

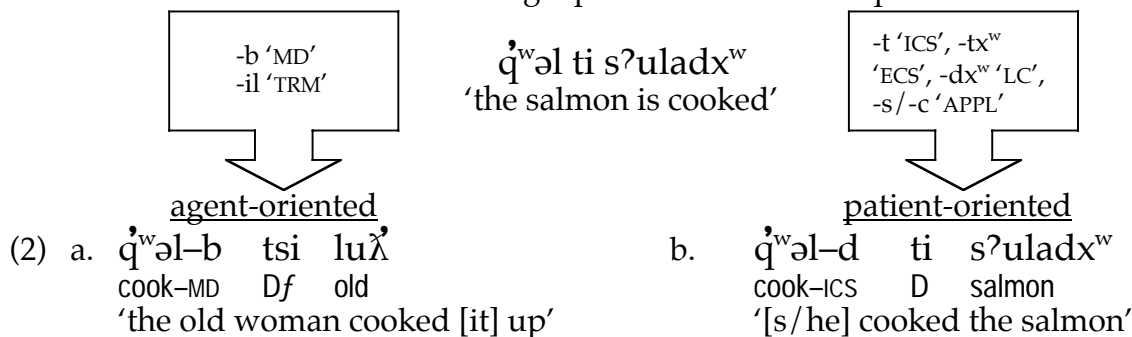
Semantic agents, syntactic subjects, and discourse topics: How to locate Lushootseed sentences in space and time.

1) The structure of Lushootseed clauses

Like most Salishan languages, Lushootseed has (almost) no transitive verb roots. Even events which are high on the scale of semantic transitivity (Hopper & Thompson 1980) are expressed by derived verbs built on intransitive roots, as in (1):

- (1) a. ʔu-pus čəd
 PNT-be:hit:by:flying:object 1SG
 'I [am/was] struck (by a flying object)'
- b. ʔu-pusu-d čəd
 PNT-be:hit:by:flying:object-ICS 1SG
 'I pelted [him/her]'
- c. ʔu-pusu-dx^w čəd
 PNT-be:hit:by:flying:object-LC 1SG
 'I accidentally pelted [him/her]'

Suffixes that affect the verb's valency fall into two classes—*agent-oriented* and *patient-oriented*, based on the semantic role of the single permissible non-oblique NP or *direct complement*:



(2a) is intransitive and can take an oblique complement in a PP, as in (3a); (2b) appears to be intransitive in that it can not have an overt NP expressing an agent, as shown in (3b):

- (3) a. $\text{q}^w\text{əl-b tsi luλ ʔə ti sʔuladx}^w$ b. $\text{*q}^w\text{əl-d tsi luλ } \emptyset / \text{ʔə ti sʔuladx}^w$
 cook-MD Df old PR D salmon cook-ICS Df old D salmon
 'the old woman cooked up the salmon'

If the agent is 1st or 2nd person, however, then both the agent and the patient are expressible:

- (4) a. $\text{q}^w\text{əl-b čəd ʔə ti sʔuladx}^w$ b. $\text{q}^w\text{əl-d čəd ti sʔuladx}^w$
 cook-MD 1SG PR D salmon cook-ICS 1SG D salmon
 'I cooked up the salmon' 'I cooked the salmon'

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Thus, in the third person Lushootseed appears to lack morphosyntactically transitive clauses—*i.e.* clauses with two non-oblique NP-actants or pronominal actants.

- because the roles of NPs can be defined in terms of the *semantic* roles assigned by valency-increasing (and other) suffixes, it is not clear that sentences need to be described in terms of having a *syntactic* subject
- the standard works on Lushootseed (*e.g.* Hess 1993) avoid the syntactic term “subject” in favour of the semantic terms “agent” and “patient”

While this meets the criterion of language-specific descriptive adequacy, as witnessed by the incisive work of Hess (1976, 1993, 1998), it embodies a strong theoretical claim in that

- syntactic subject is an important concept in most theoretical models
- subjects are major benchmarks for discourse-analysis and cross-linguistic comparison

Thus, any claim for a subjectless language merits close attention.

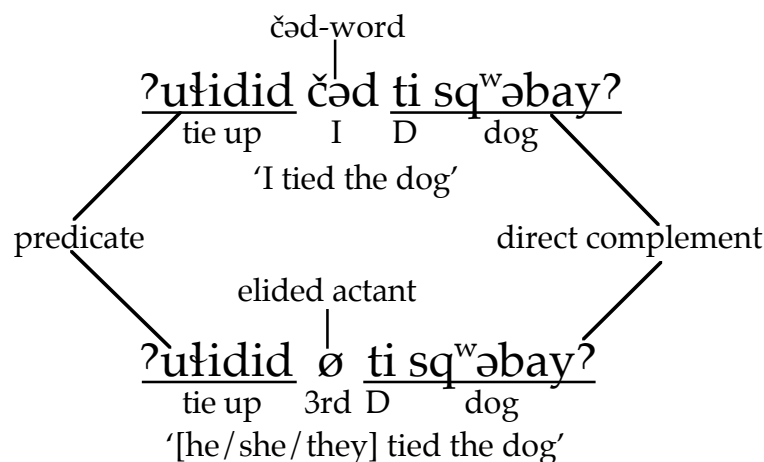
2) Subject properties of actants

The patient-oriented clause in (2b) looks intransitive in that it has and can only have one syntactic actant. Semantically, however, it is highly transitive and implies the action of a (contextually-specified) agent.

- Hess himself (1993: 11) suggests that students of Lushootseed imagine the presence of a fictitious third-person pronoun (čəs) in patient-oriented sentences like that in (5)

From this perspective, (2b) seems analyzable as having a \emptyset third-person that corresponds to the pronominal clitic (čəd-word) in (4b), as in (5):

(5) Alternative structure of patient-oriented clauses



As it turns out, this “fictitious” pronominal has some very real syntactic effects. Agents in patient-oriented clauses, whether čəd-words or \emptyset , share cross-linguistically typical subject-properties which distinguish them from direct complements.

2.1) Agentivity (Keenan 1976; Langacker 1991)

The subject of a transitive clause is typically the agent or initiator of the event designated by the verb, while the patient is typically the direct object.

- the čəd-word is always the agent/initiator of a patient-oriented clause (POC)
- in POCs with no čəd-word, the direct complement is always interpreted as the patient

- (6) a. $\dot{t}u\dot{c}u-d \quad \check{c}\acute{a}d \quad t\grave{a} \quad sqiq^w\acute{a}c$
 shot-ICS 1SG D deer
 'I shot the deer'
- b. $\dot{t}u\dot{c}u-d \quad \emptyset \quad t\grave{a} \quad sqiq^w\acute{a}c$
 'he/she/they shot the deer'
*but, *'Deer shot him/her/it/them'*

- semantically, POCs always have a definite agentive (\emptyset) event-participant

2.2) Relativizability (Keenan 1976; Keenan & Comrie 1977; Mel'čuk 1988)

If only one NP in a clause is accessible to relativization, it is the syntactic subject:

- in Lushootseed, direct complements of POCs are generally relativizable only if the agent is a first- or second-person
- relativizations of POCs with two NP actants are interpreted as agent-centred (7b)

- (7) a. $ti \quad \check{c}\acute{a}\check{c}as \quad ?u-t\grave{a}s-\acute{a}d \quad \check{c}\acute{a}d$
 D boy PNT-be:hit-ICS 1SG
 'the boy that I hit'
- b. $ti \quad \check{c}\acute{a}\check{c}as \quad ?u-t\grave{a}s-\acute{a}d \quad \emptyset \quad ti?i\grave{l} \quad stub\check{s}$
 D boy PNT-be:hit-ICS 3 D man
 'the boy that hit the man'
*but, *'the boy that the man hit'*

- relativization of third-person objects with third-person subjects may actually be permissible in some cases when semantic ambiguity does not result

2.3) Possessor of non-finite clauses (Langacker 1991; Taylor 1994)

In many languages, non-finite clauses may require one of the actants of the corresponding finite clause to be realized as a possessor—this actant is generally the syntactic subject:

- in Lushootseed, *s*-nominalizations of clauses realize the agents of POCs as possessors

- (8) a. $?u-?abyid \quad \check{c}\acute{a}d \quad ti \quad \check{c}\acute{a}\check{c}as$
 PNT-give 1SG D boy
 'I gave sth to the boy'
- b. $ti?a? \quad \underline{d-s-?abyid}$
 D 1PO-NP-give
 'what I give to him'
 (lit. 'my given to him')
- c. $?u-?abyid \quad \emptyset \quad ti \quad \check{c}\acute{a}\check{c}as$
 PNT-give 3 D boy
 '[he/she/they] gave sth to the boy'
- d. $ti?i\grave{l} \quad s-?abyid-\underline{s} \quad ti?i\grave{l} \quad \check{c}\lambda a?$
 D NP-give-3PO D stone
 'what he gives to Stone'
 (lit. 'his given to Stone')

- in (a) and (c) the direct complement is the recipient (direct object), as it is in (d)
- "extraction" of the gift (an oblique object) realizes the giver as the possessor in (b) and (d)

2.4) Control of reflexivization (Mel'čuk 1988)

The controller of a reflexive verb is the syntactic subject:

- all three of čəd-words, zero-pronominals, and direct complements control reflexives

(9) a.	ʔu-q ^w ulu-t-sut	čəd		c.	ʔu-q ^w ulu-t-sut	tsi	čačas
	PNT-hug-ICS-REFL	1SG			PNT-hug-ICS-REFL	Df	girl
	'I hug myself'				'the girl hugged herself'		
b.	ʔu-q ^w ulu-t-sut	∅		d.	ʔu-q ^w ulu-t-s	tsi	čačas
	PNT-hug-ICS-REFL	3			PNT-hug-ICS-1SG:OBJ	Df	girl
	'he/she/they hugged themselves'				'the girl hugs me'		

- in (9c), the direct complement is the semantic agent, a role not normally open to it in POCs
- the direct complement here is the subject, as it is in intransitive clauses (see (14) below)
- the same is true in (9d), where the patient is realized as an object suffix
- ∴ the direct complement can be the subject/agent of a POC if the object is a pronominal

There seems to be a surface constraint against the realization of two non-oblique NPs in a clause; the use of an object suffix allows the patient to be realized without using an NP, leaving a "slot" open for an agentive noun-phrase.

2.5) Passivization (Keenan 1976; Mel'čuk 1993)

A true syntactic passive, by definition, demotes a syntactic subject to an oblique position and promotes an object to subject position (Mel'čuk 1993):

- Lushootseed combines a patient-orienting suffix with the middle *-b* to form passives

(10) a.	ʔu-ʔəy'-dx ^w	čəd	ti	sq ^w əbay?	c.	ʔu-ʔəy'-dx ^w	∅	ti	sq ^w əbay?		
	PNT-find-LC	1SG	D	dog		PNT-find-LC	3	D	dog		
	'I found the dog'					'he/she/they found the dog'					
b.	ʔu-ʔəy'-du-b	čəd	ʔə	ti	sq ^w əbay?	d.	ʔuʔəy'dub	ti	sq ^w əbay?	ʔə	ti?iɬ
	PNT-find-LC-MD	1SG	PR	D	dog		was:found	D	dog	PR	D
	'I was found by the dog'					'the dog was found by this [guy]'					

- the agent of a POC—a čəd-word in (10a) and a zero in (c)—becomes an oblique in (b) & (d)
- in a passive, the čəd-word represents the patient (10b), as does the direct complement (c)

The passive "transformation" is not as obvious in (10), where the syntactic nature of the actant-types (clitics and NPs), prevents the obvious inversion of syntactic roles, seen in (11):

(11) a.	ʔu-g ^w əč-əb	ti	čačas	ʔə	ti	sqəlalitut
	PNT-look:for-MD	D	boy	P	D	guardian:spirit
	'the boy looked for a guardian spirit'					

b. ʔu-g^wəč-t-əb ʔə ti čačas ti sq^wəbay?
 PNT-look:for-ICS-MD P D boy D dog
 ‘the dog was looked for by the boy’

- the subject of the intransitive middle form in (a) becomes an oblique in (b), while the oblique object becomes subject

Analysis of čəd-words and ø third-persons as syntactic subjects allows us to treat these Lushootseed voice alternations as canonical structural passives (although communicatively they serve a rather different function—see Section 3 below).

2.6) Non-deletability, topicality, and switch reference

Subjects across languages are semantically non-deletable from a clause (Mel’čuk 1988) in that they are highly topical (Keenan 1976) and recoverable from discourse:

- both the agents and patients of POCs are non-deletable in context (that is, their identities are semantically present in the clause and recoverable from discourse)
- čəd-words and ø agents are almost always topics of discourse episodes (see below)

Subjects also control referent-tracking processes such as switch-reference (Keenan 1976):

- Lushootseed has a suffix used when subject ≠ discourse topic (Kinkade 1990; Hess 1993)

(12) a. ʔu-k^wəda-d ø tiʔəʔ pəčəb=ulicaʔ-s
 PNT-take-ICS 3 D bobcat=blanket-3PO
 ‘[he (Bobcat)] took his bobcat-blanket’

b. g^wəl ʔal-d ø k^wədiʔ ʔad^zalus
 and be:located-ICS 3 there beautiful
 ‘and [he] put it in a beautiful [place]’

c. g^wəl lə-g^wəd-il ø ʔəx^wčəg^w=us
 and CONT-be:seated-TRM 3 towards:sea=face
 ‘and [he] sat facing the water’

d. diʔił k^wi s-šu-d-əg^wid ʔə tiʔəʔ čačas
 sudden D NOM-see-ICS-NTS P D child
 ‘all of a sudden the boy saw him’
 (lit. ‘the seeing [him] of the boy [was] sudden’)

- the discourse topic and agent in (12a) – (c) is Bobcat, but in (d) the agent (realized as the possessor of the non-finite clause) is “the boy” and so the verb bears the marker *-ag^wid*
- although *-ag^wid* is not strictly speaking switch-reference (Kinkade 1990), it is similar enough in its reference-tracking function to be used as a subject property

Again, čəd-words and ø third-persons have more of the relevant subject-properties than the direct complements of POCs.

2.7) Subject properties and semantic roles

As we saw above, čad-words and ø third-person agents share many cross-linguistically typical subject-properties, while direct complements do not:

(13) Summary of properties for actant types

subject property	čad-word	ø third-person	direct complement
agentivity	✓	✓	
relativizability	✓	✓	✓*
possessor of NFC	✓	✓	
control of reflexives	✓	✓	✓
pronouns	✓	n/a	n/a
passivization	✓	✓	
non-deletability	✓	✓	✓
topicality	✓	✓	
switch reference	✓	✓	

*if agent is not third-person

- čad-words and ø third-persons share most subject-properties
- they also share more of these than do the direct complements
- thus, čad-words and ø third-persons are better candidates for syntactic subject

Under this analysis, we see that intransitive verbs (verbs which do not take a both čad-word and a direct complement) assign the same semantic roles to čad-words, ø third-persons, and direct complements, whereas POCs assign a distinct role to direct complements:

(14) Comparative semantic roles of actant-types for different kinds of clauses

	čad-words	ø third-person	direct complement
bare radical	endpoint	endpoint	endpoint
transmutative	endpoint	endpoint	endpoint
middle	initiator	initiator	initiator
passive	endpoint	endpoint	endpoint
patient-oriented	initiator	initiator	<i>endpoint</i>

- in intransitive clauses, direct complements share the relevant syntactic subject-properties with čad-words and ø third-persons, and so are also analyzable as subjects
- in patient-oriented clauses with object-suffixes like (9d), direct complements do represent an initiator, suggesting that Lushootseed has a surface constraint that “counts” overt NPs

In patient-oriented clauses, direct complements do not behave as subjects and are not marked as oblique, and so are best analyzed as direct objects of transitive clauses.

Given the shared subject properties of čad-words and ø third-person agents, they can be treated as a pronominal subject paradigm in which third-person subjects are contrastive paradigmatic zeros.

3) Properties and functions of subjects in discourse

In narrative, subjects are identified with discourse topics, which serve as “reference-points”, identifying new events by associating them with the location of the subject/topic in discourse space. Story-tellers link new, rhematic information to a thematic, topical participant:

- this participant, the discourse topic, is realized consistently throughout the discourse episode as syntactic subject, irrespective of its semantic role as agent or patient
- subject-continuity is a well-known feature of Salishan discourse (Kinkade 1990)
- episode boundaries are marked by “topic-shifting” structures (Pu & Prideaux 1994) that establish a new reference-point, which then becomes the subject/discourse topic
- episodes are also marked by declination of F0 maxima which form high-level intonational contours for the organization of discourse (Beck & Bennett 1998; Bennett & Beck 1998)

This is illustrated by the episode in (15), the opening of *tiʔiʔ bibščəb ʔi tiʔiʔ suʔsuqɑʔs, tətyika* “Little Mink and his Younger Cousin, Tetyika”. Here the narrator aligns a single syntactic subject (underlined) in (15bff) with the discourse topic, the predicate/rheme (double-underlined) of the topic-shifting structure in (15a):

- (15) a. tiʔiʔ bibščəb ʔi tiʔiʔ suʔsuqɑʔ-s, tətyika, tiʔiʔ ʔu-d-s-yəhub-tu-bicid
 D (RDP)mink and D cousin-3PO Tetyika D IRR-1PO-NP-tell-ECS-2SG:OBJ
 ‘what I will tell you about is Little Mink and his younger cousin, Tetyika’
- b. hay, ʔu-ʔiʔda(hə)b tiʔiʔ bibščəb ʔi tiʔiʔ suʔsuqɑʔ-s, tətyika
 INTJ PNT-troll D (RDP)mink and D cousin Tetyika
 ‘well then, Little Mink and his younger cousin, Tetyika, went trolling’
- c. ʔu-ʔiʔdaab ∅ əlgʷəʔ
 PNT-troll 3 PLURAL
 ‘they went trolling’
- d. huy, ʃu-dxʷ-əxʷ ∅ tiʔiʔ čxʷəluʔ
 INTJ see-LC-now 3 D whale
 ‘well, they caught sight of Whale’
- e. huy, bapa-d-əxʷ ∅ əlgʷəʔ
 INTJ annoyed-ICS-now 3 PLURAL
 ‘well, they annoyed him’
- f. bapa-d-əxʷ ∅ əlgʷəʔ tiʔiʔ čxʷəluʔ
 annoyed-ICS-now 3 PLURAL D whale
 ‘they annoyed that whale’
- g. huy, xʷakʷi-s-əb-əxʷ ∅ ʔə tiʔiʔ čxʷəluʔ
 INTJ sick:of-APPL-MD-now 3 PR D whale
 ‘well, they were gotten sick of by that whale’
- h. huy, bəq̣-t-əb-axʷ ∅ ʔə tiʔiʔ čxʷəluʔ
 INTJ be:in:mouth-ICS-MD-now 3 PR D whale
 ‘well, they were swallowed by that whale’

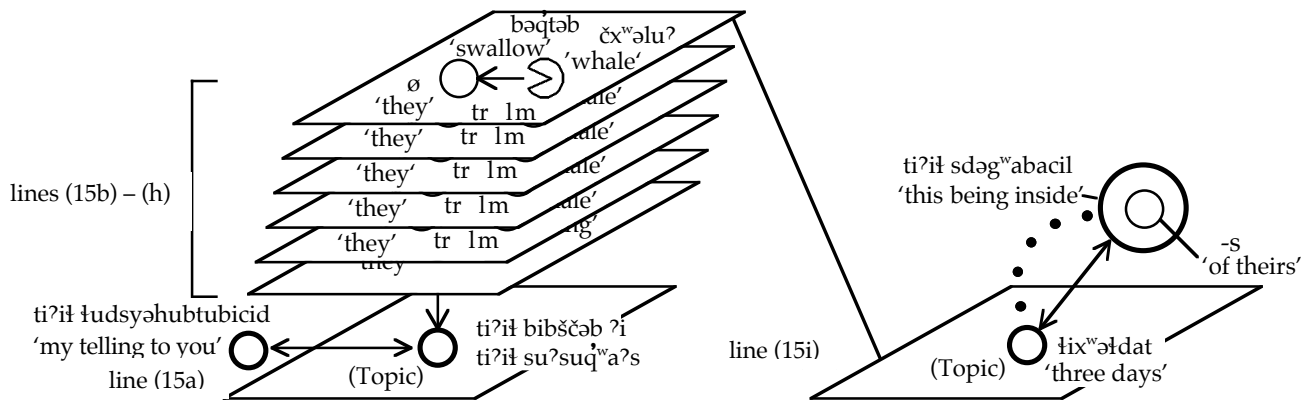
- i. lix^wəɫdat tiʔiɫ s-dəg^wabac-il-əx^w əlg^wə ʔə tiʔiɫ čx^wəluʔ
 three:days D NP-in:small:space-TRM-now PLURAL PR D whale
 'they were inside that whale for three days'
 (lit. 'their being inside that whale was three days')

(Hess 1993: 175 - 6, lines 6 - 13)

- the syntactic subject (15c – h) is consistently elided, obligatorily so in (15d – f)
- the baroque use of the passive in (g) maintains syntactic subject–discourse topic identity
- the verbless sentence in (15i) shifts the narrative to a new topic (double underlined)

This pattern is represented in (16), which shows the “alignment” of events in a connected narrative (15a - h) and subsequent change of episode by establishing a new topic (15i):

(16)



- sentences in an episode (a plane) are aligned with each other by a shared subject—a topical NP (consistently a \emptyset third-person), located in discourse space by (15a) (bottom plane)

This resembles Gernsbacher’s (1990) 3-stage model of language-comprehension:

- the narrator “lays a foundation” by establishing a topic
- new information is linked to the foundation vis à vis the syntactic subject (\emptyset third person)
- new topic creates new structure with its own foundation, marked by topic-shifters (15a, i)

4) Grounding as evidence for zero-subjects

Lushootseed, like other Salish languages, lacks inflectional marking for tense, which can lead to structural ambiguity between finite and non-finite constructions (Beck, to appear):

- (17) a. haʔɫ ʔu-k^wik^wəɫ tiʔəʔ q^wuʔ b. tiʔəʔ haʔɫ ʔu-k^wik^wəɫ q^wuʔ
 good PNT-trickling D water D good PNT-trickling water
 'the water trickles / trickled nicely' 'the nicely trickling water'

- these phrases look similar, but are glossed as finite or non-finite in different syntactic roles
- Davis *et al.* (1997) also note structural ambiguity between modifiers and RCs in Státimcets

Semantically, the finiteness of a clause is associated with the groundedness of an expression—that is, whether the expression is fully located for the hearer in time and space and thus identified as a particular instance of an event (Langacker 1991). In English, finiteness is associated with the marking of tense:

- *John gave Mary money* refers to a specific event at a specific time, in this case (roughly) a discrete point in the past prior to the speech act—thus, the event is temporally grounded
- *John's giving Mary money* is ambiguous as to whether the event has happened, is happening, will happen, might happen, etc.—∴ it is ungrounded (or rather, grounded by the larger expression that contains it)

Finite expressions represent unique grounded instances of events while non-finites are more generic. In Lushootseed, what appear to be non-finite clauses may express grounded events:

- (18) a. $\text{ʔu-la}\check{\text{x}}\text{-dx}^{\text{w}}\text{-}\check{\text{a}}\text{x}^{\text{w}}$ $\text{ti}^{\text{?}}\text{i}\check{\text{l}}$ tu-d-s-huy
 PNT-recall-LC-now D PAST-1PO-NP-do
 'he remembered what I had done'
- b. $\text{ʔ}\check{\text{a}}\text{s-haydx}^{\text{w}}$ $\text{ti}^{\text{?}}\text{i}\check{\text{l}}$ $\check{\lambda}\text{u-s-}\check{\text{a}}\text{-}\text{ʔib}\check{\text{a}}\check{\text{s}}$ $\text{ʔ}\check{\text{a}}$ $\text{ti}^{\text{?}}\text{i}\check{\text{l}}$
 STAT-know D HAB-NP-STAT-travel PR D
 'he knew that that one would be travelling'

(What looks like tense in these examples is aspectual marking of a type applied both to nouns and verbs—cf. *tu-* in (18a) and *ti tusčistx^w* 'her ex-husband (sčistx^w)'; *λu-* in (18b) and *ti λuṭisəd* 'the habitual arrows (ṭisəd)').

In the absence of tense/mood, what seems to ground sentences in Lushootseed is their syntactic subject. This is consistent with findings in Bella Coola (19) and Státimcets (20), where temporal readings of clauses were found to depend on the deictic categories marked on NPs:

Bella Coola

- (19) a. $\text{k}\check{\text{x}}\text{-is}$ $\text{ti-}\text{ʔimlk-tx}$ $\text{ti-stal}\text{tmx-}\check{\text{t}}\text{ayx}$
 see-3SG:3SG $\text{D}_{\text{proximal}}\text{-man-D}_{\text{proximal}}$ $\text{D}_{\text{proximal}}\text{-chief-D}_{\text{proximal}}$
 'the man sees this chief'
- b. $\text{k}\check{\text{x}}\text{-is}$ $\text{ti-}\text{ʔimlk-tx}$ $\text{ta-stal}\text{tmx-t}\check{\text{x}}$
 see-3SG:3SG $\text{D}_{\text{proximal}}\text{-man-D}_{\text{proximal}}$ $\text{D}_{\text{distal}}\text{-chief-D}_{\text{distal}}$
 'the man saw that chief (e.g. yesterday)'

(Davis & Saunders 1975)

- in (a) 'man' and 'chief' are both proximal (ti- -tx/-ṭayx), ∴ currently in "eyeshot" of e.o., and the clause gets a present-tense reading
- in (b) 'man' is proximal, 'chief' is distal, meaning the event can't have occurred with the two at their current locations (∴ it was in the past)

Státimcets

- (20) $\check{\text{s}}\check{\text{a}}\text{x}\check{\text{s}}\check{\text{a}}\text{x}$ ni $\text{k}\check{\text{a}}\text{l}^{\text{?}}\check{\text{a}}\text{q}\check{\text{s}}\check{\text{t}}\check{\text{a}}\text{n-}\check{\text{s}}\text{-a}$ ti US-a
 silly D_{absent} chief-3PO-D D US-D
 'the past president was a fool'
 *'the past president is a fool'
 'the present (unseen) president is a fool'
 *'the present president was a fool'

(Demirdache 1996: 81)

- in (20), the 'absent' deictic *ni-* on 'chief' indicates the chief is not visible or, by semantic extension, is past-chief
- with *ni-* the interpretation is past or present depending on the NP's reference

In (19) and (20) the sentences receive temporal grounding from their actants. In Lushootseed, events are grounded temporally by their subjects, just as events are grounded spatially by their subjects in the discourse pattern in (16). Frequently, these subjects are \emptyset third-persons.

5) Conclusion

There seems to be some motivation for the use of the term “subject” in Lushootseed:

- while there is an unusually close “fit” between semantic and syntactic roles of participants in an event, this fit is not perfect, making a term for the syntactic role useful
- using “subject” and “object” allows comparison of Lushootseed grammatical processes with those of languages where syntactic roles are not so closely aligned with semantics
- the notion of subject is also linked to the organization of discourse in that subjecthood unifies the discourse episode by linking new events to a topical participant
- in the absence of inflectional marking for tense and mood, syntactic subjects serve to ground clauses

While treatments of Lushootseed grammar which avoid the term meet the criterion of language-specific descriptive adequacy, syntactic subject remains an important theoretical concept and a necessary benchmark for discourse-analysis and cross-linguistic comparison.

Abbreviations

1, 2, 3 = 1st-, 2nd-, 3rd-person
APPL = applicative
CONT = continuative
D = deictic
ECS = event-external causative
e.o. = each other
HAB = habitual
ICS = event-internal causative

INTJ = interjection
IRR = irrealis
LC = lack of control
MD = middle
NTS = non-topical subject
NP = nominalizer
PNT = punctual
PO = possessive

PR = preposition
RC = relative clause
RDP = reduplication
REFL = reflexive
S = singular
STAT = stative
sth = something
TRM = transmutative

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