



TITLE

***The Light Keeper, Ceiling Installation
(Paper and Poster)***

Topic: Architecture and Generative Process

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Abstract

The *Light Keeper* is a permanent ceiling installation for the Centre for Indigenous Initiatives (formerly Centre for Aboriginal Culture and Education) at Carleton University. The Centre aims to increase the recruitment and retention of Indigenous students, faculty and staff by ensuring Indigenous cultures, traditions and worldviews are sensitively represented at the University. The installation is located on campus in the Indigenous Centre, named Ojigkwanong, meaning “morning star” in Algonquin, as a tribute to the renowned Anishinaabe Elder Grandfather William Commanda. The installation was designed and built by the author along with architecture students and in consultation with the centre’s architect Douglas Cardinal. The design is based on the theme of *light* as symbolic of knowledge and on the fact that the Carleton campus is on traditional, unceded territories of the Algonquin nation.

The ceiling installation is envisioned as an interconnected, woven assembly and support structure made of bands of birch plywood with coloured wire-mesh highlights at key locations. The design was generated from the inherent properties of the materials with no pre-conceived designs other than what emerged out of the haptic exploratory process. The dimensions and configurations extracted from this generative process led the design possibilities and were modified accordingly as the project evolved and in response to the specifics of the interior site. The design originates from one singular band of thin birch plywood with its ends overlapped together to create a circular frame that recalls the basic frame of the traditional native drum. The diameter of this circular frame is the minimum allowed by the pliability of the birch plywood. Accordingly, the basic design elements are the circle, the circular drum frame, and the interwoven “sounds” that would emanate from this source.

Overall, the ceiling is composed of modulating patterns within the overall collaborative weave, with the configurations and their inter-connected parts envisioned as symbolic metaphors for the Centre’s mission/vision and the worldview of Indigenous Peoples.

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Key words: Generative process, modularity, Emergence, Indigenous culture

Main References:

[1] Reid, Bill and Bringhurst, Robert, “*The Raven Steals the Light*”, University of Washington Press, 1996

Ojigkwanong: The Light Keeper
Ceiling Installation, Centre for Indigenous Initiatives, Carleton University

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Abstract

The *Light Keeper* is a permanent ceiling installation for the Centre for Indigenous Initiatives (formerly Centre for Aboriginal Culture and Education) at Carleton University. The Centre aims to increase the recruitment and retention of Indigenous students, faculty and staff by ensuring Indigenous cultures, traditions and worldviews are sensitively represented at the University. The installation is located on campus in the Indigenous Centre, named Ojigkwanong, meaning ‘*morning star*’ in Algonquin, as a tribute to the renowned Anishinaabe Elder Grandfather William Commanda. The installation was designed and built by the author along with architecture students and in consultation with the Centre’s architect Douglas Cardinal. The design is based on the theme of *light* as symbolic of knowledge and on the fact that the Carleton campus is on traditional, unceded territories of the Algonquin nation.

Overall, the ceiling is composed of modulating patterns within the overall collaborative weave, with the configurations and their inter-connected parts envisioned as symbolic metaphors for the Centre’s mission/vision and the worldview of Indigenous Peoples.

The Raven, Light and Knowledge

As a symbol of a wise, courageous, cunning and paradoxical trickster, the raven permeates the stories of many diverse cultures. For example, as told by the acclaimed artist Bill Reid and the poet, cultural historian and scholar Robert Bringhurst in their book *The Raven Steals the Light*, for the Aboriginal peoples of the Northwest Coast the story of the raven recounts how a greedy and selfish elderly chief kept *light*, symbolising knowledge and wisdom, in his house locked in a bentwood box. The cunning raven tricked and distracted the elder, allowing him to steal the *light* and bring it to the earth and humanity in the form of the sun, moon and stars.

Of equal importance to the installation design is the naming of the Aboriginal centre as *Ojigkwanong*, meaning ‘*morning star*’ in Algonquin. The light emitting from ‘*morning star*’ is symbolic of Elder William Commanda’s worldview and mission. Thus, the symbolism of the raven and of *Light* as wisdom and knowledge to both Indigenous peoples and Carleton University, offer the conceptual vision and catalysts for the project. The raven as a significant inhabitant of the land and the land’s history, is much in line with the centre’s initial design visioning sessions facilitated by Douglas Cardinal that called for a response to the land on which *Ojigkwanong* is located.

The Light Keeper

The ceiling installation is envisioned as an interconnected, woven assembly and support structure made of bands of birch plywood with coloured wire-mesh highlights at key locations. The design was generated from the inherent properties of the materials with no pre-conceived designs other than what emerged out of the haptic exploratory process. The dimensions and configurations extracted from this generative process led the design possibilities and were modified accordingly as the project evolved and in response to the specifics of the interior site.

The birch bands were joined together with stainless steel fittings that serve as “beaded” connections. Overall, the ceiling is composed as modulating patterns within the overall collaborative weave, with their configurations and inter-connected parts envisioned as metaphors for the Aboriginal Centre’s vision and focus. The design originates from one singular band of birch plywood with its ends overlapped together to create a circular frame similar to the basic frame of a traditional native drum. Thus, the basic generative design elements are the circle, the drum, the braided and/or woven ‘sounds’ emanating from this source, and the birchtree.

The Birch Tree

Found throughout almost all of Canada (referred to as the *Land of the silver birch* in a popular traditional folksong), birch trees provided numerous materials for survival. Birch wood and birchbark, being inherently resistant to decay, was used to make many practical things, such the iconic canoe, storage containers, snowshoes, bowls, wigwams, including beer/wine and syrup. Lightweight and highly maneuverable, the birchbark canoe was initially the main means of water transportation for Indigenous peoples and the *voyageurs* that used it later in the Canadian fur trade. Eventually it became primarily a very popular recreational vehicle, acquiring the status of a Canadian cultural icon. These cultural, practical and structural characteristics of birch are important underlying conceptual currents of the design in addition to their related resonances with the broader ethnic and multicultural diversity within Canada.

The Generative Circle and Drum

The design originates from the circular frame created when the ends of a singular band of birch plywood are overlapped together, recalling the basic frame of a traditional native drum. Where the band-ends overlap, a central pivot point allows the ends to rotate, de-forming the frame and re-aligning the end corners. This allows for additional extension bands to be added at both ends and they in-turn are braided together as allowed by their inherent de-formability. The initial circular frame, pivot point and braiding or weaving sequence generated the subsequent basic design configurations that emerged and were woven together throughout the installation. Thus, circularity is inherently embodied throughout the design reflecting the importance of the circle and circularity to Indigenous peoples. Overall, the design consists of turbulent woven patterns of birch bands that are highly ordered when surrounding the circular light fixtures throughout the Ojigkwanong ceiling and within its circular Ceremonial Space.

The Ceremonial Space

The Ceremonial Space ceiling design is based on the four cardinal directions (North, South, East and West) of the Sacred Circle and Medicine Wheel, their corresponding elements (earth, fire, water and air), and their associated colours (red, white, black/dark-blue, and yellow). The very center of this assembly is inhabited by *light* as a glowing Sun or ‘*morning star*.’ Appropriately coloured wire-mesh fabric that has been folded into a fluidly flexible origami pattern is sculpted into forms that recall attributes associated with the dynamic Sun and corresponding element of each of the four cardinal directions. The element of earth was envisioned as a combination of the forms of the other three elements of air, water and fire.

The *Light Keeper* ceiling installation in *Ojigkwanong* contributes towards Carleton University’s goals and commitment towards leadership in Indigenous affairs through cultural research, visibility, education and knowledge.

Project Images:



Figure 1: © M. Báez, *Light Keeper*, Circular Ceremonial Space



Figure 2: © M. Báez, *Light Keeper*, Central Sun detail



Figure 3: © M. Báez, *Light Keeper*, Generative process: Initial circular frame made from one birch-plywood band with the ends overlapped together with a central pivot. Additional bands are added and woven into the generative cellular unit. 5 of these units are shown in combination on the right.



Figure 4: © M. Báez, *Light Keeper*, Perimeter area detail



Figure 5: © M. Báez, *Light Keeper*, partial view, Ceremonial Space and perimeter area.



Figure 6: © M. Báez, *Light Keeper*, Circular Ceremonial Space detail.

Ojigkwanong *Light Keeper* installation student team:

David Anderson, Etai Atias, Jesse Bird, Aniq Chaudry, Zabdi Falcon, Sara Farockhi Boroujeni, Diego Juarez Gallo, Jon Miura, Jason Surkan and Antoinette Tang.

Additional installation student assistants:

Nahid Ahmadi, Mohammed Ali Navid-Bakhsh, Audrey Caron, Fiona Estwick, Alexandra Ianoul, Honey Kim, Dylan Morris, Heeva Salemi, Bernice Shum, Barbara van Waarden, Charlie van Waarden, and Nourhan Zaky.

Special thanks to:

Mark MacGuigan and Robert Wood from the Azrieli School of Architecture and Urbanism Woodshop for their assistance.

The Centre for Indigenous Initiatives

Main References:

Reid, Bill and Bringhurst, Robert, “*The Raven Steals the Light*”, University of Washington Press, 1996