

# Lushootseed Argument Structure and the Discourse Function of the Morpheme /-b/<sup>1</sup>

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Derivational suffixing, a highly grammaticized process, provides speakers lexical choices of predicates with differing argument structures. The grammar of Lushootseed is shaped by the functional pressures of information flow and has syntacticized a common discourse pattern in that lexical ergative nominals are prohibited; the solution is detransitivization. Transitive suffixes, either /-d/ 'in-control transitive', /-dxw/ 'lack of control transitive', or /-txw/ 'causative' create stems with two participants. The intransitive suffix /-b/ ensures grammatical intransitivity of a clause; when suffixed to roots, /-b/ creates stems which are equal to monomorphemic intransitive roots. When attached to a transitive stem, the result is a detransitivized stem. The choice between an intransitive, transitive, or detransitivized predicate is motivated by pragmatics for the purpose of establishing core and oblique distinctions. Viewed in this way, the absolutive category, the most "immediately involved participant," is the locus around which Lushootseed grammar is organized. This fact is best understood after an investigation of argument structure in connected speech.

## 1 Introduction

The nature of argument structure in Salish languages has intrigued linguists for decades. A lot of rich, detailed work on argument structure has been conducted by many good scholars. Yet, unfortunately, little agreement has been reached concerning the organizing principles of argument structure. While it is often recognized that suffixing is involved, there is not unanimous acceptance of the motivations for this suffixing. For some, syntax is central; for others, it is semantics. Still further is the complication of whether this suffixing is derivational or inflectional.

The central issue for Lushootseed is encapsulated in the illustrative examples given in Hess 1993 (his glossing):<sup>2</sup>

(1a) g<sup>w</sup>əč'əb                  tsi č'ač'as                  (Hess 1993:115)  
look • for                  DEM child  
'The girl looked for [something/someone]'

(1b) g<sup>w</sup>əč'əd                  tsi č'ač'as                  (Hess 1993:115)  
look • for                  DEM child  
'[Someone] looked for the girl'

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<sup>2</sup> Abbreviations used in this paper are: ASP = aspect, CS = causative, DC = deictic, DEM = demonstrative, DM = discourse marker, DST = distributive, INTR = intransitive, IRR = irrealis, ITP = intensifying particle, LTR = lack of control transitive, MD = middle, NOM = nominalizer, OBL = oblique, PL = plural, PNT = Beck's punctual, POSS = deictic, PRF = perfective, PRG = progressive, PRT = partitive, PST = (remote) past, QUOT = quotative, REFL = reflexive, RPT = repetitive, STA = stative, SUB = subjunctive, TR = transitive.

(1c)	g <sup>w</sup> əč'təb	ʔə ti č'ač'as	ti sq <sup>w</sup> əbay'	(Hess 1993:115)
	look • for	OBL DEM child	DEM dog	
	'The boy looked for the dog'			

Each of the examples in (1) represents a fully inflected Lushootseed clause. The predicate in (1a) is suffixed with /-b/ and the single argument is an agent. In (1b) the suffix on the predicate is /-d/ and the overt argument is a patient. The predicate in (1c) is marked with both /-d/ and /-b/ and the clause has two overt arguments: one core, the patient, and one oblique, the agent. In this paper, I will demonstrate that the morphemes /-b/ and /-d/, as well as the other transitivizers /-dx<sup>w</sup>/ and /-tx<sup>w</sup>/, are derivational in nature and are employed in discourse to alter the argument structure of a clause. Although the semantics of the predicates in (1) invoke two participants, grammatically, each predicate has a distinct argument structure: (1a) is intransitive, (1b) is transitive and (1c) is detransitive. I will also show that the selection among the three predicate types is motivated by the pragmatics of the discourse context.

## 2 Derivation rather than inflection

Bybee 1985 persuasively argues that distinctions between inflection and derivation are often murky and, as with many functional oppositions, the two are best viewed as a continuum with prototypical instances of each at opposite ends. Inflection is typically regular, highly productive, and adds clear meaning to the stems to which it attaches. Inflection is often thought of as grammatically required, specifying information like tense/aspect or person and number. Inflection does not alter the lexical category of an item nor does it affect the valence of a predicate. Derivation, on the other hand, is more idiosyncratic and less productive. Derivation commonly changes grammatical category or alters the transitivity of a clause. In this section I will demonstrate that the -b/-d alternation found in forms like g<sup>w</sup>əč'əb 'search' and g<sup>w</sup>əč'əd 'look for', and other such pairs, is not inflectional, but derivational. Support for this analysis can be demonstrated by its involvement in the lexicalization process, its association with roots that have lost independent status, and the layering of /-b/ and the transitivizing morphemes.

### 2.1 Lexicalization

One criterion Bybee uses for distinguishing derivation from inflection is 'lexical generality,' by which she is referring to the greater lexical restrictions associated with derivation. Inflectional processes tend to be more regular and have less restrictions on their application. For this reason derivation is more closely associated with lexicalization than inflection. Derivation can create new lexical items whereas inflection does not.

#### 2.1.1 Lexicalization of transitive predicates

Transitivization is more easily understood as a derivational process in that it alters the argument structure of a clause. The set of transitivizing suffixes, /-d/ 'in-control transitive' (TR), /-dx<sup>w</sup>/ 'lack of control transitive' (LTR), or /-tx<sup>w</sup>/ 'causative' (CS), all increase the valence of predicates. For some roots, each of these suffixes can be added and the result is not just a change in semantics, but a change in valence. One example is the high frequency root, k<sup>w</sup>əd 'take.'

(2a)	k <sup>w</sup> əd - ad	čəł	tiʔił	q <sup>w</sup> u	(SSP 50:157) <sup>3</sup>
	take - TR	1p	DEM	water	
	'We took the water jug'				
(2b)	tul'čad	k <sup>w</sup> (i) ad -s -k <sup>w</sup> əd - (d)x <sup>w</sup>	<tiʔił ad>	tiʔił ad - sʔəłəd	(PR 162) <sup>4</sup>
	from.where	DEM your-NOM-take-LTR		DEM your - food	
	'From where did you manage to get your food?'				

<sup>3</sup> Data from Hilbert 1995a. g<sup>w</sup>əq'ulc'əʔ: Aunt Susie Sampson Peter will be labeled with (SSP X:Y) where X is the page number and Y is the line number.

<sup>4</sup> Data from Hess 1995. The story is Martha Lamont's rendition of 'Pheasant and Raven.' The punctuation is given by Hess. Parentheses are used for phonological segments which are phonetically neutralized. Angle brackets indicate a false start.

- (2c)     $\text{ʔu} - k^w\text{əd} - \text{tx}^w$  (Hess 1976:245)  
          PRF - take - CS  
          'He made someone take it'
- (2d)     $k^w\text{əd} - \text{ax}^w$        $\text{čəx}^w$        $\text{six}^w$  (Hess 1976:244)  
          take - ASP          I          ITP  
          'You are getting that way again'<sup>5</sup>

In each of the examples in (2a-c) the addition of a suffix derives a new stem with an argument structure that is different from the root in (2d). In (2a) /-d/ indicates that the 'taking' is done by a volitional agent; in (2b) /-dx<sup>w</sup>/ shows that the 'taking' is accomplished only after considerable effort; in (2c) /-tx<sup>w</sup>/ marks the 'taking' as something that was caused. The semantic compatibility of this root (and others like it) with the transitivizing suffixes provide useful options for speakers.

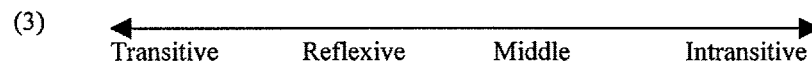
If all verbal roots in the language were to associate with the transitivizers as easily as  $k^w\text{əd}$ , an argument could be made that this is mere inflection. However, this is not the case. The loose semantics of a root like  $k^w\text{əd}$  'take' allows for it to be productively suffixed with each of the transitivizers. That is, it is possible to 'take' something volitionally (2a), it is possible to 'take' something after considerable effort (2b), and it is possible to force someone to 'take' something (2c), but other roots are much more selective about which of the transitivizers they can co-occur with. Roots such as  $\text{ʔəy}$  'find' or  $\text{ləx}$  'remember' are never transitivized with /-d/ because these actions cannot be done volitionally or without considerable effort. In fact, for a root like  $\text{ʔəy}$ , I find it difficult to gloss it as 'find' because it never occurs without /-dx<sup>w</sup>/ in my data. That is,  $\text{ʔəy}dx^w$  'find' is a lexicalized word in the language; segmenting the root from the suffix for words like this is only motivated by the distributional facts of roots like  $k^w\text{əd}$  in (2), not for the facts surrounding a root like  $\text{ʔəy}$ . The incompatibility of certain roots with specific transitivizers strongly suggests that transitivization in Lushootseed is a derivational process.

## 2.1.2 Lexicalization of intransitive predicates

While the derivational nature of the transitivizing suffixes is relatively straightforward, the intransitive suffix /-b/ is more complex and requires more detailed discussion. There is evidence of lexicalization of verbs formed with the morpheme /-b/. One can reasonably posit that there are two distinct /-b/ morphemes: one which is grammatically motivated (detransitive clauses) and one lexically motivated (intransitive clauses). While extensive comparative evidence might point to this conclusion, a more likely scenario is that /-b/ is productive at two distinct layers of derivation, yet unified in marking grammatical intransitivity of the base to which it attaches. Given that /-b/ alters the argument structure of predicates, a property typically associated with derivation, and its involvement in the lexicalization process, the latter proposal of a unified /-b/ is preferable. In the following discussion, I continue with lexicalization of intransitive predicates.

## 2.1.3 Lexicalization of middles

The morpheme /-b/ has sometimes been described in the literature as marking 'middle' constructions. While this use of /-b/ merely represents a subset of the full range, it is consistent with grammatical intransitivity. Kemmer 1993 thoroughly describes middle constructions which she characterizes as lying on a continuum of transitivity with transitive and intransitive at opposite ends. Intransitive clauses are 'one-participant events,' and transitive clauses are 'two-participant events.' She explains that on the continuum of transitivity, reflexives and middles fall in between transitive and intransitive, with reflexives being closer to transitive and middles situated closer to intransitives, as in:



<sup>5</sup> Hess explains that " $k^w\text{əd}$  can be used to indicate a spirit (or other power) seizing someone" (Hess 1976:244). This idiosyncratic use of  $k^w\text{əd}$  without a transitivizer is consistent with what Hopper and Thompson refer to as low transitivity because of the absence of two clear participants.

Although reflexives and middles are often homophonous, such as in Romance languages, in other languages such as Hungarian or Lushootseed, the two construction types are grammatically distinct.

- (4a)    ?u - t'uc'u - **cut**                      čəx<sup>w</sup>                      (BHH 207)  
          PRF - shoot - REFL                      2s  
          'You shot at yourself'
- (4b)    ?u - t'it' - **əb**            bək'<sup>w</sup>            sələx̌il            bək'<sup>w</sup>            dadatu            (SSP 3:45)  
          PRF -bathe-MD            all            evening            all            morning  
          'I bathed every evening, every morning'

With a morphological distinction between reflexive and middle constructions, the example in (4a) shows a situation closer to a two-participant event, and (4b) illustrates a one-participant event. When these morphemes are in complementary distribution, the reflexive form is used in clauses that show a greater separation of the two participants, whereas middle forms are used in clauses where the two grammatical entities have merged or are seen as one. In this way since reflexives are closer to two participant clauses on the transitivity continuum, they are more transitive, while middles, because of the semantic proximity of middle situations to one-participant events, are associated with intransitivity.

Kemmer identifies several prototypical middle situation types including: grooming, change in body posture, motion, cognition, emotion, etc. A quick search for examples of each type in Lushootseed reveals the presence of /-b/.

- (5)    **Grooming** - t'it'əb 'bathe', c't'usəb 'shampoo hair', špad'əb 'comb hair'  
**Motion** - sax''əb 'run,' səx̌əb 'dance,' p'usəb 'float,' x̌t'ab 'fall out of canoe'  
**Change in body posture** - šəqači'əb raise one's hand, tag''usəb put face in water to drink  
**Cognition** - hiq''ab 'desire,' yičəb 'observe', pitəb 'notice'  
**Emotion** - ŋšəb 'pity', x̌ahəb 'cry'  
**Indirect** - t'ililəb sing, x̌ayəb laugh, x''uyub sell, tuq''ub cough, puk''əb pile, p'uləb puff up, p'ix''əb to drip, č'ədəb shiver, pusc'əb reach puberty

Hess 1976 implies that the majority of the above middle forms are lexicalized in that no corresponding entry in his dictionary exists without /-b/. This is due in large part to the unitary nature arguments associated with middles. However, at least one example from this list exploits the full extent of derivational possibilities.

- (6a)    dəg''aš                      tiʔit' špac -s  
          put.in                      DEM comb-3POSS  
          'She put her comb in'
- (6b)    ?u-špad''-əd                      čəd  
          PRF-comb-TR                      1s  
          'I combed her hair'
- (6c)    ?u-špad''-əb                      čəd  
          PRF-comb-MD                      1s  
          'I combed my hair'

The root *špac* 'comb' can function as an argument of a clause (6a), it can be transitive (6b) or it can be intransitive (6c). This exceptional example illustrates how the transitivizer /-d/ in (6b) creates a two-participant event, and the marker of grammatical intransitivity, /-b/, in (6c) characterizes a situation where the two participants are treated as a single grammatical unit.

## 2.2 Non-analyzability

Naming conventions in Lushootseed are largely descriptive, and there is evidence that for certain stems /-b/ is involved in this process. Description can be onomatopoeic, as in *k'aʔaʔ* 'crow' or *ʔatʔat* 'duck' where the names of these animals mimic the sound that they produce, or it can be visual:<sup>6</sup>

(7a) ʔaʔ-ʔal=us  
RDP-mark  
'raccoon'

(7b) təj=abac  
roll=body  
'sea cucumber'

(7c) q'č=aʔad  
bent=side  
'seagull'

A raccoon gets its name from its marked face, a sea cucumber from the way its twisting body cuts through the water, and a seagull from its bent wings. It is likely that entries such as the following originated as descriptions involving a middle marker whose history is now lost.

(8a) bəʃčəb  
bəʃč - əb  
?? - b  
'mink'

(8b) təc'əb  
təc' - əb  
?? - b  
'weasel'

(8c) p'əc'əb  
p'əc' - əb  
?? - b  
'bobcat'

The list of such forms is not limited to the examples in (8). A knowledge of Lushootseed CVC root structure allows the segmentation of /-b/ and an awareness of the fine line between noun and verb in Salish suggests that characterizing an action is a potential source for names. While a possible etymology may be posited for the prickly fruit of the gooseberry, for many of these, removal of the /-b/ leaves a root with no synchronic meaning. That is, *p'əc'əb* 'bobcat' may have been known as 'the one who *p'əc'*-es' but the meaning of the root *p'əc'* is lost.

## 2.3 Layering of derivational morphemes

A final piece of evidence that points to the derivational nature of /-b/ is the layering of derivational transitivizers as well as /-b/. In the previous section it was shown that /-b/ attaches to roots to create new stems. These stems are then subject to further derivation. That is, the root suffixed with /-b/ creates a new morphological chunk, a word, which is available for manipulation. The causative suffix /-txʷ/ attached to the word *saxʷəb* 'run, jump' derives a new verb *saxʷəbtu* 'to kidnap/carry off something.'

(9a) huy saxʷ - əb (SSP 120:810)  
DM jump - INTR  
'He jumped'

(9b) huy saxʷəb - txʷ ʔəlgʷəʔ (SSP 98:194)  
DM run - CS PL  
'They ran off with him'

(9c) ʔu tɬu - saxʷəbtu - b ti d - bədaʔ (SSP 98:194)  
DM IRR - kidnap - INTR DEM my child  
'Oh, my son is going to be kidnapped'

The examples in (9) show the path by which 'kidnap' is derived from 'run.' The lexicalized stem *saxʷəb*, is derived from the root *saxʷ*, which does not have synchronic meaning, plus the suffix /-b/. This stem is then subject to further derivation. The causative marker, /-txʷ/, is suffixed to the stem *saxʷəb* 'run' which indicates that the action is forced. The semantics surrounding an event describing someone who is forced to run (against their will) are compatible with the semantics of kidnap. (9c) shows that this new stem is then subject to even further derivation.

If these suffixes are simply inflection, there is little motivation, either cognitive or functional, to explain this layering. It seems highly counter-intuitive that the root *saxʷ* would be inflected as intransitive, then transitive and intransitive again. However, if each layer is analyzed as a stage of derivation, subject to subsequent lexicalization, it is possible to see how speakers have derived new lexical items from existing stems. There is no need to posit two distinct /-b/ morphemes in the grammar because whether suffixed to a

<sup>6</sup> In this analysis, the equals sign (=) signals a lexical suffix.

root or suffixed to a transitive stem, the morpheme ensures grammatical transitivity. The result of this layering is three types of predicates with distinct argument structures.

### 3 A Discourse-Functional Approach to Argument Structure

The term 'argument structure' is often used to refer to the relationship between a verb and its associated arguments. For a language like English, this can be tricky because a single verb can be associated with more than one argument structure so speakers have choices. To understand the role of argument structure, in grammar, it is useful to examine why speakers make the choices they do. For Lushootseed this choosing process is centered around the selection of a predicate with a particular argument structure.

#### 3.1 Intransitive

Payne 1997 defines an intransitive verb as "one that describes a property, state or situation involving one participant." He emphasizes the need to separate semantic transitivity from grammatical transitivity. That is, a verb like *eat* in English may be semantically transitive, but can be used both transitively or intransitively. For Lushootseed a root like *g'əč*, 'look for,' while semantically transitive, its use can be intransitive, transitive or detransitive, as seen in (1).

The suffix */-b/* marks the grammatical intransitivity of a predicate. The argument structure of the derived stem is equal to that of monomorphemic roots which are used as intransitive predicates. A very few monomorphemic roots are intransitive predicates; clauses with these predicates have a single core argument and carry no additional morphology. Typically these verbs express common notions, such as motion. The data in (10) illustrate that the morpheme */-b/* is used to create intransitive predicates having the same argument structure as monomorphemic roots.

- |       |   |   |   |               |
|-------|---|---|---|---------------|
| (10a) | <i>ʔu - bəč</i><br>PRF - fall.down<br>'I fell down'       | <i>čəd</i><br>I   | (Hess 1976:22.5)  |               |
| (10b) | <i>ʔu - q'c' - ab</i><br>PRF - slip - INTR<br>'I slipped' | <i>čələp</i><br>you.PL                                    | (Hess 1995:6)   |               |
| (10c) | <i>łčil</i><br>arrive                                     | <i>tiʔəʔ</i><br>DEM                                       | <i>sqa-s</i><br>older.sibling-3POSS<br>'His older brother arrived.' | (SSP 117:715) |
| (10d) | <i>huy</i><br>DM  | <i>sax<sup>w</sup> - əb</i><br>jump - INTR<br>'He jumped' | (SSP 120:810)   |               |

For first and second persons the argument is expressed as an enclitic; for third person the argument is either a full NP or phonologically null.<sup>8</sup> Although the semantic roles of the arguments differ, grammatically there is no distinction. In (10a) and (10b) the argument represents a patient, but in (10c) and (10d) the argument is an agent. The semantic roles of the arguments differ because of the semantics of the predicate, yet the grammar treats them all as core arguments.

#### 3.2 Transitive

The question of whether TRANSITIVITY is a valid category in Lushootseed has been the subject of debate. Certainly, given the fact that two lexical NPs never occur in the core of one clause, transitivity is not manifested in Lushootseed in the same way as for English. Hopper and Thompson 1980 importantly define transitivity in semantic terms as a global property of the clause. Semantic transitivity is best seen as

<sup>8</sup> Here I am not assuming phonologically null to be equal to a syntactic zero. It is possible that the grammar does not have a need to represent the presence of something with a noticeable absence (cf. Mithun 1986).

a continuum involving as many as ten factors. For Lushootseed, grammatical transitivity is not nearly as subtle; predicates with two core participants are morphologically marked with a transitivizer. This morphology described above, realized as either /-d/ 'in-control transitive' (TR), /-dxʷ/ 'lack of control transitive' (LTR), or /-txʷ/ 'causative' (CS), has significant ramifications on the syntax of the language.

These morphemes when added to roots derive new lexical items offering speakers a range of differing syntactic frames. In the case of transitive clauses, two semantic entities are represented in the clause, prototypically an agent and a patient. In Lushootseed only a few roots can have two core arguments.

- (11a) ʔu - ʔəgʷəʔ čəd ti d - ʔalʔal (Hess 1976:295)<sup>9</sup>  
 PRF -leave.behind I DEM my - house  
 'I left my house'
- (11b) ʔu - ʔəʔalš čəd ti d - lupəčiʔ (Hess 1976:313)  
 PRF -put.on I DEM my - gloves  
 'I put my gloves on'

In both clauses two core arguments occur: the agent is marked by the clitic *čəd* 'I' and the patient is a full noun phrase in the absolutive. Neither clause contains any additional morphology indicating transitivity. When both arguments are expressed pronominally, this is accomplished by an object suffix and a subject clitic on the predicate, as in (12a) and (12b). Pronominal subjects, of either transitive or intransitive clauses, are marked with the same set of clitics.

Transitive objects, when pronominal, are marked with a different set of suffixes.

- (12a) ʔu - ʔəgʷəl-buʔəd čəd (SSP 176:418)  
 IRR - leave - 2p.O I  
 'I'll be leaving you (folks) tomorrow.'
- (12b) ʔes - ʔəq - cid čəd (HH1 129:3)  
 STA - hear - 2.O I  
 'I hear you'
- (12c) ʔes - ʔəʔ čəd (SSP 8:140)  
 STA - sick I  
 'I was sick'
- (12d) ʔu - ʔə - ʔil čəxʷ (SSP 212:189)  
 IRR -PRG - sing you  
 'You will be singing'

The data in (12a-d) illustrate the fact that first and second person pronouns operate on a nominative-accusative pattern. That is, when speech act participants are coded in a clause, the subjects of intransitive and transitive clauses are marked in a way that is different than objects. Subjecthood is based in large part on the pronouns; elsewhere in the grammar there is little convincing evidence for subjects.

In contrast, lexical arguments pattern around the absolutive category, i.e. a distinction is made between core (absolutive) and oblique, not nominative and accusative. Clauses with two arguments may contain a pronoun and a lexical argument.

- (13) ba - ʔə - xʷəc - əd čəd tiʔəʔ d - sčʔayəp (SSP 21:2)  
 ADD-PRG-take.off-TR I DEM my-cedar.bark.skirt  
 'I removed my skirt'

<sup>9</sup> With both of these examples I am skeptical about the monomorphemic nature of these roots. For one, they are not CVC, and also the final consonants of both are fricatives, similar to other transitive roots found in texts, such as *qʷataš* 'lay it down' (SSP 85:80) and *kʷalš* 'weave it' (SSP 81:9). Hess 1976 lists *-š* as a transitive suffix, but it does not appear to have the productivity of the other transitivizers. It is possible that this is a very old transitivizer which has become frozen in the morphology. Given that the current discussion concerns the derivational nature of synchronic transitivizers, I put this lexical question aside for now.

In (13) the root  $x^w\text{æ}$  'take off' is not inherently transitive. The transitivity marker /-d/ is added to the root to derive a transitive stem. This morpheme cannot be viewed as cross-referencing of, or agreement with, any argument. Rather, it functions to alter the argument structure; that is, the addition of /-d/ makes the root  $x^w\text{æ}$  into a two-argument grammatical stem  $x^w\text{æd}$ . The two core arguments of the clause are a semantic agent and a semantic patient. The agent is the subject of the clause and is expressed by the pronominal clitic  $\text{čæd}$  'I'. Importantly in Lushootseed only first and second person pronouns, i.e. speech act participants, can be overtly coded as grammatical subjects of transitive clauses.

Transitive objects, prototypically semantic patients, on the other hand, are not thus restricted. In (13), the object of the clause,  $ti^?ə^?dsč'ayəp$  'cedar-bark skirt' is a semantic patient. Comparison of the examples in (11)-(13) demonstrates that transitive objects can be expressed either pronominally or nominally.

- (14a)  $\lambda^?u - t'al - \text{ad}$      $ti^?ə^?$      $tatačulbix^w$     (SSP 182:587)  
 HAB - slice - TR    DEM    large.animal  
 'They sliced up the large animal'

- (14b)  $t'uc' - \text{dup} - \text{ad}$     (SSP 181:561)  
 shoot - DST - TR  
 'He shot them.'

Example (14) shows that no cross-referencing of core arguments appears on the predicate; the transitive marker simply marks the clause as a two-argument clause. That is, predicates have the same marking whether there is an overt argument or not, regardless of person.

In addition to the restriction of transitive subjects to speech act participants, clauses with more than one lexical argument in the core are strictly prohibited. The grammar allows only one lexical nominal in the clause core, either the single argument of an intransitive or the object of a transitive clause, but never the subject of a transitive clause.

- (15a)  $ʔu - k^w\text{ad} - \text{tx}^w$      $\text{čæx}^w$      $ti^?i\text{t}$      $s\text{xal}$      $tul^?al$      $\text{cayax}^w\text{talot}$     (WS 124:12)<sup>10</sup>  
 PRF - get - CS    you    DEM    letter    from    Cayax<sup>w</sup>talot  
 'You got a letter from Cayax<sup>w</sup>talot'

- (15b)  $\text{t'il} - \text{d} - \text{æx}^w$      $ti^?ə^?$      $bibədbəda^? - s$      $ʔə$      $ti^?ə^?$      $ʔudaw'$     (PR 138)  
 give.food-TR-ASP    DEM    little.children - his    OBL    DEM    tallow  
 'He gave his brood tallow to eat'

Both examples in (15) contain three semantic entities, two of which are lexical nominals. Grammatically, however, only two arguments can be expressed as core. Transitive subjects must be pronominal, as in (15a) or absent, as in (15b); objects can be full nominals, pronouns or absent. In addition, as was seen with intransitive roots, semantic roles do not determine grammatical relations. In (15a) three semantic roles are overtly coded: an agent, a patient and a source. Grammatically, however, only the agent and patient are core; the source is oblique. In (15b), there is a semantic agent, patient and a recipient. The agent is unexpressed, and in this clause it is the recipient, not the patient, which is core. This preference for recipient over patient in the core reflects a cross-linguistic preference for core arguments to be human/animate as opposed to inanimate (Dryer 1986).

### 3.3 Detransitive

While Lushootseed has grammaticized an avoidance of core lexical transitive agents, the grammar is necessarily capable of dealing with the occasional pragmatic pressure to express both an agent and a patient lexically. The grammatical resolution of this pragmatic need is achieved by detransitivization. Compare the transitive clause in (16a) with the detransitivize clause in (16b):

<sup>10</sup> Data from Snyder 1968, page and line number.



(16a) kʷəd - ad      čəɬ      tiʔit      qʷu      (SSP 50:157)  
 take - TR      1p      DEM      water  
 'We took the water jug'

(16b) kʷəd-at-əb      ʔə tiʔəʔ pastəd      tiʔəʔ      səpləl      (SSP 55:262)  
 take - TR - INTR      OBL DEM white.man      DEM      flour  
 'The white people took the flour'

The clause in (16a) is fully transitive: the predicate is marked with a transitivizer, the agent is a pronoun, and the patient is a full noun phrase. Although word order appears to be the same, the clause in (16b) differs in three significant ways: the agent is a full nominal, the agent nominal is marked as oblique, and the predicate is marked with /-b/. I suggest that the pragmatic context, which forces speakers to express two lexical nominals in a single clause, is concomitant with a grammatical requirement to detransitivize. This point will be discussed at length in section 4.

A consequence of detransitivization is that only one argument may remain in the core. For transitive clauses it is the patient which is most affected and therefore takes the single core slot; it falls out that the agent is marked as oblique. This follows a general pattern noted by Mithun 1994 and Mithun and Chafe 1999 in which the most immediately involved participant is in absolutive position. By this analysis, concerning a verb like *kʷədad* 'take,' speakers code as more central the thing that is 'taken' rather than who did the 'taking.' Both clauses in (16) show this to be the case in that whether the clause is transitive or detransitive, the object that is taken is absolutive.

### 3.4 Summary

Transitivity appears to be an important category in Lushootseed. For the set of intransitive roots which function as predicates with no additional morphology, the single argument is the subject of the clause regardless of its semantic role. The morpheme /-b/, when affixed to roots, creates intransitive stems with argument structures equal to monomorphemic intransitive roots. There is a small set of inherently transitive roots in the language, but the majority of transitive clauses are marked with a transitivizer. These derived transitive stems have argument structures equivalent to the monomorphemic transitive roots. Overt subjects of transitive clauses are restricted to speech act participants. That is, third-person is unmarked and non-third person is marked with subject clitics. Lexical agents are obligatorily marked as oblique. Transitive objects can be unspecified, pronominal, or lexical. Pronominal objects are distinct from pronominal subjects. Lexical objects, like intransitive lexical subjects, are absolutive when in the clause core. In this way, two distinct alignment patterns emerge: an absolutive pattern for lexical nominals, and a nominative-accusative pattern for pronouns. The nominative-accusative patterning can be seen in the fact that transitive and intransitive pronominal subjects are marked with the same set of person clitics, while transitive pronominal objects are treated differently and are marked with object suffixes. Lexical items in the core of a clause follow an absolutive pattern in that they can only be the subject of intransitives or the object of transitive predicates.<sup>11</sup> When there is a competition between two lexical arguments for core status in a single clause, the resolution is detransitivization. Derivational suffixing is employed to alter the valence of predicates.

### 4 Argument Structure and Information Flow

To understand the motivation for these valence-adjusting suffixes, it is useful to realize that the relationship between discourse and grammar is inextricably linked. There is a constant interplay between the two and neither exists independent of the other. Discourse, or the way language is used, employs grammar as a framework for constructing meaning and communication, and grammar can be described as sedimented patterns of discourse. The patterns by which this sedimentation occurs have come to be known as grammaticization. Du Bois characterizes grammaticization as:

the shifting from relatively freely constructed utterances in discourse ... to relatively fixed constructions in grammar. (1985:346)

<sup>11</sup> It is not useful to talk about ergative-absolutive patterning because of the grammatical prohibition against lexical subjects of a transitive clause. That is, it is impossible to have a grammatically transitive clause with a lexical subject.

As an important component of grammar, argument structure, therefore, is best observed in discourse. Analyzing connected speech illustrates how routinized patterns can serve as the building blocks for conveying the status of information.

In Lushootseed, argument structure is manipulated by the lexical choice of predicates. Valence-adjusting suffixes create new lexical items with differing argument structures. These new chunks are then employed when creating a discourse and are subject to further discourse pressures. Sets of stems with observable similarities are the result of this derivational suffixing. The question at issue here concerns the grammatical prohibition against lexical subjects of a transitive clause. For Lushootseed, it has been long known (Hess 1973) that a lexical agent is marked as oblique in a clause which also contains a lexical patient. This fact is confirmed by the absence of any counter-evidence in the large corpus of textual data available for the language. Grammatically, speakers cannot do it, and apparently it is never done.

One promising explanation for this pattern of detransitivization comes from principles of 'information flow,' which suggest that speakers code information according to its pragmatic status (Chafe 1976, 1987, 1994 and Du Bois 1987). The linguistic information associated with this coding reflects properties of cognitive processing. Two relevant constraints put forth by Chafe 1987 are 'the light starting point constraint' and 'the one new concept at a time constraint.' Du Bois concludes that transitive objects and intransitive subjects, or absolutes, are preferred as a locus for new information in the core rather than transitive subjects. Mithun 1994 describes absolutive as the case around which the grammars of ergative-absolutive systems are organized. She explains:

In ergative/absolutive systems, the principal case is generally recognized as the absolutive. If one case is formally unmarked, it is typically the absolutive. If a clause has only one core participant, it is normally the absolutive.

Absolutives share a crucial functional feature: they represent the participant that is the most immediately or directly involved in an event or state. (1994:255)

In light of these cognitive and discourse-functional explanations, it is quite reasonable that Lushootseed lexical core arguments are restricted to the category of absolutive. Pronouns, however, operate on a nominative-accusative basis. A split in the patterning between pronouns and lexical nominals is relatively common cross-linguistically.<sup>12</sup> Even pronouns in a 'deeply ergative language' like Dyirbal follow a nominative-accusative pattern (Dixon 1994). In Nepali, pronouns are morphologically ergative, but their discourse distribution is robustly nominative-accusative (Genetti and Crain, to appear).

A discourse need to maintain topicality, Chafe's 'starting point', motivates a nominative-accusative pattern. On the other hand, an awareness of the most immediately involved participant motivates an absolutive pattern. Yet, as Du Bois 1985 notes, these two motivations are competing, and within a single domain both cannot win. Mithun and Chafe note that:

Although English has grammaticized both starting points (in its subjects) and immediately involved participants (in its objects), whenever there is competition between these two roles, as there is with intransitives, it is the starting point role that wins.... But just as the starting point role takes priority in English, in ergative-absolutive patterning it is immediacy of involvement that takes priority. With intransitives, then, we find only the absolutive role, regardless of whether the referent in question functions as an agent or a patient. (Mithun and Chafe, 1999:17)

It is significant that Mithun and Chafe are careful not to label English as a nominative-accusative 'language,' rather they talk about patterns. Du Bois 1987 has shown that English has an ergative-absolutive pattern of new information in discourse. If a language like English with its robust nominative-accusative patterns can exhibit a discourse property which is ergative-absolutive, the split between the patterning of pronominals and that of lexical nominals in Lushootseed does not seem so strange. Lushootseed exhibits a nominative-accusative pattern for pronouns and an absolutive pattern for lexical nominals.

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<sup>12</sup> In the literature the different treatment of pronouns and lexical nominals has sometimes been referred to as split ergativity. I also avoid this term because of its association with ergativity. There is no evidence that Lushootseed has an ergative construction. In fact the grammar appears to go to great lengths to avoid needing such a category.

These information flow factors are significant for speakers of Lushootseed who apparently are responsive to these pressures as they shape discourse. Concerning the two constraints formulated by Chafe, the first constraint limits the amount of new information in a clause and the second decides what goes into the core. The ramifications of these constraints makes it necessary for speakers to manipulate argument structure in order to allow for the differing alignment patterns. The grammatical resolution of these discourse pressures is a limitation on the introduction of lexical information in a clause to the absolutive category. The tendency to avoid lexical transitive subjects can be explained as the result of routinization according to principles of information flow to the extent that the language has syntacticized this into a prohibition.

Keeping these principles of information flow in mind, a better understanding can be had of the cognitive processing involved in distinguishing the three types of predicates. Let's reconsider the following examples from Hess 1993:

- (17a) *gʷəč'əb*      *tsi č'ač'as*      (Hess 1993:115)  
 look • for      DEM child  
 'The girl looked for [something/someone]'
- (17b) *gʷəč'əd*      *tsi č'ač'as*      (Hess 1993:115)  
 look • for      DEM child  
 '[Someone] looked for the girl'
- (17c) *gʷəč'təb*      *ʔə ti č'ač'as*      *ti sq'əbay'*      (Hess 1993:115)  
 look • for      OBL DEM child      DEM dog  
 'The boy looked for the dog'

Looking at (17a) we find an intransitive stem which can therefore have only a single argument in the clause core. Because of the semantics of the root *gʷəč'*, which requires a volitional actor, the addition of /-b/ creates a one-argument stem; semantically the single argument is an agent. Because this argument is the most immediately involved participant, syntactically it is absolutive. The transitive stem in (17b) also has *tsi č'ač'as* in the clause core, but here it is a patient, i.e. also absolutive. The morphological difference between the stems in (17) is not inflectional, rather it is lexical/derivational. These valence-changing suffixes derive new stems with different argument structures. Speakers select the intransitive *gʷəč'əb* when the most newsworthy argument is an agent, and they use the transitive *gʷəč'əd* when they choose to highlight the patient. When adding a patient to a clause with mono-valent *gʷəč'əb*, the new argument is necessarily marked as oblique; this added patient is oblique whether or not the agent receives overt mention, as in:

- (18) *gʷəl*      *ba - gʷəč' - əb - əxʷ*      *ʔə*      *kʷi*      *sxʷədaʔəb*      (SSP 27.15)  
 then      RPT -look.for-b - ASP      OBL      DEM      doctoring.power  
 'they looked for doctoring power'

The agent in (18) is not expressed (due to the discourse context) and the patient is marked as oblique. The agent's privileged position of absolutive is apparently maintained. This construction is similar in structure and function to an antipassive, but the predicate is intransitive, not detransitive.

The addition of an overt lexical agent to a *gʷəč'əd*, i.e. transitive clause, is predictably more grammatically complex. In a transitive clause two semantic entities exist, whether or not they are overtly mentioned. If the expressed agent is a speech act participant, i.e. first or second person, the stem is inflected with a person clitic, as in:

- (19) *gʷəč'əd*      *čəd*      *ti sq'əbay'*  
 look • for      I      DEM dog  
 'I looked for the dog'

The two semantic entities are an agent, *čəd* 'I', and a patient, *ti sq'əbay'* 'the dog'. In contrast, if the agent is a lexical nominal, the grammar requires that the clause be detransitivized. The resulting clause is the same one shown in (17c), reprinted below in (20):

- (20)      g<sup>w</sup>əč'təb                      ʔə ti č'ač'as                      ti sq<sup>w</sup>əbay'                      (Hess 1993:115)  
             look • for                      OBL DEM child                      DEM dog  
             'The boy looked for the dog'

As a result of grammatical constraints (motivated by principles of information flow) one of the arguments of the clause must be removed from the core. Since *ti sq<sup>w</sup>əbay'* is the most immediately involved participant of the stem *g<sup>w</sup>əč'əd*, the agent *ti č'ač'as* is marked as oblique. Although /-b/ ensures the grammatical intransitivity of both intransitive and detransitive clauses, it is important to note that the argument structure of the detransitivized *g<sup>w</sup>əč'təb* is not equal to that of the intransitive *g<sup>w</sup>əč'əb*. Recognizing the derivational nature of this morpheme, as well as the different morphological layers at which this suffixing occurs, we see how a single marker of intransitivity alters both the grammar and the lexicon. When /-b/ is suffixed to a root, its function is to create a lexical item which is grammatically equivalent to the set of monomorphemic intransitive roots. When /-b/ is suffixed to a transitive stem, its discourse function is to mark intransitivity and allow for an oblique lexical agent.

## 5 Text Analysis

Having shown the lexical differences of the predicates in (17a) and (17b), the choice between an intransitive and a transitive stem is relatively transparent. However, the distinctions between the selection of a transitive and a detransitivized stem, as in (17b) and (17c), are discourse motivated, not lexical, and therefore a bit trickier. Additional complexity derives from the fact that in languages like Lushootseed, a preponderance of predications predominate; relatively few nominals, especially highly salient nominals occur in a discourse. But the choice between a transitive stem and a detransitivized stem is real and readily observable, although only clearly, within a context of connected speech.

When following the discourse it is important to note that nominals are often marked with determiners that indicate the referents are specific entities. Hess 1976 describes two distinct series of determiners: a set beginning with an alveolar stop /t/ which indicates that the referent is 'known to addressee' and a set beginning with a velar stop /k/ which indicates that the referent is 'hypothetically, vague, remote.' In my analysis, I refer to the determiners beginning with /t/ as 'visible' and those beginning with /k/ as 'invisible.'<sup>13</sup> By 'visible' I do not mean optically perceptible, rather the speaker is cognizant of a referent whether or not the referent is present in the immediate environment. When recounting past events, speakers may choose to place themselves in the scene and describe the situation as an observer. 'Invisible' determiners mark non-specific referents, or specific referents, such as relatives, who have passed away.

### 5.1 Transitive with specific agents

In the following passage Aunt Susie Sampson Peter introduces specific people using a 'visible' determiner and this impacts the choice of transitive predicates in the following clauses. I highlight the transitivizers in boldface on each predicate. In the first line she uses a detransitivized root to allow for the overt mention of two lexical nominals. The agent, *tiʔtʔ ʔacitʔalbi<sup>w</sup>* 'the people' and the patient *tiʔəʔ sluʔay* 'cedar bark' are both mentioned so the predicate is necessarily detransitivized.

- (21)      k<sup>w</sup>əd - at - əb                      ʔə tiʔit ʔacitʔalbi<sup>w</sup>                      tiʔəʔ sluʔay  
             take.it - TR - INTR                      OBL DEM people                      DEM cedar.bark
- (b)      g<sup>w</sup>əl      λ'u - ʔu - tʊq<sup>w</sup> - udx<sup>w</sup>  
             then      HAB - PRF - pull.it.off- LTR
- (c)      λ'u - ʔu - šab - ad  
             HAB - PRF - dry.it - TR
- (d)      λ'u - k<sup>w</sup>əd - ad - əx<sup>w</sup>  
             HAB - take.it -TR - ASP

<sup>13</sup> These determiners do not correspond exactly to the definite and indefinite pronouns found in English. An interesting difference is that 'invisible' determiners are used for kin terms in Lushootseed to indicate that the referent has passed away.

- (e) g<sup>w</sup>əl      λ'u - t'əs - əd      dx<sup>w</sup>al      ti<sup>2</sup>ə<sup>2</sup> hud  
then      HAB -warm-TR      towards      DEM fire
- (f) g<sup>w</sup>əl      λ'c'əq' -əd  
then      soften - TR
- (g) g<sup>w</sup>əl      λ'u - hañil  
then      HAB - become.good
- (h) huy      λ'u - k<sup>w</sup>əd - ad - əx<sup>w</sup>  
DM      HAB - take - TR - ASP
- (i) g<sup>w</sup>əl      λ'u - k<sup>w</sup>alš - əx<sup>w</sup>      ti<sup>2</sup>ə<sup>2</sup>      λ'u - da<sup>2</sup> -ət - əb      šadəc'  
then      HAB - take.it - ASP DM      HAB-name-TR-INTR      garment  
'The people took the bark of the cedar and they pulled it off. They dried it. Then they warmed it near the fire, then they soften it by pounding and it becomes good. Then they weave this that they call an undergarment.'<sup>14</sup>

The detransitivization in the first line is a syntactic requirement for clauses which contain two lexical nominals. The agent is expressed in an oblique phrase, signaled by the preposition <sup>2</sup>ə, and marked, by *ti<sup>2</sup>ə<sup>2</sup>* as specific. The effect of marking the agent as specific is that subsequent predicates are transitive, even though the core arguments are not overtly expressed. Both the agent and patient are so topical that overt mention is not required. Not until line (i) does another detransitivize clause occur, reprinted below in (22):

- (22) λ'u - da<sup>2</sup> - ət - əb      šadəc'  
HAB - name-TR-INTR      garment  
'they call an undergarment'

The agent of this clause is likely to be non-specific. That is, the name of the garment the people made is *šadəc'*, but it is probably not only the specific people in the story that would refer to the garment by this name. All speakers, whether they are visible or invisible to the speaker, would use this term. Interestingly, no determiner is present with the argument in this predication.

## 5.2 Detransitive with non-specific agents

In contrast to specific agents triggering selection of a transitive predicate, detransitized predicates are selected for clauses with non-specific agents. In a passage where Aunt Susie is asked to talk more about the clothes that people wore, she explains that people in those days weren't poor. The people she is talking about are introduced with an 'invisible' determiner. Here, she is not referring to a specific group of people, just people in general.

- (23) x<sup>w</sup>i<sup>2</sup> g<sup>w</sup>ə - slabs      g<sup>w</sup>ə - tu - s<sup>2</sup>ušəbābt<sup>w</sup>      k<sup>w</sup>ədi tu - <sup>2</sup>acittalbi<sup>w</sup>.  
NEG SUB - really SUB - PST - poor      DEM PST - people
- (b) x<sup>w</sup>ul'      λ'u - <sup>2</sup>əs - huy -t - əb      ti<sup>2</sup>ə<sup>2</sup>      sq'a<sup>2</sup>q'a<sup>2</sup>šəd.  
just      HAB - STA-make-TR-INTR      DEM      moccasins
- (c) <sup>2</sup>əs - huy - tu - b      ti<sup>2</sup>ə<sup>2</sup> st'uq<sup>w</sup>      dəx<sup>w</sup> - <sup>2</sup>uayəti      k<sup>w</sup>ədi stab.  
STA - make-CS-INTR      DEM feathers      NOM - put      DEM thing  
'The people were not really poor. They had moccasins made. They had feathers prepared for putting on things.'

In the first line of (23) 'people' are introduced in the negative equational construction.<sup>15</sup> In lines (b) and (c) the detransitivize predicate is used because of the non-specific agent. Although the distinction between specific and non-specific is readily apparent when a mass noun like *<sup>2</sup>acittalbi<sup>w</sup>* 'people' is concerned, its use is subtle and by no means the only pressure motivating the choice between a transitive and detransitivize predicate.

<sup>14</sup> The free translation is from Hilbert.

<sup>15</sup> Subjunctive marking accompanies the negative verb x<sup>w</sup>i<sup>2</sup>.

### 5.3 Core versus oblique

In addition to the specific/non-specific opposition triggered by the selection of visible or invisible determiners, a related yet separate interplay between core and oblique roles also mediates the lexical choice between a transitive and detransitivized predicates. The motivation for distinguishing core from oblique comes from the likelihood that core participants are more relevant to the discourse being constructed; oblique participants are not as important core arguments, hence the term oblique. However, within the types of arguments which are marked as oblique, there is a range of importance. Oblique agents are more central to a discourse than perhaps a manner adverbial which is grammatically nominal. In this way, obliques can also be used as a staging ground for introducing new information that may ultimately wind up in the core. This oblique lexical information can impact the transitivity of a clause.

In connected Lushootseed discourse, distinguishing between core and oblique is especially important for the introduction of new information. Speakers reserve the clause core for those participants considered important. Lexical nominals in the core are absolutive. Oblique phrases, on the other hand, are the locus for less important information. That is, oblique referents are less worthy of attention than core (absolutive) referents. In the following excerpt Gram Ruth Sehome Shelton is describing when the white man first arrived, bringing new things, like *ləpəsk* 'i' 'hardtack'. Since this is a story about when they were given hardtack, we expect hardtack to be absolutive. Although it is not mentioned in every clause, when hardtack is referred to, it is absolutive.

- |      |                          |                                  |                   |                      |                                |
|------|--------------------------|----------------------------------|-------------------|----------------------|--------------------------------|
| (24) | tu - t̥c̥il              | kʷi ship                         | dxʷal             | kʷi tu - ʔibtakʷbixʷ | (RSS 13:150-158) <sup>16</sup> |
|      | PST - arrive DEM         | ship                             | towards DEM PST - | Suquamish            |                                |
| (b)  | bə - t̥il=igʷəd          | ʔə tiʔəʔ ʔisʔistəʔ <sup>17</sup> |                   |                      |                                |
|      | RPT give=things          | OBL DEM the.same                 |                   |                      |                                |
| (c)  | ləpəskʷi tiʔəʔ ʔisʔistəʔ | ʔə tiʔit dxʷsʰalb                |                   |                      |                                |
|      | hardtack DEM the.same    | OBL DEM Klallam                  |                   |                      |                                |
| (d)  | hikʷ                     | kʷi šuʰ                          |                   |                      |                                |
|      | big                      | DEM tide                         |                   |                      |                                |
| (e)  | huy                      | ʔəqʷuci(d)təbəxʷ                 |                   |                      |                                |
|      | DM                       | open                             |                   |                      |                                |
| (f)  | huy                      | kʷəd-at-əb-əxʷ                   | ʔə tiʔəʔ wiwʷsu   | tiʔəʔ ləpəskʷi       |                                |
|      | DM                       | take-TR-INTR-ASP                 | OBL DEM children  | DEM hardtack         |                                |
| (g)  | huy                      | huy -ud-əxʷ                      | ʔəlgʷəʔ           | sbəbiʔ               | ʔal tiʔəʔ šuʰ                  |
|      | DM                       | make-TR-ASP                      | 3pl               | banks                | at DEM tide                    |
| (h)  | huy                      | təj -əd-əxʷ                      | ʔəlgʷəʔ           |                      |                                |
|      | DM                       | roll-TR-ASP                      | 3pl               |                      |                                |
| (i)  | gʷəl                     | təj -əd-əxʷ                      |                   |                      |                                |
|      | then                     | roll-TR-ASP                      |                   |                      |                                |
| (j)  | huy                      | təqʷ-əxʷ                         | tiʔəʔ ləpəskʷi    |                      |                                |
|      | DM                       | wet-ASP                          | DEM hardtack      |                      |                                |
| (k)  | gʷəl                     | gʷə - biʰ -əd                    |                   |                      |                                |
|      | then                     | SUB - smash-TR                   |                   |                      |                                |

'A ship arrived there to the Suquamish. They were given these same kinds of things. Hardtack as had been given to the Klallam. The tide was way out. Then they opened it (the box of hardtack). Then the children took this hardtack. Then they used it as a hoop there where the sand was uncovered by the tide. Then they rolled it and they rolled it. Then the hardtack got wet and smashed to pieces.'

<sup>16</sup> Data from Hilbert 1995b

<sup>17</sup> Here the lexical suffix is not referential and its addition to the root derives an intransitive stem 'to give things.' That is, things is part of the predicate not an argument.

### 5.4 Human versus non-human

(25) huy g<sup>w</sup>i(h)-it-əb - əx<sup>w</sup> k<sup>w</sup>i **tu - d - scapa<sup>?</sup>** (RSS 8:30-35)  
DM call TR-INTR-ASP DEM PST - my- grandfather

(b) tu - dx<sup>w</sup>sʰal<sup>ʔ</sup>b  
PST - Klallam

(c) ʰq<sup>w</sup>uy k<sup>w</sup>i tu - sda<sup>?</sup> - s  
ʰq<sup>w</sup>uy DEM PST - name - 3POSS

(d) g<sup>w</sup>i(h)-it - əb - əx<sup>w</sup> **ʔə ti<sup>?</sup>ə<sup>?</sup> captain**  
call - TR - INTR-ASP OBL DEM captain

(e) q<sup>ʷ</sup>il - it - əb - əx<sup>w</sup> **ʔə ti<sup>?</sup>ə<sup>?</sup> s<sup>?</sup>ila<sup>?</sup>xad** **ʔə ti<sup>?</sup>ə<sup>?</sup> captain**  
load TR - INTR-ASP OBL DEM helper OBL DEM captain

(f) q<sup>ʷ</sup>il - it - əb - əx<sup>w</sup> dx<sup>w</sup>al di<sup>?</sup> ʃəq  
load -TR - INTR - ASP towards other.side high

(g) tʃil - tu - b - əx<sup>w</sup> dx<sup>w</sup>ʔa  
arrive - CS - INTR - ASP there

(h) huy huy **ʔə təd - ax<sup>w</sup>** **ti<sup>?</sup>ə<sup>?</sup> s<sup>?</sup>ila<sup>?</sup>xad** **ʔə ti<sup>?</sup>ə<sup>?</sup> si<sup>?</sup>ab**  
DM DM eat - ASP DEM helper OBL DEM captain  
'Then my grandfather was called. He was Klallam. ʰq<sup>w</sup>uy<sup>?</sup> was his name. The captain called him. The captain's hired hand put him on board. Boarded him there up high. They got him there. Now the hired hand of the leader ate.'

15

## 5.5 Narrative

Packaging of information according to its pragmatic status is especially evident in narrative texts where it is even clearer what the story is about. In her recitation of 'Pheasant and Raven,' Martha Lamont uses detransitivization as means of keeping the important entities, i.e. Pheasant and Raven, at the forefront. In this passage she is recounting how Raven is trying to get food from some hunters, just as Pheasant had done earlier in the story. (In the first line she self-corrects when she says Pheasant, instead of Raven.)<sup>18</sup>

- (26)    huy g<sup>w</sup>əl    ʔuḥ<sup>w</sup> - əx<sup>w</sup>    tiʔəʔ    <sg<sup>w</sup>əlub> [qaw'qs]    (PR 184-189)  
          DM then go - ASP    DEM    Pheasant Raven

- (b)    g<sup>w</sup>əl g<sup>w</sup>əl    lə - tčil  
          then then    PRG - arrive

- (c)    g<sup>w</sup>əl lə - ʔəy'dx<sup>w</sup>    tiʔəʔ    cədit    s'ub'ubədiʔ  
          then PRG - find    DEM    DC    hunters

- (d)    λ'al bə - diḥ    dəx<sup>w</sup> - ʔah    ʔə tiʔit    dəx<sup>w</sup> - ʔəy'dub -s    ʔə tiʔit [sg<sup>w</sup>əlub]  
          same RPT-event    NOM-located    OBL DEM NOM -find -3POSS    OBL DEM Pheasant

- (e)    g<sup>w</sup>u(h)utəb - əx<sup>w</sup>19    ʔə tiʔəʔ    sq'əbq'əbayʔ  
          bark    -ASP    OBL DEM    dogs

- (f)    ʔiditəb - əx<sup>w</sup>    tiʔəʔ    qaw'qs  
          growl    -ASP    DEM    Raven

'And then Raven went. And next he arrived. And next he found those hunters. It was the very same place that Pheasant had found them. The dogs barked. They growled at Raven.'

In the first line Raven is absolutive. He is looking for the hunters who gave Pheasant some food. In line (c) he finds them and we understand that these hunters are important characters because they are coded as absolutive. In line (e) no overt absolutive argument is mentioned, but this absence is interpreted as Raven, not the hunters. Semantically it would be odd for the hunters' dogs to bark at them, rather than at Raven. But pragmatically Raven is the most important character in this scene, and even though he lost his absolutive status for a clause to allow another important entity on scene, he quickly regains his absolutive standing. This position is confirmed in the last line of the passage when Raven receives overt mention.

## 5.6 Summary

In this section I have demonstrated that argument structure is manipulated primarily for pragmatic, but also syntactic, reasons. Grammatically the language has a requirement to detransitivize to allow for a lexical agent. Derivational suffixing provides the machinery for speakers to create lexical choices with distinct argument structures. While constructing a discourse, speakers select predicates with argument structures that suit their needs. Pragmatically speakers structure arguments in a context with respect to their topic-worthiness; those most worthy of attention are placed in the clause core, and the rest are oblique. In addition the grammar is sensitive to whether an agent is specific or non-specific.

## 6 Conclusion

The grammar of Lushootseed is shaped by the functional pressures of information flow and has syntacticized a common discourse pattern. Lexical nominals follow an absolutive pattern; transitive lexical agents in the clause core are prohibited. The solution to avoiding core transitive lexical agents is detransitivization, which is accomplished by derivational suffixing. Valence-adjusting suffixes create lexical alternatives for predicates with differing argument structures. Transitive suffixes create stems with two participants. The intransitive suffix /-b/ ensures grammatical intransitivity of a clause. When suffixed to roots, it creates stems which are equal to monomorphemic intransitive roots. When attached to a transitive stem, the result is a detransitivized stem. Viewed in connected speech we see how the choice of predicates is pragmatically, not syntactically, motivated. Speakers choose predicates for the purpose of

<sup>18</sup> The brackets and parentheses are provided by Hess.

<sup>19</sup> The dictionary only has g<sup>w</sup>ihəb 'dog bark' I guess that this alveolar is a transitivizer, and the result is 'bark at'.



aligning core and oblique distinctions. In this way, argument structure is manipulated according to pragmatics, which is best understood after an investigation of argument structure in connected speech.

#### References:

- Bates, Dawn. 1997. Person marking in Lushootseed subordinate clauses. *International Journal of American Linguistics*, 63:316-333.
- Bates, Dawn, Thom Hess and Vi Hilbert. 1994. *Lushootseed Dictionary*. Seattle: University of Washington Press.
- Beck, David. 1996. Transitivity and causation in Lushootseed morphology. *Canadian Journal of Linguistics*, 41:109-40.
- Beck, David. 1998. Eliding the Obvious: Zero subjects in Lushootseed. *Proceedings from the first Workshop on American Indigenous Languages*. Santa Barbara Papers in Linguistics, 8:15-29.
- Bianco, Violet. 1995. Stress in Northern Lushootseed -- A Preliminary Analysis, *Papers for the 30<sup>th</sup> International Conference on Salish and Neighbouring Languages*, Victoria, B.C. pp. 127-136.
- Bybee, Joan L. 1985. *Morphology: a study of the relation between meaning and form*. Amsterdam: John Benjamins.
- Chafe, Wallace. 1976. Givenness, contrastiveness, definiteness, subjects, topics and point of view. In Charles N. Li, ed., *Subject and Topic*, 25-55. New York: Academic Press.
- Chafe, Wallace. 1987. Cognitive constraints on information flow. In Russell S. Tomlin, ed., *Coherence and grounding in discourse*, 21-51. Amsterdam: John Benjamins.
- Chafe, Wallace. 1994. Discourse, Consciousness and Time: the Flow and Displacement of Conscious Experience in Speaking and Writing. Chicago: The University of Chicago Press.
- Croft, William. 1991. *Syntactic categories and grammatical relations: The cognitive organization of information*. University of Chicago Press.
- Dixon, R. M. W. 1994. *Ergativity*. Cambridge: Cambridge University Press.
- Dryer, Matthew. 1986. Primary Objects, Secondary Objects, and Antidative. *Language* 62: 808-845.
- Du Bois, John W. 1980. Beyond Definiteness: The trace of identity in discourse. In Wallace Chafe, ed., *The pear stories: cognitive, cultural and linguistic aspects of narrative production*, 203-274. Norwood, NJ: Ablex.
- Du Bois, John W. 1985. Competing Motivations. In J. Haiman, ed., *Iconicity in Syntax*, 343-365. Amsterdam: John Benjamins.
- Du Bois, John W. 1987. The discourse basis of ergativity. *Language*, 63:805-855.
- Fillmore, Charles J. 1968. The case for case. In Emmon Bach and Robert T. Harms, eds., *Universals in linguistic theory*, 1-88. New York: Holt, Rinehart and Winston.
- Fillmore, Charles J. 1988. The mechanisms of 'construction grammar'. *BLS* 14:35-55.
- Genetti, Carol and Laura D. Crain. to appear. Beyond Preferred Argument Structure. In Du Bois, John, et al, eds. *Preferred Argument Structure: Grammar as architecture for function*. Amsterdam: John Benjamins.
- Gerds, Donna. 1988. *Object and Absolutive in Halkomelem Salish*. New York and London: Garland Publishing.
- Goldberg, Adele. 1995. *A construction grammar approach to argument structure*. Chicago: University of Chicago Press.
- de Groot, Casper. 1989. *Predicate structure in a functional grammar of Hungarian*. Dordrecht: ICG Printing.
- Hess, Thom. 1976. *Dictionary of Puget Salish*. Seattle: University of Washington Press.
- Hess, Thom. 1993. A schema for the presentation of Lushootseed verb stems. In *American Indian linguistics and ethnography in honor of Laurence C. Thompson*, eds. Anthony Mattina and Timothy Montler. Missoula: University of Montana Occasional Papers in Linguistics 10:113-126.

- Hess, Thom. 1995. *Lushootseed reader with introductory grammar, Vol I*. Missoula: University of Montana Occasional Papers in Linguistics 11.
- Hess, Thom. 1998. *Lushootseed reader with intermediate grammar, Vol II*. Missoula: University of Montana Occasional Papers in Linguistics 14.
- Hess, Thom and Vi Hilbert. n.d.. *Lushootseed*. 2 vols. Seattle: Daybreak Star Press.
- Hilbert, Vi. 1995a. *g'əq'ulc'əʔ: Aunt Susie Sampson Peter*. Lushootseed Press: Seattle.
- Hilbert, Vi. 1995b. *siastənu: "Gram" Ruth Sehome Shelton*. Lushootseed Press: Seattle.
- Hopper, Paul and Sandra A. Thompson. 1980. Transitivity in grammar and discourse. *Language*, 56:251-299.
- Jacobsen, William H. 1979. Why does Washo lack a passive, in F. Plank, ed., *Ergativity: towards a theory of grammatical relations*, London: Academic Press.
- Jelinek, Eloise. 1995. The compositionality of argument structure in Lummi. In the papers for the *Thirtieth International Conference for Salish and Neighboring Languages*, Victoria, B.C.
- Jelinek, Eloise and Richard Demers. 1983. An agent hierarchy and voice in some Coast Salish languages. *International Journal of American Linguistics*, 56:341-360.
- Jelinek, Eloise and Richard Demers. 1994. Predicates and Pronominal Arguments in Straits Salish. *Language*, 49:167-185.
- Kemmer, Suzanne. 1993. *The middle voice*. Amsterdam: John Benjamins.
- Kroeber, Paul D. 1999. *The Salish language family: reconstructing syntax*. Lincoln and London: University of Nebraska Press.
- Kuipers, Aert. 1968. The categories of Verb-Noun and Transitive-Intransitive in English and Squamish. *Lingua* 221:610-626.
- M. Dale Kinkade. 1983. Salish evidence against the universality of 'noun' and 'verb'. *Lingua*, 60:25-40.
- M. Dale Kinkade. 1990. Sorting out third persons in Salish discourse. *International Journal of American Linguistics*, 56:341-360.
- Mithun, Marianne. 1986. When zero isn't there. *Proceedings of the Twelfth Annual Meeting of the Berkeley Linguistics Society*. Berkeley: Berkeley Linguistics Society.
- Mithun, Marianne. 1990. Third-person reference and the function of pronouns in Central Pomo natural speech. *International Journal of American Linguistics*, 56:361-376.
- Mithun, Marianne. 1991. Active/Agentive case marking and its motivations. *Language* 67:510-546.
- Mithun, Marianne. 1994. The implications of ergativity for a Philippine voice system. In Barbara Fox and Paul Hopper, eds., *Voice: Form and Function*. Amsterdam: John Benjamins.
- Mithun, Marianne and Wallace Chafe. 1999. What are S, A and O? *Studies in Language* 23: 579-606.
- Palmer, F.R. 1994. *Grammatical Roles and Relations*. Cambridge, UK: Cambridge University Press.
- Payne, Thomas E. 1997. *Describing Morphosyntax: a guide for field linguists*. Cambridge: Cambridge University Press
- Schachter, Paul. 1976. The subject in Philippine languages: topic, actor, actor-topic, or none of the above. In Charles N. Le, ed., *Subject and topic*, 491-518. New York: Academic Press.
- Schachter 1977. Reference-related and role-related properties of subjects. In Peter Cole and Jerrold Sadock, eds., *Grammatical relations*, 279-306. New York: Academic Press.
- Schachter, Paul and Fe T. Otones. 1972. *Tagalog Reference Grammar*. Berkeley: University of California Press
- Snyder, Warren A. 1968. *Southern Puget Sound Salish: Texts, Place Names and Dictionary*. Sacramento: Sacramento Anthropological Society, no. 9.
- Thompson, Sandra A. and Paul Hopper. To appear. Transitivity and Clause Structure in Conversation, in Bybee and Hopper, eds., *Frequency Effects and Emergent Grammar*. Amsterdam: John Benjamins.
- van Eijk, Jan and Thom Hess. 1986. Noun and verb in Salish. *Lingua* 69:319-331.