CHAPTER 8

Archaeological Basketry from the Fraser Valley: A Technological and Stylistic Review

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Introduction

The combination of stylistically sensitive attributes, organic composition that can be dated by radiocarbon assay, and direct evidence of plant-based technologies endow basketry with exceptional potential to inform us about the past. Large samples associated with other archaeological remains maximize that potential, but even fragmentary and stray specimens can provide insight (e.g., Bernick 2003, 2005). This review considers techno-stylistic characteristics of basketry from the perspective of their contributions to Fraser Valley cultural history. Archaeological basketry has been used in other regions to trace ethnicity, group affiliation, and cultural relations in antiquity (e.g., Adovasio 1986; Croes 1989). Specimens from the Fraser Valley have the same kinds of characteristics and similar promise for inferring cultural associations.

Numerous studies of basketry from the Northwest Coast culture area document technological and stylistic variation correlated with particular cultural groups (e.g., Jones 1976; Laforet 1984; Thompson and Marr 1983; Wray 2012). Basketry from the Coast Salish region appears to have been distinct from that made by neighboring groups for at least the past three millennia, albeit with changes through time (Bernick 1998; Croes 1977). A previous study of basketry from the Coast Salish region revealed techno-stylistic variation that coincides chronologically with culture types and phases developed from other kinds of archaeological evidence (Bernick 1998). Several specimens from the Fraser Valley were included in that study, though it mainly considered assemblages from Coast Salish areas to the west and south. At that time, the best known and largest collection of Fraser Valley basketry consisted of five specimens from the Scowlitz wet site (DhRl 16W), and they did not fit well into the typology of basketry from other parts of the Coast Salish region (Bernick 1998:152). Basketry artifacts from the Fraser Valley are more numerous now, and though they comprise too small sample to support statistical tests, the data are sufficient for preliminary exploration of possible intra-regional variation.

Currently, to my knowledge, there are 38 archaeological sites in the Coast Salish region that have produced basketry. These sites cluster geographically into what I refer to as Coast Salish subareas. These subareas include the Fraser Valley, Fraser Delta, Puget Sound, and southeastern Vancouver Island. Here, following an overview of available data sources for the Fraser Valley and definitions of key terminology, I present summary descriptions of pre-contact period basketry emphasizing aspects of construction and ornamentation. I lump the entire corpus of Fraser Valley archaeological basketry into one assemblage in order to reveal technological and stylistic attributes that characterize the subarea. Subsequently I consider similarities and differences in temporal context and in comparison to basketry from other parts of the Coast Salish region. I conclude with a discussion of the implications for culture history and suggest directions for future research.

Data Sources and Definitions

The Fraser Valley basketry artifacts discussed here are from 11 archaeological sites that lie between the Harrison River in the east and the Coquitlam River in the west (Figure 1). All of the specimens had preserved in anaerobic, water-saturated mud and were waterlogged when found. They were recovered over the past 50 years, mainly from eroding deposits, by private citizens, avocational archaeologists, and professional archaeologists. Often other artifact types were found in association with the basketry but only a few of the sites have been investigated. Combining all known Fraser Valley archaeological basketry artifacts into a single assemblage allows inclusion of specimens with imprecise site designations and poor contextual information, as well as basketry from controlled excavations.
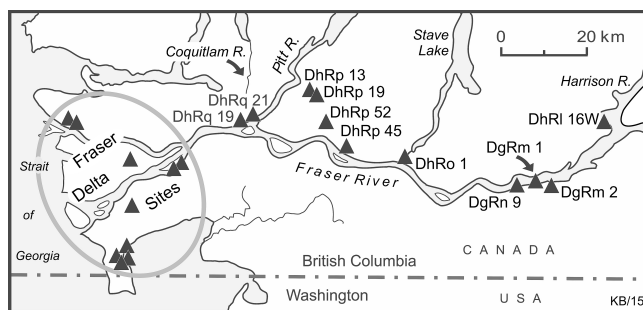
Figure 1. Archaeological sites in the lower Fraser River region that have yielded basketry. The named sites, between the Harrison River and the Coquitlam River, are in the Fraser Valley study area.

Table 1. Archaeological basketry artifacts from the Fraser Valley.

Site	Basketry Artifacts	Age (Years BP)	Reference
DgRm 1	7	**2000**	Bernick 1991, 2002; D. Schaepe, pers. comm. 2005
DgRm 2	1	**?**	Bernick 1991
DgRn 9	1	**2000**	Bernick 1991, 2008
DhRl 16W	10	**1200-600**	Bernick 1994; Brown 2000; Thorogood *et al.* 2003; Wooten 1992
DhRo 1	1	**800**	McLaren *et al.* 2014
DhRp 13	1	**?**	Bernick 1991
DhRp 19	1	**?**	Bernick 1991
DhRp 45	1	**900**	site form
DhRp 52	1	**3500**	Homan and Leon 2010
DhRq 19	3	**900**	Bernick 2003
DhRq 21	1	**2900**	Bernick 1985; Patenaude 1985

There are 28 artifacts in the sample (Table 1), which consists of six complete or nearly complete baskets, 18 fragmentary baskets (some represented by more than one piece), one partial mat, one tumpline, and two objects of uncertain original form. Ten specimens have been dated directly, another ten are associated with dated materials, and most of the remainder are provisionally dateable by their stylistic attributes. They range in age from ca. 3500 BP to ca. 600 BP. Most of the items have sufficient integrity to indicate whether they represent a container (basket) or flat form (mat/strap) and to provide minimum original dimensions. Details of construction and ornamentation are observable to varying degrees depending on artifact condition.

Attributes that I considered include material (cedar bark, wood splints, species), weave type, weaving gauge, average width of warp and weft elements, selvage type, reinforcement type and location, ornamentation (method, location, and motif), handles (composition and placement), basket base (weave type, shape, and size), and original basket height, circumference at mouth, and form. These comprise most of the set recommended by Adovasio (1977) in his guidelines for professional analysis of archaeological basketry. I extracted data from descriptions in publications and unpublished reports and from my notes for previous research that I had conducted over the past 30 years. I also further analyzed selected specimens. For sources see Table 1. The search for comparative information centered on published and unpublished existing literature about archaeological basketry from the Coast Salish region. The documented data are enhanced by personal familiarity with many of the collections including several for which reports are not yet available.

Materials

Wood splints consisting of longitudinally split withes or roots comprise the usual construction material of Fraser Valley basketry. Ornamentation often involved contrasting the light-coloured inner split surfaces with dark-coloured, bark-covered outer (curved) surfaces. Available data suggest that western redcedar *(Thuja plicata)*, particularly withes, was the usual wood material, though at least one specimen also has some spruce root *(Picea* sp.) elements. Strips of western redcedar inner bark were used for some plaited specimens including all flat forms.

Technical Terms Used in This Chapter

Basketry: woven or sewn constructions made from unspun plant fibres without a loom. Coiled (sewn) basketry is included in the definition, but containers made by folding sheets of bark are not.

Warp: the passive elements of woven basketry. Usually perpendicular to the weft. The term "warp" can refer to an individual element or to the entire set. On baskets the warp is normally vertical.

Weft: the active elements of woven basketry. Usually perpendicular to the warp. The term "weft" can refer to an individual element or to the entire set. On baskets the weft is normally horizontal.

Selvage: the edge of woven fabric finished to prevent unravelling. On a basket the selvage is the rim. Mats have side selvages and end selvages.

Pitch: the direction in which weaving stitches slant. An up-to-the-right (/) pitch is characteristic of Coast Salish and Wakashan basketry.

Basketry Techno-Stylistic Characteristics

The following summary descriptions are organized according to the technological categories represented (plaiting, twining, wrapping, coiling) and within those categories according to material and general form. The scheme accommodates fragmentary as well as complete specimens. In keeping with archaeological convention, baskets are classified according to the main weave used to construct the walls and flat forms are classified according to the major weave of the object. Attributes that are highlighted have proved insightful for comparative studies of other assemblages from the Northwest Coast (e.g., Bernick 1998; Croes 1977; Jones 1976). Weave, selvage, and reinforcement types are illustrated in Figures 2 to 4.

Plaited Basketry (17 Artifacts)

Plaiting is a method of weaving whereby warp and weft elements pass alternately over and under one another. Numerous variations are possible. Most of the Fraser Valley specimens are woven in a simple 1/1 interval commonly

known as checker plaiting, with the warp and weft oriented at right angles to one another and each element consisting of a single strand (Figure 2a). One object combines checker and twill plaiting (Figure 2b); it is also the only example woven on a bias, that is, on a diagonal relative to the edges. In addition, twill plaiting was used occasionally in a decorative context on basket walls and in either a 2/2 or 3/3 interval to construct basket bases.
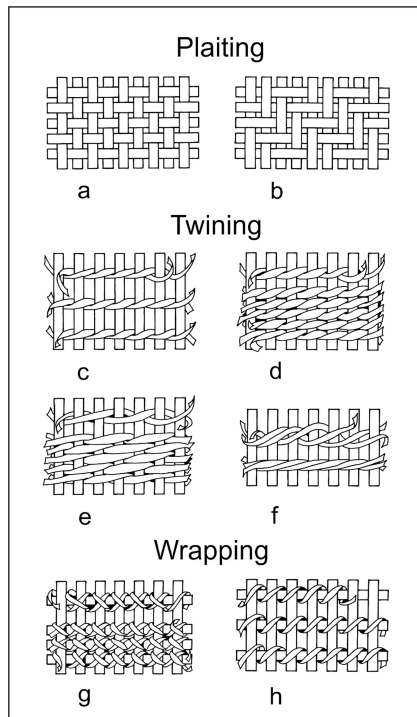

Figure 2. Basketry weave types mentioned in the text: (a) checker plaiting; (b) twill plaiting 2/2; (c) open plain-twining; (d) close plain-twining; (e) diagonal twining (also known as twilled twining); (f) three-strand twining; (g) cross-stitch wrapping; (h) open wrapped-twining.

The types of plaited basketry represented include wood splint checker baskets (n=10), cedar bark checker baskets (n=3), cedar bark checker mat (n=1), cedar bark tumpline (n=1), and a residual category of cedar bark checker basketry of uncertain original form (n=2). The plaited wood splint artifacts comprise 36 percent of the Fraser Valley basketry assemblage; the plaited cedar bark specimens account for 25 percent.

Wood Splint Checker-Plaited Baskets. The Fraser Valley assemblage includes two nearly complete and eight fragmentary baskets woven in checker plaiting from thin wood splints (Bernick 1985, 1991:110-134, 1994:24-28, 2002; Thorogood *et al.* 2003; Wooten 1992). The original baskets had rectangular or square bases and sides that expanded upward. At least three had distinct corners though perhaps more pronounced in their lower portions. The nearly complete specimens are 29 cm and 34 cm tall respectively; surviving fragments of the others indicate

similar sizes. Half have handles made from twisted withes. Most of the handles are attached to the respective basket rims, their ends looped over the selvage and uppermost weft rows near corners. One basket has two adjacent handles at the rim, another has a handle attached to a reinforcement on the basket wall, and two specimens have vertical handles (tumpline loops). Rim finishes are simple: two have single-strand wrapped selvages preceded by a row of twining (Figure 3e), one has a wrapped selvage the details of which are not reconstructable, and one has a cut-off selvage.
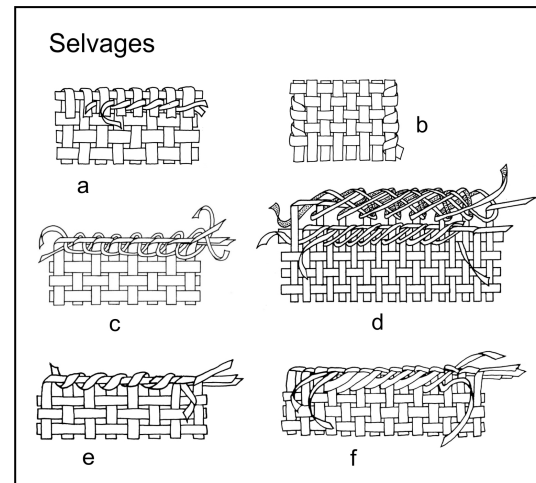

Figure 3. Basketry selvage techniques: (a) twined; (b) continuous element; (c) hitched; (d) figure-eight wrapped (false-braid); (e) single-strand wrapped; (f) two-strand wrapped.
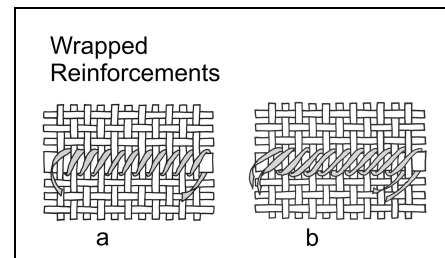
Figure 4. Two methods of constructing reinforcements on Fraser Valley basketry: (a) single-strand wrapped; (b) two-strand wrapped.

Most of the wood-splint checker-plaited baskets have evidence of structural or colour contrast ornamentation, often both. Several decorative schemes exist. One specimen (Figure 5) might be considered a combination weave since, in addition to checker plaiting, it has bands of wrapped twining (Figure 2h) with the rigid/passive element on the outside, bands of three-strand twining (Figure 2f), and also bands of what appears to be twill plaiting. Another basket features a narrow band of three-strand twining at the rim, an identical band eight centimeters lower on the basket wall, and a colour-contrast plaid pattern encompassing the entire basket including the base. Wrapped reinforcements (Figure 4), which also can be perceived as narrow bands of

structural decoration, occur at or near the rims on five artifacts and on three of those also at intervals on the basket wall. One basket has colour-contrast ornamentation featuring a shifting checkered pattern, and two others have evidence of colour contrast. One basket fragment has a vertical zigzag in twill plaiting that may have been enhanced by colour contrast.
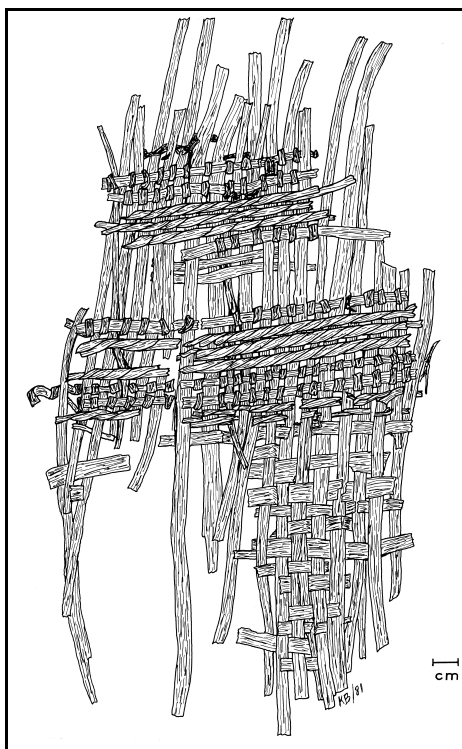
Figure 5. Fragment of checker-plaited basketry with bands in wrapped twining and three-strand twining. DhRq 21:3345. About 3000 years old. K. Bernick drawing, 1981.

Cedar Bark Checker-Plaited Baskets. Three artifacts are basket fragments woven from strips of cedar bark and all three have handles made of twisted withes attached to the rim (Bernick 1991:132, 2003). One has a single-strand wrapped selvage with a preparatory row of two-strand twining (/) (Figure 3e). Another specimen has a selvage that appears to be reinforced and hitched (Figure 3c) and a row of two-strand twining (/) as the penultimate weft. Each of these artifacts consists of two rim fragments with attached handles, and in one case also a portion of the wall or base. The third cedar bark checker-plaited specimen has a handle but no surviving selvage.

Cedar Bark Checker-Plaited Mat. One fragmentary artifact has a continuous element side selvage (Figure 3b) indicating that the original object was flat. It is coarsely woven from bark strips and likely is part of a mat with minimum dimensions of 50 x 36 cm. Neither of the ends are present, and there is no evidence of ornamentation (Bernick 2003).

Cedar Bark Plaited Tumpline. One artifact is woven on a bias, in a combination of checker and twill plaiting. Homan and Leon (2010) describe a 38 cm long, 4.4 cm-wide strap portion transitioning to braided cords at each end. Interpretation as a tumpline, or carrying strap, rests on form and ethnographic analogy; no basket was associated.

Cedar Bark Checker-Plaited Complex Objects. Two cedar bark woven artifacts are too fragmentary to determine their original forms but they do not appear to be either baskets or mats. One has an elaborate selvage that is folded over and wrapped or hitched. The other has a simple twined selvage (Figure 3a) preceded by a row of three-strand twining (/). These objects are not reported; I observed them in 1995 and 1999 while they were being evaluated for conservation treatment at UBC and SFU respectively.

Twined Basketry (8 Artifacts)

Twining involves weaving with passive warp elements and multiple active weft elements. Each weft consists of two or more strands that twist together enclosing the warps. Two-strand twining is often called plain twining. Of the many possible twining varieties, only close plain twining (n=2) and open plain twining (n=6) occur as primary construction techniques in the Fraser Valley assemblage (Figures 2c and 2d). Three-strand twining (Figure 2f) and diagonal twining (Figure 2e), as well as two-strand twining occur in a secondary/decorative context on some plaited and twined baskets. With the exception of occasional decorative rows, the twining stitches on the Fraser Valley specimens lean up to the right (/).

Close-Twined Wood Splint Baskets. Two fragmentary artifacts feature a close weft woven in two-strand twining (Figure 2d) (Bernick 1991:133-135, 2008). Both represent baskets that were originally more than 25 cm tall, and both have two-strand wrapped reinforcements (Figure 4b) and structural ornamentation. Neither has a surviving base. One has a figure-eight wrapped false-braid selvage (Figure 3d) and a now-detached handle, and appears to have had slightly flared sides. It has a decorative band immediately below the rim and another band three cm lower on the basket wall; each band consists of three rows of two-strand wrapped reinforcements (Figure 6). The second close-twined specimen does not have a surviving selvage. It has complex structural ornamentation that includes sections in diagonal twining, occasional rows of twining with an opposite pitch creating a chevron pattern, and decorative wrapped reinforcements.

Open-Twined Wood Splint Baskets. The Fraser Valley assemblage includes two nearly complete and four fragmen-
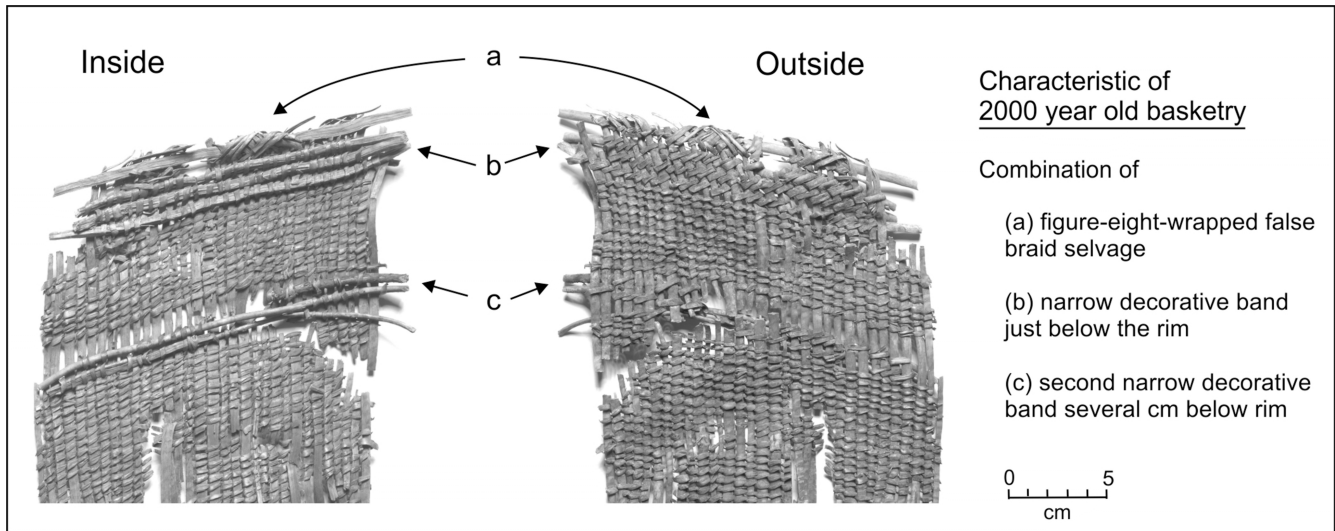
Figure 6. Wood-splint twined basket fragment, DgRn 9:2. On this specimen, each decorative band consists of three adjacent two-strand wrapped reinforcements. Photos courtesy of Royal British Columbia Museum.

tary baskets woven in open two-strand twining (Figure 2c) (Bernick 1994:29-30, 2002). The basket bases, which are present on three specimens, are twill plaited and encircled by one or two close rows of plain twining (/). Original basket form, apparently similar for all specimens, featured a rounded square or rectangular base, flared sides, and a circular mouth. One was 16 cm tall and about 40 cm in circumference at the mouth. The other specimens range from 31 cm to more than 42 cm tall. Only the largest specimen has an extant handle, made from a twisted withe attached to the top of the basket. Both nearly complete baskets have two-strand wrapped selvages (Figure 3f) and two other specimens have remnants of selvages that appear to be a wrapped type.

Ornamentation occurs on four of the open-twined specimens. On one, all weft rows exhibit checkered colour-contrast. A second basket has a colour-contrast checkered pattern only at the rim and a third has colour-contrast checkered pattern at the bottom of the wall and also checkered vertical stripes. A fourth specimen features a horizontal band of decorative two-strand reinforcement (two or three rows) immediately below the selvage, and another band (three rows) about 12 cm below.

Wrapped Basketry (1 Artifact)

Wrapping is a method of basketry construction characterized by a passive warp and multiple-strand wefts that include both passive and active components. Often the passive weft element is relatively robust and lies across the warp. The active weft element is flexible and wraps the passive element onto the warps at their intersections. Many types of wrapped weaves occur in the repertoire of Northwest Coast basketry. There is only one specimen from the Fraser Valley and it is an unusual variety.

Cross-Stitch-Wrapped Wood-Splint Basket. One nearly complete basket is woven entirely in a cross-stitch wrapping technique (Figure 2g). It is relatively small, undecorated, and lacks handles. The base has not survived. Original basket height was approximately 19 cm and numerous inserted warps attest to a flared form, probably bowl shaped. For a detailed description see Bernick (2003).

Coiled Basketry (2 Artifacts)

Coiled basketry is sewn, not woven. The foundation coil, which may be a single or multiple element, is often arranged as a spiral. Successive courses are sewn together with a single flexible strand, generally using an awl. Basketry made by the same method but with foundation "coils" arranged as strips or as rings, is also classified as coiled. Characteristics of the foundation and the way in which it is engaged by the sewing strand may be diagnostic (Figure 7). Two archaeological specimens are reported from the Fraser Valley.

Bundle-Foundation Coiled Basket. The Fraser Valley assemblage includes one nearly complete basket with a spiraling flat-bundle foundation and split-stitch sewing for the sides. The basket base is plaited. A slat-foundation ring coil at the bottom of the basket wall and another at the top comprise structural ornamentation. The rim is a simple wrapped type with a cedar bark foundation. The basket is oval in form, 14 cm tall and 75x18 cm in maximum length and width, and is identified as a cradle or baby carrier (Bernick 2014a).

Slat-Foundation Coiled Basketry. One fragment of the flat part of a basket features a slat foundation and non-interlocking simple stitches (Figure 7a). A remnant of imbrication testifies to ornamentation but there are no surviving indications of designs or colour. The fragment is relatively small, 23 x 5.5 cm, and neither the form nor size of the original object are indicated. It is rigid and would not have been water-tight (Bernick 2002).
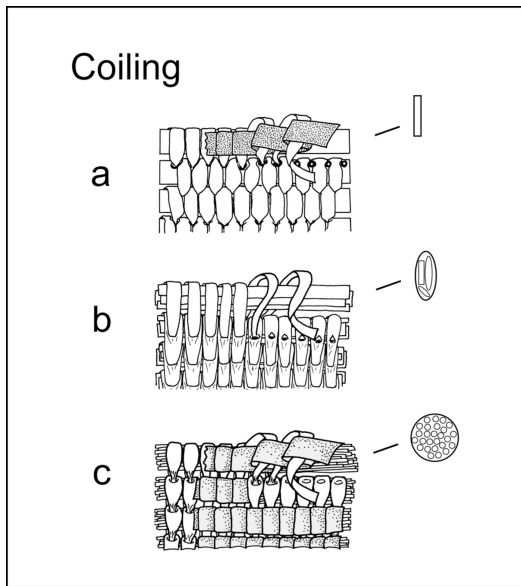
Figure 7: Coiled basketry techniques: (a) slat foundation; (b) flat-bundle foundation; and (c) round-bundle foundation. Both (a) and (c) illustrate ornamentation by imbrication.

Temporal Variability

The Fraser Valley basketry assemblage described in the preceding section stands out as being diverse with respect to methods of construction and style. The sample of 28 artifacts includes ten artifact types that comprise four technological classes. That degree of diversity is remarkable for a small part of a single cultural region and suggests the possibility of change through time. Considering that the assemblage spans three millennia, questions of current interest concern whether a chronologically meaningful techno-stylistic pattern can be discerned for Fraser Valley archaeological basketry, and if so, whether the pattern mirrors that of other Coast Salish subareas. To address these questions, I rearranged the Fraser Valley assemblage into chronological groups, identified characteristics with particular potential to reflect temporal variability, and compared the results for the respective age-groups. The following summaries highlight differences and similarities within the Fraser Valley assemblage and between Coast Salish subareas.

Oldest Specimens, ca. 3500-2900 BP (2 Artifacts)

The oldest basketry artifact currently reported from the Fraser Valley is a bias-plaited cedar bark tumpline excavated from ca. 3500 year-old cultural deposits (Homan and Leon 2010). It is the only basketry from the Coast Salish region of British Columbia that is woven from cedar bark and known to be more than 1500 years old (Bernick 1998, 2014b). However, there are fragments of one 2000 year-old cedar-bark open-twined basket from the Puget Sound subarea (Nordquist 1976) and numerous 2500-3000 year-old cedar-bark basketry artifacts from the Hoko River site at the junction of Klallam (Coast Salish) and Makah

traditional territories on the Olympic peninsula in Washington (Croes 1995). Croes identifies the Hoko basketry as stylistically Makah, based, in part, on the presence of cedar bark basketry. Notably, the Hoko River site also produced bias-woven basketry strap fragments that may have been tumplines. Strap forms like the Fraser Valley specimen are not reported from any other site in the Coast Salish region. Eldridge (1991:48-50; also see Eldridge, this volume) describes a 4000 year-old plaited strap from the Fraser Delta but it differs from the Fraser Valley specimen in material, form, construction, and style.

Another Fraser Valley basketry artifact in the "oldest" category was recovered in association with a wood artifact directly dated to 2930 BP (Patenaude 1985). The fragmentary checker-plaited wood-splint specimen has rows in other weaves that apparently comprised horizontal bands (Figure 5) (Bernick 1985). This kind of decoration differs from that on other Fraser Valley specimens but it occurs on 3000 year-old wood-splint checker-plaited basketry from the Fraser Delta (Archer and Bernick 1990:143-144). The Fraser Valley specimen was included in the sample used to identify diagnostic characteristics of Coast Salish region basketry older than 2900 BP and attributed to the Locarno Beach culture type (Bernick 1998:151).

### Middle-Aged Specimens, ca. 2100-1900 BP (8 Artifacts)

Four wood-splint basketry artifacts, all from the same Fraser Valley site, have radiocarbon dates that span a 200-year range with a median of ca. 2000 BP (D. Schaepe, personal communication 2005). One is checker-plaited, two are twined, and one is coiled. The checker-plaited specimen displays characteristics typical of ca. 2000 year-old basketry from the Fraser Delta, San Juan Island, and Puget Sound, including a horizontal decorative band just below the rim and another several centimetres below (Bernick 1998, 2002). The two Fraser Valley twined specimens that are directly dated to ca. 2000 BP, and also four undated plaited and twined wood-splint fragmentary baskets have similar ornamentation (Bernick 1991, 2002, 2008). One of those fragmentary baskets has a false-braid selvage that is diagnostic of 2000 BP basketry in the Fraser Delta and Puget Sound (Bernick 1998). The selvages of most Fraser Valley specimens are simple variants of wrapping rather than the elaborate figure-eight-wrapped false-braid. Other characteristics of the ca. 2000 BP Fraser Valley assemblage include two-strand wrapped reinforcements, twill-plaited bases, wood-splint materials, frequent colour-contrast ornamentation, occasional chevron or zigzag designs, and the absence of baskets in wrapped weaves. These attributes are consistent with ca. 2000 year-old basketry from the Fraser Delta and Puget Sound. Whether that is also true for Vancouver Island remains moot as no basketry of comparable age has been found there (Bernick 1998).

Unlike the "middle aged" woven basketry, the ca. 2000 year-old coiled specimen from the Fraser Valley differs entirely from artifacts in other parts of the Coast Salish region. It is the only currently known archaeological

example of slat-foundation sewn basketry (Bernick 2002). The only other coiled archaeological basketry from the Fraser Valley is 800 years old and has a bundle foundation (Bernick 2014a). There are a few coiled specimens from the Fraser Delta and Puget Sound, as well as several from the Ozette site that are presumed to be imports from the Fraser area, but these all have bundle foundations (Figure 7) and none are known to be more than about 700 years old (Croes 1977, 1991; Laforet 1971).

Youngest Specimens, ca. 1200-600 BP (15 Artifacts)

Two-thirds of the Fraser Valley specimens in the "youngest" category are checker-plaited, five from cedar bark and five from wood splints. The remainder are all made from wood splints, three twined, one wrapped, and one coiled. They include six directly dated specimens with an average age of 880 BP (range, 1010-765 BP) and nine that were recovered from deposits associated with radiocarbon dates in the 1200-600 BP range (Bernick 1991, 1994, 1998, 2003, 2014a).
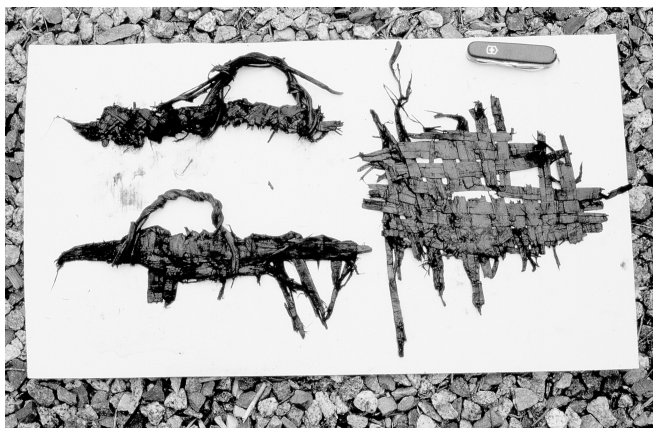
Figure 8. Three fragments of a cedar-bark checker-plaited basket from DhRq 19. The handles are made from twisted withes/roots and were attached to the rim, probably on opposite sides of the basket. AMS date 804±75 cal BP. K. Bernick photo, 1992.

The ca. 1200-600 BP cedar bark specimens, all of which are fragmentary, are plain with simple selvages and no ornamentation. Those that represent baskets have wood-fiber cordage handles at the rim (Figure 8). The only other cedar bark basketry in the Fraser Valley assemblage are the 3500 year-old tumpline, which differs from the younger specimens morphologically, technologically, stylistically, and functionally, and one plaited specimen of unknown age (Bernick 1991:132, 2003; Homan and Leon 2010). Cedar bark plaited basketry from the Vancouver Island and Puget Sound Coast Salish subareas resembles that from the Fraser Valley in regard to techno-stylistic characteristics and none is older than ca. 1300 BP (Bernick 1998). The same is

likely true for the Fraser Delta where cedar-bark plaited basketry was recovered recently from two sites (DgRs 56 and DhRt 2) but is not yet reported or dated; I observed these finds in 2010 and 2012 at UBC.

Wood-splint checker plaited baskets in the ca. 1200-600 BP age group include one nearly complete and four fragmentary specimens. They have wrapped reinforcements spaced at intervals on the basket walls or only at the rim, horizontal or vertical handles at the top near the corners, and simple, wrapped or cut-off selvages. The nearly complete specimen (Figure 9) has a checker-plaited base with unusual characteristics that might represent a mend. On that basket and at least one other, the reinforcements are single-strand types. Colour contrast ornamentation, present on some of the specimens, occurs as vertical stripes or over the entire surface and is notably different from that on ca. 2000 year-old baskets from the Fraser Valley and other Coast Salish subareas (Bernick 1994; Thorogood *et al.* 2003; Wooten 1992). The Fraser Valley wood-splint plaited basketry also differs from 3000 year-old specimens in method and placement of ornamentation, as well as types of selvages and reinforcements and probably also in original form. Other than the Fraser Valley assemblage, plaited wood-splint basketry dating to ca. 1200-600 BP is scarce or absent in the Coast Salish region. One specimen with spaced horizontal reinforcements was recovered from deposits estimated to be ca. 700 years old in the Fraser Delta (Bernick 1991:122-124), and a few twill-plaited wood-splint specimens are reported from Puget Sound (Blukis Onat 1976).

Three wood-splint fragmentary baskets in the ca. 1200-600 BP age group are woven in open plain twining. Remnants of a wrapped selvage and a handle at the rim are present on one (Bernick 1994). Another has colour-contrast wefts. Their ragged condition precludes comparison of stylistic details though they clearly lack the type of ornamentation characteristic of older baskets from the Coast Salish region. Plain open-twined baskets dating from the past 1300 years occur in the Puget Sound and Vancouver Island Coast Salish subareas, and ca. 3000 BP in the Fraser Delta (Archer and Bernick 1990; Bernick 1983:262, 1998; Blukis Onat 1976; Munsell 1976).

Two unique specimens from the Fraser Valley fall into the "youngest" category. One of those, which is cross-stitch-wrapped, is the only example of basketry made entirely in that technique reported from an archaeological context in the Coast Salish region. On specimens from all represented eras, occasional rows and isolated stitches in the same cross-stitch-wrapped technique occur on basket walls and bases as reinforcements or stabilizers (Bernick 2003).
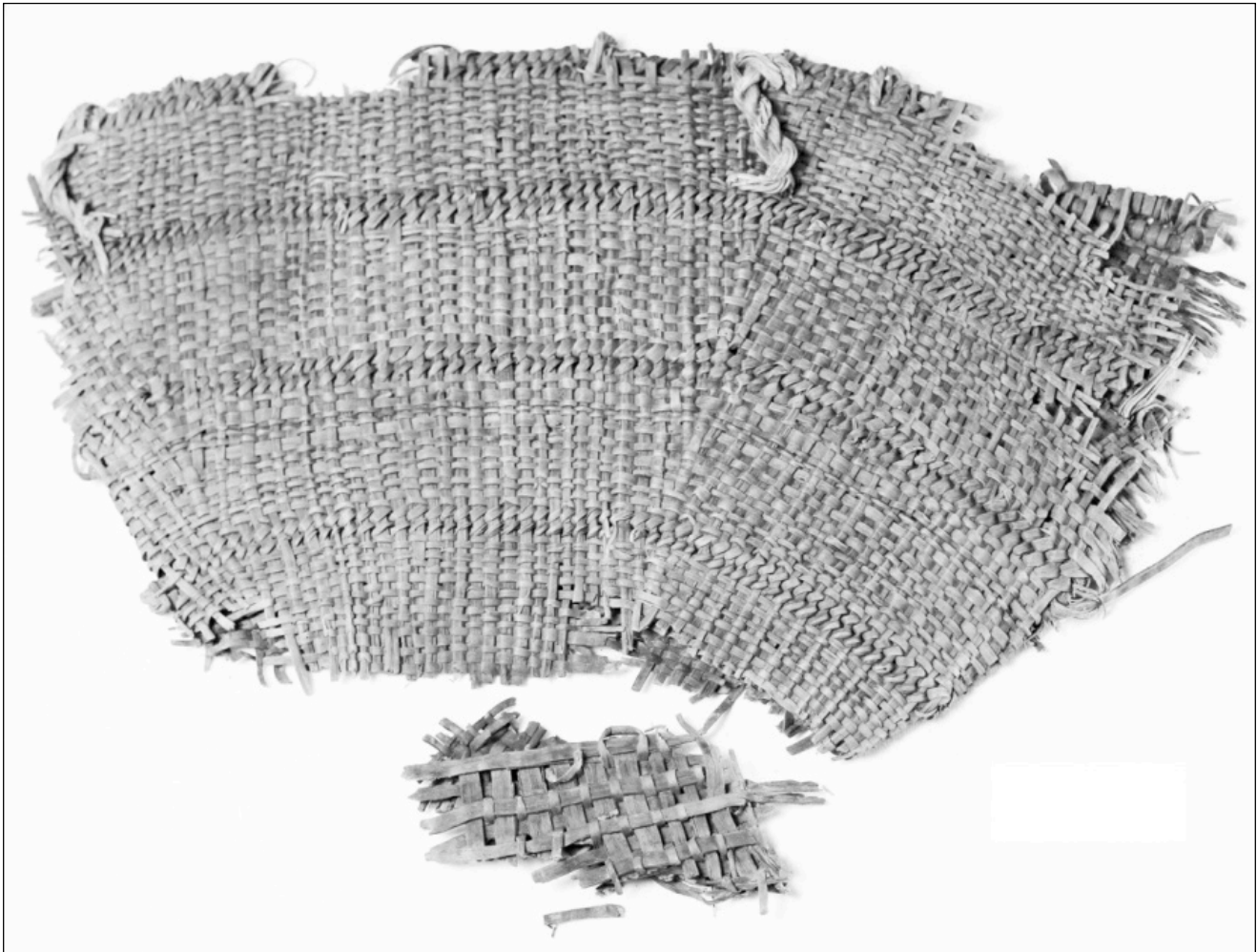
Figure 9. Wood-splint checker-plaited basket from the Kanaka Creek site, DhRp 45. Characteristics include vertical handles, distinct corners, and horizontal single-strand wrapped reinforcements at intervals. The base, now detached, was rectangular. AMS date 846±47 cal BP. Height, base to rim, 29 cm. Image copyright 2015 SFU Museum of Archaeology & Ethnology.

A 2900 year-old fragmentary specimen from the Coast Salish area on the Olympic Peninsula has numerous cross-stitch-wrapped wefts combined with open-wrapped-twining (Croes 2012:151-154). The second one-of-a-kind Fraser Valley specimen is coiled with a flat-bundle foundation and split stitches. Its techno-stylistic attributes differ markedly from those of the 2000 year-old coiled fragment from the Fraser Valley and somewhat less from undated coiled specimens from the Fraser delta and Puget Sound (Bernick 2014a). Both of these unique specimens have ethnographic parallels.

Undated Specimens (3 Artifacts)

Three Fraser Valley basketry artifacts cannot be assigned to a chronological category. Two of these are wood-splint checker-plaited specimens, one of which has a band of close twining and one single-strand wrapped reinforcement; the other has very little remaining intact weave. A third specimen, consisting of the rim and handles of a checker-

plaited cedar bark basket, is unlikely to be more than about 1200 years old (Bernick 1991:131-134).

Ethnographic Parallels

Most Coast Salish basketry specimens in ethnology collections are coiled, and most literature about baskets made in the Fraser Valley during the post-contact era describes coiled basketry. The conventional interpretation identifies coiling as an Interior Salish technique that diffused to the Fraser Valley and other parts of the Coast Salish region (Barnett 1955:123-124; Fortney 2001; Haeberlin *et al*. 1928:133-136). The antiquity of coiling among Interior Salish groups is not known. The oldest reported example from the Fraser Plateau is a charred bundle-coiled specimen dated to ca. 250 BP (Wittke *et al*. 2004). Round-bundle foundations (Figure 7c) were the usual type of Interior Salish coiled basketry. Slat-foundation coiling (Figure 7a), like the 2000 year-old Fraser Valley archaeological artifact, is characteristic of the St'át'imc (Lillooet), who made both types (Barnett 1955:123; Duff

1952:57; Haeberlin *et al*. 1928:135). Flat-bundle foundations (Figure 7b) and spiral-coiled basket cradles with plaited bottoms like the 800 year-old specimen from the Fraser Valley also have parallels with St'át'imc constructions (Haeberlin *et al.* 1928).

Woven basketry is conspicuously under-represented in Coast Salish ethnographic collections and literature. In a previous publication, I argue for a connection between the unique 900 year-old cross-stitch-wrapped basket from the Fraser Valley and somewhat transformed baskets made in the twentieth century in Puget Sound (Bernick 2003). Notably, the type of wrapped basket cited in the literature as being typical among Coast Salish groups of British Columbia (Barnett 1955:122-123; Jones 1976:205) is not represented in the admittedly small Fraser Valley assemblage described in this review. That weave type, open-wrapped-twining (Figure 2h), predominates in the ca. 1000-year-old Little Qualicum River site (DiSc 1) assemblage from the Coast Salish region on Vancouver Island (Bernick 1983:264-279), and I have seen examples recently recovered from several unreported and undated sites on southeastern Vancouver Island and the Sechelt peninsula. The more common basket weaving techniques in the Fraser Valley archaeological sample, plain twining and checker plaiting, were certainly known in post-contact times in the Coast Salish region but details are scarce for the Fraser Valley and Delta (Barnett 1955:123; Jones 1976). Jenness (1955:8) remarks that the Katzie had rectangular cedar bark baskets but does not mention whether they were used throughout the Fraser Valley. For the Coast Salish region in general, the ethnographic literature indicates underlying similarity of traditional basketry techno-stylistic characteristics but with differences among ethno-linguistic groups, and also importation of baskets and methods of manufacture.

Implications and Challenges

The small and diverse sample of archaeological basketry from the Fraser Valley shows significant stylistic and technological variation through time. The basketry types cluster chronologically into three groups that correspond in age to those represented in other Coast Salish subareas (Bernick 1998). Similarity between basketry from the Fraser Valley and other parts of the Coast Salish region is notable ca. 2000 BP. That holds true for the Fraser Delta and Puget Sound; no basketry of comparable age is reported for Vancouver Island. Intra-regional comparison for the preceding era is constrained by the presence of only two older specimens from the Fraser Valley. One of those, a 2900 year-old fragmentary basket, bears remarkable techno-stylistic similarity to contemporaneous specimens known from the Fraser Delta (Archer and Bernick 1990), which implies cultural connections.

Basketry from the Fraser Valley dating from ca. 1200-600 BP has a mixed correspondence to that from other Coast Salish subareas (Bernick 1998; Croes 1977; Croes, ed. 1976). Cedar bark plaited specimens and wood-splint open-plain-twined baskets appear as frequent types in assemblages of this age from Puget Sound and Vancouver Island, as well as from the Fraser Valley. But wood-splint checker-plaited specimens, which account for one-third of the Fraser Valley 1200-600 BP assemblage, do not occur in those other subareas except in earlier times. As for the Fraser Delta, there are no basketry specimens confirmed to be younger than 1400 BP, precluding comparison with the Fraser Valley at this time.

The diversity of Fraser Valley archaeological basketry is heightened by the presence of unique techno-stylistic types, specifically a bias-plaited tumpline (ca. 3500 years old), slat-coiled basketry (ca. 2000 years old), a cross-stitch-wrapped basket (ca. 1000 years old), and a flat-bundle coiled cradle (ca. 800 years old). These differ from the basketry in archaeological assemblages from other Coast Salish subareas though they have ethnographic/modern parallels that suggest cultural relationships through time. For example, the continuity of cross-stitch-wrapping has suggested intermarriage or trade between people in the Fraser Valley and Puget Sound for at least the past millennium (Bernick 2003), and characteristics of the bundle-coiled cradle attest to contact between Fraser Valley and Interior Salish groups to the north 800 years ago (Bernick 2014a). Similarly, some aspects of ornamentation appear to have persisted for thousands of years. One example is the plaid pattern on a 2000 year-old checker-plaited basket from the Fraser Valley, which resembles decoration on the oldest Salish blankets from the region (Bernick 2002:9; Gustafson 1980:55-58).

Another link to the ethnographic record concerns evidence in the Fraser Valley archaeological assemblage for the use of tumplines (pack straps) to carry baskets. Although this review does not explore functional aspects of basketry, the presence of vertical handles merits comment. Vertical handles, which are documented on two ca. 1200-600 BP Fraser Valley baskets, would have been used to guide or attach a strap. The ca. 3500 year-old basketry tumpline from the Fraser Valley, though clearly not associated with those particular baskets, suggests that the practice had considerable antiquity. However, neither vertical handles nor basketry tumplines occur in archaeological collections from other Coast Salish subareas. Considering the small sample size, the possibility of significant intra-regional variation in handle styles remains speculative.

To summarize, Fraser Valley archaeological basketry is mainly woven (vs. coiled) and mainly made from wood splints (vs. cedar bark). The plaiting, twining, wrapping, and coiling techniques that are represented include both common types and unique varieties. Techno-stylistic diversity is notable and temporal variation accounts for some of the diversity. Congruence with other Coast Salish subareas is most pronounced at about 2000 BP. Fraser Valley basketry from later times, ca. 1200-600 BP, bears greater resemblance to that from Puget Sound than Vancouver Island, but there are some significant differences that render an assertion of similarity tenuous and warrant

further consideration. One of those differences pertains to the presence of wood-splint checker-plaited baskets in the Fraser Valley ca. 1200-600 BP including specimens with vertical handles.

As a first step toward assessing intra-regional variation, this review suggests that techno-stylistic characteristics of basketry may have been more diverse in the Fraser Valley than in other Coast Salish subareas, and that relative diversity and consequent difference increased through time. Larger samples are needed in order to evaluate the suggestion. Regardless, the existing Fraser Valley basketry sample demonstrates potential to enlighten aspects of the past beyond descriptions of material culture. When additional basketry becomes available, it may be possible to learn when and why Coast Salish groups began to make coiled basketry, to trace social and economic connections between residents of the Fraser Valley and Puget Sound, and to explore the inter-relationship of basketry ornamentation and artistic expression in other media.