

Semantic Role Assignment in Lushootseed Causatives<sup>1</sup>

Thom Hess  
University of Victoria  
Dawn Bates  
Arizona State University

## 0. Introduction

- I. Non-Agent Causers: *yayus-tx<sup>w</sup>* 'have someone work'  
 II. Agent Causers: *?u<sup>x</sup>-tx<sup>w</sup>* 'take someone somewhere'  
 III. Causatives Designating a Goal: *yəc-əb-tx<sup>w</sup>* 'tell someone'  
 IV. Psychological Predicates: *sa<sup>?</sup>-tx<sup>w</sup>* 'dislike someone'  
 V. Conclusion

## 0. Introduction

Bates (1997) argues that Lushootseed stems are subcategorized according to the semantic roles they assign and that each stem designates one role for assignment to its absolutive argument. Other roles are conveyed in oblique phrases. The semantic roles are drawn from a small universal inventory including Agent, Experiencer, Patient, Goal, Causer and Causee. For example, the intransitive predicate in (1), *q<sup>w</sup>əlb* 'cook', assigns Agent to its absolutive argument and Patient to the oblique. This property is encoded here in the semantic frame (Ag,Pat).

- |     |                                  |               |                              |   |
|-----|----------------------------------|---------------|------------------------------|---|
| (1) | <i>q<sup>w</sup>əlb</i>          | -as           | <i>tsi ʔadəy<sup>?</sup></i> | <i>ʔə ti s<sup>?</sup>uladx<sup>w</sup></i> |
|     | STEM                             | ABS SUBJ MRKR | DIRECT COMPLEMENT            | OBLIQUE                                     |
|     | cooks                            | if she        | the woman                    | the salmon                                  |
|     | 'If the woman cooks the salmon.' |               |                              |   |

We employ underlining in the semantic frame to indicate the role assigned to the absolutive argument. This lexical marking is necessary, because, as Bates (1997) notes, Lushootseed surface intransitives can be unergative (e.g., *yayus* 'work'); unaccusative, with a Patient subject (e.g., *ʔup* 'end up on a lap'); or semantically bivalent, with an Agent or Patient subject. The examples in (2) illustrate several different semantic frames of intransitive stems.<sup>2</sup> The first line of each example gives the semantic frame and a stem gloss. This is followed by a sample sentence showing the mapping of the roles to the syntactic positions available in main clauses.<sup>3</sup>

<sup>1</sup> We acknowledge the support of our institutions, the Lushootseed speakers with whom we have worked over the years, and the community of Salish scholars. All errors are our own.

<sup>2</sup> Abbreviations employed here follow Bates (1997).

<sup>3</sup> Lushootseed personal pronouns do not mark gender, and third persons are always null in the main clause. In the other clauses third person collapses a number distinction found in first and second person pronouns. As in Hess (1995), the gloss SOMEONE is short for a definite and specific third person pronoun: 'he, she, it, they, him, her, them'. The full line glosses may employ the specific English pronouns appropriate for some in-context use of an example sentence.

- |     |    |   |            |                                      |
|-----|----|---|------------|--------------------------------------|
| (2) | a. | <i>pus-il</i> (Ag,Pat, Gol) 'throw'                         |            |                                      |
|     |    | <i>ʔupusil</i>  | <i>čəd</i> | <i>ʔə tə ʔəsbulux<sup>w</sup>ilc</i> |
|     |    | asp-throw-intr  | 1sgS       | P DET ball                           |
|     |    | 'I threw the ball.'   |            |                                      |
|     | b. | <i>yayus</i> (Ag,) 'work'                                   |            |                                      |
|     |    | <i>ʔu-yayus</i>   | 0          | <i>tsi s-ʔadəy<sup>?</sup></i>       |
|     |    | asp-work  | 3S         | DET-f nom-woman                      |
|     |    | 'The woman worked.'   |            |                                      |
|     | c. | <i>ʔup</i> (Pat) 'end up on lap'                            |            |                                      |
|     |    | <i>ʔu-ʔup</i>   | <i>čəd</i> |                                      |
|     |    | asp-end up on lap   | 1sgS       |                                      |
|     |    | 'I sat on his lap (without the intention of either of us).' |            |                                      |

Each of the sentences in (2) illustrates the predicate stem assigning its designated (underlined) role to the absolutive argument. In (2a), the first person singular subject is assigned the designated Agent role, while (2b) shows a third person subject marker with a coreferential DP realizing the designated Agent. The designated Patient role is assigned to the 1sgS in (2c). The oblique phrase in (2a) is assigned a non-designated role, Patient.

Hess (1993, 1995) categorizes stems as AGENT-ORIENTED or PATIENT-ORIENTED to describe the distinctions shown in (2). The present analysis extends that work and, following Bates (1997), shows how syntactic transitivity interacts with semantic role mapping. Hess (1995), concentrating on main clauses, employs neither transitivity nor the idea of an absolutive subject in his analysis. The present paper assumes Bates's (1997) position that the morphosyntax of embedded clauses requires such descriptive machinery and we extend it here to the analysis of main clauses.

As argued in Beck (1996), transitivizing morphological processes create a subject-object relation and can have significant effects on the semantic properties of the resulting forms. The absolutive argument in a transitive clause is the object position, realized in first and second persons with an object suffix and in third person with a direct complement, possibly zero. A transitive stem, therefore, assigns its designated (underlined) role to an object, and has the subject available for mapping a non-designated role, most often Agent. The example in (3) shows a transitive stem based on the same root as the example in (1): intransitive *q<sup>w</sup>əlb* (Ag, Pat) and transitive *q<sup>w</sup>əld* (Ag,Pat) assign the same roles but designate them differently.

- |     |  |
|-----|--|
| (3) | <i>q<sup>w</sup>əld</i> (Ag,Pat)                                 |
|     | <i>q<sup>w</sup>əld</i> <i>ti s<sup>?</sup>uladx<sup>w</sup></i> |
|     | STEM      DIRECT COMPLEMENT                                      |
|     | 'She cooks the salmon.'  |

We employ an input-output metaphor for the suffixing processes creating transitive stems. With regard to causative formations, the input includes all stem-forming suffixes preceding *-tx<sup>w</sup>*, along with the semantic frame for that stem; the output is the full form in *-tx<sup>w</sup>* including its semantic

frame.

In addition to adding a morphosyntactic argument position, causative  $-tx^w$  imparts a distinction between Causer and Causee to the semantic frame of its input. Moreover, a  $-tx^w$  formation is sensitive to the semantic structure of the input. When the input implies location or translocation, the output targets the Patient.<sup>4</sup> These forms are discussed in Section II below. On the other hand, if no location or translocation is indicated, then the  $-tx^w$  inherits the role structure of the input; these forms are discussed in Section I. As an example, compare the causative transitive forms in (4), based on the input structures from (2), repeated here for convenience. We represent the Causer-Causee distinction separately from the Agent-Patient-Goal distinction because Causer and Causee are regularly assigned to arguments that already bear one of the other roles. The example in (4a) shows a Causer that is simultaneously Agent. In contrast, (4b) shows a Causer that is not an Agent. An Agent Causer performs the action described by the stem (walking, singing, working, loading). A non-Agent Causer effects causation at some metaphorical distance from the stem's action (not sitting, but causing someone else to sit; not working, but causing someone else to work; not burning up, but causing something else to burn).<sup>5</sup>

- (4) a. input: pus-il (Ag,Pat,Goal) 'throw'  
 output: pus-il- $tx^w$  'throw someone (as in wrestling)'  
 output frame: Ag, Pat, Gol  
                   Causer Causee  
 ?u-pusil-tu-bš  
 asp-throw-tr-1sgO  
 'He threw me.'
- b. input: yayus (Ag) 'work'  
 output: yayus- $tx^w$  'make someone work'<sup>6</sup>  
 output frame: Ag  
                   Causer Causee  
 ?u-yayus- $tx^w$  0 tsi s-ʔadəyʔ  
 asp-work-tr 3S DET-f nom-woman  
                   Causer Ag-Causee  
 'She made the woman work.'
- c. input: ?uʔ (Pat) 'end up on lap'  
 output: ?uʔ- $tx^w$  'put someone on someone else's lap'  
 output frame: Pat, Gol

<sup>4</sup> That is to say, the designated role of the transitive in  $-tx^w$  will be Patient, and Patient will be assigned to the absolutive argument.

<sup>5</sup> Beck (1996) analyzes the (non-)Agent Causer contrast as involving EVENT-EXTERNAL CAUSATION versus EVENT-INTERNAL CAUSATION.

<sup>6</sup> When it is useful, we underline the gloss for the absolutive argument.

Causer (Causee's lap)  
 ?u-?uʔ-tu-bš.  
 asp-lap-tr-1sgO  
 'They made me hold her on my lap (having first brought the baby to me).'

The examples discussed so far illustrate the two main classes of  $-tx^w$  stems and we will return to them in Sections I and II. Two other classes of  $-tx^w$  stems are more sensitive to the semantic structure of the resulting  $-tx^w$  form than the semantics of the input. One class expresses psychological predicates (e.g., 'anger at', 'dislike of') and the other requires Goal as the designated role of the output, overriding any inheritance for the input. Sections III and IV describe and exemplify these classes.

The basic function of the  $-tx^w$  is to transitivize the form and to add a semantic role of Causer that must be mapped to some position. (That is, the Causer role may not be implied.) The Causer role is designated for the absolutive argument in  $-tx^w$  forms that denote psychological states, but in all other  $-tx^w$  forms, the Causer maps to the subject position.<sup>7</sup>

We are now prepared to detail the various input-output relationships in  $-tx^w$  forms and to bring much data to bear on the analysis. The next section discusses one of the most common patterns in  $-tx^w$ .

#### I Non-Agent Causers: yayus- $tx^w$ 'put someone to work'

As mentioned above, causatives in  $-tx^w$  often inherit the designated role of their input. When inheritance obtains, the absolutive argument of the intransitive input corresponds to the absolutive argument of the transitive stem. (Indeed, this is one of the reasons that ABSOLUTIVE is the appropriate term here.) When the input has a designated Agent,  $-tx^w$  forms behave just as Gerdts (1995) reports for Halkomelem causatives. In the  $-tx^w$  form, the absolutive is an Agent Causee and the subject is a Causer.

It is possible to predict when inheritance will govern role assignment in a  $-tx^w$  formation, viz., when the input does not imply location or translocation. The stem yayus 'work', for example, designates Agent for its absolutive argument, and it forms a causative that also designates Agent: yayus- $tx^w$  'make someone work'. The causative tuq<sup>w</sup>- $tx^w$  'make someone cough' inherits the designated Experiencer role of its input stem tuq<sup>w</sup>-u-b 'cough'. The input stem t'əq<sup>w</sup> 'snap in two' designates a Patient, and its  $-tx^w$  output does also: 'stop a song'.<sup>8</sup> The examples in (5) illustrate

<sup>7</sup> The examples are given here without reference to the other word-building properties of the roots to which  $-tx^w$  attaches. It could be, however, that such reference is essential to the best treatment of Lushootseed verbal morphology as a whole (cf. Bates and Hess (in prep.)).

<sup>8</sup> However, the following comment under the t'əq<sup>w</sup> entry in the *Lushootseed Dictionary* makes it seem that 'the drummers' may be the absolutive argument of the  $-tx^w$  form. "This was done by making an abrupt spreading motion with the arms, palms down as a signal for the drummers to stop (as when they are not getting the rhythm right)." The corpus does not include an example with a direct complement, however.

these properties.

- (5) input: output:  
 g<sup>w</sup>əd-il g<sup>w</sup>əd-il-tx<sup>w</sup>  
 Ag Ag  
 Causer Causee  
 'sit down, get up' 'sit someone down (pick up and place him)'
- (6) input: output:  
 yayus Ag yayus-tx<sup>w</sup>  
 Causer Ag  
 Causee  
 'work' 'put someone to work'  
 ?u-yayus-tx<sup>w</sup>. 'Put him to work'<sup>9</sup>  
 ?u-yayus-tx<sup>w</sup> čəx<sup>w</sup>. 'You gave him a job.'

The example in (7) is ambiguous between a non-Agent Causer reading for ?ibəš-tx<sup>w</sup> 'walk the dog' and an Agent Causer reading 'carry her while walking'. The former analysis is included here.

- (7) input output  
 ?ibəš ?ibəš-tx<sup>w</sup>  
 Ag/Pat Ag/Pat  
 Causer Causee  
 'walk, journey' 'walk someone, walk an animal, take someone out on a date'  
 by land'  
 ?u?ibəštx<sup>w</sup> čəd ti dsq<sup>w</sup>əbay? ?al k<sup>w</sup>i duk<sup>w</sup>ə?dat. 'I will walk my dog tomorrow.  
 ?u?ibəštx<sup>w</sup> tsi qabəy?. 'He took the young woman on a date.  
 ?u?ibəštub čəd ?ə dbad, sbiaw. 'My father, Coyote, forced me to go on a journey.'

Bates (1997) employs the double role Ag/Pat to indicate automotion. The example in (8) appears from the gloss to involve translocation, but could be glossed 'retire'.

- (8) input output  
 təd<sup>z</sup>-il təd<sup>z</sup>-il-tx<sup>w</sup>  
 Ag Ag  
 Causer Causee  
 'go to bed' 'put someone to bed'  
 ?u-təd<sup>z</sup>-il-tu-b ?ə tsi?i? sk<sup>w</sup>uy ti bəda?s. 'That mother put

<sup>9</sup> This example and the next come from notes taken by Laurence C. Thompson while conducting a fieldmethods course using a speaker of the Upriver Skagit dialect of Northern Lushootseed at the University of Washington in the 1960's. The underlining and hyphens are our additions.

her son to bed.'

The next example illustrates the causative inheriting the role structure of the intransitive base ?ət- 'eat', including its non-designated Patient, the food eaten.

- (9) input output  
 ?ət<sup>-10</sup> ?ət-tx<sup>w</sup>  
 Ag, Pat Ag, Pat  
 Causer Causee  
 'eat' 'feed someone'  
 ?u-?ət-tx<sup>w</sup> ti ?aci?talbix<sup>w</sup>. 'They fed the people.'  
 qa(h) aci?talbix<sup>w</sup> k<sup>w</sup>i ?u-?ət-tu-b. 'Many people will be fed.'  
 bək<sup>w</sup> ?əsq<sup>w</sup>ib [k<sup>w</sup>i] s-ət-tu-b-s. 'Everything was prepared that she was fed.'

Our final example of a non-Agent Causer appears in (10): the first gloss for the causative, 'make someone sing', fits the present pattern. The second gloss, 'turn on the radio', is more common in the Lushootseed corpus.

- (10) input output  
 ?ili-b ?ili-b-tx<sup>w11</sup>  
 Ag, Pat, Gol Ag, Pat, Gol  
 Causer Causee  
 'sing' 'make someone sing; turn on radio; play musical instrument'  
 ?u-?ili-b-tx<sup>w</sup> čəd ti?i? tidtid. 'I played the radio.'

Under the present analysis, the 'turn radio on' and 'play musical instrument' readings are metaphorical in that the 'singer' (the radio, musical instrument) is not a volitional actor in the event; nevertheless, an Agent analysis seems appropriate.

Our discussion now turns to another numerous class of causative stems: those that assign an Agent Causer role.

## II Agent Causers: ?uχ<sup>w</sup>-tx<sup>w</sup> 'take something somewhere'

The previous section showed that causative formation adds a Causer subject to an input that already assigns some role to its absolutive argument. The Causer role can simply "fill out" the semantic frame of the output, leaving the rest of the input role structure intact; this is inheritance. The present section discusses the other general pattern of role assignment in causatives, namely,

<sup>10</sup> It is not clear why the causative form ?ət-tx<sup>w</sup> 'feed someone' is based on a non-occurring root ?ət-, rather than on the existing stem ?ətəd 'eat'. Truncation or deletion may be involved in the causative formation, or the intransitive stem might contain a non-productive suffix.

<sup>11</sup> ?ilibtx<sup>w</sup> enters into another causative pattern which is considered in Section III below.

that wherein the Causer shares the subject position with an Agent and a competing generalization overrides inheritance.

As mentioned in the introduction to this paper, Agent Causers realize the subject of causatives whose input stem involves translocation or location of a Patient. The Patient need not be the designated role in the input, but the designated role of the output is always a Patient Causee. These -tx<sup>w</sup> forms all imply translocation, and we include events of speaking and loading as translocative events, where the message or the load is Patient.

The following example shows that a locative input may result in a causative in this class denoting translocation with an Agent-Causer and a designated Patient.

- (11) input                      output  
 ?a(h)                      ?a(h)-tx<sup>w</sup>  
 Pat                              Ag,                      Pat  
                                     Causer                      Causee  
 'be there'                      'have / take something/someone somewhere'  
 x<sup>w</sup>ul'əx<sup>w</sup> čəx<sup>w</sup> ʔu-?a(h)-tx<sup>w</sup> tsi?iʔ dəd'əx<sup>w</sup> ?ə tsi?iʔ sqig<sup>w</sup>ac. 'You will just have there Deer's intestines.'  
 čad swatix<sup>w</sup>təd ti?ə? dəx<sup>w</sup>-?a(h)-tu-b-š. 'To which country is it that they have been taken?'  
 bək<sup>w</sup> čələp ʔu-liʔ-?a(h)-tx<sup>w</sup>. 'You folks will have it all along with you.'

The Goal role implied by the input and output forms in (12 - 14) can be realized in a prepositional phrase headed by a directional preposition: like dx<sup>w</sup>al 'toward'.

- (12) input                      output  
 pus-il                      pus-il-tx<sup>w</sup>  
 Ag,Pat,Gol                      Ag,                      Pat,                      Gol  
                                     Causer                      Causee  
 'throw'                      'throw something /throw someone (as in wrestling)'  
 ?u-pus-il-tx<sup>w</sup> čəd. 'I threw someone.'  
 ?u-pus-il-tu-b čəd. 'I got thrown (while wrestling).'  
 huy pus-il-tx<sup>w</sup>-əx<sup>w</sup> ti?ə? cədiʔ šadəc. 'Then she threw [down her] undergarment.'
- (13) input                      output  
 ʔuc-il                      ʔuc-il-tx<sup>w</sup>  
 Ag, Pat, Gol                      Ag,                      Pat,                      Gol  
                                     Causer                      Causee  
 'shoot'                      'shoot a projectile'  
 ?u-ʔuc-il-tx<sup>w</sup> čəd ti ʔisəd. 'I shot the arrow.'
- (14) input                      output  
 x<sup>w</sup>ʔ-ag<sup>w</sup>-il                      x<sup>w</sup>ʔ-ag<sup>w</sup>-il-tx<sup>w</sup>  
 Ag/Pat                              Ag,                      Pat  
                                     Causer                      Causee  
 'climb down'                      'bring someone/something down'

Events of buying and selling imply an Agent (the seller), a Goal (the buyer) and a Patient (the item exchanged). The examples in (15) illustrate the Patient designated in the causative form.

- (15) input                      output  
 x<sup>w</sup>uyu-b                      x<sup>w</sup>uyu-b-tx<sup>w</sup>  
 Ag,Pat,Gol                      Ag,                      Pat,                      Gol  
                                     Causer                      Causee  
 'sell'                              'sell something'  
 ?u-x<sup>w</sup>uyu-b-tx<sup>w</sup> ti?ə? ?al?al čəʔ. 'He sold our house.'  
 ?u-x<sup>w</sup>uyu-b-tu-b ?ə tsi?ə? d'əpus ti?ə? spču? ?ə tsi?ə? ?ibacs. 'My aunt sold her granddaughter's cedar-root basket.'

The Lushootseed corpus contains many examples of causatives built on stems implying automotion, describing events of walking, canoeing, jumping, etc. The examples in (16 - 20) show Agent Causers who transport a designated Patient.

- (16) input                      output  
 ?ux<sup>w</sup>                              ?ux<sup>w</sup>-tx<sup>w</sup>  
 Ag/Pat                              Ag,                      Pat  
                                     Causer                      Causee  
 'go'                                  'take something/someone somewhere'  
 ?ux<sup>w</sup>-tu-b-əx<sup>w</sup> ?ə tsi?ə? ?əx<sup>w</sup>adus ti?ə? stawix<sup>w</sup>aʔʔ [dx<sup>w</sup>al] ʔ'əqbidəx<sup>w</sup> . . .  
 'Basket Ogress took the children up inland [from there] . . .'  
 day ti?ə? kikawič ləg'əb stubš k<sup>w</sup>i ʔu-?ux<sup>w</sup>-tx<sup>w</sup> ti?ə? stawix<sup>w</sup>aʔʔ ?al ti?ə? dəx<sup>w</sup>ahəx<sup>w</sup> ?ə ti?ə? swədəbš. 'It was only Little Hunchback, a young man, who took the children to the site of Swinomish.'
- (17) input                      output  
 ?əʔ                                  ?əʔ-tx<sup>w</sup>  
 Ag/Pat                              Ag,                      Pat  
                                     Causer                      Causee  
 'come'                              'bring someone / something'  
 ?u-?əʔ-tx<sup>w</sup> ti sq'əbay?. ' [Someone] brought the dog.'  
 sali? k<sup>w</sup>i ʔu-?əʔ-tx<sup>w</sup> čəx<sup>w</sup> č'əa?. 'You should bring two rocks.'
- (18) input                      output  
 čubə                              čubə-tx<sup>w</sup>  
 Ag/Pat                              Ag,                      Pat  
                                     Causer                      Causee  
 'go/come up from shore'  
 from shore'  
 stabəx<sup>w</sup> ti?iʔ lə-čubə-tx<sup>w</sup>. 'What is he bringing up from shore?'  
 [tu-]čubə-tu-b-əx<sup>w</sup> ti?iʔ q'iq<sup>w</sup>ʔay?ulč ?ə tsi?ə? ?i ?adad ?i tsi?iʔ wiʔwiʔ. 'Magpie and

Snipe took that little wooden platter up from shore.'

- (19) input                    output  
 sax<sup>w</sup>-əb                    sax<sup>w</sup>-əb-tx<sup>w</sup>  
 Ag/Pat                    Ag,                    Pat  
                                   Causer                    Causee  
 'run, jump'                    'run off with someone/something, kidnap'  
 qa(h) sləxil k<sup>w</sup>i tu-(s-)sax<sup>w</sup>-əb-tu-b-s əlg<sup>w</sup>ə?  
 sax<sup>w</sup>-əb-tu-b-əx<sup>w</sup>. ' [The canoe pulled by a 'magic' seal] lurched forward with [them in it as captives].'  
 ... čəda x<sup>w</sup>ul' t<sup>w</sup>-lə-sax<sup>w</sup>-əb-tx<sup>w</sup> ti<sup>w</sup>i t s<sup>w</sup>ə t ə d. '... and I will just run the food over [to the neighbors].'

- (20) input                    output  
 tč-il                    lč-il-tx<sup>w</sup>  
 Ag/Pat                    Ag,                    Pat  
                                   Causer                    Causee  
 'arrive'                    'arrive bringing someone /something'  
 tč-il-tx<sup>w</sup>-əx<sup>w</sup> ti<sup>w</sup>ə? wi<sup>w</sup>su. ' She arrived with the children.'  
 ?u-tč-il-tu-b čəd. ' They arrived with me in tow.'  
 ... čta t<sup>w</sup>-tč-il-tx<sup>w</sup>-əx<sup>w</sup> dx<sup>w</sup>al k<sup>w</sup>i tuhuyutəb čət s<sup>w</sup>ušəbabdx<sup>w</sup>. . .  
 '... and we will bring it (out) [i.e., tell it] about how we were made unfortunate ...'

Example (7) in the previous section showed that ?ibəštx<sup>w</sup> 'walk' is ambiguous between a non-Agent Causer reading, e.g., 'walk the dog' and an Agent-Causer reading. The latter is illustrated below.

- (21) input                    output  
 ?ibəš                    ?ibəš-tx<sup>w</sup>  
 Ag/Pat                    Ag,                    Pat  
                                   Causer                    Causee  
 'walk, travel over land'                    'carry someone while walking, walk someone'  
 g<sup>w</sup>əl lil k<sup>w</sup>i x<sup>w</sup>-s-?ibəš-tx<sup>w</sup>-s tsi<sup>w</sup>ə? kia<sup>w</sup>s. 'And [she] took her grandmother a long way.' [At this point the grandmother (who is really Coyote in disguise) is being carried to a gathering on the older sister's back.]

Example (22) illustrates a causative denoting an event of speaking following the present pattern and designating the Patient, that is, the message, as the absolutive argument.

- (22) input                    output  
 q<sup>w</sup>i<sup>w</sup>-ad                    q<sup>w</sup>i<sup>w</sup>-ad-tx<sup>w</sup>  
 Ag,Pat,Gol                    Ag,                    Pat,                    Gol  
                                   Causer                    Causee

'call loudly'                    'announce someone'  
 ?u-q<sup>w</sup>i<sup>w</sup>-ad-tu-b k<sup>w</sup>i dsda?. ' [They] called out my name in a loud voice.'

The next section discusses causatives that contrast with (22) in targeting the Goal, rather than the Patient.

### III. Causatives Designating a Goal: yəc-əb-tx<sup>w</sup> 'tell someone'

To this point in the discussion, all the causatives in -tx<sup>w</sup> have designated either an Agent-Causer or a Patient-Causee as their absolutive argument. In addition to these, some -tx<sup>w</sup> forms designate a Goal-Causee for their absolutive argument in an interesting expansion of the derivational potential of the Lushootseed transitivity system.

If the input describes an event with actants Agent, Patient and Goal, as many predicates involving speaking or loading do, then -tx<sup>w</sup> can designate a Goal role as absolute even if the input designates a Patient. This operation is more complex than either inheritance (Section I) or an output constraint (Section II). This role-switching strategy increases the voice-determining derivational potential of the transitivity suffix system, because transitives in non-causative {-d / -t-} always inherit the designated role of their input. Many of the causatives which designate a Goal have counterparts in {-d / -t-} based on the same input which designate a Patient. The input frame matches the {-d / -t-} form, not the causative:

- (23) ?u<sup>w</sup>əp čəd. 'I inadvertently sat on someone's lap (because the bus stopped abruptly).'  
 ?u<sup>w</sup>əpu-d ti<sup>w</sup>i t ?ibacs. 'She put her grandson on her lap.'  
 ?u<sup>w</sup>əp-tx<sup>w</sup> tsi s<sup>w</sup>təday?. 'Someone sat some third party on the woman's lap.'

The corpus has ten examples of causatives that designate a Goal, two of which are ambiguous between the Goal reading and the non-Agent Causer reading. Not all of the input stems imply a Goal, but all of the -tx<sup>w</sup> forms specify a designated Goal.

- (24) input                    output  
 qil                    qil-tx<sup>w</sup>  
 Pat,Gol                    (Ag),                    Pat,                    Gol  
                                   Causer                    Causee  
 'ride (in canoe)'                    'load (canoe)'  
 qil-tx<sup>w</sup> t(i) ads<sup>w</sup>əlay?. 'Load your shovelnose canoe.'

input                    output  
 qil                    qili-d  
 Pat,Gol                    Ag,                    Pat                    Gol  
 'ride (in canoe)'                    'load items (into canoe)'  
 qili-d t(ə) s<sup>w</sup>ə t ə d. 'Put the food in the canoe.'  
 tux<sup>w</sup> čəd tu-qili-t-əb. 'But I was forced on board.'

- (25) input output  
 ?u? output  
 Pat Pat, Gol  
 Causer Causee's lap  
 'end up on lap' 'put someone on someone else's lap'  
 ?u-?u?-tx<sup>w</sup> tsi s<sup>t</sup>adey?. ' [Someone] sat [some third party] on the woman's lap.'  
 ?u-?u?-tu-bš. ' [They] made me hold [her] on my lap.'

input output  
 ?u? ?u?u-d  
 Pat Ag, Pat, Gol  
 'end up on lap' 'put someone on one's own lap'

- (26) input output  
 čəba? čəba?-tx<sup>w</sup>  
 Pat, Gol (Ag), Pat, Gol  
 (back) Causer Causee  
 (x's back)  
 'backback' 'load a pack on someone's back'  
 'have a pack on back'

g<sup>w</sup>əl huy, čəba?-tu-b-əx<sup>w</sup>. 'And then [they] loaded [his] back.'  
 g<sup>w</sup>əl huyiləx<sup>w</sup> mima?əñ ti?ə? cədi? [s-əs-]čəba?-tu-b-s. 'And this which was put on [his] back became small.'

The examples in (27- 29) show our analysis of events involving communication, where the audience is Goal.

- (27) input output  
 šay-əb šay-əb-tx<sup>w</sup>  
 Ag, Gol Ag, Gol  
 causer causee  
 'laugh' 'smile at someone'  
 [?u-]šay-əb-tu-bš. ' Someone smiled at me.'

- (28) input output  
 yəc-əb yəc-əb-tx<sup>w</sup>  
 Ag, Pat, Gol Ag, Pat, Gol  
 Causer Causee  
 'tell a story to someone'  
 ya? t ləcu-yəc-əb-tu-b ?ə ti?ə? ?iisəds əlg<sup>w</sup>ə? ti?ə? stawix<sup>w</sup>a? t. 'In vain their families tried to tell these children [about Basket Ogress].  
 ... čx<sup>w</sup>a ?u-yəc-əb-tx<sup>w</sup> k<sup>w</sup>(i) ad?iisəd. '... and you will tell your friends [about my return].'

- input output  
 yəc-əb yəc-əd  
 Ag, Pat, Gol Ag, Pat, Gol  
 Causer Causee  
 'report' 'tell about something/someone'  
 [?u-]yəc-əd ti?ə? šhuyutəbs ?ə ti?ə? sqəlalitut. ' He told about what the power had done to him.'  
 ?u-yəc-t-ubu t čəx<sup>w</sup>. 'You told on us.'

- (29) input output  
 g<sup>w</sup>aag<sup>w</sup>ad g<sup>w</sup>aag<sup>w</sup>a(d)-tx<sup>w</sup>  
 Ag Ag, Pat, Gol  
 Causer Causee  
 'get to talking' 'converse with someone'  
 g<sup>w</sup>aag<sup>w</sup>a(d)-tx<sup>w</sup> ti?ə? lu? lu? s. ' He talked to the elders [about what he was going to do].'  
 g<sup>w</sup>əg<sup>w</sup>a(t)-tx<sup>w</sup>  
 Ag, Pat, Gol  
 Causer Causee  
 'speak to someone'  
 ?u-g<sup>w</sup>əg<sup>w</sup>at-(t)x<sup>w</sup> čəd. 'I spoke to him.'  
 ?u-g<sup>w</sup>əg<sup>w</sup>at-(t)u-bš. ' He spoke to me.'

g<sup>w</sup>əg<sup>w</sup>a(d)-tx<sup>w</sup>  
 Ag, Pat, Gol  
 Causer Causee  
 'scold someone'

tiləb ?u-g<sup>w</sup>əg<sup>w</sup>ad-(t)u-b ?ə tsi?ə? sk<sup>w</sup>uys [ti?it cədi t]. 'Right away his mother scolded him [(lit. that one)].'

Section I noted that example (10) ?ilibtx<sup>w</sup> is ambiguous between 'sing to someone' and 'make someone sing'. Only the first reading is relevant to the Goal pattern, and it is the only one analyzed in (30).

- (30) input output  
 ?ili-b ?ili-b-tx<sup>w</sup>  
 Ag, Pat, Gol Ag, Pat, Gol  
 Causer Causee  
 'sing' 'sing to someone'  
 tu-ləcu-?ili-b-tu-bš. ' She was singing to me.'

It is not clear whether the Goal is implied in the input or if the Goal is supplied by the -tx<sup>w</sup> formation.

The last and smallest class of causatives we review here denote psychological states. We turn to these in the next section.

## IV. Psychological Predicates: saʔ-txʷ 'dislike someone'

The -txʷ form, but not the input, is a psychological predicate in this, the smallest class of -txʷ forms. The input stems either assign no role or they might assign Patient, depending on the predicate analysis of "adjectives", but the psychological predicate has a role structure unrelated to that of the input stem. The Causer is the designated role and the subject maps Experiencer.

(31)	input	output
	saʔ	saʔ-txʷ
	Patʔ	Exp, Causer
	'bad'	'dislike someone'
	saʔ-tu-bʃ čəxʷ.	'You hate me.'
	put čəd saʔ-txʷ.	'I do not like [it].'

(32)	input	output
	dukʷ	dukʷ-txʷ
	Patʔ	Exp, Causer
	'strange, bad'	'get angry with someone'
	lə-dukʷ-tu-b tiʔəʔ sbiaw.	'She became angry with Coyote.'
	ʃwulʔ ʔu-dukʷ-tu-b ʔə tsiʔəʔ bədaʔs.	'His daughter simply became angry with him.'

Our final example appears in (33):

(33)	input	output
	hikʷ	hikʷ-txʷ
	Patʔ	Exp, Causer
	'big'	'respect someone'
	haʔt tiʔitʔ gʷ-ad-s-əs-hikʷ-tu-b ʔə t(i) adʔiisəd.	'Your people will have great respect for you.'

The example sentence shows the 2sg subject prefix mapping the designated role of hikʷ-txʷ 'respect' in a passive construction.

## V. Conclusion

This working paper grows out of our work (Bates and Hess (in prep)) on the derivational potential of Lushootseed stems. Although we have yet to conduct an exhaustive search of the literature on causatives, we believe that the generalizations above, about Goal arguments of causative predicates, are new to the literature on Lushootseed.

We have discussed four patterns of role assignment in causatives; these four are the most numerous in the Lushootseed corpus. Another common pattern involves the affixation of the causative suffix to predicates of negation; these are beyond the scope of the present paper, as are some interesting generalizations about the interaction of stative aspect and causatives.

## REFERENCES

- Bates, Dawn. 1997. Semantic roles and referent tracking in Martha Lamont's "Pheasant and Raven." *Papers for the 32nd International Conference on Salish and Neighboring Languages*, 1-21. Port Angeles, WA: Peninsula College.
- Bates, Dawn and Thom Hess. In prep. Lushootseed Reference Grammar. Ms.
- Beck, David. 1996. Transitivity and causation in Lushootseed Morphology. *Canadian Journal of Linguistics*, 109-140.
- Gerds, Donna. 1995. Halkomelem Causatives Revisited. Paper presented at the 9th International Conference on Salish and Neighboring Languages, University of Victoria.
- Hess, Thom. 1993. A Schema for the presentation of Lushootseed verb stems. In *American Indian Linguistics and Ethnography in Honor of Laurence C. Thompson*, ed. by Anthony Mattina and Tim Montler. University of Montana Occasional Papers in Linguistics No. 10. Missoula: University of Montana.
- Hess, Thom. 1995. *Lushootseed Reader with Introductory Grammar*, Volume 1. University of Montana Occasional Papers in Linguistics No. 11. Missoula: University of Montana.