Chapter 14

Okanagan-Similkameen Projectile Points: Origins, Associations, and the Athapaskan Question

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The Okanagan-Similkameen Region

The Okanagan and Similkameen Valleys occupy a transition zone between the Columbia (or Southern) and Canadian (or Northern) Plateaus. Geo-politically, the region straddles the United States and Canadian borders (Figure 1). Although this boundary is meaningless with regard to the pre-contact First Nations of the area, it has been known to impede the free flow of archaeological information.

Geographically, the Okanagan-Similkameen consists of glacially-carved montane river valleys flowing through the Okanagan Highlands and Cascade Range. These valleys served as corridors for post-glacial movements of flora, fauna, and indigenous populations. The wider Okanagan corridor extends south to north from the Columbia River to the headwaters of Okanagan Lake. The narrower and more steeply-sloped northwest to eastward trending corridor is the Similkameen Valley, which flows east from an area near the headwaters of the Skagit River, north to the Princeton Basin, then south to its confluence with the Okanogan River in the United States. Okanogan is the accepted spelling in the United States.

The mid Fraser-Thompson and Nicola valleys lie to the north, the Kootenay valley to the east and the Skagit River-Puget Lowlands to the west across the Cascade Range. Evidence of contact and/or influences of these areas can be found in the archaeological record, primarily between the Canadian and Columbia Plateau cultures and secondarily from the Kootenay Valley and Skagit-Puget Lowlands (Copp 2006).

Okanagan-Similkameen Projectile Points

Table 1 lists projectile points by type observed in the Okanagan and Similkameen Valleys (Copp 2006; Grabert 1968, 1970; Vivian 1992). These points are compared with northwestern Columbian and southern Canadian (Fraser) Plateaus (Campbell 1985; Chatters 1984, 1986; Lohse 1985, 1995). Fine typological distinctions among Okanagan-Similkameen projectile point types are not attempted due to small sample sizes, although Lohse's (1985, 1995) analyses from the northern Columbia River area have increased identifiable diagnostic attributes, based on comparable materials.

Given that individual knappers differed in experience, vagaries of raw material quality, and personal idiosyncratic mental templates for any given point "style" being produced, it is not surprising that many defined types exhibit a wide range of morphological variation. Point size is most likely due to a function of the above variables, weapon systems (lance, atlatl, and/or bow and arrow), or time. As a result, the temporal position of non-radiometrically-dated materials cannot be determined solely upon typological traits, given the wide temporal span of similar point types across the Plateaus. Rather, associated artifacts and features must also be considered where possible—as well as proximity to areas with reported types.

Seventeen projectile point types, including sub-types, (Tables 1 and 2) are discussed in this study. Defined types are primarily in accord with criteria defined by Copp (2006), Grabert (1968, 1970), Lohse (1985, 1995), and Vivian (1989a, b;

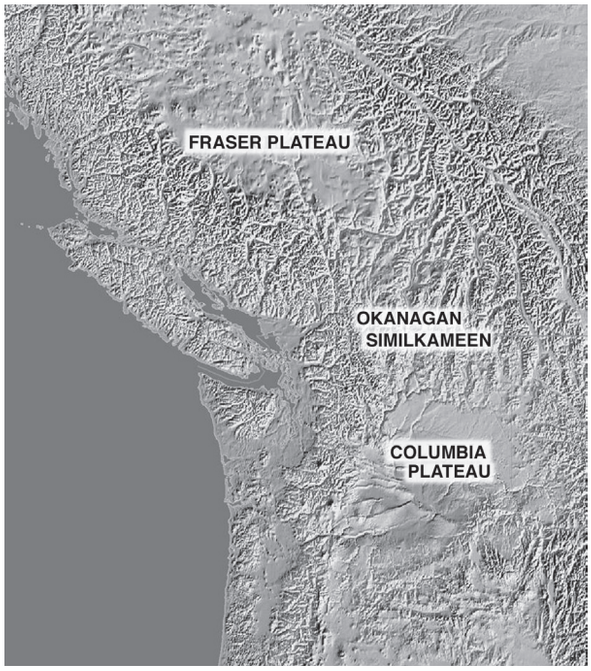

Figure 1. Inter-Plateau (Okangan-Similkameen) area.

1992). The Cold Springs Side-notched and Wallula Rectangular Stemmed are more commonly found south of the Canada-US border. Canadian Plateau types defined for the mid Fraser-Thompson—the Lehman Oblique-notched, Lochnore Side-notched, and Shuswap Types 1 through 8—occur in the north, but not south Okanagan and Similkameen Valleys. Shuswap Types 6 and 7 correspond to the Similkameen Stemmed Series and Nespelem Bar-Rabbit Island types. All other types are shared between the Columbia and Canadian Plateaus. Named types listed are the closest analogous projectile point categories from the Canadian and northern Columbia plateaus.

Table 3 illustrates the relative frequency of point types within the Okanagan-Similkameen. Numbers and frequencies are not currently available for the Okanagan Valley but are likely comparable. Exceptions are Lehman and Lochnore Phase specimens that are not known to occur in the Okanagan, but are rare in the Similkameen.

Discussion

Typological identification coupled with radiometric assays indicates a continuum of projectile point styles ranging from the early through late Holocene.

Terminal Pleistocene (>10,000 BP)

The terminal Pleistocene in the Pacific Northwest of North America is represented by the Fluted Point Tradition-Clovis. To date, no known sites of this tradition are known in the Okanagan-Similkameen. The nearest Fluted Point Tradition site is the East Wenatchee site (45–D0–486) located on the mid-Columbia River (Gramly 1996, Mierendorf 1997). Although radiometric assays on bone associated with Clovis points produced mid-Holocene age ranges, the site is assumed to date greater than 10,000 BP.

A possible unfluted Clovis variant in the Grand Forks, B.C. museum is similar in material and morphological traits to a fluted East Wenatchee site specimen (cat no. 1992.24.14) on display at the Burke Museum, Seattle. Photographed in the display case, the Grand Forks artifact appears to fall within the known range for Clovis (Figure 2), but information on artifact provenience is not currently available.

Early Holocene (10,000–6000 BP)

Early Holocene projectile points identified in the Okanagan-Similkameen are few and are characterized by the Western Stemmed Point Tradition. An exception is a heavily worn, basally edge-ground lanceolate point recovered at tree line on Crater Mountain by Lower Similkameen elder Robert Dennis in the early 1970s. The specimen (Figure 3), photographed by the author in 1974, resembles non-stemmed Plano varieties from the Columbia Plateau and Plains culture areas similar to the Goshen (Goshen-Plainview) Complex of Wyoming and Montana (Frison and Bonnichsen 1996; Irwin 1968), dating earlier than 10,000 BP.

At least two specimens of the Western (Intermontane) Stemmed Point Tradition characterized by the Windust Phase of 8000–1100 BP (Ames et al. 1981; Rice 1965, 1972; Rudolf 1995; Sappington 1994) have been identified in the Canadian portion of the Similkameen valley. Salo (1987) has also reported a Windust point in a private collection from the Palmer Lake area of Washington State, south of the current channel of the Similkameen River. Canadian sites referred to are indicated in Figure 4.

Canadian Windust specimens include a single point observed in a private collection and the other

Table 1. Okanagan-Similkameen projectile points (modified from Lohse 1985, 1995, Lohse and Schou this volume).

Type	Description	Age (BP)
Type 1: Windust C (CP), Plano (sFP)	Specimens are squat, shouldered lanceolate points with a broad to contracting stems conforming to the Windust C type (Lohse 1995:6). Flaking is variable, ranging from collateral to semi-collateral. Cross-sections are biconvex. Raw materials are cryptocrystalline silicates. Lateral edge-grinding is present as are two small lateral notches above the stem of a specimen recovered from site DiRc–67.	9000–13,000
Type 2: Cascade A,B,C (CP); Leaf-shaped Lanceolates (sFP)	**Cascade A**: These are points with broad to thick lanceolate bodies exhibiting rounded or pointed bases. Serrated blade margins occur in Columbia Plateau sites, and are rare in the Okanagan-Similkameen.	5000–8000
	Cascade B: These points are characterized by slender lanceolate bodies with slight concave bases. Cascade B points are rare in the Okanagan-Similkameen. Specimens with serrated blade margins have not been observed. Published illustrations resemble irregular Windust Phase points.	5000–8000
	Cascade C: Often referred to as "Classic" Cascade points, these points exhibit thin lanceolate bodies and contracting, rounded to pointed bases. Serrated margins occur frequently in Columbia Plateau assemblages, but are rare in the Okanagan-Similkameen.	5000–8000 (3000–8000 south Fraser Plateau).
Type 3: Cold Springs Side-notched (CP); Large Side-notched (sFP)	These points generally exhibit large atlatl-sized body morphologies characterized with side notches, convex blade margins and lateral contracting basal margins. Stem forms are straight to expanding with straight to convex bases.	4000–6000 (4000–9000 south Fraser Plateau)
Type 4: Mahkin Shouldered (CP); Shouldered Lanceolates (sFP)	The points are variable with shouldered, lanceolate body forms and convex blade margins. Stem forms are straight to contracting with rounded bases.	2500–8000
Type 5: Lehman Oblique notched (sFP)	This point type is currently known only from the Canadian Plateau. It exhibits thin, pentagonal body morphology with obliquely-oriented V-shaped corner to side notches. Base forms are generally expanding and exhibit edge grinding.	4000–6000 (?) (terminal date uncertain)
Type 6: Lochnore Side-notched (sFP)	The Lochnore Side-notched point has a leaf-shaped body form with wide side notches, heavy basal grinding and pointed to convex base morphologies. These distinctive points were originally defined based upon limited distribution within the mid Fraser-Thompson River region as per the Lehman Oblique Side-notched form (ARCAS 1986; Stryd and Rousseau 1996), but rare specimens have been found in the Similkameen valley (Copp 2006).	3500–5500 (?) (initial and terminal dates are uncertain)
Type 7: Shuswap Horizon Types 1, 2 and 8 (sFP)	These are points with roughly lanceolate body morphologies and shallow corner removals or side-notches forming rounded shoulders. Concave basal margins dominate and produce slight to pronounced "ears" (Richards and Rousseau 1987:25).	2500–4000 (Types 1 and 2: 2800–4000; Type 8: 2500–4000) on the southern Fraser Plateau only
Type 8: Shuswap Horizon Types 3 and 4 (sFP)	These are points exhibiting triangular body morphologies with distinctive concave basal margins and shallow side to corner-removed notches. Shoulders are pronounced and stems are generally expanding with concave bases. Type 4 is a smaller, with concave to indented bases.	2500–4000 on southern Fraser Plateau

Table 1 continued.

Type	Description	Age (BP)
Type 9: Shuswap Horizon Type 5 (sFP)	These are large triangular to lanceolate points with wide side to corner-removed notches with pronounced shoulders. Basal margins are generally concave with straight to slightly expanding stems.	2500–4000 on southern Fraser Plateau.
Type 10: Nespelem Bar (CP); Shuswap Horizon Type 7 (sFP)	These points vary in size but all exhibit elongate, triangular body morphologies with slight shoulders. Bases are generally convex with contracting stems.	3000–5000, (1500–3000 for Shuswap Horizon Type 7).
Type 11: Rabbit Island "A" and "B"; (CP)/Shuswap Horizon Types 6 and 7 (sFP), Var. Similkameen Stemmed (Vivian 1992)	These points exhibit narrow triangular body shapes with square shoulders ("corner-removed"). Bases vary from straight to contracting stems. Bases are straight to rounded base. These points have similar styles to northern Canadian Plateau Athapaskan Kavik points.	2000–4000 (A), 1500–3000 (B) and 1500–3000 for Shuswap Horizon Types 6 and 7.
Type 12: Columbia Corner-notched "A" (CP); Corner-notched variants (sFP)	These points vary in size, but generally exhibit large bodies with triangular shapes and straight to convex blade margins. Corner notches are wide and deep. Stems are expanding and barbs project downwards. Bases are generally straight.	2500–5000 (1200–2400 south Fraser Plateau variants).
Type 13: Quilomene Corner-notched (CP); Corner-notched variants (sFP)	These points are generally larger than Type 11. They exhibit thick bodies and t straight to convex lateral blade margins. Corner notches are wide and deep with slight downward projecting barbs. Stems are generally expanding with straight bases.	2000–3000 (1200–2400 south Fraser Plateau variants).
Type 14: Quilomene Bar Basal-notched "B" (CP), Basal-notched variants (sFP)	Quilomene Bar Basal-notched points are separated into two sub-types. Sub-type "B" is smaller, with shorter barbs than sub-type "A". Both are characterized by triangular body shape with straight to convex blade margins. Barbs are distinctive and result from deep basal notching. Stems are square to contracting with generally straight bases. Similar styles occur in the mid Fraser-Thompson and Okanagan valleys.	1500–2500 (300–2000 south Fraser Plateau variants).
Type 15: Wallulla Rectangular Stemmed (CP); Small stemmed variants (sFP)	These are small, triangular arrow-sized bodies with square shoulders formed by wide, low corner notches or corner removals. Stems are long, narrow and straight sided with a convex to straight basal margin. They represent a range of variants in mid Fraser-Thompson regions.	150–2000.
Type 16: Columbia Corner-notched "B" (CP); Corner-notched variants (sFP)	These points resemble Columbia Corner-notched "A" specimens, but are small in all aspects and most likely represent bow and arrow technologies.	150–2000.
Type 17a,b: Plateau Side-notched (CP); Plateau Small Side-notched (CP): Var. Kamloops Horizon small side-notched (sFP)	Plateau side-notched points are smaller than the Cold Springs type and manufactured from triangular preforms. They generally tend to be thin in cross-section with square to rectangular bases, although there is a great deal of variation in base form. Larger forms (type 17a) with thicker cross-sections appear to pre-date very small forms. These are referred to as Plateau side-notched following Lohse (1995). Plateau small side-notched points (type 17b) exhibit straight to concave bases. Rare forms exhibit a slight spur on one or both base edge margins. Small side-notched points in the Okanagan-Similkameen fall within the size ranges of the Kamloops type. The rare multiple-notched form is lacking.	(Type 17a): 1500–2000 (Plateau side-notched) (Type 17b): 150–1500 (Plateau small side-notched)

Table 2. Projectile point types.

	Columbia Plateau	^{14}C max	^{14}C min	Southern Fraser Plateau	^{14}C max	^{14}C min
Type 1	Windust C	13,000	9000	Plano	10,000	8000
Type 2	Cascade A,B,C	8000	5000	Leaf–shaped Lanceolates	8000	3000
Type 3	Cold Springs Side–notched	6000	4000			
Type 4	Mahkin Shouldered	8000	2500	Shouldered Lanceolates	9000	4000
Type 5				Lehman Oblique–notched	6000	4000
Type 6				Lochnore Side–notched	5500	3500
Type 7				Shuswap Horizon 1, 2 and 8	4000	2500
Type 8				Shuswap Horizon 3 and 4	4000	2500
Type 9				Shuswap Horizon 5	4000	2500
Type 10	Nespelem Bar	5000	3000	Shuswap Horizon 7	3000	1500
Type 11	Rabbit Island A	4000	2000	Shuswap Horizon 6 and 7	2800	2400
Type 12	Columbia Corner–notched A	5000	2500	Corner–notched variants	2000	1200
Type 13	Quilomene Bar Corner–notched	3000	2000	Corner–notched variants	2400	1200
Type 14	Quilomene Bar Basal–notched	2500	1500	Basal–notched variants	2000	300
Type 15	Wallulla Rectangular Stem	2000	200			
Type 16	Columbia Corner–notched B	2000	150	Corner–notched variants	2000	1200
Type 17a	Plateau Side–notched	2000	1500			
Type 17b	Plateau Small Side–notched	1500	150	Kamloops Horizon Side–notched	1200	150

is a surface find from the Copper Mountain Spring site (DiRc–67) near Princeton (Gould et al. 2001) (Figure 5). It was found as the result of an impact assessment project in proximity to a wetlands created by recent damming of a spring in the Interior Douglas Fir (IDF) zone southwest of the Princeton Basin (Gould et al. 2000). It is a large square-based, lanceolate stemmed point base manufactured of vitreous black chert and exhibits collateral flaking and slight basal-lateral edge grinding, a characteristic of 30% to 85% of Windust points (Ames 2000a, b; Rice 1972).

Site DiRc–67 is located in a southeastern flowing late Pleistocene meltwater channel that was in existence while the northern arm of the Similkameen was still choked with ice (Hills 1962) and may have been connected with the potential Cathedral Lakes refugium (Hebda 1999) across the highlands.

A small variant point form similar to one identified by Rice (1972:40, fig. 4e) has been observed in a private collection by the author, but permission to draw or photograph it has not been obtained (Figure 6). No image has been been published of the Windust point reported at site 45OK545 in Washington State (Salo 1987).

Windust points have a known distribution in the Canadian and northern Columbia Plateaus including the Kootenay valley (Choquette 1996), (American) Okanogan Highlands (Thoms 1987), and the Methow Valley (Fulkerson 1988). No Windust or Lind-Coulee variants were identified in the Chief Joseph reservoir (Campbell 1985) on the Upper Columbia River or Wells reservoir (Chatters 1986; Grabert 1968) at the confluence of the Okanogan and Columbia Rivers of Washington State. This may be a function of an emphasis on riverside sites in these areas. Early Holocene sites are most likely rare, deeply buried, or restricted to mid-to upper elevation sub-alpine ecozones.

The valley system between the Methow and Similkameen valleys via the Palmer Lake area may represent a plausible connecting area for the early movement north of people with this technology from the more xeric Columbia Plateau and southern Cascade foothills.

The earliest unequivocal evidence for human occupation in the Okanagan-Similkameen are surface finds and sites containing Cascade points, dating ca. 6000–8000 BP. Vivian (1992:149–153) recorded 26 instances of Cascade points in Similkameen Valley private collections. To this number can be added points associated with radiocarbon estimates of ca. 6900 and 7400 BP at Stirling Creek (DiRa–09) and one undated complete specimen from the Princeton Golf Club Springs site (DiRc–66) as well as

Table 3. Okanagan-Similkameen projectile points.

	Type	Okanagan-Similkameen	Columbia	Fraser Plateau
1	Windust C	rare	rare	rare
2	Cascade C	common	common	common
3	Cold Springs	rare	common	rare
4	Mahkin Shouldered	rare	common	absent
5	Lehman Oblique Notched	rare	absent	present
6	Lochnore Side–notched	rare	absent	present
7	Shuswap 1,2,8	rare	absent	present
8	Shuswap 3,4	rare	absent	present
9	Shuswap 5	rare	absent	present
10	Nespelem Bar	common	common	rare
11	Rabbit Island A, B (Shuswap 6 and 7)	common	common	present (variants)
12	Columbia Corner–notched A	rare	common	common variants
13	Quilomene Corner–notched	common	common	common variants
14	Quilomene Basal–notched	rare	common	present (variants)
15	Wallula Rectangular Stemmed	rare	common	absent
16	Columbia Corner–notched B	rare	common	rare
17	Plateau Side–notched	common	common	common

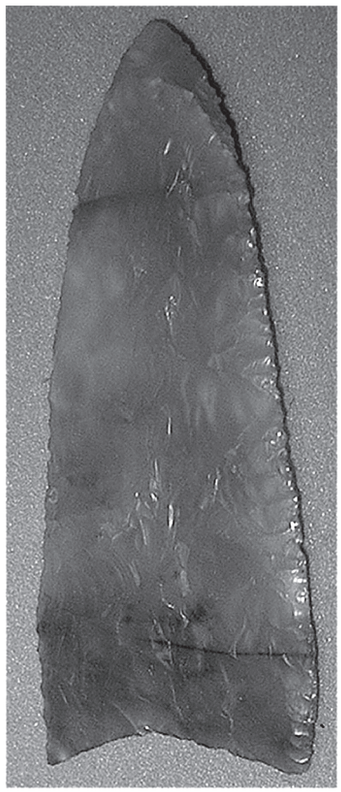

Figure 2. Grand Forks "Plateau Unfluted Lanceolate" specimen.

Figure 3. (b) Early Similkameen Lanceolate point (surface find).

those described by Grabert (1970) and more recent researchers in the Okanagan Valley. These are found in residential-logistical camps associated with big game hunting, primarily of ungulates such as elk, deer and bighorn sheep or mountain goat. Sites are generally located within catchment areas located on river or extinct lacustrine terraces with access to mid and high-elevation montane environments–exhibiting a range of floral and faunal resources attractive to seasonally mobile foragers.

Mid- Holocene (6000–2500 BP)

Mid-Holocene sites are characterized by continued use of leaf-shaped Cascade points, the introduction of the evolved Cascade "C" Mahkin Shouldered (Lohse 1995) and Cold Springs side-notched types (Figures 7, 8, and 9).

Cascade points of atlatl neck-width sizes (>7 mm, but <16 mm) recorded in the study area are assumed to date between 4500 to 7500 BP or earlier, although leaf-shaped variants continue through to the Late and Protohistoric periods albeit reduced in size (see Figure 7).

Mahkin Shouldered and Cold Springs side-notched points are rare to absent in the Okanagan-Similkameen. In the Similkameen, a single surface find of a Mahkin Shouldered preform was recorded at the Princeton Golf Club site (DiRc–66) and another from the surface of August Lake (DiRc–56) nearby. Cold Springs types are found in association with Cascade points in the Columbia Plateau and are more common in the (American) Okanogan than the north Okanagan (Grabert 1968). As with the north Okanagan they are rare in the Similkameen, known mostly from surface finds and only rarely in excavated sites.

Early weakly shouldered Cascade points are considered Mahkin Shouldered types in the Chief Joseph Dam locale (Lohse 1985), dating ca. 3500–8000 BP and as early as 5000–6600 BP in the Cascade Range (Lohse 1995, Mierendorf et al. 1998:498). Vivian (1989) reported a Windust, here re-classified as Mahkin Shouldered, point from August Lake (DiRc–56 site inventory form, 1989) south of Princeton (Figure 8).

The Lehman Phase (4000–6000 BP) includes the oblique-notched projectile point type. Research indicates that Lehman Phase peoples lacked the capacity to capitalize on anadromous salmon, although some were taken. The Plateau Microblade tradition appears to be lacking in this phase, although evidence

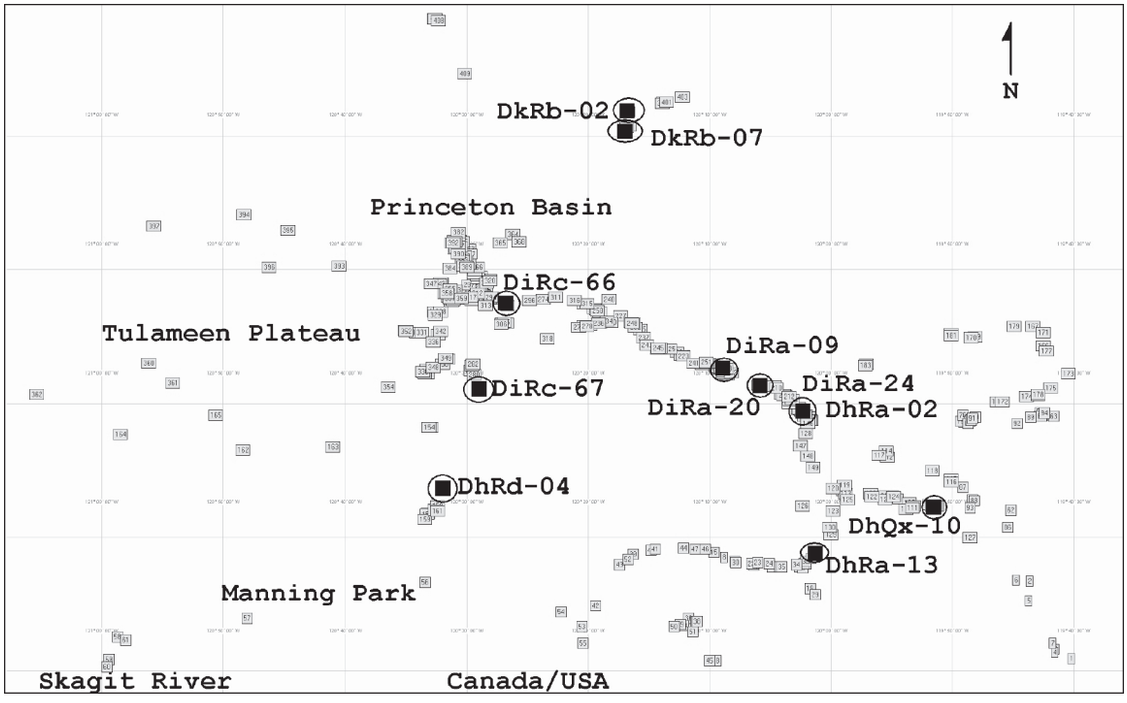

Figure 4. Archaeological site distribution illustrating sites discussed in text.

Figure 5. Windust point (DiRc–67).

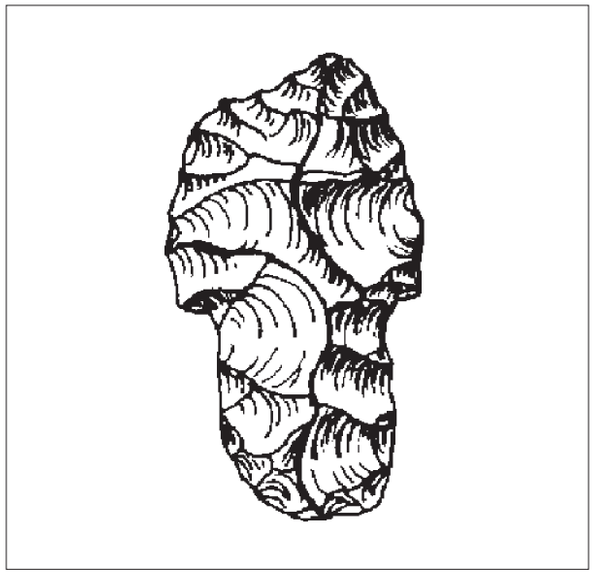

Figure 6. Windust point variant similar to Canadian Similkameen specimen (after Rice 1972:63, fig. 14c).

compiled by Wilson et al. (1992) at the Baker site (EdQx–43) contradicts this. Consensus indicates that the Lehman Phase represents local development out of earlier Nesikep Tradition cultures.

Southern Fraser Plateau Lehman Oblique-notched projectile points are rare in the Similkameen, and non-existant in the Okanagan. Two recorded specimens were surface collected from DiRa–09 (Vivian 1992:140–153) and one recovered from a disturbed context from the same site (Copp 1995), (Figure 10a). This is the first recorded occurrence of this point style outside of the mid-Thompson-Fraser River region where it has been dated 3500–5500 BP (Copp 1997).

The Lochnore Phase (3500–5500 BP) exhibits distinctive side-notched projectile points exhibiting heavy basal grinding, as well as concave-edge sidescrapers and macroblades (Stryd and Rousseau 1996). Leaf-shaped projectile points (Cascade types), use of cyptocrystalline silicates over dacites, and a distinctive leaf-shaped knife exhibiting a prominent basal striking platform are considered typical traits. One of these leaf-shaped bifaces was recovered during sediment removal operations along with the single Lehman Oblique-notched specimen at DiRa–09 (Figure 10b).

Unlike the opportunistic Lehman Phase inhabitants of the mid-Fraser-Thompson, Lochnore Phase peoples have been characterized as a "mapping-on" forager strategy (cf. Binford 1980) focusing on a wider variety of fauna (Rousseau et al. 1991). Intensive use of salmon is uncertain, but some evidence of storage has been recorded (Pokotylo and Mitchell 1998; Stryd and Rousseau 1996). Small circular cultural depressions with mat-lodge configurations and interior storage pits have been found at the Baker site (EdQx–43) dating ca. 3950–4450 BP (Wilson et al. 1992), suggesting a shift towards a collection strategy by at least these times in the southern Fraser Plateau.

Of interest is the hypothesis advocated by Stryd and Rousseau (1996) that Lochnore Phase populations derived from earlier Old Cordilleran Tradition/Cascade Phase peoples of the Interior who in turn derive from Coastal Old Cordilleran (Pebble Tool)/Olcott Tradition populations migrating up major rivers to exploit salmon while adapting to xeric pine-sagebrush lowlands and more mesic Douglas Fir uplands. They believe that the more riverine-oriented Lochnore Phase peoples co-existed with upland-adapted Lehman Phase foragers, but eventually absorbed them through intermarriage and/or syncretic behaviour. Wilson et al. (1992) interpret these data as characteristic of a single Lehman-Lochnore culture complex *contra* Stryd and Rousseau (1996). The occurrence of both point types at DiRa–09, but in undated surface contexts, does little to resolve questions of ethnicity but ex-

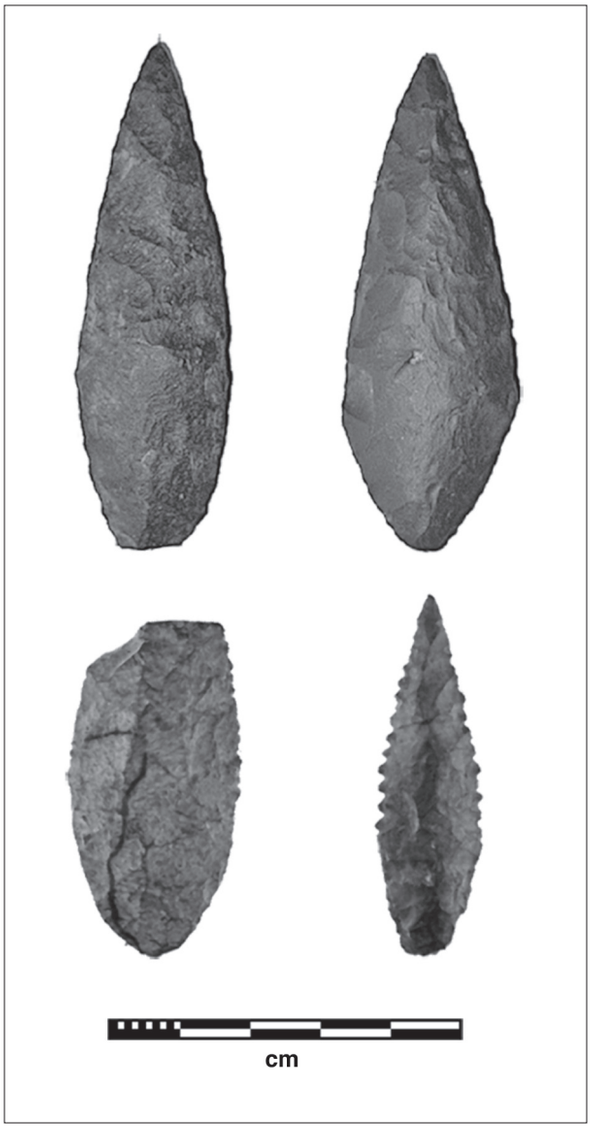

Figure 7. Cascade C points.

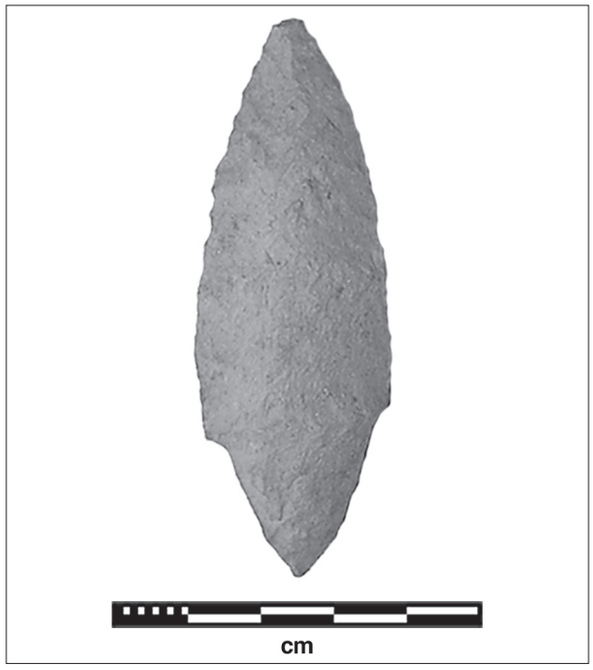

Figure 8. Mahkin Shouldered point.

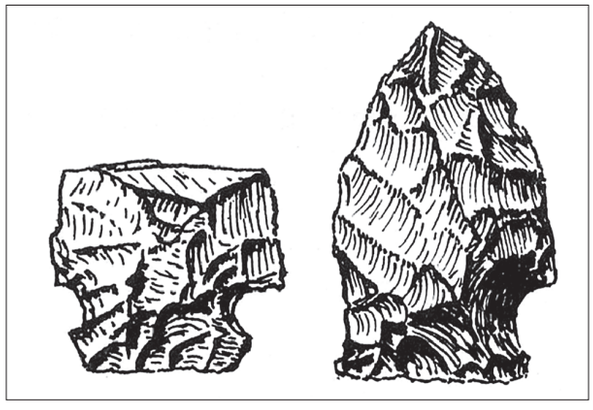

Figure 9. Cold Springs points.

pands the geographic range of this point style into the Similkameen Valley.

Coastal (Western Cascade Range slope) Olcott Tradition (ca. 5000–9000 BP) cultural materials include Cascade points and quartz crystal microblades (Onat et al. 2001). The Stuwe'yuq site (45K1464) on the western slopes of the Cascade Range at Tolt River exhibits these traits between 3500 and 5400 BP (Onat et al. 2001:9–58). Similar materials date 6800 to 7400 BP at the Stirling Creek site (DiRa–09) on the eastern Cascade slopes in the Similkameen Valley (Copp 1995), suggesting contact between the Coast and Interior at these times.

Although travel between the eastern and western Cascade slopes would have been possible by following major drainages (i.e., Similkameen-Pasayten, Similkameen-Skagit; Methow-Skagit), these routes would still have required arduous trekking through forests characterized by heavy downfall until subalpine and alpine zones were reached anytime during the last 7000 to 9000 years (cf. Luxenberg 1999 for 19th century accounts illustrating the difficulties of traveling over the Cascades Divide).

This pattern explains the lack of sites found in mid-elevation forests of the Similkameen, Cascade and Manning Parks in Canada and in north Cas-

cades National Park in Washington State where sites generally have been found within major river valleys at lower elevations or at higher elevations near tree line (Copp 2006; Gould et al. 2001; Mierendorf et al. 1998).

The presence of Lehman-Lochnore complex artifacts in the salmon-free Similkameen valley requires explanation. Although undated and lacking stratrigraphic context, these cultural materials could represent separate excursions into that territory, or it could represent an early mixed Lochnore-Lehman group (Wilson et al. 1992) traveling together from their northern cultural base prior to the hypothesized cultural assimilation.

Southward expansion into the Similkameen Valley from the mid Fraser-Thompson may explain the change from leaf-shaped projectile point technology between 4500–7500 BP to a number of barbed and stemmed types by ca. 4500 BP. The shift to more mesic, forested conditions may also provide a partial explanation for such shifts in material culture occurring at approximately similar times in both the Fraser and Columbia Plateaus (cf. Lohse 1995).

Sites dating 4500–2500 BP are rare in the Okanagan-Similkameen. Represented by the Tcutcuwi'xa rock shelter (DhRa–02), Stirling Creek (DiRa–09) and Pinto Flats (IR2–01) in the Similkameen, sites of this age are the more frequent south of the border at Palmer Lake (Salo 1987). Projectile points dating to this time period include three series of stemmed and notched forms: Shuswap Horizon types 6 and 7; Rabbit Island and Nespelem Bar (Similkameen Stemmed), Columbia Corner-notched and the Quilomene Bar notched series (Figures 11 to 14).

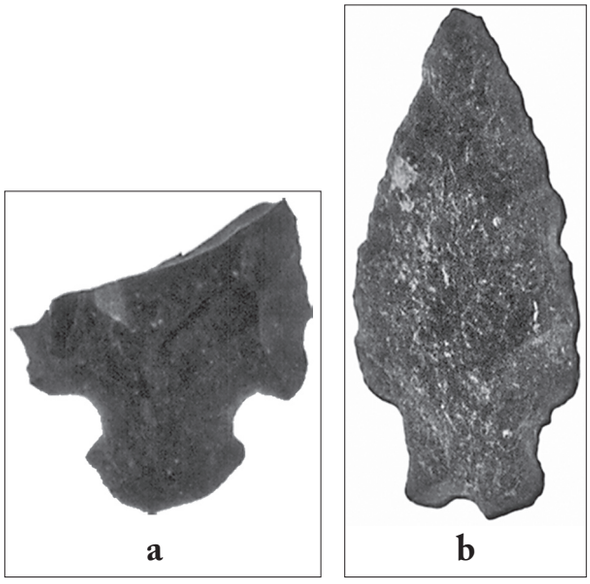

Figure 10. (a) Lehman Oblique–notched point; (b) Lochnore Side–notched point.

Late Holocene (2500–150 BP)

Later Holocene sites exhibit both sizes of Plateau side-notched projectile point types (Lohse 1995), with smaller variants predominating by the second half of this temporal distribution (Figure 15). Specimens have been recovered from excavations and observed in private collections. A Plateau side-notched point was located in the pithouse-mat lodge feature at the Snazaist Village site (DiRa–20). It is associated with several corner to basally-notched atlatl points from the same feature dated 1980 ± 60 BP. It provides evidence of an atlatl point type being adapted as bow and arrow technology.

Wallula rectangular types are common in the northern Columbia Plateau, as are Plateau small side-notched forms (Lohse 1985). One specimen from the Cool Creek site (DhQx–10) (Figure 16) in the Similkameen resembles an Athapaskan Kavik point type, as do Rabbit Island B specimens from other valley sites.

Plateau small side-notched points are similar to those defined as Kamloops small side-notched varieties characteristic of the mid Fraser-Thompson and Athapaskan variants from the Chilcotin (Magne 2001; Magne and Matson 1987). Examples have been found in excavated and surface collections (Figure 17). A radiometric assay of 710 ± 40 BP on ungulate bone fragments in association with a small side-notched point at the Snazaist Village site (DiRa–20) and an assay of 130 ± 40 BP from the Cool Creek site (DhQx–10) confirm a late age for this style.

Extra-areal Comparisons: The Plateau Mosaic

The Okanagan-Similkameen occupies an area intermediate between the south Fraser (or south "Canadian") and Columbia Plateaus. The nature of its riverine-montane topography and the fact that the Okanagan and Similkameen Rivers generally flow north to south suggests pre-contact cultural interactions would have naturally followed this direction (see Figure 1).

Terminal Pleistocene (>10,000 BP)

Current models of terminal Pleistocene glacial withdrawal indicate a northward retreat of ice lobes from northern Washington State. *In situ* downwasting of ice in the Canadian Okanagan and adjacent areas of northern Washington State is indicated by the presence of kettled outwash deposits. The emergence of higher peaks, particularly in the Cascade Range and Okanagan Highlands, is assumed to have supported in-migration of flora and fauna following the Okanagan River north.

Pellat's (1996) studies of fossil pollen recovered from small upland lakes on Mt. Stoyoma in the Cascade Range northwest of Merritt offers the most recent palaeo-environmental syntheses of southwestern B.C. His data, collected at elevations between 1800 and 2100 meters ASL, indicate that rapid warming heralded the end of the last glaciation about 10,000 BP. Heinrichs and Hebda (2001) summarized similar results for investigations at Mts. Kobau and Crater in the southern Okanagan and Similkameen Valleys.

From approximately 10,000 to 7500 BP climate remained warmer and dryer than recent (Xerothermic). Climax vegetation was non-analog Engelmann Spruce-Subalpine Fir parkland during the immediate post-glacial period. Hebda (1999) indicated the prevalence of grasses and sage biotic communities to elevations of ca. 1300 meters ASL, supplemented by Rocky Mountain Juniper *(Juniperus scopularum),* soapberry *(Shepherdia canadensis)* and willows *(Salix spp.)* through most of the montane areas of interior British Columbia at about that time. Terminal Pleistocene upland areas were thus forest-steppe communities, within Pellatt's (1996) non-analog ESSF zone.

Heinrichs (1999) and Pellatt's (1996) data indicate a mosaic vegetation pattern from the earliest Holocene (9500–10,000 BP) ranging from sagebrush-steppe through open and closed canopy forests of Pine and Engelmann Spruce. Downwasting left highland areas ice-free before valley bottoms. It is likely a similar pattern developed within the Okanagan Valley, ameliorated by the relatively lower elevations of the Okanagan Highlands. Glacial Lake Penticton was drained by ca. 8900 BP—providing a minimum early Holocene date for northern Okanagan bottomland occupations (Alley 1976).

As such, resources suitable for foragers were available in both valleys, but varied in abundance with latitude and elevation with dates for initial occupations ranging ca. 9000–10,000 BP—within the time range for the Intermontane Western Stemmed Point Tradition. A date of 10,000 BP could include an early Plateau Fluted Point Tradition. Interestingly, Hebda (1999) hypothesized that the Cathedral Lakes area may have been refugia for flora and fauna during the terminal Pleistocene—supported by the undated lanceolate point recovered from tree-line on Crater Mountain nearby (see Figure 3).

Future searches for terminal Pleistocene human activities in the study area should focus on higher elevations, at least in the Cascade Range, for cultural materials originating from the Columbia Plateau and Cascade Range.

Early Holocene (10,000–6000 BP)

The early Holocene is characterized by an initial occupation by Western Stemmed Point Tradition (Windust) peoples. Although known only from undated surface finds of distinctive Windust points, they indicate sporadic use of the Similkameen Valley probably between ca. 8000 and 10,000 BP. To date, no Western Stemmed Point Tradition sites are known for the Okanagan Valley, but this may be a function of sampling and research designs in this area.

Cascade (leaf-shaped) points are known to be coeval in time with Western Stemmed Point sites in the Cascade Range—specifically, at Newberry Crater on the border of the southern Columbia Plateau (Connolly 1999). Early Holocene dates range from ca. 9900 to 6500 BP (Connolly 1999:223) at Paulina Lake. Otherwise, Cascade points are diagnostic

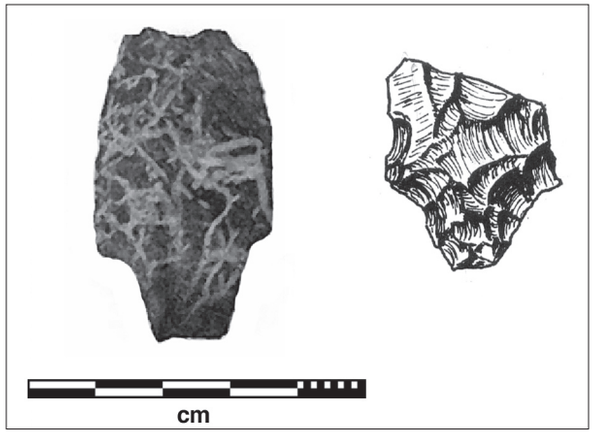

Figure 11. Nespelem Bar points.

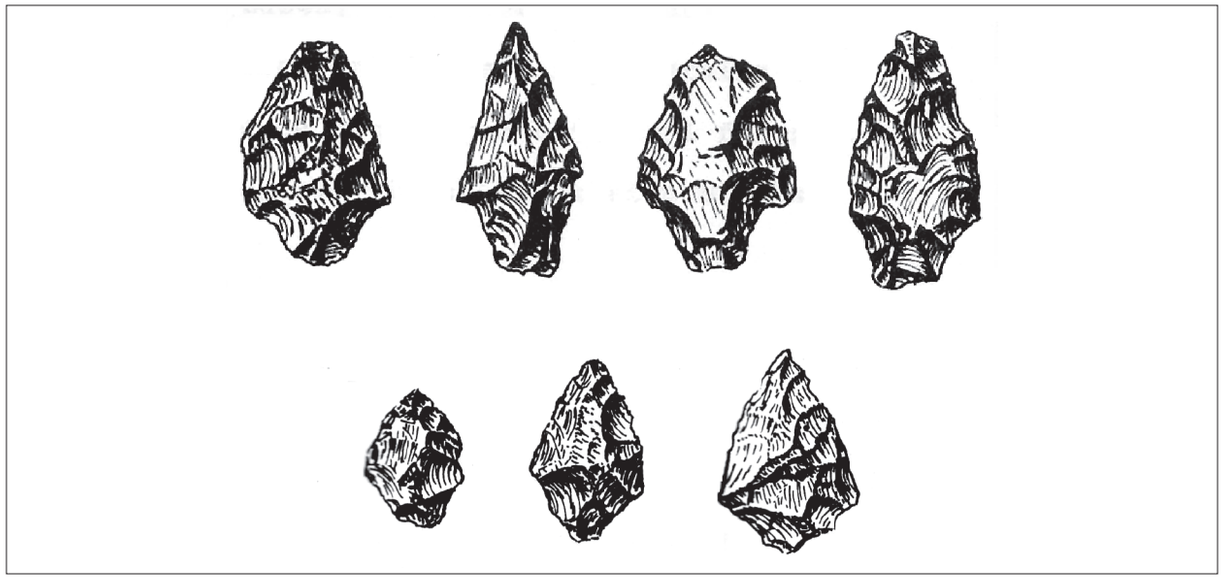

Figure 12. Rabbit Island A, B points (to scale).

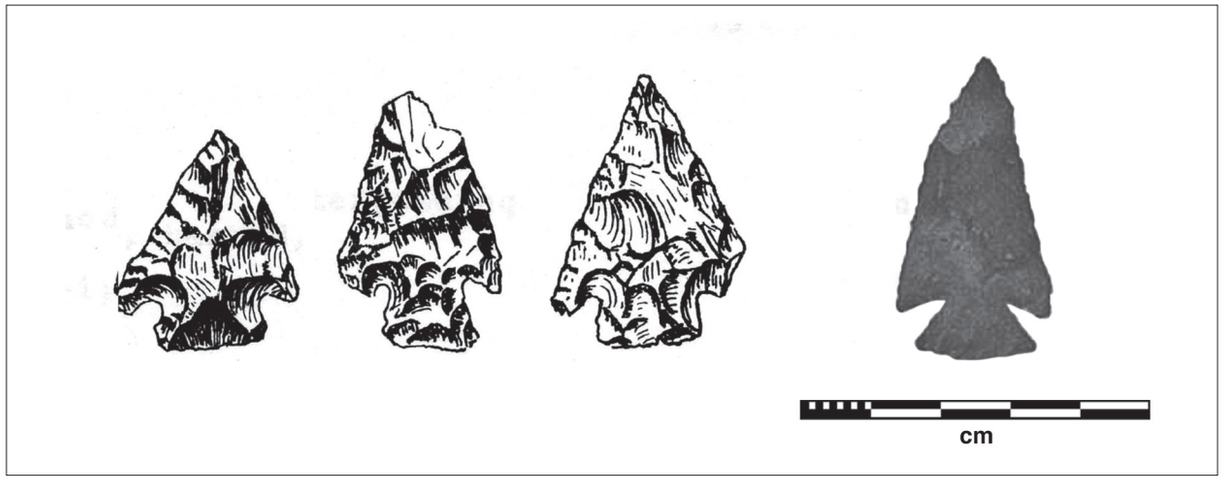

Figure 13. Columbia Corner–notched A, B points.

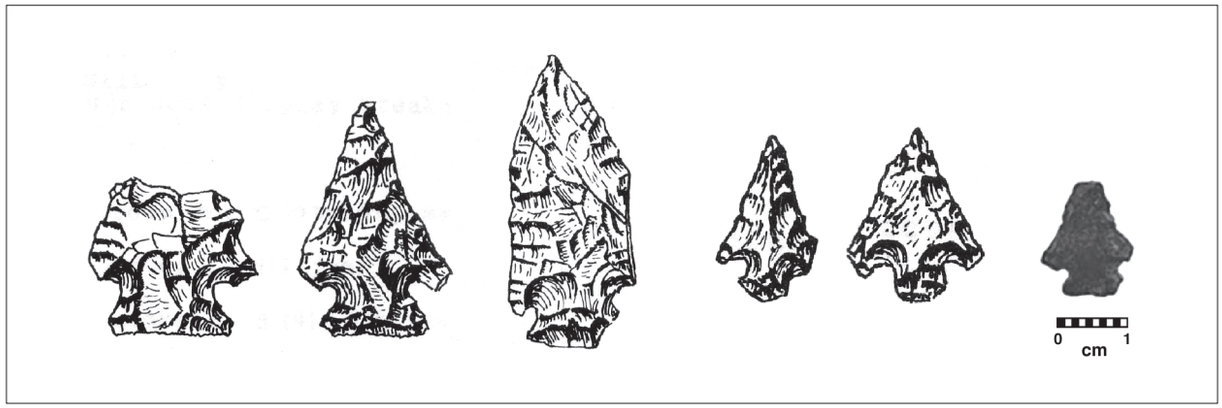

Figure 14. Quilomene Bar Basal–notched points.

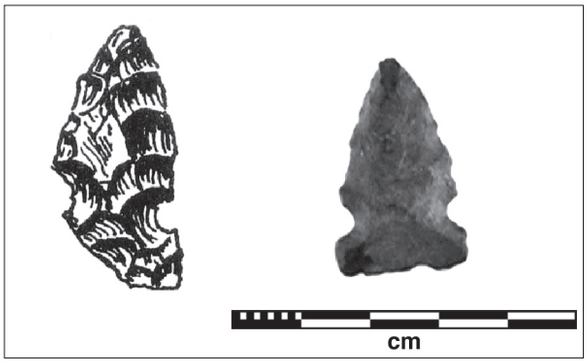

Figure 15. Plateau Side–notched points.

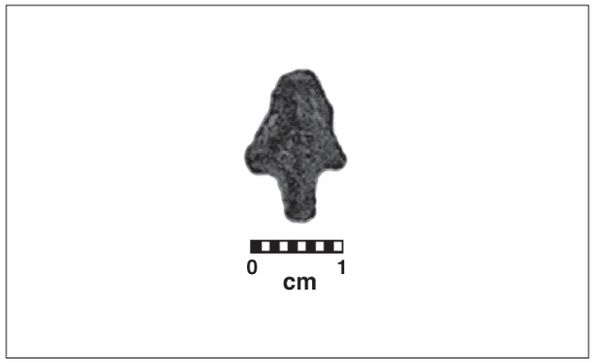

Figure 16. Wallula Rectangular Stemmed point.

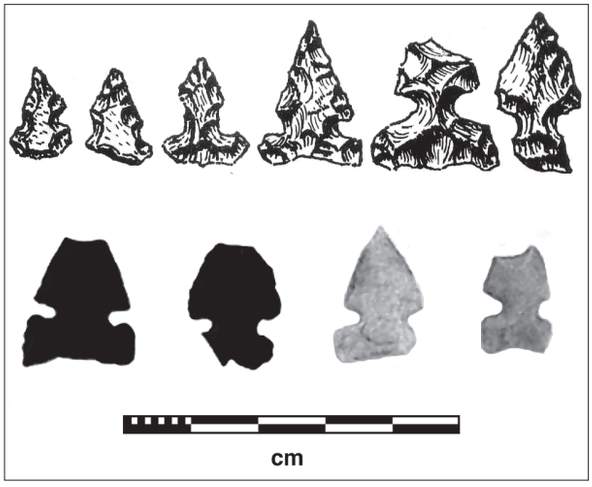

Figure 17. Plateau Small Side–notched points.

of the Olcott Tradition (5000–9000 BP) on both sides of the Cascade Range (Copp 2006, Onat et al. 2001). Mahkin Shouldered points are known principally from the northern Columbia Plateau. Defined by Losey (1985, 1995) they represent an evolved Cascade C type, albeit with stronger shouldered hafting elements. Cold Springs Side-notched points are more common in the Columbia Plateau than the inter-plateau region of the Okanagan-Similkameen, and post-date the main Mazama tephra fall (ca. 6800 BP). These points co-occur with Cascade and Mahkin Shouldered types.

This projectile point sequence indicates greater similarity during early Holocene times with the Columbia Plateau. The presence of the Plateau Microblade tradition (PMt) in the mid Fraser-Thompson and Okanagan-Similkameen areas dating from ca. 8000 to 1800 BP indicates ties to the northern Canadian Plateau and subarctic and/or west Coast through the Northwest Microblade Tradition. Microblade technologies, both coastal and interior, ultimately derive from northeast Asia at a time span greater than 12,000 BP. The appearance of microblade technology in the Okanagan-Similkameen by ca. 7400 BP (Copp 1995, 2006) indicates probable adoption through stimulus diffusion or population movements. The author takes the approach that the adoption of this highly expedient technology suitable to mobile foragers through diffusion to be a more parsimonious explanation than migrations, at least during the early Holocene.

Mid-Holocene (6000–2500 BP)

The mid-Holocene is a time of increasing cultural complexity on both Plateaus. There was a shift from foraging to foraging-collecting subsistence strategies marked by initial occurrence of pithouse structures. Early pithouses occur in isolated contexts or in small clusters of three or four, expanding to larger multihouse villages by the end of the period. Concurrent with a gradual shift to semi-permanent winter villages was the introduction at atlatl-sized corner and basally-notched, as well as corner-removed and contracting stemmed points.

The Okanagan Valley, with its seasonal runs of anadromous salmon, follows a pattern of increased use of piscean resources over time and documents increasing seasonal sedentism. The presence of larger aggregate clusters of pithouses south of the International Boundary in north-central Washington State is evident (Chatters 1986, 1989; Grabert 1968, 1970).

The Canadian Okanagan does exhibit pithouse villages, but these are restricted to larger lake locales (e.g., Osoyoos, Skaha and Okanagan Lakes) where populations would have been smaller than in the

American Okanogan. This may be a function of the fact that few salmon would have been able to surmount the natural falls at the south end of Skaha Lake—restricting northern Okanagan populations' access to this r-type species upon which larger aggregate populations were dependent.

There is no evidence for large winter villages in the Canadian Similkameen Valley. Salmon were restricted to the lower (US) portions of the river due to the height of Squantlen Falls upriver of the Similkameen and Okanogan confluence. Canadian Similkameen villages tend to be few in number and do not appear to have numbered more than four to six houses per village. Palmer Lake, on the American side of the valley, probably exhibited higher aggregate winter populations given its proximity to the fishing pools downstream of Squantlen Falls.

As such, the northern (Canadian) Okanagan and Similkameen valleys exhibit a continued reliance on earlier foraging and root collecting relative to a higher incidence of salmonid fishing on the American portions of the valleys. This is particularly noticeable in the Canadian Similkameen Valley where microblade and microcore technology is present by 7400 BP and continues to 1800 BP and possibly later, indicating the continuance of more mobile foraging subsistence strategies.

Late Holocene (2500–150 BP)

Late Holocene projectile points document a progressive reduction in size of all types, culminating in the eventual replacement of atlatl systems with the bow and arrow—although the late occurrence of points with neck-widths greater than 7 to 10 mm suggests the atlatl was never totally abandoned.

Grabert (1968, 1970) determined a clinal mode for pre-contact distributions of small, arrow-sized notched points in the Okanagan/Okanogan Valleys dating less than 1000 BP. His research indicated higher frequencies of smaller Columbia Corner-notched B variants in north-central Washington State than Plateau Small Side-notched forms, and ***vice versa*** for the Canadian valley. The situation for the Similkameen Valley appears to be identical, with Plateau Small Side-notched points predominating (Copp 2006; Vivian 1989a, b).

Again, the lack of salmon meant that Canadian Okanagan-Similkameen would have had to trade or travel some distance to acquire enough dried stock to carry them through the winter. The relative lack of winter villages in the Similkameen valley in particular, suggests that populations were smaller overall and that some portion of the indigenous population probably moved south and east during the Fall and Winter to areas closer to the salmon.

Ethnographic documents for the Similkameen (Allison 1892; Teit 1930) indicate that some people preferred to stay in the Canadian portion of the valley during the Fall and Winter seasons, subsisting on locally procured wild game, roots, freshwater fish and traded salmon.

The Athapaskan Question

The Ethnographic Record

There is general acceptance that, prior to ca. AD 1800, and possibly as early as 1200 BP, the area from Nicola Lake to the confluence of the Similkameen and Okanogan rivers was occupied by a population speaking an Athapaskan language (ARCAS Associates 1986, 1993; Boas 1895; Bouchard and kennedy 1984; Duff 1969; Hudson 1986, 1995, 1996; Hunn 2000; Kinkade et al. 1998; Magne 2001; Magne and Matson 1984, 1987; Teit 1895, 1900, 1930; Wilson et al. 1992, and Wyatt 1972).

Wyatt (1998) summarized linguistic information collected on the Nicola-Athapaskan language, primarily from the vocabulary list of MacKay (1895) as well as from work by Harrington (1943), who suggested a Chilcotin origin for Thompson Plateau and Pacific Coastal Athapaskan-speaking peoples. Wyatt cited Davis' (1975) and Krauss' (1973, 1979) linguistic research to be inconclusive as far as a Chilcotin-Nicola connection is concerned.

Workman (1977, 1979) indicated that a volcanic tephra eruption dating ca. AD 700 (Clague et al. 1995; West and Donaldson 2001) triggered an Athapaskan migration southward through the Interior of British Columbia and on to Washington and Oregon coastal areas. Cultures in the latter areas exhibited Athapaskan languages ethnohistorically (Harrington 1943; Hunn 2000) and linguistic studies (Krauss and Golla 1981:68) suggest a migration through the B.C. Interior and/or Cordillera prior to AD 500. There likely is a causal relationship between the Nicola and the Chilcotin documented by Bouchard and Kennedy (1984:13) who recorded Okanagan elders

had maintained a distinction between groups in the Nicola and the Similkameen Valleys (Figure 18):

> Our research has shown us that elderly Thompson informants refer to the former Athapaskan inhabitants of the Nicola Valley as **stewix**, but they do not recognize that these are the same people who also used to live in the Similkameen Valley, nor do they recognize the term **smEllekamux** given by Teit (1898–1910) as the name of the former Athapaskan inhabitants of the Similkameen. Conversely, present-day elderly Okanagan informants refer to the former Similkameen Valley Athapaskan residents as **smlkamix** (the equivalent of Teit's term), but they do not recognize them as the same people who also lived in the Nicola Valley and they do not recognize the term **stewix** by which the Nicola Valley Athapaskan were known.

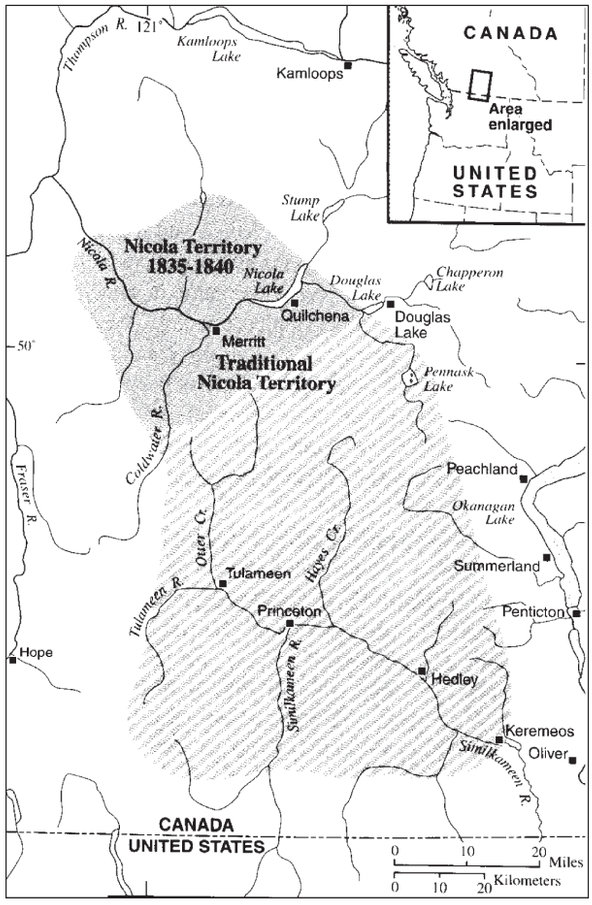

Figure 18. Ethnohistoric Nicola–Athapaskan distributions (after Wyatt 1998: 221, based on Teit 1900–1921).

Bouchard and Kennedy (1984) directly contradict Teit (1930:203–204, 213–216) who stressed the existence of **Stuw'ix** (var. **Stewix** above) throughout the Similkameen Valley as far south as the confluence of the Similkameen and Okanogan Rivers prior to the adoption of the horse in the early to mid 1700s. After the horse was adopted, Teit (1930:213–216) indicates that the Stuwi'x were either pushed out of the lower Similkameen Valley (i.e., Keremeos south to the confluence) or were assimilated by the Okanogan. Similarly, he cites increased trade and intermarriage for their assimilation by the Thompson in the upper Similkameen and Nicola Valleys.

Bouchard and Kennedy (1984:21) in a 1972 interview with Similkameen elder Harry Robinson, now deceased, underscore the point that the present Okanagan-Colville speaking population in the Similkameen Valley is an extension of the ancestral Nicola-Athapaskan Similkameen population:

> Both the Okanagans and the Similkameens were afraid of each other … They could not understand each other's languages, and so they used sign language … The Okanagans realized that the old Similkameen people were starving, so they cooked a lot of food for them…The Similkameen asked that Okanagans to stay there with them … After awhile, they became one band of people, because the old Similkameen people died, and the Similkameen children learned the Okanagan language … Old Terpasket said that our roots come from the Okanagan boy, **Gats'xwula^{7}xw**, whose father had been the chief of the group of Okanagans who came over into the Ashnola area. When the father of Gats'xwula^{7}xw died, it was the grown Gats'xwula^{7}xw who was asked to be chief, by the Similkameen people.

In this account, the Okanagans had come to the Ashnola Valley over the mountains from the Methow river valley. A similar story was recounted by Harry Robinson who emphasized that the Methow were male hunters who stayed and married into the Ashnola groups (Hudson 1990, 1996).

The Methow river valley drains into the Columbia and provides an analogous physiographic setting to the Similkameen, as it extends northwest into the Cascade Range, for a riverine-montane lifestyle in pre-contact times. The Methow Valley provides an analog for pre-contact lifestyles as it too lacks anadromous salmon resources as well as being the eastern leg of a trans-Cascade contact path with the Coast, as indicated previously.

With regard to the Methow as a Salish-speaking people, Kinkade (1967) studied Salishan place names in that valley and determined that many had origins in the Okanagan-Colville language even though the historic population spoke Columbia Salish. He concluded that there had been a population displacement of Okanogan-Colville by Columbia Salish on the order of a few hundred years. This evidence parallels the Nicola-Similkameen Athapaskan situation, although data are scant in the latter case. Both indicate population displacement and/or acculturation in the late pre-contact to historic periods.

To summarize, these data indicate at least a late pre-contact and early historical Athapaskan-speaking population in the general area consisting of the **Stuwix** of the Nicola Valley, referred to by the Okanagan term **Smlkamix** by the Similkameen First Nations. By the time ethnographic research was carried out in the late 19th century by James Teit, the Similkameen Valley was Okanagan territory and entirely Salish-speaking. As such, Similkameen Athapaskan populations were effectively absorbed, culturally and linguistically, into the Salish populations of the time.

The Archaeological Record

Co-habitation or sharing of resource areas in prehistory and identification of ethnicity in the archaeological record has been attempted by many Plateau scholars, especially in attempts to define an Athapaskan presence. Stryd and Rousseau's (1996) synthesis of the Middle Period mid Fraser-Thompson cultures beginning ca. 5500 BP postulates that a riverine and Douglas fir forest adaptation deriving from earlier ungulate hunting Nesikep Tradition peoples, illustrates an expansion of Salish-speaking peoples migrating into the southern interior in order to exploit riverine (salmon), grassland (roots) and forest (ungulate) resources. A Salish identification of these Lochnore Phase peoples is specifically stated as being based upon "the continuity between this tradition and the historic Salish-speakers of the area. Furthermore, Elmendorf (1965) identifies the northwestern part of the present Interior Salish territory … as the most probable homeland of the proto-Interior Salish, an area more or less consistent with that of the Lochnore Phase" (Stryd and Rousseau 1996:199). A co-resident Lehman Phase population inhabiting upland areas presumed not to be capitalizing on riverine salmonid resources (an Athapaskan-style orientation) is interpreted as a distinctive and separate cultural, or ethnic, group.

Wilson et al. (1992), working in the same area, rejected the bi-ethnic model citing mixed Lochnore-Lehman assemblages in most sites as well as the co-occurrence of these materials at the Baker site (EdQx–43) as well as at nearby sites EdQx–41 and EdQx–42. Wilson et al. (1992) further stated that comparisons between Lochnore and Lehman Phase sites should more properly be made with Indian Dan/late Kartar Phase populations of the Okanogan and Upper Columbia River regions of Washington State based upon shared patterns observed in projectile points and house form. Wilson prefers to view differences in site assemblages as "different specialized activities" rather than attribute them to cultural differences between groups.

Stryd and Rousseau (1996:199) counter that, in their opinion, site assemblage differences do reflect cultural, or ethnic, differences; that components of Lochnore and Lehman Phase sites are not mixed, although they recognize that components could be the results of deflation or investigator error in assemblage recognition. Without access to the sites for re-excavation and examination of original field documentation it is difficult to objectively determine which view is more likely to be correct.

Could co-existence of two similar cultures, in this case foragers or forager-collectors, over long periods of time be possible, given stressors such as competition for resources? Salishan river-oriented mixed forager-fishers would still have needed access to upland root, berry and hunting areas supposedly occupied by Athapaskan foragers. It is unknown whether such a situation would remain in equilibrium for millennia.

Material culture that has been used to deduce or infer ethnicity or group identity in the archaeological record of past foragers tended to focus on

relating artifact types (style) or broader technological traditions with defined groups. For example, Teit (1930:217–223) suggested that an absence of ground stone artifacts, specifically mortars and pestles, arrow smoothers and coiled baskets may have been indicators of the Athapaskan nature of Stuwi'x populations in the valley. Counter to this, Teit's (1930:219, 225–226) records indicate more common use of Columbia Plateau cultural traits involving the use of woven tule rush and sage textiles. As such, it is difficult to equate these material culture traits to retention of Athapaskan patterns (re: absence of ground stone) or syncretic adaptation of the more xeric resources of the valley.

Rousseau's (1992) analysis of key-shaped formed unifaces relatively commonly found in Columbia and Fraser Plateau sites dating between 4000/3000 to 1000 BP may be an indication of the relative uniqueness of the Similkameen archaeological record as they are absent in this area. Rousseau's experimental data using replica artefacts and microwear analysis indicates they were used primarily in processing stalks and branches, possibly as shaft smoothers and for other woodworking, as well as occasional shaving and smoothing of antler (Rousseau 1992:ii). As these distinctive artefacts occur in territories commonly associated with Interior Salish and Sahaptin-speaking Plateau peoples (Rousseau 1992:98), although they have also been found in two sites in the Chilcotin (Rousseau 1992:5), their absence in the Similkameen Valley may be indicative of Stuwi'x populations at a time depth of ca. 1000 to 3000 or 4000 years, assuming that the current archaeological database has not missed these tools due to sample bias.

Magne and Matson (1987:57–80) discriminated between Athapaskan and Salish projectile points through application of Multiple Discriminant and Multidimensional Scaling Analyses. Their sample consisted of 57 small side-notched projectile points from sites in north- to south-central British Columbia. Tables of quantitative and qualitative data derived from this sample were used to statistically validate their hypothesis that differences exist across a geographic area equated with historical ethno-linguistic territories of Salish or Athapaskan speaking peoples. They indicated that small side-notched projectile points could be readily identified according to presumed ethnically relevant morphological traits in a gradient ranging from north to south in the Plateau.

One of the most discriminating variables was the co-occurrence of concave based small side-notched projectile points with spurs projecting from one, or both, basal edges (Magne 2001). Whether such discrete artifact traits are a reflection of ethnicity between the two cultures (Salish and Athapaskan) or some other cultural or idiosyncratic pattern is debatable. However, they combined these specific artifact attributes with a statement that house form, size and depth could also be diagnostic of ethnicity (Magne and Matson 1987:67), expanding analysis beyond the level of artifact and house style to inferred socio-economic or political patterns. They were careful to state that these findings were *suggestive* of ethnic identification, not conclusive evidence.

In terms of the Similkameen artifact database, small side-notched projectile points with projecting basal spurs recovered from later pre-contact period deposits at Snazaist Village (DiRa–20) and Cool Creek (DhQx–10) could be inferred as Athapaskan. On the other hand, it is also likely that this point sub-type could be explained through the spread of sylistic variables through stimulus diffusion. The site otherwise does not exhibit other Athapaskan traits as the pithouse structures, or at least the single example tested, more closely resemble the shallow, saucer shaped types characteristic of the Columbia Plateau and Okanagan Valley.

Small side-notched projectile points appear ca. 1200 BP in the south-central Interior of British Columbia—the time of the White River tephra fall. This trait is highly suggestive of, if not an actual Athapaskan presence, then diffusion of a particular style into the Plateau. On the other hand, particularly since there is a continuum of side-notched projectile points throughout the pre-contact sequence from as early as 7000 BP, this could represent *in situ* progressive reduction of projectile point size associated with shifts from dart to arrow technologies.

Similarly, small, stemmed projectile points are also associated with Athapaskan sites in British Columbia (Magne 2001; Magne and Matson 1987). Referred to as Kavik or Klo-kut, they resemble smaller stemmed variants in the Similkameen (Rabbit Island series and some Wallula Stemmed variants). Small stemmed points associated with the Coquille Microblade Tradition are found in ethnohistoric Athapaskan territories in Oregon (Connolly 1986, 1991) but, as with side-notched

points, stemmed variants also occur early in the Similkameen, becoming smaller over time.

The archaeological literature of British Columbia has suggested that microblade technology can be roughly equated with identification of linguistically differentiated pre-contact peoples—a type of proto-Athapaskan-speaking culture of microblade users (Carlson 1983, 1990). What is important is the assumption that microblade technologies arrived across the Bering Strait sometime less than 13,000 years ago and then spread south either are the result of migration and/or stimulus diffusion.

Borden (1968), Carlson (1983, 1990), and Dumond (1969) viewed microblade technologies as evidence of early Holocene populations of proto-Athapaskans into North America. By 7500–8000 BP microblade technologies are widespread throughout the Pacific Northwest where they may have continued in Plateau montane areas to at least 600 BP, possibly to 200 BP, long after they had been discontinued elsewhere. Sanger's (1970a) original work defining the Plateau Microblade tradition suggested the technology was extant from 7500–3500 BP, but also may have continued to proto-historic and/or early historic ("Christian Era") times.

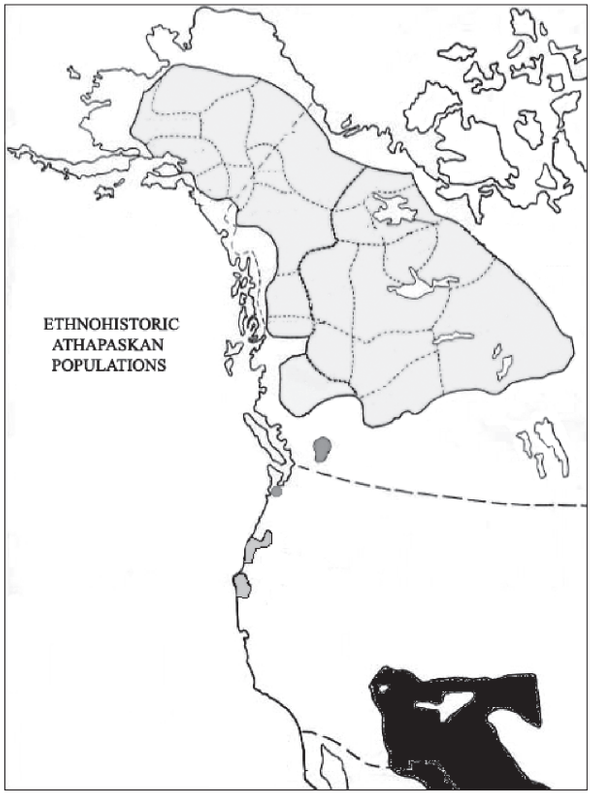

Figure 19. Ethnohistoric Athapaskan populations (after http://ehl.santafe.edu/maps/Na-Dene.gif).

Neither migration or stimulus diffusion hypotheses have been satisfactorily falsified, nor have they been verified at the time of writing. Both explanations remain plausible, so the identification of specific traits in the Similkameen (small side-notched and small stemmed projectile points, a microblade technology) and a hunting-gathering-fishing economy adapted to riverine and montane settings may yet indicate an Athapaskan presence, especially in components dating less than 1200 BP. This appears to be the case for the Coquille and Rogue River valley sites in Oregon—a much stronger case, given an ethnohistoric Athapaskan-speaking population there (Figure 19).

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