A Treatment of Passives and Pronouns in Lummi Matrix Sentences[*]

Nancy Chinchor
University of Massachusetts at Amherst

0. Introduction

The purpose of this paper is to present an analysis of simple declarative sentences in Lummi which will account for the appearance of the morpheme {ŋ} as well as the order and form of pronouns. The morpheme {ŋ} always appears encliticized onto the verb that it follows. The combination of the transitivizer and {ŋ} acts as a passive marker on the verb. I will treat only this instance of {ŋ} . The examples that I give here contain verbs which take the transitivizer {t}. However, there are other transitivizers in Lummi, such as {n} , which also combine with {ŋ} to form the passive. The morpheme {n} has a morphologically determined alternate {nəx}.

The pronouns which appear in matrix clauses are of two types. These are the subject pronouns and the object pronouns. The paradigms follow.

(1) Subject pronouns			(2) Object pronouns		
	sg.	pl.		sg.	pl.
1	sən	ł	1	oŋəs	oŋəł
2	sxʷ		2	oŋəs	
3	s		3	∅	

A subject pronoun appears on the surface as subject whether it be the deep or derived subject. This does not mean that the sub-

ject pronoun is always the agent. An object pronoun appears on the surface as object and is always in second position in the clause, i.e. it immediately follows the verb. The subject pronoun is in second position except when an object pronoun is present in the same clause. In this case, the object pronoun has priority over the subject pronoun for second position. Noun phrases are never marked for this subject/object distinction. But, unlike pronouns, they are marked for agenthood. This is accomplished by the preposition ʔəš which indicates that the following noun phrase is the agent.

1. Passive

One of the more mysterious processes in Lummi is the one which can be called the passive. There are many separate cases to consider here. The first case consists of the set of sentences for which passive is optional. This case is not very different from the English passive. Passive can be used to change focus whenever a sentence contains a noun phrase as underlying subject and either a noun phrase or pronoun as underlying object.

(3) a. x̌čit-s cə swəy̓qəʔ sə sƚəniʔ

know-agreement-the-man-the-woman

The man knows the woman

b. x̌čit-ŋ ə cə swəy̓qəʔ sə sƚeniʔ

know-passive-agent-the-man-the-woman

The woman is known by the man.

2

(4) a. x̌čit-oŋəs cə sway?ɣə?

   know-1st person pronoun-the-man

   The man knows me.

   b. x̌čit-ŋ-sən ə cə sway?ɣə?

   know-passive-1st person pronoun-agent-the-man

   I am known by the man.

In (3a) there is an agreement marker on the verb. When a sentence contains two full noun phrases and passive has not taken place, the agreement suffix {-s} shows up on the verb.

The second case to consider here consists of the set of sentences in Lummi which do not allow passive. These are exactly those sentences which have a pronoun as deep subject. In the following examples, a * on the English sentence means that it is not the gloss that should be given to the grammatical Lummi sentence. The correct gloss is given in parentheses following the incorrect one.

(5) a. x̌čit-sx̌ʷ cə sway?ɣə?

   know-2nd person pronoun-the-man

   You know the man.

   b. x̌čit-ŋ-sx̌ʷ cə sway?ɣə?

   know-passive-2nd person pronoun-the-man

   *The man is known by you. (The man knows you.)

(6) a. x̌čit-oŋəɫ-sx̌ʷ [1]

   know-1st person pl. pronoun-2nd person pronoun

   You know us.

3

(6) b. •x̌c̓it-ŋ-t̓-sxʷ   **2**

    know-passive-1st person pl. pronoun-2nd person pronoun

    We are known by you.

(7) a. c̓sat-sən

    hit-1st person pronoun

    I hit someone/thing.

  b. c̓sat-ŋ-sən

    hit-passive-1st person pronoun

    •Someone/thing was hit by me. (I got hit.)

None of the passive sentences, (5b), (6b), or (7b), are well-formed even if the agent marker appears on the pronoun. Any way of generating passives, then, must not apply to structures which have a pronoun as underlying subject. This case is very different from English since passive is not sensitive to pronouns in English.

Up until this point it seems reasonable to think that passive is a transformational process. A possible way of formalizing this process is given in (8). Here, I am assuming VSO word order and the existence of the phrase structure rules $S \rightarrow V \; \overline{NP} \; \overline{NP}$ and $\overline{NP} \rightarrow \{NP, Pro\}$. The distinction between NP and $\overline{NP}$ is important here because $\overline{NP}$ can dominate a pronoun, but NP cannot. Passive must not be allowed to apply to a sentence with an underlying pronoun subject. But it optionally applies when the pronoun is the underlying object.

(8) V   NP $\overline{\text{NP}}$

    1   2   3 $\Rightarrow$ (optional)

    1-ŋ ə+2   3

The problem with such a rule is that there are cases where passive is obligatory. These cases are just those sentences which have a transitive verb and an empty subject or object position. For example, the only way to say 'the man hit someone' is (9) and the only way to say 'someone hit the man' is (10).

(9) čsət-ŋ ə ɛə swəy?qə?

    hit-passive-agent-the-man

    The man hit someone/thing.

(10) čsət-ŋ ɛə swəy?qə?

    hit-passive-the-man

    Someone/thing hit the man.

The form given in (11) is the form that both sentences would take if passive had not applied.

(11) čsət ɛə swəy?qə?

    hit-the-man

    *Someone hit the man. *The man hit someone. (Hit the man!)

It would be impossible to decide whether the noun phrase which appears in (11) is the subject or the object of the verb. A possible generalization here, then, is that the passive is obligatory whenever the word order fails to distinguish subject and object.

If the $\overline{\text{NP}}$ which is present on the surface is a pronoun, this

ambiguity would not necessarily arise due to the different forms which pronouns take depending on whether they are subjects or objects on the surface. But, for some reason, passive is obligatory when the nonempty $\overline{NP}$ is a pronoun, too.

(12) a. ʔcsət-ŋ-sən

      hit-passive-1st person pronoun

      Someone/thing hit me.

  b. * ʔcsət-cŋəs

      hit-1st person pronoun

      Someone/thing hit me.

In (12) we see that passive is obligatory if the pronoun is the underlying object. This is just the place where the form of the pronoun could disambiguate its role in the sentence. But it is passive which disambiguates. So, only (12a) is good, even though (12b) can theoretically be unambiguously interpreted since the pronoun is in the object pronoun form. If the pronoun is the underlying subject of the sentence, passive is disallowed. So, to say 'I hit someone/thing', you must use (13) and not (14).

(13) ʔcsət-sən

      hit-1st person pronoun

      I hit someone/thing.

(14) ʔcsət-ŋ-sən

      hit-passive-1st person pronoun

      *I hit someone/thing. (Someone/thing hit me.)

Here we see a conflict between two possible generalizations. The first is that passive is obligatory when the word order fails to

distinguish subject and object. The second is that passive is never allowed when an underlying pronoun subject is present. The second generalization wins. This may be due to the fact that you cannot have the agent marker {ə} with a pronoun.[3] The strength of the second generalization can be seen again in the ability to delete the agent marker in the case where passive has occurred in a sentence with a noun phrase subject and a pronoun object. There is no problem in understanding {-sx^w} as the deep object of (15) even if the {ə} does not appear.

(15) x̌ʔit-y-sx^w (ə) cə sway̓ʔqəʔ

know-passive-2nd person pronoun-(agent-)the-man

The man hit you.

There is still one more case to consider here and that is the one in which both the subject and object nodes are empty. Passive is obligatory here, too.

(16) c̓sət-y

hit-passive

Someone/thing got hit on purpose.

A summary of the facts presented so far is given in (17). The subscript 's' means underlying subject; the subscript 'o' means underlying object; Δ means that the node is empty.

(17) Distribution of Passive According to Sentence Type

optional	obligatory	disallowed
NP_s NP_o	$\triangle$ $\triangle$	PRO_s $\triangle$
NP_s PRO_o	NP_s $\triangle$	PRO_s NP_o
	$\triangle$ NP_o	PRO_s PRO_o
	$\triangle$ PRO_o	

There are further facts about passives which do not follow from the discussion above because of the oversimplification there. Hess (1973) points out that passive can be used for many things, one of which is the completion of a paradigm. This occurs in Puget and other Salish languages. Lummi is no exception. The point in the paradigm where passive is of use is in the third person. There are many irregularities exhibited by the third person in Lummi. To say 'the man knows him', you cannot follow the pattern in (4), which works for all the other persons both singular and plural. Instead, the passive form must be used, as in (18).

(18) x̌čit-ŋ ə cə swəy̓qə̓ʔ

know-passive-agent-the-man

The man knows him.

Note that (18) still differs from the passive for the other persons, as given in (4). This is due to some other irregularity of the third person which shows up elsewhere. Third person $\{-s\}$ never appears following the morpheme $\{ŋ\}$ in matrix sentences.

Another example of this deletion is in (19).

(19) x̌čit-ŋ

    know-passive

    Someone knows him.

In summary, the passive is used for at least three purposes in Lummi: to change focus, to mark subject and object and express purposeful action, and to complete a paradigm. I propose that the first purpose be handled by an optional transformation and that the second and third purposes be handled in the lexicon.

3. The Base

The following phrase structure rules will be all that this analysis of sentences with transitive verbs will require. I am assuming underlying VSO word order.[4]

$$(20) \quad S \longrightarrow V \ \overline{NP} \ \overline{NP}$$

$$\overline{NP} \longrightarrow \left\{ \begin{array}{c} NP \\ PRO \\ \Delta \end{array} \right\}$$

Even though NP obviously has more structure, I will leave it unanalyzed here. Note that the pronouns are all base-generated.

The lexical entries for a small set of lexical items appear in (21) and the required syntactic redundancy rules are in (22). The full set of features for a lexical entry are gotten by applying the redundancy rules to expand the features given in the lexical entry.

(21) x̌č̌it   [+V,+transitive]

cə sway?ɣə? [+NP]

sə st̓əni? [+NP]

s   [+PRO,+3rd person]

sən   [+PRO,-3rd person]

sxʷ   [+PRO,-3rd person]

č̓   [+PRO,-3rd person]

△   [+△]

(22) a. [+transitive] ⟶ [±passive]

b. [+passive] ⟶ [__ △ $\overline{NP}$]

c.   [__ NP △]

d.   [__ NP [+PRO,+3rd person]]

e. [-passive] ⟶ [__ PRO NP]

f.   [__ NP NP]

g.   [__ NP [+PRO,-3rd person]]

h. [+NP] ⟶ [±agent]

i. [+agent] ⟶ [V __ △]

j.   [V __ [+PRO,+3rd person]]

k. [-agent] ⟶ [V __ NP]

l.   [V __ [+PRO,-3rd person]]

m.   [V $\overline{NP}$ __]

In (23), there are rules which rewrite non-terminal symbols so
that the process of lexical insertion can take place.

(23) V $\longrightarrow$ [+V,+transitive]

NP $\longrightarrow$ [+NP]

PRO $\longrightarrow$ [+PRO]

$\triangle \longrightarrow$ [+$\triangle$]

After the phrase structure rules in (20) generate a tree, the non-terminal symbols are rewritten using the rules in (23) and context-sensitive rules which specify the frame that the particular node appears in. These rules are of the form:

NS $\longrightarrow$ [X __ Y] /X __ Y where NS stands for any non-terminal symbol and X and Y are variables ranging over non-terminal and terminal strings. This specification of the **frame is unnecessary** if the lexical insertion rule is written so that the context of the node which is being filled can be referred to. The actual lexical insertion rule is a substitution transformation which matches the features of the lexical entry and the features of the non-terminal node.

We should take a closer look at how the obligatory passives are generated. The case where passive completes a paradigm is handled by selectional rules, (22d) and (22j). This is necessary because the subcategorization rule must refer to a particular feature of the pronoun i.e., its specification for the feature [3rd person]. The passive which is used to distinguish subject from object is handled by strict subcategorization rules, (22b), (22c), and (22i). This is so because the subcategorization rule need only refer to lexical categories.

The syntactic redundancy rules are also interesting in that they make clear a similarity which I have tended to deny. (22c) and (22d) point out the parallel way in which the third person pronoun and $\triangle$ act, at least with respect to passive. It may be that the third person form is disappearing from Lummi and that, instead, the $\triangle$, which I have been translating as 'someone/thing', is being interpreted in the same way as third person normally is. The disappearing of the third person may explain some of the irregularities which it exhibits. If this is the case, the completion of the paradigm is not happening because the paradigm is not incomplete. And, then, this case of the obligatory passive becomes exactly like the case where the subject and object are being distinguished.

4. The Transformational Component

Armed with some possible deep structures, we can now face the transformational component of the grammar. There are several processes that will be taken care of here. There is the passive which can optionally take place to change focus. When optional passive does not take place and two noun phrases are present, a rule of agreement must step in (see (3) for examples). When there is a pronoun in object position and the verb has the feature [-passive] , the pronoun must be marked for case so that its surface form is that of an object pronoun (see (2) for the forms of object pronouns). Object pronouns are then moved from clause final position to the position immediately following the

verb. Some minor rewriting rules change the form of those lexical items whose features have been altered by the syntactic redundancy rules or the transformations. The final process that I will discuss is that of cliticization, which attaches all the verbal particles and pronouns to the verb. The transformations that accomplish these changes follow.

(24) PASSIVE (optional)

V	NP	$\overline{\text{NP}}$	
1	2	3	$\Longrightarrow$

1	2	3
[+passive]	[+agent]	

AGREEMENT (obligatory)

V [-passive]	NP	NP	
1	2	3	$\Longrightarrow$

1	2	3
[+agreement]		

CASE MARKING (obligatory)

V [-passive]	$\overline{\text{NP}}$	PRO	
1	2	3	$\Longrightarrow$

1	2	3
		[+case]

PRONOUN ATTRACTION (obligatory)

V	$\overline{\text{NP}}$	PRO	
1	2	3	$\Longrightarrow$

1	3	2

PRONOUN REWRITE RULES (obligatory)

$$\begin{array}{c} s \\ [+\text{case}] \end{array} \longrightarrow \emptyset$$

$$\begin{array}{c} +\text{sən} \\ [+\text{case}] \end{array} \longrightarrow \text{oŋəs}$$

$$\begin{array}{c} sx^w \\ [+\text{case}] \end{array} \longrightarrow \text{oŋəs}$$

$$\begin{array}{c} ł \\ [+\text{case}] \end{array} \longrightarrow \text{oŋəł}$$

VERB REWRITE RULES (obligatory)

$$\begin{array}{c} \text{verb} \\ [+\text{passive}] \end{array} \longrightarrow \text{verb-ŋ}$$

$$\begin{array}{c} \text{verb} \\ [+\text{agreement}] \end{array} \longrightarrow \text{verb-s}$$

NOUN PHRASE REWRITE RULES (obligatory)

$$\begin{array}{c} \text{noun phrase} \\ [+\text{agent}] \end{array} \longrightarrow \text{ə⌢noun phrase}$$

CLITICIZATION (obligatory)

V	PRO	(PRO)	
1	2	3	$\Longrightarrow$

1-2-3

The transformations are ordered in this way for reasons of simplicity and descriptive adequacy. Passive must precede Agreement because Passive can optionally apply to phrase markers that would obligatorily undergo Agreement only if Passive had not applied. Passive precedes Case Marking because Case Marking mentions the feature [passive]. Passive precedes Pronoun attraction just because it is simpler to write a Passive rule when the input to it

14

is of a uniform word order.

Agreement is only ordered with respect to Passive because Passive is the only other rule which applies to phrase markers containing no pronouns. Agreement is irrelevant to the operation of the other rules.

Case Marking is crucially ordered with respect to Pronoun Attraction. If Pronoun Attraction occurred first, Case Marking would be formulated as follows:

(25) CASE MARKING (obligatory)

V [+passive]	PRO
1	2 $\Longrightarrow$
1	2 [+case]

This would work well for sentences whose objects were pronouns underlyingly. However, sentences whose subjects are pronouns underlyingly would undergo this Case Marking rule even if there were no pronoun object present because Passive is disallowed in such constructions. Thus, if Case Marking were ordered before Pronoun Attraction, the following ungrammatical sentences would be generated.

(26) • čsɔt-oŋəs

hit-1st person pronoun

I hit someone/thing

čsɔt-oŋəs cə swəy⁷q̓ə.⁷

hit-1st person pronoun-the-man

*I hit the man.   (The man hit me.)

It is impossible to reformulate Case Marking so that it will not apply in these cases because a pronoun object can occur with a Δ or NP subject and is marked for case if the verb has the feature [-passive]. The only answer, then, is to do Case Marking before Pronoun Attraction. And so we will keep the formulation given in (24).

The Rewrite Rules, of course, all follow the feature changing rules. Cliticization follows the Rewrite Rules because it utilizes the rewritten version of the words.

5. Conclusions

I have argued that some passive forms must be base-generated and that others are the product of an optional transformation. Further work on the semantics of the passive in Lummi may force me to claim that all the passives are base-generated. Since Passive is ordered first in the list of transformations, this will not cause a great upheaval in the transformational component. There is also the possibility that all passives are transformationally derived. This could be done by a rule which is optional in some cases and obligatory in others. The consequences of having such a rule need to be explored. This will probably require looking at data containing embedded sentences.

I have also claimed that the subject and object pronouns are transformationally related. I think that for the most part this will turn out to be right. However, there are still the irregularities of the third person to contend with. Since it is very

difficult to find evidence for there even being a third person object pronoun, my claim is weakened. The third person subject pronoun appears irregularly and is homophonous with the agreement marker itself. In the following examples, {s} acts just like the other subject pronouns.

(27) c̓sət-sən

hit-1st person pronoun

I hit someone/thing.

c̓sət-ɬ

hit-1st person pl. pronoun

We hit someone/thing.

c̓sət-sxʷ

hit-2nd person pronoun

You hit someone/thing.

c̓sət-s

hit-3rd person pronoun

He hit someone/thing.

(28) x̌c̓it-sən cə swəy̓q̓ə

know-1st person pronoun-the-man

I know the man.

x̌c̓it-ɬ cə swəy̓q̓ə

know-1st person pl. pronoun-the-man

We know the man.

17

x̌čit-sx^w cə sway?q̇ə?

know-2nd person pronoun-the-man

You know the man.

x̌čit-s cə sway?q̇ə?

know-3rd person pronoun-the-man

He knows the man.

(29) x̌čit-oŋəs-sən

know-2nd person pronoun-1st person pronoun

I know you.

x̌čit-oŋəs-ł

know-2nd person pronoun-1st person pl. pronoun

We know you.

x̌čit-oŋəs-s

know-2nd person pronoun-3rd person pronoun

He knows you.

The irregularities in the third person occur when {ŋ} is pres-
ent. In these cases the sentence is good if the {s} is not pres-
ent. I have no satisfying explanation for this. All of the
other subject pronouns can appear after {ŋ}, as the following
examples show.

(30) x̌čit-ŋ-sən

know-passive-1st person pronoun

Someone knows me.

x̌čit-ŋ-ƚ

know-passive-1st person pl. pronoun

Someone knows us.

x̌čit-ŋ-sxʷ

know-passive-2nd person pronoun

Someone knows you.

*x̌čit-ŋ-s

know-passive-3rd person pronoun

Someone knows him.

(31) x̌čit-ŋ-sən (ə) cə swəy̓q̓ə

know-passive-1st person pronoun-(agent-)the-man

The man knows me.

x̌čit-ŋ-ƚ (ə) cə swəy̓q̓ə

know-passive-1st person pl. pronoun-(agent-)the-man

The man knows us.

x̌čit-ŋ-sxʷ (ə) cə swəy̓q̓ə

know-passive-2nd person pronoun-(agent-)the-man

The man knows you.

*x̌čit-ŋ-s (ə) cə swəy̓q̓ə

know-passive-3rd person pronoun-(agent-)the-man

The man knows him.

19

FOOTNOTES

[1] No other combination of subject and object pronouns yields grammatical sentences with the desired meanings.

[2] No other combination of subject and object pronouns gives grammatical sentences either.

[3] If the pronoun contains more information, though, it acts like a noun phrase. For example,

leŋit-s sɔ cə sk̉ʷtoʔ
look at-agreement-she-the-Raven
She looks at Raven.

leŋit-ŋ ə su niɫ cə sk̉ʷtoʔ
look at-passive-agent-this female one-the-Raven
Raven was looked at by her.

[4] The word order which is assumed at this point makes virtually no difference to the analysis that follows. All of the rules can be rewritten for any ordering without major changes in the overall scheme of the analysis.

BIBLIOGRAPHY

Thom Hess, 'Agent in a Coast Salish Language', IJAL 39.2, April 1973, pp. 89-94.