

Towards a New Tribal Architecture: Designing the Little Big Horn College Campus Plan

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INTRODUCTION

The design of the Little Big Horn College is an extraordinary opportunity to explore the formation of a “new tribal architecture”, specifically because the primary focus of the College is the preservation and continuation of Crow Tribal culture. The President of the College, Dr. Janine Pease Pretty On Top, states that “the Crow Indian community has taken up the challenge to envision and dream of a learning community in a respectfully designed and uniquely Crow campus plan.” In the collaborative design process for the Little Big Horn College entitled, Community Envisioning Process for the New Campus, the intent was to facilitate direct involvement of tribal members in the creation of the design. The ongoing process - led by an architect of Crow Tribal heritage - has included research of Crow culture and design, consultations with tribal elders, participatory workshops with Little Big Horn College staff, faculty and students, design charrettes and in-studio design explorations.

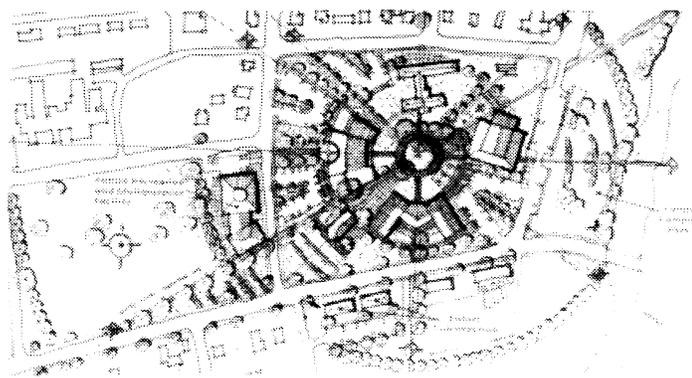


Fig. 1. Conceptual Master Plan for the Little Big Horn College Campus in Crow Agency, Montana. (Drawing by Daniel Glenn.)

This process has led to a completed master plan for the new college and is aiding in the effort to secure six million dollars to build the

first phase of the plan. The next step is the development of the architecture itself. The specific nature of the architecture is yet to be determined and the approach to that determination is the subject of this paper. The process thus far has led to several conclusions: First, a participatory process directly involving tribal members is vital in determining the nature of a culturally specific design. Second, critical determinants of form can be drawn from traditional tribal architecture and artifacts without necessarily being derivative of the form of those artifacts. Because the essence of meaning in Plains Indian architecture is highly abstract and understood principally through oral tradition, any attempt to successfully develop new forms outside of that oral tradition is very difficult if not impossible. The structures embody meaning yet can only be “read” through interpretation, traditionally by elders of the tribe. And finally, while “form follows function” is a modernist tenet, it is also descriptive of nearly all traditional Native American structures, but only if the term “function” is understood in all its complexity.

CONTEMPORARY NATIVE AMERICAN ARCHITECTURE

The traditional culture of many Native American tribes is still very much alive and vibrant and yet the built environment of the reservations, with a few notable exceptions, does not reflect the tribal culture. In her book, *Contemporary Native American Architecture*, Carol Herselle Krinsky documents projects in Native American communities all over the United States which have been designed with the intention of being culturally responsive. The projects are often excellent examples of the potential of the development of a culturally responsive architecture, but they represent only a handful of exceptions to the majority of built structures in reservation communities. Reservations in the United States are dominated by Bureau of Indian Affairs standardized housing, which are typically stripped down versions of the American ideal suburban bungalow: a rectangular box on a concrete slab with a minimally-pitched gable roof. House plans, originally designed as World War II veteran’s housing, originate in Washington, D.C.. These homes are repli-

cated by the tens of thousands on reservations across the country, without regard to climate or other regional considerations, much less tribal culture. Institutional and commercial structures are typically equally removed from the culture. This is in marked contrast to the built structures of tribes historically—amply documented in Nabokov and Easton's text *Native American Architecture*—in which each tribe had distinctive dwellings particular in every detail to the tribe's culture, regional climate and local resources.



Fig. 2. View of HUD homes in Crow Agency, Mt. (photo by D. Glenn)

Instead of being expressed in the built environment, the tribes' cultures today are expressed through language, story telling, ceremonies, pow wow gatherings, dress (both ceremonial and modified daily wear), drumming, singing, food, family structure, community structure, decoration and art work. Cultures are expressed wherever the people have control over the medium of expression. The built environment is typically controlled by outside entities, such as the Bureau of Indian Affairs, various other branches of the Federal Government, the construction industry, and commercial interests. Recent changes such as the "Indianization" of the Bureau of Indian Affairs, Indian preference in Federal contracting, and greater control by tribal governments has had an incremental impact on the nature of the built environment on reservations, but the overall effect does not yet appear to be transformative.

If the built realm of today's indigenous communities is to be reflective of the unique cultures of each region and each tribe, processes must be developed which give a voice to the people of the tribe. New structures and communities need to be designed which are culturally relevant and yet not historically derivative, in danger of becoming caricatures of historic models. The evolutionary process that created the extraordinarily responsive structures of the past, such as the plains teepee, the desert hogan, and the coastal long house, cannot be replicated today. Yet new forms can be developed which reflect the interweaving of new technologies, materials, and lifestyles with ancient knowledge and traditions inherent in today's tribal communities. The difficult part of the equation is exactly how to go about developing new forms that are in fact relevant and meaningful to today's Native Americans.

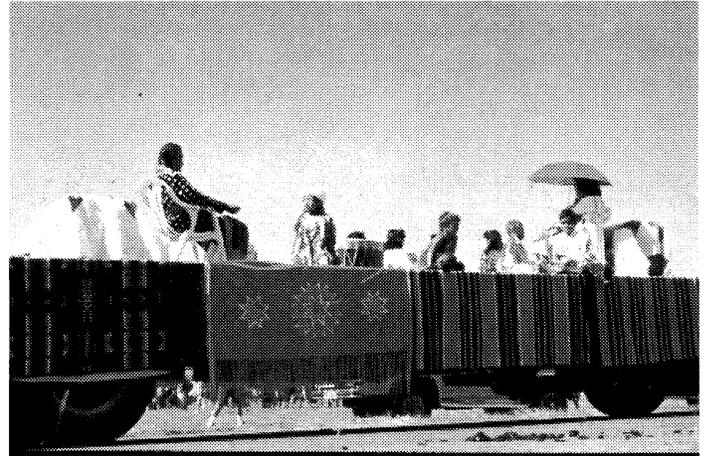


Fig. 3. Crow women in the Grand Entry at the annual Crow Fair. (photo by D. Glenn)

In her book, Carol Herselle Krinsky documents many of the efforts of the past three decades to develop culturally relevant works of architecture. While the book is a catalog of excellent efforts towards developing contemporary Native American architecture, it also documents the great difficulty architects face when confronted with this particular design challenge. How, for example, does one create formal expressions with brick and mortar or steel and glass which successfully reflects a nomadic plains culture? The temptation to resort to the "concrete teepee" is difficult to resist. If the Greek temple we revere in Western architectural history evolved from a reed hut to a marble masterpiece, and later to be reinterpreted in concrete, steel and dryvit, perhaps there is nothing inherently wrong with the concrete teepee. The teepee is a powerfully iconographic form. If I.M. Pei can successfully utilize the ancient and powerful symbol of the pyramid in Paris, reinterpreted in steel and glass, then perhaps a similar use of the teepee's conical form can be more than emblematic of a stereotype or caricature in the American West. Its form has of course been utilized repeatedly in this vein in the West, from the literally concrete teepee gas stations of the mid-twentieth century to museums and grandiose, Las Vegas-style casinos of the latter twentieth century. The most extraordinary of these is Antoine Predock's American Heritage Center in Laramie, Wyoming. The core of the building is a massive, six story conical form that closely reflects the teepee form both in its plan and its shape.

Yet such simplistic formal constructs do not represent a "new tribal architecture". Derivative forms are in fact highly contradictory with the nature of historic tribal architecture. As Nabokov and Easton thoroughly document in *Native American Architecture*, traditional structures evolved from a complex blending of technology, climate and culture.

Perhaps the most important lesson from such structures is that while they are imbued with layers of meaning, they are at the very same time simple, elegant responses to climate and social need. For

example, in the Crow teepee, each one of its twenty-one poles are symbolic of elements integral to Crow culture, including animals such as the bear, the mountain lion, the owl and the coyote. And yet there is no attempt to literally represent the meaning of these poles.

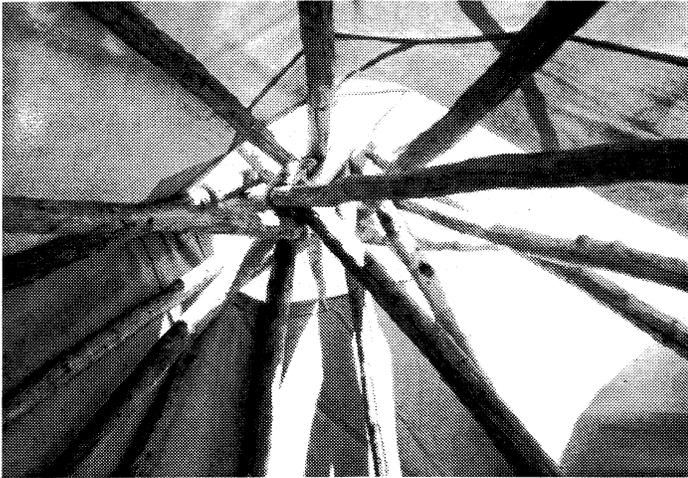


Fig. 4. View of the structure of the Crow teepee lodge. (photo by D. Glenn)

Power and meaning is embedded in the teepee structure through the oral tradition. Therefore, if a new structure is designed which is not somehow integrated into the tribes evolving oral tradition, it cannot possibly become meaningful to the tribe, regardless of what it might look like. As the renowned Australian architect Glen Murcutt has stated, regarding his work with the Aborigines, the critical issue is not what a thing *is*, but what it *does*, both culturally and physically.

ICONOGRAPHIC/NATURALISTIC/COSMOLOGICAL

In the many attempts to develop a contemporary Native American architecture, three basic approaches have emerged: iconographic, naturalistic, and cosmological. The iconographic approach is clearly the most common, and it appears in many forms. These buildings attempt to express the culture through the built expression of emblematic icons: traditional structures, traditional artwork, or animal forms. The Arapaho architect, Dennis Sun Rhodes, has designed many buildings with this approach, including the Native American Center for the Living Arts in Niagara Falls, New York, which is designed in form of a giant turtle, an animal sacred to many tribes. This approach certainly has merit. The advantages include the lack of ambiguity in the form, in the same way a cruciform church is unambiguous in its meaning to the Christian religion. The ability of the architecture to be read and understood by the community is critical to it being relevant to that particular culture. Yet in some ways the parallel to the cruciform church is inaccurate. The plan of the cathedral was derived from the form of the cross but the expression of the building was not a giant cross. In

some ways the cross in the cathedral is more akin to the role of the circle in the design of a teepee lodge.

The circle, to Native Americans, is an almost universally sacred symbol in much the same way as the cross is to Christians. In the high plains, the form of the sweat lodge, the teepee lodge, and the encampment is circular in plan, not in geometric perfection, but in the idea of the circle. The perfect circle is implied without having to be built. The remainder of the structure of the lodge is not, as far as we know, iconographic. There is no attempt to form a symbolic expression in the teepee form itself. In the Crow teepee, there is extraordinary imbedded meaning in the teepee structure, but this meaning is conveyed through numerology and oral tradition, not form. Additional meaning is often overlaid on the Plains teepee through iconographic painting, but this is decoration more akin to the stain glass windows of a cathedral than a building shaped to represent a particular form. On the other hand, the sweat lodge is described by the Crows as “the body of the buffalo.” The willow frame is the ribcage and the fire is placed off center to symbolize the heart. Yet, even in this case, the meaning is highly abstract. There is no attempt to literally represent the buffalo’s body in the structure’s form or detail.

The only literal expression of animal imagery in the form of the architecture might arguably be the Northwest coastal long houses, in which the entry ways were developed as elaborately carved totems expressive of animals. Yet even here the buildings themselves were not formed in such a way as to represent an animal. Their forms are quite utilitarian, though also like the teepee, abstractly embedded with meaning. The whole idea of creating a highly complex form that attempts to directly emulate an animal or any other object seems contradictory to the bulk of Native American architectural tradition. When such examples were presented to the Little Big Horn College, the overwhelming response was highly pragmatic concerns that such complex forms, no matter how beautiful, would be problematic: difficult to construct, expensive, and difficult to maintain. The Native American Center for the Living Art has in fact been in-operational for several years partially due, apparently, to roof problems and maintenance difficulties with the building. This is not to say that iconography should not play an important role in the design of contemporary Native American architecture. Its role, however, should perhaps be relegated to its role in the traditional architecture: as decoration, not form.

The second most common approach to the creation of a contemporary Native American architecture is what I’ve termed “naturalistic.” In these buildings, the architects design in a manner which attempts to make the buildings reflective of nature. The foremost proponent of this approach is the Canadian metis architect, Douglas Cardinal. His most famous work, the Canadian Museum of Civilization in Ottawa, is designed to emulate the complexity and power of natural earth forms. This work is not iconographic as it does not directly symbolize nature, but instead attempts to express the spirit of nature. In other architects’ projects, this might be less in the form of the building but more in the use of materials expressive of the region. It is interesting that the work of Antoine Predock might typically be termed “naturalistic”, yet when he was commis-

sioned to design the American Heritage Center, he chose to be iconographic in his overt use of the teepee form. The naturalistic approach has a lot of promise, and as Cardinal has demonstrated, it can result in powerfully expressive works of architecture. Yet like the iconographic approach, the forms are derivative, not inherent to their function or their purpose. In addition, a "naturalistic" architecture is almost inherently highly complex formally, as nature is highly complex, yet traditional Native American structures are universally simple in their form and structure. There is an economy to the architecture that is reflective more of the actual practice of living lightly on the earth than the imagery of building like the earth.

The third approach, a "cosmological" design, seeks to utilize the spiritual, universal world view of a tribe to inform the tectonics and siting of structures. In this approach, the cosmology of the tribe is a primary tool in generating the form of the building or collection of buildings. In the best sense, this might lead to a sort of Feng Shui of Native American architecture. The cardinal directions, the sacred circle, numerology, star mapping, and geography, which play a vital role in the world view of Native American tribes, are utilized to develop the form and arrangement of the architecture. The most vocal proponent of this methodology is the firm of RoTo Architects. In their design of Sinte Gleska University near Rosebud on the Pine Ridge Reservation in South Dakota, the firm utilized Lakota cosmology as a primary generator of form. Unfortunately, this approach was not combined with the clarity and simplicity of traditional Native American architectural forms. Instead, it was merged with the highly complex splintered geometries of contemporary Western high art architecture, quite indistinguishable from the architects' earlier work in the firm of Morphosis. Instead of Lakota tribal cosmology generating a uniquely Lakota architecture, it became a rationalization for the firms delight in wildly complex form making. The extraordinarily high cost of actually building such forms resulted in the project's collapse, unfortunately after the foundations had been poured. Another firm was brought in with the thankless task of trying to utilize these foundations to develop some sort of viable building for the university while cutting construction costs by two-thirds. Perhaps one of the most vital lessons of traditional Native American architecture was lost on the architects, that of economy. Like their forefathers, the majority of tribes today have extremely limited resources - with the notable exception of a handful of casino billionaires. This situation, in combination with a philosophy which reveres the earth as a living being, implies that a truly Native American architecture in contemporary America will be restrained - in both materials and form.

LEARNING FROM THE TEEPEE

While "form follows function" is a modernist tenet, it is also descriptive of nearly all traditional Native American structures, but only if the term "function" is understood in all its complexity. The teepee is the embodiment of this tenet and provides a powerful lesson in form making for any modern attempt to develop a Plains Indian architecture.

The structural form does not seek to be anything other than what it is. It is not iconographic.



Fig. 5. View of a Crow encampment at the annual Crow Fair. (Photo by D. Glenn)

The teepee appears to be quite simple, but that perception is deceiving. In fact, it is a sophisticated structure that varies substantially in detail and structure from tribe to tribe across the Great Plains. The structure has evolved over millennia, with the earliest forms dating back at least 5,000 years. Perhaps if we give the tract home another thousand years or so to evolve, it will become something equally admirable.

Unfortunately, given our rapid destruction of the natural environment, we may not have a thousand years to find out. Our own culture too often mistakes simplicity for a lack of sophistication, yet this simple structure utilizes renewable resources - buffalo hide and lodge pole pine - to provide year around shelter in a fully portable dwelling that requires no more than an hour to erect. It is adaptable to the coldest winter nights or the hottest summer days; and it is beautiful both in exterior form and interior space. In the summer heat, the sides are rolled up to catch the breezes. In the winter, an inner liner known as a "dew cloth" is tied to about five feet up the poles and provides both an improved upward draft for smoke ventilation and an insulated layer for warmth. The structural form was derived both from utility and from spirituality: the circular form is sacred to the Plains Indian, representing the circle of life. The dwelling in nearly all tribal cultures is much more than shelter; it is a sacred space. The doorway among the Crows, for example, faces the rising sun to the east, and the interior space layout is highly regimented and ritualized.

Almost as intriguing as the teepee is the encampment, formed by multiple lodges. The beauty of a large gathering of lodges is something to behold, as visitors to the Crow Fair can attest. There thousands of teepees are erected for one week in August each year along the Little Big Horn River, forming the largest gathering of Native Americans in the country. For that one week, Crow Agency becomes the "teepee capitol of the world." The traditional encampment on the Great Plains was often circular like the lodge itself, with an opening to the east. The encampment circle, like nearly

everything in Native culture, was multifaceted - being spiritual, social and practical. It protected a large open social space in the center from the high winds that continue to hold reign over our region. The beauty of the encampment is also in the multiplicity of the elegantly simple forms on the land, creating a powerful single whole. While individual expression was often quite pronounced, it was limited to the paintings on the lodge exterior.

A NEW TRIBAL ARCHITECTURE IN THE MAKING

The design of the Little Big Horn Campus Plan has sought to develop a "new tribal architecture" with direct relevance and meaning to the Crow people. Its success or failure will not be known until it is built and occupied, but the reactions thus far have been very promising. This has been largely attributable to the extensive process to develop the design work. The teepee lodge and the encampment have become the primary conceptual basis for the design of the Little Big Horn College campus. This approach evolved out of the participatory process, in which tribal members directly developed design concepts in a workshop setting facilitated by graduate students of architecture from Montana State University.



Fig. 6. Cultural Advisors for the charrette process included Art Fitzpatrick, Sr. and Scott Russell, staff members of the Little Big Horn College.

The Design Workshops and cultural research were conducted with 15 graduate students in the MSU School of Architecture led by the author, a professor of architecture and a descendant of the Crow Tribe. The students met with tribal elders, toured the reservation, researched the history and cultural practices of the tribe, and facilitated several Design Workshops with the community. The process included an intensive Design Charrette involving a total of 50 graduate students in architecture and a dozen guest faculty and design practitioners, and cultural advisors from the tribe.

Utilizing "kit-of-parts" models to aid in quickly generating design schemes, teams developed approaches to the layout of the site plan

for the college. The schemes which emerged were not as proposed as formal derivatives of the teepee itself, but instead the organizational structure of the lodge and the encampment became the basis for the new campus layout. The circle becomes the dominant ordering device, as in the teepee. The cardinal directions and the social and hierarchical ordering of the encampment and the lodge were translated by the Crow participants into ordering principles for the layout of the various programmatic functions of the campus.

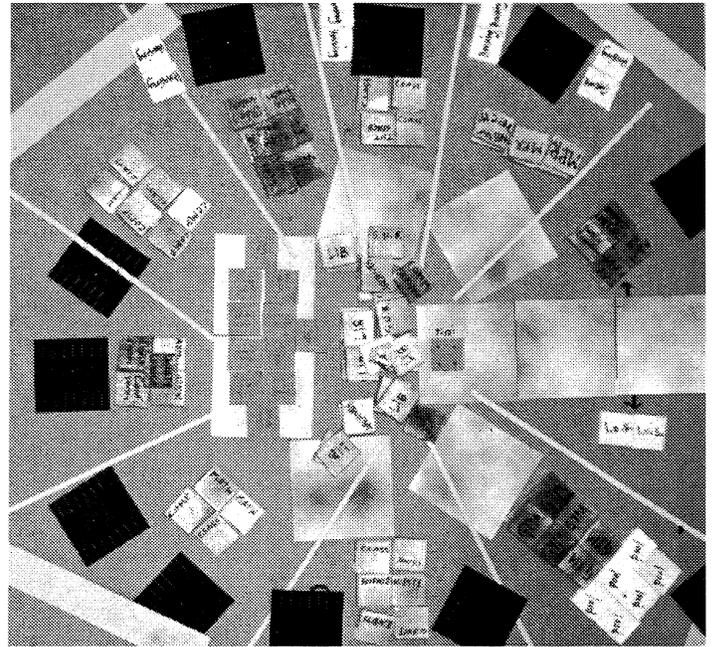


Fig. 7. Tribal members lay out a proposal for the campus plan using a "kit-of-parts" model.

For example, the primary symbolic entry for the campus comes from the east. The administration would be located at the west end of the site, or the rear of the "learning lodge", in a similar manner as the chief sits in the rear of the teepee. The buildings are then arranged in a circular pattern, which form a central social space as in the traditional encampment. The circle is also preferred, as it is largely non-hierarchical, with the various departments of the campus sharing an equal relationship to the center and to one another. Ten radial paths were proposed, emanating from the center of the campus, which would symbolize the "ten lunar months of gestation" and the sacred number ten, which is central to the Tobacco Society, a Crow social and religious organization dating back several centuries.

The work of the design workshops was translated into designs by design teams of Crow cultural advisors, graduate students, faculty, and guest professionals in a five day charrette. Four schemes were presented back to the college for feedback. Preferred alternatives were developed in a design studio. The final scheme was developed by a professional team of architects, all of whom had participated in the process, and it substantially follows the scheme that was developed in the design workshops.

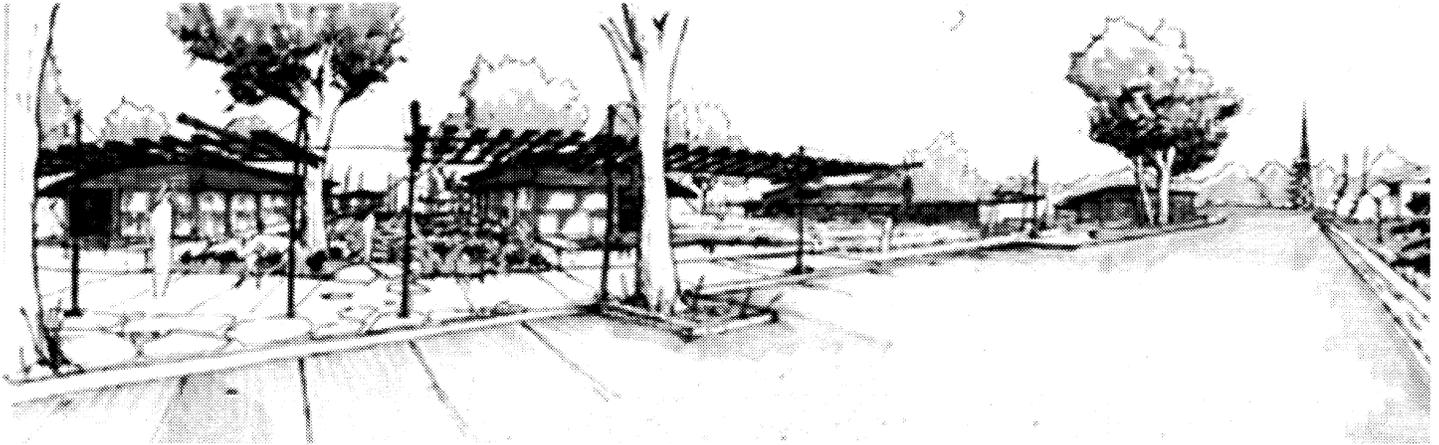


Fig. 8. Charrette sketch of the proposed campus as viewed from the main street of Crow Agency. (Drawing by Jess Graden, a MSU School of Architecture graduate student.)

The master plan that emerged out of this process has been lauded by the community for its direct cultural relevance. In the design studio and in the charrette, efforts were made to give formal expression to the architecture, but the final design work is still in process. The participatory design process will continue in the development of the building designs.

The following are design parameters derived from process thus far and the study of the traditional architecture:

- An effective, direct participatory process is vital to the cultural relevance of the design work.
- The designs will seek to achieve a simplicity of form derived from utility in harmony with the natural environment. As such, they will be “green buildings” with the forms designed to maximize daylight, natural heating, cooling and ventilation.
- Economy of means will be a primary component of all design decisions, both as a function of a limited budget and as a philosophical principle.
- As in the teepee, the structure will be expressed and legible to the occupants.
- The forms will not seek to be iconographic in any direct way, though the circle will be incorporated as a primary organizational element.
- The meaning of the architecture, while abstract, must be incorporated into the structure in a manner that allows it to be “read” by future generations.
- Iconography will be incorporated into the building through decoration of the built elements. Crow artists will be invited to develop the designs for the various elements.

- Local, natural materials, will be incorporated into the building, though following the adaptive nature of the tribe to new technologies over the centuries - the horse, the rifle, the car, the computer - the latest materials will be utilized throughout.
- Following the sustainable intent of the building, locally available, low embodied energy materials will be favored.
- Native plants will be predominant in the landscaping.
- In the Crow tradition, pragmatism will be favored over dogmatism in decision-making.

BIBLIOGRAPHY

- Albright, Peggy. *Crow Indian Photographer: The Work of Richard Throssel*. University of New Mexico Press, 1997.
- Bryan, William L. Jr. *Montana's Indians*. American & World Geographic Publishing, 1996.
- Glenn, Daniel J. *Little Big Horn College Community Envisioning Process*. MSU School of Architecture publication, 1999.
- Hoxie, Frederick E. *Indians of North America - The Crow*. Chelsea House Publishers, 1989.
- Krinsky, Carol Herselle. *Contemporary Native American Architecture: Cultural Regeneration and Creativity*. Oxford University Press, 1996.
- Linderman, Frank B. *Plenty-coups: Chief of the Crows*. University of Nebraska Press, 1930.
- Linderman, Frank B. *Pretty-shield: Medicine Woman of the Crows*. University of Nebraska Press, 1932.
- Lowie, Robert H. *The Crow Indians*. University of Nebraska Press, 1935.
- McCleary, Timothy P. *The Stars We Know: Crow Indian Astronomy and Lifeways*. Waveland Press, Inc., 1997.
- Nabakov, Peter and Easton, Robert. *Native American Architecture*. Oxford University Press, 1989.
- Nabakov, Peter. *Two Leggings: The Making of a Crow*. University of Nebraska Press, 1967.
- Voget, Fred W. *The Shoeshine-Crow Sun Dance*. University of Oklahoma Press, 1984.