

Korean and Lushootseed Salish from a functional perspective

by

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We accept this dissertation as conforming  
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## Abstract

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This dissertation compares two Pacific Rim languages, the Asian language Korean and the native North American language Lushootseed Salish. The former is spoken by approximately 70 million people on the Korean peninsula and in the neighbouring People's Republic of China. Lushootseed Salish is now moribund but had an estimated speakership of about 11,000 at the time of first European contact.

The theoretical framework used in this comparison is the Functional Grammar of Simon C. Dik. The Korean data are from both native and non-native grammarians as well as my own judgements as a native speaker. The Lushootseed data are from the fieldnotes and two grammars of Professor Hess.

Following the theoretical and grammatical discussion, a traditional story from both languages is provided with detailed analysis.

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## List of Abbreviations

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1	1st person	Nom	Nominative
2	2nd person	Nomn	Nominalizer
3	3rd person	Obj	Object
Acc	Accusative	Obl	Oblique
Ag	Agent	OC	Out-of-control
Aor	Aorist	Pass	Passive
AO	Agent oriented	Pat	Patient
Art	Article	Pl	Plural
Asp	Aspect	PO	Patient oriented
Ben	Benefactive	pref	prefix
Caus	Causative	Q	Question
Comp	Complementizer	Rec	Recipient
Dat	Dative	S	Sentence
Dec	Declarative	Sg	Singular
Det	Determiner	Subj	Subject
Dem	Demonstrative	Suf	Suffix
DO	Direct object	T/A	Tense/Aspect
EDO	Embedded direct object	Temp	Temporal
EIO	Embedded indirect object	Top	Topic
ES	Embedded subject	Tr	Transitive
fut	future	V	Verb
Gen	Genitive		
Go	Goal		
Instr	Instrumental		
IO	Indirect object		
Irr	Irregular		
Kr	Korean		
Loc	Locative		
Lu	Lushootseed		
Mod	Modal		
MS	Matrix subject		

## Dedication

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To the memory of my grandfather  
Chi Soo Kim (1906 - 1991)

**Part I**

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**Background**

## Chapter 1

### Introduction

---

This dissertation is a contrastive study of Korean and the Amerindian language called Lushootseed using the functional grammar model set forth by Simon C. Dik. It concentrates on causative constructions.

Korean is spoken by some seventy million people on the Korean peninsula and approximately two million elsewhere throughout the world. Lushootseed is a moribund Salish language formerly spoken around the shores of Puget Sound in Washington State. Anthropological demographers estimate that in precontact times it had about eleven thousand speakers, which made it one of the largest of the twenty-three known Salish languages.<sup>1</sup>

The data of this study are based on Korean folk stories, my own knowledge as a native speaker and the writings of Korean grammarians, both traditional and modern. Sources for Lushootseed are the extensive text collection of Professor Thom Hess and the two pedagogical grammars compiled by him.

Korean and Lushootseed differ on most usual points of typological comparison. Korean is verb final while Lushootseed is verb initial with the usual related phenomena: Korean has postpositions, Lushootseed prepositions; and relative clauses precede the head in Korean but typically follow the head in Lushootseed. Whereas Lushootseed puts possessor after the possessed item, Korean uses the reverse order (Greenberg, 1964). Here follow contrasting examples of each of these four points:

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<sup>1</sup>See Suttles, W. and B. Lane (1990) "Southern Coast Salish". In: Wayne Suttles (ed.) *Handbook of North American Indians*, vol. 7. Smithsonian Institute. Washington, D.C. 485-502.

- (1) Kr: sonyən-i ka-ss-ta. Lu: ?u?uχ<sup>w</sup> ti čačas.  
 boy-Nom go-T/A-Dec Asp-go Det boy  
 The boy went.
- (2) Kr: ki kaŋ-esə Lu: ?al tə stulək<sup>w</sup>  
 Det river-Postp(Loc) Prep Det river  
 In the river.
- (3) Kr: yənə-ka koyəŋi-ka mək-in kəs-ita.  
 salmon-Nom cat-Nom eat-Comp thing-to be  
 Lu: sʔuladx<sup>w</sup> tiʔə? suʔələd ?ə tiʔə? pišpiš.  
 salmon Det Nom-Asp-eat-Tr Prt Det cat  
 The salmon is what the cat ate.
- (4) Kr: i salam-ji kə Lu: sq<sup>w</sup>əbay? ?ə tiʔə? stubš.  
 this man-Poss dog dog Poss Det man  
 This man's dog, or dog of this man

Lushootseed strives toward only one argument per clause (although others can be brought in by means of oblique constructions) whereas Korean, like English, permits fairly long sequences of arguments with a particular verb. However, both languages are argument dropping. Lushootseed compensates for the lack of arguments by means of verbal suffixation showing voice and, in subordinate clauses, person and number.<sup>2</sup> Whereas Lushootseed permits omission of all arguments, Korean, on the other hand, only allows the omission of subjects and objects. Listeners determine these by context.

Morphologically, the two languages are less disparate. Neither language distinguishes a class of adjectives from verbs. Both have a very large number of affixes, particularly on the verb, and the number of affixes per word can be quite high. On average the index of synthesis in Korean<sup>3</sup> is 1.99 and 2.275 in

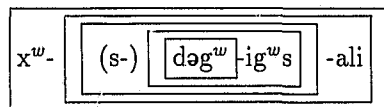
<sup>2</sup>In matrix clauses listeners identify third person referents by context.

<sup>3</sup>As for the index of synthesis, I checked three sources in Korean. First, I counted the number of morphemes in a one hundred word text from theoretical linguistics material. The index was 2.17. Secondly, I counted it from a novel. The index was 1.83. Finally, I counted it from a journalistic passage. The index was 1.98. On average, the index is 1.99.

Lushootseed. On the other hand, Korean is more agglutinating than Lushootseed. On average the index of agglutination is 1.53 in Korean<sup>4</sup> and 0.832 in Lushootseed.<sup>5</sup>

Typical of Oriental languages, Korean has a large set of numeral classifiers. Superficially, Lushootseed has the same kind of morpheme class (except that the Lushootseed morphemes entail wider grammatical uses than does the Korean class). On the other hand, Korean compounds extensively while compounding is rare in Lushootseed. In word building, Lushootseed tends to 'nest' its roots within many layers of derivation and inflection as in this diagram:

E.g.



The Korean affixes, on the other hand, tend toward a more concatenated structure.

The dissertation is divided into three parts: Background, which includes this introductory chapter and an overview of Functional Grammar as described by Dik; a second part devoted to a discussion of the causative; and a third part comprising a text and glossary from both languages. Several appendices and the bibliography conclude the work.

I see two areas in which this dissertation is a contribution to knowledge. It is the first attempt at describing a Salish language using the Functional Grammar model of Simon C. Dik. Since this theory is relatively new, its descriptive

<sup>4</sup>As for the index of agglutination, I checked the above one hundred word text. First, from the theoretical essay, the index of agglutination was 1.48. Secondly, from the novel, the index was 1.52. Finally, from the journalistic passage, the index was 1.60. On average, the index of agglutination is 1.53.

<sup>5</sup>The Lushootseed index of synthesis is provided by Professor Thom Hess, and the index of agglutination is calculated by Professor Hess and me from a story in the pedagogical grammar.

power is tested here. Secondly, a contrastive grammar of two languages from different parts of the world that have never been so studied before enhances linguistic knowledge generally.

## Chapter 2

### Grammar

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#### 2.1 Functional Grammar

The theoretical framework which I shall adopt as a tool for comparing some constructions in Korean and Lushootseed makes use of a relatively simple form of functional grammar (Dik, 1980a, 1981). The theoretical tenet of this grammar is based on a functional view of natural language. According to Dik (1980a:1), a natural language is first and foremost regarded as an instrument of social interaction by means of which human beings communicate with one another and thus influence one another's mental and practical activities.<sup>1</sup>

##### 2.1.1 Predicate-frame and terms

The formation of linguistic expressions in a typical functional grammar (henceforth FG) consists of two steps. First, a *predication* is formed out of the predicates and terms contained in the Fund. The Fund consists of a lexicon containing the properties of lexical items that must necessarily be learned and memorized, and two rule components generating forms derivable by synchronically productive rules. They are predicate and term formation rules. Secondly, a predication is mapped onto its actual form by means of *expression rules*. Inside the module of expression rules, the forms and the order of constituents are de-

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<sup>1</sup>In this framework the role of communicative competence (cf. Hymes, 1972) and the actual implementation of this competence receives more attention than the argumentation of linguistic expressions via a series of abstractions.

The origin of functional grammar can be traced back to the Prague school of linguistics and the pragmatic school of thought in philosophy from Oxford (Austin 1962, Searle 1969).

terminated. A form of FG is thus a system for constructing linguistic expressions out of the predicates and terms contained in the Fund, via intermediate levels of underlying predications according to Dik (ibid:5).

FG specifies functional relations at three different levels: semantic, syntactic and pragmatic. Information relevant to the semantic functions of the arguments is specified in predicate-frames where are built the basic structure of the nuclear predications, the subcategorization of predicates, the number of arguments surfaced, etc. Semantic functions specify the roles which the referents of the *terms* involved play within the "state of affairs" designated by the predication in which they occur. Before reaching the mapping procedure of expression rules, two levels of function assignment are necessary for making a predication fully specified. These are assignment of syntactic functions and the assignment of pragmatic functions.

The basic element of a predication is a predicate. Some predicates are applied to an appropriate number of terms, resulting in the construction of *predications*. That is, we can construct *predications* by combining predicates and terms. In FG predicates are stored in the lexicon as the generic forms of predicate-frames.<sup>2</sup> These predicate-frames are known as the basic building blocks out of which underlying predications are constructed. Information regarding the number of arguments a predicate requires can be retrieved from the predicate-frames. The basic predicate-frames and the basic terms comprise the lexicon.

Each predicate is treated as part of a predicate-frame, which defines its semantic and syntactic properties. The predicate-frames themselves serve as the basic materials to construct predications. Each predicate-frame specifies the

<sup>2</sup>These basic predicate-frames and terms are not formed according to synchronically productive rules; hence, it is assumed that they are provided. Dik (1980a:5) suggests that they must be listed and cannot be generated by means of rules, and that they must be known and cannot be creatively constructed by the language user when he or she needs them.

detailed information needed for a predication, such as the form of the predicate, the syntactic category, the number of arguments which the predicate takes, the semantic functions of these arguments, and the selectional restrictions with regard to arguments. If we use the Lushootseed verbal predicate  $\sqrt{?abyi}$  'give' in (1), the following is the predicate-frame stored in the lexicon:

- (1)  $?abyi_V (X_1: \text{human}(X_1))_{Ag} (X_2)_{Go} (X_3: \text{animate}(X_3))_{Rec}$

The predicate  $\sqrt{?abyi}$  'give' requires three arguments which are an actor, a 'target' of the act and a receiver of that action. However, the predicate frame in (1) has one constraint, which prevents it from having three arguments simultaneously, when all three arguments are regular nominals rather than pronominals. It is a language-specific constraint of Lushootseed in which three regular nominals are not usually allowed to surface within a predication. The predicate-frame still states that  $?abyi-$  is a verbal (V) with  $x_1$ ,  $x_2$  and  $x_3$  plus their semantic functions Agent (Ag), Goal (Go), and Recipient (Rec), where the Agent must be human and the Recipient must be animate.

According to Dik (1981:57), *terms* are formed by means of term formation rules following the general schema shown in (2).

- (2)  $(\omega x_i: \phi_1(x_i): \dots : \phi_n(x_i)) \quad (n \geq 1)$

where  $\omega$  indicates one or more term operators and each  $\phi_j(x_i)$  indicates an open predication having  $x_i$  as a free variable. Since the open predications can include terms of the same structure as (2), the procedures for term formation are recursive. In FG it is presumed that languages possess a productive system of *predicate formation rules* by means of which the set of basic predicate-frames can be extended in tandem with a set of derived predicate-frames. For instance, all derivational morphology and compounding, causativization, voice change, and superlative and comparative formation are dealt with inside the component

of a set of derived predicate-frames.

Like predicate formation, a term  $\phi_j$  may serve as the head or as a modifier in the structure of the term. That is, the term formation rule operates like those in predication formation. In the case of a modifier, the open predication can be noun, adjective, participial, adpositional phrase, or a relative clause. Hence, term formation produces complex terms such as complex noun phrases, endless strings of conjoined phrases, and so on. Of course, the derived terms may feed the predicate-frames via term insertion, which results in an infinite number of terms in a model world.

In addition to the basic predicate-frames and terms given in a natural language, predicate formation rules and term formation rules together provide a set of predicate-frames and a set of terms, which can be combined into nuclear predications. In order to expand the basic predicate-frame toward an extended predicate-frame, for instance, we can add a locative phrase to (1) as follows:

- (3)  $\text{ʔu-ʔab-yi-t-əb}$                        $\text{ʔə ti lu}^{\text{X}}$                        $\text{ʔə ti sq}^{\text{wəbay?}}$      $\text{ʔal tiʔə? ʔalʔal.}$   
 Asp-give-yi Role<sup>3</sup>-Tr-PO    Prt Det man    Prt Det dog    prep Det house  
 ‘The old man gave [someone] a dog in the house.’

In order to get to the predication of (3), we need the basic predicate frame in (1), extended with a location satellite position.<sup>4</sup> Observe the following:

- (4)  $\text{ʔabyi}_V(x_1: \text{human}(x_1))_{Ag} (x_2)_{Go} (x_3: \text{animate}(x_3))_{Rec} (x_4)_{Loc}$

Here we need four appropriate terms to fill three argument positions and a satel-

<sup>3</sup>According to Hess (1993:49), an argument which is associated with the *-yi-* in the predicate can convey benefactive, dative, indirect object, recipient or second object. Hence, the cover term for these semantic functions is simply the *-yi-* role. In Southern Lushootseed the equivalent term is based on the slightly different form *-si-*.

<sup>4</sup>Augments are single words within the clause which express locative or temporal notions and are not part of any other constituent in the clause. They are positionally free relative to the other constituents. However, here *ʔal tiʔə? ʔalʔal* appears as an adjunct to the predication rather than the augment. Readers are recommended to refer to Hess (ibid:110)

lite position of the extended predicate-frame (4). After inserting the appropriate terms both in the argument and satellite positions, the following is obtained:

- (5) a. (dlx<sub>i</sub>: stubš<sub>N</sub>(x<sub>i</sub>): luχ<sub>A</sub>(x<sub>i</sub>)) the old [man]  
 b. (dlx<sub>j</sub>: sq<sup>w</sup>əbayʔ<sub>N</sub>(x<sub>j</sub>)) the dog  
 c. (elx<sub>k</sub>: stubš<sub>N</sub>(x<sub>k</sub>)) [someone]  
 d. (dlx<sub>l</sub>: ʔalʔal<sub>N</sub>(x<sub>l</sub>)) the house

The term formation rule is fully specified in (5), indicating that it has three definite and one existential nominal categories of which the argument *c* is not overtly shown after expression rules have applied. The right column represents the English glosses for each term. The predicate-frame with semantic functions for (4) is illustrated as in (6):

- (6) give<sub>V</sub> a. (dlx<sub>i</sub>: stubš<sub>N</sub>(x<sub>i</sub>): luχ<sub>A</sub>(x<sub>i</sub>))<sub>Ag</sub>  
 b. (dlx<sub>j</sub>: sq<sup>w</sup>əbayʔ<sub>N</sub>(x<sub>j</sub>))<sub>Go</sub>  
 c. (elx<sub>k</sub>: stubš<sub>N</sub>(x<sub>k</sub>))<sub>Rec</sub>  
 d. (dlx<sub>l</sub>: ʔalʔal<sub>N</sub>(x<sub>l</sub>))<sub>Loc</sub>

The  $\omega$  in term formation rule (2) can be one or more operators in functional notation. (6c) has an Existential Quantifier as an operator, while in other arguments *d* stands for the term operator 'definite.' Further, it has gender distinction too. Therefore, the omitted *stubš* denotes a male rather than a female. '1' represents the term operator 'singular.' The colon ':' indicates that the information to the right gives a specification of or a restriction on the possible values of x<sub>i</sub>, x<sub>j</sub>, x<sub>k</sub>, and x<sub>l</sub> to the left.

### 2.1.2 On predication construction

The output of term insertion is a predication. According to Dik (1981: 70ff), predications of this type are hierarchically organized structures, but they do not have a linear order defined over their constituents. All permutations of the four terms in (6), for instance, contain the same information. In FG predications are linearized only at the very end of the descriptive procedure.

The structure of a predication is based on individual predicate-frames which have the same meaning across languages. Consequently, a typological universal<sup>5</sup> is obtained through term insertion rules at the stage of predication construction, before linear order has been achieved by expression rules. The actual number of arguments which surface is adjustable, since FG permits a predicate-frame to be only partially filled. The predicate-frame (4) in Lushootseed is only in part filled by terms, resulting in an open predication with a free variable. In short, only one argument is sufficient for the nuclear predication denoting 'give' in Lushootseed, because Lushootseed grammar allows only one direct complement per nuclear predication.

The general schema for predications induced from (4) can be formulated as follows:

(7a) Nuclear predication

$$\left[ \underbrace{\phi}_{\text{predicate}} \underbrace{(x_1)(x_2)\dots(x_n)}_{\text{arguments}} \right]_{\text{nuclear predication}}$$

(7b) Extended predication

$$\left[ \left[ \underbrace{\phi}_{\text{predicate}} \underbrace{(x_1)(x_2)\dots(x_n)}_{\text{arguments}} \right] \underbrace{(y_1)(y_2)\dots(y_n)}_{\text{satellites}} \right]_{\text{terms}}_{\text{extended predication}}$$

where

1.  $\phi$  is a predicate,

<sup>5</sup>According to Dik (1980a:13), this is one of the features in FG which contributes to typological adequacy in that it does not force us to assume a certain fixed order among the terms in a predicate cross-linguistically, which never occurs in actual linguistic expressions.

2.  $x_1 \dots x_n$  represent nuclear arguments of that predicate,
3.  $y_1 \dots y_n$  represent satellites to the nuclear predication,
4. each  $x_i$  and  $y_i$  is marked for some semantic function, and
5. the nuclear predication is marked for some type of state of affairs, (e.g. some verbal notion).

Among the infinite number of semantic functions how does one describe the relations of one to another? According to FG, from the unordered terms in the basic schema (7a,b) we can extract a hierarchical notion rather than a linear one in that the intrinsic relationship among semantic functions characterizes the terms in a given predicate. It is also presumed that some of these semantic functions are more central to the predication than others. If we extend the notion 'central' to (7b), all the semantic functions in the nuclear predication are obviously more central than those assigned in the satellite terms.

For instance, an agent is a more necessary constituent than a goal which is an optional element in a given action. The agent must be more central to the predication than the goal is.<sup>6</sup> Along these lines, there can be no recipient without a goal, but there can be a goal without a recipient. Therefore, it is reasonable to state that the goal is more central than the recipient in this respect, even though the goal in Lushootseed can be omitted, as in (8).

- (8) ʔu-ʔab-yi-t-əb            ʔə ti luχ            ti čačas  
 Asp-give-yi Role-Tr-PO    Prep Det man    Det boy  
 'The old man gave [something] to the boy.'

A language-specific rule in Lushootseed suppresses constructions with three arguments which surface after the expression rules.

<sup>6</sup>Goal in FG corresponds to Patient in Bloomfield (1934) according to Dik (1989:104). Note that Patient is consistently used in Hess's description of Lushootseed.

Although we compare only two semantic functions at one time with respect to the notion 'central,' it is clear that there is a partial ordering of the terms of a predication. This partial ordering is called the *semantic function hierarchy* (SFH).

( 9) Semantic function hierarchy (SFH)

Ag Go Rec Ben Instr Loc Temp

Ag stands for Agent; Go stands for Goal; Rec stands for Recipient; Ben stands for Beneficiary; Instr stands for Instrument; Loc stands for Location; and Temp stands for Temporal. Other semantic functions such as Experiencer, Manner, Source, etc., are not included here.

Apart from the intrinsic ordering implied in the SFH, it is also presumed that predications do not define any further orientation or perspective on the state of affairs which they designate. In predications a relationship between the number of entities with their own roles in the state of affairs is encoded at an intermediate stage before the full-fledged phrases. That is, the linear ordering among constituents in a sentence does not take part in the process of predication construction. At this stage predications simply state certain relationships between a number of entities, once the semantic roles are established.

According to Dik (1981:71), in natural discourse people are apparently more interested in the entities which play a role in some state of affairs, than in the relations obtaining among them. If the entity, chosen as a point of departure for describing some state of affairs, were always the entity with the highest ranking semantic function in the SFH, this perspective could be taken as fixed regardless of grammatical relations. On the contrary, it is noted that the actual linguistic expression and the predicative structure of a sentence do not often coincide. There is no one-to-one correlation between semantic functions and grammatical relations among arguments. Grammatical relations merely repre-

sent a certain salience in the logico-semantic relations among the constituents of the sentence.

Predications can be formulated for linguistic expressions of quite different structures. These differences result from the assignment of two further types of functions besides the semantic functions already given in the predication construction. The logico-semantic relations can be mapped as a set of syntactically encoded semantic functions among the sentential constituents. And additional information can be added to the actual linguistic expressions after the syntactic information has been mapped. This additional information includes situational and contextual information which is realized by adding intonation, stress, or even utilizing dislocation of constituents in FG terms.

### 2.1.3 Assignment of syntactic functions

As the point of departure for describing the state of affairs, the syntactic function is assigned. In turns, subj(ect)<sup>7</sup> assignment determines the perspective from which the situation of the predication is described.

In Korean, the expressions for the predicate *čuta* 'give' are as follows:

- (10a) *noin-i sonyən-eke kə-lil ču-əss-ta.*  
 old-man (Ag) child (Rec) dog (Go) give-T/A-Dec  
 'The old man gave a dog to the boy.'
- (10b) *kə-ka noin-e jihə sonyən-eke ču-ci-əss-ta.*  
 dog (Go) old man (Ag) child (Rec) gave-Pass-T/A-Dec  
 'The dog was given to the boy by the old man.'
- (10c) *sonyən-i noin-ekesə kə-lil pat-ass-ta.*  
 boy (Rec) old man-from (So) dog (Go) receive-T/A-Dec  
 'The boy received the dog from the old man.'

<sup>7</sup>From the viewpoint of derived syntax, one argument (usually a noun phrase) from among the arguments of a predicate is singled out for preferential treatment — preferential in that, for instance, it alone undergoes a number of syntactic rules such as movement rules, agreement rules, etc. in generative terms. This argument is called the SUBJECT of the sentence, according to Comrie (1981b:68).

In Lushootseed, the actual expressions describing states of affairs designated by a predicate such as  $\sqrt{\text{ʔabyi}}$  'give' in (4) take as their point of departure either [someone] (11a), [something] (11b) or *the dog* (11c) (following Hess's 1993 illustration):<sup>8</sup>

- |       |               |                  |                                   |   |
|-------|---------------|------------------|-----------------------------------|---|
| (11a) | ʔu-ʔab-yi-təb | <u>ʔə ti luχ</u> | <u>ʔə ti sq<sup>w</sup>əbayʔ.</u> | The old man gave<br>[someone] a dog.        |
|       |               | agent            | patient                           |   |
| (11b) | ʔu-ʔab-yi-təb | <u>ʔə ti luχ</u> | <u>ti čačas.</u>                  | The old man gave<br>[something] to the boy. |
|       |               | agent            | dative                            |   |
| (11c) | ʔu-ʔab-yi-təb | <u>ti čačas</u>  | <u>ʔə ti sq<sup>w</sup>əbayʔ.</u> | [Someone] gave the dog<br>to the boy.       |
|       |               | dative           | patient                           |   |

The examples in each of (10) and (11) are synonymous in describing the state of affairs, although each example has its own perspective. In other words, in neither (10) nor (11) are examples *a*, *b* and *c* interchangeable with one another, although the truth-conditions of the sentences in (10) and (11) are identical. This implies that there is more to the semantics of natural language sentences than whether the question of the truth-conditions bestow synonymy on the same set of sentences.

In FG (Dik 1981:72ff) the following are the similarities in handling of Subj assignment:

- (12) a. the types of constituents accessible to Subj assignment;  
 b. the conditions under which such constituents are accessible to Subj assignment;  
 c. the formal consequences of Subj assignment for the structure of the linguistic expression; and  
 d. the subsequent rules of grammar which require crucial reference to the Subj function.

<sup>8</sup>Cf. Hess (1993:49ff). Dative in Hess (ibid) corresponds to Recipient in FG. It is also noted that patient à la Bloomfield (1933) in Hess (ibid) corresponds to Goal in FG. Here we use patient in Hess's description for Lushootseed, while goal is used in Dik's description for patient.

More often than not, the notion of Subj assignment prompts a discussion between an active and passive construction; however, in FG its association with voice-change is simply abandoned. The active-passive relation is considered to be only a special case of a much more general process. In principle, the Subj function can be assigned to any function in the SFH (9). From a broad range of data across languages, the following show how the Subj is employed:

- (13) a. Subj assignment is not intrinsically restricted to Ag and Go arguments;  
 b. Subj assignment does not necessarily lead to any movement of arguments.

The next syntactic assignment must be the syntactic function *Object*. The possibilities of Obj(ect) assignment are more restricted than those of Subj assignment in (12). The occurrence of Obj assignment is dependent upon the occurrence of Subj assignment. That is, Obj assignment must follow Subj assignment. Obj assignment does not normally apply to Ag, since Ag arguments are the primary candidates for Subj assignment. In FG only two syntactic functions – Subj and Obj – are required. Formally, Subj and Obj assignment are expressed as the simple addition of the Subj and Obj function to arguments with specified semantic roles. Consider the following predication to which syntactic functions have been applied.

- (14)  $\text{?abyiv} \left( \begin{array}{l} (d1x_i : \text{man}_N(x_i) : \text{old}_A(x_i))_{AgSubj} \\ \left\{ \begin{array}{l} (d1x_j : \text{dog}_N(x_j))_{Go} \\ (d1x_k : \text{boy}_N(x_k))_{Rec} \end{array} \right\}_{Obj} \end{array} \right)$

This predication, which is based on example (11), shows that Obj can be assigned to either Go or Rec, e.g. (11a) *?u?abyitəb ?ə ti luʰ ?ə ti sqʷəbəyʔ*. ‘The old man gave [someone] a dog,’ and (11b) *?u?abyitəb ?ə ti luʰ ti ʰaʰas*. ‘The old man gave [something] to the boy.’ In other words, it is possible to specify a perspective for either the goal or the recipient via the Obj function assignment. Since linear order is determined at the final stage of the FG’s descriptive

procedure, the predication in (14) can be used for any language. The predication structure in (14) is independent of the constituent ordering patterns of any one specific language. Dik's FG obtains typological adequacy by simply not specifying Obj function to a particular term at this stage of the grammar.

If we apply predication (14) to Korean, we have the constructions (15) and (16).

(15)    *noin-i*                      *sonyən-eke*                      *kæ-lil*                      *ču-əss-ta.*  
 old-man (Ag)-**Subj**    child (Rec)                      dog (Go)-**Obj**    give-T/A-Dec  
 'The old man gave a dog to the boy.'

(16)<sup>9</sup>    *noin-i*                      *sonyən-il*                      *kæ-lil*                      *ču-əss-ta.*  
 old-man (Ag)-**Subj**    child (Rec)-**Obj**    dog (Go)                      give-T/A-Dec  
 'The old man gave the boy a dog.'

In (15), Obj is added to Go, while in (16) it is added to Rec. The assignment of Obj is selected by means of placing the viewpoint on either Go or Rec in (14). Either way, the structure of (14) remains intact.

The full inventory of Subj and Obj assignment for predication (14) is summarized in table (17).

(17)

	Agent	Goal	Recipient
a.	Subject	Object	
b.	Subject		Object
c.		Subject	
d.			Subject

The two assignments (17a) and (17b) cover examples (15) and (16) respectively. (17c) and (17d) are found in examples (18) and (19).

<sup>9</sup>Example (16) is the well-known double object (accusative) construction in Korean to be explored in chapter four.

(18) kæ-ka      noin-e ïihæ      sonyæn-eke      čuə-ci-əss-ta.  
 dog (Go)    old man (Ag)    child (Rec)    gave-Pass-T/A-Dec  
 'The dog was given to the boy by the old man.'

(19) sonyæn-i    noin-ekesə      kæ-lil      pat-ass-ta.  
 boy (Rec)    old man (So)    dog (Go)    receive-T/A-Dec  
 'The boy received the dog from the old man.'

After the syntactic functions are assigned to (18) and (19), Subj appears on either the Go or Rec argument, giving (18') and (19'):

(18') kæ-ka              noin-e ïihæ      sonyæn-eke      čuə-ci-əss-ta.  
 dog (Go)-**Subj**    old man (Ag)    child (Rec)    give-Pass-T/A-Dec  
 'The dog was given to the boy by the old man.'

(19') sonyæn-i            noin-ekesə      kæ-lil            pat-ass-ta.  
 boy (Rec)-**Subj**    old man (So)    dog (Go)        receive-T/A-Dec  
 'The boy received the dog from the old man.'

Put simply, Subj assignment in FG accounts for the changes in perspective without recourse to an active-passive shift. In fact, (19) simply employs a different predicate, namely the word for 'receive.'

Thus, Subj and Obj assignments effect no change in the input predication, except for those two syntactic functions to the relevant arguments. The following points are noteworthy.

(20)

- a. The underlying semantic function of the argument submitted to Subj or Obj assignment is retained. This means that even in later stages of the description, Subj and Obj can be differentiated in terms of their underlying semantic functions.
- b. Any argument not provided with a Subj or Obj function simply remains as it is, characterized only by its semantic function.
- c. All of the formal effects of Subj and Obj assignment are taken care of by later rules which are applied only after the assignment of the pragmatic functions *Theme* and *Tail*, and *Topic* and *Focus*.

The ultimate order of constituents is determined by the interaction of the syntactic and pragmatic functions. First, the Subj or Obj function determines the positions the constituent has. Then pragmatic functions determine the ultimate linguistic expression. The Subj or Obj function is also responsible for the way the sentence constituents are marked by case or adpositions. If there is agreement between the verb and any other constituent in the clause, then the Subj is the first candidate and the Obj is the second candidate for fulfilling this agreement.

Languages differ with respect to which constituents can and which constituents cannot be assigned Subj and Obj function. In FG the variation across languages in this respect is controlled according to the SFH as illustrated in (9). This hypothesis in FG can be presented as follows (Dik, 1981:74):

(21)	Ag>	Go>	Rec>	Ben>	Instr>	Loc>	Temp
Subj	X	X	X	X	X	X	X
Obj		X	X	X	X	X	X

Apparently, Subj can be added to any semantic function. Obj can be added to any semantic function except Ag, when the Ag is occupied by Subj. The schema in (21) shows that the assignment of Subj and Obj functions becomes more "unusual" or "marked" as we pass through the SFH from left to right, both within and across languages.<sup>10</sup>

<sup>10</sup>According to Dik (ibid:78), languages differ in the 'cut-off point' for the syntactic function assignments. For example, English has its cut-off point for Obj assignment after Ben(efactive) as shown below:

John bought Mary<sub>BenObj</sub> a drink.

As for Subj assignment, English has its cut-off point either before or after Ben. Compare the following with the above:

Mary<sub>BenSubj</sub> was bought a drink by John.

#### 2.1.4 Assignment of pragmatic functions

Within linguistic theory in general, the principle that pragmatic functions of some sort must play a role at some level in the description of natural languages is recognized without dispute. For instance, pragmatic functions have been organized into oppositions such as 'topic' versus 'comment,' 'theme' versus 'rheme,' 'given' versus 'new,' and 'focus' versus 'presupposition.' These oppositions are *pragmatic functions* inasmuch as they can be predicated of constituents only with respect to some wider, extra sentential setting in which they occur. It is also known that they are all crucially dependent on pragmatic information in some way or another. In FG there are four pragmatic functions. They are theme, topic, focus and tail.

In FG, pragmatic functions, employing the so-called *left-dislocated* and *right-dislocated* constituents, are not to be regarded as part of the predication proper, but as constituents preceding and following the predication, and connected with it by way of some pragmatic characteristic. To express this characteristic, Dik (1981) assigns the pragmatic function Theme to left-dislocated constituents, and the pragmatic function Tail to right-dislocated constituents. Up to the point of the assignment of syntactic functions, principles and schemata have been developed inside the predication. A grammar must also provide the means for introducing predications preceded by a Theme and followed by a Tail (Dik, 1981:130ff).

(22)  $(x_i)_{Theme}, \text{ Predication}, (x_j)_{Tail}$

shows that both the Theme and the Tail are optional additions to a predication. That is, Theme and Tail functions are only loosely connected to a predication. According to Dik (*ibid*), the pragmatic status of these two functions are interpreted as in (23):

- (23) a. A constituent with Theme function presents a domain or universe of discourse with respect to which it is relevant to pronounce the predication that follows it.
- b. A constituent with Tail function presents, as an 'afterthought' to the predication, information meant to clarify or modify (some constituent contained in) the predication.

Besides theme and tail, Dik (ibid) assumes that the pragmatic functions *Topic* and *Focus* are relevant to the predication proper.

- (24) a. A constituent with Topic function presents the entity 'about' which the predication predicates something in the given setting.
- b. A constituent with Focus function presents the relatively most important or salient information with respect to the pragmatic information of the Speaker and the Addressee.

Dik (1981) emphasizes that FG does not adopt the view that each pragmatic function should effect a binary division of the linguistic expression such that, if we assign some pragmatic function  $P_i$  to some constituent of a linguistic expression, the rest of the linguistic expression should necessarily have some pragmatic function  $P_j$ . Interestingly, although the notion of 'presupposition' in FG is regarded as a very important pragmatic notion, it is not considered to be a pragmatic function. Instead it is implicitly associated with linguistic expressions as in the following schema:

The assumption that  $p$  is true is a presupposition and  $L$  is some linguistic expression, then

- (25) a. When a Speaker assumes that  $p$  is true, he may express  $L$ .
- b. When a Speaker expresses  $L$ , he must assume that  $p$  is true.
- c. When an Addressee hears a Speaker express  $L$ , he may infer that the Speaker assumes  $p$  to be true.

If (25) provides an adequate account for the notion of presupposition, then the presuppositions may not be part of the linguistic expressions in which they are located. The correlation between the presupposition and the nuclear predication

is linked by means of discourse rather than a rigid syntactic rule.

Let us examine several constructions in both Korean and Lushootseed employing pragmatic functions.

### Theme:

By definition, Theme is a constituent which presents a domain or universe of discourse with respect to which it is relevant to pronounce a following predication. Despite its relevance to predications, the Theme is not to be regarded as a part of the predication. First, we shall review the Theme in Korean and Lushootseed, and examples in English in which the Theme is connected with the predication only via the pragmatic relation of relevance as shown here:

- (26) a. tæhapilo-malhamyən kikəs-i k<sup>h</sup>in čokæ(i)ta.  
 gaper-as for that-Nom big clam-to be-Dec  
 'As for the gaper, that is a big clam.'
- b. čə k<sup>h</sup>in čokæ-ka tæhap-ita.  
 that big clam-Nom gaper-to be-Dec  
 'That big clam is a gaper.'

The following are the Lushootseed counterparts to (26):

- (27)<sup>11</sup> a. háʔəc g<sup>w</sup>əl láʔb hik<sup>w</sup> sʔáx<sup>w</sup>uʔ.  
 horse clam and-Conn very big clam  
 'As for the horse clam, it is a big clam.'
- b. laʔb hik<sup>w</sup> sʔáx<sup>w</sup>uʔ tiʔit háʔəc.  
 very big clam that horse clam  
 '(A) really big clam (is) that horse clam.'

The Theme terms in (26) and (27) are directly related to the predication in which the Theme behaves as an element of the predication set. The Themes above can also appear as part of the predication by repeating the noun, nominalization, pronominalization, clitic, etc. The examples above are straightforward in that

<sup>11</sup>These examples are from the *Dictionary of Puget Salish* (Hess, 1976:651).

the sentence-initial Theme(s) should be filled by some term(s), which may force us to be confined to the 'extraction' account for the origin of the Theme position.

Of course, there are certain constructions in which the Theme constituent does not have any natural source within the predication that follows it. In other words, the Theme constituent and the predication that follows it do not have a direct relationship which can be interpreted as part of the predication. Observe the following (Dik, *ibid*:133).<sup>12</sup>

- (28) As for *the students*, adolescents almost never have any sense.  
 (29) As for *Paris*, the Eiffel Tower is really spectacular.  
 (30) As for *the Centre*, well, the less said about so-called 'think tanks,' the better.

The theme constituents *the students*, *Paris*, and *the Centre* do not originate from the predications. That is, a kind of macro-level universe in discourse is set up for the Theme constituent and the predication that follows it.

To cope with the implicit<sup>13</sup> and explicit relations between a Theme constituent and the predication following it, Dik suggests that the Theme constituent is an element outside the domain of the predication. Its location is to the left of the predication as represented in (31).

- (31)  $(x_i)_{Theme}, (\phi \dots (x_i) \dots)_{Predication}$

In this schema, the optional status of the term  $(x_i)$  inside the predication allows the Theme function to be incorporated into the general schema of (22) regardless of the overt relation between the Theme constituent and the variable  $(x_i)$ .

<sup>12</sup>Originally, (28) and (29) are from Ross (1970); and (30) is from Schwartz (1976).

<sup>13</sup>Quoting Grice (1987), FG adapts the pragmatic relation of *relevance* to relational communication as roughly shown below.

For any pair of Theme T and predication P to make sense, it must be relevant to pronounce P with respect to T.

The above is a condition on possible Theme-predication combinations.

Once again, the relationship between the Theme and the predication can be characterized by articulating that, for a given Theme  $x_i$ , the predication may be an *open* predication in  $x_i$ . This implies that the Theme constituent may be treated as a member outside the performative modality of the subsequent predication. That is, the predication in schema (31) has the full range of performative modalities such as *declarative*, *imperative*, and *interrogative*. Further, examples from other languages also favor the schema (31) above. Observe the Theme constituent with interrogative modality.

(32) My hometown? I haven't been there for ages.

Assuming that it is correct to assign Theme function to *my hometown* in (32), one may have a question from where the modality within *my hometown* comes. If it is extracted from the predication, there should be a rule which may introduce the interrogative mood to the Theme position. Otherwise, the interrogative modality must be introduced by some previous predication. However, if (31) applies to this situation, then there is no conflict between the declarative and the interrogative mood in (32).

### Topic:

In FG Theme is in principle presented as independent of the predication, and the predication is adjusted to the Theme rather than the other way around. However, Topic (Dik, *ibid*:141) is considered to be part of a predication. The Topic function marks that constituent of a predication 'about' which the predication can be taken to predicate something. While the Theme constituent retains its independency of the predication involved, the Topic constituent is necessary for completion of a predication. Furthermore, while Theme is presented in 'absolute' form without any marking of semantic and syntactic functions, Topic

often carries the markings signalling its semantic and syntactic functions within the predication. However, these markings may be partially or wholly neutralized in languages which have a special Topic marker such as Korean  $-(n)in$ <sup>14</sup> and Lushootseed  $g^wəl$ <sup>15</sup> constructions:

- (33)  $čunc^hi-nin$      $ssəkkəto$                        $čunc^hi-(i)ta.$   
 herring Top    become stale-Emp    herring to-be  
 'As for herring, [it] is the best even though it becomes stale.'  
 '(As for fish,) the herring is the best even though it becomes stale.'
- (34)  $tiʔəʔ sʔaχ^wuʔ$      $g^wəl$      $ʔu-dəg^w-abac-bi-d$                        $ʔə$      $tiʔəʔ$      $salif.$   
 Dem butter clam    Top    Asp-inside-LS-2Stem-Tr    Prt    Dem two  
 'As for the butter clam, it is between the [other] two.'

The above examples show that the topic element in the sentence can be replaced by the Subj function; hence, the question arises as to whether or not there is a distinctively assigned function for the Topic constituent independent of that for the Subj function. In FG, as expected, the two functions may coincide, but there is no requirement linking the two constituents with different syntactic and pragmatic functions in the sentence. Therefore, the general schema for the Theme function in (31) can be extended as follows:

- (35)  $(x_i)_{Theme}, \phi \dots (x_j)_{Topic} \dots$

As mentioned above, the value of  $i$  may be identical to that of  $j$ . Up to this point, the reasoning behind the distinction of Theme and Topic in FG is said to be that the Theme is excluded from the domain of predication that follows it, while the pragmatic function Topic is included in the domain of predication.

<sup>14</sup>Some readers may have more exposure to the Japanese topic marker  $-wa$  whose function in Japanese is very similar to  $-(n)in$  in Korean.

E.g.  $Sakana-wa$      $tai-ga$                        $ii$   
 fish Top    red-snapper Subj    good  
 'As for fish, red-snapper is the best.'

<sup>15</sup>According to Hess (1993:154), topicalization is achieved by placing  $g^wəl$  after the topic, in effect treating the topic as an entire clause and using  $g^wəl$  to introduce the following clause. Often, the first constituent, a demonstrative, may be omitted.

Note that Topic is not specified in terms of linear order.

The other two pragmatic functions recognized in FG may be thought of as being symmetrical to theme and topic. Let us briefly consider the third pragmatic function, *Focus*.

#### Focus:

The most important or salient information with respect to the pragmatic information the Speaker has for the Addressee is Focus. Constituents pertaining to pragmatic information shared by Speaker and Addressee are not Focus. Rather, the Speaker assigns Focus to those constituents in a discourse situation which contain new information in terms of pragmatic structure.<sup>16</sup> Aside from realization by prosodic elements, the pragmatic function Focus may be shown with wh-question words. The typical operation of Focus assignment employing wh-question words is performed in the following order (Dik, *ibid*:149).

Suppose that at a given moment  $t_i$  in a communicative exchange between Speaker and Addressee the following conditions hold:

(36)

1. For a given open predication in  $x_i$ ,  $\phi \dots (x_i) \dots$ , the speaker assumes that there is a term  $\delta$  such that if we substitute  $\delta$  for  $x_i$  in the open predication, the resulting predication  $\phi \dots (\delta) \dots$  will be true;
2. the speaker does not know the identity of  $\delta$ ;
3. the speaker assumes that the Addressee knows the identity of  $\delta$ ;
4. and the speaker wants the Addressee to tell him the identity of  $\delta$ .

Under the above conditions the Speaker can form a predication of the form  $\phi \dots (Qx_i)_{Focus} \dots$ , in which a question word (Q) is assigned the Focus function.

The question operator can be separated regardless of the variable  $x$ . Hence, it

<sup>16</sup>According to Givón (1990:699), even contrastive focus overlaps with other topics of grammar, since functional domains are not fully exclusive of each other. In addition, he quotes Bolinger (1961) in which the following is suggested concerning focus of assertion: "... every semantic peak is contrastive ..."

is presumed that all question terms receive Foc(us) function.

In detail, a wh-question thus counts as a request from the Speaker to the Addressee to give him a true value  $\delta$  for the questioned term  $x_i$ . Now if we consider the moment  $t_{i+1}$ , the Addressee will realize the above pragmatic information launched by the Speaker. From the perspective of the Addressee, if the following two items hold at  $t_{i+1}$ ,

- (37) 1. the Addressee does indeed know a true value  $\delta$  for the questioned term  $x_i$ , and  
 2. the Addressee is prepared to tell the speaker the identity of  $\delta$ ,

then the Addressee can form a predication of the form  $\phi \dots (\delta)_{Foc} \dots$  as an answer to the question. The term  $\delta$  is also assigned Foc function, since the term  $\delta$  is the only information which is projected as new from the Addressee. Consequently, the constituent which receives Focus function provides the requested identity from the wh-question. Let us consider the following wh-questions in Lushootseed:<sup>17</sup>

- (38)  $\text{ʔəs-ʔəxid kʷi dəxʷə-s-tagʷ-əxʷ ʔə tiʔəʔ qawqs}$   
 Asp-why Art pref-Nomn-hungry Prt this Raven  
 'Why is Raven hungry?'

- (39)  $\text{ʔəs-čaləxʷ kʷi tʰu-s-huy-s.}$   
 Asp-how Art Mod(Irr)-Nomn-make-3SgAg  
 'How will he manage?'

The corresponding constructions in Korean are given in (40) and (41); however, notice that the wh-question words in Korean are only optionally fronted after the expression rules have been applied.

- (40)  $\text{kalkamakwi-ka wə pəkopʰ-ayo?}^{18}$   
 raven-Nom why hungry-Q  
 'Why is Raven hungry?'

<sup>17</sup>From Hess (1993:136).

<sup>18</sup> $wə \text{ kalkamakwi-ka pəkopʰ-ayo?}$  is also grammatical.

- (41) ki-ka      əttəhke    hænaka-l-kkayo.  
          he-Nom    how            manage-Q  
          'How will he manage?'

The wh-question words naturally receive the pragmatic function Foc, since they are new information in a given discourse between the Speaker and the Addressee. We shall return to a discussion of Focus in appendix B. Rather, we have discuss briefly the fourth pragmatic function in FG, viz. *Tail* function.

#### Tail:

By definition, *Tail*, as an 'afterthought' to the predication, characterizes constituents which present information meant to clarify or modify the predication. The Tail function can be compared to the Theme function in terms of the application domain of predication. In FG the Tail function is assigned to a constituent outside the open predication, applied to the explication of the Theme. Tail comes after the predication in question, as opposed to the initial position in the case of Theme.

Let us investigate the Tail function and see whether it matches well with the Theme discussed earlier.

As mentioned in the section on Theme, the left- and right-dislocands are illustrated in the following passages (from Siewierska 1991:150).

- (42) So what I confess to is a certain ... feeling of dissatisfaction ... in some of the habits 'n' expressions of students that come to me particularly English expression, spelling, punctuation. Once again, *very basic skills*, I'm often very dissatisfied with *them*.
- (43) Both of my brothers came back, uh but one went up to New Guinea and was uh shot through the throat 'n' the bullet came out in his out his back ... Yes *it* was there a long time, *the bullet*, in fact and he had to have *it* removed, *the bullet*.

In (42), the initial constituent, *very basic skills* is resumed in the main predication by a co-denotational item, a pronoun here. In (43), the final constituent, *the bullet* is co-denotational with an entity in the predication, a pronoun again. The Tail is typically located after the predication. Like the Theme, the Tail will also be set off from the preceding predication by means of an intonational contour. Observe the following with italicized Tail functions (Dik, *ibid*:153).

- (44) He's a nice chap, *your brother*.  
(45) I didn't like it very much, *that book of yours*.  
(46) I like John very much, *your brother I mean*.  
(47) John gave that book to a girl, *in the library*.

As with every logical possibility in the distribution of Theme, there is a question of the extent to which the Tail constituents should be regarded as being 'extracted' from the predication. In many cases, it is presumed that some kind of extraction must be involved. In (44) the Speaker produces the predication 'he's a nice chap' without Addressee knowing whom he is talking about, and then only later realizes that the referent of *he* should be specified as 'your brother.' In terms of the Speaker's behaviour we would rather assume something like the following to be the case here; in detail, the Speaker has the full predication corresponding to "your brother is a nice chap" at his disposal, but at first believes that it is sufficient for the Speaker to use *he* for referring to the argument; only later does he add the fuller specification as a Tail to the predication.

In (46) it is not necessary to assume that at the moment the Speaker produces the word *John*, the underlying term must be more fully specified as *your brother John*. The Tail in (46) may add information which was not contained in the original predication. In (47) the satellite of the predication, denoting the spatial dimension, is another example of Tail in which only the second thought is

carried out to the preceding predication. If this pragmatic information is added, the predication will be schematically illustrated as follows:

(48) Predication,  $(x_j)_{Tail}$

where the general condition on possible Tails is that they should be interpretable as a further specification or modification of the predication. Note that the Theme can show the modal difference from that in the original predication, e.g. interrogatives, and so on. The Tail, as the extra-clausal pragmatic function, has undergone a similar modification of the predication, but not so radical as the changes in mood as in the case of Theme. Observe the following (from Dik, *ibid*:154).

(49) John won't be invited, eh... Bill I mean.

The above shows that the Tail need not be a further 'spelling out' of information already contained in the predication. That is, the Tail constituent must in some way or other specify or modify the preceding predication. That partial independence of the Tail, however, does not complete predication as is the case with the Theme. However, it is a sufficient condition for spelling out of pragmatic information in a given discourse. Let us consider the following examples in French (modified and adopted from Dik, *ibid*:155).

- (50) a. Nous lui avons donné le livre hier, à ta sœur.  
 b. \*Nous lui avons donné le livre hier, ta sœur.

In Korean, the same construction is as follows:

- (51) a. uli-ka    əče            ki-eke    ki č<sup>h</sup>æk-il    ču-əss-ta,    ki yəča-eke.  
           we            yesterday    (s)he-to    Det book    gave            Det woman-Dat
- b. \*uli-ka    əče            ki-eke    ki č<sup>h</sup>æk-il    ču-əss-ta,    **ki yəča.**  
           we            yesterday    (s)he-to    Det book    gave            Det woman
- 'We gave the book to her yesterday, to/\* $\emptyset$  that woman'

These examples show that in French and Korean Tail must have a marking corresponding to the constituent of the predication in which further specification of information is contained. This need implies that the Tail carries not only semantic but also syntactic function.

**Part II**

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**Causatives**

## Chapter 3

### The causative constructions

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#### 3.1 Definition of causatives

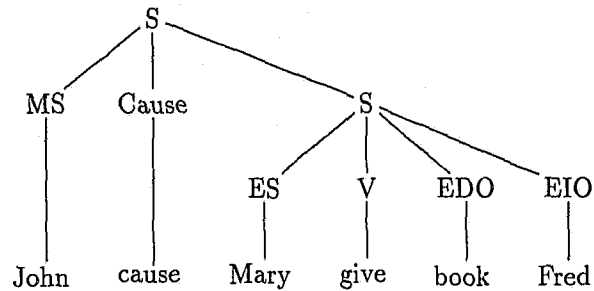
By definition, causatives refer to the causal relationship of two arguments – Causer and Causee – between alternative versions of a sentence. A well-known pair of examples in English is: *The cat killed the mouse* and *The mouse died*. The two sentences are related in the sense that the transitive *kill* can be regarded as a ‘causative’ version of the intransitive *die*; that is, ‘cause to die.’ Similarly, some affixes which are usually attached to the predicate head, such as *-ize* in English, change the whole sentence into a causative one. In addition to lexical (*kill* vs. *die*) and morphological *-ize* causatives, there are periphrastic, that is syntactic, causatives in many languages, e.g., *Mary had the baker deliver the bread* versus *The baker delivered the bread*. But regardless of type, a causative predicate requires one more argument than the corresponding non-causative predicate (Cf. Comrie, 1976).

Although *causative construction* could refer to any grammatical device that encodes causation, the traditional and current linguistic usage typically limits the term to the above three types and, in particular, to cases involving an added argument, the causer. Before turning our attention to the causative in Korean and Lushootseed, we shall consider the views of several scholars concerning causatives.

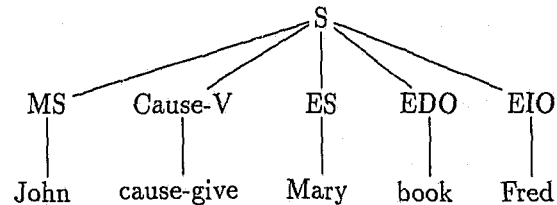
## 3.1.1 Comrie: The number of arguments in causatives

Comrie (1976) assumes that causative constructions derive from a matrix clause and an embedded clause. The latter clause represents a non-causative sentence such as *Mary gives a book to Fred*; while the former expresses the ultimate initiator of an event, *John causes*, for example, in a sentence like *John causes Mary to give a book to Fred*. See (1) and (2).<sup>1</sup>

(1) John caused Mary to give the book to Fred.



(2) John cause-give Mary the book to Fred.



On the basis of a very broad language sample, Comrie suggests that the surface representation of such structures as (1) is that shown in (2). That is, the causative element, whether an affix or an **independent word**, and the verb of the embedded clause are fused,<sup>2</sup> so that in the resulting surface sentence there

<sup>1</sup>MS corresponds to matrix subject; ES corresponds to embedded subject; EDO corresponds to embedded direct object; and EIO corresponds to embedded indirect object.

<sup>2</sup>Usually, two verbs appear disjunctively in English syntax. However, one counterexample is as follows:

is no longer any clause embedding. There is, of course, an added NP, namely initiator, the Causer.

Comrie (1976:261) points out that there are some languages in the world that simply do not have surface structures that correspond to the given underlying structure – that is, they do not have structures that are causative by our definition. He claims, however, that the vast majority does (*ibid*). For this majority there is no restriction on the formation of causatives. And, in general, the causative sentence has one more argument – that which expresses the causer – than its corresponding non-causative sentence. Languages treat this added argument, the causer, as subject (by case marking, word order, etc.). That is, the subject of the corresponding non-causative sentence is displaced in the derived causative.

According to Comrie (but challenged by Dik as detailed below), the displaced subject usually appears in the derived causative construction in a position following the syntactic positions of the other arguments that happen to be in the sentence. Thus, if the non-causative sentence had simply a subject and an object, the derived causative has a subject, object and indirect object; and it is the former, non-causative subject that is the indirect object. Observe (3) in Turkish (from Comrie, *ibid*:263).

- (3) Dişçi mektub-u müdür-e imzala-t-ti.  
dentist letter DO director IO sign Caus Past  
'The dentist made the director sign the letter.'

If there was an indirect object in the non-causative sentence, then the subject of the derived causative is expressed in some other oblique constituent.

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Don't let go of the rope.

One may question whether or not the causative element *let* is cliticized. This question, however, is beyond the scope of the current investigation.

- (4) Dişçi Hasan-a mektub-u **müdür tarafından** göster-t-ti.  
dentist H. IO letter DO director by show Cause Past  
'The dentist made the director show the letter to Hasan.'

Of course, an intransitive non-causative is transitive in its causative derivation and the former subject is now object.

- (5) Je ferai courir **Roger**.  
I make (fut) run Roger  
'I shall make Roger run.'

This "repositioning" of the former subject is summarized in (6).

- (6) Subj(ect) – direct object (DO) – indirect object (IO) – other oblique constituents (Obl)

After adding the causer, the embedded subject is shifted from Subj position to the leftmost position that is not already occupied. Comrie considers this ordering as a hierarchy,<sup>3</sup> with subject at the top and other oblique constituents at the bottom.

### 3.1.2 Givón: Agentivity to causatives

Givón (1984:107) claims that agentivity is scaled very much the same in all languages, as a cluster of properties as shown in (7).

- (7) a. Humanity: human > animate > inanimate > abstract  
b. Causation: direct cause > indirect cause > non-cause  
c. Volition: strong intent > weak intent > non-voluntary  
d. Control: clear control > weak control > no control  
e. Saliency: very obvious/salient > less obvious/salient > unobvious/nonsalient

On this scale the core property is **obviousness/saliency of cause**. Thus, a prototypical agent is human, direct, deliberate, controlling and obvious causer.

<sup>3</sup>Independently motivated, the paradigm case of causative constructions has a common feature with the relative accessibility of noun phrase positions to relativization (Cf. Keenan & Comrie 1977). That is, subjects are easier to relativize than direct objects, and so forth. In short, Comrie identifies the syntactic typology of causative constructions with part of the linguistic universals realized in the hierarchy.

Among the manipulative verbs, e.g. make, take, ask, order, etc., there are periphrastic causatives in which the semantic relation between the main and subordinate clause is defined by Givón as in (8).

- (8) Semantic definition of manipulative verbs
- a. The main clause codes a manipulation by one agent of another potential agent.
  - b. The manipulating agent is coded as the subject of the main clause, the manipulee as its object.
  - c. The complement clause codes the target event performed – or to be performed – by the manipulee.
  - d. The manipulee is the subject-agent of the complement clause.

Morpho-lexical causativization is also found at the top of the manipulative-causative portion of this scale. In fact, Givón believes that the manipulative causative type evolved from the morpho-lexical causativization. He claims that causative affixes are the diachronic consequence of co-lexicalization.

Further down the scale Givón (1990) points out that many languages allow reasonable leeway in assigning non-agent subjects to prototypically transitive verbs, by analogy with real agents. In English, for example, the following transitive verbs can take “less-than-agentive” subjects.

- (9) a. *Liquor* killed him. (‘He drank liquor, and that [act] killed him.’)  
b. *The house* sleeps six people. (‘Six people can sleep in the house.’)

In (9), entities that cannot really initiate an event are nevertheless construed as doing so. They become “causer” and are marked syntactically as agent-subject.

Givón also claims that the directionality of the scale vis-à-vis the construction of agentivity is universal, although cultures (or at least the languages that represent them) differ at the point along the scale at which non-agents can be construed as agents.

**3.1.3 Dik: Predicate formation**

Dik (1980a) finds some exceptions among the above generalizations. Often, there are examples in which no morphological change is detected after a certain expansion in grammatical function has been added to the original verb. To account for the increasing number of complements in the morphologically unchanged predicate, three possibilities are suggested. The first is to increase the number of complements. The second is to decrease the number of complements when the predicate with more complements is considered as basic. The third is to readjust the number of complements from an underlying structure.

Similarly, a general principle governing the causative operation is the tendency for languages to avoid doubling up on the same grammatical relation. Since the newly introduced causer appears in Subj position, the Causee agent must employ grammatical relation other than Subj. The change toward the lower end of the hierarchy in (6) is called "demotion." Observe the following in French.<sup>4</sup>

- (10) a. Jean marche.  
John walks  
b. Pierre fait marcher Jean (DO).  
Peter lets walk John
- (11) a. Jean ouvre la porte.  
John opens the door  
b. Pierre fait ouvrir la porte à Jean (IO).  
Peter lets open the door to John  
'Peter lets John open the door.'
- (12) a. Jean donne un cadeau à Marie.  
John gives a present to Mary  
b. Pierre fait donner un cadeau à Marie par Jean (Obl).  
Peter lets give a present to Mary by John  
'Peter lets John give a present to Mary.'

<sup>4</sup>DO represents direct object; IO represents indirect object; and Obl represents oblique object.

In (11b) the embedded subject *Jean* becomes IO following the prediction in (6). In (12b) the embedded subject *Jean* becomes Obl, since the DO and IO positions are occupied. However, there is an alternative construction to (11b) in which the embedded subject appears in Obl position. Consider the following:

- (13) Pierre fait ouvrir la porte par Jean (Obl)  
Peter lets open the door by John

Interestingly, the demotion in (13) is performed one step further than that predicted in the hierarchy. The IO position in (13) is left unoccupied. According to Dik (1980a), there are few languages which fully bear out the predictions based on Comrie's relational hierarchy in (6). Moreover, in some languages, the embedded subject may take on a grammatical relation already present in the construction. Observe (14) in Korean:

- (14) čəlsu-ka yəŋhi-ka ka-ke həssta.  
Chulsoo-Nom Younghee-Nom go made/did  
'Chulsoo made Younghee go.'

The Causee agent remains in Subj position after the clauses unify into one complex construction. This kind of doubling also appears in DO position in Korean.

While scrutinizing syntactic doubling, Dik (1980a:60) suggests that Dutch doubling in DO position is not an exception to the relational hierarchy, but a general rule for the causative construction in Dutch. In other words, the Causee subject may appear as DO in Dutch, although the DO position is already occupied by another argument. These Dutch constructions throw doubt on the validity of Comrie's relational hierarchy in explaining the general properties of the causatives. After observing numerous examples of doubling and extended demotion, Dik concludes that there is more involved in the treatment of the embedded subject in causative constructions than mere mechanical demotion.

### 3.2 Syntactic causatives and lexical causatives

#### 3.2.1 Preamble

The productive forms of the causative are periphrastic in Korean (as they are in English), the form of which is *-ke hata* 'make [someone] do [something],' while nonproductive forms employ a causative suffix depending upon the morphological environment of the verb. In fact, there are seven allomorphs of the causative suffix.

In Lushootseed, on the other hand, there is only a morphological causative. It has two shapes, *-tx<sup>w</sup>* when final, otherwise *-tu-*. Cross-linguistic studies suggest that isolating languages tend to employ auxiliary causative verbs, while agglutinative languages tend to employ affixes. Both Korean and Lushootseed bear this out.

#### 3.2.2 The periphrastic and affixal causatives in Korean

First of all, we will consider the '*-ke hata*' construction in Korean. (16) is the causative construction of (15). The syntactic process of causativization employs the complementizer *-ke* and a matrix verb *-hata* 'do.' The complementizer *-ke* is attached to the embedded predicate which is a verb.

(15) *sonyən-i čip-e ka-ss-ta.*  
 boy-Nom home-to go-T/A-Dec  
 'The boy went home.'

(16) *poknam-i sonyən-il čip-e ka-ke hæ-ss-ta.*  
 Boknam-Nom boy-Acc home-to go-Comp do/make-T/A-Dec  
 'Boknam took the boy home,' or  
 'Boknam made the boy go home.'

In (16) a new argument is introduced as the causing agent. As the pair (15) and (16) shows, the causative construction in Korean changes the semantic role of the complement *sonyən* 'boy' from agent in (15) to patient in (16). The change

in case particle from *-i* to *-il* reflects this difference.

The examples in (17) and (18) are a pair describing a certain causal event in which *sonyən* 'a boy' becomes the newly introduced Causer. The unified verb takes one of the causative allomorphs according to the morpho-phonological environment.

- (17) *koŋ-i kuləssta.*  
 ball-Nom rolled  
 'A ball rolled.'

- (18) *sonyən-i koŋ-il kul-li-əss-ta.*  
 boy-Nom ball-Acc roll-Caus-T/A-Dec  
 'A boy rolled a ball.'

In Korean there is a morphological process of causativization in which one of seven allomorphs – *-i*, *-hi*, *-li*, *-ki*, *-u*, *-č<sup>h</sup>u* or *-ku* is added to the verb. (18) has the allomorph *-li*. This morphological causative was widely used with Sino-Korean verbs at least as early as the Middle Korean period. Documents from the 15th century attest to its use. In the modern day language, however, the process is no longer as productive as before.

Concerning the case particles after causativization, the following gives an idea of changes in grammatical relations which is not solely dependent on the hierarchy in (6). Consider (19).

- (19) *sonyən-i čip-e ka-ke hæ-ss-ta.*  
 boy-Nom home-to go-Comp do/make-T/A-Dec  
 '[Someone] made the boy go home.'

The case particle *-il* in *sonyən-i* is anticipated, when observing the periphrastic causative construction in (19). Example (19) is also naturally conceivable as having the Acc case particle, except for the lack of causing agent. It is difficult to assume that the case particle on the complement (Causee agent) denotes the relation-changing device via the notion of demotion, since the complement of the causative predicate can even be omitted in colloquial speech. In other

words, neither does the surface case particle (Nom) necessarily signal the complement's subjecthood in the original position, nor does its derived position after causativization. That is, the argument-dropping feature in both Korean and Lushootseed behaves similarly whenever the participants in discourse already know references of the omitted argument, e.g. *næ-ka [sonyən-i] čip-e ka-ke hæsssta* 'I made [the boy] go home' from (19). A sentence without the Causee, [sonyən-i] 'the boy' in this example, is understood without any hesitation. That is, example (19) may retrieve the omitted complement such as *næ-ka* 'I,' or *poknam-i* 'Boknam-Nom' in (16). It depends on the common knowledge between the speaker and the addressee. Note that the case particle for the Causer agent remains the same, which is the nominative case particle *-i* or *-ka*.

The extent to which speakers of Korean are able to drop complements is illustrated in (20), which lacks both agent and patient (Go).

- (20) čip-e      ka-ke      hæ-ss-ta.  
       home-to go-Comp do/make-T/A-Dec  
       '[Someone] made [someone] go home.'

The predication in which the causative predicate in (20) operates seems to follow a different principle. If the two complements have the nominative case particle, *word order* makes up for the missing information due to the doubling of the syntactic position. If there is no argument as in (20), then *discourse* replaces the detailed semantic roles previously presented. It is obvious that the semantic roles of omitted arguments in (20) are preserved by discourse. Observe the morphological causative employing a new verb in (21) which cannot have the two complements in the nominative case particle.

- (21) sonyən-\*/i/íl čip-e      ponæssta.  
       boy-Nom      home-to sent  
       '[Someone] sent the boy home.'

Unlike the omitted complement in (20), the nominative case particle cannot ap-

pear in (21). That is to say, the syntactic causative construction in (20) allows the nominative as well as the accusative case particle. The syntactic causative implies that the causer should be an animate doer. From the viewpoint of semantic functions, it is plausible to say that there are an agent and a patient/goal rather than a newly introduced subject and an embedded subject assumed in the given event of (20). On the contrary, the lexical predication in (21) has stricter constraints which allow only a nominative and accusative combination of case particles.

In this section, I have been concerned with the semantic functions of arguments in Korean, which result in the appearance of a certain case particle. In the next section, we observe the Lushootseed causativization, which does not explicitly increase the number of sentential complements in third person, as we will see in the next section.

### 3.2.3 The morpheme $-tx^w$ / $-tu-$ in Lushootseed

The causative construction in Lushootseed is formed with the suffix  $-tx^w$ . It is pronounced  $-tu-$  when non-final on the predicate head. Consider (22) and (23).

(22)  $\text{ʔu-ʔu}\check{x}^w$  ti  $\overset{1}{\underset{2}{\text{čačas}}}$ .  
 Asp-go Det boy  
 'The boy went.'

(23)  $\text{ʔu-ʔu}\check{x}^w\text{-}tx^w$  ti  $\overset{1}{\underset{2}{\text{čačas}}}$ .  
 Asp-go-Caus Det boy  
 '[Someone] took the boy somewhere.'

Sentence (22) has only one argument, and it expresses the agent or doer. (23) is a similar sentence with the same argument, this time serving as patient. Its predicate bears the causative suffix  $-tx^w$ . The English gloss in (23) can be paraphrased as '[someone] causes the boy to go somewhere.' Consider the

following with *-tu-*:

- (24) ʔu-tuk<sup>w</sup>-tu-b            ʔə    ti čačas.  
Asp-go home-Caus-Tr    prep    Det child  
'The boy took [someone] home.'

The causative constructions in (23) and (24) might be considered to add a place holder to a regular predicate, forming *patient oriented* predicates (Hess, 1993:25ff). Apparently, the morpheme *-tx<sup>w</sup>/-tu-* in addition to producing a causative construction changes the semantic function of the complement from agent in (22) into patient in (23). Then, one may well question how this Lushootseed morphological process can add one more semantic role without any overt change in the number of complements. One explanation is that the predicate becomes a different verb, the truth condition of which does not require two overt complements. The other is to assume that the Causer is omitted after causativization, since this language's third person marker is zero in matrix clauses. Even though we adopt the first approach here, it is still presumed that there are semantic roles of Causer and Causee in the logical form of the given event: '[Someone] took [somebody] somewhere.' The second explanation becomes weak when the first and second person arguments appear in the given event, because the first and second person pronouns are expressed in Lushootseed. Hence, accounting for an additional argument after causativization becomes a problem.

### 3.3 Discussion

#### 3.3.1 Doubling of grammatical relations

While the Lushootseed examples above show that one argument is enough even after *-tx<sup>w</sup>* or *-tu-* is added to the non-causative predicate, there are examples where more than one grammatical relation appears. Consider the following in

Korean:

- (25) ai-ka pap-il mək-əss-ta.  
child-Nom meal-Acc eat-T/A-Dec  
'The child ate a meal.'
- (26) əmma-ka ai-lil pap-il mək-i-əss-ta.  
mommy-Nom child-Acc meal-Acc eat-Caus-T/A-Dec  
'Mommy fed the child a meal.'
- (27) əmma-ka ai-eke pap-il mək-ke hə-ss-ta.  
mommy-Nom child-Dat meal-Acc eat-Comp make/do-T/A-Dec  
'Mommy made the child eat.'

In (26) the morphological causative construction has two DOs. Since there is already a DO argument in (25), the demotion of the Causee argument is expected to end in IO position. That is, *ai-lil* 'child-Acc' which appears in DO position of (26) would be expected by (6) above to have been *ai-eke*, that is an IO. Nevertheless, (26) is not only acceptable in Korean, it is quite ordinary. As shown in (19), there are Korean examples where the Causee agent remains in Subj position after causativization. In addition, we can extend doubling to IO position when there is an IO argument in the non-causative sentence. Consider the following:

- (28) əmma-ka ai-eke pap-il ču-əss-ta.  
mommy-Nom child-Dat meal-Acc give-T/A-Dec  
'Mommy gave a meal to the child.'
- (29) nə-ka əmma-eke ai-eke pap-il ču-ke hə-ss-ta.  
I-Nom mommy-Dat child-Dat meal-Acc give-comp do/make-T/A-Dec  
'I had mom give a meal to the child.'

In (28) there is an IO argument as well as a DO argument. After causativization it is anticipated that the Causee subject will be demoted to Obl, since the DO and IO positions are already occupied. Furthermore, Obl doubling is not an exception to Comrie's case paradigm, since the Obl position is a place holder

used when more than four arguments appear in a sentence. But these two syntactic doublings – of DOs and IOs – are typical case readjustments after syntactic processes.<sup>5</sup>

Now, let us consider the following Lushootseed examples, which do not have any complements:

- (30) ʔu-tuk<sup>ʷ</sup>.  
Asp-go  
'[Someone] went home.'
- (31) ʔu-tuk<sup>ʷ</sup>-tx<sup>ʷ</sup>.  
Asp-go-Caus  
'[Someone] took [someone] home.'

As seen in (31), the causative morpheme *-tx<sup>ʷ</sup>* is added without specifying one more complement. According to Hess (ibid), such verb-only sentences are common and considered to be good Lushootseed style. Further, the [*someone*] can be he/she/it/they, as in *He took her home*, *They took him home*, etc. In third person, Lushootseed causativization does not require any change in the number of complements. In other words, it is possible to entirely omit specific mention of agent and patient, leaving only the verb. This morphological process is productive, whereas there is no periphrastic causative in the language.

Next, let us consider some more details about arguments in Lushootseed (from Hess, 1976:382).

- (32) ʔu-qəp̄ tiʔəʔ buʔq<sup>ʷ</sup>.  
Asp-land Det waterfowl  
'The waterfowl alighted.'
- (33) ʔu-qəp̄-əd tiʔəʔ hud.  
Asp-land-Tr Det fire  
'[Someone] smothered the fire.'

<sup>5</sup>Syntactic doubling is considered unusual, an exception, by Comrie (1974:8).

- (34) ʔu-qəp̄-tx<sup>w</sup>      tiʔəʔ    ʃuləsaq̄<sup>w</sup>.  
 Asp-land-Caus    Det    airplane  
 '[Someone] landed the airplane.'

In (32) there is no patient. In (33) there is a patient and an unexpressed agent affects it directly, while in (34), the airplane is what actually lands but some unexpressed pilot is responsible for the plane's landing. When reviewing these examples, we realize that none of these three predicates changes the number of arguments as the valency<sup>6</sup> increases. Rather, the more complex a predicate becomes by affixation, the greater the number of arguments for it. But the increase in the number of complements in (33) and (34) is not obvious. In other words, if the language has a strong constraint limiting the number of arguments or complements, the aforementioned claim becomes weak after transitivization in (33) and causativization in (34). In (33) an actant is implied, but Lushootseed grammar does not permit its overt expression. Similarly in (34) the pilot cannot be expressed. Implicitly, the causative morpheme motivates the Addressee's understanding that someone else is involved.

If there were a first person argument in (32) and (33), we would have the following:

- (35) ʔu-qəp̄-əd      ɕəd    tiʔəʔ    hud.  
 Asp-land-Tr    1Sg    Det    fire  
 'I smothered the fire.'
- (36) ʔu-qəp̄-tx<sup>w</sup>      ɕəd    tiʔəʔ    ʃuləsaq̄<sup>w</sup>.  
 Asp-land-Caus    1Sg    Det    airplane  
 'I landed the airplane.'

The first person pronoun *ɕəd* can be agent as in (35) and (36). It can also appear

<sup>6</sup>The term is borrowed from chemistry, and is used in linguistics to refer to the number and type of bonds which SYNTACTIC elements may form with each other. The concept of valency can be seen, as far as its ancestry within linguistics is concerned, as something which takes over and extends the more traditional notions of transitivity and government (Lyons 1977:486). If a verb takes only the subject element, it has a valency of one, or is monovalent. If a verb takes both subject and direct object, then it has a valency of two, or is bivalent, and so on.

as patient, as in (37):

- (37) ʔu-ʔu<sup>ʔw</sup>-tu-b      čəd ʔə      ti čačas.  
 Asp-go-Caus-Tr 1Sg prep Det (M.) child  
 'The boy took me home.'

According to Hess,<sup>7</sup> not only word order but also world order<sup>8</sup> shows us the semantic functions of arguments in Lushootseed. Nonetheless, grammatical relations seem to be doubled from the viewpoint of morphology in (32) after causativization. *tiʔəʔ ʔuləsaq<sup>w</sup>* 'the airplane' becomes Causee after the causative morpheme *-tə<sup>w</sup>* is added. It is important to note that Lushootseed never permits more than one direct complement per clause. The *čəd*-word and the direct complement appear in Subj and DO position in (35) and (36). The word order suggests which one is in Subj position. By means of a special suffix, *-b*, a second NP can be added in the form of a prepositional phrase. This construction raises another question which is to be investigated in the next section.

### 3.3.2 Extended demotion

According to the relational hierarchy in (6), it has been the case that when the embedded subject is demoted in the hierarchy, it is demoted to the next available empty position. In the previous section, we have seen syntactic doubling in DO and IO position. By contrast, if the Causee after causativization is demoted more steps than expected, then we shall get an empty syntactic position in the hierarchy. The hierarchy is repeated here:

- (38) Subj — DO — IO — Obl

A certain syntactic position in (38) is not occupied by a demoted argument

<sup>7</sup>From a talk by T. Hess at the Salish Morphosyntax Workshop held at the University of Victoria, March 1994.

<sup>8</sup>The culturally defined relation between the Speaker and the Addressee is different from that in Western Culture.

during the process. We have such an example from French in (13), repeated here as in (41), in which DO is empty. This example may be interpreted as being derived from a passive construction before causativization. Let us re-examine the extended demotion.

- (39) a. Jean donne un cadeau à Marie. (=12)  
           John gives a present to Mary  
       b. Pierre fait donner un cadeau à Marie par Jean (Obl)  
           Peter lets give a present to Mary by John  
           ‘Peter lets John give a present to Mary.’

If we consider another explanation for extended demotion, as argued by Seuren (1972), (41) may not in fact be an exception to the paradigm case. Observe the following:

- (40) a. Un cadeau est donné à Marie par Jean.  
           a present is given to Mary by John  
           ‘A present is given to Mary by John.’  
       b. Pierre fait <sub>s</sub>[un cadeau donner à Marie par Jean]  
       c. Pierre fait <sub>s</sub>[donner un cadeau à Marie par Jean]  
           ‘Peter lets John give a present to Mary.’

The occurrence of Obl *par Jean* arises through passivization of the embedded sentence. Hence, we have (40c). Along these lines, the passivization approach can handle the extended demotion in (13), repeated in (41).

- (41) Pierre fait ouvrir la porte par Jean. (=13)  
       Peter lets open the door by John  
       ‘Peter lets John open the door.’

The Obl argument *par Jean* ‘by John’ suggests that the preposition *par* is a remnant of passivization before causativization.

Interestingly enough, Korean extended demotions are found in IO rather than in Obl. Observe the following:

- (42) koŋ-i kull-əss-tə.  
       ball-Nom roll-T/A-Dec (=17)  
       ‘A ball rolled.’

- (43) sonyən-i koŋ-il/\*-eke kul-li-əss-ta.  
 boy-Nom ball-Acc/\*Dat roll-Caus-T/A-Dec  
 'A boy made the ball roll.'

In (42) the Dative case particle is not acceptable, but the predicted DO in the hierarchy is grammatical. However, if we have an animate Causee, then the following is also acceptable:

- (44) sonyən-i čip-e ka-ss-ta. (= (15))  
 boy-Nom home-to go-T/A-Dec  
 'A boy went home.'
- (45) nə-ka sonyən-il/-eke čip-e ka-ke hæ-ss-ta.  
 I-Nom boy-Acc/Dat home-to go-Comp make/do-T/A-Dec  
 'I made the boy go home.'  
 'I allowed the boy to go home.'

In (45) the demoted Causee can appear as either DO or IO. The DO, namely, the human causee, can be demoted to IO position, leaving DO empty. The syntactic causative construction in (45) has a meaning of permission as well as causation.

In Lushootseed we have seen the extended demotion in (37) with a preposition *ʔə*. Two additional Lushootseed examples follow:

- (46) ʔu-ʔəʔ-tu-b čəd ʔə tsi luʔ.  
 Asp-come-Caus-Tr 1Sg Prep Det (F.) old  
 'The old woman brought me.'
- (47) ʔu-ʔuk<sup>w</sup>-tu-b čəx<sup>w</sup> ʔu ʔə ti ʔaciʔtalbix<sup>w</sup>.  
 Asp-go-Caus-Tr 2Sg Q Prep Det people  
 'Did the people take you home?'

After *-tu-* is added, the newly introduced causer must take one of the syntactic positions in (38). Each causative predicate in (46) and in (47) has a prepositional phrase as agent. The causee remains as DO; the causer appears in Obl, leaving Subj and IO empty. However, it is not clear how to distinguish IO from Obl. Lushootseed has a construction in which a bare NP conveys the Obl

argument in English.<sup>9</sup>

### 3.4 Remedies for the shortcomings

#### 3.4.1 Morphological approach

From another point of view, the causativization process may be interpreted in terms of derivational morphology. Derivational morphology refers to one of the two main processes of word formation, the other being inflectional. A frequently cited criterion to distinguish the two morphological processes is that the result of a derivational process may be a different syntactic category from that of the word to which the process applies, whereas an inflectional process never changes the syntactic category of the word. Even when derivational affixes do not cause a change in syntactic categories, other sorts of large meaning differences can result from derivational processes. The changes in meaning after causativization are so substantial that the triggering morpheme of the causative constructions is derivational rather than inflectional. Typically, derivational affixes also occur closer to the root morpheme than inflectional ones. However, the distinction between the two morphological processes is not always clear-cut, as we will see later.

From a morphological perspective, Comrie (1985) treats causatives as formed by a derivational process. Causative verbs, in fact, are derived not only from verbs, but also from non-verbs such as adjectives, nouns, etc. He is particularly concerned with what the dividing-line is between derivational mor-

<sup>9</sup>For instance, an Oblique argument is signalled in verb morphology as follows:

ʔu-ʔuʔ<sup>w</sup>-tx<sup>w</sup>-yi-d    ti    čačas.  
Asp-go-Caus-Ben-Tr    Det    boy  
‘[Someone] took [something/someone] somewhere for the boy.’

The beneficiary is a prepositional phrase in English, whereas it is in DO position in Lushootseed. The term *yi-role* covers benefactive, dative, indirect object, recipient and provides for a possible second object according to Hess (1993:47).

phology, syntax and inflectional morphology on the one hand, and derivational morphology and the lexicon as a structured list on the other. The term 'derivation' itself implies a kind of directional modification from an underlying to a surface representation. Here, the root morphemes with which we are concerned are mainly verbs, but they can be nouns, pronouns, adjectives, adverbs, and so on. That is, a non-verbal predicate can be the predicate head of the causative operation.

To cope with the demand as to how to describe the derivational situation of the new predicate, it seems quite reasonable to examine the valency of the new verbs. According to Comrie, the decrease or increase in the number of objects, with a change of valency in the latter case, often utilizes the same formal mechanism. He also reports that where rearrangement involves transforming some peripheral argument of the verb (e.g. an instrumental phrase) into an argument more closely bound to the verb (a direct object), the effects of valency-increase and valency-rearrangement are often indistinguishable. Some instances of valency-rearrangement are similar to valency-decrease. Observe the following, in which the increase of valency is not explicitly demonstrated in Korean:

- (48) *hæpyət<sup>h</sup>-i paŋan-e ɕčo-i-əss-ta.*  
 sunshine-Nom room inside-Loc shine-Suf-T/A-Dec  
 'The sun shone in the room.'
- (49) *ki yəča-ka hæpyət<sup>h</sup>-e koč<sup>h</sup>u-lil ɕčo-i-əss-ta.*  
 Det woman-Nom sunshine-Loc pepper-Acc air (out)-Caus-T/A-Dec  
 'The woman aired out [red] peppers.'

The above pair illustrates the fact that it is difficult to decide which one is the underlying construction before valency-change. Or, one may assume that the two examples in (48) and (49) are derived from a common underlying construction. Moreover, the verb morphology of the two sentences above is identical. In other words, the causative construction in (49) does not reveal itself by means

of verb morphology. The number of arguments increases regardless of the case particles, and this causes the grammatical relations to be confusing. Nevertheless, the lexical entry with one more argument should be added into the lexicon under the same word. In fact, (49) can be taken as a passive construction before causativization: "The woman put [red] peppers shone by sunshine." That is, Location is considered as Force (Dik, 1981:37ff) here; the sun in fact makes the peppers dry. Note that the solar energy in nature is expressed in an Obl phrase.

Let us reconsider the morphological causatives in Korean. Following Lieber (1980), the causative allomorph *i* in (49) may be considered as having its own lexical status like roots and stems. The only difference between it and separate words is that the aforementioned affix has morphological subcategorization restrictions as part of its lexical properties. In other words, this causative morpheme is an information-carrying device which indicates how to map certain lexical features according to the morphological subcategorization. Consider the following:

(50) sonyən-i    č<sup>h</sup>a-e    ol(i)l-ass-ta  
 boy-Nom    car-Loc    ride-T/A-Dec  
 'The boy got into the car.'

(51) sonyən-il    č<sup>h</sup>a-e    ol(i)-li-əss-ta  
 boy-Acc    car-Loc    ride-Caus-T/A-Dec  
 '[Someone] put the boy into the car.'

Simply put, by means of the causative morpheme *-li*, the mapping rule of the predicate allows another semantic role – *causer* – to be inserted as a variant in the predicate function. In (51) the newly introduced argument, which is omitted here, is signalled by the fact that *sonyən* now bears the accusative or patient case particle *-il*.

O'Grady (1991:154) notes that, unlike the syntactic causative, the morphological causative is limited in Modern Korean to between 400 and 500 native (as

opposed to Sino-Korean) verbs. Moreover, many morphological causative formations have developed noncausative meanings, which is typical of derivational morphology. Observe the following from O'Grady (*ibid.*).<sup>10</sup>

- (52) əməni-ka ai-eke pap-il mək-i-əss-ta.  
 mother-Nom child-Dat rice-Acc eat-Caus-T/A-Dec  
 'The mother made the child eat the rice,' *or*  
 'The mother fed the child the rice.'

- (53) əməni-ka ai-eke os-il ip-hi-əss-ta.  
 mother-Nom child-Dat clothes-Acc dressed-Caus-T/A-Dec  
 'The mother made the child wear the clothes,' *or*  
 'The mother put clothes on the child.'

The above examples show that the morphological causative construction in Korean has both a causative and a non-causative interpretation, depending upon whether the dative case particle is regarded as causee/agent or goal/recipient. In other words, the semantic function of *ai-eke* in (52) and (53) may trigger the inclusion of causation when being rendered into English. This fact reminds us of the transitive and intransitive English verbs which do not show any change in shape, cited from O'Grady (*ibid.*).<sup>11</sup>

	<i>Base</i>	<i>Affixed form</i>
(54)	pəs- 'to take off'	pəs-ki- 'to take off'
	sin- 'to wear (shoes)'	sin-ki- 'to put on (shoes)'
	či- 'to burden'	či-u- 'to burden'
	ssis- 'to wash'	ssis-ki- 'to wash'

The English glosses in (54) show that valency in English is not made known by the verb,<sup>12</sup> but rather by the number of arguments actually present. In Korean, however, the optional argument-dropping property of the grammar precludes determining valency on the basis of the number of arguments present. Instead, particular verb structures – the causative morpheme in this case – play an im-

<sup>10</sup>These examples are originally from Patterson (1974).

<sup>11</sup>This table is originally from Lee (1975).

<sup>12</sup>Except for a very few cases such as fall, fell; lie, lay; sit, set; and the like.

portant part in determining valency. This kind of causative typology makes it difficult to suggest a framework to cover the causatives in both Korean and Lushootseed. In the long run, finding a theoretical framework which maximally expresses the native speaker's linguistic competence will be the main concern.

### 3.4.2 Semantic properties of the main verb

In explaining the semantic-cognitive dimensions of complementation, Givón (1990) tries to classify the semantic properties of the main verb in detail. The syntactic properties of clauses are crucially dependent upon the semantic case-frame imposed by verbs. The main verb also determines the semantic frame of verb-plus-complement constructions, given that verbs select their arguments and that sentential complements are one type of clausal argument. Complement-taking verbs are grouped into three major classes:

- (55) a. Modality verbs:            want, begin, finish, try, etc.
- b. Manipulative verbs:       make, take, order, ask, etc.
- c. Cognitive-utterance verbs: know, think, say, etc.

As part of the semantic scale of verbs, Givón (ibid:519) suggests that morpho-lexical causativization finds its place at the very top of the manipulative-causative portion of the scale. Interestingly, he regards the affixal status of the causative morpheme as nothing but the *diachronic* consequence of the co-lexicalization of its precursor — a manipulative-causative main *verb* — with its complement verb-stem. The co-lexicalization usually gravitates toward a lexical-derivational process, whereby the erstwhile verb, e.g. make, cause, etc. loses its independent lexical status, undergoes morpho-phonological reduction,<sup>13</sup> and becomes a causative affix on the verb. He also adds a prediction principle extracted from the implicational-hierarchic generalizations (Givón, ibid:556).

(56) Morpho-lexical causatives and non-agentive manipulees:

<sup>13</sup>This is called 'bleaching' in Givón (ibid:556).

“If a language has both a periphrastic — syntactic complementation — causative and a morphological causative, the former is more likely to code causation with a *human-agentive manipulee*, while the latter is more likely to code causation with an *inanimate manipulee*.”

The above generalization holds for the Korean causative constructions, but not for those of Lushootseed. In Korean, the periphrastic causative construction in *-ke hata* ‘cause someone to do something’ seems to encode causation with an animate Causee agent. Observe the following:

- (57) ?ki-ij                    hanmati-ka    kunčuy-ij    solan-il        ča-ke  
 3Sg-Gen                    words            crowd-Gen    turmoil-Acc    sleep-Comp  
 hæ-ss-ta.  
 do/make-T/A-Dec  
 ‘His words made the crowd’s turmoil sleep.’  
 ‘His words calmed down the crowd’s turmoil.’

- (58) ki-ij            hanmati-ka    kunčuy-ij    solan-il        čæ-u-æss-ta.  
 3Sg-Gen    words            crowd-Gen    turmoil-Acc    sleep-Caus-T/A-Dec  
 ‘His words made the crowd’s turmoil sleep.’  
 ‘His words calmed down the crowd’s turmoil.’

(57) is awkward. The inanimate Causee does not seem to be natural in a periphrastic causative construction, but it is fine with the morphological causative in (58).<sup>14</sup> This bears out Givón’s implicational generalization that the Causee agent is not required to be animate. The prediction in (56) thus holds for Korean, but it does not apply to Lushootseed, due to its lack of periphrastic causative constructions.

The English periphrastic causative verbs ‘make,’ ‘have,’ ‘force’ are used predominantly to encode causations with human manipulees. By contrast, morpho-lexical causatives such as *lay* (vs. *lie*), *raise* (vs. *rise*), *show* (vs. *see*), etc., or new verbs with the affixes *-ize*, *-ate*, *-en* or *en-* (as in *theory*, *theor-ize*;

<sup>14</sup>Note that the periphrastic causative in (57) has the sense of permission, while the morphological causative in (58) does not convey the sense of permission.

*substance, substanti-ate; dark, dark-en; large, en-large; etc.*) apply to non-human manipulees. According to Givón, the case-hierarchy predictions concerning the marking of the manipulee along the complementation scale are also manifest within the narrow range of the morpho-lexical causatives.

### 3.4.3 Functional approach to causativization

Against the bisentential underlying representation in (1), Dik (1980a) suggests a causative predicate formation rule in which another agent is introduced; the newly introduced agent occupies the role of Causer and the original agent becomes the Causee. Dik uses the Dutch *laten*-construction ('to let') to illustrate his thesis, and he describes causative constructions under a predicate formation rule in FG. His functional paradigm suggests several significant characteristics of language, especially when we seek a syntactic typology of causative constructions. This framework will be explored more in the following section.

In Dik (1980a:62), the FG account of causative constructions presents a number of advantages over the biclausal hypothesis as set forth in Comrie (1976). In Comrie and most other transformational treatments of causative constructions, a two-place<sup>15</sup> causative verb is proposed. To meet the requirements of such verbs, the causer as subject and a sentential complement expressing the

<sup>15</sup>Following a model in model theoretical logic (Dowty *et al.* 1981), I used this term as a basic syntactic category. In logic, it is customary to specify the syntax of a language not by a phrase-structure grammar but by a recursive definition of the *well-formed expressions* of a language. Thus, basic expressions can be divided into various categories.

event caused<sup>16</sup> <sup>17</sup> are assumed.

Recently, descriptions of verbal categories of many Amerindian languages have utilized a transitive-intransitive classification; and much emphasis has been put on grammatical relations when examining the functional roles of arguments for the predicate of a given language. This approach has led to problems in deciding whether or not implicit functional roles of arguments are added before or after derivational predicate affixes. The following is a recapitulation of predicate formation in FG.

According to Dik(1981:16-7), FG starts with the construction of nuclear predications. By 'nuclear predication' he means the application of a predicate to an appropriate number of terms functioning as arguments of that predicate.

<sup>16</sup>Of course, one may consider this not as two separate events but as one, in which the second event is not expressed. However, it seems that semantic classification in causatives is not well explored. According to Wierzbicka (1988:237), "... The area of causation has an enormous inherent interest from the point of view of the 'philosophy of grammar' and the sociology of language: after all, the causative constructions a language has show how the speakers of this language draw distinctions between different kinds of causal relations, how they perceive and interpret causal links between events and human actions. And yet our knowledge and understanding of 'ethno-causology' is, I think, incomparably far behind that of ethno-zoology, ethno-botany or ethno-geology."

<sup>17</sup>According to Shibatani (1976:1ff), defining the causative construction is not easy. If we could define it fully, we would already have succeeded in giving a grammatical description of the construction. Since it is difficult to draw a definition based on a few languages, Shibatani suggests that a situation of causation be tested across language families. Here we assume that there is a situation which consists of the causative state of affairs. The following are the two conditions that are crucial to constitute a causative event:

- a. The relation between the two events is such that the speaker believes that the occurrence of one event, the "caused event," has been realized at  $t_2$ , which is after  $t_1$ , the time of the "causing event," where  $t$  is time.
- b. The relation between the causing and the caused event is such that the speaker believes that the occurrence of the caused event is wholly dependent on the occurrence of the causing event; the dependency of the two events here must be to the extent that it allows the speaker to entertain a counterfactual inference that the caused event would not have taken place at that particular time if the causing event had not taken place, provided that all else had remained the same.

Predicates may be either basic or derived. Basic predicates are given in the lexicon; derived predicates are formed by means of predicate formation rules. Along the lines of Bach (1968), simple (non-derivational) *contentive* lexemes (i.e., those that are verbal, adjectival, or nominal) are treated as basic predicates. The lexical entries of the basic predicates contain all the information relevant to their semantic and syntactic behaviour in linguistic expressions. The predicate formation rules do not require generative rules to specify the structures' underlying predications. Instead FG proposes conditions on the well-formedness of predicate-frames. These contain the necessary information about the syntactic and semantic behaviour of the basic predicates. Each predicate is treated as part of a predicate-frame. Thus, in FG predicates are not regarded as isolated items to be inserted into some independently generated structure, but rather they are defined by predicate-frames. Predicate-frames are the basic building blocks out of which underlying predications are constructed (Dik, *ibid*:6). Each predicate-frame gives the following information about a predicate:

- (59) (i) its lexical form;  
 (ii) the syntactic category to which it belongs;  
 (iii) the number of arguments it requires;  
 (iv) the selection restrictions which the predicate puts on its arguments; these define the necessary conditions of terms that are to fill argument slots;  
 (v) the semantic functions which the arguments fulfill.

An example of a basic predicate-frame is (60).

(60)  $give_V (x_1: human(x_1))_{Ag} (x_2)_{Go} (x_3: animate(x_3))_{Rec}$

Here, V means that *give* is a verbal predicate, the variables  $x_i$  mark the argument positions, the labels Ag(ent), Go(al), and Rec(ipient) mark the semantic functions of the arguments, and the expressions 'human ( $x_1$ )' and 'animate ( $x_3$ )' specify the selection restrictions on the agent and the recipient argument respectively.

Predications are formed by the insertion of appropriate terms into the arguments specified in the predicate-frame. Additional terms can be added to this frame. These occupy satellite<sup>18</sup> positions and give an extended predicate-frame. By a *term* Dik means any expression which can be used to refer to an entity or set of entities in some world. (61) is a general schema for representing the structure of terms.

$$(61) (\omega x_i: \phi_1(x_i): \dots: \phi_n(x_i))$$

where  $\omega$  indicates one or more term operators and each  $\phi_j(x_i)$  indicates an 'open predication' with  $x_i$  as a free variable. The open predication includes any kind of verb in which a causal/caused event occurs. The free variable can belong to an animate as well as an inanimate noun phrase. A particular  $\phi$  in (61) may end up as the head or a modifier in the structure of the term, and in the latter case, it may be a noun, an adjective, an adpositional phrase, or a relative clause.

The causative construction in Lushootseed is similar to the output of a productive predicate formation rule on some arbitrary predicate-frame. Observe the following formula in FG (from Dutch).

(62) CAUSATIVE PREDICATE FORMATION: Dik (1980a:66)

input: some arbitrary predicate-frame  
 $\phi(X_1) \dots (X_n)$   
 output:  $\text{laten}_V \phi(X_0)_{Ag} (X_1) \dots (X_n)$

$X_0$  indicates a newly introduced argument position for the causer and  $\phi$  indicates some predication. Although Dik does not provide a formula for morphological causative constructions, we can adapt (62) to give (63) by expanding it to handle morphological causatives in general.<sup>19</sup>

<sup>18</sup>In FG, nuclear predicate-frames can be extended by means of satellite positions, namely, positions for satellite terms which specify further properties of the nuclear state of affairs as a whole. Cf. Chapter 2, section 1.2.

<sup>19</sup>If we are to produce a syntactic causative construction, the device can be adjusted by a slightly different marking on *Caus*.

- (63) input: some arbitrary predicate-frame  
 $\phi (X_1) \dots (X_n)$   
 output:  $\text{Caus}_V \phi (X_0)_{Ag} (X_1) \dots (X_n)$

The symbol Caus is not an independent lexical item; it is a place holder which conveys the meaning of causation, and it also introduces the Causer argument to the whole predication.

#### 3.4.4 Subj and Obj functions revisited

The matrices (64) and (65) review syntactic doubling and extended demotion in Korean and Lushootseed. Non-causative constructions in both languages can be summarized as in (64).

- (64)
- |      |    |    |     |
|------|----|----|-----|
|      | Ag | Go | Rec |
| Subj | +  | +  |     |
| Obj  |    | +  | +   |

(with the added restriction that Lushootseed grammar prohibits expression of more than one argument per predicate<sup>20</sup> even when the event could not occur without two (or more) participants). As briefly mentioned in section 2.2.1 of chapter 2, the Obl arguments in Korean are not confused with other arguments in Ag, Go, or Rec. For instance, the benefactive case particle *-(l)il wihayə* in Korean is disjunctively composed of the accusative case particle plus the verb *wihayə* 'to make benefit.' The whole construction becomes a phrase; hence, it is in no way ambiguous.

Without considering Ben, which is called yi-role<sup>21</sup> in Lushootseed, (64) shows the following possibilities:

- (63)' input: some arbitrary predicate-frame  
 $\phi (X_1) \dots (X_n)$   
 output:  $\text{Caus}_{V'}^{syn} \phi (X_0)_{Ag} (X_1) \dots (X_n)$

<sup>20</sup>Without special secondary affixes.

<sup>21</sup>See footnote 9.

- (65)
- |           |      |     |
|-----------|------|-----|
| Ag        | Go   | Rec |
| (i) Subj  | Obj  |     |
| (ii) Subj |      | Obj |
| (iii)     | Subj |     |

The following expression rules determine the form of nominal terms in Korean. When Subj is assigned to Ag, Obj can be assigned to Go, or to Rec as in (65i and ii). Otherwise, Subj is assigned to Go; this provides for the Korean passive construction. Every Subj is realized with the case particle *-ka/-i* and every Obj with the case particle *-il/-lil*. When no syntactic function is assigned to some term, i.e., the sentence lacks a subject and an object, then an Ag term is realized with the case particle *-eke* 'to' which marks IO in the hierarchy (38), and by default, a Go term surfaces with the case particle *-il/-lil* and a Rec term with the case particle *-eke* 'to'. Observe the following:

- (66) sonyən-i                      kwača-lil                      mək-əss-ta.  
 boy-Nom (AgSubj)    cake-Acc (GoObj)    eat-T/A-Dec  
 'The boy ate the cake.'
- (67) sonyən-i                      kwača-lil                      toŋmu-lil                      ču-əss-ta.  
 boy-Nom (AgSubj)    cake-Acc (Go)    friend-Acc (RecObj)    give-T/A-Dec  
 'The boy gave a friend the cake.'

In (66) the Ag and Go are assigned Subj and Obj respectively. In (67) the recipient is assigned Obj. The passive construction in (68) shows that a Go argument is assigned Subj function, and an Ag argument without any syntactic function appears in the Dat case particle.

- (68) pohæŋča-ka                      kyæŋkwan-eke                      čap-hi-əss-ta.  
 pedestrian-Nom (GoSubj)    policeman-Dat (Ag)    catch-Pass-T/A-Dec  
 'A pedestrian was caught by the policeman.'

In Lushootseed nominal terms belong to one of three possible types of complement. Following more or less traditional Salish nomenclature, these are

called direct, oblique and adjunct complements. The latter two are distinguished from the first by the same preposition, namely *ʔə*. Thus, oblique and adjunct complements have identical form. Only when one or the other of these complements receives special focus (see appendix B), does the distinction between them become overt with distinctive morphological marking. The direct complement itself lacks any special syntactic or morphological marking. Here we are concerned with the oblique complement.

#### 3.4.5 Expression rules from Korean causatives

From the preceding discussion, the following special rules can be presented to explain the properties of Korean causative constructions (Dik, *ibid*:68).

- (69) Rule 1: The Causer agent *must* be assigned Subj function.  
Rule 2: One Obj function must be assigned.  
Rule 3: When Obj is assigned to Go or Rec, then the Obj function may *optionally also* be assigned to the Causee agent.

Let us consider the implications of (69). Rule 1 implies that causative constructions cannot be made passive. This rule leads to a simplification of the potential array of realizations for causative constructions. The prohibition of rule 1 is useful in light of the more complex character of causatives. If they could be made passive, the resulting complexity would be extreme.

Rule 2 implies that if the Causee agent is the only argument in the causative construction, then the Causee agent may be assigned Obj function. With this rule Dik accounts for the fact that, in Dutch and many other languages, when the complement of the causative construction is intransitive, there is only one possible realization (from Dik, *ibid*:68):

- (70) a. Pete liet Jan lopen.  
Pete let John walk  
'Pete let John walk.'
- b. \*Pete liet door Jan lopen.  
Pete let by John walk  
'Pete let by John walk.'

Dutch shows that the argument in intransitive predicates is forced to get assigned Obj. On the basis of (70), we see that the Causee agent in Dutch is assigned Obj if it is from an intransitive construction. Hence, (70b) is ungrammatical. In other words, syntactic function has priority over the expression rules, i.e., the rules in which the case morphology or the adpositions are determined. However, in Korean the Causee agent might not be assigned Obj function; rather, it sometimes remains unchanged but without any syntactic function assignment. Therefore, it is necessary to modify the rule 2 in (69) as follows:

(71) Rule 2 (modified): One Obj function *may* be assigned.

(71) sanctions the Korean extended demotion to Obl. Sentence (72) shows another interesting contrast concerning the case particles.

- (72) poknam-i sonyən-\*/i/il/eke kəl-li-əss-ta.  
Boknam-Nom boy-\*Nom/Acc/Dat walk-Caus-T/A-Dec  
literally, 'Boknam walked the boy.'  
'Boknam made the boy walk.'

A Causee agent is not acceptable with the nominative case particle but is well-formed with either the accusative or dative. The Ag<sup>1</sup>Subj argument<sup>22</sup> can not remain without being assigned Obj. Either Obj is assigned to the Causee agent or the Causee agent becomes unspecified in terms of syntactic function, and is by default marked with the dative particle, *-eke*.

<sup>22</sup>In (63) we have a formula which introduces a new argument with subscript 0. The Ag<sup>1</sup> in Ag<sup>1</sup>Subj denotes that the argument with semantic function Ag has been there before the causative operation ends. In terms of syntactic functions the Causee agent was assigned Subj.

If, on the other hand, the predicate-frame is based on the syntactic causative rather than on the morphological causative of (73), the prohibition of Ag<sup>1</sup>Subj no longer obtains.

- (73) poknam-i      sonyən-i/il/eke      kət-ke      hæ-ss-ta.  
 Boknam-Nom   boy-Nom/Acc/Dat   walk-Comp   make/do-T/A-Dec  
 'Boknam caused the boy to walk.'

The expression rule for (73) even includes the case particle *-i* which means that the Ag<sup>1</sup>Subj can remain the same after the causative operation. The syntactic causative permits Obj not to be assigned to the Causee agent. Hence, syntactic doubling of grammatical relations can be handled easily in FG. Moreover, the Dat case particle *-eke* on the Causee agent makes it seem as if the unified predication allows for the extended demotion into Obl position in the hierarchy of (38). This is because the unspecified syntactic function on the Causee agent term leads to Ag<sup>1</sup> instead of Ag<sup>1</sup>Subj.

Sentence (74) provides another example in which the derived predicate-frame is replaced by lexical causation.

- (74) poknam-i      sonyən-\*/i/\*eke      ponæ-ss-ta.  
 Boknam-Nom   boy-\*/Nom/Acc/\*Dat   send-T/A-Dec  
 'Boknam sent the boy [somewhere].'

(74) can be interpreted as a causal event such as 'Boknam caused the boy to go [somewhere].' However, in this sentence the lexical item *ponæta* allows the Causee agent to be assigned only Obj. In other words, ordinary speakers regard the predicate as an independent verb rather than as a word based on a derived predicate-frame as part of the causative operation; therefore Obj assignment is necessary in (74).

The following is a transitive example previously cited as in (26) and (27).

- (75) əmma-ka      ai-\*/ka/lil/eke      pap-il      mək-i-əss-ta.  
 mommy-Nom   child-\*/Nom/Acc/Dat   meal-Acc   eat-Caus-T/A-Dec  
 'Mommy caused the child to have a meal.'

In (75), the Causee agent must either be assigned Obj or be unspecified in terms of syntactic function assignment. Double Nom case marking is not allowed. However, it is allowed when the predicate forms a syntactic causative as follows:

- (76) əmma-ka ai-ka/lil/eke pap-il mək-ke hæ-ss-ta.  
mom-Nom child-Nom/Acc/Dat meal-Acc eat-Comp make/do-T/A-Dec  
'Mommy made the child eat.'

Not only can the Causee agent in (76) remain the same but it can also be assigned Obj after the derived predicate-frame is fixed. Moreover, when any syntactic function is not assigned, the argument having only semantic function appears with the dative case particle *-eke*.

Rule 3 implies that if, besides the Causer ( $Ag^0$ ) and the Causee ( $Ag^1$ ), there is also a Go argument present, then the normal assignment of Obj is expected to remain in the Go argument. However, because the Causee agent can also be assigned Obj, rule 3 provides for the doubling of Obj function. It is summarized as follows:

- (77)  $Ag^0$ Subj  $Ag^1$ Subj GoObj

(77) represents the syntactic doubling of Subj. The predicted occupation of IO position is schematically captured in (78).

- (78)  $Ag^0$ Subj  $Ag^1$  GoObj

Optionally, however, Obj can be assigned to  $Ag^1$  as represented in (79).

- (79)  $Ag^0$ Subj  $Ag^1$ (Subj)Obj GoObj

This last schema provides for the doubling of DOs in both (75) and (76). The syntactic assignment of Obj to  $Ag^1$  overrules the remnant of (Subj) from the non-causative predicate-frame. That is, the case particle in the Go argument

remains the same after Obj function is assigned to Ag<sup>1</sup>.

Here, we have an interesting Korean example in which the morphological and syntactic causatives are combined (from Song 1993:289).

- (80) əməni-ka                      kačəŋpu-ka/?lil/eke                      ai os-il  
 mother-Nom                      housemaid-Nom/?Acc/Dat                      child clothes-Acc  
 kalaip-hi-ke                      hæ-ss-ta.  
 change-Caus-Comp                      make/do-T/A-Dec  
 'Mother made the housemaid change the child's clothes.'

The predicate in (80) is composed of a verb stem plus the Caus morpheme, the complementizer *-ke* and the matrix verb *hæssta* 'made/did.' As opposed to the lenient selection of case marking noted above, the Acc case particle here seems to me to be grammatically marginal if not out and out unacceptable. This highly questionable interpretation may be due to the complex stacking of arguments which can occur as object. There are two interpretations of (80). Either the child in (80) is the actant in changing the clothes, because 'Mother made the housemaid cause [the child] to change clothes,' or, the housemaid actually changed the child's clothes. Thus we see that control of the event is an important issue.

Another interpretation of events described by the syntactic causative is the permissive sense. A permissive reading with the syntactic causative construction has the following schema for the derived predicate-frame.

- (81) input:                      some arbitrary predicate-frame  
     $\phi (X_1) \dots (X_n)$   
 output:                      Caus<sub>V</sub><sup>yn</sup>  $\phi (X_0)_{Ag} (X_1) \dots (X_n)$   
 meaning:                      "x<sub>0</sub> does nothing to prevent the state of affairs designated  
    by the input predicate-frame from obtaining"

### 3.4.6 Expression rules in Lushootseed causatives

Let us now review the exceptional syntactic doubling and the extended demotion in Lushootseed. As mentioned briefly above, Lushootseed arguments can be classified into two groups. One contains direct complements and the other contains oblique complements. Of oblique complements we are concerned here with the indirect complements, which usually form a prepositional phrase with *ʔə*.

The basic predicate in Lushootseed has one or two arguments.<sup>23</sup> No more are permitted without special derivation of the predicate head. This distinction between one and two arguments does not depend entirely on the number of logical/actual participants in an act/event. It is no surprise that a verb such as *ʔitut* 'sleep(s)' allows only one argument; but similarly verbs like *kʷədad* 'take(s)' and *kʷaxʷad* 'help(s)' and hundreds more can have only one argument in spite of the fact that at least two participants are necessarily involved in these actions. Verbs of this class are called *patient oriented* by Hess (1993:26ff) because that one permitted argument expresses the patient (Goal in Dik's term). It is conveyed in the direct complement.

A second equally large class of verbs Hess calls *agent oriented* (Hess, *ibid*) because the direct complement accompanying these verbs expresses the agent. This class does permit two arguments. In addition to the agent, overt mention of a patient (i.e., goal) is possible (although good Lushootseed style seldom includes it without at the same time dropping the agent<sup>24</sup>). Whether or not the agent is stated, the patient of this verb class is expressed in the adjunct complement. In the following examples *-qʷəld* belongs to the patient oriented class and *-qʷəlb* to the agent class.<sup>25</sup>

<sup>23</sup>Although these are optional because Lushootseed is an argument dropping language.

<sup>24</sup>Most often it is the agent that is given and the patient that is omitted.

<sup>25</sup>Here the root involved can go in either stem class but many roots are restricted to one class or the other.

- (82) ʔu-ɬ<sup>w</sup>əl-d ti sʔuladx<sup>w</sup>.  
Asp-cook-PO Det salmon  
'[Someone]<sup>26</sup>cooked the salmon.'
- (83) ʔu-ɬ<sup>w</sup>əl-d.  
Asp-cook-PO  
[Someone] cooked [something].
- (84) ʔu-ɬ<sup>w</sup>əl-b tsi lu<sup>χ</sup>.  
Asp-cook-AO Det (F.) old  
'The old woman cooked.'
- (85) ʔu-ɬ<sup>w</sup>əl-b.  
Asp-cook-AO  
'[Someone] cooked [something].'
- (86) ʔu-ɬ<sup>w</sup>əl-b tsi lu<sup>χ</sup> ʔə ti sʔuladx<sup>w</sup>.  
Asp-cook-AO Det (F.) old prep Det salmon  
'The old woman cooked the salmon.'
- (87) ʔu-ɬ<sup>w</sup>əl-b ʔə ti sʔuladx<sup>w</sup>.  
Asp-cook-AO prep Det salmon  
'[Someone] cooked the salmon.'

In these examples it is the first two that have patient oriented predicates while the other four are agent oriented. Note that (87) remains agent oriented even though the argument expressing the old woman, *tsi lu<sup>χ</sup>*, has been omitted.

Example sentences (83) and (85) impart the same information as do (82) and (87). In (82) *ti sʔuladx<sup>w</sup>* 'the salmon' is the direct complement and conveys the patient (goal). In (84) and (86), on the other hand, *tsi lu<sup>χ</sup>* 'the old woman' is the direct complement and expresses the agent. Example (86) includes an adjunct, *ʔə ti sʔuladx<sup>w</sup>* 'the salmon,' which represents the patient (goal).

By means of a secondary stem suffix, namely -b,<sup>27</sup> a patient oriented stem can be formed that does permit the expression of an agent by providing for the

<sup>26</sup>Words within brackets are required by English grammar but have no referent in the Lushootseed sentence.

<sup>27</sup>This suffix is homonymous with the agent stem suffix -b but is a different morpheme.

optional addition of an oblique complement.

- (88) ʔu-ɬ<sup>w</sup>əl-tə-b<sup>28</sup>      ʔə    tsi      luχ̣    ti    sʔuladx<sup>w</sup>.  
 Asp-cook-PO-2Suf    prep    Det (F.)    old    Det    salmon  
 'The old woman cooked the salmon.'

In this sentence the direct complement, *ti sʔuladx<sup>w</sup>* 'the salmon,' has not changed from (82) above but an oblique complement, *ʔə tsi luχ̣*, has been added for specific mention of an agent, *the old woman* in this case. Only by secondary derivation of a patient (goal) oriented stem is this possible.

When three participants are involved in an event, Lushootseed grammar prohibits explicit mention of all three arguments in the same clause. If a man gives the salmon to the old woman, Lushootseed speakers have a variety of options. They may express the agent and patient (goal), or the agent and recipient,<sup>29</sup> or the patient and recipient, or any one of these alone but not all three at once. Typically, only the recipient is stated.

The beneficiary argument is conveyed in the direct complement and the patient is expressed by the argument being "demoted" to adjunct status. Hence, the patient of a beneficiary oriented sentence is marked the same way as the patient of an agent oriented sentence. Consider (89).

- (89) ʔu-ɬ<sup>w</sup>əl-yi-d      tsi luχ̣      ʔə ti sʔuladx<sup>w</sup>.  
    beneficiary    patient  
 Asp-cook-Ben-Tr    Det old      prep Det salmon  
 '[Someone] cooked a salmon for the old woman.'

With Lushootseed constraints on nominal terms above, let us retrieve the causative constructions. If we regard the direct complement as the surface forms of Subj and Obj function, the doubling of syntactic functions can be treated as usual. Note that there is a strong constraint in the language prohibiting two direct complements in a row. In the case of the extended demotion we must incorpo-

<sup>28</sup>When not final, -d becomes -t-. An epenthetic schwa separates the -t- and the -b.

<sup>29</sup>Lushootseed grammar does not distinguish recipient from beneficiary, nor either of these from an argument conveying the opposite notion - a detrimental.



(Hess, 1993:50):

- (93) ʔu-ʔuχ<sup>w</sup>-tx<sup>w</sup>-yi-d      ti      čáčas.  
 Asp-go-Caus-Ben-Tr    Det    child  
 '[Someone] took [something] somewhere for the boy.'
- (94) ʔu-ʔuχ<sup>w</sup>-tx<sup>w</sup>-yi-d      ʔə      ti sq<sup>w</sup>əbayʔ  
 Asp-go-Caus-Ben-Tr    prep    Det dog  
 '[Someone] took the dog somewhere [for someone].'
- (95) ʔu-ʔuχ<sup>w</sup>-tx<sup>w</sup>-yi-tə-b      ʔə      ti      luχ.  
 Asp-go-Caus-Ben-PO-Tr    prep    Det    old  
 'The old man took [something/someone] somewhere  
 [for someone].'

The benefactive argument corresponding to *yi* of (93) appears in direct complement. It can be said that the argument *ti čáčas* 'the boy' is assigned Obj function. The DO argument is preceded by the preposition *ʔə* in (94). According to our rules of the syntactic functions, this argument is unspecified as far as the Obj function is concerned. Hence, the default argument with the preposition *ʔə* leaves (94) without any syntactic function. When another suffix introducing a patient is added in the predicate of (95), the Causer agent may not be assigned Subj function like examples with arguments in  $Ag^0$ . The PO suffix suppresses the realization of Subj function in (95), since the implicit DO seems to hold the position of the only direct complement of the sentence.

The fact that Lushootseed can have only one argument per sentence fatally weakens the rules in (90). Subj is assigned to the Lushootseed direct complement whenever it is realized. Therefore, the schema providing for syntactic doubling necessary in languages like Korean must be modified to accommodate languages like Lushootseed. If only first and second person čəd-words show this doubling, the necessity of abandoning of Obj function strongly emerges from the preceding discussion. Consequently, the rules of (90), even as revised, fail to account for Lushootseed causative constructions.

Causativization in a focused argument is exemplified in (97) and contrasted with the non-causative (96). Observe the following:

(96) ʔəca kʷi ʔu-tag<sup>w</sup>-š.  
I-am Det Asp-buy-Tr  
'I am the one who will buy [it/something].'

(97) ʔəca-tx<sup>w</sup> kʷi ʔu-tag<sup>w</sup>-š.  
I-am-Caus Det Asp-buy-Tr  
'Let me buy [it].'

The disparity of the English glosses in (96) and (97) seems large given the similarity of the two Lushootseed sentences; the former lacks only the causative morpheme in the matrix predicate. This predicate, ʔəca, expresses first person singular. (There is no copula in Lushootseed.) (97) is still another example of the causativization process in Lushootseed.

### 3.5 Conclusion

In this chapter, I have discussed the characteristics of Korean and Lushootseed *causative constructions*. A review of the definitions for causative turn crucially upon the fact that a new argument is introduced during the causative operation. The newly introduced argument is called Causer. The entity which is influenced by the Causer is labeled as Causee. While seeking the common features of the causative operation across languages, Comrie emphasizes the number of arguments before and after causativization, noting the change in valency. Givón puts emphasis on the semantic expansion of main verbs and ranks the semantic scale of *causatives* in terms of human manipulative verbs. In Dik's FG, emphasis is given to predicate formation rather than valency change or a semantic scale. That is, some arbitrary predicate-frame is used to describe the causative operation. A basic predicate-frame can be extended to include more information as required to adjust *terms* to a new situation. The language-

specific surface forms are handled within expression rules in the final stage of predication construction.

Dik maintains that syntactic doubling of the grammatical relations DO or IO is natural in the sense that Obj function can be (*optionally*) assigned to the Causee agent. It is not an exception.

This discussion also shows that it is frequently hard to trace the position of the newly introduced argument after causativization in argument-dropping languages. In such cases the on-going discourse seems to provide for the appearance of the Causer.

Korean causative constructions fit Dik's FG model tolerably well. However, the Lushootseed causative operation does not do so entirely. The predicate-frame formation rule does work well for both languages; but the expression rules need modification for Korean and turn out to be totally inadequate for the Lushootseed causative construction. Specifically, Lushootseed initiators in causatives appear in an oblique phrase after the causative morpheme *-tu-* is added to the predicate. With the constraint of only one direct complement per sentence, Subj function is unspecified when the salience in discourse is kept in Rec or Go terms. Hence, there are sentences without an Ag argument in Subj, which results in extended demotion. Of course, FG is a relatively new theory and is being modified as empirical evidence accumulates. I expect that Functional Grammarians will modify these FG rules when languages like Lushootseed become more widely known.

**Part III**

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**Texts**

## Chapter 4

### A Korean story: The Righteous Brothers

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#### 4.1 The righteous brothers

(*ijŏchin hyŏŋče*)

1. yesnal yesčək, əni maile aču saičohin hyŏŋčeka salko issəssəyo.
2. hyŏŋin kyəlhonil hayə kačoktilkwa salko issəssəssko, toŋsəŋin əmənilil mosiko issəssčiyə.
3. tu hyŏŋčenin məil tile naka yəlsimhi ilil həssəyo.
4. kaılı toiča, nonenin nulən pyəka kimpic<sup>h</sup>ilo č<sup>h</sup>uləŋkəlyəssəyo.
5. hyŏŋčenin čilkəun maımilo č<sup>h</sup>usulil hayəssəyo.
6. kilikonin ssalil nanuəssəyo.
7. ssal kamaka č<sup>h</sup>aŋkoe katikhake ssahyəssəyo.
8. ikəkil pon hyŏŋin maimi mopsi himushəssəyo.
9. kilənte muntik ilən səŋkaki tiləssəyo.
10. 'aunin əmənilil mosiko issini, napota toni tə manhi p<sup>h</sup>ilyohal kəya.'

11. ətuin pami toiča, hyəŋin ssal han kamalil čikee čiko amuto molike toŋsəŋ čipilo kassəyo.
12. kilikonin toŋsəŋji ssal kama wie kačiko on ssal kamalil ollyənohasəyo.
13. kilənte ki sikane toŋsəŋto ssal kamalil čiko hyəŋnim čipilo kassəyo.
14. toŋsəŋ yəksi hyəŋkwa kat<sup>h</sup>in səŋkakil həsstən kəyeyo.
15. taim nal ač<sup>h</sup>im, kokane ka pon hyəŋkwa toŋsəŋin č<sup>h</sup>amilo isəŋhata səŋkakhəsəyo.
16. punmyəŋ han kamaŋi ssali piə issəya haninte, ssalin kitəlo issəsinikkayo.
17. kinal pam, hyəŋkwa toŋsəŋin tasi ssal han kamassikil saŋtəpaŋji čip kokkane kačyətə nohasəyo.
18. kilənte əččitoŋin iličiyə.
19. ki taimnal ač<sup>h</sup>imeto ssalin han kamato piči anhko yəčənhi kitəloyəsəyo.
20. hyəŋkwa toŋsəŋin mač<sup>h</sup>i tokkəpie holin kipuniəsəyo.
21. čənyəki toiča, hyəŋin tasi ssal kamalil čiko aune čipil hyəŋhə ttənasəyo.
22. toŋsəŋ yəksi ssal kamalil čiko hyəŋnimne čipilo hyəŋhəsəyo.
23. kilənte mail hankautesə hyəŋkwa toŋsəŋin səlo mačuč<sup>h</sup>iko maləsəyo.
24. hyəŋčənin kkamččak nolasə səlo č<sup>h</sup>yətəpoassčiyə.
25. “ani, nəto?”
26. “kiləm, hyəŋnimto?”
27. hyəŋčənin nəmu kamkyəkhəsəyo.
28. kiləsə səlo putuŋk<sup>h</sup>yəanko kippimji nunmulil hillyəsəyo.
29. ki hu, hyəŋčənin əmənimkke tək tə hyotəhamyə saičəhke saləsəyo.

## 4.2 A parsing schema for the righteous brothers

1. [[yesnal yesčək *AdvP*], [[əni maile *PP*] [aču saičohin *AP*] hyəŋčeka *NP*]  
[[sal *V*]ko [iss *V*]əss *VP*]əyo. *S*]
2. [[hyəŋin *TP*] [[kyəlhonił *NP*] hayə*VP*] [kačoktilkwa *PP*] [[sal*V*]ko  
issəssəss*VP*]ko *S*], [toŋsəŋin *TP*] [[əmənilili *NP*] [[mosi*V*]ko issəss*VP*]čiyo. *S*]
3. [[tu hyəŋčənin *TP*] [[mæil *AdvP*] [tile *PP*] naka *VP*] [[yəlsimhi *AdvP*]  
[ilil*NP*] hæss *VP*]əyo. *S*]
4. [[[kaili *NP*] [toiča*VP*]s], [nonənin *TP*] [nulən pyəka *NP*] [[kimpič'ilo *PP*]  
č<sup>h</sup>uləŋkəlyəssəyo.*VP*]s]
5. [[hyəŋčənin *TP*] [[čilkəun *AP*] maimilo *PP*] [[č<sup>h</sup>usulil *NP*] hayəssəyo. *VP*]s]
6. [[kilikonin *TP*] [[ssalil *NP*] nanuəssəyo.*VP*]s]
7. [[ssal kamaka *NP*] [č<sup>h</sup>əŋk *PP*] [[katikhake *AdvP*] ssahyəssəyo.*VP*] *S*]
8. [[[[ikəkil *NP*] pon *VP*] hyəŋin *TP*] [[maimi *NP*] [mopsi*AdvP*]  
[himushəssəyo.*VP*] *S*] *S*]
9. [[kilənte *AdvP*] [muntik *AdvP*] [ilən səŋkaki *NP*] [tələssəyo.*VP*] *S*]
10. [[['aunin *TP*] [[əmənilil *NP*] [mosi *V*] ko iss *VP*] ini *S*], [[napota *NP*]  
[toni*NP*] [tə manhi *AdvP*] p<sup>h</sup>ilyohal kəya.'*VP*] *S*]
11. [[[[ətuin *AP*] pami *NP*] [toiča *VP*] *S*] [[hyəŋin *TP*] [[ssal han kamalil *NP*]  
[čikee *PP*] čiko *VP*] [[amuto *TP*] molike *AdvP*] [[toŋsəŋ čipilo *PP*]  
kassəyo.*VP*] *S*] *S*]
12. [[kilikonin *TP*] [[toŋsəŋi *AP*] ssal kama wie *PP*] [[kači *V*]ko on *VP*]  
[ssal kamalil *NP*] [ollyənohəssəyo.*VP*] *S*]
13. [kilənte *AdvP*] [ki sikane *PP*] [toŋsəŋto *TP*] [[ssal kamalil *NP*] či *VP*] ko  
[[hyəŋnim čipilo *PP*]kassəyo. *VP*]

14. [[[toŋsæŋ]<sub>NP</sub>] yək̥si <sub>AdvP</sub>] [hyəŋkwa <sub>PP</sub>] [[[kat<sup>h</sup>iŋ]<sub>AP</sub>] sæŋkakil <sub>NP</sub>]  
hæsstən kəyeyo. <sub>VP</sub>] <sub>S</sub>
15. [[taim nal ač<sup>h</sup>im <sub>AdvP</sub>], [kokane <sub>PP</sub>] [[ka pon <sub>VP</sub>] [hyəŋkwa <sub>PP</sub>]  
toŋsæŋin <sub>TP</sub>] [č<sup>h</sup>amilo <sub>AdvP</sub>] [isaŋhata sæŋkakhæssəyo. <sub>VP</sub>] <sub>S</sub>
16. [[punmyəŋ <sub>AdvP</sub>] [han kamaji <sub>AP</sub>] [ssali <sub>NP</sub>] [piə issəya haninte <sub>VP</sub>] <sub>S</sub>],  
[[ssalin <sub>TP</sub>] [kitælo <sub>AdvP</sub>] [issəss <sub>VP</sub>] inikkayo. <sub>S</sub>] <sub>S</sub>
17. [[kinal pam <sub>AdvP</sub>], [hyəŋkwa toŋsæŋin <sub>TP</sub>] [tasi <sub>AdvP</sub>] [[ssal han  
kamassikil <sub>NP</sub>] [[[saŋtəpaŋji <sub>AP</sub>] čip <sub>NP</sub>] kokkane <sub>PP</sub>] kačyəta  
nohass <sub>VP</sub>] əyo. <sub>S</sub>
18. [[kilənte <sub>AdvP</sub>] [əččitoŋ <sub>AP</sub>] [il <sub>NP</sub>] ičiyə? <sub>S</sub>]
19. [[ki taimnal <sub>AdvP</sub>] [ač<sup>h</sup>imeto <sub>PP</sub>] [ssalin <sub>TP</sub>] [han kamato <sub>PP</sub>]  
[[piči <sub>VP</sub>] anhko <sub>AdvP</sub>] [[yəčənhi <sub>AdvP</sub>] kitæloyəss <sub>VP</sub>] əyo. <sub>S</sub>
20. [[hyəŋkwa toŋsæŋin <sub>TP</sub>] [mač<sup>h</sup>i <sub>AdvP</sub>] [[tokkæpie <sub>PP</sub>] [holin <sub>VP</sub>]  
[kipun <sub>NP</sub>] jəss <sub>VP</sub>] əyo. <sub>S</sub>
21. [[[[čənyək̥i <sub>NP</sub>] toiv <sub>VP</sub>] čə. <sub>S</sub>], [hyəŋin <sub>TP</sub>] [tasi <sub>AdvP</sub>] [[[[ssal kamalil <sub>NP</sub>]  
čiko <sub>VP</sub>] [[aune <sub>NP</sub>] čipil <sub>NP</sub>] hyaŋhæ <sub>VP</sub>] tənass <sub>VP</sub>] əyo. <sub>S</sub>
22. [[toŋsæŋ <sub>NP</sub>] [yək̥si <sub>AdvP</sub>] [[[[ssal kamalil <sub>NP</sub>] čiko <sub>VP</sub>] [[hyəŋnimne <sub>NP</sub>]  
čipilo <sub>PP</sub>] hyaŋhæss <sub>VP</sub>] əyo. <sub>S</sub>
23. [[kilənte <sub>AdvP</sub>] [[mail <sub>NP</sub>] hankautesə <sub>PP</sub>] [hyəŋkwa toŋsæŋin <sub>TP</sub>]  
[səlo <sub>AdvP</sub>] [[mačuc<sup>h</sup>i <sub>VP</sub>] ko malass <sub>VP</sub>] əyo. <sub>S</sub>
24. [[hyəŋčənin <sub>TP</sub>] [[kkamččak <sub>AdvP</sub>] nolasə <sub>VP</sub>] [[səlo <sub>NP</sub>] č<sup>h</sup>yətapoass <sub>VP</sub>]  
-čiyə. <sub>S</sub>]
25. “[[ani, <sub>AdvP</sub>] [nəto? <sub>TP</sub>] <sub>S</sub>”]
26. “[[kiləm, <sub>AdvP</sub>] [hyəŋnimto? <sub>TP</sub>] <sub>S</sub>”]
27. [[hyəŋčənin <sub>TP</sub>] [[nəmu <sub>AdvP</sub>] kamkyək̥hæss <sub>VP</sub>] əyo. <sub>S</sub>]
28. [[kiləsə <sub>AdvP</sub>] [[səlo <sub>NP</sub>] putuŋk<sup>h</sup>yəanko <sub>VP</sub>] [[[[kipimii <sub>AP</sub>]  
nunmulil <sub>AP</sub>] hillyəss <sub>VP</sub>] əyo. <sub>S</sub>]
29. [[ki hu, <sub>AdvP</sub>] [hyəŋčənin <sub>TP</sub>] [[əmənimkke <sub>PP</sub>] [[təuk tə <sub>AdvP</sub>]  
hyotoha <sub>VP</sub>] myə <sub>VP</sub>] [[saičohke <sub>AdvP</sub>] salass <sub>VP</sub>] əyo. <sub>S</sub>]

### 4.3 The righteous brothers

1. Once upon a time, there were two good brothers in a village.
2. The older brother was married and lived with his family, and the younger one lived with his mother.
3. The two brothers worked hard in the field every day.
4. When autumn came, rice paddies were covered with yellow crops.
5. The brothers harvested with delight.
6. And they divided the crops into two.
7. Bags of rice filled the older brother's store house.
8. The older brother was happy watching the store house.
9. Then, he all of sudden thought,
10. "Since my brother lives with Mother, he needs more money than I do."
11. When it got dark, the older brother brought a bag of rice to his brother's by himself.
12. And then, he left the bag in his brother's storage.
13. By the way, the younger brother also carried a bag of rice to his older brother's house.
14. The young one had the same thought as his brother.
15. The next morning, the two brothers got a surprise after counting the number of bags,
16. because the number should be one less than that of yesterday; however, it was the same.
17. That night, the two brothers carried one bag of rice to each other's storage.

18. Then, what happened?
19. The next morning, the number of bags of rice still remained the same.
20. The two brothers felt as if they were haunted.
21. When it got dark, the older brother left for his brother's carrying a bag of rice.
22. The younger brother also carried a bag of rice to his brother's.
23. Accidently, they met each other in the middle of the village.
24. The two brothers got surprised when they identified themselves.
25. "Is that you?"
26. "Then, you did too?"
27. The two brothers were moved.
28. They burst into tears, embracing each other.
29. After that, the two brothers lived closely, showing their mother every attention.

## 4.4 Glossary for Korean folk tale

## [a]:

aču	very	1	adv.
ač <sup>h</sup> im	morning	15, 19	noun
amu(-to)	someone (-also)	15	pron. (-suf.)
anhko	not (verb)-and	19	adv. (v.)-suffix
ani, (nəto)	not, (you-too)	25	adv.
-ass	past or perfective	11, 12, 17, 21, 22 23, 24, 29	suffix
au	young brother	10	noun
aune	young brother's (-ne = of the same kind)	21	suffix

## [č]:

-ča	conjunctive ending	4, 11, 21	suffix
čənyək	night	21	noun
-či	introducing negative adverb	19	ending
čike	an A-frame pack	11	noun
či(ko)	carry (-conjunctive ending)	11, 13, 21, 22	v.
	čita <sub>v</sub> (x <sub>1</sub> : animate (x <sub>1</sub> ) <sub>A<sub>g</sub></sub> (x <sub>2</sub> ) <sub>G<sub>o</sub></sub> )		
čip	house	11, 13, 17, 21, 22	noun
-čiyο	-či - neutral ending, -yo (Honorific form)	11, 19, 24	ending
-čiyο?	the rising tone signals the question	18	ending
čilkəun	√-ta merry, pleasant	5	adj. - ending
	čilkəpta <sub>v</sub> (x <sub>1</sub> : human (x <sub>1</sub> ) <sub>o</sub> )		

[č<sup>h</sup>]:

č <sup>h</sup> amilo	really	15	adv.
č <sup>h</sup> aŋko	storage	7	noun
č <sup>h</sup> ulləŋkəly(əssəyo)	make waves (past-ending)	4	v.
	č <sup>h</sup> ulləŋkəlitav (x <sub>1</sub> ) <sub>o</sub>		
č <sup>h</sup> usu	harvest	5	noun
č <sup>h</sup> yətapo(ass-či-yο)	look at	24	v. - past - endings
	č <sup>h</sup> yətapota <sub>v</sub> (x <sub>1</sub> : animate (x <sub>1</sub> ) <sub>A<sub>g</sub></sub> (x <sub>2</sub> ) <sub>G<sub>o</sub></sub> )		

## [e]:

-e	location, method	1, 3, 4, 7, 11, 12, 13, 15, 19, 20	postposition
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## [ə]:

-ə	conclusive	1, 3, 4, 5, 6, 7, 8, 9, 12, 13, 14, 15, 16, 17, 19, 20, 21, 22, 23, 27, 28, 29	ending
əččitəi-n	how become	18	v.
	əččitəitav (x <sub>1</sub> ) <sub>o</sub>		-ending (adnominal)
əməni	mother	10	noun
əməni-m	mother	29	noun -suf (Hon.)
əni	certain	1	adj. (adnominal)
-əss	past cf. -ass	1, 2, 3, 4,	ending
	(some says it as perf.)	5, 6, 7, 8, 9, 10, 19, 20, 27, 28	
ətuun	√-ta dark	11	adj. -suf. (adnominal)
-ə	function word	1	ending(neutral)
-əya	function word (reason)	16	ending

## [h]:

han	one	11, 16, 17 19, 22	adj. (adnominal)
han-	the very	23	pref.
hankautes-ə	at the very middle (of)	23	pref.- noun -suf. (loc.)
hayə	√hata, do and	2, 14, 15	v. - conj. ending
	hata <sub>v</sub> (x <sub>1</sub> : human(x <sub>1</sub> )) <sub>Ag</sub> (x <sub>2</sub> ) <sub>Go</sub>		
hæssəyo	did	3, 27	v. past -S.E.
hayæssəyo	did	5	see above, line 3
-hi	derivational stem	3, 19	suffix
hillyæssəyo	secrete, emit fluids	28	v. past -ending
	hillitav (x <sub>1</sub> : animate (x <sub>1</sub> )) <sub>Ag</sub> (x: -solid (x <sub>2</sub> )) <sub>Go</sub>		
	hilitav (x <sub>1</sub> : -solid (x <sub>1</sub> )) <sub>Proc</sub>		
himushæssəyo	be satisfied	8	adj. -past -ending
hollin	get possessed	20	v -(adnominal) ending
	hollitav (x <sub>1</sub> : animate (x <sub>1</sub> )) <sub>Proc</sub>		
hu	after	29	noun
hyanphae	√-a(ta), head for	21	v. -(conj.) ending
	hyanphata <sub>v</sub> (x <sub>1</sub> )(x <sub>2</sub> ) <sub>Dir</sub>		
hyəŋ	old brother	2, 7, 13, 15, 17, 20, 21, 22, 23, 26	noun

hyəŋče	brothers, esp. a pair of br.	1, 5, 24, 27, 29	noun
hyotoha(myə)	be obedient, live dutifully	29	noun-do (v.)
	live with filial piety		
	hyotohata <sub>V</sub> (x <sub>1</sub> : human(x <sub>1</sub> )) <sub>Ag</sub> (x <sub>2</sub> ) <sub>Dir</sub>		

## i:

-i	nominative case	4, 10, 11, 21,	particle
-i(ta)	copular verb	14, 18, 19, 20	postposition
ikəs	[this thing] → this	8	pron.
il	work	3, 18	noun
ilən	similar cf. iləh(ta)	9	adj. - ending (adn.)
isəŋhata	strange (dictionary form)	15	adj.
iss(ta)	there is/are	10, 16	v.
	isstə <sub>V</sub> (x <sub>1</sub> ) <sub>o</sub>		

## i:

-il/lil	accusative case	2, 3, 6, 7, 14, 17, 28	suffix
-ilo	instrumental, reason, method	4, 5, 13, 15	postposition
-ilo	directional	11, 22	postposition
-in	perfect tense allomorph	11	suffix
-in/nin	topic marker	2, 3, 4, 5, 6, 7, 8 10, 11, 17, 19, 20, 23	suf.
-ini	reason	10, 16	ending
-inikkayo	emphatic	16	ending
-ii	possession	12, 16, 17, 28	suffix

## k:

-ka	nominative case	1, 4, 8	particle
kačiko	carried, kept and	12, 17	v. -ending
kačok	family	2	noun
kačyətə	carried, kept	17	v. - ending (past)
	kačita <sub>V</sub> (x <sub>1</sub> ) <sub>Po</sub> (x <sub>2</sub> ) <sub>Go</sub>		
kail	autumn	4	n.
kama	(rice) bag	7, 11, 12 13, 16, 17 19, 21, 22	noun
kamkyəkhæssəyo	was/were touched	27	n. -do (v.) - ending
	kamkyəkhata <sub>V</sub> (x <sub>1</sub> : human(x <sub>1</sub> )) <sub>o</sub>		

kat <sup>h</sup> in	same, identical	14	adj. - adnominal ending
katikhake	full	7	adj. - adverbial ending
kassəyc	went	11, 13, 15	v. -past -ending
	kata <sub>v</sub> (x <sub>1</sub> ) <sub>P<sub>o</sub></sub>		
kaunte	middle	23	noun
-ke	derivational suffix	7, 11, 29	adverbial ending
-kə(s)	thing	10, 14	noun
kipun	sentiment	20	noun
kipim	delight	28	noun
ki	that (demonstrative) distal	13, 19, 29	adj. & pron.
		cf. proxial this /i/	
kilæse	hence, therefore	28	adv.
kiləm	so, ...	26	adv.
kilənte	by the way, so	9, 13, 18, 23	adv.
kiliko	and	6, 12	adv.
kimpič <sup>h</sup>	gold color, golden	4	noun
			(compounding)
kinal	that day, cf. line 1	17	noun
kitəlo	as usual	16, 19	adverb
-ko	conjunctive	1, 2, 10, 11	ending
		12, 13, 19	
kokkan	storage	15	noun
-kwa	with	2, 14, 15, 17, 20, 23	postp. (comitative, enumeration)
kyəlhon	marriage	2	noun

**kk:**

-kka	interrogative	16	suffix
kkamččak	surprise, (mimetic), blink (n.)	24	adv.
-kke	-toward (Hon.) cf. -eke (neutral)	29	suffix

**l:**

-l	imperfect tense	10	derivational ending
-lil	accusative	2, 5, 11, 12, 13,	suffix
		21, 22, 23, 28	

**m:**

-m	honorific	29	suffix
mač <sup>h</sup> i	as if ..., just like ...	20	adv.
mačuč <sup>h</sup> i(ta)	come across, meet	23	v.
	mačuč <sup>h</sup> ita <sub>V</sub> ((x <sub>1</sub> : animate(x <sub>1</sub> )) <sub>Ag</sub> (x <sub>2</sub> ) <sub>Go</sub> )		
mæil	every day	3	noun
mail	village	1, 23	noun
maim	mind	5	noun
mal(ta)	stop	23	auxiliary verb
manhi	much, many	10	adv.
moli(ta)	be unaware of -	11	v.
	molita <sub>V</sub> (x <sub>1</sub> : juman(x <sub>1</sub> )) <sub>o</sub>		
mopsi	very, a great deal	8	adv.
mosi(ta)	live together	2	v.
	mosita <sub>V</sub> (x <sub>1</sub> : human(x <sub>1</sub> )) <sub>Ag</sub> (x <sub>2</sub> ) <sub>Go</sub>		
muntik	suddenly, abruptly	9	adv.
-myə	state, conjunctive	29	ending

**n**:

-n	perfective tense	1, 4, 5, 8, 9, 12, 15, 20	adnominal suffix
na	1st person singular	10	pron.
naka	√ <i>naka</i> (ta) went and	3	v. -ending (conj.)
	nakata <sub>V</sub> (x <sub>1</sub> ) <sub>Proc</sub>		
nal	day cf. line 1	15	noun
nanu(ta)	divide		v.
	nanuta <sub>V</sub> (x <sub>1</sub> : human(x <sub>1</sub> )) <sub>Ag</sub> (x <sub>2</sub> ) <sub>Go</sub>		
-ne	the same kind	21, 22	suffix
nə	the second person singular	25	pron.
nəmu	too (much); ever so	27	adv.
-nim	honorific	13, 22, 26	suffix
nin	topic marker	3, 4, 5, 6, 10, 12, 23, 27, 29	particle
-ninte	conjunctive	16	ending
noh(ta)	put	17	v.
	nohta <sub>V</sub> (x <sub>1</sub> : human(x <sub>1</sub> )) <sub>Ag</sub> (x <sub>2</sub> ) <sub>Go</sub> (x <sub>3</sub> ) <sub>Loc</sub>		
nolla(ta)	surprise	24	v. -sə
	nollata <sub>V</sub> ((x <sub>1</sub> : human(x <sub>1</sub> )) <sub>o</sub> )		(enforcement)
non	rice paddy	4	noun
nuləh(ta)	yellowish, golden	4	adj.
nunmul	tear	28	noun

## [o]:

on	come( $\sqrt{ota}$ ) -perfect	12	v. -ending (adnominal)
ollyənoh(ta)	put (upward)	12	v. (raise + put) comp.
	ollyənohta <sub>V</sub> ( $x_1$ : human( $x_1$ )) <sub>Ag</sub> ( $x_2$ ) <sub>Go</sub> ( $x_3$ ) <sub>Loc</sub>		

## [p]:

pam	night	11, 17	noun
pi(ta)	empty	19	adj.
pi(ta)	vacant, empty	16	adj.
po(ta)	see, cf. line 15	8	v.
-pota	than	10, 15	adv. suffix
punməŋ(hi)	clarity-(A.dv.) → deriv. suffix - hii	16	adv.
putuŋk <sup>h</sup> yəan(ta)	hold, embrace	28	v.
	putuŋk <sup>h</sup> yəanta <sub>V</sub> ( $x_1$ : human( $x_1$ ))( $x_2$ ) <sub>Go</sub>		
pyə	rice (plant)	4	noun
p <sup>h</sup> ilyoha(ta)	need	10	v.
	p <sup>h</sup> ilyohata <sub>V</sub> ( $x_1$ : human( $x_1$ )) <sub>Ag</sub> ( $x_2$ ) <sub>Go</sub>		

## [s]:

saičoh(ta)	close	1	adj.
saičoh-ke	be on good terms -ending (adverbial)	29	adj.
sal(ta)	live ( $\sqrt{salta}$ )	29	v.
	salta <sub>V</sub> ( $x_1$ : animate( $x_1$ )) <sub>i</sub>		
sal-ko	live - conj. ending	1	v.
səŋkak	thought cf. line 14	9	noun
səŋtəpəŋ	opponent	2cm17	noun
-sə	location -(e)sə	2cm23	postposition
-sə	enforcement	2cm24	ending
səlo	each other	2cm23, 28	adv. & noun
sikan	time	2cm13	noun

## [ss]:

ssah-yəssəyo	accumulate - past - ending	7	v.
	ssahita <sub>V</sub> ( $x_1$ ) <sub>Proc</sub>		
ssal	rice	6, 7, 11, 12, 13,	noun
		16, 17, 19, 21, 22	
-ssik	same number	17	suffix

## [t]:

taim	next	15, 18	noun
tasi	again	17, 21	noun
tə	more	10	adv.
-tən	incomplete	14	adn. ending
təuk	more	29	adv.
-til	plural particle	2	suffix
til	field	3	noun
til(ta)	occur	9	v.
	$tilta_V(X_1)_{Proc}$		
-to	also	11, 13, 19, 25, 26	postposition, suffix
təi(ta)	become	4, 11, 13, 14, 15,	v.
	$təita_V(X_1)_{Proc}$	17, 20, 22, 23	
ton	money	10	noun
toŋsæŋ	(same birth) little brother	2	noun
tokkæpi	goblin	20	noun
ttəna(ta)	leave for	21	v.
	$ttənata_V(X_1)_{Ag}(X_2)_{Dir}$		
tu	two	3	adj. & noun

## [w]:

wi	top	12	noun
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## [y]:

-ya	conclusive (non honorific)	10, 16	postposition
yesćək	old time	1	noun
yesnal	old day	1	noun
-yeyo	declarative	14	postposition
yəčənhi	as before	19	adv.
yəksi	also	14, 22	adv.
yəlsim(hi)	enthusiasm(tically)	3	noun (-adv.)
	diligent(ly)		
-yo	function word	1, 3, 4, 5, 6, 7,	ending
	(raised social register)	8, 9, 12, 13, 14,	
		15, 16, 17, 18, 19,	
		20, 21, 22, 23, 24,	
		27, 28, 29	

## Chapter 5

### A Lushootseed story: The Young Mink and His Little Younger Brother, Tutyeeka

#### 5.1 The Young Mink and his little younger brother, Tutyeeka

(bibščəb ʔi tiʔit suʔsuqʷaʔ, tətyika)

1. ʔutiʔtada(hə)b<sup>1</sup> tiʔit bibščəb ʔi tiʔit suʔsuqʷaʔs, tətyika.
2. ʔutiʔtada(hə)b əlgʷəʔ.
3. huy, šudxʷəxʷ tiʔit čxʷəluʔ.
4. huy, bapadəxʷ əlgʷəʔ.
5. bapadəxʷ əlgʷəʔ tiʔit čxʷəluʔ.
6. huy, xʷakʷisəbəxʷ ʔə tiʔit čxʷəluʔ.
7. huy, bəqtəbaxʷ ʔə tiʔit čxʷəluʔ.
8. ʔixʷ[ət]dat<sup>2</sup> tiʔit [s]dəgʷabacil[s]əxʷ əlgʷəʔ ʔə tiʔit čxʷəluʔ.
9. huy, ʔibibəšəxʷ tiʔit bibščəb.
10. ʔibibəšəxʷ.
11. huy, kawdxʷəxʷ tiʔit sčaliʔ ʔə tiʔit čxʷəluʔ.
12. “ʔuʔəxičədəxʷ čəxʷ, bibščəb.”
13. “ʔu.., tuχʷ čəd ʔuʔibibəš.”
14. “bibščəb. xʷiʔ kʷi [gʷ]adsukawdxʷ tiʔit [ds].čaliʔ.”
15. huy, cutəxʷ tiʔit bibščəb,
16. “ʔu. . .”

<sup>1</sup>This story is unusual in that it lacks the typical introductory “formula” ʔəstəlil (*They dwelled (there)*). This word begins almost all traditional Lushootseed stories just as *yesnal yečək* introduces Korean stories and *Once upon a time* begins those in English. However, none of the three renditions of this story that has been collected uses ʔəstəlil.

<sup>2</sup>In a traditional story from Northern Lushootseed one would expect buusət dat *four days* because four – not three – is the traditional number. Events ususally happen four times, often there are four brothers in a story, etc. By speaking of three rather than four days, the raconteur has made a small adaptation to the dominant Anglo culture surrounding the reserve.

17. hay, g<sup>w</sup> adadg<sup>w</sup> adəx<sup>w</sup> ti?i? bibščəb ?i ti?i? su?suq<sup>w</sup> a?s, tətyika.  
 18. "Xub čə? ?uhudčup č?a k<sup>w</sup>uk<sup>w</sup> cut."  
 19. huy, hudčupəx<sup>w</sup> əlg<sup>w</sup>ə?  
 20. "Pu?əxiədəx<sup>w</sup> čəx<sup>w</sup>, bibščəb."  
 21. "Pu·, tux<sup>w</sup> čəd ?uhudčup."  
 22. huy, hičitəbəx<sup>w</sup> ti?i? sčali? ?ə ti?i? čx<sup>w</sup>əlu?  
 23. "Pu?əxiədəx<sup>w</sup> čəx<sup>w</sup>, bibščəb!"
24. day ?uhaydub ?ə ti?i? čx<sup>w</sup>əlu?  
 25. huy, tu?ux<sup>w</sup>əx<sup>w</sup> ti?i? čx<sup>w</sup>əlu?  
 26. ti· ləb dx<sup>w</sup>taqt ti?i? s?alil ?ə ti?i? čx<sup>w</sup>əlu?
27. dadatu[t] ti?i? sk<sup>w</sup>ilil ?ə ti?i? bibščəb.  
 28. ?uluud ti?i? luX tudi? taqt.  
 29. ləcupayəq ?ə ti?i? sdi?dəx<sup>w</sup>it.  
 30. huy, ?ilibəx<sup>w</sup> ti?i? bibščəb.  
 31. ?ilibəx<sup>w</sup>:
32. "stab čəx<sup>w</sup> stab ?uk<sup>w</sup>ix<sup>w</sup>id. stab čəx<sup>w</sup> stab ?uk<sup>w</sup>ix<sup>w</sup>id.  
 33. hag<sup>w</sup>əx<sup>w</sup> čəd tu?acig<sup>w</sup>ədil ?ə tə luX čx<sup>w</sup>əlu?, čx<sup>w</sup>əlu?  
 34. stab čəx<sup>w</sup> stab ?uk<sup>w</sup>ix<sup>w</sup> id. stab čəx<sup>w</sup> stab ?u.k<sup>w</sup>ix<sup>w</sup> id.  
 35. hag<sup>w</sup>əx<sup>w</sup> čəd tu?acig<sup>w</sup>ədil ?ə tə luX čx<sup>w</sup>əlu?, čx<sup>w</sup>əlu?"
36. huy, təlawiləx<sup>w</sup> ti?i? luX.  
 37. huy, yəcəbax<sup>w</sup> ?ə ti?i? bibščəb ?i ti?i? su?suq<sup>w</sup> a?s, tətyika, ?ə ti?i? s?aliltubsəx<sup>w</sup>.  
 38. huy, ?ux<sup>w</sup>əx<sup>w</sup> tə ?aci?talbix<sup>w</sup>.  
 39. bəcatəbəx<sup>w</sup> ti?i? k<sup>w</sup>a?aq dəx<sup>w</sup>?ibəš ?ə ti?i? bibščəb ?i ti?i? su?suq<sup>w</sup> a?s.  
 40. pu·təx<sup>w</sup> ?əstəuq<sup>w</sup>ač ti?i? bibščəb ?i ti?i? su?suq<sup>w</sup> a?s, tətyika.<sup>3</sup>

<sup>3</sup>In former times raconteurs seldom told a story the same way every time. They altered the emphasis according to the occasion and audience. Episodes were expanded or reduced, often omitted as suited the purpose of a particular story session. Sometimes as here an episode is reduced to a single line. Because the audience had heard these stories all their lives, they did not need to know what had happened to Mink's and Tutyeeka's hair, for they already knew. In some other telling that incident is developed when judged to be important to the occasion. (In Southern Lushootseed, by the way, Mink is named for his bald head, *čəbalqid*.)

41. huy, t<sup>h</sup>uk<sup>w</sup>tubəx<sup>w</sup> tiʔiʔ bibščəb ʔi tiʔiʔ suʔsuq<sup>w</sup>aʔs.
42. huy, q<sup>w</sup>uʔtəbəx<sup>w</sup> tiʔiʔ ʔacit<sup>h</sup>talbix<sup>w</sup> tu·lʔal bək<sup>w</sup> čad.
43. huy, ʔət<sup>h</sup>tub tə ʔacit<sup>h</sup>talbix<sup>w</sup>.
44. huy g<sup>w</sup>əl, juʔiləx<sup>w</sup> tə ʔacit<sup>h</sup>talbix<sup>w</sup>.
45. huy, hig<sup>w</sup>iləx<sup>w</sup> siʔab tiʔiʔ bibəčəb ʔi tiʔiʔ suʔsuq<sup>w</sup>aʔs, tət<sup>h</sup>yika.
46. huyəx<sup>w</sup> čəd.

**5.2 The Young Mink and his little younger brother, Tutyeeka**

1. Young Mink and his little younger brother, Tutyeeka, were [out] trolling.
2. They were trolling.
3. Then, [they] saw Whale.
4. So they bothered/teased Whale.
5. They bothered/teased Whale.
6. Then Whale got tired [of it].
7. So Whale swallowed [them].
  
8. [For] three days they were inside Whale.
9. Then, young Mink [began to] pace back and forth.
10. [He] paced back and forth.
11. Then, [he] bumped into the heart of Whale.
12. "Hey, what are you doing, Young Mink?"
13. "Oh, I'm just pacing back and forth."
14. "Young Mink! Don't you [go] bump[ing] into my heart."
15. But Young Mink [only] said,
16. "Yeah, yeah."
  
17. Next, Young Mink and his little younger brother, Tutyeeka, talked [their predicament] over.
18. "We should make a fire and cook [something] for ourselves."
19. So, they made a fire.
20. "What are you doing?, Young Mink!"
21. "Oh, I just built a fire."
22. Then, they cut [down] the heart of Whale [to cook it].
23. "What are you doing?!!, Young Mink."
  
24. [That] was all Whale [ever] knew.
25. Then Whale went [as the last motion in his death throes].
26. Whale [shot] way up on shore. [More literally, Suddenly to [a] place up from the shore is where Whale landed.]
  
27. [The next] morning early Young Mink peeked [out from inside Whale.]
28. [They] heard an old man way up the bank.
29. [He] was making a small canoe.
30. Then Young Mink sang.
31. [He] sang:

32. "What, [oh] what are you pounding?  
What, [oh] what are you pounding?
33. For a long time I [have been] inside old Whale, Whale.
34. What, [oh] what are you pounding?  
What, [oh] what are you pounding?
35. For a long time I [have been] inside old Whale, Whale."
36. Then that old man ran [to his village].
37. [He] told about how Young Mink and his little younger brother, Tutyeeka [had] been brought ashore.
38. Then, they went [to see for themselves].
39. A large mat was laid out for Young Man and his little Younger brother to walk on.<sup>4</sup>
40. Young Mink and his little younger brother, Tutyeeka, were completely bald.
41. Then, Young Mink and his little younger brother, Tutyeeka, were taken home.
42. Then, people from everywhere were gathered.
43. Then [they] fed the people.
44. And then, the people had a good time.
45. Thus, did Young Mink and his little younger brother, Tutyeeka, become very important men.
46. I am finished.

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<sup>4</sup>That is, Mink and his brother got the red carpet treatment.





- 5a bapadəx<sup>w</sup> əlg<sup>w</sup>əʔ [See 4b-4h.]  
 5b tiʔiʔ čx<sup>w</sup>əluʔ [See 3h-3j.]
6. huy, x<sup>w</sup>ak<sup>w</sup>isəbəx<sup>w</sup> ʔə tiʔiʔ čx<sup>w</sup>əluʔ.  
 s. adv. predicate oblique complement  
 Then Whale got tired [of it].
- 6a huy [See 3a.]  
 6b x<sup>w</sup>ak<sup>w</sup>isəbəx<sup>w</sup> [someone] got tired of [someone, something]  
 6c əx<sup>w</sup> [See 3d.]  
 6d x<sup>w</sup>ak<sup>w</sup>isəb verb stem providing for the possible overt  
 expression of both a direct complement patient  
 and an oblique complement agent  
 x<sup>w</sup>ak<sup>w</sup>isəbəx<sup>w</sup><sub>V</sub>(x<sub>1</sub>)<sub>0</sub> (x<sub>2</sub>: animate(x<sub>2</sub>)<sub>Exp</sub>)  
 6e -(ə)b suffix creating stems that provide for the  
 possible overt expression of an oblique  
 complement expressing agent  
 6f x<sup>w</sup>ak<sup>w</sup>is tired of someone/something verb stem providing for  
 the possible overt expression of a direct complement  
 expressing patient  
 x<sup>w</sup>ak<sup>w</sup>is<sub>V</sub>(x<sub>1</sub>: animate(x<sub>1</sub>))<sub>Exp</sub>  
 6g -s suffix changing an agent oriented stem in -il to  
 a patient oriented verb stem  
 6h x<sup>w</sup>ak<sup>w</sup>i(1) tired verb stem (with root, x<sup>w</sup>ak<sup>w</sup>-, bound to -il)  
 6i ʔə tiʔiʔ čx<sup>w</sup>əluʔ oblique complement expressing agent (16.4, 16.5)  
 6j ʔə particle introducing an oblique complement  
 6k tiʔiʔ [See 1k.]  
 6l čx<sup>w</sup>əluʔ [See 3j.]
7. huy bəqtəbax<sup>w</sup> ʔə tiʔiʔ čx<sup>w</sup>əluʔ.  
 s. adv. predicate oblique complement  
 So Whale swallowed [them].

- 7a huy [See 3a.]  
 7b bəqtəbax<sup>w</sup> *someone swallowed someone / something*  
 7c ax<sup>w</sup> variant of əx<sup>w</sup> [See 3d.] occurring when all preceding vowels in the word are /ə/ (exclusive of prefixes)  
 7d bəqtəb verb stem providing for the possible overt expression of both a direct complement patient and an oblique complement agent  
 bəqtəb<sub>V</sub>(x<sub>1</sub>)<sub>Go</sub>(x<sub>2</sub>: animate(x<sub>2</sub>))<sub>Ag</sub>  
 7e -əb [See 6e.]  
 7f bəqəd<sub>V</sub>(x<sub>1</sub>)<sub>Go</sub>  
 7g -t- variant of -(ə)d [See 4f.] used whenever this suffix is not final (exclusive of clitics such as ax<sup>w</sup> / əx<sup>w</sup>).  
 7h bəq *get swallowed, put in mouth, root*  
 bəq<sub>V</sub>(x<sub>1</sub>: animate(x<sub>1</sub>))<sub>Exp</sub>  
 7i ʔə tiʔiʔ čx<sup>w</sup>əluʔ oblique complement expressing agent [See 6i - 6l.]

8. ʔix<sup>w</sup>əʔdat tiʔiʔ sdəg<sup>w</sup>abacilsəx<sup>w</sup> əlg<sup>w</sup>əʔ ʔə tiʔiʔ čx<sup>w</sup>əluʔ.  
 predicate direct complement

*For three days they were inside Whale.*  
*clause subordinated to focused adjunct*

- 8a ʔix<sup>w</sup>əʔdat (for) three days focused temporal augment serving as predicate  
 ʔix<sup>w</sup>əʔ three times  
 ʔix<sup>w</sup> three  
 -əʔ variant of -at derivational suffix (time)  
 (It also creates ordinals from ʔix<sup>w</sup> upwards.)  
 -dat twenty-four hour period, day(s) lexical suffix

- 8b tiʔiʔ sdəg<sup>w</sup>abacilsəx<sup>w</sup> əlg<sup>w</sup>əʔ ʔə tiʔiʔ čx<sup>w</sup>əluʔ.  
 direct complement consisting of subordinate clause introduced by distal demonstrative

- 8c tiʔiʔ distal demonstrative bound to entire following subordinate clause. (See also 1k).

- 8d sdəg<sup>w</sup>abacilsəx<sup>w</sup> əlg<sup>w</sup>əʔ ʔə tiʔiʔ čx<sup>w</sup>əluʔ.  
*They came to be inside that whale.* Subordinate clause.

- 8e s- ... -s subordinate clause inflection for third person.  
 8f s- nominalizing prefix here marking subordinate clause.  
 8g -s third person suffix (See 1v.), here showing  
 that the subordinate clause involves third person

8h dəg<sup>w</sup>abaciləx<sup>w</sup> əlg<sup>w</sup>ə? ?ə ti?i? čx<sup>w</sup>əlu?  
*They were inside the whale.*

8i dəg<sup>w</sup>abaciləx<sup>w</sup> əlg<sup>w</sup>ə? *They are inside.* predicate

8j dəg<sup>w</sup>abaciləx<sup>w</sup> [*they*] *were inside*

8k dəg<sup>w</sup>abacil *come to be inside the/a body*

dəg<sup>w</sup>abacil<sub>V</sub>(x<sub>1</sub>)<sub>0</sub>

8l -il agent oriented suffix

8m dəg<sup>w</sup>abac *inside body*, locative stem

8n -abac body, lexical suffix

8o dəg<sup>w</sup> *inside container*, locative root  
 (variant of dək<sup>w</sup>/dəg<sup>w</sup>a-)

8p -əx<sup>w</sup> [See 3d.]

8q ?ə ti?i? čx<sup>w</sup>əlu? *of that whale*

8r ?ə semantically "loaded" preposition  
 introducing a locative adjunct

8s ti ?i? čx<sup>w</sup>əlu? *that whale*

8t ti?i? [See 1k.]

8u čx<sup>w</sup>əlu? [See 3j.]

9. huy, ?ibibəšəx<sup>w</sup> ti?i? bibščəb.  
 s. adv. predicate direct complement  
*Then young Mink paced back and forth.*

9a huy [See 3a.]

9b ?ibibəšəx<sup>w</sup> *pace back and forth*

9c ?ibibəš reduplicated – VC<sub>2</sub> stem designating acts done  
 that do not come to fruition (whether or not  
 agent has an intended goal).

9d ?ibəš *walk, travel on land*, root  
 ?ibəš<sub>V</sub>(x<sub>1</sub>: animate(x<sub>1</sub>))<sub>Ag</sub>

9e əx<sup>w</sup> [See 3d.]

9f ti?i? bibščəb [See 1i - 1n.]

10. ?ibibəšəx<sup>w</sup> *He paced back and forth.* [See 9b-9e.]

11. huy, kawdx<sup>w</sup>əx<sup>w</sup> tiʔiʔ sčaliʔ ʔə tiʔiʔ čx<sup>w</sup>əluʔ.  
 s. adv. predicate direct complement expressing patient  
*Then he bumped into Whale's heart.*
- 11a huy [See 3a]  
 11b kawdx<sup>w</sup>əx<sup>w</sup> [he] bump(ed) into, predicate head  
 11c kawdx<sup>w</sup> bumped into, patient oriented verb stem  
 kawdx<sup>w</sup><sub>V(x<sub>1</sub>)G<sub>o</sub></sub>  
 11d kaw- verb root  
 11e -dx<sup>w</sup> [See 3f.]  
 11f əx<sup>w</sup> [see 3d.]  
 11g tiʔiʔ sčaliʔ that heart, direct complement  
 11h tiʔiʔ [See 1k.]  
 11i sčaliʔ heart  
 11j ʔə tiʔiʔ čx<sup>w</sup>əluʔ of (that) Whale possess  
 phrase expressing possessor  
 11k ʔə preposition introducing possessor [Compare 8q.]  
 11l tiʔiʔ [See 1k.]
12. ʔuʔəxičədəx<sup>w</sup> čəx<sup>w</sup>, bibščəb.  
 predicate addressee  
*Oh! What are you doing, young mink?*
- 12a ʔuʔəxičədəx<sup>w</sup> čəx<sup>w</sup> What are you doing? predicate  
 12b čəx<sup>w</sup> you 2nd person sg. particle  
 12c ʔuʔəxičədəx<sup>w</sup> doing what? predicate head  
 12d ʔəxičəd interrogative stem<sup>5</sup> derived by an unproductive  
 replication from the interrogative root ʔəxid  
 what happen(ed)?  
 ʔəxičəd<sub>V(x<sub>1</sub>: animate(x<sub>1</sub>))A<sub>g</sub></sub> [See 12d.]  
 12e ʔəxid root of ʔəxičəd [See 12d.]  
 12f ʔu- perfective aspectual prefix  
 12g əx<sup>w</sup> [See 3d.]  
 12h bibščəb [See 11-1n.]
13. ʔu:, tuχ<sup>w</sup> čəd ʔuʔibibəš.  
 excl. predicate  
*Oh, I'm just pacing back and forth.*

<sup>5</sup>Interrogative predicates are not dealt with in FG as of 1980.

- 13a ʔuʔibibəš pace back and forth, predicate head  
 13b ʔibibəš [See 9c-9e.]  
 13c ʔu- [See 12f. ]  
 13d čəd I, first person single predicate particle  
 [Compare 12b.]  
 13e tuḥ<sup>w</sup> merely, just predicate adverb  
 13f bibščəb young mink, addressee [See 11-1n.]
14. bibščəb. x<sup>w</sup>iʔ k<sup>w</sup>i g<sup>w</sup>adsukawdx<sup>w</sup> tiʔiʔ dščaliʔ  
 addressee pred. complement  
*Young Mink. Don't bump my heart!*
- 14a bibščəb [See 11-1n and 13f.]  
 14b x<sup>w</sup>iʔ no, not. sole member of predicate<sup>6</sup>  
 14c k<sup>w</sup>i g<sup>w</sup>adsukawdx<sup>w</sup> tiʔiʔ dščaliʔ. bump into my heart  
 direct complement of x<sup>w</sup>iʔ in the form of an embedded clause.  
 14d k<sup>w</sup>i adjective demonstrative marking the complement  
 as hypothetical or unrealized.  
 14e g<sup>w</sup>adsukawdx<sup>w</sup> tiʔiʔ dščaliʔ  
 embedded sentence serving as head of complement of x<sup>w</sup>iʔ
- 14f g<sup>w</sup>adsukawdx<sup>w</sup> (if) you bump, predicate  
 14g kawdx<sup>w</sup> [See 11c-11e.]  
 14h -u- variant of ʔu- [See 12f.]  
 14i -s- [See 8e.]  
 14j -ad- you, your. second person singular prefix [Cf. 12b.]  
 14k g<sup>w</sup>- subjunctive prefix  
 14l tiʔiʔ dščaliʔ my heart, direct complement in embedded  
 sentence 14e.
- 14m dščaliʔ my heart head of direct complement  
 14n sčaliʔ heart  
 14o -čaliʔ bound nominal root  
 14p s- nominal prefix  
 14q d- I, my. first person singular prefix. [Cf. 13d.]  
 14r tiʔiʔ [See 1k.]

<sup>6</sup>The polarity operator is a predicate in Lushootseed. Hence, a different device is needed to describe it.

15. huy, cutəx<sup>w</sup> tiʔiʔ bibščəb  
 sent. adv. predicate direct complement  
*Then young Mink spoke.*
- 15a huy [See 3a.]  
 15b cutəx<sup>w</sup> speak, say. head of sole member of predicate  
 15c əx<sup>w</sup> [See 3d.]  
 15d cut speak, say. root  
       cut<sub>V</sub>(x<sub>1</sub>: human(x<sub>1</sub>))<sub>Ag</sub>  
 15e tiʔiʔ bibščəb (that) Young Mink  
 15f bibščəb [See 1l-1n.]  
 15g tiʔiʔ [See 1k.]
16. ʔu *yeah, OK.* (a noncommittal response), a nonce word
17. hay, g<sup>w</sup>adadg<sup>w</sup>adəx<sup>w</sup> tiʔiʔ bibščəb ʔi tiʔiʔ suʔsuq<sup>w</sup>aʔs, tətyika.  
 s. adv. predicate direct complement  
*Then Young Mink and his little younger brother, Tutyeeka,*  
*talked [their situation] over.*
- 17a hay *then, next, so then* sentence adverb  
 17b g<sup>w</sup>adadg<sup>w</sup>adəx<sup>w</sup> *discuss [something], talk [something] over*  
 17c g<sup>w</sup>adadg<sup>w</sup>ad doubly reduplicated stem  
       -VC<sub>2</sub> pattern [as in 9c] and  
       -C<sub>1</sub>VC<sub>2</sub> pattern expressing  
       multiple (because both  
       C<sub>1</sub>VC<sub>2</sub>C<sub>1</sub>VC<sub>2</sub> and  
       C<sub>1</sub>VC<sub>2</sub>VC<sub>2</sub> occur, it is  
       not possible to claim that one  
       pattern forms a stem to which the  
       second pattern added rather than  
       the other way around.)  
       g<sup>w</sup>adadg<sup>w</sup>ad<sub>V</sub>(x<sub>1</sub>: animate(x<sub>1</sub>))<sub>Ag</sub>  
 17d əx<sup>w</sup> [See 3d.]
- 17e tiʔiʔ bibščəb ʔi tiʔiʔ suʔsuq<sup>w</sup>aʔs, tətyika. [See 1i-1w.]

18. ǰub čəʔ ʔuhudčup čta k<sup>w</sup>uk<sup>w</sup>cut. compound sentence  
 predicate predicate  
*We should make a fire and cook for ourselves.*
- 18a ʔuhudčup *make a fire* head of predicate  
 18b hudčup *make a fire* verb stem  
 hupčup<sub>V</sub>(x<sub>1</sub>: human(x<sub>1</sub>))<sub>Ag</sub>  
 18c hud *make* root  
 hud<sub>V</sub>(x<sub>1</sub>: human(x<sub>1</sub>))<sub>Ag</sub>  
 18d -čup *fire/firewood* lexical suffix  
 18e ʔu- [See 1b.]  
 18f ǰub *should* predicate adverb  
 18g čəʔ *we* first person singular  
 predicate particle
- 18h k<sup>w</sup>uk<sup>w</sup>cut *cook for self* reflexive stem  
 k<sup>w</sup>uk<sup>w</sup>cut<sub>V</sub>(x<sub>1</sub>: human(x<sub>1</sub>))<sub>Ag</sub>  
 18i k<sup>w</sup>uk<sup>w</sup> *cook* verb root borrowed from  
 English *cook*, root never  
 stands alone in Lushootseed.  
 It must have suffix -cut.  
 18j -cut reflexive suffix
- 18k čta *and we*  
 18l čʔ < čəʔ [See 18g.]  
 18m -a coordinate conjunction  
 used only with person  
 marking predicate particles
19. huy, hudčupəx<sup>w</sup> əlg<sup>w</sup>əʔ.  
 sent. adv. predicate  
*So they made a fire.*
- 19a hudčupəx<sup>w</sup> *made fire* predicate head  
 19b hudčup [See 18b-18d.]  
 19c əx<sup>w</sup> [See 3d.]  
 19d əlg<sup>w</sup>əʔ *they* [See 2b.]  
 19e huy [See 3a.]
20. ʔuʔəxiχədəx<sup>w</sup> čəx<sup>w</sup>, bibščəb. [See 12-12h.]

21. ʔu:, tuḡ<sup>w</sup> čəd ʔuhudčup.  
 Exclamation predicate  
*Oh, I am just making a fire.*
- 21a ʔuhudčup [See 18a-18e.]  
 21b čəd [See 13d.]  
 21c tuḡ<sup>w</sup> [See 13e.]
22. huy, ḥičitəbəx<sup>w</sup> tiʔiʔ sčaliʔ ʔə tiʔiʔ čx<sup>w</sup>əluʔ.  
 sent. adv. predicate direct complement  
*Then, he cut whale's heart.*
- 22a huy [See 3a.]  
 22b ḥičitəbəx<sup>w</sup> cut (something) predicate head  
 22c ḥičitəb verb stem providing for the possible  
 overt expression of an oblique  
 complement expressing agent
- 22d ḥičit- ḥičit<sub>V(x<sub>1</sub>)Go</sub> patient orient verb stem  
 22e ḥič(i) ḥičit- v(x<sub>1</sub>)Go verb root  
 22f əx<sup>w</sup> ḥič(i)<sub>V(x<sub>1</sub>: animate(x<sub>1</sub>))Exp</sub> [See 3d.]  
 22g tiʔiʔ sčaliʔ ʔə tiʔiʔ čx<sup>w</sup>əluʔ [See 11g-11m.]
23. ʔuʔəxiḡədəx<sup>w</sup> čəx<sup>w</sup>, bibščəb [See 12-12h.]
24. daý ʔuhaydub ʔə tiʔiʔ čx<sup>w</sup>əluʔ.  
 predicate oblique complement  
*[That] was all Whale [ever] knew.*

24a	daʔ	ʔuhaydub	[that's] all [he] knew
24b	daʔ		only, predicate adverb
24c		ʔuhaydub	was known (by)
			ʔuhaydub <sub>VGo</sub> (x <sub>2</sub> : human(x <sub>2</sub> )) <sub>Exp</sub>
24d		ʔu-	[See 1b.]
24e		haydu-	know
			haydu- <sub>V</sub> (x <sub>1</sub> ) <sub>Go</sub>
24f		du-	variant of dx <sup>w</sup> - occurring in non-final position
24g		hay-	know, bound verb root
24h		-b	[See 7e.]
24i	ʔə	tiʔiʔ čx <sup>w</sup> əluʔ	[See 6i-6l.]

25. hay, tuʔux<sup>w</sup>əx<sup>w</sup> tiʔiʔ čx<sup>w</sup>əluʔ.  
 s. adv. predicate direct complement  
 Then Whale went [as the last motion in his death throws].

25a		huy	[See 3a.]
25b		tu.ʔux <sup>w</sup> əx <sup>w</sup>	went
25c		-əx <sup>w</sup>	[See 3d.]
25d		tuʔux <sup>w</sup>	went, agent oriented stem
25e		ʔux <sup>w</sup>	go, verb root
			ʔux <sup>w</sup> <sub>V</sub> (x <sub>1</sub> : animate(x <sub>1</sub> )) <sub>Ag</sub>
25f		tu-	inflexional prefix expressing acts, states or entities remote in time or space
25g	tiʔiʔ	čx <sup>w</sup> əluʔ	direct complement expressing agent [See 3h-3j.]

26. tiləb dx<sup>w</sup>ʔaqt tiʔiʔ stəlil ʔə tiʔiʔ čx<sup>w</sup>əluʔ.  
 predicate direct complement  
 Whale [shot] way up on shore.

26a	tiləb	dx <sup>w</sup> ʔaqt	predicate
26b		tiləb	predicate adverb
26c		dx <sup>w</sup> ʔaqt	focused locative adverb functioning as head of predicate root
26d		ʔaqt	landward, root
26e		dx <sup>w</sup> -	prefix (derivational) creating verb stems from locative stems

- 26f tiʔiʔ sʔalil ʔə tiʔiʔ čxʷəluʔ direct complement consisting of subordinate clause introduced by distal demonstrative
- 26g tiʔiʔ [See 8c.]
- 26h sʔalil ʔə tiʔiʔ čxʷəluʔ subordinate clause  
*Whale went ashore*
- 26i ʔə tiʔiʔ čxʷəluʔ ʔə-phrase replacing third person suffix -s.
- 26j s- ... (-s) [See 8g.]  
subordinate clause inflection for third person (here, however, -s is by replaced ʔə tiʔiʔ čxʷəluʔ )
- 26k s- [See 8f.]
- 26l ʔalil tiʔiʔ čxʷəluʔ *Whale went ashore*, verb agent oriented stem functioning as predicate head
- 26m ʔalil *go ashore*  
ʔalil<sub>v</sub>(x<sub>1</sub>: animate(x<sub>1</sub>))<sub>Ag</sub>
- 26n tiʔiʔ čxʷəluʔ [See 3h-3j.]
27. dadatu[t] tiʔiʔ skʷilil ʔə tiʔiʔ bibščəb.  
predicate direct complement  
[*The next* ] *morning early Young Mink peeked* [out from inside *Whale.*]
- 27a dadatu[t] *in the morning* focused temporal augment serving as predicate
- 27b tiʔiʔ skʷilil ʔə tiʔiʔ bibščəb *Young Mink peeked*  
[out from inside *Whale.*]  
direct complement consisting of subordinate clause introduced by distal demonstrative

27c	tiʔiʔ	[See 8c.]
27d	skʷilil ʔə tiʔiʔ bibščəb	subordinate clause
27e	tiʔiʔ bibščəb	ʔə-phrase replacing third person suffix -s, [Cf. 8g.], here, -s is replaced by ʔə tiʔiʔ bibščəb
27f	tiʔiʔ	[See 8c.]
27g	bibščəb	[See 11-1n.]
27h	kʷilil	<i>peer out from behind something</i> <i>peer</i> , verb stem (with root kʷil, bound to -il) kʷilil <sub>V(x<sub>1</sub>: animate(x<sub>1</sub>))Ag</sub>
27i	kʷil-	<i>stare</i> , root kʷil <sub>V(x<sub>1</sub>: animate(x<sub>1</sub>))Ag</sub>
27j	s-	[See 8f.]

28. ʔuluud    tiʔiʔ luχ            tudiʔ ʔəqt.  
 predicate    direct complement    locative augment  
 [They] heard an old man way up the bank.

28a	ʔuluud	heard	
28b	luud	hear	patient oriented stem
		luud <sub>V(x<sub>1</sub>)So</sub>	
28c	luu		variant of luh 'hear', root
28d	-d		[See 4f.]
28e	ʔu-		[See 1b.]
28f	tiʔiʔ luχ		direct complement expressing patient
28g	luχ	old	head of direct complement
28h	tiʔiʔ		[See 1k.]
28i	tudiʔ ʔəqt		locative augment
28j	ʔəqt		head of locative augment
28k	tudiʔ	yonder, way off over there	adv. demonstrative

29. læcupəyəq    ʔə tiʔiʔ sdiʔdəxʷiʔ.  
 predicate    adjunct  
 [He] was making a small canoe.

29a	ləcupəyəq	<i>hewing out</i>	head of predicate
29b	‿əyəq	<i>hew out, build canoe</i>	agent oriented stem
		‿əyəq <sub>V</sub> (x <sub>1</sub> : animate(x <sub>1</sub> )) <sub>A<sub>g</sub></sub>	
29c	ləcu-		prefix (continuous aspect)
29d	ʔə tiʔiʔ sdiʔdəx <sup>w</sup> iʔ		agent oriented predicate
29e	sdiʔdəx <sup>w</sup> iʔ	<i>little hunting canoe</i>	head of adjunct
29f	diʔdəx <sup>w</sup> iʔ	<i>little hunting canoe</i>	dim. of dəx <sup>w</sup> iʔ
29g	dəx <sup>w</sup> iʔ	<i>hunting canoe</i>	
29h	s-		nominal prefix
29i	tiʔiʔ		[See 1k.]
29j	ʔə		[See 6j.]

30. huy, ‿ilibəx<sup>w</sup> tiʔiʔ bibščəb.  
 s. adv. predicate direct complement  
*Then Young Mink sang.*

30a	huy		[See 3a.]
30b	‿ilibəx <sup>w</sup>	<i>sings now</i>	
30c	əx <sup>w</sup>		[See 3d.]
30d	‿ilib	<i>sings</i>	agent oriented stem
		‿ilib <sub>V</sub> (x <sub>1</sub> : animate(x <sub>1</sub> )) <sub>A<sub>g</sub></sub>	
30e	tiʔiʔ bibščəb		[See 1j-1w.]

31. ‿ilibəx<sup>w</sup> [See 30b.]

31a	əx <sup>w</sup>	[See 3d.]
31b	‿ilib	[See 30d.]

32. stab čəx<sup>w</sup> stab ʔuk<sup>w</sup>ix<sup>w</sup>id.  
 d. complement (int.) predicate  
*What, oh what are you pounding*

- 32a. This sentence is highly unusual and were it not in the special song setting, it would be considered ungrammatical because the interrogative noun *stab* 'what?' is here used as an adverb. In normal use this sentence would be *stab k<sup>w</sup> (i) adsuk<sup>w</sup> ix<sup>w</sup>id*.



36a	huy		[See 3a.]
36b	təlawiləx <sup>w</sup>	run/ran	
36c	təlawil	run/ran	agent oriented stem
		təlawil <sub>V</sub> (x <sub>1</sub> : animate(x <sub>1</sub> )) <sub>Ag</sub>	
36d	əx <sup>w</sup>		[See 3d.]
36e	tiʔiʔ luχ		direct complement expressing agent
36f	luχ		[See 28g.]
36g	tiʔiʔ		[See 1k.]

37. huy, yəcəbax<sup>w</sup> ʔə tiʔiʔ bibščəb ʔi tiʔiʔ suʔsuq<sup>w</sup>aʔs, tətyika,  
 s. adv. predicate adjunct  
ʔə tiʔiʔ stəliltubsəx<sup>w</sup>.  
 adjunct  
*[He] told about how Young Mink and his little younger brother,*  
*Tutyeeka [had] been brought ashore.*

37a	huy		[See 3a.]
37b	yəcəbax <sup>w</sup>	[he] told [them] about	
37c	yəcəb	report	agent oriented stem
		yəcəb <sub>V</sub> (x <sub>1</sub> : human(x <sub>1</sub> )) <sub>Ag</sub>	
37d	yəc	tell	bound root
37e	-əb		[See 1h.]
37f	ax <sup>w</sup>		[See 7c.]

- 37g ʔə tiʔiʔ bibščəb ʔi tiʔiʔ suʔsuq<sup>w</sup>aʔs, tətyika,  
 adjunct serving as "patient," here, the information reported.

- 37h ʔə particle introducing agent  
 37i tiʔiʔ bibščəb ʔi tiʔiʔ suʔsuq<sup>w</sup>aʔs, tətyika,  
*Young Mink and his little brother, Tutyeeka.* [See 1j-1w.]  
 37j ʔə tiʔiʔ stəliltubsəx<sup>w</sup>, second member of adjunct in 37  
 37k ʔə [See 37h.]

37l	tiʔiʔ stalitubsəx <sup>w</sup>	<i>their having been brought ashore</i>
37m	stalitubsəx <sup>w</sup>	subordinate clause functioning as head of adjunct phrase
37n	s.talitubs	subordinate clause
37o	s- ... -s	[See 8e-8g.]
37p	ʔalitub	patient oriented stem inflected for agency
37q	-b	[See 6e.]
37r	tu-	causative suffix for patient oriented stem
37s	ʔali- <i>go ashore</i>	agent oriented stem [See 26m.]
37t	əx <sup>w</sup>	[See 3d.]
37u	tiʔiʔ	[See 1k.]

38. huy, ʔuχ<sup>w</sup>əx<sup>w</sup> tə ʔaciʔtalbix<sup>w</sup>.  
s. adv. predicate direct complement  
*Then, they went [to see for themselves].*

38a	ʔuχ <sup>w</sup> əx <sup>w</sup>	<i>went</i>	
38b	ʔuχ <sup>w</sup>	<i>go</i>	[See 25e.]
38c	əx <sup>w</sup>		[See 3d.]
38d	tə ʔaciʔ talbix <sup>w</sup>		direct complement
38e	ʔaciʔ talbix <sup>w</sup>	<i>person/people</i>	head of d.c.
38f	tə		[See 33l.]

39. bəčatəbəx<sup>w</sup>  
predicate  
tiʔiʔ k<sup>w</sup> aʔa q dəx<sup>w</sup> ʔibəš ʔə tiʔiʔ bibščəb ʔi tiʔiʔ suʔsuq<sup>w</sup> aʔs.  
direct complement  
*A large mat was laid out for Young Mink and his little Younger brother to walk on.*

39a	bəčatəbəx <sup>w</sup>	<i>[it] was put down</i>	sole member of predicate
39b	bəčatəb	<i>[it] was put down</i>	patient oriented stem for agency bəčatəb <sub>V(x<sub>1</sub>G<sub>o</sub>(x<sub>2</sub>: animate(x<sub>2</sub>)))<sub>A<sub>g</sub></sub></sub>
39c	-əb		[See 6e.]
39d	bəčat-		[See 7f.]
39e	bəča	<i>fall over</i>	variant of bəč bəča <sub>V(x<sub>1</sub>: animate(x<sub>1</sub>))<sub>Exp</sub>, experiencer root</sub>

- 39f tiʔiʔ k<sup>w</sup>aʔaʔ dæx<sup>w</sup>.ʔibəš ʔə tiʔiʔ bibščəb ʔi tiʔiʔ suʔsuq<sup>w</sup>aʔs.  
direct complement
- 39g k<sup>w</sup>aʔaʔ head of complement
- 39h dæx<sup>w</sup>ʔibəš ʔə tiʔiʔ bibščəb ʔi tiʔiʔ suʔsuq<sup>w</sup>aʔs.  
*for Young Mink and his little younger brother to walk on*  
subordinate clause modifying k<sup>w</sup>aʔaʔ.
- 39i ʔə tiʔiʔ bibščəb ʔi tiʔiʔ suʔsuq<sup>w</sup>aʔs.  
ʔə-phrase replacing third person suffix -s.
- 39j dæx<sup>w</sup>- ... ʔə... subordinate clause inflection  
expressing reason/location
- 39k dæx<sup>w</sup>... (-s) [See 8g.]  
subordinate clause prefix inflection expressing reason/location.
- 39l ʔibəš *walking* agent oriented stem, [See 9d.]  
tiʔiʔ... [See 1j-1w.]
40. pu·təx<sup>w</sup> ʔəstəuq<sup>w</sup>ač tiʔiʔ bibščəb ʔi tiʔiʔ suʔsuq<sup>w</sup>aʔs, tətyika.  
predicate direct complement  
*Young Mink and his little younger brother, Tutyeeka, were completely bald.*
- 40a pu·təx<sup>w</sup> ʔəstəuq<sup>w</sup>ač predicate
- 40b pu·təx<sup>w</sup> adverb
- 40c pu· *very, completely, totally*
- 40d əx<sup>w</sup> [See 3d.]
- 40e ʔə stəuq<sup>w</sup>ač head of predicate
- 40f tuq<sup>w</sup>ač *bald head* stem
- 40g tuq<sup>w</sup> *to be peeled*  
tuq<sup>w</sup><sub>V(x<sub>1</sub>)Proc</sub>
- 40h -ač *head* lexical suffix
- 40i ʔəs- stative aspect prefix
- 40j tiʔiʔ... [See 1j-1w.]
41. huy, tu<sup>w</sup>tubəx<sup>w</sup> tiʔiʔ bibščəb ʔi tiʔiʔ suʔsuq<sup>w</sup>aʔs.  
s. adv. predicate direct complement  
*Then, Young Mink and his little younger brother, Tutyeeka,*  
*were taken home.*

41a	huy		[See 3a.]
41b	ʔuk <sup>w</sup> tubəx <sup>w</sup>	<i>were taken home</i>	predicate
41c	ʔuk <sup>w</sup> tub		predicate
		ʔuk <sup>w</sup> tub <sub>V(x<sub>1</sub>: human(x<sub>1</sub>))Ag(x<sub>2</sub>)Go</sub>	
41d	əx <sup>w</sup>		[See 3d.]
41e	-b		[See 6e.]
41f	ʔuk <sup>w</sup> tu	<i>taken home</i>	
		ʔuk <sup>w</sup> tu <sub>V(x<sub>1</sub>)GO</sub>	
41g	-tu-	<i>causation</i>	[See 37r.]
41h	ʔuk <sup>w</sup>	<i>go/come home</i>	
		ʔuk <sup>w</sup> <sub>V(x<sub>1</sub>: human(x<sub>1</sub>))Ag</sub>	
41i	tiʔiʔ...		[See 1j-1w.]
42.	<u>huy, ɬ<sup>w</sup>uʔtəbəx<sup>w</sup> tiʔiʔ ʔaciʔtalbi<sup>w</sup> tuʔʔal bək<sup>w</sup> čad.</u>		
	s. adv.	predicate	direct complement
		<i>Then, people from everywhere were gathered.</i>	
42a	huy		[See 3a.]
42b	ɬ <sup>w</sup> uʔtəbəx <sup>w</sup>	<i>were gathered</i>	predicate
42c	ɬ <sup>w</sup> uʔtəb	<i>were brought together</i>	head of predicate
		ɬ <sup>w</sup> uʔtəb <sub>V(x<sub>1</sub>)Go(x<sub>2</sub>: animate(x<sub>2</sub>))Ag</sub>	
42d	ɬ <sup>w</sup> uʔt-	<i>gathered</i>	
		ɬ <sup>w</sup> uʔt <sub>V(x<sub>1</sub>)Proc</sub>	
42e	əx <sup>w</sup>		[See 3d.]
42f	ɬ <sup>w</sup> uʔ	<i>gather</i>	root
		ɬ <sup>w</sup> uʔ <sub>V(x<sub>1</sub>)Proc</sub>	
42g	tiʔiʔ ʔaciʔtalbi <sup>w</sup> tu..ʔʔal bək <sup>w</sup> čad		direct complement
42h	ʔaciʔtalbi <sup>w</sup>	<i>people</i>	head of d. complement
42i	tiʔiʔ		[See 1k.]
42j	tuʔʔal bək <sup>w</sup> čad		locative phrase modifying ʔaciʔtalbi <sup>w</sup>
42k	bək <sup>w</sup> čad	<i>everywhere</i>	
42l	čad	<i>where</i>	head of locative phrase
42m	bək <sup>w</sup>	<i>all, complete</i>	adverb
42n	tuʔʔal	<i>from</i>	preposition
42o	tuʔ	<i>from</i>	prefix
42p	ʔal	<i>general locative</i>	preposition

43. huy, ʔəɪtub tə ʔacɪttalɪx<sup>w</sup>.  
s. adv. predicate direct complement  
*Then [they] fed the people.*
- 43a huy [See 3a.]  
43b ʔəɪtub *fed* predicate  
ʔəɪtub<sub>V</sub>(x<sub>1</sub>: animate(x<sub>1</sub>))<sub>Ag</sub>(x<sub>2</sub>)<sub>Go</sub>  
43c ʔəɪt- *fed*  
ʔəɪtub<sub>V</sub>(x<sub>1</sub>: animate(x<sub>1</sub>))<sub>Ag</sub>  
43d -tu [See 37r.]  
43e -b [See 6e.]  
43f ʔəɪ *eat* verb root (bound form)  
43g tə ʔacɪttalɪx<sup>w</sup> *the people* direct complement  
43h ʔacɪttalɪx<sup>w</sup> *people* [See 42g.]  
43i [See 331.]
44. huy g<sup>w</sup>əl, juʔiləx<sup>w</sup> tə ʔacɪttalɪx<sup>w</sup>.  
s. adv. predicate direct complement  
*And then, the people had a good time.*
- 44a huy [See 3a.]  
44b g<sup>w</sup>əl *and* s. adverb  
44c juʔiləx<sup>w</sup> *had a good time* predicate  
juʔiləx<sup>w</sup><sub>V</sub>(x<sub>1</sub>: human(x<sub>1</sub>))<sub>Exp</sub>  
44d əx<sup>w</sup> [See 3d.]  
44e juʔil *enjoy oneself* verb stem  
44f tə ʔacɪttalɪx<sup>w</sup> [See 43f-43h.]
45. huy, hig<sup>w</sup>iləx<sup>w</sup> siʔab tiʔiɪt bibəcəb ʔi tiʔiɪt suʔsuq<sup>w</sup>aʔs, tətɪyika.  
s. adv. predicate direct complement  
*Thus, did Young Mink and his little younger brother, Tutyeeka,  
become very important men.*
- 45a huy [See 3a.]  
45b hig<sup>w</sup>iləx<sup>w</sup> siʔab *became important* predicate  
45c əx<sup>w</sup> [See 3d.]  
45d hig<sup>w</sup>il *become* verb stem  
hig<sup>w</sup>il<sub>V</sub>(x<sub>1</sub>: human(x<sub>1</sub>))<sub>Exp</sub>  
45e siʔab *noble, high class* head of predicate  
45f tiʔiɪt... [See 1j-1w.]

46. huyəx<sup>w</sup> čəd.  
predicate direct complement  
*I am finished.*
- 46a huyəx<sup>w</sup> *finished* predicate  
46b əx<sup>w</sup> [See 3d.]  
46c huy *finish* verb root  
huy<sub>V</sub>(x<sub>1</sub>: animate(x<sub>1</sub>))<sub>Ag</sub>  
46d čəd [See 13d.]

## Bibliography

- 
- Austin, John L. (1962) *How to Do Things with Words*. Oxford: Clarendon Press.
- Bach, Emmon. (1968) "Nouns and noun phrases." In: Bach and Harms (eds.) *Universals in linguistic theory*. New York: Holt, Rinehart and Winston. 91-122.
- Bak, Sung-Yun. (1977) "Topicalization in Korean." *Working papers in linguistics*. Dept. of Linguistics. Univ. of Hawaii. 63-88.
- Bates, Dawn, Thom Hess, and Vi Hilbert. (1994) *Lushootseed Dictionary* Seattle: University of Washington Press.
- Bloomfield, Leonard (1933) *Language*. New York: Holt.
- Boas, Franz. (1929) "Classification of American Indian Languages." *Language* 5.1-7.
- Bolinger, Dwight (1961) "Contrastive accent and contrastive stress."
- Choi, So Young. (1993) (compiled) *The Korean Fables*. (in Korean) Seoul: Eunhasoo.
- Chomsky, Noam. (1965) *Aspects of the Theory of Syntax*. The MIT Press.
- Chun, Soon Ae. (1986) "Possession ascension in Korean." *Relational studies on Korean*. (ed.) S. Chun. 51-97. Linguistics, SUNY at Buffalo. New York.
- Comrie, Bernard. (1974), "Causatives and Universal Grammar." *Transaction of the Philological Society*. Basil Blackwell, Oxford. 1-32.
- . (1976) "The syntax of causative constructions: cross-language similarities and divergencies." In: M. Shibatani (ed.) *Syntax and Semantics*. vol. 6: 261-312. London and New York: Academic Press.
- . (1981a) *Language Universals and Linguistic Typology*. Oxford: Blackwell.
- . (1981b) "Aspect and Voice: some Reflections on Perfect and Passive." In: Tedeschi P. and A. Zaenen (eds.) *Syntax and Semantics*. vol. 14:65-78.

- (1985) "Causative verb formation and other verb-deriving morphology." In: Shopen T. (ed.) *Language typology and syntactic description* vol. 3. Cambridge University Press.
- Croft, William. (1990) *Typology and universals*. Cambridge University Press.
- Dowty, D., R. Wall, and S. Peters. (1981) *Introduction to Montague Semantics*. Dordrecht: D. Reider Publishing Co.
- Dik, Simon C. (1989) *The Theory of Functional Grammar Part I: The Structure of the Clause*. Foris Publications. Dordrecht/Providence.
- (1981) *Functional Grammar*. Foris Publications.
- (1980a) *Studies in Functional Grammar*. London and New York: Academic Press.
- (1980b) "Seventeen sentences: Basic principles and application of functional grammar." In: E. Moravcsik and J. Wirth (eds.) *Syntax and Semantics*. vol 13.45-75. Academic Press.
- Dik, Simon C, Maria E. Hoffmann, Jan R. de Jong, Sie Ing Djiang, Harry Stroomer, and Lourens de Vries. (1981) "On the typology of Focus Phenomena." In: *Perspectives on Functional Grammar* (eds.) Teun Hoekstra, Harry van der Hulst, & Michael Moortgat. Foris Publications.
- Garvin, Paul L. (1964) *A Prague School Reader on Esthetics, Literary Structure, and Style*. Georgetown University Press: Washington, D.C.
- Givón, Talmy (1984) *Syntax* vol. I. Philadelphia: John Benjamin Publishing Co.
- (1990) *Syntax* vol. II. Philadelphia: John Benjamin Publishing Co.
- Grice, H.P. (1967) "Logic and Conversation." ms. Published in part In: P. Cole and J. Morgan (eds.) *Speech Acts: Syntax and Semantics*. vol. 3. New York: Academic Press. 1975, 41-58.
- Halliday, M.A.K. (1967) "Notes on transitivity and theme in English." *Journal of Linguistics*. 3:37-81, 199-244.
- Hasegawa, Nobuko. (1981) *A lexical interpretive theory with emphasis on the role of subject*. Ph.D. dissertation. University of Washington. Seattle, Washington.
- Hess, Thomas M. (1973) "Agent in a Coast Salish language." *IJAL* 39:89-94.

- (1976) *Dictionary of Puget Salish*. University of Washington Press. Seattle, Washington.
- (1993) *Lushootseed Reader with Introductory Grammar* vol. I. University of Victoria. Victoria, British Columbia. ©Tulalip.
- Hess, Thom and Vi Hilbert. (1976/9) *Lushootseed* vol. I, II. Seattle: Daybreak Star Press.
- Hornby, A.S. and E.C. Parnwell. (1972) *The progressive English dictionary*. London: Oxford University Press.
- Hymes, Dell. (1971) (ed.) *Pidginization and creolization of languages*. Cambridge: Cambridge University Press.
- (1972) "On communicative competence." In: John J. Gumperz and Dell Hymes (eds.), *Directions in sociolinguistics; the ethnography of communication*. New York: Holt.
- Jacobs, Peter. (1994) "The inverse in Squamish." In: T. Givón (ed.) *Voice and Inversion*. The Benjamin Publishing Co. 121-145.
- Kang, Beom-mo. (1988) *Functional inheritance, anaphora and semantic interpretation*. Ph.D. dissertation. Department of Cognitive and Linguistic Science, Brown University.
- Keenan, Edward L. (1975) "Logical expressive power and syntactic variation in natural language". In: E. L. Keenan (ed.) *Formal semantics of natural language*. Cambridge: Cambridge University Press. 406-422.
- Keenan, E. and B. Comrie. (1977) "Noun phrase accessibility and universal grammar." *Linguistic Inquiry* 8, 63-99.
- Kim, Young-Seok. (1985) *Aspects of Korean Morphology*. Seoul: Pan Korea Book Corporation.
- Kinkade, M. Dale. (1989) "When Patients are Topics: Topic Maintenance in North American Indian Languages." In: proceedings of the 24th International Conference on Salish and Neighboring Languages. Steilacoom, Washington.
- Kitagawa, Chisato. (1982) "Topic Constructions in Japanese." *Lingua* 57:175-214.
- Kuno, Susumu. (1973) *The structure of Japanese language*. Cambridge, Mass. MIT Press.

- Lee, Hee-Seung. (1957) *New Korean Grammar for the secondary schools*. [sækotijmunpəp] (in Korean) Seoul: Ilchokak.
- Lee, Keedong. (1975) "Lexical causatives in Korean." *Language Research*. 11.17-24.
- Li, Charles. (1976) (ed.) *Subject and Topic*. Academic Press: New York.
- Li, Charles and Sandra Thompson. (1976) "Subject and Topic: A New Typology of Language." In: C. Li (ed.) 457-90.
- Lieber, Rochelle. (1981) *The Organization of the Lexicon*. Ph.D. dissertation, MIT.
- Lyons, John. (1968) *Theoretical Linguistics*. Cambridge University Press.
- (1977) *Semantics* vol. 2. Cambridge University Press.
- Nuyts, Jan, Machtelt A. Bolkestein and Co Vet. (eds.) *Layers and Levels of Representation in Language Theory, A Functional View*. Amsterdam: John Benjamins.
- O'Grady, William. (1991) *Categories and Case*. Amsterdam and Philadelphia: John Benjamins Publishing Co.
- Patterson, B. Soon Ju (1974) "A study of Korean Causatives." *Working Papers in Linguistics* 6.4:1-15. University of Hawaii.
- (1970) "Gapping and the order of constituents." In: M. Bierwisch and K. Heidolph (eds.), *Progress in Linguistics*. The Hague: Mouton. 249-259.
- Ross, John J. (1986) *Infinite Syntax*. The Ablex Publishing Co.
- Schwartz, Arthur. (1976) "On the universality of subject: the Ilocano case." In: C. Li (ed.)
- Searle, John R. (1969) *Speech Acts*. London: Cambridge Univ. Press.
- Seuren, P. A. M. (1972) "Predicate raising and dative in French and sundry languages." Unpublished paper. Magdalen College, Oxford.
- Shibatani, Masayoshi. (1976) "The Grammar of Causative Constructions: A conspectus." In: M. Shibatani (ed.) *The Grammar of Causative Constructions: Syntax and Semantics*. vol. 6.1-40
- Siewierska, Anna. (1991) *Functional Grammar*. London and New York: Routledge.

- Sohn, Ho-min. (1986) "Multiple topic constructions in Korean." in: *Linguistic Expedition* Seoul: Hanshin Publishing Co. 199-210.
- Song, Seok-Choong. (1988) *Explorations in Korean Syntax and Semantics*. Institute of East Asian Studies. University of California, Berkeley.
- . (1993) *Explorations in Korean Syntax and Semantics*. [Hankukə munpəpii sə čomyəŋ] (in Korean). Seoul: Čisiksanəpsa.
- Suttles, Wayne and Barbara Lane. (1990) "Southern Coast Salish." In: Wayne Suttles (ed.) *Handbook of North American Indians*. vol. 7. Smithsonian Institute. Washington, D.C. 485-502.
- Thompson, Laurence C. (1979) "Salishan and the Northwest." In: L. Campbell and M. Mithun (eds.) *The Languages of Native North America: Historical and Comparative Assessment*. Austin: University of Texas Press. 692-765.
- van Eijk, Jan and Thomas Hess. (1985) "Noun and verb in Salish." *Lingua* North Holland. 69.319-331.
- Yang, Dong-Whee. (1973) *Topicalization and Relativization in Korean*. Ph.D. dissertation. Indiana University. Bloomington, Indiana.
- Yang, In-Seok (1974) "Two causative forms in Korean." *Language Research* 10.83-117.
- Yoon, James H. (1986) "Some queries concerning the syntax of multiple subject constructions in Korean." *Studies in the Linguistic Sciences* 16.215-36.
- Wierzbicka, Anna. (1988) *The Semantics of Grammar*. Philadelphia: John Benjamins Publishing Company.

## Appendix A

## Inventory of Phonemes: Korean and Lushootseed

Korean consonants:

	labial	alveolar	palatal	velar	glottal
stops:					
lenis	p	t	č	k	
aspirated	p <sup>h</sup>	t <sup>h</sup>	č <sup>h</sup>	k <sup>h</sup>	
fortis <sup>1</sup>	ḑ	ṭ	č̣	ḳ	
nasal	m	n		ŋ	
fricatives:					
lenis		s			h
fortis		s'			
lateral		l			
glide	w		y		

Lushootseed consonants:

	labial	alveolar	alveopalatal	velar	uvular	glottal
stops:			{ affricates			
plain	p	t	c	č	k k <sup>w</sup>	q q <sup>w</sup>
glottalized	ḑ	ṭ	č̣	č̣̣	ḳ ḳ <sup>w</sup>	q̣ q̣ <sup>w</sup> ?
voiced	b	d	d <sup>z</sup>	ǰ	g g <sup>w</sup>	
fricatives:		s	ʃ	š	x <sup>w2</sup>	χ χ <sup>w</sup> h
resonants:						
plain			l	y	w	
laryngealized			ḷ	ỵ	ẉ	

Both languages have three series of oral obstruents but Korean has distinctive aspiration while Lushootseed utilizes significant voicing; and the Ko-

<sup>1</sup>In the text itself, the fortis series of stops is represented by geminate symbols rather than with the diacritic '. Thus, the bilabial fortis stop is seen there as pp instead of ḑ. The geminate representation adheres more closely to the practice of standard Korean orthography.

<sup>2</sup>W represents labialization.

rean fortis series, although somewhat similar to the glottalized consonants of Lushootseed, is nonetheless acoustically distinct. A major difference in manner of articulation is that Korean, like English, has a series of nasal consonants which Lushootseed lacks.

On the other hand, Lushootseed has six significant positions of articulation while Korean uses four. Lushootseed also has a series of labialized stops and affricatives which do not occur in Korean.

**Korean vowels:**

	front	mid	back
high	i	ɨ	u
mid	e	ə	o
low	æ	a	

**Lushootseed vowels:**

	front	mid	back	front	mid	back
high	i		u	ii <sup>3</sup>		uu
		ə				
low		a			aa	

Korean vowel phonemes are more numerous than in Lushootseed, although the latter has distinctive vowel length (albeit of low functional value).

Neither language has distinctive word stress nor tone.

<sup>3</sup>The double symbols represent lengthened sounds.

## Vita

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Kim, Hyong Joong: 1992, "Minimality in Lushootseed Salish." *Working Papers in Linguistics*. vol. 10s.71-84. University of Washington. Seattle, Washington.

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