

# THE FIRST NATION ARCHITECTURAL LANDSCAPE

## Considering a Neglected Architectural History

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The difficulty with documenting the architecture of First Nations in Canada lies within several realities: cultural diversity, geographical isolation, and varying traditions, for instance, make it such that typologies have emerged that are well beyond what has been typically studied by architectural historians and theorists. There are challenges in understanding past and present-day aboriginal architectural design in that both can be linked to traditional practices that are not always explicit and not always open to the outsider: site and program are clearly subordinate to culture and tradition. And as outlined elsewhere, the challenge for architectural historians in terms of understanding past aboriginal architectural design lies well beyond these complexities; it lies in the very nature of colonizing and “missionizing.”<sup>2</sup>

In simple terms, when beginning to document the architecture of First Nations, several realities emerge. First, there has been little attention paid to pre-European contact and early contact First Nation buildings.<sup>3</sup> Perusing the vast archaeological, anthropological, and historical records, for example, would render sketches that highlight sophisticated building traditions pre-dating European arrival. There is very explicit information that can be gleaned from within the archival realm. In the recorded interviews by Major John Matthews, for instance, Chief August Jack Khahtsahlano outlines the architecture of a long house; the details are surprisingly precise when he describes a post-and-beam, cedar-clad building and from such textual and visual sketches, one would be able to reconstruct the long house “type”

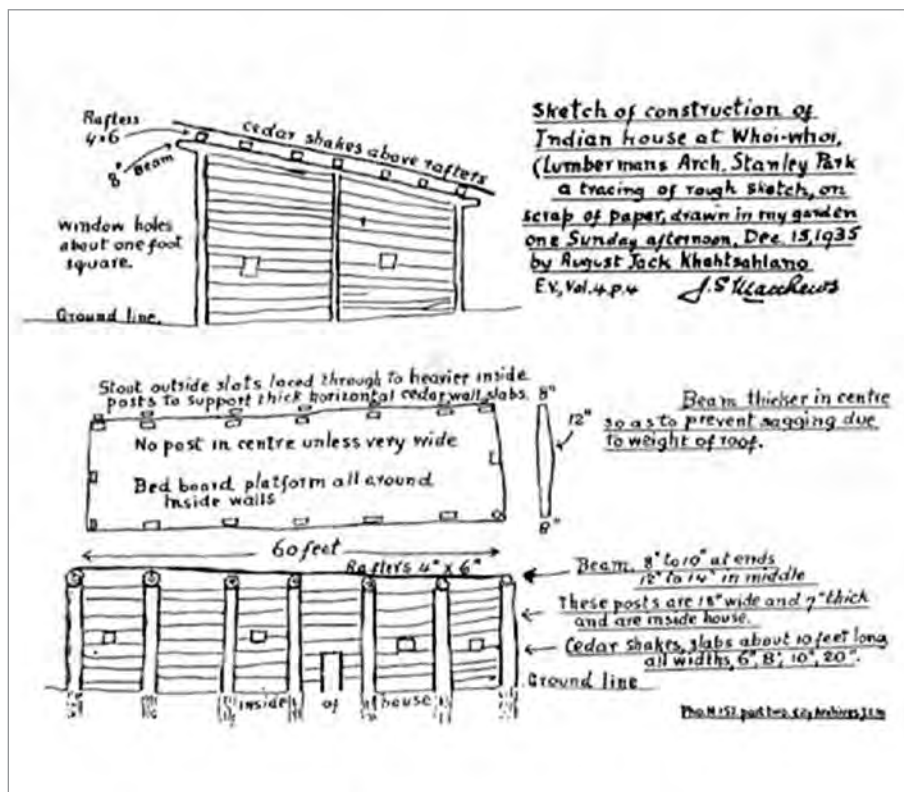


FIG. 1. HOUSE AT WHOI-WHOI. DIAGRAM BY AUGUST JACK KHAHTSAHLANO, SON OF KLHAYTULK, C. 1934. | MATTHEWS, CONVERSATIONS WITH KHAHTSAHLANO 1932-1954, P. 24E.



FIG. 2. TSAWWASSEN FIRST NATION LONGHOUSE. | DANIEL M. MILLETTE.



FIG. 3. WESTBANK FIRST NATION PITHOUSE. | DANIEL M. MILLETTE.



FIG. 4. SLIAMMON FIRST NATION HEALTH CENTRE. | DANIEL M. MILLETTE.



FIG. 5. OSOYOOS FIRST NATION HEALTH AND COMMUNITY CENTRE. | DANIEL M. MILLETTE.

that filled the aboriginal landscape of Western Canada upon European arrival (fig. 1).<sup>4</sup> Second, when the architecture of First Nation communities is studied, the aboriginal context is often completely removed. The complete exclusion of First Nation culture in the work of John Veillette and Gary White as they studied “Indian village” churches in British Columbia is a good example.<sup>5</sup> And within historical narratives, the whole of early aboriginal architecture is generally left out. The thorough and authoritative work of Leslie Maitland, Jacqueline Hucker, and Shannon Ricketts is an example of the lacunae; it begins in the seventeenth century, virtually ignoring anything non-European.<sup>6</sup> Third,

when there are accounts of First Nation architectural designs, they are brief and incomplete. The general (albeit accurate) summary in Harold Kalman’s work,<sup>7</sup> the broad outlines in Keith Thor Carlson’s edited *A Stó:ló-Coast Salish Historical Atlas*,<sup>8</sup> the short mentions of igloos and the Haida plank house in John May’s *Buildings Without Architects*,<sup>9</sup> and the similar notes in Paul Oliver’s *Dwellings – The Vernacular House World Wide*,<sup>10</sup> leave no synthesis on the varied buildings erected by First Nation communities.<sup>11</sup>

Fourth, there is almost no documentation on what could be considered the present-day double-fronted architectural

developments within First Nation communities. On the one hand, due to a re-emergence of cultural practices, a new set of designs that is linked to traditional ways is emerging—longhouses for traditional ceremonies, for example, such as the documented longhouse by the Tsawwassen First Nation<sup>12</sup> (fig. 2), and pithouses for teaching, such as the one being constructed by the Westbank First Nation (fig. 3). On the other hand, there is an emergence of purpose-built architectures linked to immediate needs such as healing centres as the one built by the Sliammon First Nation (fig. 4), and health and community centres such as the example built by the Osoyoos First Nation (fig. 5). And

fifth, there is no systematic documentation of the architecture that is currently being designed to at once showcase First Nation culture, all the while serving other purposes, notably museums or ecological centres; the pavilion installed by the Musqueam community is an example of such a design (fig. 6).

Simply put, and in spite of precedents elsewhere, we have for the most part ignored the complexities and richness of this important architectural ensemble.<sup>13</sup> And while the past few decades have seen some research bounded to theory—post-modern and post-colonial (with very little primary material from which to base the same theories)—relatively unnoticed is the new built landscape.<sup>14</sup> Reflecting the phenomenon, it is no surprise that a survey of the curricula of the architecture schools in Canada shows almost no focus on First Nation architectural design, theory, or history. In short, the historical and present-day design, history, and theory realms have yet to be occupied from the point of view of documentation, critical assessment, and context of First Nation architectures. This article is part of a wider project that aims at filling the research lacunae.<sup>15</sup>

## VERNACULAR ABORIGINAL ARCHITECTURE

Without doubt, the way traditional architecture continues to be perceived is mired in a European history-of-art aesthetic, within what is at times a condescending view of “the object as primitive.” How can one, after all, “fit” into the Western canon a building such as an unused structure at the Kitselas First Nation community (fig. 7)? First Nation architecture has never quite corresponded to the definition of “vernacular” as defined during the early twentieth century. Adolf Loos, one of the key theorists of early modernism, as early as 1910 was looking at the houses

and farmyards of the peasant’s domain as examples of an idyllic vernacular. The highlighting of the vernacular by Loos drew others’ attention, including Frank Lloyd Wright who spoke of “Folk building growing in response to actual needs, fitted into environment by people who knew no better than to fit them with native feeling.”<sup>16</sup> Wright was looking at the basic buildings situated within the countryside and very much set the tone for other early modernists, historians, and theoreticians to follow. From its early beginnings, the Modern Movement adopted a rhetoric that implied that “instinct over intellect” was what directed vernacular building. In fact, First Nation architecture was completely omitted from the modernist architectural discourse—historical, theoretical, or otherwise. The thought that tradition in building crafts had little to do with architect-designed architecture prevailed during much of the last century and, in this way, entire architectural histories, including that of First Nations, have been cast aside as unworthy of serious study. One exception of course is Sybil Moholy-Nagy’s work, which very clearly highlighted that academic or research on “anonymous architecture” was by far inadequate.<sup>17</sup> For her innovative studies, she looked at the *native genius* of builders using design tenets such as climate, site specificity, expression of form and function, and use of materials and technique. However, and while her work contained “culture” as a component of planning and architecture history, Moholy-Nagy did not comprehensively consider culture within her work and, echoing her modernist predecessors, she too for the most part omitted First Nation architecture.<sup>18</sup>

Only very slowly did cultural lives and traditional necessities of non-architect designs begin being appreciated and, eventually, by the 1970s (and still beyond the realm of architectural historians and theorists),

anthropologists and geographers recognized the importance of the built environment within First Nation contexts. Only then did the notion of the “primitive” begin to be replaced with an awareness of diversity in traditional building design by non-architects. The notion of vernacular architecture thus very slowly evolved into one that considered and respected culture and non-architect architecture.<sup>19</sup> It is important to emphasize that much can be learned from past and present environmentally sensitive, mixed-use architecture that derives from tradition and community-driven design.<sup>20</sup>

With the latter in mind, there does persist a vernacular aboriginal architecture in Canada. It is diverse and dynamic. It is comprised of community-specific and purpose-built buildings commissioned by communities. It is one that is *conceived with traditional elements in mind; insists on community involvement within the design process, regardless of who holds the design pen (architect or non-architect); involves community members within its construction; considers program combinations that extend beyond conventional praxis; contains a high element of community pride; and incorporates within its design a host of environmental considerations.* Together, this architecture reveals culturally sensitive responses to specific challenges that result in what can only be called unique cultural spaces. The architecture represents a convergence of ideas and traditions that is at once traditional, contemporary, and distinct. Most of this vernacular is located within First Nation communities, although there are a number of examples that are part of the broader landscape. Situated, within urban areas or reserve peripheries, examples such as the First Nations House of Learning at the University of British Columbia in Vancouver and the Native Child and Family Well Being Centre in



FIG. 6. MUSQUEAM FIRST NATION – MULTIPURPOSE BUILDING. | DANIEL M. MILLETTE.



FIG. 7. KITSSELAS FIRST NATION – MULTIPURPOSE BUILDING. | DANIEL M. MILLETTE.

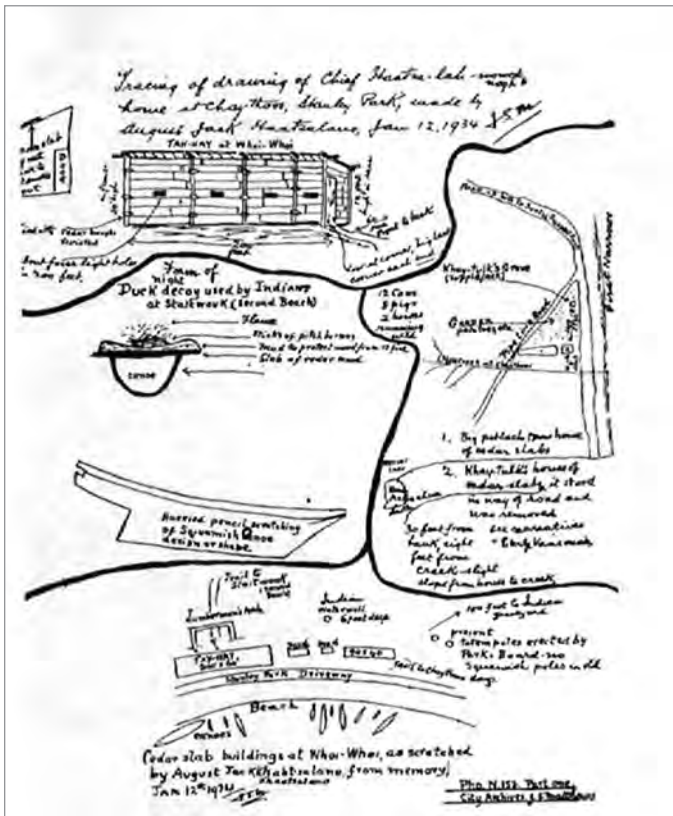


FIG. 9. LONGHOUSE SKETCH. DIAGRAM BY AUGUST JACK KHAHTSAHLANO, SON OF KLHAYTULK, C. 1934. | MATTHEWS, CONVERSATIONS WITH KHAHTSAHLANO 1932-1954, P. 24D.



FIG. 8. HOUSE AT NOOTKA (JOHN WEBBER, 1778). | MATTHEWS, CONVERSATIONS WITH KHAHTSAHLANO 1932-1954, PLATE 40D.

downtown Toronto are part of the set of facilities that serve the growing urban First Nation communities.<sup>21</sup> The present-day First Nation architectural vernacular therefore complements past architectures that persist within the archeo-historical realm (archaeological, historical, and archival), deriving out of traditional and current needs, designed by architects as

well as non-architects, and is built within and without First Nation communities.<sup>22</sup>

### DOCUMENTING THE FIRST NATION ARCHITECTURAL LANDSCAPE

The architectural landscape of Canada's First Nations cannot be grouped within

clear fields. The traditions, temporal overlaps, ground realities, styles, purposes, and materials seem so completely blended that any attempt at categorization is challenging and perhaps even counterproductive. We can, however, broadly suggest general research fields. These include what could be called a "contact" field, comprised of architecture pre-dating

European contact as well as the early colonial period; a “traditional practice” field, overlapping the past colonial era and extending to the present-day, specifically designed to accommodate spaces of cultural interaction and traditional practice; a “purpose-built” field, consisting of present-day architecture that is designed with specific program in mind; and a “cultural showcase” field, made up of architecture that, while satisfying specific practical uses, aims to highlight culture. With the possible exception of the first, the fields are not temporally concurrent and there is overlap among them. Together, they serve as a loose framework within which we can begin to present the ensemble. We describe below the fields and offer some examples from one geographical area, British Columbia, focusing on the later two most recently appearing fields.

### **The Contact Field**

This first research field is temporally defined. In a sense, it is the richest field to be mined because of the tremendous archival, ethnographic, archaeological, and historical material that has been collected for at least two centuries. It comprises the architecture that dotted the northern part of North America prior to the arrival of the first Europeans and during the early colonial era. One of the only published chronicles of early traditional North American aboriginal architecture is that by Peter Nabokov and Robert Easton.<sup>23</sup> Their descriptive accounts of the structures erected by First Nations are brought together in their book on Native American architecture as they link bands, tribes, and clans to geography, building materials, and regional influences. Their work excludes many First Nations but it is very useful in that it describes a variety of cultural aspects to place-making, notably the technical differences and the building traditions of different First Nations.

A similar analysis, perhaps more comprehensive, would form part of the content for this “contact field.”<sup>24</sup>

For Canada, a closer look at the archival material might render a clearer picture. When in 1792, for example, Captain George Vancouver carried out his explorations along the coast of what is now Washington State and British Columbia, he noted a structure that housed some six hundred Dwanish people. He described the three-hundred-and-sixty-five-metre-long, sloping-roofed building. Along the more prominent elevation, which made up the main facade of the building, there were large columns, some six metres high and eight metres apart. And nineteen-metre-long beams extended from these to lower posts at the rear.<sup>25</sup> This is a very clear example of what can be gleaned from the archives. Along the Fraser River, the longhouses of the various tribes had quite staggering dimensions and features: shed-roofed and pitched-roofed longhouses were built as post-and-beam assemblies, with smaller lateral spandrels between the beams for roofing and between the posts for partitioning. Very wide planks of cedar were used as sheathing, overlapping horizontally. Inside, we know from the paintings of artists like John Webber<sup>26</sup> and Paul Kane<sup>27</sup> that there were partitions delimitating family or clan spaces, as well as fire pits, placed at specific locations. Both of these artists provide remarkable detail.

The observations of Captain Vancouver and other explorers and artists are not atypical. Many explorers and eventually missionaries, colonial administrators, traders, and “Indian agents” recorded their architectural observations in their diaries and journals. The archives, art works, and official documents remain to be unpacked. Artist-explorers such as William Armstrong<sup>28</sup> and Frederick

Arthur Verner<sup>29</sup> travelled solo, looking at settlements as they painted day-to-day scenes in aboriginal Canada. The painting depicted in the aforementioned painting by Webber delivers a precise snapshot of the interior of well-appointed dwelling in the later eighteenth century (fig. 8).<sup>30</sup> In the picture, we can see a post-and-beam building interior, complete with racks for fish drying, stepped benches, decorated posts, and partitions. This is significant and remains to be adequately documented.

Further, if the past few decades have revealed anything in terms of Canada’s aboriginal traditional knowledge, it is that aboriginal collective memory is passed down to a great extent through the oral tradition and that conceptions of “history” are not the same for Europeans and aboriginal peoples.<sup>31</sup> One of the well documented examples of architectural memory includes excerpts from the aforementioned interviews by Major John Matthews of August Jack Khahtsahlano during the 1932 to 1954 period, within which several architectural descriptions outline buildings. When Khahtsahlano speaks of, and draws, the post-and-beam, shed-roofed structure at Whoi-Whoi,<sup>32</sup> the village house of E-yal-mu at Jericho,<sup>33</sup> the potlatch house at the False Creek,<sup>34</sup> or the “Big Indian potlatch house” at Kitsilano,<sup>35</sup> we get a very clear picture of architectural design during the early colonial era; the detail is technical and authoritative (fig. 9).<sup>36</sup> Oral histories, documented or persisting within the aboriginal collective memory, remain untapped for their architectural content.

### **The Traditional Practice Field**

The “traditional practice” field overlaps with the “contact field” in the sense that the former derives from the same collective memory as that of the latter, all the



FIG. 10. MUSQUEAM FIRST NATION – LONGHOUSE. | DANIEL M. MILLETTE.



FIG. 11. SEABIRD ISLAND FIRST NATION – SCHOOL. | DANIEL M. MILLETTE.

while extending into the present day. The earlier mentioned book by Nabokov and Easton excludes many present-day buildings focusing on traditional practice. The discussion of the west coast, or north-west coast to use their terminology, for example, is not completely representative of site realities, particularly as related to the Coast Salish of today.<sup>37</sup> One example for our purpose is the “new” longhouse architecture of the Coast Salish, which is at once traditional, using long-established design tenets and construction techniques, and contemporary elements, taking into account the needs of what could be called a modern-traditional society and an accompanying set of present-day construction constraints. Traditional building types assumed to have fallen into disuse are reappearing, albeit altered with contemporary needs in mind; designs such as the longhouse built by the Musqueam First Nation community are in fact combined with present-day materials and techniques to form an example of what has been outlined as a new “type” (fig. 10).<sup>38</sup> Here, for instance, the building exterior echoes the two large fire pits located toward the centre of the inner traditional space. The structure is cedar clad and roofed, maintaining traditional material use. At Coqualeetza and dozens

of other communities, similar structures have been built during the past few decades, with profiles reflecting inner traditional uses. The “traditional practice” field has a rich oral history component attached to it, in terms of architectural design. For the longhouse and pithouse types, for instance, there are elders and other knowledgeable community members who possess important design knowledge and draw upon traditions, experiences, and memories to “design” buildings or specific building areas and details. Site orientation, materials, spatial disposition, and structural strategies are all guided by living architectural memorial praxis. The documenting, synthesis, and analysis of this architecture await.

### The Purpose-built Field

This field is defined as present-day architectural design with a specific purpose in mind, including mixed-use programming that generally, although not always, goes beyond conventional praxis in terms of program combinations. Several significant examples of the “purpose-built” field highlight a clear trend. The commissions all share the First Nation vernacular tenets outlined above. They are driven by community input and borne of traditional

and environmental considerations. The Seabird Island First Nation School, for example, was designed with a complex, mixed-use program requirement, all the while with consideration for culture and tradition at the forefront of the design process (fig. 11).<sup>39</sup> It is located along the northern periphery of the community’s designated green space, in close proximity to other community amenities. The forested mountains surrounding the site are reflected in the building’s forms, with walls and roofs almost entirely clad in cedar shingles. Much of the building’s construction was undertaken by community members. The result is a multi-use facility that combines the cultural and environmental aspects of traditional education.

A further example of a purpose-built building is the Squamish Nation’s Totem Hall, located in Squamish and set at the foot of the Stawamus Chief, a granite dome rising over seven hundred metres above the waters of Howe Sound (fig. 12).<sup>40</sup> The mound is of significant spiritual significance to the area’s First Nations peoples. The community elders and other community members had full and continuous input over the design process, resulting in a mixed-use centre



FIG. 12. SQUAMISH NATION – TOTEM HALL. | DANIEL M. MILLETTE.



FIG. 13. OSOYOOS FIRST NATION – NK'MIP DESERT CULTURAL CENTRE. | DANIEL M. MILLETTE.



FIG. 14. SQUAMISH – LIL'WAT CULTURAL CENTRE. | DANIEL M. MILLETTE.



FIG. 15. FIRST NATION HOUSE OF LEARNING, UNIVERSITY OF BRITISH COLUMBIA. | DANIEL M. MILLETTE.

that takes into account the community's needs, including community hall, daycare facility, pre-school, community administration offices, and an elder centre. A community garden forms part of the overall site plan. The building was also designed to serve as an emergency shelter, with emergency power and significant earthquake-resistant features. Seventy-five-foot glue-laminated beams extend the full length of the building, supported by cedar posts, assembled within a traditional post-and-beam Coast Salish architectural arrangement.

### The Cultural Showcase Field

This field is defined by architecture that, while satisfying specific practical uses, aims to highlight culture.<sup>41</sup> In many cases, and more recently, First Nations have chosen to showcase their traditions and culture within prominent and cutting-edge designs. Some examples are sited directly within First Nation communities, while others are located within non-aboriginal areas. In both cases, however, there is considerable First Nation involvement in the design process. And while

the primary intent may be to showcase culture, this does not exclude other purposes. The Nk'Mip Desert Cultural Centre, sited within the Osoyoos First Nation community, is a purpose-built building that aims at showcasing the Osoyoos First Nation's culture. It is designed with community involvement in very specific needs to be addressed (fig. 13). The site is located next to one thousand six hundred acres of desert conservation area land which is central to the community's history, culture, and way of life.<sup>42</sup> Cultural presentation, ecological conservation,



FIG. 16. FIRST NATION HOUSE OF LEARNING, UNIVERSITY OF BRITISH COLUMBIA. | DANIEL M. MILLETTE.

and environmental sensitivity are therefore key tenets to the project. When the architects were hired by the First Nation community, they were first instructed to design a centre that reflects the identity of the First Nation.<sup>43</sup> Governing the design of the building was the community's wish to represent itself within a building that reflects a persisting, growing, and dynamic culture. The design defies what might be considered as a typical museum-like presentation where aboriginal culture can be shown as observed from the outside. This is therefore not a museum; it is a centre that showcases culture, nature, and the symbiotic relationships that exist between the two.

The building embodies the Osoyoos First Nation's values of sustainability, diversity, and longevity. This includes what could be considered as present-day sustainability tenets, but also the aforementioned vernacular design tenets: reflecting the First Nation's will to maintain the integrity

of the environment, the partially buried structure mitigates the extreme desert temperatures; the building's site orientation makes best use of the sun's effects; radiant heating and cooling in the floors and ceilings is based on traditional ways, and glazing is treated specifically and differently on each façade, optimizing orientation benefits. Further, a green roof allows for a substantial replanting of portions of the desert landscape. This example of purpose-built architecture by a First Nation highlights the coexistence of traditional and present-day uses.

Another example within the "cultural showcase" field is the Squamish Lil'wat Cultural Centre, located in Whistler. It is at once a museum, cultural centre, and interpretive centre, complete with gallery spaces and workshops (fig. 14).<sup>44</sup> In some ways, the building is experimental as it brings together the cultures of the Squamish people and the Lil'wat people, peaceful neighbours since time

immemorial. The building was designed within a collaborative process between the two First Nations. Its primary aim is to showcase notions of balance, harmony in tradition, and spirituality. What makes the project such a great example of current developments in First Nation architecture is that it is designed with two traditional typologies in mind: the Istken building, or traditional pithouse of the Lil'wat First Nation, and the longhouse building of the Coast Salish First Nations of the area, both aiming at highlighting specific traditional architectures. The appearance of traditional architecture persists: the use of wood and, in this particular case, cedar provides direct linkages between the distant past and the present. This building is another clear example of the current trend of First Nation-led architectural design focused on traditional uses, environmentally sensitive design, and cutting-edge technology.<sup>45</sup>

The House of Learning at the University of British Columbia in Vancouver is yet a further example of "cultural showcase" architecture, located outside of First Nation reserve lands, yet well within the traditional territory of the Musqueam First Nation (fig. 15).<sup>46</sup> The building provides a place that reflects tradition and culture—a place where First Nation students can study, learn, and participate in special events. The project was conceived through a completely collaborative process, with First Nation input throughout, and is thus an example of cooperation between First Nations, planners, designers, and the building's eventual users. The building includes a complex program, with a resource library, a computer lab, spaces for students, counselling, a ceremonial hall, and a daycare centre. It houses administrative offices, seminar rooms, cultural workshops, elders lounge, as well as student lounges. In architectural terms, the House of Learning combines the



traditional design and construction elements in a contemporary set of forms. The structure is a contemporary interpretation of the Coast Salish longhouse, recalling houses where learning traditional practices was central. However, the contemporary form breaks from the traditional form. The varying pitch of the roof rafters gives the building a dynamic feel, in keeping with a modern set of past traditions (fig. 16). A further architectural element is the use of cedar; its aroma is striking as one enters into the ceremonial hall. Cedar columns, post-and-beam assemblies, and cedar shingles provide a direct link to Coast Salish architecture. Some of the posts are carved by First Nations artists. Through traditional construction techniques, materials, and landscaping juxtaposed with a contemporary form, the House of Learning strategically and effectively balances traditional ways with the contemporary building.

## CONCLUSION

The First Nation architectural landscape of Canada persists through several fields: whether the “contact” field, the “traditional practice” field, the “purpose-built” field, or the “cultural showcase” field, they all include the elements of what could be called “First Nation Vernacular”: they are designed with traditional elements in mind, involve considerable community input within the design (and often the building process), contain a high element of community pride, and incorporate environmental sensitivity throughout the design process. To a large extent, all of the fields reflect what is today considered “new” thinking in green architectural design and regenerative theory.

For researchers, the fields represent tremendous opportunities: a historical focus that is buried in archival and archaeological detritus; a re-emerging architecture

that captures elements of long-held traditions and joins them to contemporary design that is at once evocative and true to traditional pasts; a current set of designs that is purpose-built and adaptive, and a culturally complex field that showcases community pride and cultures whose traditions have long been underappreciated and overlooked. And while the examples in this article have been from British Columbia, the researcher might choose other regions, traditional territories, or provinces; examples might include spaces for traditional practice and community gathering such as the rudimentary shelter built by the Whitefish Lake First Nation community in Northern Ontario. The shelter is open on its sides, covered in cedar boughs, and evokes environmental immediacy. Similarly, for an example within the “purpose-built” field, one might look at the Centre for Native Child and Family Well Being in Toronto, built away from First Nation reserve lands and relatively hidden from the passerby.<sup>47</sup> The complex adaptively reuses an existing four-storey office building in the city centre. In this case, the community and the architects conceived a longhouse that would comprise a multipurpose room for the centre, offering culturally relevant services and amenities to the urban First Nation population, accommodating counselling spaces, play areas, meeting rooms, circle sessions, and ceremonial activities. The building amalgamates an addiction and mental health care clinic, a daycare and child drop-in centre, administrative offices, and spaces of traditional practice. A sweat lodge form is also part of the design.

Whether from the archival or archaeological realms, or from the present-day panoply of built architecture, examples such as pithouses, community centres, learning spaces, elder centres, health facilities, and traditional spaces, require documenting and critical assessment

to understand culture and to perhaps gain some insight into building within environmental sensitivity, cultural inclusion, and innovative program tenets. In this essay, we have presented examples of well executed projects, past and present, each with its unique set of characteristics related to cultures whose needs have not often been met by contemporary architecture. It should be of no surprise that they include mixed-use elements, as well as traditionally and environmentally sensitive approaches; elements that are thought to be “contemporary,” yet are timeless in First Nation culture. Together, this vernacular architecture ensemble reveals culturally- and environmentally-sensitive responses to specific design, site, and program challenges, resulting in what can only be called a body of unique cultural spaces waiting to be documented and celebrated.

## NOTES

1. May, John, 2010, *Building Without Architects – A Global Guide to Everyday Architecture*, New York, Rizzoli, p. 43.
2. Millette, Daniel M., 2011, “Memory, the Architecture of First Nations, and the Problem with History,” In Rhodri Windsor Liscombe (ed.), *Architecture and the Canadian Fabric*, Vancouver, University of British Columbia Press, p. 367-379. The devastating effects of the conjoined processes of colonizing and missionizing, and the repercussions and distressing outcomes upon First Nation cultures, communities, and social mores are acknowledged although not discussed in this article.
3. One possible exception is the brilliant photography work of Edward S. Curtis, undertaken during the very early twentieth century. See Solomon, Dan and Mary Solomon (eds.), 2000, *Sites and Structures – The Architectural Photographs of Edward S. Curtis*, San Francisco, Chronicle Books.
4. Matthews, John Skitt, 1955, *Conversations with Khahtsahlano 1932-1954*, Vancouver, City Archives.
5. Veillette, John and Gary White, 1977, *Early Indian Village Churches – Wooden Frontier*

- Architecture in British Columbia*, Vancouver, University of British Columbia Press.
6. Maitland, Leslie, Jacqueline Hucker, and Shannon Ricketts, 1992, *A Guide to Canadian Architectural Styles*, Peterborough, Broadview Press.
  7. Kalman, Harold, 2000, *A History of Canadian Architecture*, Don Mills and London, Oxford University Press, p. 1-23.
  8. Carlson, Keith Thor (ed.), 2002, *A Stó:lō Coast Salish Historical Atlas*, Toronto and Seattle, Douglas and McIntyre and University of Washington Press, p. 40-47.
  9. May : 122-125.
  10. Oliver, Paul, 2003, *Dwellings – The Vernacular House World Wide*, London, Phaidon, p. 23-26.
  11. The Hudson's Bay Archives contain several thousand examples of the diaries, reports, maps, and drawings that make for an ideal source of primary research material for pre-contact and historical architecture.
  12. Millette, Daniel, M., 2002, "Re-Building Memories: On the Reconstruction of a 'Traditional' Longhouse," *Architecture Canada*, Journal of the Society for the Study of Architecture in Canada, vol. 27, no. 4, p. 47-50.
  13. See for instance Krinsky, Carol Herselle, 1996, *Contemporary Native American Architecture – Cultural Regeneration and Creativity*, New York and Oxford, Oxford University Press; and Brown, Deidre, 2009, *Māori Architecture – From Fale to Whareniui and Beyond*, London, Penguin.
  14. There are some exceptions focusing on architectural design. See for example a set of articles in *Canadian Architect*, 2007, vol. 52, no. 3.
  15. Support for portions of the present work and research for the wider project was enabled by a grant from the Canada Council for the Arts.
  16. Quoted in Oliver : 9.
  17. Moholy-Nagy, Sybil, 1957, *Native Genius in Anonymous Architecture*, New York, Horizon Press.
  18. Moholy-Nagy, Sybil, 1968, *Matrix of Man. An Illustrated History of Urban Environment*, New York, Frederick A. Praeger.
  19. One important example is Lafon, Martine and Caroline Lafon, 2004, *A Home in the World: Houses and Cultures*, New York, Harry N. Abrams.
  20. Current theory advocating regenerative frameworks and methodologies includes many design tenets that have their origins in aboriginal thought. See Mang, Pamela and Bill Rees, 2012, "Designing from Place: A Regenerative Framework and Methodology," *Building Research and Information*, vol. 40, no. 1, p. 23-39.
  21. These two examples will be discussed below.
  22. We recognize that First Nation reserve housing and church architecture does not fit into our definition of vernacular aboriginal architecture; our definition speaks for itself. For an example of a thorough case study of housing—and its cultural significance within a specific First Nation community, see Cassault, André, 2003, "House Hunting or I've Never 'Lived' in My House," *Architecture Canada*, Journal of the Society for the Study of Architecture in Canada, vol. 28, nos. 1-2, p. 31-42.
  23. Nabokov, Peter and Robert Easton, 1989, *Native American Architecture*, Oxford, Oxford University Press.
  24. Similarly, there are deliberate archival sources, for example the dispatches sent to Europe by the missionary priests, such as the reports by one Oblate, Father Léon Fouquet. See Fouquet, Léon, 1874, *Missions de la Congrégation des missionnaires oblats de Marie Immaculée*, vol. 12, Paris, Typographie A. Hennuyer. Further, the outstanding work of museums and the archaeological survey of Canada archaeologists (some published and some unpublished) remain to be perused and contextualized within an architectural research framework.
  25. For a discussion of related historical records, see Millette, Daniel M., 1998, *Traditional Use Study – the Tsawwassen First Nation*, Victoria, Tsawwassen First Nation and British Columbia Ministry of Forests.
  26. John Webber (1751-1793) travelled with Captain James Cook in the 1770s.
  27. Paul Kane (1810-1871) travelled throughout Canada during the 1840s and beyond.
  28. William Armstrong (1822-1914) travelled throughout the Plains during the later part of the nineteenth century.
  29. Frederick Arthur Verner (1836-1928) painted Sioux settlements during the later nineteenth and early twentieth centuries.
  30. Matthews : plate 40D.
  31. Royal Commission on Aboriginal Peoples, 1996, *Report of the Royal Commission on Aboriginal Peoples. Volume 1 – Looking Forward, Looking Back. Part One: The Relationship in Historical Perspective*, Ottawa, Royal Commission on Aboriginal Peoples.
  32. Matthews : 24.
  33. *Id.* : 53.
  34. *Id.* : 56.
  35. *Id.* : 54.
  36. Similarly, ethnographic interviews with Tsawwassen Chief Harry Joe by Homer Barnett in the 1930s outline the Tsawwassen longhouse as one split into two living spaces and measuring some 55 and 95 metres in width each. See Barnett, Homer, 1935, *Tsawwassen Field Notes*, University of British Columbia, Special Collections, University of British Columbia Main Library, Folder #1, Box #1, Book #8. 1935-1936.
  37. This is not to say that the work of Peter Nabokov and Robert Easton is not of immense value; in addition to past uses, they offer significant insight into today's typologies (*op. cit.* : 87-91).
  38. Millette, 2002 : 47-50.
  39. Patkau Architects were engaged for the Seabird Island First Nation School.
  40. The architect hired for the Squamish Nation Totem Hall was B. Gordon Hlynsky.
  41. Examples from the cultural showcase field are often highlighted within the architectural literature. See, for instance, Taggart, Jim, 2011, "Aboriginal Affirmations," In *Toward a Culture of Wood Architecture*, Vancouver, Abacus Editions.
  42. For a technical presentation of the Nk'Mip Desert Cultural Centre, see Thakre, Peeroj, 2007, "Earth and Sky," *Canadian Architect*, vol. 52, no. 3, p. 26-30.
  43. The architectural firm employed by the Osoyoos First Nation was Hotson, Bakker, Boniface, Hadden Architects.
  44. The design for the Squamish Lil'wat Cultural Centre was by Alfred Waugh Architect.
  45. Incidentally, the design fits well within the Leadership in Energy and Environmental Design Program, complete with a green roof covered in native species.
  46. The design for the House of Learning was by McFarland Marceau Architects.
  47. For a technical assessment of the Centre for Native Child and Family Well Being, see Grdadolnik, Helena, 2010, "Natural Strength," *Azure: Design Architecture and Art*, vol. 26, no. 203, p. 66-71.