The growth of Salishan 'gardens' Part One: Interior Salish

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Ethnographic and historical linguistic data can be used to form a complete picture of contact-induced change, within both the culture and language of a particular people. We make use of both types of data in the beginning stage of trying to attain an understanding of the differences between the Coast Salish and Interior Salish in terms of property and resource ownership. We focus here on the development of forms for 'garden' among Interior Salishan languages. We find two broader formulations, one in the southern languages and another in the western. Both sets of terms are shown to have generalized from precontact times when they referred to berry patches. One language, Lillooet, apparently innovated its own form.

1 Introduction

Speakers of languages within the Salishan family traditionally lived in either of two cultural areas. The Coast Salish were in the Northwest Coast while the Interior Salish were in the Plateau.¹ While both had fundamentally hunter-gatherer societies, the former were characterized by a stratified society while the latter groups were typically more egalitarian.

On the coast, there was a notion that tended or habitually used resource sites, particularly for rarer commodities, could be staked out (sometimes quite literally) as personal property. Thus, in these varied societies, there was a conceptual connection among owned berry patches, root patches, fishing holes and mollusk beds. Whether these notions had currency among the IS is less well understood.

Prior to contact, some of the CS groups are said to have practiced agriculture in a limited way. The name for a tended, privately owned area was later translated by some as 'garden'. However, translations for the word 'garden' are often missing from CS dictionaries and word lists in areas where one would most expect to find it. For example, it is absent from: McCaw (1886), W. Snyder (1968), Hess (1976) and Bates et al. (1994) for Puget Sound Salish; N. Thompson (1978) for Twana; Galloway (1990) for the Samish dialect of Straits

¹ We use the following abbreviations, allowing context to distinguish between language groupings on one hand and peoples on the other: PS (Proto-Salishan), IS (Interior Salishan and Interior Salish), CS (Coastal Salishan and Coast Salish), NIS (Northern Interior Salishan) and SIS (Southern Interior Salishan).

Salish; and Galloway (1980) for the Upriver dialect of Halkomelem. Oddly, dictionaries and word lists for IS languages are more likely to contain a word for 'garden' than lexical inventories of the coastal languages.²

The English word 'garden' has a number of associated semantic domains. A garden is something that can be possessed and is typically owned by an individual, family or small group. It is demarked; there is a known external boundary. It is tended; not only is the area kept clear but intruders are kept out. And there is some cultivation activity (e.g. planting or transplanting) involved.

In this presentation, we will examine IS words for 'garden' with the intention of establishing the origins of the forms. We hope to establish whether any portion of the notion 'garden' could have been precontact in nature.

We plan to undertake a parallel examination of CS 'garden' later. At that point we should be able to ascertain how the differences in cultures between IS- and CS-speaking peoples impacted their concept of 'garden' and their process of creating the term for it.

2 Background

Traditionally, the IS were located between the Cascade Mountains and the Rocky Mountains, within the Plateau cultural area. Their languages are divided into two branches: the Southern (Columbian, Colville-Okanagan, Kalispel-Spokane-Flathead and Coeur d'Alene) and the Northern (Lillooet, Thompson and Shuswap). These labels are not spatially accurate, however, since the Colville-Okanagan territory extends to the north farther than do the Lillooet and Thompson territories. The branches are rather on a southeast-northwest axis.

Vegetal crops were important to most if not all of the IS. For the Salish (also known as Flathead) of western Montana, for example, this importance resulted in a number of lunar months being named after the particular crop harvested at that time (based on Cajune 1998:431-2):

Late March – Late April	Buttercup Month
Late April – Late May	Bitterroot Month
Late May – Late June	Camas Month
Late July – Late August	Huckleberry Month
Late August – Late September	Chokecherry Month

Compared to the attention paid to the subject among the CS, there seems to be little recent interest regarding the transition of precontact gathering to postcontact agriculture among the IS. A review of Walker (1998) found that the introduction of crops is not treated, while Euro-American exploration, disease, the introduction of the horse, the fur trade and new religions are given

² We wish to thank Jan van Eijk and Tony Mattina for looking up forms for us in works we otherwise had no access to. We are most grateful to Sally Thomason for her input regarding 'garden' in Montana Salish.

adequate coverage. One counter-example to this lack of interest is Turner (1992) which unfortunately fails to discuss implications in the Lillooet language.

In the remainder of this section, we will survey what the literature says about resource area ownership and vegetal resource management during precontact times. Specific information about the introduction of crops and agricultural methods will be treated below at the time we present linguistic data on forms for 'garden'.

2.1 Precontact Ownership

Resource area ownership among the IS prior to contact is often presented as communal, such as in the following assessment of the Shuswap:

While each band had its commonly and habitually used hunting, fishing, gathering, and trapping areas, proprietary rights over the resources were apparently held by all Shuswap in common. (Ignace 1998:208)

A corresponding statement for the Northern Okanagan, Lakes and Colville tells us who was not viewed as owning it but fails to be specific about who did:

> The digging grounds and berry-picking patches were not considered either village or group property; and although the women worked together, each kept her own harvest. (Kennedy and Bouchard 1998:242)

A more concise description of the Kalispel brings private ownership into the picture. Kalispel private ownership came into play when an individual invested his or her own efforts to construct and maintain something used to obtain a resource. These included use rights for the land upon which the improvement was situated.

Property rights were held by the tribe and the individual ... Village territorial rights extended to hunting and fishing sites and large weir sites where there was communal distribution of fish. Individual rights extended to fish traps, small weirs, spearing platforms, snares, and deadfalls. (Lahren 1998:285)

Ownership was extended further among the Shuswap, however. Some hunting areas were claimed by individual families who maintained their claim through inheritance and habitual use (Dawson 1892:14). This is viewed as preventing over-depletion of resources in that area by dispersing hunters throughout band territory (Alexander 1992:143).³

³ Alexander argues that these property claims amounted to stewardship rather than ownership. Hayden (1992:5-6) doesn't distinguish between the two, using

It is unclear if historic ownership of fishing rocks in the Fraser River by the Lillooet and Thompson had precontact roots (see Romanoff 1992:242; Kennedy and Bouchard 1992:309). However, it is made very explicit that there was no individual ownership of Lillooet, Thompson or Shuswap plant gathering sites --- "access was free to all band members" (Tyhurst 1992:398; also Romanoff 1992:242).⁴

2.2 Precontact Vegetal Resource Management

Agriculture is said to not to have been practiced by the Lake Salish (speakers of a Colville-Okanagan dialect), for example, because of their seasonal movement: "Because the Lake often had to move to where food was the most plentiful, they never developed agriculture." (Tower 1998:439)

While we find no mention of precontact planting or transplanting, a number of IS groups, however, did engage in what can be termed resource management involving plants, by intervening in the growing of vegetal crops:

> Natural resources management was carried out [by the Shuswap] through a variety of ways, including burning of old plant growth to enhance new growth, the pruning of berry bushes, and the selective harvesting of plant and animal species in the sense of never taking more than was needed. (Ignace 1998:208)

> The Spokane too used burning to increase crop productivity: Prescribed burning altered the understory to encourage animal browsing, increase huckleberry yields, prevent crown fires, propagate certain seed crops, and reduce insects. (Ross 1998:274)

The Columbian-speaking Entiat regularly burned grass off the prairies (Majors 1975:96), presumably to promote root crops. The Shuswap sought to protect

[&]quot;the term 'ownership' loosely as a convenient way to refer to any restriction of access to an item or resource within a community". We will hold off on entering on this discussion, also raised among the CS, until a later date.

⁴ Turner (1978:27) states: "As on the Coast, berry patches and root-digging areas of the Interior could be 'owned' by certain high-class individuals or families within a group and permission had to be asked by others to use them ... as often as not, the best areas were considered tribal property." She fails to indicate whether this refers to the southern IS area, the central and northern Athapaskan areas, or both. It would appear that Turner is describing a postcontact development presented more fully by Alexander (1992:143-4), who says that beginning "in the 1800, some [Interior] Salish bands, including Pavillion [Lillooet], adopted some social practices from the coastal tribes that resulted in changes in the ownership practices".

their vegetal resources. Any strangers caught "plant gathering within the tribal territory of another group were driven off or killed" (Alexander 1992:143).

3 Interior Salishan 'garden' Data

We divide the following presentation and discussion of data on 'garden' into three sections: 1) the Southern Branch, 2) the Northern Branch, and 3) related forms found in both branches.⁵

3.1 Southern Branch

Within SIS we have thus far located forms for 'garden' in Colville-Okanagan, Columbian, Coeur d'Alene and Flathead-Pend d'Oreille. We have only associated data from the Spokane dialect.

3.1.1 Colville-Okanagan

Near Fort Colville in 1826, the Hudson's Bay Company made "one of the earliest attempts at farming in eastern Washington", with disappointing results:

The potatoes appear pretty well, barely middling, no wheat at all came up, and only a few stocks of Indian corn. Green pease, but indifferent. The kitchen garden stuffs, turnips, cabbage, etc., only so so. The soil appears to be too dry. The moles are destroying the potatoes. (Majors 1975:54)

The nearby Lake Indians, however, became successful in agriculture by 1882:

... upon the opposite bank of the river are eight comfortable ranches, belonging to the Columbia Lake Indians, who raise grain and vegetables in considerable quantities ... (Ibid, 54)

Mattina (1987) lists the following forms for 'garden', along with other forms from which we may deduce their structure.

(1) $\sqrt{k^{w}} an_{1}$ s-k^w an=tq crop, garden (64) s-n-k^w an=tq-tn garden, farm k^w an=tq GROW A CROP k^w an=tq-m PLANT A CROP (332) sx^w-k^w an=tq-m farmer (64)

⁵ We have changed from various sources practical orthography into linguistic transcription. We have also added root markers where we feel they are needed. We use = to indicate lexical suffixes and – for other affixes.

(2) =aiq -tn

The forms for 'garden' in (1) derive from the stem GROW A CROP. The translation of the suffix in (2) suggests an institutionalized agriculture. The root likely has the meaning TO PLANT.

3.1.2 Columbian

The Columbian-speaking Wenatchee met their first Euro-American in 1811, a trader for the Northwest Fur Company (Majors 1975:95). In June 1841, Lt. Robert Johnson of the Wilkes United States Navy Expedition reports that the Wenatchee are working cultivated gardens:

> ... a beautiful patch of meadow land, of about 100 acres in extent, which the Indians had enclosed in small squares by turf walks. In them they cultivated the potato in very systemic manner. (Ibid)

Johnson reported that this growing of potatoes was evidence of fur-trader influence (Ruby and Brown 1986:266). It is unclear if these squares represented individually owned gardens but that is a possibility.

Sometime prior to 1890, the Chelan were taught to plant by a priest:

A priest had a little mission at Manson ... The priest had taught them agriculture, and the Indians' vegetables did his teaching credit. (Majors 1975:96)

The Columbian language has two forms meaning 'garden' (Kinkade 1981), based on different roots. The suffixes are related to those of Colville-Okanagan presented in (2) and the word for 'garden' in (3) is related to its Colville-Okanagan counterparts in (1).

(3)	snak úniqtən	garden, farm	(69)
	sk ^w úńłą	crops, plants	(17)
	cf ki sh ki án an	I examined it	
(4)	snadwúlłqtən	garden	(69)
	sď~úlłq	garden	

3.1.3 Coeur d'Alene

The first agricultural pursuits among the Coeur d'Alene occurred by 1833, before the arrival of Jesuit priests in 1842, and involved the potato:

... German botanist Charles Geyer observed the Schitsu'umsh growing potatoes successfully along the Coeur d'Alene River

in 1843. Geyer believed the Schitsu'umsh had obtained the English white potato from Hudson's Bay Company fur traders, likely at Fort Spokane, 'about ten to fifteen years ago,' which would date potato cultivation among the Schitsu'umsh to as early as 1828 (Geyer 1846). In any case, it is not difficult to understand an easy transition to tuber cultivation by a people who relied so extensively on a root-digging tradition (Frey 2001:73).

Coeur d'Alene interest in gardens flourished following missionary-supplied training:

From 1846 to 1876, some 40-50 Coeur d'Alenes lived at the [Cataldo Mission] The missionaries boarded youths who they trained in agriculture and animal husbandry ... Having learned farming skills at the mission, the Coeur d'Alene young adults were eager to move to the fertile prairies and turn them to agriculture. [After 1877 m]ost obtained a portion of their subsistence from gardening (Palmer 1998:322).

The root in the Coeur d'Alene word for 'farmer' is the same one found in the Columbian form in (4).⁶

(5)	hnkolstqn	garden	(Nicodemus 1975:216)
	kolstq	garden	
(6)	sya•qʻɔ́lstq	farmer	(Reichard 619)
	sye-	'-er'	
	√ q uÌ	PRODUCE	
	cf. Lillooet √kul	MAKE	(see van Eijk 1983:26)
	=stq	CROP(S), VEG	ETATION

The Coeur d'Alene suffix =stq is equivalent to variants of *=alq in other Interior Salishan languages (Kuipers 2002:213); see (1-4). The morpheme meaning MAKE and PRODUCE can appear with either an initial \dot{k} or \dot{q} .

3.1.4 Flathead-Pend d'Oreille-Spokane

Cultivated gardens were introduced a relatively long time ago to the tribes speaking this language. They were probably seen first by the Spokane in 1813:

⁶ The absence of labialization in the Coeur d'Alene forms does not signify a difference, as labialization is neutralized prior to a rounded vowel.

When the Astorians, in 1813, planted their first garden --- of turnips, potatoes, cabbage, and other vegetables --- they expected the Indians to follow suit. By the next year, the Indians had indeed acquired a taste for vegetables, but hardly enough to give them incentive to garden. They raised the following objection: Whey should they garden when they could help themselves to the vegetables in the traders' gardens? (Ruby and Brown 1970:45)

The Flathead-Pend d'Oreille form for 'garden' is cognate with Columbian forms in (3) and has the same root as the Coeur d'Alene form in (5):

(7)	sä"ol=1q	garden	(Thomason 2004)
	√q̃wol	PLANT (verbal)	
	=l q	ROOT, BERRY	

Thomason notes that the root is heard as $k^w ol$ at times, paralleling what we saw above in Coeur d'Alene.

Although Carlson and Flett (1989) do not have a word for 'garden' in the Spokane dialect, they do provide an interesting semantically-related form.

(8)	pk =úle?x	he planted a field, he sowed grain	(61)
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This term is similar to one found in a CS language. Twana \sqrt{puk} =álbəš, literally "raise the ground", is the word for 'mole' (Thompson 1979:98).

3.1.5 Initial SIS Discussion

In the territory where SIS languages were spoken, first contact came by 1811 and the Indians of the area began to observe gardening within a couple of years. From what little data we have found, there may have been quite a difference in time with respect to when different groups either first saw or first participated in gardening. This may have impacted when the word for 'garden' would have entered their vocabulary.

The four SIS languages derive the term for 'garden' from either of two roots. Columbian is interesting because it has a form based on each. With the first root, there is a difference in vowels between \sqrt{k}^{w} an in Colville-Okanagan (see 1) and \sqrt{k}^{w} un in Columbian (see 3). The forms based on the first root relate to forms found in NIS and all of them will be discussed below in 3.3.

The second root is found as $\sqrt{\dot{q}^w ol}$ in Columbian, $\sqrt{k^w} ol$ or $\sqrt{\dot{q}^w ol}$ in Flathead-Pend d'Oreille and $\sqrt{k^w} ul$ or $\sqrt{\dot{q}^w} ul$ Coeur d'Alene. These forms for 'garden' are apparently based on * $k^w ul$ TO BECOME; DO, MAKE, FIX (Kuipers

2002:168).⁷ Such a derivation might hang together reasonably well. However, we developed a different derivation for these forms for 'garden' once we examined related data in Colville-Okanagan. In presenting this analysis, we will begin with PS and work our way forward to SIS.

Our derivation begins with the PS root for BEND, TWIST, which Kuipers (2002:48) shows as $k^{W} \wedge l(\dot{c})$, $k^{W} \wedge \dot{c}$. This three-form representation suggests to us that what is being described is a CVC root ($k^{W} \wedge l$) followed by an optional suffix (=a \dot{c}). Modern day forms suggest that a different suffix could be added to form Proto-SIS $\sqrt{k^{W}} \wedge l$ =aw PICK (see 10). That could further be extended with the suffix =alq to form $k^{W} \wedge l$ pick berries' (also see 10). In these forms, the action of picking berries is typified as involving twisting them off the plant.

(10) Colv-Ok	ď ^w liw−m	pick berries	(Mattina 1987:166)
	q ^w lw=a 1 q	pick berries	

To $k^{w} \wedge lw=a^{1}q$ 'pick berries', we add the nominal prefix to get $s-\sqrt{k} \wedge lw=a^{1}q$ 'crop'. And from 'crop', with additional affixation, we arrive at $s-\sqrt{k} \wedge lw=a^{1}q$ -tn 'berry patch', which later extends to 'garden' (see 11).

(11) Columbian	snaq ^w úlłqtən	garden	(Kinkade 1981:69)
	sởʷúlɬq	garden	

The second Columbian forms in (11), 'pick' + 'vegetal food', probably also translates as 'crop(s)'. Here, in Columbian, there is no overt ->w suffix.⁹

⁷ The alternation of k and \dot{q} in the Coeur d'Alene root MAKE, PRODUCE is probably phonemic free variation. The regressive assimilation of u to o in the environment of a following post-velar (as, for example, the final q in sya•q5lstq) is a regular process in Coeur d'Alene (Sloat 1966:57). The position of articulation of the root initial stop is itself very likely assimilated to the o. The same kind of alternation takes place in Flathead-Pend d'Oreille (Thomason 2004). The reason is probably the same irregular extension of the regressive assimilation.

⁸ We use Λ here for Kuiper's retracted or dark schwa (see his page 4). It seems odd to us that this "development of vowels in IS" is projected back to PS, since there is apparently no trace in CS. Of the daughter languages using this root for 'garden' and related forms, all but Coeur d'Alene are recorded with an initial \dot{q}^w and even it is sometimes so recorded (see discussion in footnote 5).

⁹ The = ∂w may not be present or it may have caused rounding of the root vowel and was itself lost. Perhaps it was metathesized and the resulting ∂w diphthong simplified. More data is needed in order to account for the development of the vowel quality in $\sqrt{q^w}$ úl. It could also be the case that the w-loss is related to the glottalization of the l that preceded it, or that change may have been totally due to the retraction of the vowel.

However, the Thompson form for 'berry-picking place, shown in (12), has many of the same affixes found in (10) and (11), including $n \dots tn$ PLACE, and contains a variant of the = \Rightarrow w suffix, =ew, showing that this suffix may go back to Proto-IS.

(12) Thompson n√q^wy=éw-m-tn berry-picking place

In Thompson, *=ew* at times carries the meaning 'top'. Thus, 'pick-berry' would literally mean to 'twist the top'.

After breaking off from Proto-CS, Proto IS added $*k^w ul$ TO BECOME; DO, MAKE, FIX (Kuipers 2002:168), a new root that was homophonous with $*k^w al$ TWIST, after its vowel quality changed through rounding. Subsequent to the two roots becoming identical, it appears that TWIST in Coeur d'Alene, for example, where the current literal meaning of 'farmer' is "one who produces crops", was reinterpreted as MAKE, PRODUCE. Current analysis of 'garden' in Flathead-Pend d'Oreille, for example, is best seen as containing the root. PRODUCE and the suffix CROPS. One SIS language, Columbian, appears not to have any reflexes of $*k^w ul$ (see Kinkade 1981).¹⁰

3.1.6 Prehistoric and Historic Perspectives

If the analysis presented in 3.1.5 is close to accurate, we must consider how the majority of SIS languages got from using a particular word for areas where berries were twisted (or picked) to using that same word for 'garden'. Certainly the first introduced crops, "turnips, potatoes, cabbage, and other vegetables" (see 3.1.4), were not twisted or picked. To account for the latter-day application of the term even though this difference in harvesting no longer makes the meaning transparent, we conceive of an intermediate stage in the history of the word.

We conjecture that, among the SIS, the concept of plot or cultivated area had earliest manifestations in the areas of managed land where techniques were employed, by the Spokane among others (see 0.2.3), to stimulate berry crop production. At this point the name of the natural berry patch was extended to cover these seasonally burnt off areas. And later still, circa 1813, the term was extended again to cover areas subjected to new land management techniques, namely gardens. Thus, there is reason to believe that the terms today applied to gardens are actually from precontact times.

¹⁰ Note the possibly-related Thompson form $\dot{q}^w a \cdot \dot{q} w \dot{u} \dot{l} s \sim \dot{q}^w \partial \cdot \dot{q} w \dot{u} \dot{l} s$ 'wapato, arrowhead' (Thompson and Thompson 1996:312).

3.2 Northern Branch

We have located a word for 'garden' in each of the three languages of NIS, namely Shuswap, Thompson and Lillooet. Unfortunately, we have no ethnographic data regarding the introduction of gardens into these speech areas.

3.2.1 Shuswap

The Shuswap forms for 'garden' and related terms, from Kuipers (1974), manifest much the same structure as in Colville-Okanagan and Columbian, and have an even closer phonological relation to the notion TRY.

(8)	x-k en = iq-tn	garden (221)
	s-k ^w en=1q	planted seeds, cultivated plant; onion	
	k en t q-m	to plant, cultivate	
(9)	√k en-m, √k en-s	TO TRY, TASTE	

It is interesting that the onion is singled out by the Shuswap as being the prototypical 'cultivated plant'. In Thompson, the domestic onion now shares the name of a wild onion (Thompson and Thompson 1996:1054). In Lillooet, the traditional name for wild onions is now used exclusively for the domestic while wild ones are termed 'real onions' (Turner 1978:216).

3.2.2 Thompson

In the Thompson language, the word for 'cultivated garden', related to the Colville-Okanagan and Shuswap forms discussed above, is said in precontact times to have referred to an individual's personal berry patch (Thompson and Thompson 1996).

(10)	√kven	REGARD	(128)
	s√k [™] én'=łq	one's own berry-patch ACL of	cultivated
		garden (food plants)	(129)
	k én=lq	look over, survey the crop, p	otential harvest
		[esp. berries] ACL extended to cultivated garden ¹¹	from wild fruits

The suffix =4q PLANT (541) will no doubt prove to be a variation of the same morpheme as =a4q PLANT (535) and =e4q CROP; BERRY-PATCH; FLOWERS, BERRIES, FRUIT DEVELOPING; CORMS, ROOTS OF WILD PLANTS; POTENTIAL HARVEST, GARDEN (537).

¹¹ Thompson and Thompson use the abbreviation ACL to indicate that the following form is an "acculturation development, post-contact acculturated usage."

3.2.3 Lillooet

The form for 'garden' in Lillooet (van Eijk 1983) is unrelated to any of the other IS 'garden' forms we have found.

(11)	nsləpcáltna	garden	(111)
	ləpxál	to bury	(32)
	ləpən	to plant smt.	
	ləpqtən	hoe	
	ləpałkúna?	rotten salmon eggs	

The lexical suffix in the last form appears to be a variant of the =alq suffix seen elsewhere in IS.

3.2.4 Discussion

While there is clearly innovation in Lillooet in terms of the creation of a new word, there is a different type of innovation in Thompson.

3.2.4.1 Lillooet Innovation

The Lillooet form for 'garden' reveals interesting metaphorical extensions in both the root and lexical suffix. It is based on a root meaning TO BURY SOMETHING that in precontact times formed the base for the word for 'rotten salmon eggs'. The eggs were "buried in the ground for a number of months" (van Eijk 1983:32) before being dug up and eaten as something akin to an Indian cheese. It is not a far step to extend the root meaning of BURY SOMETHING (like salmon eggs) to PLANT SOMETHING (like bulbs or seeds) as both involve coming back later for an edible outcome.

The =aiq suffix, seen elsewhere in IS referring to a growing vegetal crop, here occurs in 'rotten salmon eggs', referring to the roe that was later harvested. With the advent of introduced agriculture, seeds and bulbs were also buried to produce different kinds of food.

Lillooet 'garden' appears to be a unique innovation. It seems unlikely that there had been a previous NIS word for 'garden' that was replaced in Lillooet. The Lillooet may have developed their word later than the forms in SIS and other NIS languages because of a lower importance to them of vegetal crops in precontact times. This lesser importance is perhaps shown by the fact that authors writing about fourteen IS groups in Malinowski and Sheets (1998) failed to mention the importance of roots, berries, bulbs, nuts or seeds for only one group, the Lillooet

3.2.4.2 Thompson Innovation

The Thompson form for 'garden' in (10) is said to have originally indicated private ownership of an area that produces berries as a crop. It was then extended to mean also a 'cultivated garden.' The following pair of forms demonstrates that the notion of ownership can be explicitly expressed in the language.

(12)	√pu[:p]ǹ =éłq	find a berry-patch	(248)
	√pu[:p]n =éłq-x-c	find a berry-patch belonging to s	s.o. $else^{12}$

The berry patch described in (13) is one kept secret from others. However, it does not appear to have any morphology to mark it as such.

(13) √q́ ^w əy	RIPE/COOK	(309)	
s√qwíy-t	fruit, berries	(310)	
s√q ^w i-t= él p	berry bush, vine, fruit tree, berry-patch		
s√q ^w i-t =él q	favorite (secret) berry-pa	favorite (secret) berry-patch one watches	
	until berries are ripe SYN	í s√ď ^w iy -él q	

This absence of marking, coupled with the presence of a nearly identical synonym, signals to us that there might be something wrong with judging all the forms in (13) to have the same root.

A key distinction between 'one's own berry-patch' and 'one's secret berry-patch' would seem to be how they are being watched, one publicly and the other guardedly. If that is so, then 'secret berry-patch' should have a different root from 'one's own berry-patch'. The following root in Twana, a CS language, reflects just the concept that should be involved in creating an opposition between the Thompson forms. And this root has a close phonological similarity to the Thompson form for 'one's secret berry-patch', considering there could be a relationship between *l* and *y*.

(14) Twana √qil LOOK AT GUARDEDLY (Thompson 1979:155)

The opposition between an openly watched berry patch and a guardedly watched one seems unique to Thompson, based on the data presented above. This seems to reflect a post-contact introduction of private resource ownership (see footnote 4), with the word for 'berry patch' shifting to 'privately owned berry patch' and then later being extended to 'garden'.

3.3 Forms Common to Both Branches

Above we have outlined our best guess regarding the development of the word 'garden' based on $*\vec{k}^w \Lambda \vec{l}$ in two SIS languages, and linked that with possibly related forms in another. In NIS, we have seen that Lillooet has an interesting form for 'garden', probably innovated within that language. We will

¹² Thompson and Thompson use [] to mark an infix.

now examine the derivation of the one form for 'garden' common to both branches.

The most widespread form for 'garden' is found in four IS languages (namely Thompson, Shuswap, Colville-Okanagan and Columbian (see 1, 4, 8, 10). It contains the same suffix =alq found in the SIS form based on $*k^w \wedge l$. Kuipers (2002:213) lists that suffix as being from Proto-IS where the meaning was HARVEST (berries, roots). The root of the form common to both branches is based on the following PS root:

(15) $*k^{w}$ an TO INSPECT (TRY OUT, AIM AT) (Kuipers 2002:49)

Examples from various of the daughter languages (extracted from that same source) show the range of semantic expansions of the meaning of the root:

point at, show (Bella Coola); regard, examine (Sliammon); watch, observe (Klallam); pay attention, size up (Upper Chehalis); choose (Thompson); try, taste, choose (Shuswap); try, taste, examine, choose, select (Columbian); pick out, show for inspection, choose (Kalispel); try, choose, consider, examine (Spokane)

It is likely that the forms in Colville-Okanagan, Shuswap, Columbian and Thompson based on k^w an all reflect a precontact practice of selecting/ choosing/pointing out a particular berry patch for one's personal use and that becomes what the individual then pays attention to/examines/tastes/ tests. We have found that one group, the Kalispel (see 2.1), recognized personal property related to fishing, but we find no information regarding the practice of marking off one's personal/family area within a larger crop-growing area among the IS.¹³ It is however recorded among the following CS groups:

Saanich, Songish	camas beds	Turner (1975:81)
Northern Straits	camas beds, horse clam beds	Suttles (1987:147)
Duwhaha Samish, Sauk	tiger lily & wild carrot plots	S. Snyder (n.d.)
Katzie	cranberry bogs	Suttles (1955:26-7)

It remains for a later time to attempt to determine if this was a practice during the Proto-Salish period.

3.3.1 Morphology

The forms for 'garden' based on $*k^{w}$ an appear in both NIS and SIS but

¹³ Note SIS forms for 'Indian potato' based on the possibly related root \sqrt{k} an: Colville-Okanagan s-k'n-k' ínm (Mattina 1987:332) and Columbian sk ənk' ínəm (Kinkade 1981:81).

the morphology found does not pattern strictly along branch lines. Colville-Okanagan, in fact, has one set of forms related to the Columbian and Shuswap forms and another set related to the Thompson form.

a. Colv-Ok	s-n-k ^w an=lq-tn s-k ^w an=lq	garden garden
b. Columbian	snak ún=łq-tən sk ún=łq	garden, farm crops, plants
c. Shuswap	x-k ^w en =1 q-tn s-k ^w en=1q	garden planted seeds, cultivated plant; onion
d. Thompson	s-k én = łq	selected berry patch; cultivated garden

The first Colville-Okanagan form for 'garden' and the equivalent terms in Columbian and Shuswap, are formed by adding prefixation and the suffix -tən to the word for 'crops, plants'. The meaning of the combined prefixation and suffix is the locative PLACE. The second Colville-Okanagan and the Thompson form, however, lack this affixation. Instead, there is a metonymical shift associating a place with its product, thereby extending 'berry crop' to 'berry patch'. After contact, there was generalization from 'berry patch' to 'garden' that affected all the forms.

Rather than the pattern of the forms being NIS vs. SIS, each is found on a different axis. Columbian, Colville-Okanagan and Shuswap form a contiguous band running north-south. Colville-Okanagan and Thompson form an east-west band. It is not surprising, then, that Colville-Okanagan, which is at the intersection of the two axes, would have two forms.

4 Final Comments

We have identified two main IS word formulations for 'garden'. They are, however, not divided along IS branch lines. The three southern languages (i.e. Columbian, Spokane-Kalispel-Flathead-Pend d'Oreille and Coeur d'Alene) base the word on PS \sqrt{k}^{w} al TWIST. The western languages (i.e. Columbian, Thompson, Colville-Okanagan and Shuswap), with the exception of Lilloeet, base their words on PS $*k^{w}$ an INSPECT. Thus, Columbian, located at the southwestern corner of IS territory, has forms from both roots. Lillooet, the western-most language, has innovated its own word based on \sqrt{lap} BURY (see Proto-IS *lig).

While the two main roots go back to PS, the suffix =alq that is found in the two widespread forms is said by Kuipers (2002:213) to be Proto-IS. However, he also suggests that the suffix in question is reflected as =alč in Squamish, a CS language. If that is the case, then one would think the suffix is likely from PS because it does not phonologically resemble a borrowing. The precontact use of =a¹q in Lillooet to form 'rotten salmon eggs' confirms Kuipers' gloss of HARVEST (rather than CROP or PLANT).

What we have are two widespread formations, the elements of which date from precontact times. The western formations seem originally to have been applied to areas that were associated with tasting and selecting from a crop. The southern formations originally referred to berry patches. We can give a reasonable account of the development of the semantics of both types. The forms had their meanings generalized as they came to be applied to any area that was managed to increase crop production. Later, with the introduction of cultivation practices, they were applied to gardens.

Because we plan to make a comparable study of the development of 'garden' among the CS and then to compare the two findings, we are eager to gain further data on forms for 'garden' or related to it among the IS and CS, and to hear alternative analyses to the ones presented above.

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