## The X-Form: Applying Teton Lakota Sioux Cosmology to the Rock Art of the Upper Midwest

## Charles R. Bailey

The use of simply rendered symbols to express complex ideas is pervasive in religious iconography. In contemporary Lakota cosmology the motif for the term Kapemni (twisting), a simple hourglass or X-form, is used to symbolize the Lakotas' entire relationship with the universe — an intertwining of the physical world, philosophy, and religion. This element is often found embedded in more complex patterns in their art — beadwork or painted objects — and this peculiar feature is also found incorporated into some figures found in the rock art attributed to the Siouan and Algonquin cultures. The images most often displaying this embedded motif are bird or "thunderbird" images and anthropomorphs. According to some Lakota informants the incorporation of this motif into the X-bodied bird symbol represents "the power that mediates (or carries) prayer from below to above" and that "this same power is sent back down in response."

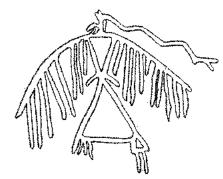
To the Teton Lakota, the eagle flew over large temporal and spatial distances as an emissary carrying appeals between humans and the Creator. It figures strongly in the belief systems of Siouan- and Algonkian-speaking people, among others.

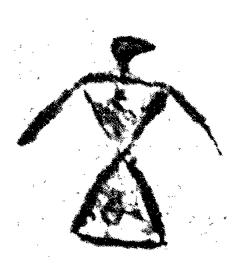
There may be a direct link between the eagle cosmology of the Plains and Woodland Indians, particularly the Lakota, and some of the ubiquitous symbolism that occurs in rock art around the Upper Midwest and Canada, such as the glyphs shown in Figures 1 and 2, at right. An excellent source for Lakota information is Ron Goodman's Lakota Star Knowledge, published in 1992 by the Sinte Gleska University in Rosebud, South Dakota. In his project Goodman, a teacher at the university, gathered together the results of ten years of research, interviewing some 61 elders and teachers and searching through various accounts and texts, to create an outstanding exposition of Lakota constellations and their relation to the sacred lifeways of the people.

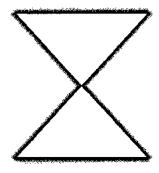
My own postulations dealing with this subject are based on research, recording of various rock art sites in the Midwest, and discussions with various archaeologists, anthropologists, and Native American elders.

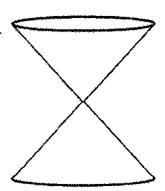
It is necessary to begin with a description of Lakota symbolism as it relates to their cosmology, and then to try to relate it to a few rock art sites in Minnesota.

Figure 3 (next page, top left) shows *Kapemni*, the simple X-form or hourglass used in Lakota iconography to represent their cosmology of reflection, a









spiritual view in which the physical world is dramatically mirrored in the sky and stars directly overhead. As above, so below. The form consists of two triangles joined at the center. The one pointed up is the symbol for the earth, the one pointed down for the sun and stars.

The Lakota-English dictionary by Father Eugene Buechel gives "twisting" as a general meaning for *kapemni*. *Pemni* is "twisting." *Ka* is a "prefix for a class of verbs whose action is performed by... the action of the wind" (Buechel 1970).

This symbol occurs in Plains Indian decorative art such as beadwork, teepee-painting, and parfleche designs.

The Keeper of the sacred star maps among the Oglalas has said of the motif illustrated at left in Figure 4, that without proper instruction it wouldn't be recognized as a star map. Asked to explain why, he replied that this was partly because the stars as they are drawn on the robe look like a wedge of pie, or a long triangle. He added that the shape on earth that a star map most resembles is the cottonwood leaf twisted into the form of a tipi.

Ron Goodman wrote, "I consider this reply of fundamental importance. The Keeper is saying that the Lakota image of a star is not a flat two-dimensional triangle, but rather a cone, a vortex of light slanted down. The inner true shape of the stars and the sun is an inverted tipi" (Goodman 1992).

John Colhoff, a Dakota man employed at the Rapid City Indian Museum, said, "an hourglass figure (two triangles joined at their apexes, *ka-pe-mini*) represents a prayer. The lower part (triangle) has to do with the earth and the upper part is the heavens. This design represents a prayer from earth going to heaven and being met halfway by the heavenly bodies" (Goodman 1992).

Goodman goes on to state that:

These wonderfully precise but all too brief words by Mr. Colhoff will need some explaining. It is important to hold to his three-dimensional (hour-glass) ideas and not its reduction to two dimensions (triangles). As we see. Mr. Colhoff is referring to two vortexes (two tipi shapes) joined at their apexes, and turning.

At one point in our research into Lakota Star Knowledge, we were told that a symbol for both stars and the sun is a vortex with apex pointing down. Mr. Norbert Running, Medicine Man and Sun Dance leader on the Rosebud Reservation, explained that the Sun Dancers create with sacrifices and prayers an invisible tipi (or vortex) of praise as they dance around the holy tree at the center Sun above, Sun Dancers below: and the connection between them is prayer.

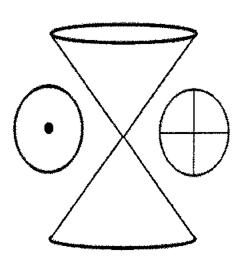
The Lakota have maps of the earth and charts of the stars, and "they are the same," said Mr. Stanley Looking Horse, father of the Keeper of the original Sacred Pipe, "because what's on the earth is in the stars. And what's in the stars is on the earth." This mirroring principle will prove central to understanding sacred designs.

Finally, Mr. Colhoff said, "This design represents prayer from earth going to heaven and being met halfway by the Heavenly Bodies." Also during our research we were told that the stars are "The holy speech of the Great Spirit, the woniya of Wakan Tanka."

Lakota concepts about the divine universe can to some extent be described through making a sequential arrangement of several of their basic theological symbols. First, the circle represents the notion of Wakan Tanka as infinite, all encompassing, with no beginning and no end. This transcendent One can be experienced as Taku Wakan, "something sacred", while remaining incomprehensible to humankind. "Indescribably mysterious" is one of the best attempts to articulate in English the essentially ineffable nature of the divine Oneness of Wakan Tanka [Goodman 1992].

In Figure 5 on the right, at the left of the figure is illustrated the place of intersection of the vortices. The *kapemni* expresses the notion that when the One becomes creator, it becomes creators, it becomes two, "grandfather" sacred above, *tunkas'ila*, and "grandmother" sacred below, *unci*, while remaining one (Goodman 1992).

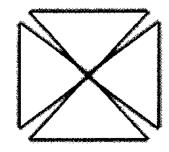
In the middle of Figure 5 the hourglass symbol shows a division into above and below, with masculine and feminine attributes. As grandfather and grandmother they are separate yet not separated. The two creators express aspects of the One, *Wakan Tanka*. And it is through the power of their "sacred talk", woglaka wakan, their prayerful and mirrored dialogue, that the stars are created, the galaxies occur, and finally that all life on earth comes into being (Goodman 1992).



On the right side of Figure 5, a third symbol, a medicine wheel, embodies further manifestations of the One. The Lakota view the universe as a sphere (Goodman 1992).

Figure 6 at right shows that, as a result of the sacred talk between grandfather and grandmother, the stellar world is created, and also the unfolding of what comes to be called the four directions. The materialization of spirit shows itself through emergence of the four elementals: water in the West, air in the North, fire in the East, and earth in the South. Certain spiritual powers are associated with the directions.

Thus, the One becomes two, sacred above and sacred below, while remaining One, and the One becomes four while remaining One. This makes six. And finally, there is the center point that represents the fire in the tipi, the Black Hills, understood as



"The heart of everything that is," and the heart of a person praying with the Sacred Pipe. Therefore, the One becomes seven while remaining one (Goodman 1992).

We may now look at parfleche designs with better understanding. The parfleche is a storage bag or purse used most often by women to carry fans, quills, beads, and other items. It is usually decorated with seemingly-abstract designs that often contain variations on the *kapemni* or X-form ideogram.

A parfleche in a text by F. H. Douglas incorporates literal elements into the X-form ideogram. The earth is a triangular, mountain motif while the stars are represented as dots inside diamond forms.

Figure 7 (next page) shows a parfleche from Mable Morrow's *Indian Rawhide: An American Folk Art* (1982); it figures heavily in Goodman's exposition. He writes:

This parfleche contains a mandala which expresses a Lakota woman's personal vision of the tribe's world view. The principal mode for the presentation of ideas in this design is through the mirroring of certain basic Lakota symbols. Of course, this mirroring gives an artistic balance and symmetry to the overall pattern, but it is this theological significance of the mirroring which shall mainly concern us here.

First, we see grandmother Earth's prayer as the triangle rising out of the earth which is represented as a sacred mountain, as tipi, as vortex.

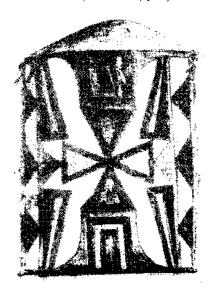
And then its mirrored image representing grandfather sacred above.

We see two vortices meeting at their apexes, and we know they are twisting. The twisting represents the "sacred talk", the movement of prayerful and creative speech going on between the grandparents, the spouses.

Next, we observe the triangles to the left and right. Together with the triangles at the peaks of the two sacred mountains, they make a four directions symbol which meets at the center.

Once "the center": cokata, is established by the kapemni, then spiritual power rays out and flows in at the six directions: West, North, East, South, above, and below. The triangles on the mountains serve a double purpose in this mandala: they are sacred above and sacred below, but also they are North and South.

Moving away from the center and the directions, we come next to the large winged images which mirror each other [Figure 8, bottom left]. These, to me, are central to the application of this cosmology to rock art imagery. The bird, especially the eagle, is a Lakota symbol for that power which mediates (or carries) prayer from below to above [Goodman 1992].





The mirroring of the winged image shown at left in the bottom figure, Figure 8, (each with a triangle, as it were, within it) implies that this same power is sent back down in response. In other words, prayer is answered. The Lakota live in a compassionate universe. This is achieved through prayer. "Prayer" in Lakota also means making relatives of the spiritual powers in the seven directions (Goodman 1992).

Figure 9 (opposite, top right): to apply this ideographic symbolism to American Indian rock art it is important to find a site that would act as a sort of Rosetta Stone, a precise representation of this sacred symbolism.

In 1944, Helen Harvey of the Minnesota Archaeological Society performed a survey of rock shelters and rock art on the west bank of the St. Croix River near the town of Stillwater in Minnesota. Accompanying her was Monroe Killy, a professional photographer and archeology buff. Killy took several black and white pictures of the rock art carved and painted on the sandstone banks, including this scene of several small petroglyphs carved over pictographs.

What appears to be depicted is a medicine wheel, a kapemni, and various bird images that actually incorporate the *kapemni* as the body of the bird image. The same type of incorporation occurs in the bird images on the parfleche.

The medicine wheel shown by Harvey is similar to the one found on Shoshone teepees, as well as on other portable art of the plains Indians. Usually divided into four quarters and sometimes cross-quartered, they often include other lines that run at various angles from the main lines.

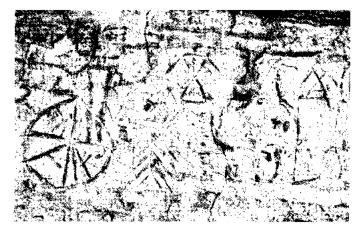
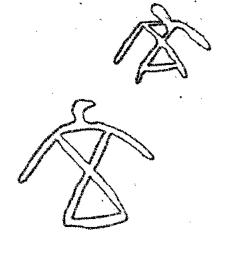


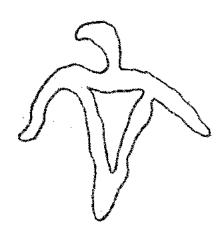
Figure 10, below, shows Mrs.

Harvey with her two children posing by the glyphs shown in Figure 10, circa 1933. Notice the medicine wheel and the X-form.

Figure 11 (next page, top left): around 1880, T. H. Lewis surveyed the same panel and made tracings of some of the glyphs. This shows the X-form incorporated into the thunderbird. This form of the X-bodied-thunderbird is found throughout the plains area of the U. S. and in Canada. Apparently, this ideogram-within-an-image is pan-tribal, occurring in glyphs and other art attributed to Siouan and Algonkian cultures.







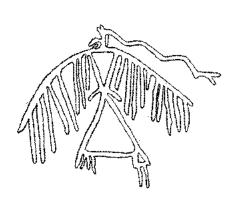


Figure 12 (left, middle) shows another Lewis tracing in the Browns Valley region. This one depicts just the "rising or upper triangle" of the X-form, possibly implying that something is being carried up. This may be similar to the imagery found on the parfleche, where one triangle is used define the direction of the message. Often the triangle is the most pronounced part of the image (see Figure 14).

The glyph in Figure 13 (left, bottom) was recorded by Lewis in the LaMoille cave near Winona, Minnesota, on the Mississippi river. Notice the marvelous feather structure and the X-form body. This glyph is now believed to be buried, the victim of lock and dam construction on the Mississippi.

While the earlier images are assumed to be Siouan glyphs, the pictograph in figure 14 (opposite page, top) is believed to be Algonkian, possibly Ojibway or Cree. This is from a drawing of a site in Canada done by the late Selwyn Dewdney.

In Figure 15 (opposite page, middle) we have an X-bodied anthropomorph from Saskatchewan, Canada, also photographed by Selwyn Dewdney. There are numerous recorded stories of individuals receiving power and wisdom (Lakota *wakan*, Ojibway *kitchiwa*) from thunderbirds or eagles in both Algonkian and Siouan cultures. The individual depicted here is said to be a shaman (Dewdney and Kidd 1967). It is possible that the same cosmic power represented by the X-form in bird imagery could be applied to human images as well.

The image in Figure 16 (opposite page, bottom) is shown in Grace Rajnovich's book *Reading Rock Art: Interpreting the Indian Rock Paintings of the Canadian Shield.* In a section on handprints in rock art she notes, "The flat hand pressed to the lips and then moved upward to heaven indicated prayer or address to the diety. Mallory, who collected a large volume of gestures, noted that the sign for 'pray' in several languages was the open palm of the hand held toward the Sky" (Rajnovich 1994). Note the X-body bird figure with what is apparently a line of communication reaching upwards.

The image in Figure 18 (overleaf, top left), photographed by Dewdney, is in Quetico Provincial Park in Canada. It shows an X-form next to a pipe-smoking figure, possibly another "prayer" reference, as the pipe is considered a vehicle for communication with the spirit world.

The glyph in Figure 18 (overleaf, left, middle) was found at Kejimkoojik Park in Nova Scotia and given a Micmac attribution by Mallory, who considers it a highly abstracted thunderbird. It also has a passing, though highly abstracted, resemblance to the earth and

sky hourglass motif found in Plains Indian artwork.

Figure 19 (overleaf, bottom left) shows a glyph found at the Jeffers Petroglyph site in southwestern Minnesota. It is part of a larger configuration that depicts an X-form thunderbird and a human together, an ubiquitous pairing found in both Plains and Woodlands rock art. The curious thing about this group is that it also falls very close to being a mirror image of four important Lakota constellations. These are: Thunderbird or *Wakinyan*, the Race Track or Sacred Hoop, Turtle, and Elk. The ritual aspect of such a configuration is powerful and multilayered. Goodman calls the cosmic icons depicted in the parfleches a mandala, "...an abstract representation of the nature of the universe, often used as an aid to private prayer, meditation, or for teaching" (Goodman 1992).

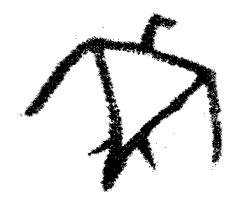
Whether or not the artists who created these glyphs were consciously trying to create a map of their constellations or were incising a sort of mandala in the rock at Jeffers for ceremonial purposes is almost a moot point; the first is contained in the second.

In Figure 20 (overleaf, top right) we have the Black Hills sky mirror, what Goodman describes as "the Lakota constellations on the ecliptic correlated by sacred stories to distinctive landforms in the Black Hills." To the contemporary Lakota the Black Hills are the center, the heart, of the earth. Notice that the constellations are not directly over their corresponding landforms, they are in a mirror image conformation, thus complying with the X-form dictate. A similar example of this may be found at Jeffers as discussed earlier.

## Summary

Oftentimes, very simple abstract symbols can contain highly complex information encoded within them, to be understood and utilized by the informed person. What we are finding is that while this symbolism is often depicted alone in Plains rock art, it also occurs inside of other imagery pecked and painted on the rocks, perhaps to give the imagery exceptional power by its creator and to communicate this to others.

It is important to note that while the X-form and triangle form motifs are found incorporated in rock art imagery all over North America as well as in other parts of the world, it is my intention to focus only on the Upper Midwest and Canada. In this region the









depiction of the X-form or hourglass is a well-recorded ideogram. It appears embedded in other imagery, but stands out as a symbol that transforms the gross image into something much more than a bird or human. It becomes a motif for spiritual communication with the cosmos. The cultures that apparently created these images also have an ethnographic tradition that includes the thunderbird and the pipe. Both are considered vehicles for communication with the spirit world.

In his book *Plains Indian Rock Art,* James Keyser discusses the concept of ideography as it applies to rock art:

Ideograms...are abstract images that do not display any obvious pictorial link with real entities.... Because ideograms do not depict any actual things, their meanings are not restricted to "things", they can also be used to represent concepts and ideas.... An important component of a simple writing system is that each pictogram or ideogram must be

recognized by all those using the system. Another aspect of a simple writing system involves the combination of interchangeable symbols into meaningful sequences. In a true ideographic system, ideograms are combined into different sequences following certain rules of syntax. These rules dictate which ideograms can be used with which, and how these symbols are spatially arranged and associated. In this way, an ideographic sequence can be read by anyone familiar with the meaning of the individual symbols, and with knowledge of the syntax. Thus, and ideographic system can communicate standardized information to multiple individuals [Keyser 2001].

In the case of the bird and human images, the ideogram is an important component of an otherwise-representational image. We do not know specifically why these images were created. Whether it was part of a ritual involving a direct appeal to the spirit world, a form of communication to others familiar with the same symbols, or both, remains to be seen. Clearly, the fact that the exact same symbol

occurs over such a large geographical area implies that it has some form of ideographical attribution. Although the X-form image, and other abstract and representational symbols found in relation to it, may not be part of a true ideographic system as described by Keyser, the rock art could display elements of that system.

Acknowledgments. Sources of figures: Figures 1,11,12,13 Lewis 1885; Figures 7,8 Goodman 1992; Figures 2,7 Monroe Killy; Figure 10, St. Paul Daily News7/23/1933; Figures 14,17 Dewdney and Kidd 1967; Figure 16 Rajnovich 1994; Figure 18 Mallery 1893; Figure 20 Goodman 1992; used with permission. Figures 3-6 drawings by the author; Figure 19 by the author.

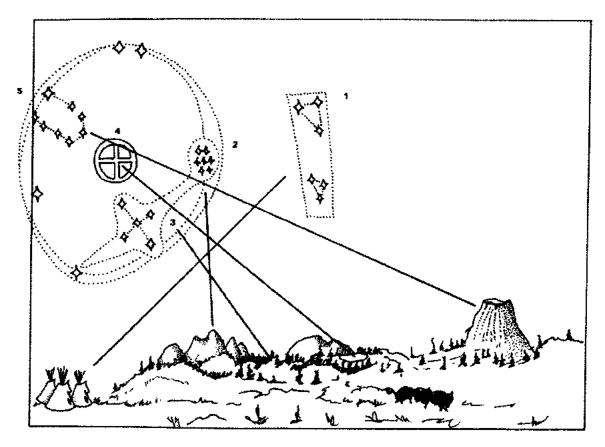


Figure 20. Lakota constellations on the ecliptic correlated by sacred stories to distinctive landforms in the Black Hills:

1) Cansasa Ipusye, the winter camps. 2) Wicincala Sakowin, Harney Peak. 3) the group Tayamni, an animal. 4) The center of Ki Inyanka Ocanku, Pe SIa, a bare hill in the Black Hills. 5) Mato Tipila, Devil's Tower. [Editor's note. we regret that we do not have or cannot easily insert the symbols for the correct orthography.]

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