

It's time to rediscover where we came from.

Children OF THE
Plumed Serpent

Día DE LOS Muertos

Many Colors
OF THE Mimbres

Inside Look:
Hooghans

Why Are
Weddings
White?

What Graves Say About
People of the
Stone Age

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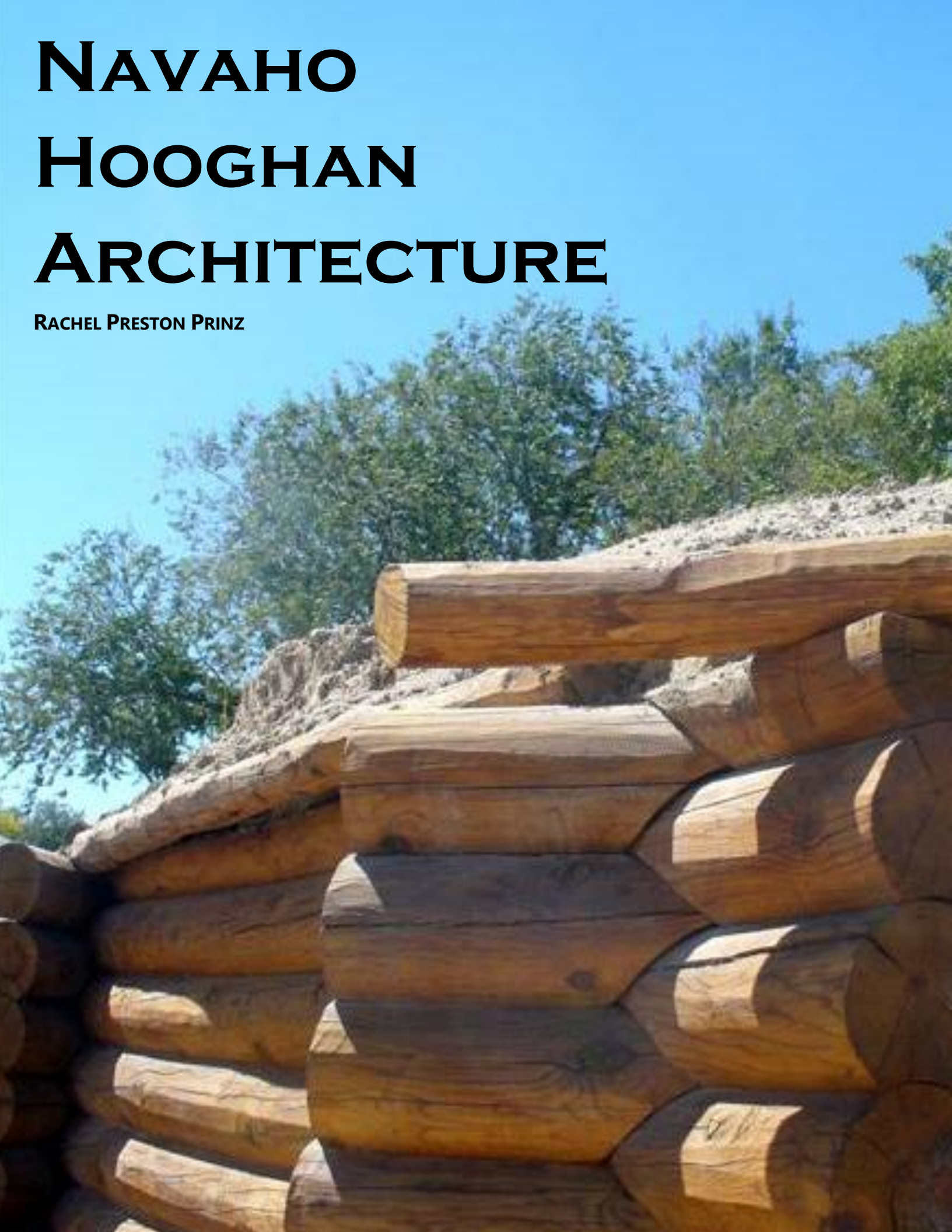
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NAVAHO HOOGHAN ARCHITECTURE

RACHEL PRESTON PRINZ



For as long as I have known of them, I have been calling them the wrong name. Like that vast majority of people I knew, I said Hogan... as in Hogan's Heroes. When I was feeling especially connected, I put the emphasis on the end of the word... I'd say Ho-Gaaan. In fact, the traditional roundhouses of the Navaho, or more correctly, the *Diné din'é*... are actually *Hooghan'a't'ei* and these hand-built structures have a sacred history that reaches all the way back to their beginnings as a people. The Navaho call their simple homes *hooghan* - quite literally - "home." When they are round in form, they call them *hooghan dijooli*, or... circular home.

Each hooghan has its own name, origin story, song, and purpose. Their stories are told in the winter, when people spend the most time inside together. All *hooghan* stories start from the story of *First Hooghan* - a hooghan made by the *Diyan din'é* (gods)- of white shell beads, abalone, jet and turquoise, the mists of dawn, and colors of sunset... they were made of everything beautiful and richly colored from within the earth or in the sky. From north to south their skin was made of rainbows... and from east to west of sunbeams. Every hooghan is made of this in a spiritual sense, and many are left undecorated to note their sacred spiritual construction. The magic does not end here -according to Navaho stories, when it was determined that First Hooghan was too small to contain all of the gathering, it was extended by blowing on the poles of jewel until the space was sufficiently enlarged! This ceremony was when the first hooghan song was born.

Language and tradition are, to indigenous cultures, one of the most exquisite and important aspects of their being. Each sound means something and connects to a certain aspect of the interconnected universe of which we are all participants. So the words they use themselves are holy, calling upon the spirits of place or thing to convey more than just an idea... their words convey a message of honoring the being(s) that existed within the idea before it was known by the people. In hooghan architecture, this manifests in the names of each of the principal structural supports. The first word in each of the 5 names is the word for the cardinal point it occupies (south, west, north), with the suffix *ce*, meaning "here" or "brought here." When a hooghan is constructed, each of the parts is serenaded in gratitude for their offering. Thus is born the tradition of the *sin*, or Sacred Navaho song. In some Navaho tradition stories, the hooghan's design was influenced by recreating the shape of a beaver lodge.

THE STORY OF THE FIRST HOOGHAN

In one of the first ceremonies of the Navaho tradition, when the sun and moon were to be made, Talking God and First Man sat next to each other in the south of the First Hooghan, and First Woman took a seat in the North. When they are used for ceremonies, the people still follow this ancient way... women sit in the north and men in the south.

A hooghan may be constructed of any combination of trees, branches, reeds, barks, earth, and even textiles – depending on what is available in the immediate area – which means that these structures are bio-climatic. The designs, while somewhat consistent, vary with the available resources and respond to the unique climate variations within the ecosystem, as well as with their age.

The most ancient hooghans are actually subterranean pithouses constructed of stone. Hooghans are built on land that is chosen for its wholeness... connecting (or disconnecting) to the elements... on raised platforms that protect from flood, near a source of flowing water for drink, near a good hunting ground or foraging area for food, in the shade of large trees for summer... In some places, more weathertight winter hooghans and summer hooghans, which allow for better ventilation, are used. A hooghan is never, ever constructed in a place where, or constructed of trees that, lightning has struck. Once lightning claims a tree or place, it is lightning's. Even the

tinest neighbors and land history are considered – ant mounds, gravesites, and battlegrounds are avoided. In cold weather a small storm-door or portico is often erected in front door to allow a place for storing wet and snowy clothing.

Hooghans are constructed according to specific cultural design criteria as well. Their entrance openings face east – towards the rising sun at the equinoxes. There is a deep history of the story of this orientation that reflects back to the origination of Navaho blessingway ceremonies. The logs which act as the main beams in the roof with the poles laid in a clockwise manner with the growing end (the top of the tree or smaller diameter end of the pole) placed towards the east, then south, then west, then north. Each different part of the roof structure is built from different trees, which have been collected from or offered to particular sacred mountains ruled by unique deities.

The male and the female are also honored in a unique way in Navaho hooghan architecture -



NAVAHO ARCHITECTURE & CEREMONY IN TRADITIONAL HISTORIES:

"The sand-altars—those exquisite symbolic picture-mosaics, made by sprinkling vari-colored sands with consummate skill upon the floor of the medicine hogan, are known to, and appreciated by, but few. Every sign and symbol upon them has a deep and profound spiritual significance; and while, naturally, all the ceremony, its songs included, appears to us as foolish, blind superstition, we should rather be humble than proud when we consider how far from perfect our own religion makes us in our actual daily living."

— *Father Berard Haile, reknown Navaho historian*

there are different shapes of hooghan the represent each sex.

The traditional male hooghan is the original cone-shaped hooghan designed to represent the Navaho sacred mountain Godernator Knob (Spruce Hill) - the place where, in Navaho tradition, First Man and First Woman found the baby Changing Woman. Here, they erected a hooghan shaped like the mountaintop in which to take care of her. The traditional male hooghan is usually conical in form and supported by five principal timbers which constitute the *qoǵán tsáǵi*, or house frame. There is no standard length for these supports, and thus no standard dwelling size. However, most often piñon trees of 8 to 10 inches in diameter and 10 to 12 feet long are used. Three of the five timbers will terminate in spreading forks, though the last two which are used for the doorway are straight poles. When suitable trees have been cut, they are trimmed, stripped of bark and dressed, then carried or dragged to the site and laid on the ground with their forked ends together, with one log end each

pointing towards the south, west, and north. The two straight timbers are then laid against the north and south timbers and adjusted so the cut ends point generally east. The entire structure is raised into place and the sides between the main supports are filled with pinon and cedar limbs and branches. A layer of cedar bark, very similar to modern cedar shingles, is added. At least 6 inches of earth is placed over the tree roof structure and branch and bark overlayment. An opening doorway between the eastern entrance poles has a flat roof formed of straight limbs or split poles laid closely together with one end resting on the oculus crosspiece and the other end on the door-frame which is lined with a log-stick enclosure bound sometimes by yucca rope.

A completed hooghan has no chimney - the oculus lets out the smoke. In larger hooghans, the west wall is extended out up to 12 inches as an inset for an interior altar. Their cool earth floors are nearly impenetrable, being compacted to a near-sheen after many years of use.

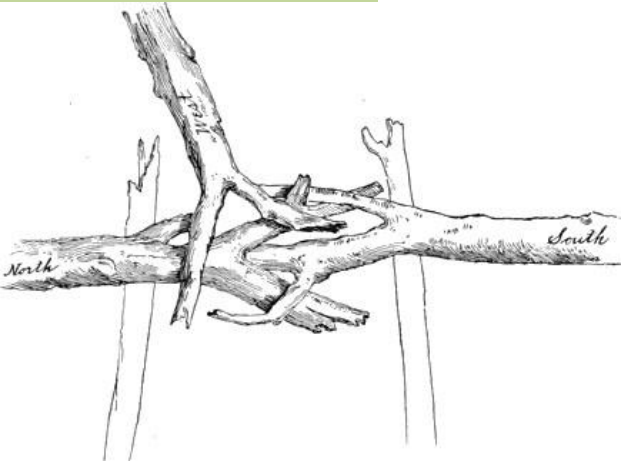


Navaho houses

Cosmos Mindeleff



Download the free e-book
Navaho Houses
for detailed drawings of
hooghan construction.



[ABOVE]

Hooghan structures by
Cosmos Mindeleff

The idea of making
hooghans a truly
sustainable option in
the modern world is
not all the far out.

Survivalists, [students](#),
[filmmakers](#), [non-profits](#)
and a few [architects](#) are
studying how
hooghans can be
reintroduced as a
viable housing option.

Despite their elegant
and intention-filled
design which can
withstand the strong
winds and rain, with
such steeply inclined
sides of nearly 45°,
this hooghan's floor
area is very small,
one must stoop to
enter the doorway,
and it is often noted

that the ceiling is so low that an
average person cannot stand erect in
it... which may have led to the demise
in using this form— as it is rarely built
today. There are other shapes of male
hooghan as well - a sweatlodge is a
male hooghan as is the square
roomed "sun house" hooghan.
Healing ceremonies take place within
male hooghans.

Later, when Changing Woman moved
into a house of her own, it was beside
MOUNTAIN-AROUND-WHICH-TRAVELING-WAS-DONE,
known now as sacred Huerfano
Mountain. The mountain is an
irregular shaped mesa, which inspired
the rounded female hooghan's
hexagonal or octagonal forms. These

Huerfano Mountain :: San Juan, New Mexico

This sacred mountain is where
Changing Woman lived in her first hooghan
and where she gave birth to her warrior twins.
This location is considered the "lungs" of the
Navaho country.

hooghans have walls made of logs
and branches that are laid vertically.
Openings between the logs are filled
with mud or clay, and their cribbed
roof is constructed with logs laid
horizontally in a circular layers that
reduce in up to the oculus smoke
hole, forming a domed roof which is
then covered with earth. Female
hooghans are used for social
festivities, and for mothers and
babies.

The vast majority of hooghans are
built by males and maintained by
females, though as in all things, there
are instances where this is not the
case... in some modern groups, only
women build hooghans for women.

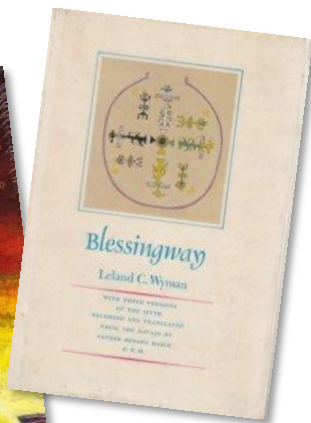
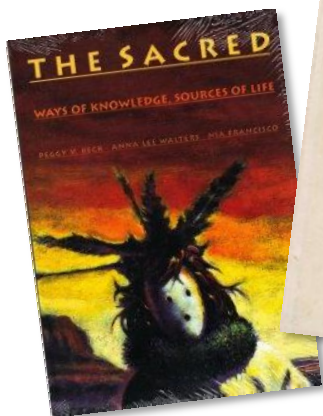
Traditionally, dying within in a
hooghan was discouraged, and if that
was to occur, a relative or friend would

ritually place all belongings of the deceased inside the hooghan, then burn and bury the entirety, marking the site with a cairn of rocks.

One of the more interesting factors of hooghan design is also one of the most subtle: it is said that the inhabitants should get up and clean the home before the dawn beings see the home. If the dawn beings see trash, they will not feel welcome, and they will not stop in to bring gifts of wealth to the inhabitants. For if there is trash, there must be wealth, and their assistance is not needed!

When the hooghan's construction is complete, and then again before major ceremonies, it is anointed in a sacred ceremony by the medicinercarrier(s) of that family or group. The inherent magic is maintained by the owners and users with a blessing of corn pollen or white corn meal from time to time.

While once the hooghans were literally and figuratively 'home', many times today the hooghan is a sacred space used only for special ceremonies. This is most often attributable to the requirement by HUD for home insurance to guarantee low-cost home loans on tribal lands. The insurance agencies do not know how to calculate risk for hand-made buildings - an epidemic that affects all indigenous cultures in the US as well as enterprising modern hippies with their earthships and upcycled co-housing projects.



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ABOUT THE AUTHOR

RACHEL PRESTON PRINZ — ARCHINIA

Rachel Preston Prinz is a passionate advocate of historic preservation. She strives to applying lessons learned in preservation and archaeology to modern bio-regional design. Her work has included forensic architecture, archaeological architecture, the preservation and adaptive reuse of historic structures, re/design for handicapped accessibility, as well as the design of bio-climatic residences and commercial structures for non-profits.



If WE were designing a hooghan for a client today here in New Mexico, in our capacity as architectural designers, we'd design it as an earth-bermed structure to shed our cold north wind and minimize the amount of heating we'd need to provide in winter. An earth-bermed structure will maintain nearly a 56°F inner-earth temperature with no heat, and requires a much smaller heat source to bring it to a comfortable 68°F than a standard surface structure which can get as cold as 38°F. We'd have an operable skylight oculus and a built-in cooking fireplace and chimney on the north.

We'd design a stone foundation wall, with insets and niches for storage, sunning benches with great windows, and wooden bookshelves inset into the sidewalls, especially on the north. Books provide great insulation.

We'd probably turn the entrance to the southeast instead of the east. That way we'd get better wind draw through the structure (our prevailing winds come from the west and north), and better protection from the snow at the front door (in fact, we'd get south-east sun first thing in the morning, so we'd maximize the natural melting capability of that orientation). We'd use glass doors at both ends and operable removable glazed windows along the sides at the entrance, and make the entry BIG, so we can use it as a source of solar gain in the winter when we'd want that extra heat, as a greenhouse of sorts to start plants in early in the spring, and we'd design it to be used as a shaded screened-in porch in the summer.