Is there a syntactic subject in Lushootseed?

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0 Introduction

One of the more notable characteristics of Lushootseed is the apparent absence of morphosyntactically transitive clauses—that is, clauses with two non-oblique NP or pronominal agents—with third-person agents. As it turns out, fully transitive clauses with two overt participants are possible only for clauses with first- or second-person agents, as shown in (1).1

(1) a) ?u+gWae+ad čad ti sqWabay?
[pnt]+look-for+[caus] 1s D dog
“I looked for the dog”

b) ?u+gWač+ab čas ti sqWašay?
“you looked for the dog”

c) ?u+gWai+ad ti sqWašay?
[he/she] looked for the dog”

(Hess 1993: 11)

Expression of two overt third-persons in a clause requires the use of the middle or the passive voice, which result in the realization of either the agent or the patient as oblique actants, contained within a prepositional phrase:

(2) a) ?u+gWač+ab ti čašas qa ti sqWašay?
“the boy looked for the dog”

b) ?u+gWač+t+ah qa ti čašas ti sqWašay?
[pnt]+look-for+[caus]+[md] P D boy D dog
“the boy made the dog look for the dog”

(lit. “the dog was looked for by the boy”)

(Hess 1993: 38)

Facts such as these have led writers such as Jelinek & Demers (1983) to posit that Lushootseed, like some Interior Salish languages, has a split ergative system in which third-person NPs such as ti sqWašay “the dog” in (1c) are—rather than direct objects in a transitive sentence—absolutive subjects and that PPs such as qa ti čašas “of the boy” in (2b) would correspond to ergatively-marked agents. While the primary researcher on Lushootseed does not accept the ergative analysis, Hess (personal communication) does feel that the absence of an overt agent-pronominal in (1c) indicates that the clause is not transitive and that the notion of “subject” is largely extraneous to the treatment of Lushootseed grammar. Outside the immediate domain of this particular language, however, such a stand is highly problematical in that the syntactic category of “subject” (or its reflex in a particular theory) is widely held among linguists to be universal and, in fact, is a cornerstone of analysis in a wide range of frameworks such as Functional Grammar (Dik 1978), Lexical-Functional Grammar (Bresnan 1982), and Cognitive Grammar (Langacker 1991). For these—and other theories which posit or derive the universality of subjects or subject-like syntactic roles—the absence of the syntactic role of subject from the Lushootseed clause would represent a major challenge. While issues such as this do not touch on the criterion of descriptive adequacy—which has certainly been met in the works of Hess and others to date—they are crucial in the context of cross-linguistic comparison and in the search for widely applicable or universal principles (or syntactic theory): thus, the claim that there is no syntactic subject in Lushootseed is an important one, and should be subject to careful scrutiny. In the paper that follows, I will examine the Lushootseed data and, in particular, sentences like those in (1) and argue that there is indeed an event-participant in such expressions that can usefully be referred to as that syntactic subject; next, I will analyze some further properties of that role both with respect to its crucial function in Lushootseed discourse and its semantic function as a deictic for events—in other words, the crucial role played by subjects in identifying specific instances of events. As we shall see, while the surface patterns of Lushootseed syntax are quite remarkable and unique, they are the result of the convergence of a number of properties of subjects and principles of discourse which are cross-linguistically by no means unusual or extraordinary.

1 Subject properties

Despite the fact that the terms “subject” and “object” are expressly avoided in the principle grammatical works on Lushootseed, many linguists feel that these categories—in particular that of “subject”—are universals of natural language (Keenan 1976; Perlmutter 1980; Me’Ok 1988; Hudson 1990; Langacker 1991), and they are widely held to play an essential part in the analysis of phenomena such as passivization, voice, and ergativity. Unfortunately, even among those who advocate the universality of “subject”, there is no agreement as to a universal definition: while the category may be active in all languages, the particular manner in which it manifests itself and the specific properties that it has in a given language can only be defined in terms of that language itself (Keenan 1976; Me’Ok 1988). The extent of the consensus seems to be that the subject is, at the very least, “syntactically privileged” (Me’Ok 1988: 161) in the sense of possessing some set of syntactic properties which (a) pertain (as a set) to no other clausal elements (Keenan 1976), (b) accord the subject the highest degree of clausal “salience” (Langacker 1991), and (c) make the subject “the argument to which the predication is attributed—that is, the primary syntactic argument of a sentence” (Bavin 1980: 2).2 In the context of a specific language, however, it remains to the linguist to determine which particular properties are diagnostic of the subject and to what extent this category plays a distinctive role in that language.

To this end, a number of attempts have been made at setting out methodological procedures for identifying subjects, two of the best and most comprehensive being those of Keenan (1976) and Me’Ok (1988). The first step in identifying the subject in a language, according to both researchers, is to identify a “basic sentence type” (Keenan 1976) and to enumerate the syntactic properties of the actants (participants) in such a clause in order to determine which of them has the greatest number of those properties typical of subjects cross-linguistically. More complex sen-

1The abbreviations used here and in the following data are given at the end of this paper.

2Cf. Foley & van Valin (1984), who challenge the universality of “subject” and posit instead the notion of “pivot”, which seems closely related (if not identical) to the characterizations of “subject” given here.
tence types may then be examined with an eye towards identifying which of the actants in these structures share the greatest number of properties with the subject of the basic sentence. For Mel'čuk, the basic sentence type is formed on the monovalent (intransitive) verb, whose single actant must correspond to the grammatical subject. In Lushootseed, the actants of intransitive stems (when not full NPs) are represented by a specific set of pronominal elements:

\[(3)\]
\[
\begin{align*}
\text{(a) } & \text{u}\text{i}\text{?} \text{a}\text{?} & \text{c} \text{a} \text{d} \\
& \text{[pnt]}+\text{come} & 1s \\
& \text{"I come"} \\
\text{(b) } & \text{u}\text{i}\text{?} \text{e}\text{d} & \text{c} \text{a} \text{d} \\
& \text{[pnt]}+\text{come} & 1p \\
& \text{"we come"} \\
\text{(c) } & \text{u}\text{i}\text{?} \text{a}\text{?} & \text{c} \text{a} \text{w} \\
& \text{[pnt]}+\text{come} & 2s \\
& \text{"you come"} \\
\text{(d) } & \text{u}\text{i}\text{?} \text{?} \text{a}\text{?} & \text{c} \text{a} \text{a} \text{p} \\
& \text{[pnt]}+\text{come} & 2p \\
& \text{"you folks come"} \\
\text{(e) } & \text{u}\text{i}\text{?} \text{a}\text{?} & \text{?} \\
& \text{[pnt]}+\text{come} & 3s/p \\
& \text{"[he/she/they] come"} \\
\end{align*}
\]

(Hess 1993: 3–6)

The "o" symbol here represents a gap left by elision in the surface syntax, rather than a structural element such as a zero pronoun (see Mel'čuk 1988, Chapter 3, for a discussion of syntactic or lexical zeros in Russian)—meaning, in effect, that Lushootseed has only a two-person pronominal paradigm.3 In sentences such as that in (3e), the absence of a subject-marker seems to signal the third-person (plural or singular) identity of the subject, which is identified with the discourse topic and is—in context—unambiguous. This will be discussed in more detail in Section 2 below. Under the approaches proposed by Keenan and Mel'čuk, participants represented by this pronominal paradigm—along with the "o" or elided element—can be put forward as candidates for subjecthood and their syntactic properties can then be compared to those typical of subjects cross-linguistically, as can the syntactic properties of the full NPs with which they can be interconnected. In Lushootseed, subject pronominals, their referents, and elided third-persons in corresponding syntactic roles have a number of the subject-like properties that have been pointed out in the literature, and these will be enumerated and discussed in the sections that follow.4

1.1 Agentivity (Keenan 1976; Langacker 1991)

Very typically across languages, subjects, particularly in transitive constructions, tend to be agents or at the very least initiators of events and actions (see also Hopper & Thompson 1980; Kemmer 1993). This tendency is also an essential element of Dik's (1978) Functional Grammar, which works on the principle of "alignment" between pragmatic, syntactic, and syntactic roles and takes the basic, unmarked mapping between syntax and semantics to be subject to agent. This is an important observation for us here, as in Lushootseed (and perhaps in other Salishan languages—Kemmer 1990) there appears to be a very strong correlation between the semantic role of agent and the syntactic role of subject—so much so that previous grammatical descriptions of the language have substituted the terms "agent" and "patient" for "subject" and "object" with a great deal of success. One place where this practice falls down, however, is with verbs of perception, where the single actant of an intransitive clause (4a) or the role represented by the pronominal element (4b) takes the semantic role more commonly referred to as "experiencer":

\[(4)\]
\[
\begin{align*}
\text{(a) } & \text{u}\text{?}\text{m}\text{+laq} & \text{?} \\
& \text{[stat]}+\text{listen} & 3s \\
& \text{"[he/she] was listening"} \\
\text{(b) } & \text{u}\text{?}\text{a}\text{?} \text{h}\text{+u}\text{?} \text{c} \text{a} \text{d} & \text{?} \\
& \text{[stat]}+\text{hear} & 1s \ 3s \\
& \text{"I hear [it]"} \\
\text{(c) } & \text{u}\text{?}\text{a}\text+m\text{+uu}\text{?}\text{c} & \text{c} \text{a} \text{d} \text{te} \text{h}\text{a}\text{?} \text{t} \text{ub} \text{?} \\
& \text{[stat]}+\text{see}+\text{[appl]} & 1s \ D \text{ good man} \\
& \text{"I am looking at the good man"} \\
\end{align*}
\]

(Bates et al. 1994: 136)

(Bates et al. 1994: 139)

(Bates et al. 1994: 214)

Note also that in such sentences the role of "patient" is not precisely the role that the observed actants are said to take, nor is the role of the subject in (c) exactly the same as that in (a) and (b). In the first two sentences, the emphasis or "profile" (Langacker 1991) of the clause is on the interaction (however passive) of observer and observed, whereas the typical analysis of a sentence such as (c)—given the applicative morphology—would be one of profiling the directing of the observer's attention towards the observed.

One way around this difficulty would be to posit the conflation of the role of agent and experiencer for syntactic purposes or to define a new role which encompasses agents, experiencers, and observers of the type illustrated in (c) above, much as Davis & Saunders (1989) have done for Bella Coola (cf. also Foley & van Valin's 1984 notion of the "macrorole"); however, this solution runs into an additional, more serious, difficulty in sentences formed on bare radicals denoting actions which are typically high on Hopper & Thompson's (1980) scale of semantic transitivity. In these constructions, is it typically the object or patient of the corresponding transitive event which is realized by the pronominal, as in (5):

\[(5)\]
\[
\begin{align*}
\text{(a) } & \text{p\text{?}} \text{upus} & \text{c} \text{a} \text{d} \\
& \text{[pnt]}+\text{be hit by flying object} & 1s \\
& \text{"[I am/was] struck by a flying object"} \\
\end{align*}
\]
In the (a) and (c) sentences the pronominal—representing the only actant of an intransitive clause, and therefore qualifying as a clausal subject (Mel'čuk 1988)—seems to represent the semantic role of goal or patient, while in the transitive clauses in (b) and (d), the same pronominals do correspond to the agent. The same kind of pattern is seen in passives (see, however, Section 1.6 below for a discussion of the term “passive” in Lushootseed, which is far from uncontroversial). In such sentences, an actant realized by a pronominal element (or which has been elided) will typically take the patient rather than the agent role, as in (6):

(6) (a) ?u+tas+ad+dx 3s D whale “they were swallowed by this whale”
   (Hess & Hilbert 1976: 125)
(b) ?u+?ul+dx’?ul axwa+t+ab+ax’ P P whale “the whale swallowed the boy”
   (my sentence)
(c) ?u+?ul+dx’?ul axwa+t+ab+ax’ P P whale “the whale swallowed the boy”
   (my sentence)

Thus, the function of the pronominal elements seems not to be tied absolutely to a given semantic role at all, but instead to a particular syntactic function. A potential solution to this problem is to define the pronominals as a special set of lexical items—or, in the terminology of Hess (1993), “cad”-words—and then to define the syntactic behaviour of the set in essentially the manner illustrated above, based on the association between these items and the varying semantic roles they play in with given verbs and in certain voices. Such an approach is, of course, completely adequate from a descriptive point of view—however, it misses not only the syntactic parallels between sentences with agents expressed as “cad”-words and those with elided third-person agents, but it also begs the question of the nature of the “cad”-words in the lexicon and whether or not they have a syntactic status comparable to similar elements in other languages and/or recognizable cross-linguistic functional parallels. In addition, a number of researchers have commented on the importance of making a separation between semantic and syntactic aspects of a sentence and of distinguishing clearly the basic units of the two “modules” or “levels” of the grammar—see in particular Dik (1978), Givón (1984), Mel’čuk (1988), Hudson (1990), Pollard & Sag (1994) (see also Mel’čuk 1988 and Bavin 1980 on the pitfalls of using semantic roles to establish syntactic categories)—and from a theoretical point of view it seems preferable to try to account for the behaviour of a category which seems to be definable on morphosyntactic rather than semantic grounds in terms of a syntactic category—such as that of subject.

1.2 Relativizability (Keenan 1976; Keenan & Comrie 1977; Mel’čuk 1988)

Across languages, syntactic subjects are a legitimate target for the formation of relative clauses, direct questions, negatives, etc., and are, in fact, the first target of these processes in most, if not all, languages, in that they occupy the top of the Accessibility Hierarchy (Keenan & Comrie 1977) which states that if only one syntactic role is accessible to relativization and related processes, it will be the subject. In Lushootseed sentences with first- or second-person subjects and third-person objects, relative clauses (RCs) can be formed quite comfortably on objects, but in sentences with third-person subjects and third-person objects, only the subject itself may be relativized, as in (7):

(7) (a) ?u+tas+ad+dx 3s P D boy “we saw the boy [that] hit the man”
   (Hess & Hilbert 1976: 125)
(b) ?u+tas+ad+dx 3s P D boy “we saw the boy [that] hit the man”
   (Hess & Hilbert 1976: 125)
(c) ?u+tas+ad+dx 3s P D boy “we saw the boy [that] hit the man”
   (Hess & Hilbert 1976: 125)

Where English would make use of an object-centred RC, Lushootseed uses a passive construction in the embedded clause, thereby avoiding the object-centred form, as in

(8) ?u+tas+ad+dx 3s P D boy “[I see the dog [that] the boy hit with a club”
   (lit. “I see the dog [that] was hit with a club by the boy”).
   (Hess & Hilbert 1976: 124)

The passivization of the lower clause allows the formation of a subject-centred—rather than an object-centred—RC. This is most likely a pragmatic constraint on the language, as there is no direct means other than the passive for marking the syntactic role of both of two third-person actants in a clause and so, if object-centred forms were allowed, they would be identical to subject-centred RCs in which the roles of the actants were reversed (that is, if ti sq”obay? ?ul+ax+’ad+dx?ti?ul axwa could mean either “the dog that the boy hit” or “the dog that hit the boy”—cf. (7b) and (c) above). What this means in terms of the analysis here is that in clauses such as the embedded RC in (7b).
above, the elided third-person participant that surfaces in the matrix clause as the head of the RC—ti ākas “the boy”—should be analyzed as the (elided) subject of the subordinate clause. To do otherwise—that is, to posit that the overt NP in the embedded clause, tiʔʔ stūb “this man”, is the subject and the “extracted” NP is the object (or some other lower rung on the hierarchy)—would be to occasion a violation of the Accessibility Hierarchy in that objects would be relativizable while subjects would not be. Given the robustness of the Accessibility Hierarchy in language after language, it seems preferable to opt for the analysis of the head of the RC in (7b) as a subject which has been elided in the embedded clause, much as subjects are elided in subject-centred RCs in English (e.g. “we saw the boy that he hit the man”).

1.3 Subject of participles (Langacker 1991; Taylor 1994)

When a clause undergoes nominalization to form a gerund or participle, the subject in many languages is realized in the role of possessor. This is true for Lushootseed, which uses nominalized clauses corresponding to English participles to realize oblique-centred relative clauses and to form complex NPs from finite clauses (Beck 1995), and in each case the participant realized as a pronominal in a non-nominalized clause surfaces as a possessor when that clause is nominalized. Consider (9) (the relevant participle/verb is underlined):

(9) (a) ʔaʔaʔaʔa D ʔaʔaʔaʔa ʔaʔaʔaʔa ʔaʔaʔaʔa?
only worthless D 1po+np+give
“what I give [to him] is only junk”
(lit. “my given [to him] [is] only junk”)

(b) ʔaʔaʔaʔa D ʔaʔaʔaʔa ʔaʔaʔaʔa ʔaʔaʔaʔa?
only worthless D 1po+np+give 3s D dog
“I gave the dog to the boy”

(c) ʔaʔaʔaʔa D ʔaʔaʔaʔa ʔaʔaʔaʔa ʔaʔaʔaʔa?
only worthless D 1po+np+give+3po D stone
“what he gives to Stone is only junk”
(lit. “his given to Stone [is] only junk”)

(d) ʔaʔaʔaʔa D ʔaʔaʔaʔa ʔaʔaʔaʔa ʔaʔaʔaʔa?
only worthless D 1po+np+give+3po D dog
“The/She gave the dog to the boy”

In the sentence in (a) the possessor of the participle sʔabyid “giving” is represented by a first-person possessive pronoun (d) and corresponds to the participant represented by the pronominal in (b); similarly, the third-person possessor in (c) corresponds to the elided (a) actant in (d), indicating that it is likely this elided actant rather than the overt NP ti ākas “the boy” that is the subject of the clause. When the subject of a participle is an overt third-person NP, it also surfaces as a possessor, as in (10):

(10) ʔaʔaʔaʔa D ʔaʔaʔaʔa ʔaʔaʔaʔa ʔaʔaʔaʔa?
only worthless D 1po+np+give 3s D dog
“[he/she] gave the gathering of his relatives by the big stone”

Here, the subject of the participial clause sʔabyid “gathering” is tiʔʔ stūb “his relatives” which is realized as a possessor, marked by the preposition ʔa. Compare this to the corresponding finite clause “sʔabyid” tiʔʔ stūb “his relatives are gathered”, in which the subject is not set off by a preposition, or “sʔabyid” we “we are gathered”, in which the pronominal occupies the same syntactic slot and takes the semantic role of tiʔʔ stūb in the two preceding sentences. Thus, it appears that whatever participant in the sentence corresponds to the pronominal will be realized in participles as a possessor—and is an excellent candidate for subjecthood.

1.4 Control of reflexivization (Mel’cuk 1988)

Cross-linguistically, Mel’cuk (1988) observes that the subject is the actor in a reflexive verb. This is true in Lushootseed for the participant-role represented by the pronominals, as in (11):

(11) (a) ʔaʔaʔaʔa ʔaʔaʔaʔa ʔaʔaʔaʔa ʔaʔaʔaʔa?
“we feed ourselves”

(b) ʔaʔaʔaʔa ʔaʔaʔaʔa ʔaʔaʔaʔa ʔaʔaʔaʔa?
“we feed myself”

(c) ʔaʔaʔaʔa ʔaʔaʔaʔa ʔaʔaʔaʔa ʔaʔaʔaʔa?
“we fed our relatives”

(d) ʔaʔaʔaʔa ʔaʔaʔaʔa ʔaʔaʔaʔa ʔaʔaʔaʔa?
“he/she hugged himself/herself”

In the (b) and (d) sentences, the pronominal/elided third-person participant seem to correspond to the actor/agent in the (a) and (c) sentences. While it might be possible to interpret the elided NP in (d) (or the pronominal in (b)) as referring to the semantic patient/syntactic object of the action, this seems unlikely, particularly given the appearance of the reflexive element, which behaves much like the object/patient suffix -s “me” in (a). As Kemmer (1993) notes, reflexives across languages tend to follow the pattern of the prototypical transitive event in which a subject/initiator is construed as acting on a patient/endpoint that is represented by a reflexive element indicating the identity of this endpoint with the initiator itself. Under this analysis, the reflexive suffix would in fact be a member of the object/patient suffix paradigm and the pronominals/elided NPs in (b) and (d) would then be analyzable only as agents/subjects.
1.5 Pronominals and conjoinability (Keenan 1976)

Across languages, subjects are generally realizable as morphologically independent pronouns and, according to Keenan (1976), if a language has a single set of such elements particular to a given syntactic role, this role will be that of subject. The Lushootseed pronominals or čad-words fit into this category quite nicely, being morphologically independent wordforms (clitics), which are not bound to a particular lexical element in the clause but appear obligatorily in sentence-second position:

(12) (a) ʔas+laqil čad
    [stat]+late 1s
    "I am late"

(b) ʔas+laqil čad
    indeed+now 1s very [stat]+late
    "indeed, I am very late"

(c) tulʔal čad sqajat
    P 1s Skagit
    "I’m from Skagit"

In the sentence in (a), the pronominal appears in its “normal” position following (and phonologically cliticized to) the verbal predicate of the sentence; in (b), however, the appearance of an adverbial particle in the clause triggers the “fronting” of the pronominal to immediately follow that particle. Note that the pronominal follows only the first adverbial and will precede any additional particles, occupying second-second (Wackernagel’s) position. The sentence in (c) illustrates this non-oblique interpretation particularly overriding the requirements of continuous constituency.

Another property of subject pronominals that Keenan points to is their ability to be conjoined with full NPs, as in (13):

(13) lə+ʔiəs čad ʔi tsa mali
    [prog]+walk 1p and D Mary
    "Mary and I are walking"

Object pronominals, on the other hand, are suffixes and may not be conjoined, conjunction of objects requiring their overt expression.

1.6 Passivization (Keenan 1976; Mećuč 1993)

The syntactic subject is widely recognized to be the syntactic actant that is “demoted” to an oblique role via passivization, the “promoted” actant becoming the subject of the new sentence. In Lushootseed the passive is formed by the combination of an applicative or any causative with the middle suffix -b, as in:

(14) (a) ʔas+ʔiə+dx’
    čad tsi časas
    [pnt]+find+[l.o.c.]+[md] 1s Df child
    "I found the girl"

(b) ʔu+ʔiə+du+b
    čad ʔa ti časas
    [pnt]+find+[l.o.c.]+[md] P D child
    "the boy found me"5

(Hess 1993: 24)

(Hess 1993: 34)

In (a), the subject pronominal čad corresponds to the semantic role of agent, yet in (b) the pronominal represents the goal of the action, the agent/subject of (a) having been demoted to a peripheral role in the sentence. However, Hess (personal communication) does not accept the term “passive”, particularly in the third person, as in example such as (15):

(15) (a) ʔu+ʔiə+dx’
    ʔa ti sq”abay
    [pnt]+find+[l.o.c.]+[md] 1s D dog
    "she found the dog"

(b) ʔu+ʔiə+du+b
    ʔa ti časas ti sq”abay
    [pnt]+find+[l.o.c.]+[md] P D child D dog
    "the boy found the dog"

(Hess 1993: 29)

Here the unrealized (elided) actant in (a) surfaces in the oblique position in (b) and the overt NP appears to undergo no change in syntactic role. Under the analysis here, however, these sentences do show a standard passive permutation in that the subject of the sentence in (a) is taken to be an elided NP corresponding to the pronominal in (14a), whereas the subject of the sentence in (b) is taken to be the single (and only possible) non-oblique NP, its sq”abax offering the goal, note that the presence of this non-oblique NP in the clause also excludes the presence of a pronominal (ruling out its interpretation as an object as in the active sentence). This conforms to the definition of the passive voice of Mećuč (1993) as an inflectional category which involves the permutation of the grammatical role of subject with that of one other participant in the clause (usually the direct object).

Hess’s objections to the analysis of the sentence in (15b) as a passive come largely from the absence of an overt element in (a) which can be analyzed as having undergone demotion in (b). While some evidence for the “presence” of an elided subject in the syntax of other portions of this paper, some specific support for the term “passive” (and the consequent existence of an elided subject) can be found by contrasting passives with the corresponding intransitive and middle forms as in (16):

5Note that the pragmatic uses and thematic structure of the Lushootseed passive are completely different from those of its English counterpart (hence the active glosses); in discourse terms, the Lushootseed passive may fall into the functional category of “inverse” (Thompson 1989; Given 1994). Jacobs (1994) offers such an analysis for the corresponding voice in Squamish based on statistical studies of topicality properties; it remains to be seen what the results of applying this method to Lushootseed would be.
In the profile of the event. Consider the sentences in (17):

(16) (a) ?u+g"a?+s\_sab 
\(\text{ti } \text{?a+s } \text{ti } \text{squiladit}\)
\([\text{pnt}]+\text{look-for+[md]} \ D \text{ boy } D \text{ guardian-spirit}\)
"the boy looked for a guardian spirit"

(b) ?u+g"a?+t\_+sab 
\(\text{ti } \text{?a+s } \text{ti } \text{sq"abay}\?)
\([\text{pnt}]+\text{look-for-[caus+][md]} \ P \text{ boy } D \text{ dog}\)
"the boy looked for the dog"

(lit. "the dog was looked for by the boy")

(c) ?u+?ulax 
\(\text{ti } \text{lu}X \text{ ti } \text{bosq}")
\([\text{pnt}]+\text{forage } D \text{ old } P \text{ D crab}\)
"the old man foraged for crab"

(d) ?u+?ulax+t\_+sab 
\(\text{ti } \text{lu}X \text{ ti } \text{h}ad\)
\([\text{pnt}]+\text{forage+[caus+][md]} \ P \text{ D old } D \text{ firewood}\)
"the old man kept the wood [that he had found]"

(lit. "the wood [that he had found] was kept by the old man")

(Hess 1993: 38)

In these sentences, the actors—the runner in (17a) and the perceiver in (b)—are not named, yet they are, in context, quite unambiguous; this means, in effect, that the missing participants are still included in the event-profile and so have been elided rather than deleted. Thus, even though the syntactic subject is not realized overtly in the clause, its identity is recoverable from discourse by dint of the fact that the subject seems to be almost invariably the discourse topic.

The highly topical nature of subjects is a well-known and well-documented property across languages (Keenan 1976; Givon 1979; Li & Thompson 1979), which may be a result of their origin (in at least some languages) via grammaticalization from topics (Givon 1979). Langacker (1991) treats a topic as an entity which acts as a primary figure for a stretch of discourse with reference to which clausal participants are identified; cross-linguistically, discourse topics may be clausal participants themselves—most commonly subjects (Givon 1979; Li & Thompson 1976)—but they may also be non-participants and serve as a more general reference-point to which the clause as a whole is related. Lushootseed seems to have a pragmatic constraint that requires the discourse topic to be both a clausal participant and to be identified with the clausal subject. Consider once again the example from (17b). Here, as noted above, the subject of the sentence is in context quite unambiguous as the sentence occurs in a stretch of discourse in which the topic has been identified as "Bear". Once established as the discourse topic, Bear is held in the minds of the speaker and the listener as a reference-point for identifying the primary clausal figure, and hence the syntactic subject, for subsequent text, although its overt expression in active transitive clauses is ruled out by the constraint against two overt NPs mentioned above. This results in a pattern in which the primary figure in discourse is often the one which receives the least overt expression, a pattern not unlike that found in more familiar null-subject languages like Chinese (Li & Thompson 1979), where the topical subject is often left unrealized, to be filled in by context.

Because of the importance of the requirement for subject to equal topic in recovering the identity of elided actants, Lushootseed has (or had) a special morphological marker in clauses that violate the subject = topic constraint. This marker seems closely related to one of Keenan's (1976) diagnostics for subjecthood, that of switch reference, wherein changes of subject in discourse often trigger the use of grammatical "switch reference" markers. In conservative Lushootseed style, the suffix -ag"a” is added to a verb whose subject does not correspond to the discourse topic (Kinkade 1990). Consider the fragment of text in (18):

(17) (a) ?u+talawit+s 
\(\emptyset \text{ ti sqig}"ac\)
\([\text{pnt}]+\text{run+appl]} \ 3s D \text{ deer}\)
"[the/she] ran after the deer"

(b) ?u+?ulat+s 
\(\emptyset \text{ ti } \text{sq"aladi}\)
\([\text{pnt}]+\text{see+appl]} \ 3s D \text{ berry}\)
"[the bear] looked at the berry"

(Hess 1993: 153, line 25)

In these sentences, the actors—the deeds of (17a) and the perceiver in (b)—are not named, yet they are, in context, quite unambiguous; this means, in effect, that the missing participants are still included in the event-profile and so have been elided rather than deleted. Thus, even though the syntactic subject is not realized overtly in the clause, its identity is recoverable from discourse by dint of the fact that the subject seems to be almost invariably the discourse topic.

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(18) (a) ?u+tk"ada+I 
\(\text{ti } \text{pa}s\text{buliva}^2+s\)
\([\text{pnt}]+\text{take+[caus]} D \text{ bobcat-blanket+3po}\)
"[Bobcat] took his bobcat-blanket"
The syntactic subject of a sentence is often identified with the semantic role of agent, where the agent is the entity that performs the action denoted by the verb. In many languages, the syntactic subject is also the referent of the discourse topic, which is the entity that is most prominent in the discourse. In Lushootseed, there seems to be a strong candidate for the syntactic subject, which is the entity that is most prominent in the discourse.

The equation of discourse topic and syntactic subject has other important consequences as well. As noted above, Langacker (1991) defines a topic as an entity that serves as a reference-point against which other clausal participants are identified in a given stretch of discourse; because syntactic subjects are highly topical and generally invariant within a discourse episode, the role of subject may be more or less prominent in the syntax of a given language, and that prominence is often tied in some way to the notion of discourse topic. Lushootseed is a case in point. In this language, as witnessed by Hess’s accurate and incisive descriptive treatments, the syntactic role of subject seems in many ways to be a less central one than it is in a subject-prominent language such as English, the subject role being describable largely in terms of the discourse notion of topic and the semantic role of agent, with both of which it is closely aligned (in the sense of Dik 1978). At the level of the individual clause, the role of syntactic subject is almost interchangeable with the semantic role of agent/experiencer, making Lushootseed what might be described as an “agent” or “initiator-prominent” language; because of the highly topical nature of this role in Salishan discourse in general (Kinkade 1990), in terms of Li & Thompson’s (1976) typology Lushootseed also seems to be a topic-prominent language, although unlike the other such languages classified by Li & Thompson under this heading, Lushootseed seems also to have a strong candidate for syntactic subject.

The role of the deictic—as its name implies—is to point out the location of specific examples or instances of a type in the DI relative to the speaker, usually in spatial terms or by spatial analog (e.g. hypothetical represented as distance). This function is most obvious in verbless sentences such as sq”abays” ti”a” “that [is] a dog”, and sq”abays” ti”a” “that [is] a dog”, as represented in (20):

(19) **Domain of Instantiation**: the mental map on which items in discourse are located by the speaker and identified with things that are known, can be seen, or are supposed to exist by the hearer

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(20) **Deixis**: Location of types in the domain of instantiation

![Diagram of Deixis Location in the Domain of Instantiation](image-url)
The diagram here shows the equation (dotted curve) of an abstract or generic type—"dog"—representing the class of all dogs—to a particular instance of that type which has already been located in the DI (that is, the speaker and hearer have identified that instance as a specific dog they know or can see). Linking the type specification "dog" to a pronominal deictic establishes its identity as a specific dog by establishing its location in the DI and the deictic thus serves as a reference-point for identifying a particular instance of a type specification. Where (a) and (b) differ is in the relative spatial locations of the type's instantiation (the dog in question) to the speaker (S); (a) pointing to a particular dog near the speaker and (b) pointing to one farther away.

In discourse terms, the function of a deictic is often to link topical, given, or thematic information to new or rhematic information—thus a deictic element may serve as a reference-point or anchor in the DI to which newer information can be attached and incorporated into the structure of the discourse episode. In Lushootseed sentences such as those illustrated in (20), this pattern is made overt in the syntax by a requirement that rhematic information be encoded in the syntactic predicate of the clause and that topical, thematic information be encoded as the syntactic subject (Beck 1996); this requirement is active not only in copular constructions like those in (20), but applies to all other sentence types as well, the least remarkable case (from a cross-linguistic perspective) being that of a "narratively-focused" sentence in which a new, rhematic event—represented by a verbal predicate—is linked to a topical subject (as, for example, in (17) above). Just as new participants must be identified with elements in the DI—that is, the type specification of a new participant must be "grounded" or identified with some known entity so that its identity is accessible to the hearer—new events must also be grounded by being identified with participants which have been previously identified in discourse. And, because subjects in Lushootseed are almost invariably topical, it is the syntactic subject of a clause which is most often used to identify a given instance of an event in discourse.

This deictic property of subjects is the basis of the most fundamental pattern of Lushootseed narrative, illustrated by the following passage from the opening of "bibş̣abəʔ ʔi ṭəʔi suʔsuqəʔaʔs, tatyika" ("Little Mink and his younger cousin, Tetyika"), as told by Mr. Edward Sam:

(21) (a) ṭəʔi bibṣ̌abəʔ ʔi ṭəʔi suʔsuqəʔaʔs, tatyika, D [rdp]+mink and D younger-cousin+3po Tetyika

"I will tell you about [is] Little Mink and his younger cousin, Tetyika"

(b) huy, ʔu+ṭəʔi dahabəʔ ṭəʔi bibṣ̌abəʔ ʔi ṭəʔi suʔsuqəʔaʔs, tatyika [intj] [prt]+troll D [rdp]+mink and D younger-cousin Tetyika

"well then, Little Mink and his younger cousin, Tetyika, trolled for fish"

(c) ʔu+ṭəʔi dahabəʔ algəʔaʔ [prt]+troll [plural]

"[they] trolled for fish"s

Here the speaker makes use of a strategy of grounding rhematic information in thematic material that he has previously located for the speaker in the DI—specifically, a topical participant (or participants) which acts as the syntactic subject, although this participant is often elided. Because any discourse episode requires a topic, the story begins with a topic-setting structure (Pu & Prideaux 1994)—in this case, a nominally-provided sentence, (21a), that identifies the topical element to which subsequent text is linked in discourse. This is shown in (22):7

(22) Sentences (a) and (c)

<table>
<thead>
<tr>
<th>Type Specification</th>
<th>Domain of Instantiation</th>
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</thead>
<tbody>
<tr>
<td>&quot;bibṣ̌abəʔ &quot;Little Mink&quot;&quot;</td>
<td>Presently belonging to you</td>
</tr>
<tr>
<td>&quot;tayta&quot;</td>
<td>&quot;they&quot;</td>
</tr>
</tbody>
</table>

Here, in technical terms, sentence (a) shows the linking of two type specifications ("my telling to you" and "Little Mink") to two instances (the deictics) that are identified with another one, the rhematic landmark (lm) becoming a discourse topic. The story-telling, a shared activity of the
speaker and interlocutor, is considered more thematic and realized as the syntactic subject of the sentence whereas "Little Mink and his cousin" is rhematic, and therefore implemented as sentence predicate; as a topic-setting structure. (a) establishes its rhyme—"Little Mink and his cousin"—as discourse topic and this becomes the reference-point in discourse-space on which all new information in the episode is grounded. The storyteller then links the established topic to the narrative overtly by using it as the subject of sentence (b), thereby grounding the first event in the story, Little Mink and his cousin's going fishing, and identifying the type of event ("trolling") to a specific instance of that event-type ("Little Mink and his cousin's trolling"). In line (c), the sentence is repeated with an elided subject, as illustrated in the second part of (22) above.

Next, in sentence (d), a new participant, Whale, is introduced, but the discourse topic is still "Little Mink and his cousin", which remains syntactic subject of the sentence: thus, the event—the sighting of Whale—is still grounded relative to Little Mink, as in (23):

(23) Sentence (d)

(Once again due to considerations of graphic presentation, the diagram has been simplified and does not include the instantiation of "whale" by its deictic. The next sentence, (e), contains no overt actants and relies on the fact that both "Little Mink and his cousin" and "whale" have been previously located in the DI to ground the new, rhematic information in the clause, the (transitive) event *bapad* ['s.o.] annoyed ['s.o.']. The primary grounding function for this stretch of discourse, however, still remains with the topical "Little Mink and his cousin" which is still the syntactic subject of the clause; a further indication of this may be the storyteller's feeling that a repetition of (e) is in order in (f), which makes overt the less topical participant, "whale". "Whale" also surfaces in overt form in (g) and (h), where new events are introduced, the event in each case being grounded in discourse by the elided subject, "Little Mink and his cousin". Note that in these sentences, "Whale" surfaces as an oblique (passive agent) while "Little Mink and his cousin" remain syntactic subject, the passive preserving topic continuity.

Sentence (i) signals a change in topic with a marked structure—a sentence whose predicate is "three days", the length of time that Little Mink and his cousin spent in the belly of the whale—and initiates a new discourse episode, as in (24) The information encoded in the DI in the previous episode is still active in (i), conferring thematic status on the subject—presupposed material based on the information in (h) (if Little Mink and his cousin were swallowed by Whale, they must have been inside him). In this particular story, "three days" is replaced in the following line by yet another topic, Little Mink himself (who manages to trick Whale and kill him), "three days" being a rather limited area of discussion. The dynamics of topic-shifting await more detailed investigation, but the principle motivation for it seems to be the subject-topic relation and the inherently deictic nature of subjects in Lushootseed discourse.

Interestingly, the use of subjects as discourse-deictic elements that serve to link new events and participants to already established, topical material is highly reminiscent of a model of language comprehension proposed by Gernsbacher (1990). Using data from experiments measuring the time required to process linguistic input in English, Gernsbacher develops a three-phase model of how incoming linguistic information is organized into conceptual structures. The first phase in the process is termed "laying a foundation" and corresponds to the stage where the listener is processing completely new information (that is, information which contains no established discourse topic); information processing is slower in this phase, but once an appropriate foundation for the communication has been laid, subsequent information can be anchored to that foundation and is processed more rapidly. This is the "mapping" stage. Finally, when the structure is complete, the process of "shifting" occurs and a new topic is introduced, laying the foundation for a new discourse structure. These three stages seem to correspond very nicely to the pattern observed in (21), where the storyteller begins with a topic-marking structure to identify the figure on which the discourse is to be grounded (lays a foundation), narrows the next sequence of events with respect to that figure (maps the events onto the foundation), and then makes use of a second topic-shifting structure to signal the end of that particular episode (shifts to a new structure). Because of the rather transparent deictic nature of verbless sentences in establishing a direct identity between type and instantiation, they seem ideal candidates for the foundation-laying process. Making use of this structure in (21a), the storyteller establishes Little Mink and his cousin as discourse topics and then maintains them as topical, non-overt subjects, introducing new events and participants while at the same time keeping the narrative firmly grounded on the communicative foundation he has set up, a foundation to which every sentence is linked both semantically (via the type-instantiation pattern illustrated in (22) and (23)) and grammatically (via the use of "Little Mink and his cousin" as the elided subject). While it is not always easy to establish clear connections between syntactic and psycholinguistic research, the parallels here are suggestive and certainly merit further investigation.

3 Conclusion

All in all, then, it seems that there is some motivation for the use of the term "subject" in Lushootseed. While it is certainly true that there is an unusually close "fit" between the semantic structure of an utterance and the syntactic role that each participant in an event is assigned by the grammar, this fit is not one-hundred percent and so the invocation of a syntactic category—how-
ever frequently the reference of this category corresponds to a given semantic role—seems justified. Even if this were not the case, the use of "subject" and "object" is highly desirable from a typological perspective, in that it allows closer comparison of the grammatical processes of Lushootseed with those of languages in which syntactic categories are perhaps not so closely aligned with the semantic roles they prototypically represent. The notion of subject seems also to be intimately linked to the organization of discourse, and the syntactic subject has an important function as a deictic element in narrative, serving to identify particular instances of an event type by linking that type to a topical participant which, by dint of being the most salient participant in the event, is realized syntactically as subject.

An interesting corollary of this notion of the subject as a discourse-deictic is the obvious similarity this function has to that of possessor which, in Cognitive Grammar, is analyzed as a deictic means of identifying one entity by reference to another, as in (25).

(25) Reference-point model of possession

![Diagram of Reference-Point Model](https://example.com/diagram.png)

(based on Langacker 1991: 171)

According to Langacker (1991), possession does not always mean "ownership", but signals an association of the possessed with the possessor wherein the possessor is seen as a sort of an index or pointer (a "reference-point") which is used to identify one specific referent among several possible referents of the same class or type. Under this type of analysis, the possessed is analyzed as lying within the "dominion" of the possessor—that is, as being in that set of entities that can be identified by their (usually unique) association with the possessor, and so the possessor is taken to perform an essentially deictic function in locating a specific instance of the possessed.

Parallels between subject and possessor have been drawn in a number of theoretical frameworks, ranging from the analogous structural positions assigned to subject (SPEC of TP or IP) and possessor (SPEC of DP) in North American generativist paradigms to the common designation of subjects and possessors as the first deep-syntactic actants of both nouns and verbs in Meaning-Text Theory (Mel'čuk 1988). While some of the motivation for these parallels is theory-specific and theory-internal, some of it is based on certain well-known cross-linguistic morphosyntactic similarities between possessors and subjects. The homophony of possessive and subject-pronominal paradigms, for instance, is not typologically unusual—and is attested in Mandinka, Bella Coola, and historically in Altai (Basakov 1971), to name but a few examples. As noted above, in many languages—including Lushootseed—the subject of non-finite participial or gerund clauses is expressed as a possessor, as in the examples in (9) above and the Tatar sentence in (26) on the following page. Under Langacker's reference-point analysis of possessive constructions, the possessors in these examples serve as reference points, not for objects, but for reified events that are realized in the syntax as nominals. Because of their relatively high saliency, subjects—as we have seen for Lushootseed—also serve as reference-points for events and so it is not surprising that

(26) min-em kür-gän-em-ne beli de ¼s+[genitive] see+[past-participle]+1po+[accusative] know+[past]
"he found out that I had seen"

(lit. "he know my having seen")

(Comrie 1981: 82)

the subject is used in the same capacity when the clause is nominalized, giving us a contrast between deixis of reified and non-reified events: ordinary verbal expressions of events are located in the DI by the location of their syntactic subjects, while the same events when nominalized are—like nouns—located relative to the location of their possessors.

A similar observation is made for the subjects of English deverbal nouns by Taylor (1994), who argues that whether the possessor of a deverbal noun in English is identified with the subject or with the object of the verb from which it is derived depends on which of the corresponding event-participants can be most effectively utilized to identify the particular instance of the event designated by the nominal. Thus, "Harry" in "Harry's love" is used to single out a particular instance of "love" for the hearer's attention—that instance of "love" of which Harry is the protagonist—whereas "Harry's fright" directs the hearer towards an event in which Harry is frightened by some other entity and is assigned a semantic role which the verb "frighten" realizes as a syntactic object. While some deverbals (like "love") select for readings of possessors as subjects and others ("fright") select for possessors as objects, many deverbals seem to allow for either interpretation, depending on the argument's "topicality" and its "informativity", the precision with which it allows the hearer to pin-point a specific event of the type represented by the noun in a given context. The details of Taylor's argument are not directly relevant to the issue of Lushootseed participles, in which the possessor always refers to the clausal subject, but nonetheless these two criteria do seem to offer an explanation of why it is that participles—which retain more of their pronominal properties than other deverbals—realize their subjects as possessors. In terms of topicality, as we have already seen, subjects in Lushootseed are almost invariably more topical than objects, whereas on a scale of informativity it seems likely that subjects will be rated highly by dint of their use as discourse-deictics. Indeed, Taylor's definition of informativity, when translated into spatial metaphor, seems to be precisely a measure of a participant's usefulness as a deictic: identifying a particular instance of an event type means locating that event in the DI relative to the speaker, something which we have already seen to be an important function of subjects in Lushootseed discourse. What is particularly interesting is that the data presented here seems to extend Taylor's analysis of deverbal nouns beyond event the level of the participle, to that of the finite clause, and thus offers a cognitive explanation of the morphosyntactic overlaps observed cross-linguistically between subject and possessor, and between subject and topic—illustrating once again the importance of recognizing the category of "subject" in Lushootseed as a benchmark for analysis of discourse and cross-linguistic comparison.

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List of Abbreviations

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<td>1</td>
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<td>l.o.c.</td>
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References


