5880

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THE HOPI METHOD OF BAKING SWEET CORN*

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ONE of the most interesting economic activities of the Hopi is the baking of sweet corn (*dupeve*) in old-fashioned earth ovens. As usual, the economic factor is not the only one involved, for a good deal of ritual is interwoven through the entire procedure. Baking takes place in mid-September, when sweet corn matures in northern Arizona, and is performed outside the village close by the field where the crop was raised. The farmer and his wife make preparations to spend two or three days away from home, and several relatives or congenial friends are invited to accompany them. A sheep is generally slaughtered to provide food, and bedding and other necessities are loaded into the wagon which conveys the party to the fields. A happy picnic atmosphere prevails from the very outset in spite of the fact that a good deal of hard work is to be done. Thus a man plans to leave the village early in the afternoon so that he may reach his destination before sunset; and immediately on his arrival he must unhitch, water and hobble his mules or horses, and then clean out the baking pit before he is ready to sit down to supper.

Early the next morning husband, wife, and most of the other members of the party begin to harvest the sweet-corn crop, while one of the women looks after the camp and one of the men starts a roaring fire in the baking oven. Among the Hopi these ovens are built in three parts (see Fig. 1). The main section (*gösi*), in which the actual baking is done, is a cylindrical pit about three feet in diameter and some eight feet deep. About eighteen inches away there is a second excavation, shaped like a bathtub and about three feet wide, about five feet long, and six feet deep. This part is called the nose of the oven (*yokaha*) and is used only for ventilation. Between the two

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HP1974

large pits there is a connecting tunnel about eighteen inches long, at a depth of approximately four feet, sloping upward to improve the draft.

Throughout the day the man in charge of the oven keeps a blazing fire going in the main pit, and from time to time the harvesters bring loads of corn, which are heaped just east of the oven. When the entire crop has been gathered and piled up beside the firepit the owner examines the walls of the *gösi*. If they have turned grayish white he decides that it is time to begin baking, but before starting operations he must perform a bit of prescribed ritual.

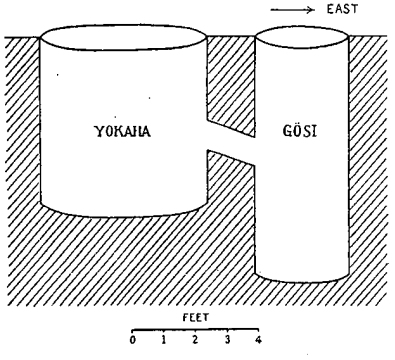

FIG. 1. An earth oven for baking sweet corn. The actual baking is done in the *gösi;* the *yokaha* is used only to create a strong draft

While the rest of the party stands about and chatters, the farmer takes some homespun cotton yarn and cuts a string that measures exactly three times the width of his hand. Two thirds of the string he doubles and twists together to form the so-called legs (*hokya'ata*) of his prayer offering; the remaining third is left to form what is called the breath (*hik'si*). At the juncture of the doubled and single parts he ties together an eagle feather and a feather from a little yellow bird (*sikya'tci*), which is said to be present throughout the corn growing season, from June to September. The eagle plume is supposed to carry the owner's prayers speedily to the sky gods; the yellow feather, to make the corn assume the proper color when it is baked. (There is a standing joke, corresponding to our jests about a young bride's biscuits, that a man's wife will leave him if his sweet corn does not bake properly.)

As soon as the feathers are tied in place the owner's wife hands him one of the largest and best ears in the crop. This ear is called "mother" and is now to be converted into a prayer stick (*paho*). As

the first step in this process the farmer carefully pulls the green husks part way down from the top, places the tied feathers against the kernels, and runs the breath line up to the tip of the ear. The pulled-down husks are then replaced so that they enclose the prayer offering, and to the outside of the mother ear there are now bound sprigs of a yellow plant called *ma'ovi* and of a gray bush known as *ku'ungya*.[1] These plants are tied in place with a string of yucca, and are included as prayers for good crops, plenty of grass, and other beneficial vegetation. The entire packet is known as a baked-corn prayer stick (*dupep paho*).

Four such packets are made in exactly the same fashion. While the last is being completed the farmer's wife picks an overripe ear which has begun to sprout tassels (*taka'la*) and, nibbling some of the kernels, mixes them with water in her mouth. She then spurts the mixture over the entire heap of corn, which is soon to go into the oven. This rite must be performed by the owner's wife, or by some other female relative or friend, and is considered to be absolutely essential to make the corn sweet, but it is very likely that a fertility motive is also involved.

As soon as the four mother ears have been properly converted into prayer offerings, the owner takes a handful of white cornmeal and makes four "paths" by sprinkling meal from each of the four cardinal directions toward the mouth of the circular pit. One of the ritual corns is placed on each path, and four people stand over them ready to push them into the oven when the signal is given. The owner's wife is usually assigned to the ear on the north path and begins the proceedings by sliding her mother ear into the oven. Then, in the customary ritual order, the other three people slide their corns in from the west, south, and east.

Immediately after the ceremonial circuit has been completed there is a mad rush by the men in the party to toss the entire heap of corn into the baking pit in any order, and as the ears go tumbling down the women hastily chew and spurt more of a mixture of kernels, sprouted corn tassels, and water over everything. Then the connecting tunnel is stopped up, and a lid consisting of several large slabs

[1] These plants have been identified by Mr. Volney H. Jones, of the Ethnobotanical Laboratory, University of Michigan. The yellow plant is a species of snakeweed, *Gutierrezia sarothrae* (Pursh) B. & R. The gray plant is a sagebrush, *Artemesia frigida* Willd.

HP1975

of stone is put over the main pit. The chinks are stuffed with old corn husks and dirt, and over all there is heaped about a foot of loose earth. The corn is left thus to bake all night, and the party disperses to spend the time in rabbit hunting and storytelling.[2]

Very early the next morning, even before daybreak, the owner goes to the oven, clears away the covering of earth and husks, and removes the stone lid. Then, before taking out a single ear, he stands erect facing east, and as the first light of dawn appears he calls out an invocation to the cloud people (generalized deities who represent dead ancestors). *Na nanivak mongwit, itanamu!* he shouts. *Peo nuswisa huvamu! Pai halaikyang kyango!* ("From all directions come, chiefs, our fathers, all together! May you eat with happy hearts!")

As soon as he has completed his invocation to the gods the owner jumps into the hot, steaming pit and begins to throw the baked ears out on the ground. By this time the other members of the party are generally awake, and one or two at a time they come down from the camp to the oven and begin to husk the corn which has been removed from the pit. During this operation care is taken not to break any of the stems, since they are necessary for bunching the corn together later on. As they work, the huskers eat freely of the hot ears, and they are also privileged to set aside as a reward for their labor the choicest ears they handle. Although no limit is set, it is customary for each worker to take only ten or a dozen ears in addition to those

[2] At a cornbake in which I participated in September, 1933, part of the time that the corn was baking was devoted to storytelling. One of the myths recited by my host's father was particularly interesting.

"Long ago there lived at Oraibi a couple whose happiness was marred by the husband's infidelity. The wife grieved constantly over the situation, but when sweet-corn baking time came, she accompanied her husband into the field. While he was busied with the preparation of the corn-mother prayer offerings, she quietly withdrew and began to dress in her bridal garments. Just as it came time to throw the corn into the hot pit she reappeared and called out hastily, 'Wait, wait till I jump in, then you can throw the corn in after me!' Before anyone realized the full significance of her words, she leaped into the oven and was burned to death."

There are two endings to this little myth. In one version it is said that the cornbake was broken up by the woman's suicide, but the other holds that it was carried out to its conclusion in order that the spirit of the dead woman might have the corn that would have been her due had she remained alive. Everyone agreed that the suicide had been performed in this manner to bring reproach on the husband, so that he would never again get the full enjoyment out of baking sweet corn that every Hopi experiences.

which are eaten on the spot. This custom is part of a Hopi convention that baked sweet corn is anyone's property until the moment that it is bunched and hung on a rack outside the house to dry.[3]

As the husking proceeds the workers ultimately come upon the corn prayer sticks, or corn "mothers," which had been so carefully prepared on the preceding day. When these are husked, the inserted prayer offerings are removed and saved by the owner, but the ears themselves are promptly consumed by the lucky finders. As soon as time permits, the owner takes the prayer offerings to his fields and there deposits them a few inches below the surface, with the breath lines extended toward the east.

When the entire content of the oven has been removed and when all the ears have been husked, the baked sweet corn is loaded into a wagon and the whole party starts for home. Upon arrival in the village the corn is speedily unloaded and the owner's wife promptly fills several trays, which are sent to various neighbors. In this way the recipients are made aware of the fact that a new load of sweet corn has just been brought into the village and that their services are requested by the owner's household. As soon as possible, therefore, the women assemble at the house in question, each one bringing with her an awl fashioned from the front upper leg bone of a sheep. With this implement a hole is bored through the stem of each ear, and a string made of yucca fiber is passed through it. These strings are made by knotting two yucca leaves together at the bases, with the thorny tips left free for convenience in threading. About twenty-five or thirty ears are generally bunched together on one string, the entire cluster being known as *hotumni*. The bundles are then hung on racks outside the house to dry in the sun, after which they are stored away for winter use. From this point on they are the owner's private property.

Baked sweet corn is prepared in several ways. It may be softened by boiling, and eaten on the cob, or else the dry kernels are shelled and ground into a meal known as *tosi*. This meal is sometimes eaten plain, but more frequently it is made into a dough called *qömi*. In this form it is a favorite gift on ceremonial occasions, and,

[3] In keeping with this convention all who happen to pass by while the corn is being conveyed into the village are invariably invited to help themselves; and it is noteworthy that the plural form *nunusa* ("eat") is used even in addressing single individuals. This is explained to mean that the cloud people are automatically included in every invitation.

HP1976

when shaped into a large brick and proffered under special conditions by a girl to an eligible male, it serves as an offer of marriage.

The account here given is based on the procedure customarily followed at Oraibi on Third Mesa. In general, similar customs prevail at the other Hopi villages, but there are doubtless many variations in regard to particular details. For example, in describing sweet-corn baking at Second Mesa Beaglehole notes that only two ritual corn packets are prepared and that they are called "Mother Corn" and "Father Corn."[4] When these are removed from the baking oven each worker takes a mouthful from the Father Corn cob, but the Mother Corn is carried back to the village to be shared by the owner's household group. One or two other differences are described by Beaglehole, but on the whole the pattern is the same for both mesas.

There is a good deal of archaeological evidence to support the belief that baking various foods in earth ovens is an ancient and widespread custom among the Pueblos. In fact, in the closing years of the nineteenth century Victor Mindeleff (5, pp. 162–163) came to the conclusion that "most of the cooking of the ancient Pueblos was probably done out of doors, as among the ruins vestiges of cooking pits, almost identical in character with those still found in Tusayan [a former name for the Hopi region], are frequently seen." It should be noted that Mindeleff has reference to cooking pits which were used not for baking sweet corn but for the preparation of a corn-mush pudding known as *pi-gummi*, or *pikami*,[5] but the ovens which he pictures (5, p. 163) are structurally comparable in most respects to those used for sweet corn.

In other parts of the Pueblo range Fewkes found similar pits. Both at Kintiel (4, p. 128) and at Four-Mile Ruin (4, p. 139) Fewkes reported "several cysts . . . which were filled with ashes and charred wood. These are interpreted as suburban ovens . . . [which] indicates that cooking was done in the open, just as is the case with certain kinds of food in modern pueblos." Fewkes likewise noted (3, p. 107) "a cluster of communal ovens" at the ruin of Heshotauthla on the Zuñi reservation. These were built of stone and were constructed with chimney-like flues.

[4] For a summary of Second Mesa procedure in baking sweet corn see Beaglehole (1, p. 44).

[5] For a description of *pikami* preparation see Beaglehole (1, p. 66).

In 1930 Dr. Frank H. H. Roberts (6, p. 44) also found a number of out-of-door firepits near Zuñi. These, too, were lined with stone and closely resemble the *pi-gummi* ovens described by Mindeleff and Fewkes. According to Roberts (6, p. 45), his Zuñi workmen were unfamiliar with the *pi-gummi* type of oven, which seemed strange in view of its frequent occurrence in ruins on their reservation. On the other hand, Roberts notes that "the Zuñi continue to roast green corn, in the husks, in deep pits. . . ."

The Zuñi custom of corn roasting furnishes an interesting comparison with Hopi practice. According to Cushing's account (2, pp. 204 ff.), the Zuñi use a cone-shaped pit somewhat similar in principle to the Hopi ovens, but whereas the latter bake sweet corn the Zuñi are said to bake "such corn as gives no promise of ripening." Apart from this basic difference, the procedure follows a comparable pattern for both tribes. The Zuñi first bring the immature unhusked ears to the oven, where a fire is kept burning all night. Then, before they are thrown into the heated pit, the leader of the activity selects a sturdy corn stalk and two fine ears, which are promptly stripped of their husks. The leader lays one ear against the stalk, and from the other he chews the kernels, spraying the pulp over the entire heap of corn. He then places the bare cob by the side of the full ear and binds both to the stalk. After a brief prayer this offering is dropped into the glowing oven and the rest of the corn is hurriedly thrown in, covered with green husks and stalks, and sealed with a mound of damp earth. When the oven is opened the next day the baked corn is removed, but instead of being husked on the spot, as is done among the Hopi, it is carried to the village, and after being husked in the owner's house is braided in long bunches and hung up to dry.

Many other details, such as the payment of workers and the "gorging" that takes place while the baked corn is being brought into the village, support the impression of close similarity between Zuñi and Hopi methods of baking corn. In the light of all the evidence, therefore, Hopi sweet-corn baking may best be considered part of a general Pueblo pattern which seems to have been operative in the Southwest since ancient times.

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HP1977

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HP1978