REPORT 15

SURVEY OF CALIFORNIA AND OTHER INDIAN LANGUAGES

Structure and Contact in Languages of the Americas

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Passive Constructions in Kʷakʷala

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1 Introduction

Franz Boas, in his 1947 grammar of Kʷakʷala, identifies a set of passive suffixes used to make syntactic subjects from various non-subject arguments. This paper furthers our understanding of Kʷakʷala passivizing morphosyntax with an analysis of the syntactic and semantic factors determining the distribution of passive morphemes. After some background on the language and its grammar, I present an overview of the multiple passivizing morphemes available to Kʷakʷala speakers and describe the function of each passive suffix. I compare the syntactic alignment of pronominal arguments with that of lexical arguments, and explore the various discourse motivations for passive constructions. Discussion and conclusions follow.[1]

2 Background

2.1 Speakers and Location

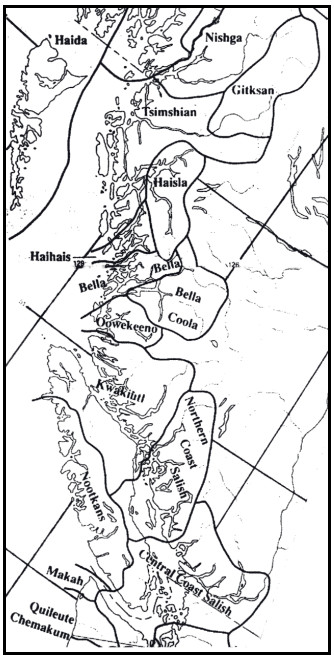

Figure 1: The Wakashan, Chimakuan, and Salishan Families (adapted from Suttles 1990:ix)

[1] This research was made possible by the support of the Phillips Fund for Native American Research, the Jacobs Research Fund, the Jacob K. Javits Fellowship Program, and Robert Oswalt Fund for Research on Endangered Languages. I gratefully acknowledge the wisdom, humor and patience of the elders who have shared their knowledge of Kʷakʷala with me: Lillian Johnny, Beverly Lagis, Gertrude Robertson, Daisy Sewid Smith, and Spruce Wamiss. I am also grateful to Bernard Comrie, Marianne Mithun, Patricia A. Shaw, and Sandra A. Thompson for their generous and insightful feedback. All errors are my own.

Kʷaḵʷala (Wakashan, KWK), formerly identified as Kwakiutl[2], is the language of the Kʷakʷəkəẃakʷ nation located on Northern Vancouver Island and the neighboring mainland of British Columbia. It is severely endangered, with approximately 190 fluent speakers remaining.[3]

The data discussed here are drawn primarily from Boas and Hunt's documentation of the language in grammar, dictionary, and texts from 1893 to 1948, as well as some elicited data published by Levine in 1980, and a few examples from recent fieldwork (2008-present). This analysis should be understood as referring primarily to the language as spoken in the years between 1895-1980.[4] Before we proceed to a description of passive constructions in Kʷaḵʷala, the next section provides an overview of grammar relevant to voice and valence, emphasizing patterns of alignment and reference tracking.

2.2 Grammatical Overview

This section provides an introduction to the grammatical structure of Kʷaḵʷala clauses and argument structure. First, a word about lexical classes: Kʷaḵʷala belongs to the Pacific Northwest *Sprachbund* for which the appropriateness of lexical classes such as 'noun' and 'verb' has been questioned (Jacobsen 1979; Kinkade 1983). In this paper, I assume that Kʷaḵʷala nouns and verbs exist as syntactic categories, defined according to derivational and inflectional marking in the context of the clause. The question of their status in the lexicon is more complex and will be set aside. A few derivational suffixes are specific to predicates, while others are restricted to arguments, but as Boas says: "[a]ny 'verb' preceded by an article is a noun … and any noun with predicative endings is a verb …" (Boas 1947:280). To avoid confusion, I will usually refer to *predicates* and *arguments* rather than verbs and nouns.[5]

Kʷaḵʷala is polysynthetic.[6] The language employs three core argument cases and one oblique case. Alignment of both lexical and pronominal arguments is thoroughly nominative-accusative. For this reason, I use the terms 'subject' and 'object' in a syntactically-constrained sense, to describe the grouping of single arguments of intransitive predicates ('S' in the sense used by

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[2] 'Kwakiutl', an anglicized orthographic representation of the name *Kʷaguʔɬ*, applies only to the band at Fort Rupert (*Caχis)* with which Franz Boas and George Hunt did most of their documentation. There are 16 bands in the Kʷakʷakəẃakʷ nation and 5 dialects, each with their own name. Some bands prefer the alternate language name *baḵʷəmḵala*. I use Kʷaḵʷala here to refer to all dialects.

[3] First Peoples' Heritage, Language and Culture Council Language Needs Assessment, 2008-2012: http://maps.fphlcc.ca/kwakwala

[4] Future work examines the use of passive constructions in new corpora gathered from 2008-present, comparing and contrasting this with earlier documentation. Examples from 2008 were gathered during the InField 2008 at UCSB, in the course "Kʷaḵʷala Field Training" with Patricia A. Shaw, Beverly Lagis, and Daisy Sewid Smith, made possible by a Social Sciences and Humanities Research Council of Canada (SSHRC) Aboriginal Strategic Research Grant to Patricia A. Shaw.

[5] Referring to the lexicon, Boas comments that "[s]trictly speaking there are only three classes of words: predicative terms, syntactic particles which define the function of predicative terms, and exclamatory forms. Not withstanding the occurrence of nominalizing suffixes there is no clearcut distinction between noun and verb. Any "verb" preceded by an article is a noun … and any 'noun' with predicative endings is a verb. Stems are neither nominal nor verbal. A division may be made between stems of static and active meaning" (Boas 1947:280). In contrast to Boas' use of the terms active/stative to describe a semantic contrast between stems, the term *active* is used in this paper for constructions which lack *passive* morphosyntax.

[6] The term 'polysynthetic' refers here to the encoding of core arguments on the verb, allowing a single phonetic word to serve as a complete clause, as well as the language's rich morphological resources, which combine in morphologically complex words.

Comrie 1978 and Dixon 1979) with the 'A' (actor or agent) argument of a transitive or ditransitive predicate, as opposed to the 'P' (most patient-like argument) of a transitive predicate.[7] The three core argument types are identified here as 'SUBJECT' (S), 'PRIMARY OBJECT' (O_1), and 'SECONDARY OBJECT' (O_2). These terms correspond with Boas' terms 'subject', 'object', and 'instrumental' (Boas 1947) and with Levine's terms 'subject', 'object', and 'oblique' (Levine 1980).

My use of the terms 'primary' and 'secondary' for Kʷaḵʷala objects departs from previous traditions in order to avoid the use of the term 'oblique' for what I analyze as a third core argument, and to emphasize the core status of secondary objects. Paradigms of pronominal and adnominal enclitics exist for each of the three core arguments — subjects, primary objects, and secondary objects — while non-core arguments occur in prepositional phrases at the end of a clause. Boas and Levine refer to these prepositionally-marked arguments as 'indirect' (Boas 1947:206), but I reserve the term 'OBLIQUE' (OBL) for non-core arguments. Boas distinguishes between 'prenominal' and 'postnominal' adnominal case marking of lexical arguments; this paper adopts both terms.

Pragmatically-neutral phrases are predicate-initial, with 'VSO' word order. Predicates are distinguishable by their position at the front of the clause, the encliticized flagging of core pronominal arguments, and/or the adnominal marking of lexical subjects, and in some cases the use of derivational suffixes specific to predicate forms. Lexically-specified arguments are case-marked with preceding prenominal enclitics and deictic demonstratives (which, like case-marking, are phonologically grouped with the preceding constituent). A clause with three lexically-specified core arguments is presented below.

(1)

hánɬʔidida	*bəgʷánəmaχa*	*ƛ̓ay̓isa*	*hánλəmi.*
hán-ɬ-ʔid**=i=da**	bəgʷánəma**=χa**	ƛ̓ay̓i**=sa**	hánλəm-i
shoot-PST-MOM**=SBJ**=DEF	man=OBJ1	black.bear=OBJ2	gun-T.DEM
V	S	O_1	O_2

'The man shot the black bear with a gun.' (Shaw: 2008_07_21_003DS)

Arrows direct our attention to the marking of lexical arguments on the preceding constituent with enclitics; in this case, the **subject** *bəgʷanəm* 'man' is marked with the prenominal enclitic *=i*, the lexical **primary object** *ƛ̓ayi* 'black bear' with prenominal enclitic *=χ(a)*, and the lexical **secondary object** *hənλəm* 'gun' with the prenominal enclitic *=s(a)* (and the third-person postnominal sentence-final *=i)*.[8]

The general shape of **pre**nominal primary-object-marking is a set of variations on *=χ(a)*, and for prenominal secondary object markers on *=s(a)*. Meanwhile, **pro**nominal object-marking tends to include the uvular stop *-q* for primary objects and again the *-s* for secondary objects. Based on these shapes, I will sometimes refer to '*χ*-marking' and '*s*-marking' to discuss differences between primary and secondary objects. As we will see in section 3.1, these two object cases are also consistently distinguished through the use of different passive morphemes:

[7] Following the tradition of labeling the primary agent or actor of a transitive verb with 'A' and the object argument of the transitive as 'P' (Comrie 1978).

[8] The forms *=χ(a)* and *=s(a)* vary to reflect features of deixis and visibility; complete sets of related forms are provided in the appendix.

-su? for primary object and *-ayu*, *-ano*, and *-əm* for secondary objects.

A simple clause with specified lexical arguments has $VS(O_1)(O_2)(X)$ order, with V representing a singly- or multiply-expressed predicate, S representing the subject, O_1 representing the primary object, O_2 representing the secondary object, and X representing an oblique argument in a prepositional phrase. The sequence of pronominal enclitics attached to the predicate corresponds directly with the VSO_1O_2 sequence of lexical arguments in a clause for which all three arguments are explicit. Thus one can form a complete transitive or ditransitive clause with a single prosodic word as in (2) and (3) below.

(2) *n̓íkənƛaq*
ǹík=ən(ƛ)=aq
say=1s.SBJ=3.OBJ1
I said to him… (B1947:281, CX12.9)

(3) *χʷəsʔídəqs*
χʷəs-ʔid(ə)=Ø=q=s
strike-MOM=3.SBJ=3.OBJ1=3.OBJ2
He struck him with it. (B1947:281)

In example (2), the predicate *n̓ik-* 'to say' encodes both the first-person singular subject *=ən(ƛ)* and the third-person primary object (O_1) *=aq*. In example (3), the third-person subject (S) is marked with a zero-morpheme *=Ø*, while both third-person primary (O_1) and secondary (O_2) objects are encoded on the verb with *=q* and *=s*, respectively. Returning to example (1), the **prenominal** SUBJECT marker *=i* (and definite marker *=da*) attach to the predicate stem *hən-ɬ-ʔid-* 'shoot-PST-MOM' preceding the lexical subject *bəgʷanəm(a)* 'man'. The prenominal PRIMARY OBJECT enclitic *=χa* precedes the lexical primary object *ƛ̓ay̓i* 'black bear', and the prenominal SECONDARY OBJECT enclitic *=sa* precedes the lexical secondary object *hənləm* 'gun'. The **postnominal** distal demonstrative *=i* follows *hənləm*. By comparing examples (2) and (3) with example (1), we can see that third person pronominal enclitics are in complementary distribution with lexical arguments. The domain of attachment for pronominal enclitics is the predicate, but in cases with multiply-expressed predicates, pronominal clitics can be distributed; the subject pronominal enclitic may attach to the first (auxiliary) predicate, and the object pronominals or prenominals may attach to the second predicate.[9] See also examples (6) and (13). With lexical arguments, the *pre*nominal demonstrative forms occur attached to the predicate or preceding element and specify deictic information about the following lexical arguments.

It is useful, while considering a dual-object system, to mention the connection between argument structure and typologies of ditransitive alignment. The valence of a Kʷak̓ʷala predicate stem is lexically determined, and can be increased or decreased with derivational affixes. Some Kʷak̓ʷala stems are inherently transitive and can take objects, while others are inherently intransitive and do not take objects (Boas 1947:280). This is true of English verbs as well: *say* can take two non-subject arguments, the *thing-said* and the *recipient* (the person to whom something is said); for English, the thing-said is marked as a DIRECT OBJECT and the recipient of

[9] Because the third-person subject pronominal marker is -Ø, and because the initial discourse markers are in the process of grammaticalizing (only sometimes taking person-marking inflection), it is not always clear how to interpret where the third-person subject enclitic attaches.

a statement as an INDIRECT OBJECT in a prepositional phrase ('I said hello **to him**'). The Kʷaḵʷala stem *n̓ik-*, translated as 'say' by Boas (1948:243), has a different argument structure. The recipient is the PRIMARY OBJECT of this stem, while the theme (the thing said) is marked as a SECONDARY OBJECT (see (21)).[10]

Languages such as Kʷaḵʷala for which *recipients* of a ditransitive predicate are consistently marked in the same way as the single object of a transitive verb have been described as having **secundative** alignment, in contrast with **indirective** languages for which the *theme* of a ditransitive predicate groups with the single object of a transitive verb, as is the case for the English ditransitive verb *say* (Malchukov, Haspelmath and Comrie 2010:3).[11] Many of Kʷaḵʷala's ditransitive predicates of transfer such as *λíqala-* 'to name', *c̓əw-* 'to give', and *həláqa-* 'to pay' follow a secundative pattern, as do stems describing communicative events such as *n̓ik-* 'say', *w̓əχ-* 'ask' and *χiɬa-* 'invite, call'.

Surprisingly, predicates of motion such as *qas-* 'to walk' and *siw̓-* 'to paddle' — which are intransitive in English — are transitive in Kʷaḵʷala, with the *destination* marked as PRIMARY OBJECT. Although we might think of 'walk' as an intransitive verb which (in English) would take oblique arguments indicating destination (I walk **to the store**) or accompaniment (I walk **with my brother**), this is not the case for the Kʷaḵʷala stem *qas-*. In an active construction, the primary object of the predicate *qas-* 'walk' has a predictable interpretation as the goal or destination. For example, see (4) (also (29) and (30)).

(4) Active: *qas-* 'walk' with PRIMARY OBJECT destination

DISC	AUX	PRED	
Wə,	*láʔlaʔi*	*qástuwiχa*[12]	*n̓aqʷaɬa*
Wə,	*láʔlaʔi*	*qás-(ʔi)d-o=**(i)χa***	*n̓aqʷaɬ-a*
Well	then it is said	walk-MOM-away-**OBJ1**=T.DEM	light-T.DEM

Well, then it is said, he walked toward the light. (B1906, III1.4)

The labelling of objects as 'primary' and 'secondary' thus also reflects the typological profile of ditransitive constructions in Kʷaḵʷala, and acknowledges some resonance with the systems discussed for other languages by Dryer (1986) and Genetti (1997).[13] Recognizing the secundative pattern of alignment in Kʷaḵʷala exposes the syntactic properties of some of language's passive suffixes, allowing us to identify a persistent contrast between the passive suffix *-suʔ*, which promotes primary objects, and the suffixes *-ayu*, *-ano*, and *-əm*, which promote secondary objects. These are described in 3.1.

In contrast to the three core arguments (SBJ, OBJ1, OBJ2), OBLIQUE arguments are indicated in a prepositional phrase, constructed from a small set of grammaticalized predicates including *la-* 'go' and *gaχ-* 'come', combined with deictically-appropriate demonstratives indicating

[10] For this reason, it may be more appropriate to translate *n̓ik-* with the English verb 'tell', for which the recipient is also marked as a direct object. Thanks to Marianne Mithun for pointing this out.

[11] English, like many languages, has different alignment patterns for different verbs.

[12] Here, as in all examples, the morphophonemic parsing provided in the second line of each example follows the rules governing fusion of phonological segments as identified by Boas in his 1947 grammar (Boas 1947:210-215)

[13] 'Primary object' and 'secondary object' are used here to refer only to morphosyntactic alignment in Kʷaḵʷala grammar, not to the cross-linguistic generalizations proposed by Dryer in comparing direct/indirect object systems with primary/secondary object systems (Dryer 1986).

proximity, visibility, and (sometimes) possession. In example (5), the preposition *la-* includes prenominal *=χ* marking the argument *guk*^{w} 'house'[14] and the third-person possessive enclitic *=is* (specifically, the form used for referents which are both invisible and distal).

(5) Prepositional phrase marking OBL

PRED	SBJ	OBL	
kʼʷəʔíɬəlʼəʔi	*Xatícən*	***laχis***	***guk*^{w}**
kʼʷəʔ-íɬ-əla=i	*Xatícən*	**la=χ=is**	**guk^{w}**
sit-in.house-CONT=SBJ	Xatícən (NAME)	**PREP=OBJ1=3.POSS**	**house**

Xatícən was sitting in his house. (B1947:282, CII 2.1)

As is true for many languages, certain types of lexical arguments in Kʷakʼʷala, such as places, are predictably oblique in active clauses.

Pronominal and prenominal flagging on the predicate and adnominal case-marking on arguments allow referent-tracking at a high level of detail. We, as well as Kʷakʼʷala speakers themselves, can thus confidently interpret the argument structure of most passivized predicates. Table 1 provides a table of pronominal and prenominal paradigms in order to enable readers to track referents in active and passive examples. Both sets of enclitics express an almost complete set of distinctions between subject (S), primary object (O_1) and secondary object (O_2), with the exception of the first-person forms (discussed below).

	Pronominal			**Prenominal**		
	SBJ	**OBJ1**	**OBJ2**	**SBJ**	**OBJ1**	**OBJ2**
1SG	=ən(ɤ)	---	=ən(ɤ)			
1INCL	=ənʔs	---	=ənʔs			
1EXCL	=ənuχ^{w}	---	=ənuχ^{w}	=i	=χ	=s
2ND	=əs	=uɤ	=us			
3RD	=Ø	=q	=s			

Table 1: Verbal enclitic pronouns and prenouns (adapted from Boas 1947:252)

I analyze the third-person subject pronominal as a morpheme with the shape -Ø; when third-person subject pronominals are tagged on the verb, there is no ambiguity about the intended referent, because all other types of marking occur. Number is only marked in first-person, which also makes a distinction between inclusive and exclusive forms. Aside from marking number, the first-person forms in Kʷakʼʷala are unusual in other ways. S and O_2 marking are identical for first-person. Meanwhile the cells marking first-person O_1 are 'empty', reflecting the fact that first-person primary objects are not indexed on the verb, but are instead expressed using a clause-final prepositional phrase derived from the verb *gaχ-* 'come'. This speaker-oriented construction based on *gaχ-* 'come' echoes other-directed prepositional phrases marked with *la-* 'go', as seen above in example (5). Speakers know that a first-person primary object is expressed when the prepositional phrase *gaχən* occurs. The example below illustrates the encoding of the first-person

[14] Prepositional phrases can be analyzed as embedded predicates, but I see this as a diachronic fact rather than a synchronic one.

primary object with the prepositional phrase *gaχən* 'to me'.

(6) First person primary object in a prepositional phrase

laṁísəs	*λíqalaƛəs*	*aƛaṅəm*	***gáχən***
la-ṁis=əs	λiqala-ƛ=(ə)s	ʔaƛaṅəm	**gaχ=ən**
AUX-CONN-2.SBJ	name-FUT=**OBJ2**	wolf	**PREP=1.SBJ**

And so you will name me (with) wolf.[15] (Anderson 2005:17)

The secundative alignment of the stem *λiqala-* 'name' is clear from the SECONDARY OBJECT case marking of the theme *aƛáṅəm* 'wolf', the name given to the speaker. If the person (or object[16]) being named were second- or third-person, the primary-object status of the speaker would be encoded on the verb with *-uƛ* (2.OBJ1) or *-q* (3.OBJ1), but for a first-person argument, the primary-object status becomes clear through the use of the phrase *gaχən*.

In addition to the pronominal and prenominal paradigms presented above, additional sets of third-person demonstrative forms express a six-way deictic contrast: demonstrative enclitics distinguish proximal, medial and distal locations, with visible and invisible status encoded for each. These distinctions are just as fully expressed in sets of possessive suffixes (which also encode a distinction between a subject possessor and a non-subject possessor), as well as in forms used for embedded purpose clauses. For those who wish to follow reference tracking in examples, the following additional tables are included in the appendix: (i) third-person 'verbal' (affixed to the predicate) demonstrative enclitics for subjects and prenominal forms; (ii) third-person pronominal demonstrative enclitics for subjects, primary and secondary objects; (iii) subject/primary object combinations; (iv) subject/secondary object combinations; (v) possessive forms; (vi) purposive clause forms; and (vii) special possessive marking in pronominal predicate clauses. In glossing third-person demonstrative forms, I will comment where the form allows one to disambiguate between multiple third-person arguments in the clause.

The next section provides a description of the morphosyntactic and combinatorial properties of passive suffixes in Kʷaƛ̓ʷala.

3 Passive Morphosyntax in Kʷaƛ̓ʷala

Before moving on to the descriptive portion of the paper, I briefly address my use of the term 'passive'. Much has been written about what should be considered 'passive', and traditions of interpretation vary (Comrie 2008, Fox and Hopper 1994, Givon 1994, Klaiman 1991, Payne 1997, Siewierska 1984, Shibatani 2003, *inter alia*). In what follows, Kʷaƛ̓ʷala passives are described in terms of both morphosyntactic and discourse-contextual properties.

Comrie 2008 provides some useful cross-linguistic criteria for identifying passive phenomena, and as we will see, Kʷaƛ̓ʷala passives conform to these tendencies. The first criterion is markedness: as is true of morphological passives in other languages, Kʷaƛ̓ʷala passive constructions are formally 'marked' by the addition of a derivational affix to a base stem which, in its unmarked state, is considered active. Furthermore, the direction of derivation is

[15] As one can see by comparing the secondary object marking of the theme *aƛaṅəm* 'wolf' with the first-person primary object marking, *λiqala-* 'to name', like the verb *ṅik-* 'to say', marks the recipient (R) of a name ('me') as the primary object, and the name being bestowed upon the recipient (T) (as the secondary object).

[16] Certain ceremonial objects, such as coppers and canoes, also receive names.

from active to passive[17], and passive forms are less frequent than active forms in connected discourse. These patterns of distribution will be clear in the description below. Secondly, Comrie suggests that passives share a quality of being 'P-oriented' rather than 'A-oriented'. Kʷaḵʷala passives can be described as P-oriented: they promote non-A arguments to subject position, whether for reasons of topic continuity or to make an argument accessible to relativization.

Cross-linguistically, passive suffixes reduce the transitivity of an active predicate stem and restructure the case-marking of arguments in certain cross-linguistically predictable ways. If an active predicate has subject 'A', the addition of a passive suffix to an active stem allows the **promotion** of non-'A' arguments to subject position and the **demotion** of 'A' from subject position. In many languages, active transitive predicates are made intransitive by passivization. But because Kʷaḵʷala has three core arguments, and because demoted subjects are marked with SECONDARY OBJECT case (*=sa*), passivized predicates are not necessarily intransitive, as they might be in languages with only two core arguments. While Kʷaḵʷala passive morphemes reduce transitivity, they do not seem to reduce valence. In many passive clauses, the case-marking is restructured, but all three arguments would still be considered core according to the formal criteria established above. On the other hand, demoted subjects, while marked as secondary objects, are not obligatory, as we will see in many of the examples provided below. By this criterion, one might identify wish to separate demoted subjects from other arguments marked as secondary objects.

Kʷaḵʷala is typologically unusual for having several passivizing suffixes with different functions.[18] Passive morphology has been well described for another Wakashan language, Nuu-chah-nulth, but is limited to a single form with broad functional scope (Nakayama 1997), in contrast to the six forms used in Kʷaḵʷala.[19] The passive suffixes of Kʷaḵʷala are presented in Table 2.

PRIMARY OBJECT	*-suʔ*
SECONDARY OBJECT	*-ayu, -əm, -ano*
EXPERIENTIAL	*-ɬ*
LOCATIVE	*-ʔas*

Table 2: Kʷaḵʷala Passive Suffixes

These morphemes occur in contrastive distribution in a slot suffixed to the predicate. The first two rows list syntactically-selected passive forms, while the third and fourth rows list semantically-selected passive forms.

The PRIMARY OBJECT passive *-suʔ* is used to promote primary objects of an active transitive or ditransitive predicate to subject status, while the SECONDARY OBJECT passives *-ayu*, *-əm,* and *-ano* promote secondary objects with an active ditransitive predicate to subject status (the variation among these three forms is discussed below). As mentioned, many Kʷaḵʷala

[17] This is clear from the boundary effects of certain 'hardening' and 'weakening' suffixes on preceding coda consonants (Boas 1947:226).

[18] Some Philippine languages, such as Tagalog, have voice systems also described as having multiple passives. A comparison between the Kʷaḵʷala system and similar Austronesian systems is beyond the scope of this paper but is in preparation.

[19] Nakayama finds 'passive' to be an inadequate term to capture the full range of functions of the *-'at* suffix he describes in Nuu-Chah-Nulth.

ditransitive predicates with meanings such as 'say', 'give', and 'pay' mark the *recipient* as primary object and the *theme* — the item said, given, or paid, for example — as secondary object. Identifying the pattern of secundative alignment in Kʷakʷala thus reveals the consistently syntactic distribution of Kʷakʷala passive suffixes promoting primary and secondary objects in the data explored below.

Boas' discussion of *-suʔ* and *-ayu* partially captures the syntactic character of these morphemes. In keeping with Boas' analysis of primary objects as "objective" and secondary objects as "instrumental", he labelled *-suʔ* as the "passive governing (the) **objective** form" and *-ayu, -ano,* and *-əm* as "passive of verbs with **instrumental**" (Boas 1947:242). On the other hand, Boas later appeals to a semantic distinction, saying "the passives in *-əm* and *-ayu* designate the thing used for doing something, while *-suʔ* designates the thing to which something is done", while *-ɬ* is "(the) passive of verbs expressing sensations and mental actions; also sensations produced by some outer action" (Boas 1947:270).

In his 1980 paper, Levine also described the function of these suffixes in partly syntactic terms, saying that "[t]he suffixes *-suʔ* and *-ayu* belong to a class of morphemes I refer to as focus elements, to emphasize that these forms shift attention to various participants in the situation, which is specified by the meaning of the stem […]. (F)ocus morphemes permit the apparent promotion to subject status of NPs containing *-χ* and *-s* as determiners" (Levine 1980:242). On the other hand, Levine renames *-suʔ* a 'goal focus passive', *-ayu* an 'instrument focus passive', *-ɬ* a focus morpheme referring to 'lack of control', and *-ʔas* a 'location focus' morpheme, suggesting a semantically-grounded interpretation of these forms.[20] Levine does not address *-əm* and*-ano*, the other secondary-object promoting passives.

I argue here that both syntactic and semantic criteria are necessary for a complete description of the Kʷakʷala passive paradigm. As is clear from the terms employed in Table 2, the data show the PRIMARY OBJECT and SECONDARY OBJECT passives to be syntactically-selected, based on the argument structure of an active predicate stem. Meanwhile, one must look beyond syntax to explain the distribution of the remaining passives. Section 3.1 discusses the use of *-suʔ* to promote PRIMARY OBJECTS to subject status and the use of *-ayu*, *-ano* and *-əm* to promote SECONDARY OBJECTS to subject status. Section 3.2 discusses the semantically-governed use of the EXPERIENTIAL *-ɬ* and the LOCATIVE *-ʔas*.

3.1 Syntactic Roles

Examples (7) and (8) below illustrate a contrast between active and passive forms of the same predicate, showing how the Kʷakʷala passive suffix *-suʔ* allows the promotion of a PRIMARY OBJECT into SUBJECT position.

[20] I believe Levine intends the term 'focus' to refer to the shared attention of the speaker and listener captured by the subject position in a Kʷakʷala clause, rather than concepts of topic and focus as commonly used in discussing information structure in discourse.

(7) Active: *wəƛ-* 'ask'

ƛálaʔi	*wəƛí*	*Gíχdənaχa*	*bəgʷańəmi:*	*"Məʔinoχoʔas?"*
ƛaˊlaʔi	wəƛ**=ĭ**	Gíχdən=χa	bəgʷańəmi:	"Məʔinoχoʔas?"
SEQ-QUOT	ask**=SBJ**	Gíχdən (name)=OBJ1	man	"Of.what.tribe.are.you?"

Then Giχdən asked the man, "What tribe are you from?" (B1895: M665.10)

(8) Passive: *wəƛ(a)-* 'ask' with primary object passive *-suʔ*

ƛálaʔi	*wəƛásuwa:*	*"Másus*	*yálagilisax?"*
ƛá-laʔi	wəƛá**-suʔ-**a	Más=us	yála-gil-is=ax
SEQ-QUOT	ask-**PASS**-T.DEM	Q=2.SBJ	do-TR-on.beach=DEM

Then he was asked: "What are you making on the beach?" (B1895: M666.23)

In example (7), the protagonist of the story, Giχdən, asks a question. His status as subject is clear from the prenominal subject-marking clitic *=i* preceding his name. The man of whom he asks the question is *χ*-marked as a primary object with the prenominal enclitic *=χa*. Later in the story, a question is asked of Giχdən; as the recipient of a question, Giχdən would be the primary object of the active predicate *wəƛ(a)-* 'ask'. Instead, the PRIMARY OBJECT passive suffix *-suʔ* in example (8) allows him, as the protagonist of the story, to remain in subject position. Meanwhile, the person asking the question does not appear.

Example (9) is from the same story containing examples (7) and (8) above, and this example illustrates the use of the SECONDARY OBJECT passive morpheme *-ayu* represented in bold type. At the moment excerpted below, the protagonist *Gíχdən* has finally found the final magical treasure he has been seeking, the decapitated heads of his rival chiefs; the decapitated heads (also in bold) are the subjects of these sentences.

(9) Passives: *c̓əw-* 'give' and *tikʷ-* 'hang.on.body' with secondary object passive *-ayu*

Gáχlaʔi	*c̓áyida*	***qáguk*ʷ**	*laχ*	*Gíχdən.*
gáχ-laʔi	c̓áw**-ayu=i**=da	**qáguk**ʷ	laχ	Gíχdən
come-QUOT	give-**PASS=SBJ**=DEF	**heads**	PREP	Giχdən (name)

Now it is said the heads were given to Giχdən.

Laʔám	*tíkʷit̓idayu*	*laχ*	*Gíχdən.*
La-m̓	tikʷ-it̓-ʔid**-ayu**=Ø	laχ	Gíχdən.
SEQ-OI	hang.on.body-MOM**-PASS**=3.SBJ	PREP	Giχdən (name)

Then they (the heads) were hung onto Gíχdən's body. (B1895, M667.6-667.7)

The argument structures of these two predicates (*c̓əw-* 'give' and *tikʷ-* 'hang.on.body') require the secondary object passive *-ayu* rather than the primary object *-suʔ* in order to promote the heads to subject position. The predicate *c̓əw-* 'give' is a ditransitive predicate with secundative alignment, for which the recipient is marked as primary object and the theme as secondary object; the SECONDARY OBJECT passive *-ayu* is thus used to promote the *qaguk*ʷ 'heads' given to Gíχdən, rather than Gíχdən himself (the recipient). In the first clause, the lexically-expressed subject is preceded by the subject enclitic *=i*; in the second clause, the third-person subject is

represented with a zero pronominal enclitic.[21]

Some elicited examples provided by Levine offer useful minimal pairs to illustrate the contrasting effects of the passive suffixes *-su?* and *-ayu* on a predicate and the surrounding clause. The first sentence is active.

(10) Active: SBJ is 'child'

PRED	SBJ	O1	O2
nəp̓ídida	*gənánəmχa*	*gukʷsa*	*t̓ísəm.*
nəp̓id=**i**=da	gənanəm=**χa**	gukʷ=**sa**	t̓isəm
throw=**SBJ**=DEF	child=**OBJ1**	house=**OBJ2**	rock

The child hit the house with a rock by throwing.
(The child pelted the house with a rock. - DR; Levine 1980:241)

The verb *nəp̓id-* 'throw' is perhaps closer to the English word 'pelt'[22]; the recipient *gukʷ* 'house' is the primary object, while the thing thrown (*t̓ísəm*, 'rock') is the secondary object. When the PRIMARY OBJECT passive suffix *-su?* is added to the predicate stem *nəp̓íd-* 'throw', we get example (11), with *gukʷ* 'house' promoted to subject position, and the demoted subject marked with *=sa* as a secondary object.

(11) PRIMARY OBJECT passive: promoted SBJ is 'house'

PRED	SBJ	O2	O2
nəp̓ídsəẇida	*gúkʷsa*	*gənánəmsa*	*t̓ísəm.*
nəp̓id-**su?**=**i**=da	gukʷ=**sa**	gənanəm=**sa**	t̓isəm
throw-**PASS=SBJ**=DEF	house=**OBJ2**	child=**OBJ2**	rock

The house was hit by a rock thrown by the child.
(The house was pelted with a rock by the child. - DR; Levine 1980:241)

The house, which would be a primary-object marked with *=χa* in an active predicate, here becomes the subject of the sentence with the addition of the PRIMARY OBJECT promotion morpheme *-su?*. The rock-throwing *gənanəm* 'child', the subject of the active sentence, is demoted to secondary object status. Meanwhile, the rock *t̓ísəm* retains secondary object status, leading to a clause with two secondary objects with different syntactic origins.[23] In many languages, the actor of a passivized transitive verb is marked as an oblique or non-core argument, but in Kʷaḵʷala, the actor of a verb passivized with *-su?* is demoted to secondary object marking, rather than a prepositional phase. Should one consider the erstwhile subject of a

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[21] In both clauses, Giχdən appears in a prepositional phrase. While this seems natural to English speakers, the argument structure of the Kʷaḵʷala predicate *c̓əw-* 'give' actually marks the recipient as primary object. In this case, the presentation of the primary object recipient Giχdən in a prepositional phrase (rather than case-marked as a primary object) is due to the extraposition of a primary object in some double-object clauses, described by Boas: "Since Kwakiutl transforms the direct object *-q* into the indirect object *laq* whenever the verb takes an instrumental
s, these forms must be considered as a substitute for the direct object …" (B1947:283).

[22] Thanks to Bernard Comrie for this gloss.

[23] The ordering of these two '*s*-marked' objects is also interesting; according to Levine, the order given, with animate (but adjunct) 'child' preceding inanimate 'rock', is the preferred order. Further research is underway to explore the strength of this preference among speakers.

passive construction to be a core argument? Despite the identity of the surface form *=sa* marking secondary object arguments and demoted subjects, other criteria might lead us to identify demoted subjects as adjuncts; as we saw above in examples (7), (8), and (9), the demoted subject can be omitted. More work is needed to determine the syntactic status of the demoted subject.

Example (12) shows that the use of the SECONDARY OBJECT promoting suffix *-ayu* as a passive suffix allows the rock to be promoted to subject instead.

(12) SECONDARY OBJECT passive: promoted SBJ is 'rock'

*nəp̓idayuwi**da***	*t̓isəm**χa***	*guk^{w}**sa***	*gənanəm.*
*nəp̓id**-ayu=i=da***	*t̓isəm**=χa***	*guk^{w}**=sa***	*gənanəm.*
throw**-PASS=SBJ**=DEF	rock**=OBJ1**	house**=OBJ2**	child

The rock was (what was) thrown at the house by the child. (Levine 1980:241)

In contrast to the double secondary-object marking of example (11), here the house remains as an *χ*-marked primary object of the passivized predicate; the demoted subject, the child, is again marked as a secondary object with *=sa*.[24] Knowing that Boas termed secondary objects 'instrumental case', we can understand why he called these suffixes 'instrumental passives'; in this particular case, the rock fits an analysis based on its semantic role as the instrument of throwing. However, as we will see below, *-ayu* and the other so-called 'instrumental passives' are not governed by the semantic role of the promoted argument, but by its syntactic role.

Do the three SECONDARY OBJECT passive morphemes contrast semantically or otherwise? Boas doesn't find recoverable differences between them; synchronically, their distribution seems lexically-determined and unpredictable. There may have been a historical difference; Boas describes *-əm* as being restricted from combining with stems with certain endings, and *-ano* as used with stems that form transitivies with the MOMENTANEOUS allomorph *-nd* (Boas 1947:270). But of *-ano*, Boas says "this suffix is used with a few words only, and is not freely available" (Boas 1911:36). As we will see in the discussion of frequency in discourse, *-ayu* is significantly more frequent than either of the other forms, and there is some indication that in the modern language, it is becoming the dominant alternative to *-su?*, retaining its productivity while *-əm* and *-ano* become increasingly restricted. Further research is exploring distributional contrasts within the group of secondary object passives.

Samples from narrative discourse published by Boas and Hunt confirm the syntactic distribution of these passivizing suffixes, with *-su?* governing the primary object case, and *-ayu* governing the secondary object case, as we can see below by comparing active and passive forms for predicates with consistent argument structure. Several of these clauses are explored in detail below, in examples (13) through (31). These examples demonstrate the consistency with which *-su?* can be predicted to promote a primary object and *-ayu*, *-əm*, and *-ano* can be predicted to promote a secondary object, whatever the semantic role of the argument being promoted.

In active examples (13) and (14), *ẃaći* 'dog' is the subject of the clause, the one who bites; the patient of the predicate *q̓əx-* 'bite' (an unspecified third-person) is marked as a primary

[24] Here Levine notes that the order of 'house' and 'child' is interchangeable. It would be surprising to find a secondary object before a primary one in the clause, but this could be a result of the animacy of the child. Current research is pursuing these questions.

object, indicated with the pronominal suffix *=q*.[25]

(13) Active sentence: *q̓əx-* 'bite'

AUX.PRED	PRED	SBJ
laʔəm	*q̓əxʔídida*	*ẇacaq*
la-m̓	q̓əx-ʔíd=i=da	ẇac=(a)q
SEQ-OI	bite-MOM=SBJ=DEF	dog=3.OBJ1

Now the dog bit him. (B1947:286, CIII12.19)

(14) Active sentence: *q̓əx-* 'bite'

PRON.PRED	SBJ_{REL}	$PRED_{REL}$
hiḿida	*ẇaći*	*q̓əxʔidəq*
hi-m̓=i=da	ẇać-i	q̓əx-ʔid=(ə)q
3.PRED-OI=SBJ=DEF	dog-DEM	bite-MOM=3.OBJ1

That is the dog that bit him. (B1947:286)[26]

(15) Passive sentence: *q̓əx-* 'bite' with PRIMARY OBJECT passive *-suʔ*

PRON.PRED	$PRED_{REL}$	SBJ_{REL}	$O2_{REL}$
hiʔəm	*q̓əxʔicəẇida*	*gənanəmasa*	*ẇaci.*
hi-m̓	q̓əx-ʔid**-suʔ=i**=da	gənanəma**=sa**	ẇaci.
3.PRED-OI	bite-MOM**-PASS=SBJ**=DEF	child**=OBJ2**	dog

That is the child (who was) bitten by the dog. (B1947:286)

In example (15), the PRIMARY OBJECT passive suffix *-suʔ* attached to the predicate *q̓əx-* 'bite' promotes *gənanəm* 'child', the one bitten, to subject status. One can see the effect of the passive suffix *-suʔ* in both the word order, which has moved child into subject position following the predicate, and in the secondary object marking of the dog *ẇaći*, who bit the child. Examples (14) and (15) are translated with initial 'that' in English, indicating additional discourse factors at work in relation to the use of passive here; these are actually predicative third-person pronouns. I return to the description of pronominal predicates in section 4.2.

As we saw in the earlier example (9), the stem *ć̓əw-* 'give' also marks recipient as primary and theme as secondary. Example (16) shows the predicate *ć̓əw-* in an active form with secondary object marking of the theme *y̓aχʷsəḿa* 'a bad thing'. The recipient in this clause occurs in a prepositional phrase as a result of extraposition of primary objects in certain syntactic contexts.[27]

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[25] Examples (14) and (15) are complicated by the use of the person-marking predicate *hi-*, also described as a 'verbal form' of an independent pronoun, which leads to an appositive clause for which the second predicate is a relative-clause type complement. For this reason, the subject precedes the embedded predicate 'bite' (Boas 1947:258). These clauses are described in section 4.2.

[26] Examples (13) and (14), in which a dog is subject-marked without triggering any special morphology in relation to a primary-object-marked human, suggest that passivization is not obligatory according to an animacy hierarchy, at least in the case of dogs biting humans. Inverse alignment systems are not uncommon in the region but the alignment here does not suggest such a pattern. For further argumentation against an inverse pattern in Kʷaḵʷala, see section 3.3 below. Further research will pursue this hypothesis.

[27] Close observers will notice that in the active clause, the pronominal mention of the recipient is actually marked as an oblique in the clause-final prepositional phrase *laq*, rather than with the primary object pronominal morpheme *=q* on the predicate, as we would expect. Boas notes that while subject, primary, and secondary arguments

(16) Active clause*: ċəw-* 'give'

AUX.PRED	PRED	O2	OBL (O1)
laṁi	*ċásа*	*ẏaχʷsəṁa*	*laq*
la-ṁ=Ø=i	ċəẃ**=sa**	ẏaχʷsəṁa	la-q
go-OI-3.SBJ=DEM	give**=OBJ2**	a.bad.thing	to-OBJ1

Then he gave him something bad. (B1947:342)

However, when the predicate *ċəw-* 'give' is passivized with PRIMARY OBJECT *-suʔ*, the recipient becomes the subject, and the demoted subject *ẏaχʷsəṁa* retains secondary object-marking.

(17) Passive clause: *ċəw-* 'give' passivized with *-suʔ*

AUX.PRED	PRED	O2
laʔə́mχənti	*ċásuʔsa*	*ẏaχʷsəṁa*
la-ṁ-χənt=Ø=i	ċə́w**-suʔ**=sa	ẏaχʷsəṁa
go-OI-evidently=3.SBJ=DEM	give-**PASS**=OBJ2	a.bad.thing

Then he was evidently given something bad. (B1947:342, CII32.13)

On the other hand, when *ċəw-* 'give' is passivized with SECONDARY OBJECT *-suʔ*, the theme *ẏaχʷsəṁa* is promoted to subject.

(18) Passives: *ċəw-* 'give' passivized with *-ayu*

Gáχlaʔi	*ċə́yida*	***qáguk*ʷ**	*laχ*	*Gíχdən.*
gáχ-laʔi	ċə́w**-ayu=i**=da	**qáguk**ʷ	laχ	Gíχdən
come-QUOT	give-**PASS=SBJ**=DEF	**heads**	PREP	Giχdən (name)

Now it is said the heads were given to Giχdən.

As mentioned earlier and seen in the examples below, the predicate *ṅik-* (translated as 'to say' by Boas but glossed as 'to tell' here) also has secundative alignment and marks hearers (the 'recipient' of the words spoken) with the primary object case. The active example (2) is reproduced below to illustrate this secundative alignment.

(19) Active clause: *ṅik-* 'to say, tell'

ṅikənlaq
ṅik=ənχ**aq**
say=1s.SBJ>3.OBJ1
I told him. (B1947:281, CX12.19)

When *ṅik-* is passivized with the PRIMARY OBJECT passive *-suʔ*, the hearer *q̓ə́mtalaɬ* is promoted

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coalesce with the verb and can be expressed in a single predicate form, "such cumbersome combinations are avoided". In such cases, the primary object is extraposed to a prepositional phrase (B1947: 251). Boas says, "Since Kwakiutl transforms the direct object *-q* into the indirect object *laq* whenever the verb takes an instrumental *s*, these forms *must be considered as a substitute for the direct object*, or as a direct object attached to the coordinate verb *la*" (B1947:283, ital. DR). The passivization of the recipient with PRIMARY OBJECT *-suʔ* supports Boas' analysis of primary objects as extraposed to prepositional phrases.

to subject, immediately following the predicate and preceded by the prenominal subject-marker *=i*.

(20) Passive clause: *n̓ik-* 'to say, tell' passivized with *-suʔ*

PRED	SBJ	O2
n̓íχsuɬaʔi	*q̓ə́mtalaɬas*	*q̓ániqiɬakʷ.*
n̓ik-**suʔ**-ɬa=i	q̓ə́mtalaɬ**=as**	q̓aniqiɬakʷ.
say-**PASS**-QUOT**=SBJ**	name**=OBJ2**	name

q̓ə́mtalaɬ was told by q̓aniqiɬakʷ. (B1947:256, III100.19)

As we would expect, the demoted subject *q̓aniqiɬakʷ*, who is telling *q̓ə́mtalaɬ* something, is demoted to secondary object status and appears in clause-final position preceded by the secondary object enclitic *=as*. The example below shows the same verb *n̓ik-* 'to say, tell', passivized with the SECONDARY OBJECT passive *-əm* (within a second-person purposive clause marked with the subordinator *qaʔs*) to promote the theme rather than the hearer.

(21) Passive clause: *n̓ik-* 'to say, tell' passivized with *-əm*

SUBORD	PRED	O2
…qaʔs	*n̓ígəmusaχs*	*ɬáẇənəməʔus*
…qaʔs	n̓ík-**əm**=Ø=us=aχs	ɬáẇənəm=əʔus
2.PURP	say-**PASS**=3.SBJ=2.OBJ2=2.POSS	husband=2.PURP

…in order that it be said to you by your husband. (B1947:270, CX249.40)

As we see in this example, the subject-promotion of the theme (the thing being said) requires the SECONDARY OBJECT passive suffix *-əm* rather than the PRIMARY OBJECT passive *-suʔ*, but instead.[28]

A similar contrast is evident with the stem *həlaq-* 'pay'. When a primary object-marked recipient becomes the subject, as in examples (20) and (21), the suffix *-suʔ* is used. In (20) the secondary object *s*-marking of the theme (the four blankets) is maintained, as can be seen from the *=sa* marking on the predicate *həláqasuʔsa*.

(22) Passive clause: *həlaq(a)-* 'pay' passivized with *-suʔ*

AUX	PRED	ADJ	O2
le	*həláqasuʔsa*	*múχsa*	*p̓əlχələsgəmaʔ*
le	həláqa-**suʔ**=Ø**=sa**	mu-χsa	p̓əlχələsgəm=aʔ
CONN	pay-**PASS**=3.SBJ**=OBJ2**	four-POSS.NSUB	blanket=DEM

She is paid with four blankets. (B1947:270, CX249.40)

[28] The case-marking of the second-person hearer as a secondary object with *=us* is unexpected. We would expect the hearer to be marked as a primary object. In addition, the demoted subject, *ɬaẇənəm* 'husband', is not case-marked at all. I do not have an explanation for this, although several factors could be at work: the subordinate syntax of the purposive clause, the second-person status of the hearer, and/or the possessed status of the husband.

(23) Passive clause: *həlaq(a)-* 'pay' passivized with *-suʔ*

AUX	PRED
le	*həláqasuʔ*
le	həláqa**-suʔ**=Ø
CONN	pay-**PASS**=3.SBJ

Then he is paid. (B1947:241)

However, when the *s*-marked theme, the payment, becomes the subject, as in example (24), the SECONDARY OBJECT passive suffix *-əm* is used to promote the secondary object.

(24) Passive sentence: *həlaq(a)-* 'pay' passivized with *-əm*

PRED	SBJ	PRED	O1
híʔəmχəʔáwise	*ẇaχa*	*həlágəmaχa*	*mámaẏuɬsila*
hí-m̓-χəʔá-wis-i	ẇaχa	həláq**-əm=χa**	mámaẏuɬsila
3P.PRED-OI-also-CONN-SBJ	amount	pay-**PASS**=**OBJ1**	midwife

That is also the amount that was paid to the midwife. (B1947:270, R 670.92)

The amount *ẇaχa* is subject-marked with the prenominal enclitic *=i*, and the enclitic *=χa* preceding *mámaẏuɬsila* 'midwife' marks it as retaining primary object status. As we saw with examples 14 and 15, the subject, the amount paid, or *ẇaχa*, precedes the stem *həlaq-* 'pay', rather than following it, because it is the subject of the verbal independent pronoun *hi-*. These 'verbal pronouns' are discussed in section 4.2.

The derived verb *həm̓gil(a)-* 'to feed', constructed from the stem *həm̓-* 'eat' and the transitivizing suffix *-gil(a)*, again illustrates the contrast between passivization of the primary object with *-suʔ* and passivization of the secondary object with a SECONDARY OBJECT promoting form, in this case *-ayu*. In (25), Stone Body, who is being fed, is the subject of the predicate *həmgil(a)-* 'feed' passivized with the PRIMARY OBJECT passive *-suʔ.*

(25) Passive sentence: *həm̓gil(a)-* 'feed' passivized with *-suʔ*

DISC	ADV	PRED	SBJ
li	*maʔɬṕaná*	*həm̓gílasəẇi*	*ťisəmgiti*
li	maʔɬ-ṕaná	həm̓gíl(a)**-suʔ=**i	ťisəmgit=i
then	two-times	feed-**PASS=SBJ**	Stone.Body=DEM

Then Stone Body was fed twice. - DR[29] (B1947:270, CIII220.30)

In example (26), the subject of the predicate passivized with the secondary object passive *-ayu* must be understood as the food, rather than the recipient of the food.

[29] Boas translates the first sentence as "Then Stone Body was twice given to eat," and the second as "… to be given to eat (with it) to his tribe." The translations provided above are my own. Boas' translations of this and the following examples are based on a gloss of *həmgil-* as 'give to eat', which allows for a less-intuitive translation. The English verb 'feed' can have secundative alignment, marking recipient as primary (direct) object ('He feeds someone with something'), or indirective alignment ('He feeds something to someone').

(26) Passive: *həm̓gil(a)-* 'feed' passivized with *-ayu*

PURP	PRED	O2
…qaʔ	*həm̓gílayusəχis*	*gúkʷəloti*
…qaʔ	həm̓gíl**-ayu-s=Ø=iχ**=is	gúkʷəlot=i
…3.PURP	feed-**PASS=-ʔ=3.SBJ=OBJ1**=3.POSS	tribe=DEM

…in order that it be fed to his tribe. - DR (B1947:270, CIII 7.6)

The recipient, *gukʷəlot* '(his) tribe' retains case-marking as the primary object with the prenominal enclitic *=iχ*.[30]

The verb *gʷəq̓əq(a)-* 'pour over' also has secundative alignment, and two examples illustrate the contrast between subject-promotion of the primary object with *-suʔ* and promotion of the secondary object with *-əm*. In the first example, passivized with *-suʔ*, the subject is understood as the 'recipient' or 'destination' of the liquid being poured while the material being poured is *s*-marked as a secondary object.

(27) Passive sentence: *gʷəq̓əqa-* 'to pour over' passivized with *-suʔ*

PRED	ADJ	O2
gʷəq̓əqasuʔsa	*ẇədaʔstá*	*ẇapa*
gʷəq̓əqa**-suʔ=**Ø=sa	ẇədaʔstá	ẇap=a
pour.over**-PASS=3.SBJ=OBJ2**	cold	water=T.DEM

It is poured over with cold water. (B1947:270, R516.16)

In contrast, in example (28), passivization with *-əm* results in the subject being understood as the *liquid* being poured.[31]

(28) Passive sentence: *gʷəq̓əqa-* 'pour over' passivized with *-əm*

PURP	PRED	PREP	OBL
…qaʔs	*gʷəq̓əgəmiʔ*	*laχa*	*líq̓əstəniʔ*
…qaʔs	gʷəq̓əq**-əm=Ø**=iʔ	la=χa	líq̓əstən=iʔ
…3.PURP	pour.over**-PASS=3.SBJ**=DEM.OBJ1	PREP	seaweed=DEM

…it is poured on the seaweed. (B1947:270, CIII 7.6)

Finally, the pair of examples below illustrate the interpretive contrast between *-suʔ* and *-ayu* marking on the MOTION predicate *qas-* 'walk'. For active motion predicates, the *destination* is encoded as primary object In (29), *qas-* is passivized with PRIMARY OBJECT *-suʔ*. The protagonist is being pursued. (That is, he is the destination of those 'walking towards' him.) He is expressed as a third-person subject, marked with -Ø, rather than the pronominal *-q* used to mark a primary object referent.

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[30] I am not sure what interpretation we should give to the morpheme *-s* following the *-ayu* in this predicate. It may be a pronominal marker indicating secondary object, in which case the translation should be 'in order that it be fed to his tribe *by him/them*'; but in most sentences like this we would find the primary object 'tribe' extraposed to a prepositional phrase.

[31] The seaweed, *líqəstən,* the destination (or 'recipient') of the liquid, is marked in a prepositional phrase here. Again, this may be a result of the extraposition of primary object to a clause-final prepositional phrase.

(29) Passive: *qas-* 'walk' passivized with *-suʔ*

DISC	DISC	PRED
Ləʔám	*lawis*	*qásʔidsaẇa*
Ləʔám	lawis	qás-ʔid-**suʔ-Ø-**a
Then	it is said	walk-MOM-**PASS-3.SBJ-**T.DEM

Then it is said they went after him.
(Then, it is said, he was pursued by them. - DR; Boas 1895, M727.17)

On the other hand, in (30a) and (30b), *qas-* is passivized with *-ayu*, and in both examples the interpretation is that the protagonist is being walked by another character.

(30) Passive: *qas-* 'walk' passivized with *-ayu*

a.

DISC	PRED	O2
Lálaʔi	*qásʔidayusa*	*wíwaʔokʷ*
Laʹlaʔi	qás-ʔid-**ayu=sa**	wíwaʔokʷ
SEQ-QUOT	walk-MOM-**PASS=OBJ2**	wolf

Then he was walked by the wolf. (B1895: M 666.21)

b.

DISC	PRED
Lálaʔi	*qásʔidayu*
Laʹlaʔi	qás-ʔid-**ayu=Ø**
SEQ-QUOT	walk-MOM-**PASS=3.SBJ**

Then it is said they walked with him

DISC	OBL	
lálaʔi	*laχa*	*ƛíχƙala*
lálaʔi	la=χa	ƛíχƙal-a
SEQ-QUOT	PREP=OBJ1	beating.of.boards-T.DEM

then to the beating of boards.
(Then it is said he was walked (then) to the beating of boards. - DR; B1895: M 683.4)

I have not yet found an active example of *qas-* with a secondary object, but we might predict that a person being made to move in a certain way, or a pet being walked by its owner, would be encoded as the secondary object.

Examples (13) to (30) show that the distribution of the PRIMARY OBJECT passive morpheme *-suʔ* and the SECONDARY OBJECT passive morphemes *-əm*, *-ayu,* and *-ano* reflect the **case-marked syntactic role** of an argument rather than its **semantic role**. Further evidence can be found in the first clause of the example below, in which a semantic instrument (*λəmgayu* 'wedge') is promoted to subject status, but with the PRIMARY OBJECT passive morpheme *-suʔ*. If the distribution of *-suʔ* and *-ayu/-əm/-ano* morphemes were based on semantic categories, the first predicate *ʔəχ-* 'take' would be marked with *-ayu, -əm,* or *-ano,* one of the passive morphemes identified as 'instrumental' by Boas, in order to promote the semantic instrument *ƛəmgayu* to subject status. But the distribution is syntactically rather than semantically determined, as we see here.

(31) Passive: *ʔəx-* 'take' passivized with *-suʔ, ṯəlχ^{w}-* 'beat (cedarbark)' passivized with *-ayu*

AUX	PRED	SBJ
la	*ʔəχʔidsəẇida*	*ƛ́əmgayuwi*
la	ʔəχ-ʔid-**su**ʔ=i=da	ƛ́əmk-ayu=i
CONN	take-MOM-**PASS**=SBJ=DEF	wedge-NOM.INST=T.DEM

Now is taken the wedge,

PURP	PRED	PREP
qaʔs	*ṯəlχʔwidáyuwiʔ*	*laq*
qaʔs	ṯəlχ^{w}-ʔid-**ayu**=iʔ	la=q
PURP	beat.cedarbark-MOM-**PASS**=DEM	PREP=3.OBJ2

and it is used for beating it (the cedarbark). (B1947:312, R296.82)

The active predicate *ʔəχ-* 'take' requires primary object marking for the thing being taken; passivization with *-suʔ* promotes this object — in this case a wedge, *ƛ́əmgayu*. Semantic interpretations of *-suʔ* would identify it as an 'objective passive' (Boas 1947:270) or a 'goal focus' morpheme (Levine 1980b:58), in contrast with *-ayu*, *-əm*, or *-ano*, identified as the passives used to promote the "the thing used for doing something" or the "instrumental" (Boas 1947:270). The semantic role of the wedge taken here would certainly fit into the category 'instrument' and one might expect the passivizing suffix to be one of the 'instrumental' suffixes. However, because of the argument structure of the predicate *ʔəχ-* 'take', for which the wedge is a primary object of the stem, it must be passivized with *-suʔ*. In the subsequent predicate *ṯəlχ^{w}-*, 'beat cedar bark', the same wedge is passivized with *-ayu*, because of the argument structure of the active lexeme *ṯəlχ^{w}-*, which would mark the wedge as a secondary object.[32]

The suffix *-ayu* also occurs in the lexicalized word for wedge, *ƛ́əmgayu,* derived from the stem *ƛ́əmk-* 'to split wood with wedge'. Here, *ƛ́əmgayu* clearly functions as an argument; it follows the prenominal subject-marker *=i* attached to the predicate. The suffix *-ayu* functions in this form as an instrumental nominalizer. The question of whether these are the same morpheme or two polysemous morphemes is discussed below in section 3.4.

The section above argues that syntactic properties govern the distribution of passive morphemes *-su* and *-ayu/-əm/-ano*. The next section addresses the distribution of the remaining passive suffixes in Figure 2, *-ɬ* (EXPERIENCER) and *-ʔas* (LOCATIVE), whose function reflects semantic, rather than syntactic, properties of the argument.

3.2 Semantic Roles

Unlike the PRIMARY OBJECT and SECONDARY OBJECT passives *-suʔ* and *-ayu*/*-əm*/*-ano*, the passive morphemes described below are sensitive to the different semantic qualities of the argument they promote. The EXPERIENCER passive *-ɬ* is sensitive to the semantic quality of an event: it only applies to situations in which an event's semantic transitivity is reduced due to lack of control (Hopper and Thompson 1980). On the other hand, the LOCATIVE passive *-ʔas* is sensitive to the semantic role of the promoted argument: it is only used to promote **places** to

[32] Again in this example, we see the extraposition of a third-person pronominal primary object ('it') to the prepositional phrase *laq*.

subject position. We will see examples of both below. The analysis of these two passives draws much from Levine's presentation in two 1980 articles concerning the Kʷaǩʷala passive.

3.2.1 EXPERIENCER Passive *-ɬ* and Event Structure

Returning to Boas' 1947 grammar, we find that he defines the suffix *-ɬ* as being the passive of 'sensations', 'mental actions', and 'sensations produced by outside actions' (Boas 1947:270). He gave examples such as the ones below:

(32) Stems which passivize with *-ɬ* (Boas 1947:377)

a.	*wəlɔ́ɬ-* wəɬ-ɬ hear-PASS	heard (CII 30.17)
b.	*wəlɑ́χʔaləɬ-* wəɬ-ʔaɬəla-ɬ- hear-SENSE.SUDD-PASS	discovered by hearing (III 257.3, X 5.13)
c.	*dúχẃaɬəɬ-* duqʷ-ʔaɬəla-ɬ- see-SENSE.SUDD-PASS	seen suddenly (be discover by seeing) (CII 98.13, CII 124.10)
d.	*misʔaləɬ-* mís-ʔaɬəla-ɬ- smell-SENSE.SUDD-PASS	discovered by smelling
e.	*p̓əxẃaləɬ-* p̓əy-ʔaɬəla-ɬ- feel-SENSE.SUDD-PASS	discovered by touch
f.	*xiċənɬ-* xiçax-ɬ examine-PASS	witnessed
h.	*ləGʷɔ́ɬ-* ləqʷ-ɬ- fire.wood-PASS	affected by fire (burnt by fire wood) (CX208.32)
i.	*qəbɔ́ɬ-* qəp-ɬ hollow.vessel.upsidedown-PASS	affected by upsetting something on oneself
j.	*pəndᶻəɬ-* pɔ́ns-ɬ be.blistered-PASS	affected by a blister (B1947:270)

Some of these predicates are derived from stems that would not take objects and therefore may not have an active counterpart to contrast with their passive form: *ləGʷ-* 'firewood' (distinct from the stems *mix(a)-* 'to start a fire' or *xiq(a)-* 'to be on fire'), *qəp-* 'a hollow vessel upside down', and *pens-* 'be blistered'. Levine presents additional elicited examples of passivized predicates without active counterparts. The stem *xədᶻ-* 'be moldy' is passivized with *-ɬ* as seen below.

(33) *xədᶻ-* 'be moldy' + EXPERIENCER passive *-ɬ*

PRED	SBJ	O2
xədᶻiɬida	*kʷənikʷ(=sa*	*xədᶻəxa)*
*xədᶻ-**ɬ**=i=da*	*kʷənikʷ(=sa*	*xədᶻəx-a)*
mold-**PASS**=SBJ=DEF	bread(=OBJ2)	mold-T.DEM

The bread is moldy (with mold). (Levine 1980a:39)

The agent of the change of state, *xədᶻəx* 'mold', is optionally included in the clause as an *s*-marked (secondary object) argument, parallel to the way demoted subjects are marked in other passive constructions. Levine provides many parallel examples with meanings such as "the man is sore-ridden (with sores)," formed with the stem *ʔamt-* 'be sore-ridden', or "the man was burned," formed on the stem *xiq-* 'be on fire'. Surprisingly, Levine's consultants seem to find it acceptable to include the inanimate agent of the event (mold, sores, flame) as a secondary object marked argument — even though this information is already contained in the predicate.

As Levine notes, what these examples seem to share is not the quality of mental sensation, but the **lack of control** exerted over an event by the experiencer, whether it is the experience of being discovered or the experience of having something suddenly spill on one's lap. This is expressed in some cases by the English verb 'affected by', which also contains the sense of a lack of control on the part of the experiencer.

Levine presents several elicited examples to illustrate the non-control aspect of the *-ɬ* suffix. In the first sentence, no deliberate actor is present.

(34) Passive clause: *Gəls-* 'paint'

PRED	SBJ
Gə́ldᶻəɬuχʷda	*ʔúdᶻuy̓iχ*
Gə́ls-**ɬ**=uχʷ=da	ʔúdᶻu=iχ
paint-**PASS**=DEM=DEF	wall-DEM

The wall is overpainted. (Levine 1980b:5)

In example (35), Levine notes that the inclusion of a deliberate actor makes the sentence ungrammatical.

(35) Passive clause: *Gəls-* 'paint', secondary object not permitted

PREP	SBJ	O2
*Gə́ldᶻəɬuχʷda	ʔúdᶻuy̓=isa	bəgʷanəm

The wall was overpainted by a person. (Levine 1980b:5)

If an argument marked as a secondary object is included in the sentence, it must be the paint, as illustrated in (36).

(36) Passive clause: *Gəls-* 'paint'

PRED	SBJ	OBJ2
Gə́ldᶻəɬuχʷda	*ʔúdᶻuy̓iχsa*	*Gəlyayu*
Gə́ls-**ɬ**=uχ=da	ʔúdᶻu=iχ=sa	Gə́ls-ayu
paint-**PASS**=DEM=DEF	wall-DEM=OBJ2	paint-INSTR.NOM

The wall is overpainted with paint. (Levine 1980b:6)

The ungrammaticality of (35) and the role of the secondary-object argument in (36) suggest, as Levine argues, that the inclusion of an agent with control is semantically incompatible with the passive suffix *-ɬ*: "semantic considerations … determine the appropriateness of co-occurrence between various elements in the surface form of sentences" (Levine 1980a:13).

The two clauses below illustrate the use of the EXPERIENCER passive in clauses with the stem *duqʷ-* 'see', first in an active sentence, and then in a clause passivized with *-ɬ*.

(37) Active: *duqʷ-* 'see'

PRED	SBJ	O1
dúqʷəluχʷda	*bəgʷánəmaχa*	*gənánəm*
dúqʷ-əla=uχʷ=da	bəgʷánəma=χa	gənánəm
see-CONT=DEM=DEF	man=OBJ1	child

The man saw the child. (Levine 1980b:39)

(38) Passive: *duqʷ-* 'see'

PRED	$PRED_{COMP}$	SBJ_{COMP}
hím̓ən	*dúqʷəɬida*	*ʔixpə́maɬa*
hi-m̓-ən	dúqʷ**-ɬ**=i=da	ʔix-pə́maɬ-a
3.PRON.PRED-OI-1.POSS	see-**PASS**=SBJ=DEF	good-play-T.DEM

That is my seen one it is a good play. (i.e., That one seen by me is a good play. - DR; B1947:286)

In example (38) passivization of the stem *duqʷ-* may be triggered by the use of the demonstrative third-person pronoun predicate *hí-*; this automatic passivization following independent pronoun predicates is discussed below in section 4.2. (Boas' awkward translation is an expression of his analysis that the complement phrase beginning with *duqʷ-* is a possessed nominal.) In my current research, *duqʷ-* is the only predicate I have found to combine with either *-suʔ* or *-ɬ* passive suffixes, indicating a difference in degree of control by the patient. However, initial findings suggest that the combination of the morphemes *duqʷ-* and *-ɬ* to mean 'discover' is not transparent to speakers, suggesting that it has lexicalized.[33]

The functional constraints determining the distribution of this morpheme might be more specific than 'lack of control' or an 'experiencer' role for the subject. In documentation recorded in 2008, a speaker used *-suʔ* to passivize the example below, despite the subject's lack of control.

[33] Passive suffixes can co-occur with transitivizing suffixes such *-(g)ila* or the causative *-amas*, such as in the stem *hám-gil-ayu* 'be fed' (eat-TR-PASS) (B1947 R225.46). Levine's example *ləGʷə-ɬ-amas-suʔ=i=da* (burn-PASS-CAUS-PASS-SUB-DEF) *c̓ədaqaχa bəgʷanəm* 'The woman caused the man to be burned' contains *two* passive suffixes (Levine 1980a:7). This seems to be a matter of semantic scope, but more research is clearly needed.

(39) Passive: *ƛ̓ilak-* 'attack' with *-suʔ*

PRED	O2
ƛ̓ílakasuẃoʔχasa	*ƛ̓aẏ̓iχ*
ƛ̓ílaka**-suʔ=**oχ=(a)sa	ƛ̓aẏ̓i-χ
attack-**PASS**=SBJ.DEM=OBJ2	bear-DEM

He is being killed (attacked) by the bear.
(Elicited: The bear is killing him; Shaw: 2008_7_17DS.340)

Interestingly, the subject of this clause is semantically an 'experiencer' of this event, but there is an animate being in control of the attack: the bear. One potential analysis is that the *-ɬ* morpheme is only used in situations in which an event is perpetrated by a non-animate entity: blisters, a container full of liquid, one of the five senses, fire or wind. Another possibility is that *-ɬ* is a Kʷaƛ̓ʷala 'middle voice'; part of the voice paradigm, but not a passive (Kemmer 1993).

Of course, it may also be the case that language shift has led to further grammaticalization of the passive suffixes. The same speaker who provided example (39) above used the SECONDARY OBJECT passive *-ayu* for another context in which one might have expected *-ɬ* to have been used previously: the stem *yəẃi-* 'wind' is stative, and the event described is not subject to animate control.

(40) Passive: *yəẃi* 'wind' with *-ayu*

PRED
yəẃísdandayuẃoλoχʷ
yəẃí-sdana-d**-ayu**=oλ=Ø=uχʷ
wind-DIE.OF-MOM**-PASS**=DIST.PAST=3.SBJ=DEM

He was blown overboard by the wind (and died; Shaw:2008_7_17DS.340)

Further research will allow us to map the new distribution of passive morphosyntax in the contemporary language.

3.2.2 LOCATIVE Passive *-ʔas* and Semantic Role of Argument

Levine adds another suffix, the LOCATIVE *-ʔas*, to the list of passive morphemes provided by Boas. This suffix is included in Boas' long glossary of lexical suffixes, but he only provides examples of this suffix used in the creation of place names. Levine gives examples, however, where it is also used to promote a place to subject from what would otherwise be an oblique constituent of an active sentence.

(41) Active: SUBJECT is *bəgʷanəm* 'man'

PRED	SBJ	OBL	
la laʔuχʷda	*bəgʷanəmχ*	*laχʷa*	*ʔəwiṅagʷis*
la-la-uχʷ=da	bəgʷanəm=χ	la=χʷa	ʔəwiṅagʷis
RED-go-DEM=DEF	man**=**DEM.OBJ1	PREP=DEM	village

The man goes to this village. (Levine 1980a:243)

In example (41), 'village' is expressed within a prepositional phrase, beginning with *laχʷa*. In the

example below, it becomes the subject of the sentence.

(42) Passive: SUBJECT is *ʔəwiɬagʷis* 'village'

PRED	SBJ	O_2
lalaʔasuχʷda	*ʔəwíɬagʷis sa*	*bəgʷánəm*
lala-**ʔas**=uχʷ=da	ʔəwíɬagʷis=sa	bəgʷánəm
RED-go-**PASS**-DEM=DEF	village**=**OBJ2	man

The village is where the man goes. (The village is gone to by the man; Levine 1980a:243)

Levine notes that *-ʔas* can only be used to promote locative arguments to subject status; non-locative arguments (i.e., *laχa bəgʷanəm* 'to the man') can not be promoted with *-ʔas*.

Thus, semantic properties motivate the use of both LOCATIVE passive *-ʔas* and EXPERIENCER passive *-ɬ* suffixes. In the case of the LOCATIVE passive *-ʔas*, the semantics of the constituent determines the appropriateness of *-ʔas*. Locative phrases are always marked in a prepositional phrase, but not all prepositional phrases are eligible for subjecthood via the *-ʔas* suffix, only those referring to a place. On the other hand, in the case of the EXPERIENCER passive *-ɬ*, it is the semantics of event structure that determine whether *-ɬ* is appropriate. Constituents promoted to subjecthood may be primary objects of a predicate (as with *duqʷ-* 'see'), or they may be the single patient of an intransitive verb which doesn't have a simple active counterpart (as with *qəbə́ɬ-* 'affected by upsetting something on oneself'). Meanwhile, neither suffix is syntactically constrained as the PRIMARY OBJECT and SECONDARY OBJECT passives are. Further research comparing historical and contemporary discourse will help us determine whether the passive paradigm has further grammaticalized, and perhaps contracted, as a result of language change over the past century.

The preceding two sections identifed the properties governing the distribution of Kʷaƛʷala passive morphology. The next section compares the alignment of lexical and pronominal arguments.

3.3 Grammatical Relations in Passive Constructions

This section discusses the effect of passivization on the grammatical relations of a clause, comparing lexically expressed arguments with pronouns. In passive constructions with lexically expressed arguments, the resulting argument structure is predictable. The distribution of pronominal arguments is less predictable. This section describes the patterns of alignment for both lexical and pronominal arguments.

As we have seen in many examples, the promotion of lexical argument to subject in a passive clause results in two changes that indicate subject status: (1) prenominal subject inflection on the predicate, and (2) the immediate post-predicate position of an argument in the syntax. In most languages, demoted subjects of passivized predicates are marked as oblique, but as we have repeatedly seen, a Kʷaƛʷala demoted subject takes SECONDARY OBJECT marking, as in (43).

(43) Passive: *síxʷ-* 'paddle' with *-ayu*

DISC	$PRED_1$	$PRED_2$
Wä! Ləʔám	*gax*	*síẃodayusis*
Wä! Ləʔám	gax	síxʷ-od-**ayu=Ø=s=**is
Now! Then	come	paddle-lead-**PASS=3.SBJ=OBJ2**=3.POSS

Wa! Then they came, they took him home

OBJ2

nəgʷə́mp	*λáwis*	*gókulot*
nəgʷə́mp	λáw=is	gókulot
father.in.law	and=3.POSS	tribe

his father-in-law and his tribe.

(Then he came paddled home by his father-in-law and his tribe. - DR; B1895 M679.17)

The father-in-law and tribe who paddle the subject home, *nəgʷəmp λawis gokulot*, are marked as secondary objects with the prenominal enclitic *=s* following the passive suffix. Meanwhile, the pronominal subject, the protagonist of this story, is marked with the third-person pronominal zero morpheme on the predicate, as we would expect.

The possessive markers in the example above also help us track referents and identify syntactic roles. Kʷaǩʷala third-person possessors distinguish between subject and non-subject possessors, and *=is* marks a subject possessor, as opposed to *-a~-Ø* for the corresponding non-subject possessor. Thus, we know that *=is* refers to the syntactic subject — the protagonist being paddled home — and not *nagʷəmp*, his father-in-law. (See Appendix III, Tables 8 and 9 for the full paradigm of third-person possessors.)

The enclitics above confirm that third-person arguments, whether expressed lexically or pronominally, behave predictably in passivized clauses. What about other pronominal arguments? Many languages treat speech act participants (first- and second-person) separately; the grammar might resist demoting a speaker or listener out of subject position. Example (44) shows us that second-person pronominal arguments do not resist demotion from subjecthood.

(44) Pronominal arguments in passive constructions: second person

PRED	COMP
dúqʷaɬaχs	*ʔəχʔíχsdəsuʔχaʔus*
dúqʷ-aɬa-χs	ʔəχʔiχsd-**suʔ**-χ=us
see-CONT-2.POSS	desire-**PASS**-FUT-3.SBJ>2.OBJ2

See what will be desired by you. (See your desired-by-you thing; B1947:255, CIII409.29)

The active version of this phrase might be something like 'see what you will desire', with a second-person pronominal subject *=əs* of the verb *ʔəχʔíχsd-* 'desire'.[34] In the passivized clause above, the second-person actor is demoted to secondary object status, reflected in the SECONDARY OBJECT enclitic *=us*, used for transitive verbs with third-person subjects acting on second-person secondary objects (paradigms of these pronominal referents are provided in

[34] In this sentence, a matrix imperative 'see' precedes a nominalized (and possessed) complement predicate, 'desired-by-you thing'; the second person *prenominal* possessive form *-χs* is used (for possessive paradigms, see tables 8 and 9 in Appendix III) but unlike third-person, no distinction is made between subject and non-subject, so this does not give us additional information about syntactic status of the possessor.

Tables 6 and 7 of Appendix III).

As we might expect, when a speaker is promoted to the syntactic subject of a passivized sentence, the argument structure follows suit, as in (45).

(45) First-person promoted subjects in passive constructions: *ləʔiλ-* 'enter'

PRED$_1$	PRED$_2$ (ADV)
ləʔíɬcəẃənχaχgən	*Gʷəʔíɬcik*
ləʔíλ-**suʔ=ənχaχ**=gən	Gʷəʔíɬ-c=ik
enter-**PASS=1s.SBJ>3.OBJ1**=1.POSS	thus.in.house-inside-DEM

I was the object of entering (i.e., someone entered and came to me) when I was in my house

here. (I was entered upon in my house. - DR; B1947:270)

The person who enters the house does not appear in the clause; the speaker is subject, and the primary object marking in the 1.SBJ>3.OBJ1 form *=ənχaχ* refers to the nominalized (and possessed) phrase *Gʷəʔíɬcik* 'inside (of) my house'. Example (46), with SECONDARY OBJECT passive *=əm* promoting the first-person from secondary object status to subject status,[35] illustrates this as well.

(46) First-person promoted subjects in passive constructions: *ləʔiλ-* 'enter'

PRED	OBL	
ləʔíλəm̓ən	*laχa*	*gukʷ*
ləʔiλ-əm**=ən**	la=χa	*gukʷ*
enter-PASS**=1s.SBJ**	PREP=OBJ1	house

I am used for entering (i.e., I am taken) into the house. (I am brought into the house. - DR; B1947:270)

However, first-person arguments do indeed seem to resist demotion from syntactic subject status. See the series of examples below, produced in 2012. In 47a, the money retains its secondary object marking; in 47b, Pearl takes secondary object marking as the demoted subject.

(47) Avoiding demotion of first-person subject

a. Active *həlaq(a)-* 'pay': third-person subject

Həɬáqasuẃi	*Pərlasa*	*dala.*
həɬáqa-**suʔ=i**	Pərl=**sa**	dala
pay-**PASS=SBJ**	Pearl=**OBJ2**	money

Pearl was paid the money. (Rosenblum 2012jul23_BL_09)

[35] The motion predicate *ləʔiλ-* 'to enter', like *qas-* 'to walk' and *siχʷ-* 'to paddle', seems to have a ditransitive argument structure, with primary object marking for goals/destinations and, in this case secondary object marking for a person who is made to move in this way ('brought into').

b. Passive *həlaq(a)-* 'pay': first-person promoted subject
Həɬáqasuẃənχas *Pərl.*
həɬáqa-**su**ʔ=ənχas Pərl
pay-PASS-1.SBJ>3.OBJ2 Pearl
I was paid by Pearl. (Rosenblum 2012jul23_BL_09)

c. Passive *həlaq(a)-* 'pay': first-person demoted subject
Həɬáχʔidənχaχ *Pərl.*
həɬáq-xʔid=**ənχaχ** Pərl
pay-PASS-1.SBJ>3.OBJ1 Pearl
Elicited: Pearl was paid by me.
Translation: I paid Pearl. (Rosenblum 2012jul23_BL_15)

In (47c), however, despite the requested passive sentence, the speaker offered the active clause. Speakers easily provided full paradigms of passive constructions with second- and third-person demoted subjects, but consistently offered active formulations when prompted to translate English passive forms with demoted first-person subjects (expressed as oblique in 'by'-phrases in English). Alternatively, they used the Kʷaḵʷala first-person pronominal predicate with an active predicate, as in (48).

(48) Alternate construction
núGʷaʔəm *q̓ʷáxʔidamasga* *gíngənanəm*
núGʷa=**əm** q̓ʷáx-(x)ʔid-amas-sga gíngənanəm
1.PRED=**1.SBJ** grow-MOM-CAUS-DEM.OBJ2 children
Elicited: The children were raised by me.
Translation: I am the one who raised the children.

In the narratives published by Boas and Hunt, relevant examples are sparse, but (49) presents the possibility that first-person pronominals resist other non-subject syntactic slots as well. According to the translation provided by Boas and Hunt, the speaker should be marked as the primary object (the recipient) of the payment; instead, it is marked as the subject.

(49) PRED

həɬágayuɬoqʷənχas
həɬáq**-ayu**-ɬ=oqʷ**=ənχas**
pay-**PASS**-PAST-DEM.OBJ1**=1.SBJ>3.OBJ2**
It was paid to me

PURP	$PRED_{PURP}$
qənc	*kəns?idayuɬac*
qənc	kəns-?id**-ayu**-ɬ=Ø=ac
1.INC.PURP	be.ashamed-MOM**-PASS**-PAST=3.SUB=1.INC.PURP

by the one deserted by us (by our abandoned one-DR).
(It would seem that the passive use of *kəns-* 'be.ashamed' has the lexicalized meaning of 'deserted by' or 'abandoned by' when marked with the secondary-object passive marker. -DR; B1947:299, 42.20)

Based on the translation, the first predicate *həlaq-* 'to pay' refers to the payment made to the speaker by someone else; the second predicate is a phrase meaning, in effect 'the person of whom we were ashamed'. Both are passivized with *-ayu* suffixes, which we know make subjects from secondary objects. The embedded predicate is framed by a purposive clause construction from the first person point of view (see Appendix III, Table 10), but within the embedded predicate, the alignment is as one would expect; the third-person subject is marked with *=Ø* (rather than primary-object *-q* or secondary *-s*). On the other hand, the grammar of the matrix predicate suggests a completely different interpretation than the translation offers: a demonstrative form signalling a third-person pronominal primary object *=oqʷ* precedes the first-person acting on third-person OBJ2 form *=ənχas*. (These forms are available in Appendix III Tables 6 and 7.) Having become familiar with the secundative alignment of the verb *həɬáq-* 'pay', we know that if the recipient of payment (the speaker) were the intended subject, the verb would have been passivized with *-suʔ*, but this clause refers to the amount paid, and is hence passivized with *-ayu*. And yet, the use of *=ənχas* shows that the pronominal marking maintains subject status for the speaker. Meanwhile, the referent of primary object demonstrative *=oqʷ* is unclear.[36]

Levine's work adds to the puzzle; he provides three examples of passives in which speaker retains subject status despite passivization, without commenting on the argument structure (the examples are provided to illustrate a different argument).

(50) First-person pronominals in passive constructions

PRED
naχʔidsuṅukʷχəntən
naq-xʔid**-suʔ-**nukʷ-χənt**=ən**
drink-MOM**-PASS**-have-EVID**-1SBJ**
It must be that I had something to drink. (Levine 1980a:51)

[36] Because this is a purposive clause with an embedded phrase, we can also note the use of the inclusive first-person form of the purposive framing construction *qənc…=ac* (see Appendix III Table 10); the paradigm of Kʷaƛ̓ʷala purposive constructions marks person but (like possession) only distinguishes between subjects and non-subjects in the third-person.

(51) First-person pronominals in passive constructions

PRED
məxʔid-suʔ-iχsd-ən
məx-xʔid-**suʔ**-iχsd=**ən**
strike-MOM-**PASS**-DESID**=1.SBJ**
I want to get hit. (Levine 1980a:51)

(52) First-person pronominals in passive constructions

PRED
duχʷʔidsuƛ̓nukʷən
duqʷ-xʔid-**suʔ**-nukʷ=**ən**
see-MOM-**PASS**-have**=1.SBJ**
I went to look at something. (I've got something looked-at. - DR; Levine 1980a:52)

The translations of these clauses rely on lexical passives in English ('I've got…'), or other ways of reducing agency (and hence, transitivity) on the part of the speaker; however, a passive interpretation would mean that the speaker is not the subject. All three of these constructions, unlike the example taken from Boas, contain aspectual suffixes following the passive derivation (*-nukʷ* 'have' and *-iχsd* 'DESID'); both act to reduce the telicity (and thus the transitivity) of the predicate (Hopper and Thompson 1980). This may also play a role in argument structure. Perhaps these are lexicalized stems for which second- and third-person subjects would also behave as if the predicate is active. Or it may be that the presence of valence-reducing suffixes such as *-nukʷ* and *-iχsd* following a passive derivation trigger different argument structures. Further research will explore the relationship of aspectual suffixes to passive morphology and alignment of first-person arguments. The preliminary analysis suggests a different pattern of alignment for passives with first-person arguments than for other pronominal arguments, but additional data from connected and spontaneous speech are necessary to support the claim.

Prompted by the prevalence of inverse systems in neighboring languages, some might suggest that the divergence of first-person pronominal alignment is evidence of an inverse system (Forrest 1994, *inter alia*). Such inverse systems reflect the grammaticalization of some type of a semantic hierarchy ranking the expected topicality of participants in a clause: first- or second-person arguments may be more topical than third-person arguments, or human arguments over animal arguments, leading to special marking in clauses which reverse this hierarchy (with a horse kicking a man, for example).

Does the divergence of the first-person pronominal agreement in Kʷaƛ̓ʷala suggest an inverse system? I would argue that it does not, for several reasons. In a prototypical inverse system, such as the Plains Cree system described by Dahlstrom, neither the transitivity of the predicate nor the grammatical relations of arguments are changed: "both the inverse and direct form are transitive and active: that is, both map agent onto subject and patient onto object" (Dahlstrom 1986:74). But as we have seen in the examples above, passive derivations consistently reduce transitivity and reorganize argument structure in predictable ways in Kʷaƛ̓ʷala clauses. For example, in (53), we see again that the second-person argument (the agent of the predicate *wəƛ́-* 'ask') is marked as a SECONDARY OBJECT with the suffix *=us*.

(53) Pronominal arguments in passive construction with ***-suʔ***

PRED	SBJ
hímaʔis	*wəχásəwus*
hi-m-is	wəχá-**suʔ=us**
3.DEM.PRON-OI-3.POSS.SBJ	ask-**PASS=3.SBJ>2.OBJ2**

That is what was asked by you. (B1947:286, III64.4)

Nakayama's analysis of the "passive" suffix *-'at* from the neighboring Wakashan language Nuu-chah-nulth also explored the question of whether an inverse analysis might be appropriate. While he found that *-'at* is sensitive to an animacy hierarchy (based on speaker empathy, Nakayama 1986:429), he concludes that the pattern of pronominal indexing in *-'at* does not support an inverse analysis (Nakayama 1986:422).[37]

Kʷakʷala grammar does not seem to be sensitive to an animacy hierarchy, as we might remember from examples (12), (13), and (14), in which a dog bites a child. The active clause (12), with no special marking, is reproduced here.

(54) Active sentence: *q̓əx-* 'bite'

AUX.PRED	PRED	SBJ
laʔəm	*q̓əxʔídida*	*w̓acaq*
la-m=Ø	q̓əx-ʔíd**=i**=da	w̓ac=(a)q
SEQ-OI=3.SBJ	bite-MOM**=SBJ**=DEF	dog=3.OBJ1

Now the dog bit him. (B1947:286, CIII12.19)

The third-person pronominal object *=aq* encliticized to the subject *w̓ac-* 'dog' refers to the person being bitten. Languages with an animacy hierarchy triggering inverse-marking might require 'dog' to be marked as 'obviative' and the third-person object to be marked as 'proximate', but there is no such marking here.

On the other hand, as we saw in examples (47) through (52), Kʷakʷala alignment of passive constructions does seem to be sensitive to a hierarchy with respect to the speaker in relation to other participants (1 > 2,3). I would argue that these clauses should tentatively be interpreted as passives with a resistance to demotion of the first-person speaker from subject position. The behavior of pronominal marking in passive constructions in contemporary Kʷakʷala discourse is a key target for further research.

The next and last part of this section addresses the combinatorial properties of these suffixes with respect to predicates and arguments, and the question of their status within the lexicon.

3.4 Derivation, Lexicalization, and Polysemy

As mentioned briefly in the introduction to the language, some derivational suffixes attach only to predicates, and others only to arguments; these suffixes contribute to the distinctions we can draw between syntactic predicates and arguments in the Kʷakʷala clause. However, there is also ambiguity; some derivational suffixes can be used with either predicates or arguments. This is the case with four of the passive suffixes in Kʷakʷala. The SECONDARY OBJECT suffixes *-ayu* and *-əm* — two of Boas' so-called 'instrumental' passives — are used extensively to nominalize

[37] Nor does Nakayama choose to characterize the Nuu-chah-nulth suffix *-'at* as "passive" (Nakayama 1986:429).

transitive stems, usually to create a word for the tool or instrument which performs an action. The LOCATIVE suffix *-ʔas* is used widely in placenames. On the other hand, the PRIMARY OBJECT suffix *-suʔ* and EXPERIENCER *-ɬ* seem never to occur in a non-predicative context.

This raises the question of the status of such morphemes in the lexicon: are the nominalizers the same as the passivizing morphemes used to derive predicates? Boas considered these morphemes to be one and the same, serving different functions in a predicative context versus a nominalizing one. I would argue that they are not. Based on the lexicalization of instrumental forms in nouns, the grammaticalization of *-suʔ* and *-ayu/-əm/-ano* in relation to the syntax of argument structure, and the fact that not all of the passive forms have a nominalizing function, I consider the nominalizing forms of *-ayu*, *-əm*, *-ano*, and *-ʔas* to be separate lexemes, distinct from the homophonous passivizing suffixes to which they are historically related.

We have seen some of the nominalizations formed by attaching *-ayu* and *-əm* to transitive stems. Example (31) contains the word *χə́mgayu* 'wedge', a combination of the stem *χə́mk-* 'to split wood with wedge', and the suffix *-ayu*. The word *Gə́lyayu* in example (34) combines the stem *Gə́ls-* 'to paint' with '*-ayu*' to form 'paint' (the substance). The Kʷaḵʷala lexicon is full of such forms. The word *t̓it̓əbayu* 'shoes' derives from the reduplicated form of *t̓ip-* 'to step on' (because there are two shoes) and *-ayu* (Boas 1948:176). The word *dənə́m* 'rope' combines the stem *dən-* 'to pull a rope' and *-əm* (Boas 1948:151). The words *síwayu* 'paddle', *ḵáwayu* 'knife', *kiλəm* 'fishing net', and *q̓ə́mdəm* 'song' are further examples of nouns created with instrumental suffixes.[38]

The suffixes are clearly very productive, but it is not likely that these forms are created anew each time. There is further evidence that certain combinations of forms are lexicalized. Boas contrasts *q̓ənẏu* 'thread' with *q̓ənáyu* 'needle', both from combinations of *q̓ən-* 'sew' with *-ayu* (B1947:312).[39] Another contrasting pair employs two different 'instrumental' suffixes with the same stem *náq-* 'to drink', leading to contrasting semantic values: *-ayu* in *náGayu* 'drinking tube' and *-əm* in *náGəm* 'bucket'. In still other cases, the productivity of these suffixes leads to formal variability with semantic constancy: both *m̓ə́nyayu* and *m̓ənyəm* 'ruler, instrument for measuring', derived from *m̓əns-* 'measure', are judged acceptable by Boas' consultants, although he says that *m̓ənyayu* was more commonly used (B1947:302).

The different functional distributions of the argument and predicate suffixes further support a polysemous interpretation. As we have seen, the semantic role of a syntactic SECONDARY OBJECT is *sometimes* 'instrument', but not always. For 'transfer' ditransitives such as 'give', 'pay', or 'send', the SECONDARY OBJECT will be the transferred object (while the recipient is marked as PRIMARY OBJECT), and for 'motion' predicates such as 'walk' and 'paddle', the SECONDARY OBJECT will be the one made to move in that way (while the destination is marked as PRIMARY OBJECT). As we saw in example (31), *-əm* and *-ano* do not always promote an 'instrument' to subject status: the semantic role of *χə́mgayu* 'wedge' is the instrument which is taken (and used) in this clause, but the selection of the object-promoting passivizing suffix depends on the syntactic case of an argument. The predicate *ʔəxʔid-* 'take' must be passivized with PRIMARY OBJECT passive *-suʔ* to allow promotion of *χə́mgayu* to subject status.

It is not yet obvious whether some stems used in a predicative context have lexicalized with

[38] This is likely the origin of Boas' use of the term 'instrumental' for the secondary object case, because he linked this suffix in its form as a nominalizer to its relationship with the secondary object paradigm of pronouns and demonstratives.

[39] The two forms *-ayu* and *-ẏu* are allomorphs of the same form; *-ẏu* tends to follow vowels, /m/, /n/, /l/, and /w/, but Boas notes "it (the passive morpheme *-ayu*) is somewhat irregular in its behavior" (B1947:312).

passive morphology. Levine gives the example *haḿx?idsuńukʷən,* 'I've got something to eat', as an example of the suffix *-su?* in a lexicalized context.

(55) PRED
haḿx?idsuńukʷən[40]
haḿ-x?id-**su?**-nukʷ**=ən**
eat-MOM-**PASS**-have**=1.SBJ**
I've got something to eat. (Levine 1980a:242)

Like examples (50) to (52), this stem includes a valence-reducing suffix *-nukʷ* following the passive suffix *-su?*. Again, the first-person subject pronominal *=ən* is attached to the predicate, and the translation includes a first-person subject. It is not clear what function the passive suffix plays here. As mentioned earlier, perhaps this is a lexicalized derived stem which can now behave as an active predicate and take subject-like subjects. More research on the alignment of pronominal arguments in active and passive constructions will help answer this question definitively.

4 Discourse Motivations for Passivization

Section 3 focused on the morphosyntactic picture of passive constructions in Kʷaḵʷala: what the individual morphemes are, what their functions are, what syntactic and semantic considersations determine their distribution, and what alignments of arguments they trigger. But passive constructions are grammaticalizations of the patterns of use in a speech community: the tendency to promote a participant to subject arises in certain discourse contexts. Over time, these tendencies can become an obligatory and unconscious feature of the grammar. This section examines the discourse context in which passive constructions are used in Kʷaḵʷala. Both types of discourse motivations are explored in this section: (1) passivization as an optional strategy within a speaker's repertoire, used in ways that reflect the speaker's choice to focus the listener's attention on something topical; and (2) passivization as an obligatory strategy triggered by certain syntactic patterns within discourse. The preliminary analysis of discourse data presented here draws on Boas' texts and grammar alongside elicited material from Levine and data from recent fieldwork.

Figures 2 and 3 summarize the findings from seven interlinearized narratives recorded by Boas and Hunt (Boas 1895; Boas 1906).

[40] This example is misspelled in Levine; it should be *həḿ-* 'eat'.

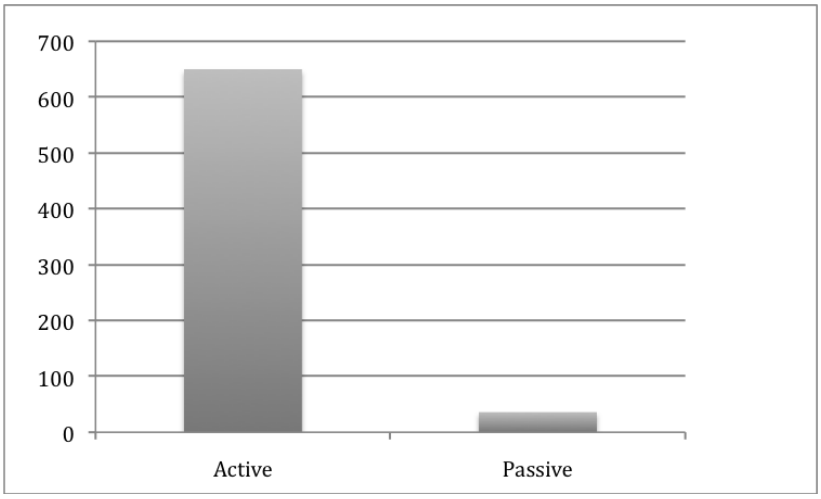

Figure 2: Total number of active and passive clauses (7 narratives)

Passive constructions are far less frequent than active predicates; out of a total of 650 clauses (one predicate per clause), only 36 predicates, or 5.5%, were passivized.[41] Kʷaḵʷala passive constructions can thus be considered pragmatically and functionally 'marked' in contrast to neutral active forms.

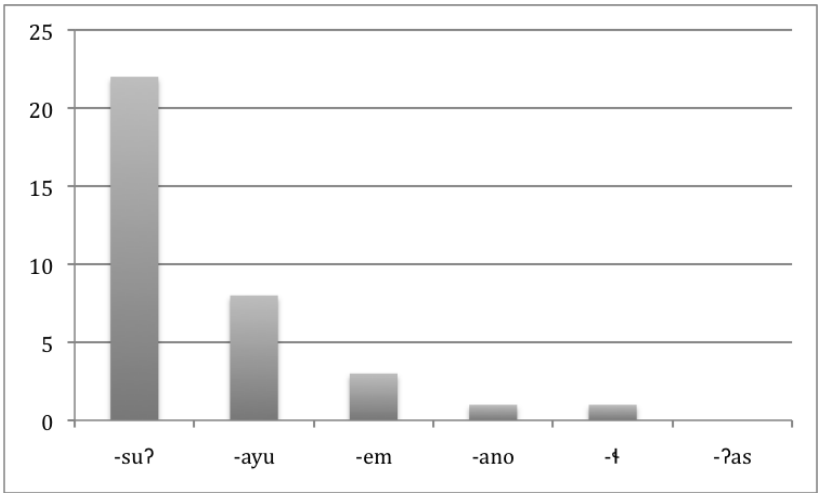

Figure 3: Number of passive morphemes by type (7 narratives)

Perhaps because the PRIMARY OBJECT promotion suffix *-suʔ* applies to both transitive and ditransitive stems, it occurs more frequently in the texts examined than the three SECONDARY OBJECT promotion suffixes (*-ayu, -ano, -əm*) combined: 22 uses of PRIMARY OBJECT *-suʔ* compared with 12 uses of SECONDARY OBJECT *-ayu* (8), *-ano* (1) and *-əm* (3). The EXPERIENCER passive *-ɬ* was found in one predicate. No locative passives were found in the narrative texts. The

[41] Clauses were counted according to predicates. Because some of the secondary object passive forms also occur in lexicalized nominals, passive forms were only counted when they were suffixed to a predicate stem and influenced the argument structure of the clause.

use of passives in the examined texts was primarily promotional, to allow a protagonist to maintain subject status, for example, or to maintain an important topic in subject position. These frequency counts should be considered in the light of the genre-limitation to origin tales. Forthcoming work analyzes the use of passive morphosyntax in a newly collected corpus of spontaneous interaction.

In many of these contexts, passivization is a narrative tool sensitive to speaker decisions about what is topical. Commonly-cited cross-linguistic motivations for using passive morphosyntax include topic continuity, argument structure of relativized clauses, and 'foregrounding' or 'featuring' of a significant participant (cf. Shibatani 1988 *inter alia*). These expectations are fulfilled in this sample of Kʷaƛ̓ʷala narrative discourse. However, passivization is obligatory in two syntactic contexts, described in the next two sub-sections: (1) relative clauses and (2) with independent pronoun predicates. These syntactic patterns are relatively rare in discourse, and much of the existing documentation relies on elicitation, which poses some challenges to interpretation, discussed below.

4.1 Passivization and Relative Clauses

In Kʷaƛ̓ʷala, relativized arguments must be presented as subjects of embedded predicates in relative clauses. The heirarchical constraint on accessibility to relativization, first described by Keenan and Comrie (1977), is common to many languages. In Kʷaƛ̓ʷala, when one wishes to relativize a non-subject argument of an active clause, one passivizes the embedded predicate to promote the argument to subject status and allow relativization. Levine's elicited examples suggest that almost any argument from the matrix clause can be relativized if it can be made a subject (Levine 1980a:245-248). The syntactic status of the relativized argument determines whether a passive is needed and if so, which passive is used in the embedded predicate. In the first three examples, no passivization is needed because the relative is the subject of the *active* form of the embedded predicate.

(56) Active RC: Relative is OBJ1 of Main, SBJ of RC

duqʷəlenƛaχa	***bəgʷanəm***	*nəp̓idasa*	*t̓isəm.*
duqʷ-l=en(ƛ)=**χa**	**bəgʷanəm**	nəp̓ida=**sa**	t̓isəm.
see-PST=1.SBJ=OBJ1	**man**	throw=OBJ2	rock

I saw the man who threw the stone. (Levine 1980a:245)

(57) Active RC: SBJ of Main, SBJ of RC

qəlkuχʷda	*mexʔidiχ*
qəlk=uχʷ=da	mexʔid=iχ
tired=OBJ1=DEF	strike=T.DEM

The one who hit is tired. (Levine 1980a:245)

(58) Active RC: OBJ1 of Main, SBJ of transitive

duqʷələnƛaχʷa	*mexʔidiχ*
duqʷ-l=ən(ƛ)=**χʷa**	mexʔid=iχ
see-PST=1.SBJ**=OBJ1**	strike=T.DEM

I saw the one who hit. (Levine 1980a:245)

In the next examples, the relativized arguments are not the subject of an active form of the predicate within the relative clause; passivization of the embedded predicate thus promotes the relativized argument to subject status and allows relativization. In (59), the primary object of the stem *duqʷ-* 'see', the one seen by the speaker, would be the primary object of an active form of *məxʔid-*. Thus, the PRIMARY OBJECT passive *-suʔ* is used to promote the relativized argument, 'the one who got hit', to become the subject of the relative clause and allow it to be relativized.

(59) Passivized RC: OBJ1 of Main, SBJ of passivized RC (< OBJ1)

duqʷələnƛaχʷa	*məxʔidsẇiχ*
duqʷ-l=ən(ƛ)=**χʷa**	məx-ʔid-**suʔ**=iχ
see-EXP=1.SBJ**=OBJ1**	strike.with.fist-MOM-**PASS**=T.DEM

I saw the one who got hit (punched - DR). (Levine 1980a:245)

In the next example, both predicates are passivized. The subject of the main predicate, the speaker (indicated by pronominal *=ənƛ*) is the recipient of the gift, hence the use of PRIMARY OBJECT passive *-suʔ* to promote the recipient to subject of the matrix clause. As a result of passivizing the matrix predicate, the demoted actor (who gave the gift) is *s*-marked as a SECONDARY OBJECT with *=sa*. This actor, the gift-giver, is the relativized argument, 'the one who was hit'.

(60) Passivized RC (and passivized main PRED):

OBJ2 of Main, SBJ of passivized RC (< OBJ1)

c̓usəẇənƛasa	*mexʔidsuʔ*
c̓əw-**suʔ=ən(ƛ)=sa**	mex-ʔid-**suʔ**
give-**PASS=1.SBJ=OBJ2**	strike.with.fist-MOM-**PASS**

I was given (it) by the one who was hit (punched - DR). (Levine 1980a:245)

He (or she) is the recipient of the punch, and would be marked as PRIMARY OBJECT in an active clause, but in order to allow relativization, PRIMARY OBJECT passive *-suʔ* promotes this person to subject. Interestingly, the gift itself, which would also be marked as a secondary object does not appear in the Kʷaḵʷala clause; there seems to be no space for it.

The example below shows the addition of further arguments to the relative clause; passivization within an embedded relative requires the same process of demotion of the actor (and secondary object marking) that one would expect in a main clause.

(61) SBJ of Main, SBJ of RC (<OBJ1)

hiʔəm	***bəgʷanəm***	*məxʔidsəẃasa*	*c̓ədaq*
hi-m̓	**bəgʷanəm**	məxʔid-**suʔ**=sa	c̓ədaq
3.PRON.PRED-OI	**man**	strike-**PASS**=OBJ2	woman

That is the man the woman hit (hit by the woman.) (Levine 1980a:245)

Note that the lexically-expressed relativized argument *bəgʷanəm* 'man' precedes the embedded predicate for which it is the subject, and no subject-marking appears on *məxʔidsəẃasa*. (With the lexical subject following the predicate, we would expect the prenominal subject marker *=i*). Note also that this is translated as a presentative clause, with 'That is…'. The matrix predicate *hiʔəm* is an independent pronoun predicate (which for the third-person forms are also equivalent to demonstratives meaning 'this', 'that (near)', and 'that (far)' (Boas 1947:258); we have seen other examples of the pronominal predicates above. These so-called 'verbal pronouns' (Boas 1947:256) also trigger passivization and are further discussed in the next section.

Levine presents the next example as proof of the ungrammaticality of non-subjects in relative clauses. This seems very likely, but there are other ambiguities which may have obscured the grammaticality judgement of a consultant; the prenominal subject marker *=i* refers to the woman *c̓ədaq*, but confusingly, the *prenominal* marker *=χa* is used in the constructed example to refer to the man (*bəgʷanəm*) who was hit, which precedes rather than follows the relativized predicate.

(62) * SBJ of Main, OBJ1 of RC

* *hiʔəm*	***bəgʷanəm***	*məxʔididaχa*	*c̓ədaq*
hi-m̓	**bəgʷanəm**	məxʔid**=i**=da**=χa**	c̓ədaq
3PRON.PRED-OI	**man**	strike**=SBJ**=DEF**=OBJ1**	woman

That is the man the woman hit. (Levine 1980a:250)

It is not clear how the relativized argument should be expressed in the embedded predicate, and whether a different type of marking (such as the third-person PRIMARY OBJECT pronoun *=q*) or any marking at all would have been appropriate.

This example highlights the challenge of constructing examples for the elicitation of grammaticality judgements. Further research will pursue the question of relativization in both the corpus of spontaneous speech and in a context of carefully considered elicitation, and focus on the pronominal and prenominal marking of subjects in relative clauses.

4.2 Independent Pronoun Predicates

Another situation in which passivization seems to be obligatory involves the unusual Kʷaǩʷala paradigm of demonstrative pronoun 'predicates' used in appositive constructions and presented in Table 3 below. These forms occur in clause-initial position and take predicate derivation and inflection as necessary although they do not take subject-marking enclitics. They must be followed by a complement which completes the clause and was analyzed by Boas as a type of relative clause; the complement takes special terminal marking triggered by the pronominal predicate.

1s	*núgʷa*	*=Ø*
1p.INC	*núgʷənc*	*=Ø*
1p.EXC	*núgʷənuʔχʷ*	*=Ø*
2	*su*	*=əs*
3.PROX	*ga*	*=ək*
3.MED	*yu*	*=ux*
3.DIST	*hi*	*=i*

Table 3: Predicate demonstrative pronouns and terminal markers (adapted from B1947:258)

When the complement is a simple NP, two constituents are juxtaposed, the predicate and the complement, as in the example below.

(63) Second-person demonstrative pronoun predicate

PRED	COMP
súʔəm	*Síwidəs*
sú=əm	Síwid=əs
2.PRON.PRED-OI	Siwid=2.PR.DEM

You are (the one who is) Siwid. (B1947:258)

Sometimes, the complement is another predicate, and the complement predicate is stativized, as below with *-nukʷ*.

(64) Second-person demonstrative pronoun predicate

PRED	COMP
súʔəm	*ḵísʔunukʷ*
sú-əm	ḵísʔu-**nukʷ**
2.PRON.PRED-OI	own.crest-having.NOM

You are the one who owns the privilege. (…who is the crest-owner - DR; B1947:258, CX 66.18)

However, in other cases, when the complement predicate is transitive, Boas observes that "when the subject is emphasized by a demonstrative pronoun, the predicate is expressed by a passive" (B1947:286). Boas' 'subject' seems to refer to the subject of the complement predicate, and it seems that passivization ensures an interpretable relationship between the referent of the 'pronominal predicate' and the subject of the embedded predicate. In the first example below, passivization with *-suʔ* allows coreference between the demonstrative *híʔəm* and the liked-thing to which it refers (which would normally be expressed as a primary object).

(65) Predicate demonstrative pronouns and passivization

PRED.PRON	PRED.COMP
híʔəm	*ʔəχʔíχsdəsaʔs*
hí-m̓-Ø	ʔəχʔíχsdə-**suʔ**=əs
3.DEM.PRON.PRED-OI-3.POSS	like-**PASS**=2.PR.DEM

That is what he likes. (lit. that is his liked one; B1947:286)

In the next example, the construction is very similar. Here the first-person possessor *-ən* precedes the complement.[42] Again, passivization permits coreference between the pronominal predicate *hím̓-* 'that' and the subject of the complement, [*=en ƛúma ʔəχʔiχsdəsəẃi*] 'my very-much liked thing.'

(66) Predicate demonstrative pronoun and passivized complement

PRED	COMP	
hím̓ən	*ƛúma*	*ʔəχʔíχsdəsəẃi*
hí-m̓=ən	ƛúma	ʔəχʔíχsdə-**suʔ=**i
3.DEM.PRON.PRED-OI-1.POSS	a lot	like-PASS=3PR.DEM

That is what I like very much. (That is my liked-thing. - DR; B1947:286)

(67) Predicate demonstrative pronoun and passivized complement

PRED	COMP
hím̓aʔis	*wəƛásəẃos*
hí-m̓**=is**	wəƛá-**suʔ**=s
3.DEM.PRON.PRED-OI**=2.POSS**	ask-**PASS**=3PR.3POSS

That is what was asked by you. (That is your asked-for-thing. - DR; B1947:286)

The prenominal possessive markers are familiar (see Appendix III), but the postnominal possessive markers *=s* seen in example (61) and (63) above and *=əs* in example (65) are not the same forms found in the standard possessive paradigm (see Appendix III, Tables 8 and 9), and are described as a special set of possessive markers used only in predicative pronominal constructions such as these (Boas 1947:259; see Appendix III, Table 11).

The three examples provided above are relatively straightforward to interpret; they also seem to be elicited examples, rather than spontaneously occurring ones. The next example, from one of Boas and Hunt's texts, is less intuitively understood.

[42] Despite the homophony between 1.SBJ *=ən* and 1.POSS *=ən*, a first-person subject would not make sense in this context.

(68) Second-person predicate demonstrative and passivized complement

PRED	COMP
súʔəm	*məxʔícuʔgʷiɬc*
súʔəm	məx-ʔíd-**suʔ**-gʷiɬ=s
2.PRON.PRED-OI	punch-MOM-**PASS**-reason=3PR.3POSS

You are the reason of his being struck. (… the reason he was punched. - DR; B1947:258, CX 66.18)

In this example, the second-person demonstrative pronoun predicate *súʔəm* precedes a passivized complement meaning 'reason for being punched'. The derivational suffix *-gʷiɬ* 'reason for' follows the primary object passive suffix *-suʔ*; we don't know the argument structure of an active form of *məxʔid-* 'punch' combined with *-gʷiɬ* 'reason for doing something,' but based on our analysis of the distribution of *-suʔ*, the primary object of the active verb form would have to be 'the reason' for which someone was punched. Passivization seems to allow coreference between the listener and the promoted subject of the complement predicate, the reason for punching.

The preceding examples employ the PRIMARY OBJECT passive *-suʔ*, but other passives also occur in these appositive constructions. Example (38) is repeated below.

(69) Passive: *duqʷ-* 'see'

PRED	$PRED_{COMP}$	SBJ_{COMP}
híḿən	*dúqʷəɬida*	*ʔixpə́maɬa*
hi-ḿ-ən	dúqʷ-**ɬ**=i=da	ʔix-pə́maɬ-a
3.PRON.PRED-OI-1.POSS	see-**PASS**=SBJ=DEF	good-play-T.DEM

That is my seen one it is a good play. (i.e., That one seen by me is a good play. - DR; B1947:286)

Here, the embedded predicate *duqʷ-* 'see' is passivized with the EXPERIENCER passive *-ɬ* enabling the play *ʔixpə́maɬ* to be the subject, coreferential with the third-person demonstrative pronoun 'that'.

The use of passivization in special syntactic contexts is intriguing, but definitive claims are limited by the rarity of these constructions and the reliance on elicitation contexts to explore their occurrence. The development of searchable corpora for both legacy texts and newly collected spontaneous speech will hopefully further illuminate the use of passivization to serve the needs of speakers.

5 Discussion and Conclusions

The rich passive morphosyntax of Kʷaƛ̓ʷala adds to our typology of voice systems in the world's languages. The Kʷaƛ̓ʷala passive paradigm reduces transitivity without reducing valence. Meanwhile, the distribution of passive morphology is shaped by both syntactic and semantic forces. The PRIMARY OBJECT passive suffix *-suʔ* and the SECONDARY OBJECT suffixes *-ayu, -əm* and *-ano* are governed by syntactic criteria: the former used to promote *χ*-marked primary objects into subject position, the latter used to promote *s*-marked secondary objects into subject position. On the other hand, the functions of passive suffixes *-ɬ* and *-ʔas* are determined by

semantic considerations of different types. The use of the EXPERIENCER suffix *-ɬ* is determined by the event structure of the clause, expressing a lack of control on the part of the patient or an experience resulting from a non-animate agent. The LOCATIVE suffix *-ʔas* is only used to make subjects from a geographic place.

This description of the passive morphosyntax of Kʷaǩʷala reveals only the tip of the iceberg. There are several issues remaining to be explored in emerging corpora. The behavior of pronominal arguments, and in particular, the behavior of first person pronominal arguments in passivized predicates, invite further study to determine whether first person arguments indeed retain their subject status. The passivization of stative predicates and the question of what voice is expressed by EXPERIENCER *-ɬ* also invite further study. One might also ask whether predicates containing passive suffixes have lexicalized and can be used as the stems of active constructions.

The corpus of contemporary interactive speech in Kʷaǩʷala in progress will allow us to explore the use of passive suffixes in more recent speech. By comparing modern examples with those taken from Boas and Hunt's texts recorded a century ago, we will be able to examine ways in which the usage or distribution of such morphemes may have changed, and flesh out our picture of passive morphosyntax in Kʷaǩʷala.

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Appendices

Appendix I: List of Abbreviations Used in Glossing

1	first person
2	second person
3	third person
A	agent-like argument of canonical transitive verb
ADJ	adjective
ADV	adverb(ial)
AUX	auxiliary
CAUS	causative
CONN	connective
CONT	continuative aspect
DEF	definite

DEM	demonstrative
DET	determiner
DIST	distal
DISTR	distributive
EXCL	exclusive
FUT	future
IMP	imperative
INCL	inclusive
INS	instrumental
INTR	intransitive
LOC	locative
N	neuter
NEG	negation, negative
NMLZ	nominalizer/nominalization
OI	old (known) information
OBJ1	primary-object
OBJ2	secondary object
P	patient-like argument of canonical transitive verb
PR.POSS	special possessive postnominal marking complements of predicative pronouns
PASS	passive
PL	plural
POSS	possessive
PRED	predicative
PROG	progressive
PROX	proximal/proximate
PST	past
PURP	purposive
Q	question particle/marker
QUOT	quotative
RECP	reciprocal
REFL	reflexive
REL	relative
RM.PST	remote past
RES	resultative
S	single argument of canonical intransitive verb
SBJ	subject
SG	singular
T.DEM	sentence-closing demonstrative
TOP	topic
TR	transitive

Appendix II: Orthographies and Phonetic Correspondences

Note: All examples have been transliterated to the 'NAPA' (North American Phonetic Alphabet) orthography.

NAPA	Boas	U'mista
b	b	b
p	p	p
p̓	p!	p̓
d	d	d
t	t	t
t̓	t!	t̓
g	g·	g
gʷ	gw	gw
k	k·	k
kʷ	kw	kw
k̓	k!	k̓
k̓ʷ	k!w	k̓w
G	g	g
Gʷ	gw	gw
q	q	k
qʷ	qw	kw
q̓	q!	k̓
q̓ʷ	q!w	k̓w
λ	L̓	dɬ
ɬ	L	tl
dᶻ	dz	dz
c	ts	ts
c̓	ts!	t̓s
ɬ	ɬ	ɬ
s	s	s
x	x·	x
xʷ	x̣w	xw
χ	x	x
χʷ	xw	xw
h	h	h
m	m	m
m̓	ᵋm	‘m
n	n	n
n̓	ᵋn	‘n
l	l	l
l̓	ᵋl	‘l
y	y	y
y̓	ᵋy	‘y
w	w	w

ẇ	$^{\varepsilon}$w	‘w
i	ē	i
	i	e
a	ā	a
u	ō	o
	¨ä	u
ə	ɛ	a̲
	˘a˘	
	â	

Appendix III: Tables of Pronouns and Demonstratives

3.DEM	Attached to Predicate		Postnominal
	Pronominal	Prenominal	
PROX.VIS[43]	=k	=ga(da)	=k
PROX.INV	=gaʔ		=ga
MED.VIS	=uχ	=uχ(da)	=iχ
MED.INV	=uʔ		=aχ, =aq̇
DIST.VIS	=iq	=i(da)	-- }=i
DIST.INV	-iʔ		=a

Table 4: 3rd person demonstrative verbal enclitics and postnominals (adapted from Boas 1947:252)

3.DEM	Pronominal			Prenominal		
	SBJ	OBJ1	OBJ2	SBJ	OBJ1	OBJ2
PROX.VIS	=k	=qək	=sək	=ga(da)	=χga(da)	=sga(da)
PROX.INV	=gaʔ	=χgaʔ	=sgaʔ			
MED.VIS	=uχ	=q^{w}	=suχ	=uχ(da)	=χ^{w}a	=sa
MED.INV	=uʔ	=q̇^{w}, =quʔ	=suʔ		=χuχ(da)	=suχ(da)
DIST.VIS	=iq	=q	=s	=i(da)	=χ(a)	=s(a)
DIST.INV	-iʔ	=qi	=si			

Table 5: 3rd person pronominal and adnominal demonstrative enclitics (adapted from Boas 1947:252)

[43] Boas named these demonstratives according to their proximity to speech participants, as ‘Demonstrative of 1st person, visible, Demonstrative of 2nd person, visible, etc.’ It is not clear whether this reflects additional referential qualities other than proximity, such as discourse relevance. However, the labels Proximal, Medial and Distal are more transparent and one can infer some metaphoric or deictic extension.

Subject	Primary Object				
	1SG	1INCL	1EXCL	2ND	3RD
1SG	---	---	---	=ənƛoƛ	=ənƛaq
1INCL	---	---	---	---	=əncaq
1EXCL	---	---	---	=ənuʔχʷoƛ	=n̓uʔχʷaq
2ND	gaχən	---	gaχənuʔχʷ	---	=siq
3RD	gaχən	gaχənx	gaχənuʔχʷ	=uƛ	=q

Table 6: Transitive predicates with primary object

Subject	Secondary Object				
	1SG	1INCL	1EXCL	2ND	3RD
1SG	---	---	---	=ənƛos	=ənƛas
1INCL	---	---	---	---	=əncas
1EXCL	---	---	---	=ənuʔχʷus	=n̓uʔχʷas
2ND	=secən	---	=secənuʔχʷ	---	=sis
3RD	=ən	=ənc	=ənuʔχʷ	=us	=s

Table 7: Transitive predicates with secondary object (adapted from Boas 1947:253)

3.DEM	Prenominal				Postnominal	
	1SG	1INCL	1EXCL	2ND		
PROX.VIS	=gin	=ginc	=ginuʔχʷ	gas	=g=	With the O2 endings of the appropriate persons.
PROX.INV					=ga=	
MED.VIS	=ən	=ənc		=us, =χs	=q=	
MED.INV				=uχs	=q̓=	
DIST.VIS				=is	--	
DIST.INV					=a=	

Table 8: Possessive enclitics for 1st and 2nd person (adapted from Boas 1947:253)

3.DEM	Possessor subject of sentence		Possessor not subject of sentence	
	Prenominal	Postnominal	Prenominal	Postnominal
PROX.VIS	=gas	=k	=ga	=gas
PROX.INV		=gaʔ		=gaʔs
MED.VIS	=us	=q (=iχ)	=uχ	=χs (=aχs)
MED.INV		=q̓ (=aq̓)		=q̓is
DIST.VIS	=is	---	=i	=s
DIST.INV		=a		=as

Table 9: Possessive enclitics for 3rd person (adapted from Boas 1947:254)

1SG	qən…a(ʔən)
1INCL	qənc…a(ʔənc)
1EXCL	qənuʔχʷ…(a(n̓uʔχʷ)
2ND	qaʔs…aʔus
3RD (POSSESSOR ≠ SUBJECT)	qaʔ…is
3RD (POSSESSOR = SUBJECT)	qaʔs…a

Table 10: Purposive clauses (adapted from Boas 1947:274)

	1.POSS	2.POSS	3.POSS
1	---	nugʷaʔəms …=us	nugʷaʔəms …=s
2	súm̓ən …=s	---	súm̓ən …=s
3	hím̓ən …=Ø	híʔəms …=Ø	híʔəm …=s

Table 11: Terminal markers on possessed nominals occuring with pronominal predicates (adapted from Boas 1947:259)