | | | | | | | |
|----------|-----|---------|--------|-----|-------|-----|-------|
| n-a | llu | llhae-a | η | si | xe | si | llʔae |
| 1SG-DECL | NEG | know-FV | LK | 1PL | FOC.Q | FUT | go |
- “I don’t know if we will go.”

This would also make sense if the [s] of the *si* form realized Part, just like the dental click.

9. Conclusion

In this paper I discussed the distribution of click pronouns in Nluu. I have shown that it is possible to account for their distribution in terms of the Simple Pronoun Constraint and the Click Pronoun Constraint. Furthermore, I have proposed a structure for Nluu pronouns which recognizes the dental click as a separate participant morpheme. The four participant morphemes are given below:

$$(78) \quad \text{Part} \rightarrow \left\{ \begin{array}{ll} \emptyset & 1^{\text{st}} \text{ (non-exclusive) or } 2^{\text{nd}} \text{ person,} \\ & \text{not following linker.} \\ \text{gl} & 1^{\text{st}} \text{ (non-exclusive) or } 2^{\text{nd}} \text{ person,} \\ & \text{following linker} \\ \text{k} & 3^{\text{rd}} \text{ person} \\ \text{s} & 1\text{EXCL.PL} \end{array} \right.$$

Furthermore, I have postulated three linker morphemes, presented below:

$$(79) \quad \text{Lk} \rightarrow \left\{ \begin{array}{ll} \eta & \text{clitic form of linker} \\ \eta\|a & \text{non-reduced form of linker,} \\ & \text{used with following gap.} \\ \emptyset & \text{used in clause initial position} \end{array} \right.$$

The constraints governing the 2nd and 3rd person pronouns are given below:

(80) **Simple Pronoun Constraint**

*LK + simple pronoun [1st or 2nd person]

(81) **The Click Pronoun Constraint**

*Click Pronoun, unless immediately right adjacent to LK.

These two constraints jointly determine the distribution of the simple and click pronouns in Nluu. In each case, I have suggested deeper explanations for the constraints (parallelism to the Gap Constraint for (80) and Last Resort for (81)), although much work remains to be done. One wonders for instance if any of the closely related !Ui languages (e.g., |Xam) had a similar alternation.

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