

**W. Meusel**

Folkwangschule für Gestaltung, Department of Architecture, 3rd. Term 1969/70  
Essen-Werden

**FfG** Ethnological Study

## **PUEBLO-NATIVE AMERICANS – New-Mexico**

An investigation of the typical housing of an ethnological culture in modern times.



**Fig. 1: Dwellings of the Pueblo- Native Americans**

## **List of Contents**

### **Introduction**

#### **1. Features of the surrounding environment**

- 1.1 Geographical conditions
- 1.2 Topographical conditions
- 1.3 Climatic conditions
- 1.4 Sociological conditions.
- 1.5 Political conditions.
- 1.6 Religious conditions.
- 1.7 Economic conditions.

## **2. Description of the House**

### 2.1 Construction task

#### 2.1.1 Physical control

#### 2.1.2 Functional framework

#### 2.1.3 Societal Milieu

### 2.2 Form

### 2.3 Technology

## **3. Model Pictures**

## **4. Bibliography**

## **Introduction**

The Pueblo-Native Americans are an isolated, moderately civilized people in North America, the native population of the north-east of New Mexico, and are particularly well-settled at the tributaries of the upper Rio Grande del Norte region. They are surrounded by the Comanche from the east, the Navajo and the Apaches from the south and west. They are divided into eight tribes, amongst others the Moqui, Jemes, Queres, Sitsimi, etc... and speak three different languages (Jemes, Queres and Zuni). Their own life story is closely linked to the colonization of North America by the Europeans. The Spaniard Juan de Onate received permission to colonise the Pueblo area in 1598. Apart from the colonists, monks began to spread out into the surrounding regions and the native people had to contribute to the construction of stunning churches and missionary buildings, and it appears as if this people were expected to adapt to this *other* culture. However, in 1680 they rose up in unified resistance against the exploitation of the conquerors. Only in 1694 were they then conquered again by a new oppressor and left their native villages and withdrew in to the less favourable regions of the Mesa where they formed an isolated oasis against any form of influence. The Pueblo Native Americans are the only native people of North America who were able to retain most of the ancestral lifestyle. This was made possible by the irreality and isolation of their area of dwelling.

# 1. Features of the Surrounding Environment

## 1.1 Geographical conditions

The area inhabited by the Pueblo Native Americans stretches across North America between 22 and 30 latitude, and between 115 and 98 longitude.



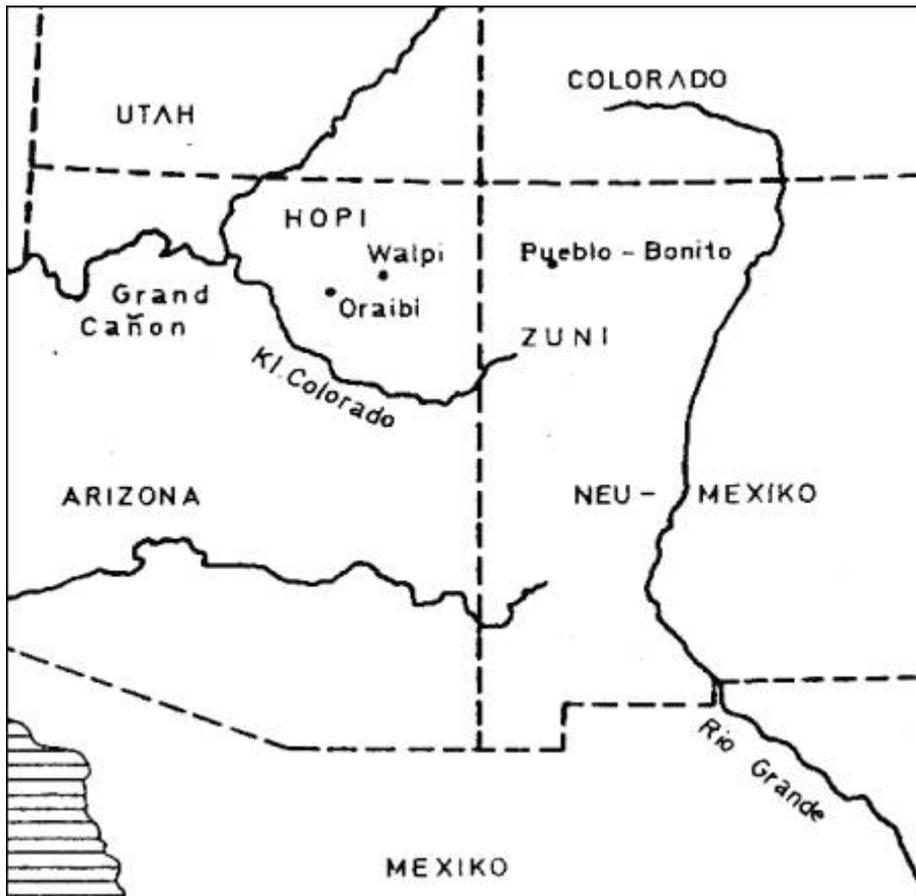
Map 1: Overview map

## 1.2 Topographical conditions

In this table land, 1500 m above sea level, two powerful rivers, the Colorado and the Rio Grande del Norte, formed massive valleys known as 'canons'.

The Mesas, steep table mountains flattened at the top, rise up above the plateau.

The highlands of New Mexico, Arizona, Colorado and southern Utah are (and were, in former times) the home of farming communities with their own individual, very unified culture. (Burland, p.144).



**Map 2: the most important settlements of the Pueblo- Native Americans in Arizona and New Mexico (Burland, p. 31)**

## 1.3 Climatic Conditions

In this climate system the summer brings intense heat while the winters are defined by storms and heavy snowfall. Apart from the Rio Grande and Colorado, the other rivers are almost dried-out, and are turned into raging torrents during heavy rainfall, only then to dry out again within a few days, or even a few hours. There is less than 300mm precipitation annually.

The vegetation in this climate is adapted to the restricted and unreliable rainfall. A sparse world of plants grows in the lower valleys of the landscape: dwarf-shrubs and gramineous plants, filled with cacti and yucca. Pine tree forests are located at the upper points of the highland, that are best adapted to the cooler north-facing hillsides. Weed vegetation covers vast expanses in the forest areas.

Antelope, deer, elk and rabbit dwell mostly on the plains in this scant nature.

## 1.4 Sociological conditions

The Pueblo Native Americans are of a small build, and have yellowish/brown skin and smooth, dark hair worn long. Until the present day, those women capable of marrying have kept the speciality of their hairstyle. They wear wide, wing-like hair strands, affixed with wooden clasps. Earrings are also worn.

The women have managed to retain the majority of the traditional dress; a sack-like long skirt that does not cover the left shoulder, and which is tied around the waist by a bright sash, a cover for the shoulders and a thick, gaiter-like wrap-around for the legs made of leather, which extends upwards from the moccasins.

Men's clothing has had a strong Spanish-Mexican influence. The Pueblo native American wears a poncho. Before the arrival of the Spanish he wore a waistcloth made of soft leather, or of leather made from deer skin, a knee-length jacket and made-to-measure moccasins out of yucca tree fibres. This brightly sewn waistcloth is still worn today during traditional ceremonies. Warriors continue to wear a leather hat with a feather, other men wear a head band. Jewellery, such as necklaces, completes the traditional attire which, according to Buschen (Buschan, p.149), originates from northern and southern tradition.

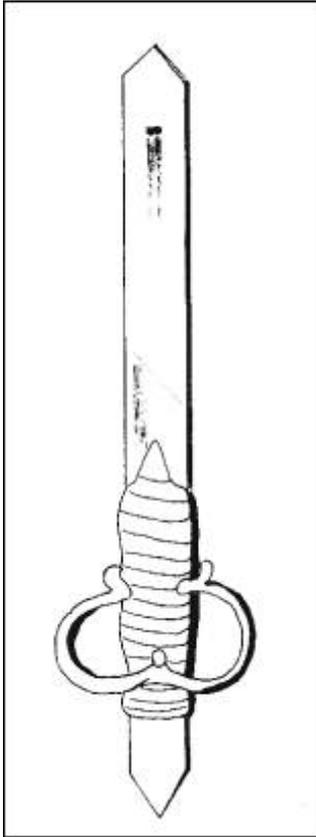
For us, the common term 'family' means 'clan' to the Pueblo-native Americans. Every clan consists of parents with daughters and grandchildren, the unmarried sons and those men who have married into the family. The newly-married husband moves into the house of his wife, because the house and field of the women are always inherited by the daughters. It is however allowed for the man to build a room there. It is apparent here that women are given preferential treatment. The sale of women is unknown. Even though a woman can drive her husband out with little obvious reason, it is the man who is head of the home who can decide on issues such as the acceptance or rejection of a suitor. The man also has a special privilege: the 'Kiva' or men's house and dwelling of the unmarried, where women are not allowed to enter. These houses, typical during the first years of Spanish occupation, are now the scene of religious ceremonies.

In general, the life of the Pueblo natives Americans is very peaceful, as the name of the conservative tribe, Hopi = the peaceful, proves.

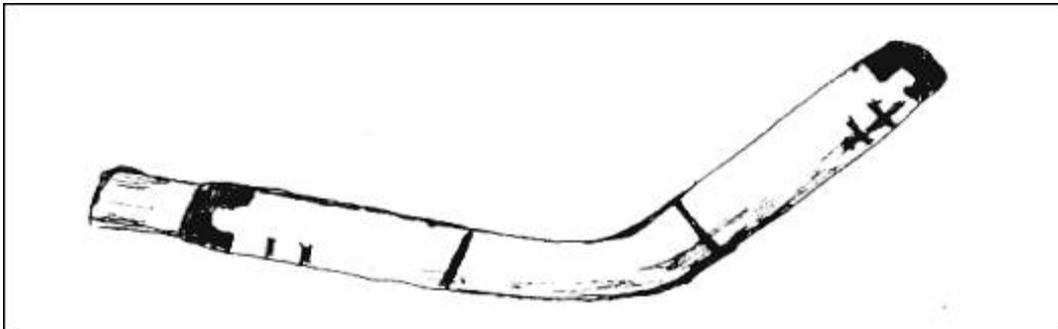
C.A. Burland (Burland, p. 33) describes it follows: „When the men were not working in the fields, they would sit on the roofs of their homes, spinning yarn or weaving blankets, during which time the women plucked and made pottery.

The relatives of various tribes often organised large hunting events across the plains in former times and, according to Schmieder (Schmieder, p.311) continued to go on“...joint hunts for antelope in the second half of the previous century”.

Today hunts are still conducted which have retained mostly a religious character. The Hopi clans capture eaglets (approximately one or two per clan). Sometimes all adults, both men and women, travel down the Mesa and into the desert in order to partake in the traditional hunt. The women drive the wild game using shouts and waving blankets towards the men: these are mostly hares, rabbits and rats that, in former times, were mostly killed using bow and arrow, spear throwing(see fig. 1) and a form of boomerang made of wood (see fig. 2). This last weapon is only used during the ceremonial hunt.



**Fig. 1**



**Fig. 2**

Now they are familiar with the rifle. The neighbouring ‚Zuni‘ organize a traditional hunt after the corn harvest. They stuff corn cobs into the mouths of the rabbits to comfort their souls. Only then are they skinned and served. The skins of the animals are still used to day to make clothing and blankets.

Today, this sense of belonging takes on different forms among the clans so that, for example, the clans are prepared to help each other during their daily work. This is in no small way attributable to the connection and organization of the clans.

The clans are heavily regimented: individual attempts to stand out are not tolerated, the interests of the community do not work to drive the individual, but rather the well-being of the whole settlement.

C. A. Burland (Burland, p. 36) provides the following example from the life of the Hopi  
„During competitions, those who always won had to leave the event so that the competition would not be soured for the others. ...And so it came that in a ritual for the treatment of an ill

person, the well-being of all was prayed for, as well as the fertility of the land and protection from plundering nomads.

These remaining traditions are the picture of “self-organization in closest relation to tribal conventions. For the Pueblo settlements (Zuni, Acoma, Iseta among others), the division of an administration into a civil and theocratic body is truly characteristic.

## **1.5 Political conditions**

Civil administration was founded during the Spanish occupation. It consists of a governor, the *Gobernador*, his representative and a row of civil servants. These functionaries are voted in by the married men of the settlement. This is an internal matter of the settlement. The governor acts as the middle-man between clan and the US government, as well as having many other tasks. He decides on the constitution of the ‘Office of Indian Affairs’, governs negotiations in matters with the church, has the role of a judge, has an observatory role over the irrigation systems, controls the school system and the flow of visitors (the Pueblo native Americans are visited by many tourists). It is also his right to set taxes for useful common purposes and to demand taxes from non-natives; he also has the right of disposal over property and land.

Westermann (Westermann, p. 299) provides an example of the governor’s office: „In the Pueblo settlement, murder is punished in the form of financial reparations, or by detention in the prison of Santa Fé. Any individual who provides information about religious customs will be whipped by the governor or buried up to the waist.”

This native-Indian administration creates a wall of protection against the intrusion of the white man but is, however, the tool of the priesthood. While the civil administration ensures smooth negotiations with the American authorities, the handling of internal, political and religious affairs in the Pueblo village is managed by the priesthood. This council sets the tone: it has an enormous influence on the process of selecting civil servants. This ancient governing body has a priest chieftain at its peak (the sun priest), who is assisted by warrior chieftain (bow priest), who are both considered executives and can carry out punishments, due to the fact that war efforts are no longer significant. The members of the priest council are chosen according to a certain system so that the first representative of the priest chieftain is always his successor.

## **1.6 Religious conditions**

Religion in the Pueblo region forms the majority of all ceremonial activities. The entire religion is a defining part of culture for this agricultural people. The Kiva, the men’s house, is considered to be the cult room where secret rites take place. Sometimes the women are allowed to enter the room as spectators.

Apart from a bench made of stone for the spectators of the “Sipapu”, the Kivas also contain a small, round cavity in the ground, normally covered up, that represents a whole into the earth from which the tribes of ancient times ascended from the underworld. The altar is situated behind the “Sipapu” as a wooden, painted backdrop. A sand painting is placed in front, surrounded by holy receptacles.

The imagination of the Pueblo native Americans is primarily concerned with the growth of the crops through the sun and rain. Because of this, the forces of nature play a significant role and are symbolized by magical acts. “Rain is obtained by smoking the holy pipe (creating rain clouds), the painting of rain and lightning symbols and through the enactment of a man-made

storm with cutting shears (lightening) and wood (thunder) at the big ceremonial footrace during the festival of the snake. (Buschan, Bd. 1, p. 152)

During this festival the members of the „Snake Society“ dance with a rattlesnake between their teeth. The snakes symbolize the lightening, and are considered ‘rain animals’. Furthermore, there is the highest God of the Heavens, the “Schotokinungwa”, the Sun God or “Tawass” whose wife is the earth female ((Kokyangwuhti = spider woman). Other Gods are the God of rain (Omauöh), the God of corn and fertility, the spirit of water (represented by a horned or feathered snake).

The birds, especially the eagle, also have an important role for the Pueblo- native Americans. The last and lowest demons are the Kachinas, that are thought of as the souls of all possible life beings, also as mystical ancestors.

These forms control the cult of the Pueblo tribes and are represented by small wooden puppets that are given to the children as presents so that they can learn about these beings and their typical characteristics. Religious festivals are celebrated in the first and second half of the year. The latter lasts for approximately nine days, from which eight of these days take place in the secret rites in the Kivas. On the ninth day the public part of the ceremony takes place. Wooden pictures of the holy Gods are placed at holy sites. Masked- and Kachina dances take place. The actors of these demons, members of the male union, also dance with masks. Their masks have the same features as the wooden puppets that embodies the holy Gods.

The ancestral spirits or Kachinas remain beneath the people for six months every year. At the end of January during the new moon, they leave their dwelling (behind the clouds or near to the Grand Canyon) and come to the natives as human beings.

They come dancing to the settlement, accompanied by the noise of their rattles, whistles and drums, and give out crop seeds and water. “These masked dances were the dramatic enactments of ancient events.” (Burland, p.38). The drive continues until all Kivas have been visited. At the end they disappear into a specially made sanctuary. By this point they should have contributed to the fertility of the land and the well-being of the inhabitants. Thereafter, the seed-sowing can begin. In July the Kachinas return to their realm of the spirits of the dead, at which point a large concluding festival takes place.

Some families keep a bird on the roof of the homes; he is fed and then one day strangled: His soul should go to heaven in order to report about the suffering of the living that should soon be alleviated. The carcass is buried in the graveyard and its feathers offered to the Gods or used for festive head attire. The eagle, for example, has an important position. He should represent the dead of the tribe who return to the village in this form. The captured eaglets are carried home in a cage and given names as clan children, and even receive Kachina puppets. When the eagle dies after reaching an old age, it is not buried in the ‘eagle graveyard’ but rather in a corn field. He should bring a good harvest with his magical powers. In this way, an intimate connection exists between cult and farming.

## 1.7 Economic conditions



**Map Nr. 3: The main native cultural areas. The shaded area = The cultural area of the Pueblo native Americans.** (Schmieder, Part II, p. 38)

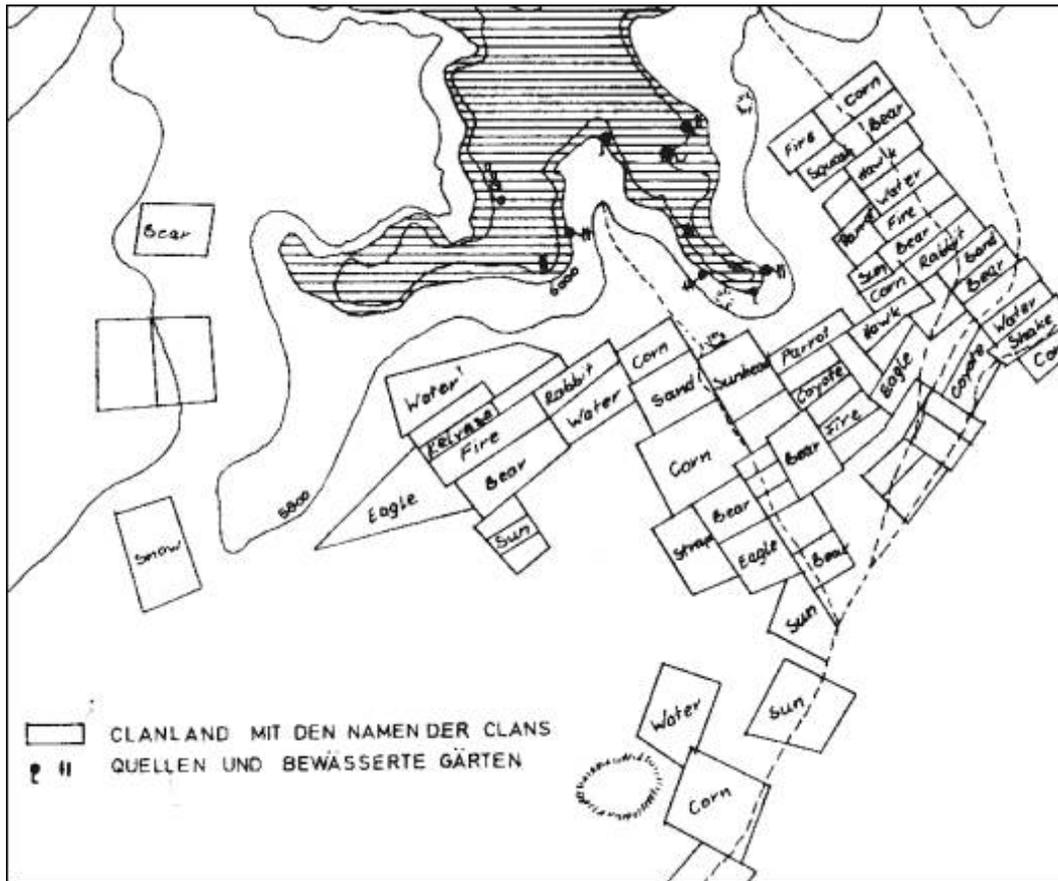
Originally, the Pueblo native Americans only kept a dog and a turkey as house pets. They took on house pets of the 'old world' from the Spanish, among others:

Sheep, goats, cows, donkeys, horses, chickens and pigs. Just as with the Navajo native Americans, the sheep form the main source of wealth by the sale of wool and lamb.

According to Westermann (Westermann, p.285), the cows were still not being milked in 1931, but rather only kept for meat.

Land cultivation plays the most important role with this farming community.

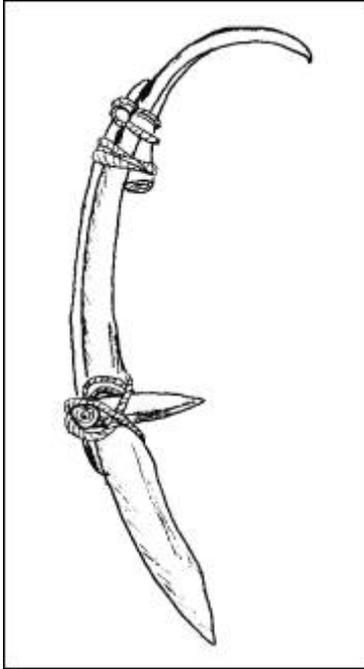
The shape of the farmland is governed by the landscape and climate. Cultivation is only possible by way of intensification, e.g. artificial irrigation, the protection of the hillsides against a scouring of the terrain. Everything contributes to a terracing of the landscape and small strips of land that climb the hillsides in a step-like fashion (see map Nr. 4).



**Map 4: Picture of farmland of a Hopi village** (Forde, Bd. LXI, p. 357-405)

The intensification of farming was only achievable through the use of advanced technology. The terraces have to be supported by dry walls and the dryness must be fought. And so the Pueblo native Americans have incorporated a well-developed technique of stone-processing and often artistic canalization systems. Some purified canals could be used by the white man again. At the beginning of the 16<sup>th</sup> century it is possible that, in the middle of the Rio Grande, 10,000 acres were artificially irrigated. A further advanced method can be noted in the use of human faces for fertilization.

The men and not the women (a sign of the significance of farming for these native Americans) use very primitive farming devices such as wooden digging sticks and small spade-like boards. An important improvement is the use of a digging board with a bent, tied-on handle to strengthen the lever movement and, in some cases, special shoes made of hardwood (see fig. 3).



**Abb. 3**

Even though the plough has found its way into farming almost everywhere, the traditional farming methods of the Pueblo-natives still find use: wheat was, for example, cut using a sickle and was threshed using horses.

Alongside the old native cult plants such as corn, beans and pumpkin, crops such as wheat, barley, alfalfa and potatoes are also grown. They also cultivate cotton, which “has proven itself as a cross between cult cotton of old, with American wild forms”. (Dittmer, p. 201)

The economy has often been heavily effected by drought. Many of the Hopi died of starvation, particularly in the almost rainless years of 1775-77, during which this people almost disappeared from the landscape. Schmieder (Schmieder, p.354) provides the following figures: from 7494 individuals in 1775, the tribe was reduced to just 798 by 1778. He estimates the actual number of Hopi to be about 2800.

The piping of water via artificial dams made of adobe (lime bricks) and the watering of certain plants by hand is not sufficient to protect the Pueblo-native Americans against starvation. Their domestic economy has adapted to these conditions.

The Pueblo native Americans therefore ensure that a level of food reserves is stored to last for a whole year, in the event of an extended period of drought: baked corn is stored on stone after having been baked in a half-ball-shaped oven outside. This form of bread is a very late cultural-historical invention, and is a symbol of highly developed agriculture.

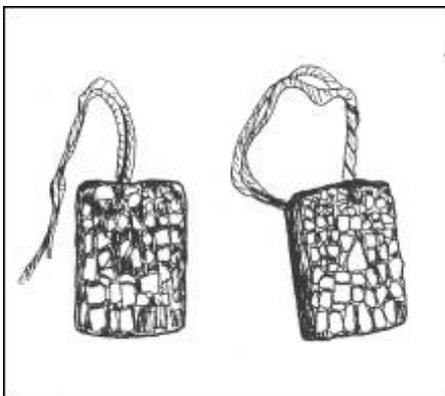
A woman not only has control of the oven located outside, but also of how the house is set up inside. A bed runs along the whitewashed walls, the grindstones (several in a row) are placed in circles around the flagstones. The hearth, introduced by the Spanish, the pots and pans, and the clay water jugs are all very interesting. The corn is ground on the grindstones and the flour is either stored in these clay jugs or cooked until it becomes a pulp, and then roasted on flagstones to form a cake, or baked in the dome-like oven to make bread. One of the many dishes for the Pueblo native Americans is what later became known worldwide as “Cornflakes”.

Nourishment mostly features cereals and less of the meat of animals captured or reared.

Next to the utensils that are readily available for the preparation of food, the loom still has an important place today: weaving was an activity for men. The loom consists mostly of two heavy beams that are attached to the roof beams. It is often wider than 1,20 m and is fitted with roll-like thread dividers. Burland shows this in his book “Naturvölker gestern und heute” (Primitive Peoples Then And Now) on page 40, a drawing from the 19<sup>th</sup> century that shows a Hopi woman sat on her weaving chair.

From the last two points, customs, conventions and economy, the art or rather the people’s art of the Pueblo native Americans is closely connected to the practical daily life.

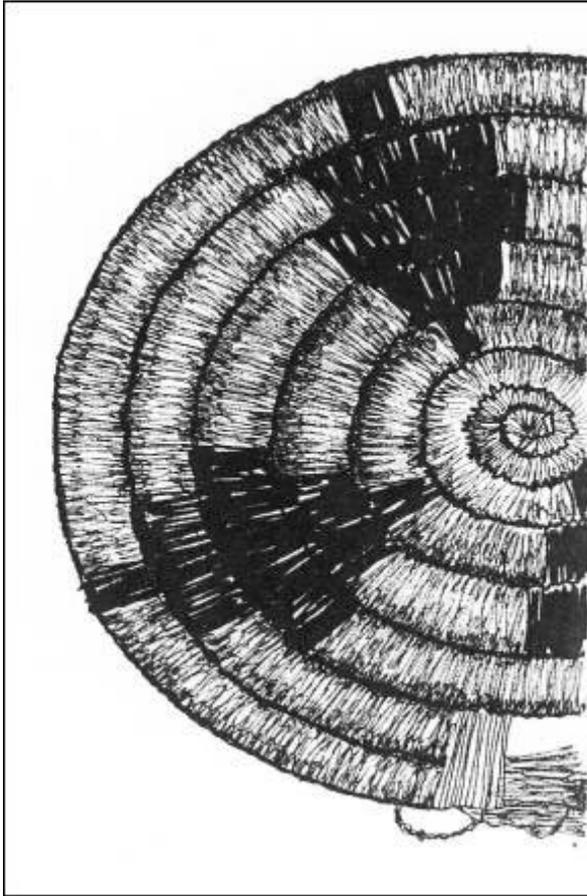
Referring to the specific hairstyle of the Pueblo girls, earrings made of small wooden discs with turquoise stones are always worn in addition (see fig. 4)



**Fig. 4: Earrings**

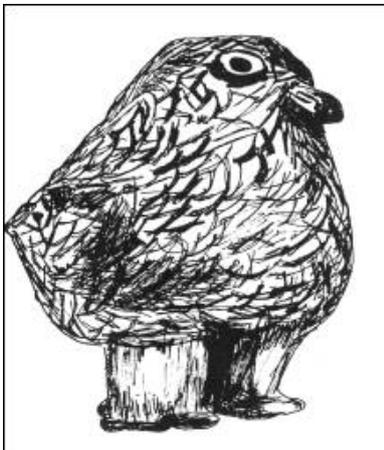
Furthermore, the Pueblo natives, like the Navajo, make silver jewellery made from American dollar coins.

The art of these natives is also closely connected to the economy. What remains impressive is the art of braiding, pottery and weaving, all still in existence. The art of braiding is still flowering. The natives make brightly coloured patterned plates made of spiralling yucca tree fibres or of wicker mesh (see fig. 5).



**Fig. 5: Hamper plate**

The pottery products made by the Pueblo women are particularly beautiful and even. First of all, a stringy, heavy lime base is made using lime, sand, water and ground, old pot fragments. Then a newly formed or old pot base is used and placed on a flat under surface. The woman then rolls out the clay into coils that are then laid on top of each other in spiral form. Using a pumpkin shell, she smears the coils flat, that are then polished using a pebble. The finished receptacle is then painted using a 'brush' that is usually nothing more than a chewed twig. The black paint is drawn from the manganese-rich, crushed stone, which is then filtered with water. Red is made from ferric oxide-rich limescale, white from kaolin, limestone and gypsum. Then the pot is left to dry and is later hardened in a wood fire.

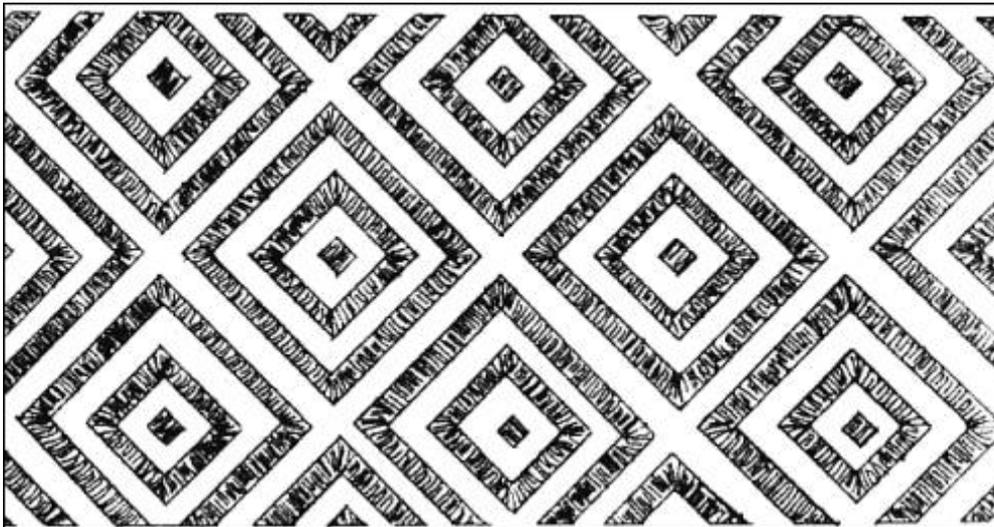


**Fig. 6**



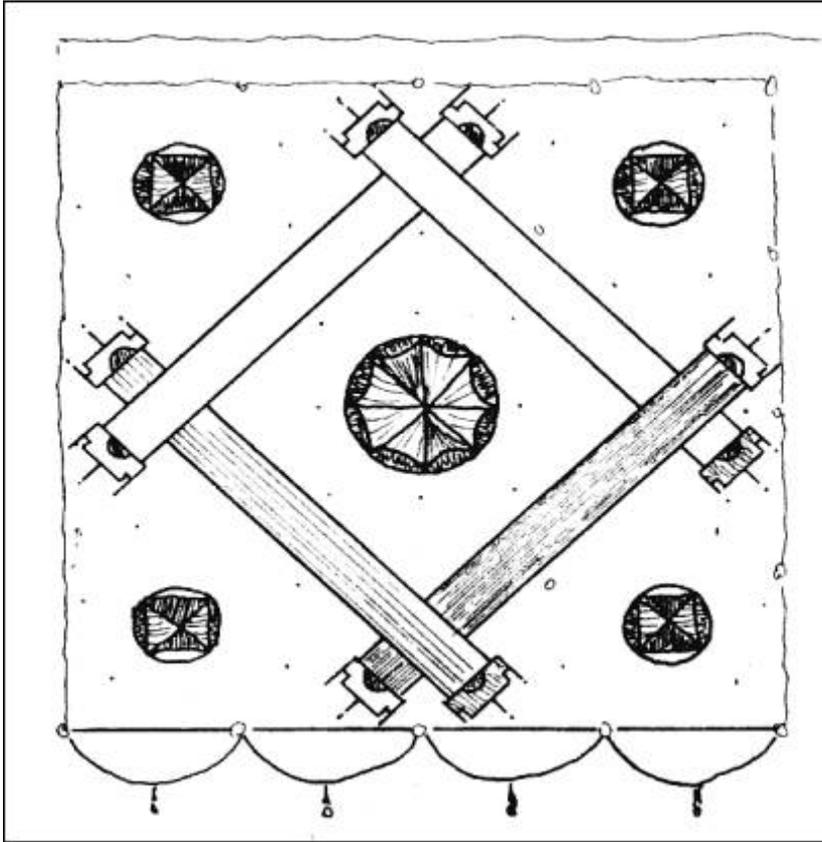
**Fig. 7**

Weaving is also an old art form of the Pueblo native Americans. In former times, cotton was woven, but the modern day natives (such as the Navajo) are famous for their richly patterned bright blankets made of sheep's wool. The spun thread is later boiled in various plant saps, that create either red, brown or blue colouring. (See fig. 8.)



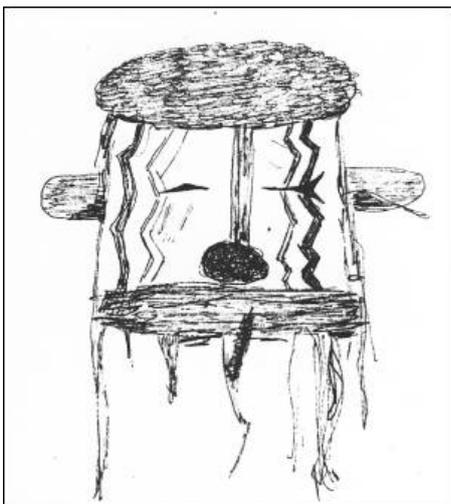
**Fig. 8**

The Kiva, the mystical room of religious celebrations, is also a site in which the art of the natives developed. Regardless of whether it is round or square, this subterranean room and its walls are covered with paintings. They depict scenes from the myths of the tribes. The sand paintings placed before the altar are made of sand with various colours. They show, for example, symbols of rain clouds and lightening like in front of the altar of the Antelope priests near to Oraibi. (See fig. 9)



**Fig. 9**

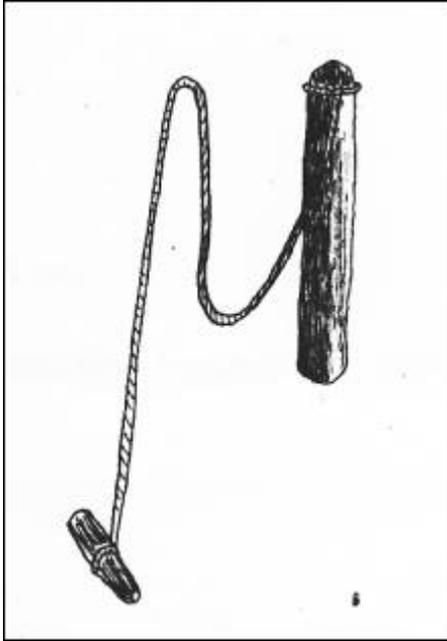
The ceremonies are marked by dances that are carried out by masked men. Sometimes the intention is to bring on rain: this is the 'snake dance' already mentioned, where the men dance with a rattle snake. For approximately fifty years, many people have been coming to Oraibi to admire the snake and Kachina dances.



**Fig. 10**

The masks (see fig. 10) take on the form of medieval helmets and consist of leather bound netting. They are painted with special symbols (zigzag lines represent lightening forks). Some dancers also wear cotton wigs that represent clouds. Others have their hair in the form of snakes (the symbol of lightening). These figures, presented in the form of wooden dolls, draw in the tourists and provides a source of income for the natives.

As with all primitive peoples, music and dance remain closely connected. Apart from the previously mentioned cutting shears and wood (see fig. 11) the dancers also carry flutes, pumpkin rattles (see fig.12) and strange scratching instruments that can be found in Old Mexico. Alongside their people's art, their architecture is characteristic.



**Fig. 11**



**Fig. 12**

## **2. Description of the House**

### ***Definition and Origin***

The Pueblo native Americans have developed building forms that find their counterpart in Europe. The houses were always formed to create one big, unified entity, that took on different forms. All Pueblos had several floors and partially formed terraced rows of villages. Soon they found themselves around an inner courtyard and were organized into pyramid forms. A single construction of this type, built from stone and adobe (limestone bricks) forms one Pueblo. This form of group settlement was already in existence during the Spanish colonization, in the 16<sup>th</sup> century, and it is common knowledge that the influence of Mexican high culture and the dry climate had an profound effect.

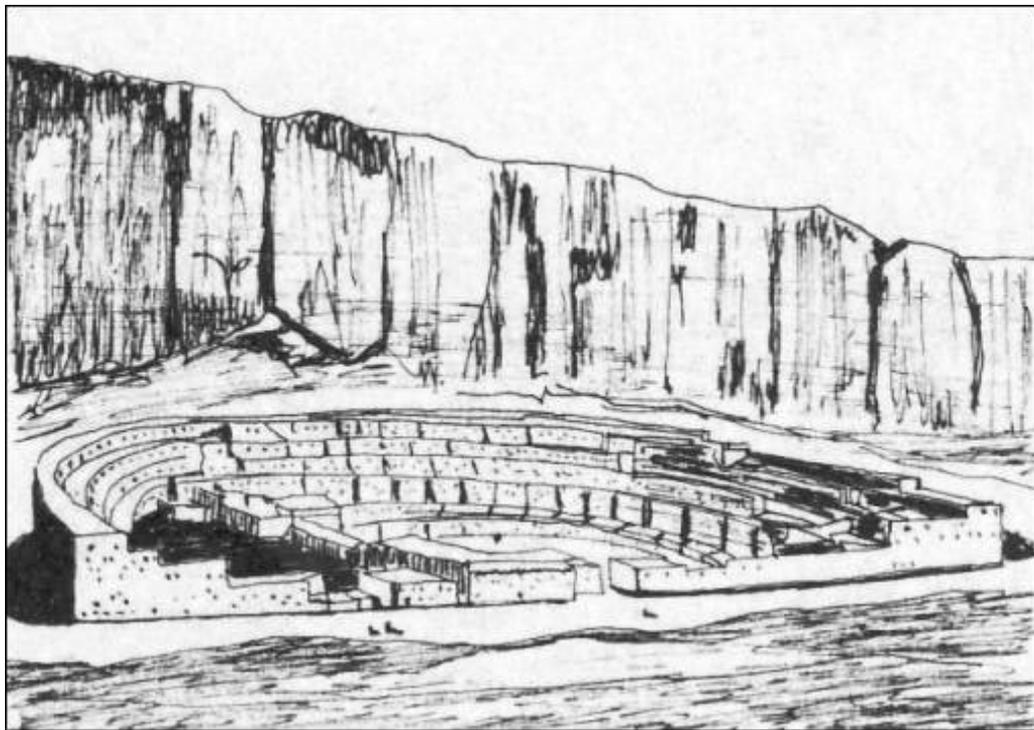
Passarge (Passarge, p. 356) mentions, according to Krickeberg, the following development in house construction:

1. The oldest house construction is characterized by coarse walls of flagstones and lime cement. The houses are quadratic with 6 to 12 rooms. The flat roof consists of beams, twigs and lime. The Kiva is already in place.

2. Ca. 900 B.C.: the florescence of Pueblo culture. The 4-5 terraced areas touch the valley ground.

3. In the Mesa – the area where people live in dwelling holes (emptied cavities in the cliffs, also termed by the Americans as “cliff dwellers”).

The bombastic buildings of the Pueblo-Bonito (see fig. 13) in New Mexico are also very impressive, with approximately 500-600 rooms and 25 circular Kivas. This constructional type has the character of a fortification, as a line of defence against nomadic, predatory neighbouring peoples like the Schoschonen, the Apaches and the Navajo native Americans.



**Fig. 13: Pueblo - Bonito**

4. Around 1200 A.D. the outskirts regions are relinquished due to defence problems and the Pueblo native Americans fall back to the little Colorado and Rio Grande where a new blossoming of culture succeeds, largely thanks to traditional Mexican cultural commodities. At the beginning of this epoch, the largest and most famous Hopi- city “Oraibi” was founded. (See map 2)

5. After the forceful arrival of the Spanish (around 1540) they begin to incorporate new elements, e.g. adobe (air-dried bricks). After the uprising by the native Americans, they succeeded in returning to their current place of inhabitation.

At the time, 70 areas with over 20000 inhabitants were counted. Today, there are 26 areas with 9000 inhabitants. (See map 5)



**Map 5: The Pueblos in the upper Rio Grande del Norte** (acc. Schmieder, p. 309)

- NOCH BESTEHENDE PUEBLOS
- ▣ PUEBLO - RUINEN
- SPANISCHE SIEDLUNGEN

Still existing Pueblos

Ruines

Spanish Settlements

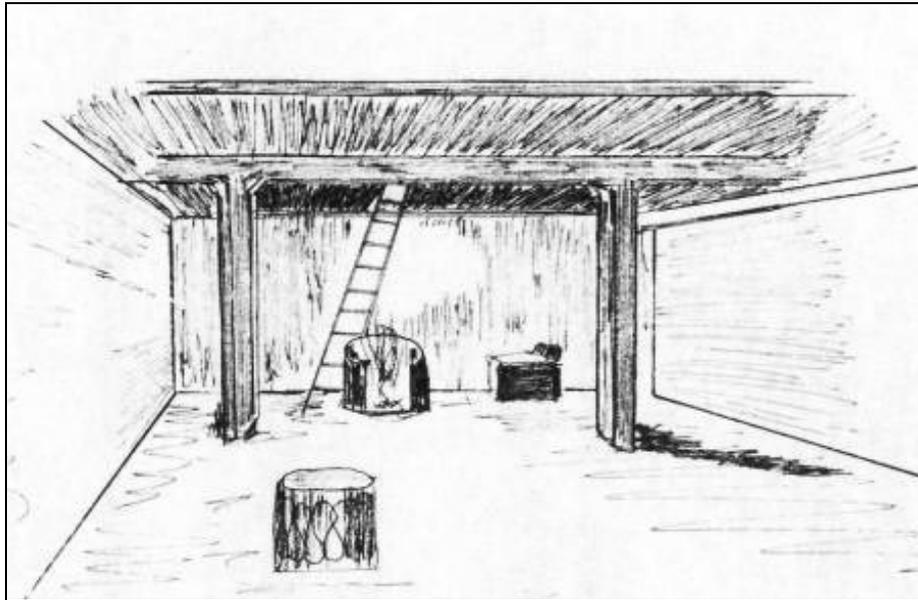
### The Communal House

The building materials for this impressive construction are withdrawn from the natural sources of the surrounding environment.

A type of mortar is prepared using lime, sand and water. With this procedure, the limestone bricks are produced (first air-dried, and then baked according to the Spanish influence). In addition, wooden beams and brushwood are used. Lead has long been known. Adobe is correctly located and sourced in the dry regions of the planet, where its uses are very well known.

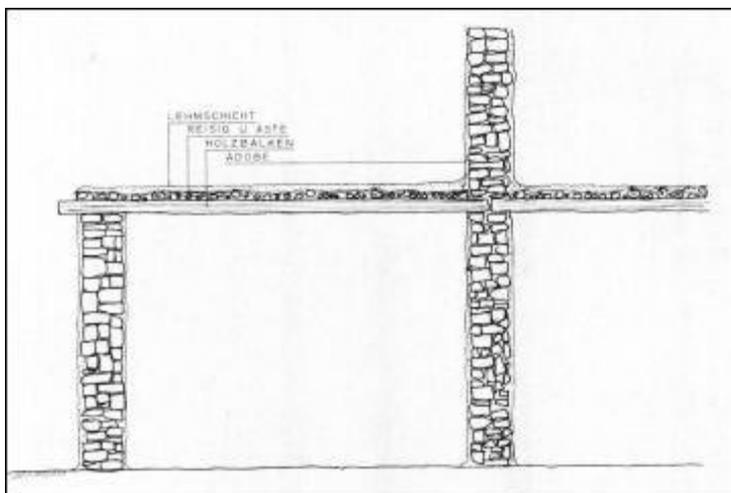
The planning of the house building is the business of the clan elders who then determine the number of rooms and floors, as the building of a communal house is a strenuous task that requires a certain deftness and a lot of experience. The floor is cleaned in order that an outline form of the lower floor can be drawn in the sand. Hereafter building work can be started. After the women have created the mortar, the base bricklaying can be executed to average

male height. Thereafter, wooden beams (made of thin log wood) are laid very closely together. The men lay mats on top or brushwood for an underlayer for the thick layer of clay. (see fig. 14).



**Fig. 14**

This type of construction of the ceilings and roofs is characteristic of the dry zones and low precipitation regions of the earth. With that, the ceiling of the ground floor and the flooring of the first floor are now complete. Beneath the first floor lies the most important part of the house: the subterranean circular or square Kiva that is only accessible via a hole in the ceiling. (See fig. 15)



**Fig. 15**

The cover of this round Kiva spanned a diameter of 19.30 metres (Pueblo-Bonito) even in former times. The ground floor, for reasons of defence, was originally built without windows or doors, but one could access this floor using an opening in the ceiling which itself was reachable with the help of a ladder. During an attack, the ladder was simply drawn up and the women escaped into the highest rooms. The European influence can be seen in the construction of wooden doors and windows, that are evident in the ground floor today. The next levels are constructed in the same way, however one room further back per level, so that a stair-like constructional form is created. (See fig.16: Model assimilation).

The facades are thickly coated with clay. “Roof surfaces of this type can cope with the heavy but infrequent down pours of rain in the winter months, but they are not allowed to be set at any great angle, but rather just enough for the rainwater to trickle off without the risk of losing the layer of clay (Völkers, p. 18)

More often than not, a flat channel in the shape of a roll or a low parapet appears. Although such a roof develops cracks and tears during the first summer, they close again during the autumn through the smelting together of the clay. In Pueblo native houses, any damage is immediately repaired. The chimneys are formed by a stack of clay receptacles placed on top of each other (without any foundation), which no doubt have their origins in Spanish influence. The half ball-shaped ovens stand in front of the Pueblo, and wooden frames which are used for drying out grain. (See fig. 16 Model assimilation).

“With its thick clay roof the house remains relatively cool during the day, and in the evenings the roof can be used as a communal area. In this way, the flat roofed house is particularly adept to the extremely dry and warm climate, and can also be used in the dry winter periods as well. In the arid regions of America it sometimes occurs with the Pueblo native Americans, whereby it is mostly limited to the old world and its main area of expansion is in the Oasis states. It forced its way into other areas with limited annual rainfall and is also easily found in southern Spain and Crete. It also appears in India – the dominant use of clay frequently leads to a limited permanence of the houses; they remain as ruins – particularly in the Orient – while another house was built at a new location.” (Schwarz, p.63).

## **Postface**

In spite of the Conservatism, it cannot be prevented that the Pueblo native Americans find themselves exposed to the intrusive forces of civilization in their cliff dwellings. This is the goal of the Americans. The native American should be reared to be a farmer. How should this be achieved? The Indian Reorganization Act” (1934) stipulates that the tribe should, once again, become the owner of its land. Furthermore, an ‘agra loan’ is given to stimulate the rebuilding of the native American economy. The native Americans still have a deep sense of mistrust against the white man and chose to remain situated in the Mesas. The American government is trying to increase its influence on the Pueblos by allowing the construction of schools nearby (like, for example, in Acoma), which is visited by some of the children. With each new generation, more and more understanding for the traditional customs is disappearing. The ‘rain wizard’ will lose his significance as the Americans are building irrigation systems that contribute to the supply of water. Two political parties are heading in two very different directions: the conservatives continue to aim for total isolation while the liberals are prepared to accept outer civilization. These old, invigorating traditions are going to disappear in the face of American civilization. Whether such a transformation is really desired by this peaceful people, remains unclear.

**Model assimilation**



## **Bibliography**

Weyer, E. jr.:

Primitive Völker heute

Bertelsmann Verlag 1959

Völkens, Otto:

So wohnen die Völker der Erde

Cassianeum Verlag.

Donauwörth 1949

Burland, C.A.:

Naturvölker gestern und heute

Otto Maier Verlag

Ravensburg 1965

Buschan, Georg:

Illustrierte Völkerkunde

Bd. I.; 3.A.

Vergleichende Völkerkunde - Amerika

Strecker&Schröder Verlag

Stuttgart 1922

Schmieder, O.:

Die Neue Welt

Teil II - Nordamerika

Keysersche Verlags-Buchhandlung.

1963

Westermann, D.:

Die heutigen Naturvölker im Ausgleich mit der neuen Zeit

P. Enke Verlag

Stuttgart 1940

Dittmer, E.:

Allgemeine Völkerkunde, Formen und Entwicklung der Kultur

F. Vieweg Verlag

Braunschweig 1956

Passarge, S.:

Geographische Völkerkunde

Safari Verlag

Berlin 1951

Schwarz, G.:

Allgemeine Siedlungsgeographie

Walter de Gruyter Verlag

Berlin 1961

Forde, C.D.:

Hopi Agriculture and Land

Journ. Roy. Anthr. Inst., Bd LXI

London 1931

