A word about manuscripts

Papers submitted to the Lambda Alpha Journal of Man for publication should be typed double-spaced on non-corrasable paper following the pattern established in the American Anthropologist.

All references to literature must be correctly documented with the author's name, date of publication, and the page number, e.g. (Smith 1969:340).

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Imagine it is twilight, the work of the day is accomplished, the comfort of the firelight is drawing you closer to enjoy each other's company with a cup of palm wine. It is a time of relaxation after the evening meal. Children amuse each other with guessing riddles, gradually the friendly chatter subsides when you hear me say, "A story for you".

The Hyena and the Dead Ass

The hyena once had the luck to come upon a dead ass. There was enough meat for three whole days. He fell to with a will and was busy enjoying his meal when suddenly he saw his children coming. He knew their healthy young teeth and growing appetites, and as he did not want to share the magnificent carcass with them, he said:

"You see that village over there? If you're quick you'll find plenty of asses there, just like this one. Only run."

The hyena's children rushed toward the village, shouting the good news at the tops of their voices. And as the tale travelled to all corners of the bush, starving animals crept out - jackals, civet-cats, tiger-cats, all the smaller wild animals - and ran toward the village where a feast of asses' meat was to be found.

The whole morning the hyena watched them go by, singly or in flocks, until in the end he began to be worried.

Well, he said to himself, it looks as if it must be true. That village must be full of dead asses.

And leaving the carcass he had all to himself, he started off to join a band of other animals who were running toward the village. (Guillot, 1966, pp. 88-89)
What you have just heard is an example of a West African folk-tale. It is a short story showing exaggeration as an art in which one of the favorite characters, the stupid Hyena, is shown.

The intent and purpose of this paper is to discuss folklore and its appearance in various tribes in western, central, eastern, and south-eastern Africa.

Folklore is the common orally transmitted traditions, myths, festivals, songs, superstitions and stories of all peoples. The term was first used by William J. Thoms in 1846. The three major folklore areas of the world are: 1) Africa, Europe and Asia; 2) South and North America; and 3) the South Sea region. Each of these areas has considerable folklore unity. Most folklore consists of survivals which continue to have functional value. Sir Lawrence Gomme (1853 - 1916) tried to make the study of folklore scientific and emphasized the historical, ethnological and sociological components. Folklore has come to mean all kinds of oral artistic expression. It may be found in societies that have no writing and it may be found unwritten in a literate society. Originally folklore was the study of the curiosities of culture, but gradually it became specialized as the study of popular literary activities. (Winick, 1968, p. 217)

Today, anthropological folklorists are more interested in improving methods of reporting and analysis than trying to advance theories. They find it quite sufficient to say a number of significant, though unsystematized, things about myths and tales. They show little preoccupation with plot, slight concern with the reconstruction of original localities and little interest in migration patterns of motifs. There is even repugnance for statements about ritual-to-myth
and archetypal origins. Anthropological folklorists do not display any advanced ideas of a system of scientific theory about oral expressive behavior. However they do believe it is now necessary to study all aspects of expressive oral literature. (Jacobs, 1966, Foreward)

Folklore, as presented here, is an oral form of literature. The demand for entertainment during the long dark hours, devoid of modern conveniences such as television or theaters make story-telling an attractive and popular pastime. The environment in which tales are told is just as important as the tale itself. This environment includes the story-teller, the audience, the temperature, the time of day and the season. All are an integral part of folklore in Africa. It should be remembered that there is no right or wrong way, in most instances, of telling a story. It depends on the mood of the narrator, the participation of the audience and the occasion of the story. There is always a dramatic quality in the story-telling sessions which is probably due to the fact that they are generally told at night. Origins are unimportant in the context of this paper.

There are different forms of folklore which will be briefly discussed. In many instances there is no clear distinction as to placing a tale under a particular category, because many if not all stories include aspects of more than one type. Stith Thompson, a folklorist, not an anthropologist, has written a monumental reference work setting forward the basic elements of folk narratives of all kinds. (Thompson, 1964) Although in direct contrast to the present anthropological folklorist as pointed out before by Melfville Jacobs, Malefijt believes cataloging is a necessary prerequisite to
any systematic study. (Malefijt, p. 172) The types of folklore under
evaluation here are as follows:

1. **Animal-Trickster tale**  These are probably the most popular
in Africa. There is always a small animal of high intelligence and
cunning, quite unscrupulous, with great cupidity and gross appetite.
He victimizes a series of fellow creatures, generally one animal that
is his particular prey. He is inevitably larger and stronger than
the trickster, always dull-witted, often earnest and hard working.
People respond easily to trickster's suave arguments and alluring
promises. The trickster is not always depicted as besting an
intended victim. On occasion he loses and is shown as anything but
clever. (Herskovits, p. 449)

Herskovits believes there is an element of psychological and
sociologic significance to be found in the size of trickster who must
employ his ingenuity to best his more powerful adversary. This may
be regarded as a "reflection of African thinking in approaching the
day to day situations a human being must meet and resolve."
(Herskovits, p. 450)

2. **Fairy-tale**  This is defined as a longer narrative, serious
in general, but by no means excluding humor, centering on one hero
or heroine, usually poor and destitute at the beginning who, after
a series of adventures in which the supernatural element plays a
conspicuous part, attains his or her goal. It is essentially
melodramatic in tone and character. There is usually a helper or
two for the hero and a villain or villians. Generally the hero
possesses whatever virtues one may wish for and no mention is made
of possible flaws. There is no evolution of character discernable
in most fairy-tales; the hero is supremely good or clever throughout the story. The virtues are always courage, cleverness, presence of mind, generosity, willingness to listen to good advice, kindliness and common decency. The helper to succeed in the hero's task is important in the story. He can be an animal or person, often with supernatural powers. Sometimes help is given the hero involuntarily such as by overhearing animal talk, or through inanimate objects such as trees, magic rings, a cloak of invisibility, or an inexhaustible money bag. The villain can be near the hero, such as relatives, or unconnected with him until his tasks bring him in contact, such as giants, dragons, ogres, witches, sorcerers or magicians.

There are usually a set of tasks, often three, that the hero must overcome to win the reward, which is always something concrete; a treasure, long life, or the ideal woman. The number two or three prevails throughout the story not only to the characters but also the incidents with a gradual intensification of action. The third is the most dangerous, most valuable, prettiest, youngest, etc. There is generally an absence of death except for the villain and the ending is inevitably happy and successful for the hero. (Krappe, pp. 1-32)

3. **Myths** These stories are intimately connected with religious beliefs and practices of a people. They tell of sacred beings, of semi-devine heroes and of the origins of all things, usually through the agency of these sacred beings. (Thompson, p. 9) They appear in the form of a narrative with a plot; often with style and beauty. As a cultural institution they have psychological and social functions and meanings as well as religious overtones. (Malefijt, p. 172)
4. **Fables** Fables are a highly developed literary form in certain cultures of Negro Africa. They are short stories in which the protagonists are talking animals with both human and animal traits. They always state or suggest a moral (Winick, p. 200). Fables are derived from the animal tale and know only one philosophy—common sense. (Krappe, p. 66)

5. **Legends** Tales that are attached to a definite locality, and therefore are fixed in place if not in time, for they do not migrate. Local legends are tied to the landscape in which they arise, usually to explain some uncommon feature of that landscape. They are generally brief and even where historical events are at the bottom of a given tradition, they only preserve the kernal of a happening. They can be the result of dream experiences or spiritual illusions. They have an episodical structure and can be melodramatic without happy endings. (Krappe, pp. 70, 79, 84) (Thompson, p. 8)

6. **Explanatory and Pourquoi stories** These are stories explaining the origins and characteristics of various animals, plants, or natural phenomena. (Thompson, p. 8) (Walker, p. 83) These are often for children and frequently the explanation seems to be the entire reason for the existence of the story. Animals often play the main roles. They are generally short and the numbers of motives few. (Krappe, p. 60) A **motif** or **motive** may be thought of as the smallest divisible unit of a tale. (Malefijt, p. 172)

7. **Proverbs** Proverbs represent, in their essential form, some homey truth expressed in a concise and terse manner. (Krappe, p. 143) There are many occasions where the proverb is used, but it plays a particular role in law courts much as we cite
precedents. (Herskovits, 1958, p. 57) "It is used with great effectiveness as an instrument in achieving the paradox of plain speaking through induction. It is used to warn, admonish, reprove, guide, praise and encourage. It reflects the deepest-set values of a people, showing the drives that motivate behavior and the controls that regularize the relations of an individual to his fellows."
(Herskovits, p. 451)

8. **Riddles** These are usually limited to children who are encouraged to learn them to sharpen their wits. They are ordinarily presented in the form of a statement rather than a question.
(Herskovits, p. 453)

9. **Merry Tales or Anecdotes** These are short narratives in prose or verse, relating a episodical event or series of events culminating in a humorous situation. (Krappe, p. 45) Merry tales depict ordinary human life. They express elementary simplicity and extreme realism, and have a wider appeal than fairy-stories. The chief characteristics of a merry tale are 1) it is episodical, 2) it is humorous, 3) the supernatural, if occurring at all, is quite negligible and in no way affects its essential qualities, 4) the characters are everyday people facing everyday problems and temptations and 5) wit and satire are important, often making certain trades the object of satirical attacks. They are often disgusting but not immoral.

10. **Ogres, Giants, and Demons** These characters often appear in connection with other mentioned types, but occasionally are put in separate categories.
With the foundation thus laid, we are now ready to examine some specific African tribes and their individual folklore. We will look at the individual types of folklore appearing in each, the relative importance of the tale-teller, the setting and the unique characteristics of the culture that affect their folklore where it is presented. Sometimes what is deliberately omitted from the folktales is just as important as what is included and this will be mentioned whenever possible. We will begin in West Africa, proceed to central, then eastern, and finally to Southeastern Africa.

The Afikpo Ibos, of the thickly populated farming area of Southeastern Nigeria, have tales, proverbs and riddles that make up their folklore. They do not have a mythology explaining the nature of the universe and the creation of man, or poetry per se. There are two principal types of tales. The historic tales deal with the origins and development of the villages, compounds, and lineages; and fairy-tales which have as their characters humans, animals and objects of nature such as the sun, moon, river, etc. Proverbs are utilized as philosophical comments on life, to instruct children or to warn adults against foolish behavior. They also are expressions of group solidarity.

Riddles are employed mainly for recreation. They appear in the form of a tale, in a simple question, and as paired proverbs having the same meaning. In this latter type the first proverb is stated, and the reply is the second.

Example; "Soup in a flat plate cannot be licked."

"A white man's work is never done." (Ottenberg, 1965, p.34)
Moving from the Afikpo to the Yoruba, it is learned that folktales were the only means of transmitting the culture from generation to generation. Oral traditions of beliefs, mores, social attitudes related by the folktales have not lost their importance even with the coming of the British. (Walker, 1961, p. 1) The story-telling sessions are for the leisure after-dinner hours. They are dramatic and musical performances as well as oral ones. The narrators identify themselves completely with the characters of their tales. They use appropriate movements and gestures when necessary to illustrate a point. Musical effect is both haunting and curiously appropriate to the mood and content of the tales. (Walker, p. 4) The audience often participates in the story-telling; they may sing the choruses, beat drums or other instruments to heighten the effect. They will even cheer at the conclusion of a particularly good rendition of a favorite story.

Nigerian folktales are divided into tales of demon lovers, pourquoi stories, moral fables, trickster tales and tales that deal with fertility. The theme of mixed marriages between mortals and other worldly creatures of different kinds are seen in the demon lover stories. The nonmortal mates are often associated with the animal kingdom. These are tales of enchantment where time often has a special dimension. (Walker, p. 79)

The pourquoi stories illustrate folk efforts to explain to themselves the nature of their physical world. They seem intended primarily for children, but could also come close to myths. "Why the Tortoise's Shell is Cracked and Crooked", "Why the Fox chases the Cock", "Why the Sky is So Far Away", "Why the Bat Comes Out
Only at Night", are only several of the stories in this category.

Cannibalism during time of famine in the distant past is re-
flected in animal allegory. (Walker, p. 86) Twins are a justifi-
cation for traditional reverence and appear in many Yoruba stories, but other Nigerian tribes abhor them. (Walker, p. 88) The moralizing tendency is so strong in some fables, they seem to exist solely for that reason, but others exist for other reasons. They are all brief and direct. Tortoise in Nigeria usually assumes the role of thinker whether he wins or loses. From tribe to tribe various animals take precedence for cunning and wisdom. The hare in Southeastern Africa, the spider along the Ivory and Gold Coasts and the Jackal among the Hottentots. Some of the fables are primarily instructive and show that if a warning is ignored, it can be fatal. (Walker, p. 93)

In the Yoruba trickster tales, the trickster appears as a wily and respected planner; a rascal who preys on others and lives by his wits; sometimes he is a simple ordinary person who exploits the opportunities that come his way. Humor and satire are always apparent in these stories. (Walker, p. 99) Escapades of trickster entertain as much as they teach.

The tales of fertility like those of demon lovers, have only one theme. Among the Yorubas the desire for children is particularly strong and fertility is the key to social status, both within the family and the community. There seems to be a very high infant mortality rate. They often get so carried away with the preoccupation of fertility in their tales that even men become pregnant. (Walker, p. 8)

The Limba, who live in the upland rice farming area of Sierra Leone also possess a great deal of unwritten literature. Their
stories are part of that oral literature, as are their riddles, proverbs, occasional historical narratives, and songs that frequently occur in the stories. During long evening sessions these stories are told, usually by men around a fire with vivid gestures and dramatic effects that are admired and echoed by the fascinated audience. In practically all Limba stories there is some element of amusement. Riddles are proposed and songs are sung in the same environment. Proverbs and parables sometime enrich the language of the more noted elders, for these are often used to make a point in some legal discussion. Much of the Limba life is saturated by what is in its own way a literature. (Finnegan, 1967, Preface)

Again each narration is a dramatic performance, depending for its effect not only on the excellence of the narrator's composition, but equally on the details of his delivery which means the gestures he uses, and the active participation of the audience. The subtlety of their story-telling is almost wholly lost when it is read away from the area. So from one point of view the stories of animals or people are only simple stories that are short and uncomplicated, but it is the live performance that give them meaning. Story-telling therefore is a living art, and each narration of the same story even by the same person can be different and unique. The story-teller is the central character who shapes and orders the themes and gives the effectiveness to the enactment of the plot.

The Limba are rice farmers residing in villages where their social life is centered. Even though young men go to Freetown for work and wages, they return to add new interest and themes to the traditional ones. Some of these villages are high in the hills and are reached
by narrow winding paths. The women travel up to the villages many
times a day carrying their water containers on their heads. Their
stories make many references to the cultivation, preparation, cooking,
and eating of rice, and add an extra dimension to their whole
narrative. (Finnegan, p. 7)

Chiefship is an important institution and a frequent subject in
their literature where winning a chiefship is the conclusion and
climax to a story. The exaggerated picture of a chief reflects the
common tendency to exaggerate riches. (Finnegan, p. 10)

The method of wooing a wife is one of the most crucial endeavors
in any man's life, and it is not surprising many stories reflect this.
(Finnegan, p. 16) Relations between husbands and wives are the
frequent object of direct or allusive comment in their literature.
Many tales about the greedy anti-social spider and his wife Kayi deal
with this subject, the spider is constantly trying to get the better
of his wife. The view of women as independent or treacherous in
their role as wives is also a common theme in the stories. The wife
who tricks her husband for love of another man is one of the
conventional motifs. (Finnegan, pp. 16-17)

Like many West African people, the Limba assume the existence of
a single High God. At the same time they lay emphasis on the power
of their dead ancestors. Kanu, as they call God, frequently appears
as one of the characters of their stories. Kanu, as a remote all
powerful and unknowable being, is not at all the way he is shown in
the literature. In the stories, Kanu is a kindly father, or a
seeker of palm wine, or a chief of a magical land. Reference to
the dead are most infrequent in the literature, yet in everyday
existence they are of central importance. (Finnegan, p. 20)

The most common folklore are tales about Kanu, twins, heroes and animals, mainly spider. Morals are not an integral feature of the stories, but merely one of several stylistic devices used to bring them to a fitting conclusion. (Finnegan, p. 29)

Stories of people and heroes offer the greatest range for innovation and variation by individual story-tellers. One of the most common figures here is that of the hunter. He is given special powers for it takes a long time to train to be proficient. He is an important, if somewhat mysterious, person in reality as in the stories. Twins are frequently the central characters, and are commonly believed to also possess special powers. They are always shown as acting together and helping each other. (Finnegan, p. 33)

Limba tales cannot be classified as myths for they do not form any systematic theology, philosophy or mythology. Stories of origins are not taken seriously when they do appear. Even Kanu stories are light, not told at prescribed occasions or are in any way associated with a ritual. What is often described in Kanu or origin stories is a detached generalization about the relation and purposes of present human society.

Animal stories are the most popular, marked by humor and sometimes obscenity. The most common character is Spider, who is depicted as stupid, gluttonous, selfish and irresponsible, consistently outdone by his wife. The relation between him and his wife represent everything that is wrong or opposite in reality. Occasionally Spider is the cunning trickster who outwits larger animals. There are a few other animals with stock characteristics; the antelope, small, shy,
very clever; the goat, also clever; the leopard, dangerous, unscrupulous, full of deceit; the squirrel, clever, who comes to help larger animals; the finch, who appears in the role of diviner; and dogs, closely attached to humans. Most animal stories allude to a moral or are of the explanatory type, and do not seem to be taken too seriously. Riddles are often asked by children. Some analogy of sound, nature, or situation is usually suggested which must be correctly identified. (Finnegan, p. 40) Proverbs are frequently used in the context of persuasion in court.

The tales do not treat such subjects as wars, sieges, great historical changes or long-drawn out events. The tales are short and simple, with brief action, simple plot and little characterization. The topics most used are that of marriage or love, family relationships, position and fortunes of orphans, friendship and cooperation, chiefship, rice, food and eating. Greed for meat is found as an especially funny topic. (Finnegan, pp. 46-60)

The Dohomeans show many similarities to the Afikpo, but "offer a striking example of how each society must be studied in terms of its own particular orientation;". (Herskovits, 1958, p. 14) They have two categories of folklore; history, or ancient lore which are true stories, and tales, which are about things that never existed. To a Dohomean, life is based on history. Under the history category there are: 1) myths, comprising stories of the dieties and the creation of the world and its people; 2) clan myth-chronicles, which tell origins of families or clans and their adventures including explanations of ritual behavior, food taboos and positive sanction; and 3) verse sequences, which usually are sung and composed by
professional verse-makers for the purpose of memorizing genealogies and events that have been incorporated into ritual or law. (Herskovits, 1958, p. 17)

Tales are classified as: 1) divination tales; 2) hunter stories; 3) enfant terrible stories; 4) "Yo" stories; 5) tales of women; 6) explanatory and moralizing tales; and 7) transformation tales. Here again the narrator is all important. He sets the stage of characters and the task before them; the end of the tale describes it. Moralizing tales are always omitted from funeral sites, for they believe only a fool would moralize the dead. (Herskovits, 1958, p. 25)

In the divination stories it is tradition that all of them come from Fa, the personified system of divination. "There is symbolically an interesting tradition about the vast number of myths and tales that are told. It is said that each distinctive tale represents a year of human existence on earth, and only after all the stories that can be used for Fa divination are exhausted will the world come to an end." (Herskovits, 1958, p. 26)

Hunter is similar to the Limba interpretation. He has knowledge of magic, spiritual helpers, and extends frontiers of the world by bringing back knowledge of herbs. He is also a scout during wartime. (Herskovits, 1958, p. 28)

Infant terrible stories have to do with actions of superior people, with knowledge of the supernatural who often avenge wrongs done to them. Twins and orphan stories are common in this group. "Yo" is the protagonist of the humorous tale. He symbolizes the impulsive, gross, greedy and gluttonous. He is always laughed at, but never despised as is hyena. The theme in these tales is usually
his insatiable appetite, but also of hunger anxiety which is often prevalent in Dohomean reality. The stories of women stress plot and moral. Tales of the loyalty of friends or the opposite bring emotional satisfaction. Jealousy, fraternal rivalry, hypocracy and intrigue, faithlessness of women, and love are other frequent themes. Stories of Legba, the trickster-diety, are very common. He may be thought of as the one who "loves mischief, knows no inhibitions, recognizes no taboos and dares to challenge injustices." (Herskovits, 1958, p. 36) It is perhaps the trait of not being cowed by those in power that endears Legba to all Dohomeans. Very rarely is he duped.

Riddles play an important part in the folklore. The people especially enjoy the play on words that are so important in everyday communication. One form of the riddle, called conundrum, is attributed to professional story-tellers, and can be very long. Wagers were once made at the king's courts on the outcome of guessing contests. A period of riddling precedes all story-telling and has the special function of a memory device for children. It is characterized by exaggeration and by reference to the grotesque, the incongruous and the forbidden. (Herskovits, 1958, p. 55) Proverbs phrase the philosophy of the Dohomeans and are never used by children to press a point.

Again and again the stories stress the idea that one must be discrete at all times, and not overbearing even if one has many possessions. Social conformity is a central theme and insights into the political order and structure of power can be seen. (Herskovits, 1958, p. 79)

The Hausa have a picturesque legend of their origin. It relates
how the prince of Bafhdad made his way to Daura, slew the monstrous snake which lived in the well and terrorized the townsfolk. He was rewarded for this deed by being made the consort of the queen. Their children and grandchildren became the founders of the seven Hausa states. It is possible this legend shows the peaceful union of immigrant peoples and the indigenous tribe. The folklore seems to belong to two different periods of history, that before 1500, and that after 1500. The animal and fairy tales of the early period were simple and relatively unsophisticated, but it is to the latter period that the fiction, proverbs and historical legends belong. It is the peasant class and their tastes that reflect in the stories of wonder, surprise, tension, dilemma, violence, and humor. (Johnston, p. 30)

The oral literature of the professional story-tellers possess a residue streak of cruelty, especially in the early tales which are often harsh and bloody. This is replaced in the later tales by modified callousness and a macabre type of humor. Much of this humor is based on the discomfort of the great ones on the earth such as the lion. He is pictured as full of power and dignity as he is empty of wit and imagination.

There are stories describing events that are factual. Others, such as the animal and fairy tales, are probably as old as the language itself. The folklore is divided into animal stories, fairy-tales, proverbs, historical legends, true stories, and fiction.

The social motives in some Hausa stories are obvious while others are strictly for entertainment. Among traditional stories, a number deal with witchcraft but they do not necessarily reflect what
the Hausa believe.

Story-telling is a dramatic form of oral expression. The narrator creates the atmosphere by his mimicry, gestures, accents, and tone of voice. There is no such thing as an authentic version of a folktale. As we have seen before, each time a version is told it is somewhat different.

Animal stories are the most popular. The animal hierarchy lends itself very easily to two of the most popular themes; the triumph of brains over brawn, and the discomfort of the mighty ones. There seems to be no evidence of totemism among the Hausa. The spider, hare and jackal all appear in Hausa tales, but they have given each specific qualities. The spider is unscrupulous and vindictive, the hare gay and mischievous and the jackal cunning and sagacious. The villain is usually the Hyena who is shown as greedy and stupid, overbearing to inferiors, and servile to his superiors. He always loses in his duels with trickster.

The fairy-tales feature supernatural creatures in the form of witches, wizards, familiar spirits that haunt trees, and ogres who are the most interesting. Many are similar to European versions. The supernatural creatures are capable of assuming other shapes and forms, and even people and animals can change their shape in these stories.

The legends are concerned with the deeds of heroes during the wars between the Fulani and the Hausa. Their true stories deal with the topic of African slavery. It is a realistic acceptance of the subject, for their attitude is detached and curiously free of emotion. "The Hausa have a strong sense of history and drama.
Judged as a primitive art, as the majority should be, they reveal unusual merit." (Johnston, Introduction, p. 50)

The Bulu live in the tropical rain forests of southeast and central Cameroon. They have no tribal unity at all. The unity is expressed only in loyalty to one's patrilocal village-family. The lineage family is also the most important social unit. So strong is the idea of village-family togetherness, that everyone outside the group is considered an enemy. Not only does the village include the recognizable forest village but it also includes the ancestor village dwelling which is thought of as being underground. These ancestors are just as real and figure in their life just as much as living men. The Bulu men have two life goals; to achieve a high economic-based status through wealth accumulation, and to receive the same rank in the ancestor village after death that they had at death. The family is timeless, the lineage ancestors send a child to be born on earth by a chameleon or trap-door spider who brings the spirit of the child to the mother. For a son to be disrespectful and not want his father's name is a crime almost too serious to behold. It not only threatens the boy but could put an end to the family itself. This must be prevented at all possible costs. Growing boys find little escape from these traditions. The pressures to gain wealth and status are always present. These pressures are built into their folklore and are relieved when wealth suddenly and magically appears. Most Bulu folktales have human and animal characters. The stories tend to stress tradition, not to offend one's father or the ancestors.

Again night is always the setting for the telling of tales.
Stories teach customs, ethical norms, the goals of the society, how to act, and what to avoid. Stories use language a little more flowery and descriptive than that found in everyday speech. The narrator's gestures and movements reflect the changing emotion as the story is told. The number six is culturally important in their stories, for example, to go six rivers away suggests social separation—an unthinkable concept. (Horner, p. 145-156)

In Evans-Pritchard's collection of Azande tales, he states that they are collected to be simply read, without trying to get elaborate structural and sociological interpretation. (Evans-Pritchard, Preface) Their oral literature very seldom refers to their social institutions. The plots deal with the everyday activities of eating, drinking, working, collecting termites, hunting animals, fishing, gathering honey, wild fruits, yams, mushrooms, salt making, the weaving of barkcloth and the use of magic. What the tales fail to mention of the social life they ignore may be just as significant as what they include.

The Zande, who live in the savannah forest in the middle of Africa, have a patriarchal society. Wives are considered inferior, but this does not mean they are ill-treated or neglected. If this becomes the case, life for the husband is made miserable. This is illustrated in their tales. (Evans-Pritchard, p. 5) The importance of in-law relations, involving respect, reserve, and tension is also evident in tales. The treatment of orphans is also shown. Cannibalism, that is, the eating of enemies killed in war or executed criminals, occurred in the past and is alluded to in their folklore. God is mentioned in the tales, but he has no cult. Oracles are
consulted for many reasons and magical practices are a frequent motif of tales. (Evans-Pritchard, p. 11)

Tales are told in the evening around family fires. It is regarded as improper to tell stories during daylight hours. Usually men tell them, but occasionally women are story-tellers. The audience shows its appreciation by its participation while the narrator displays mimicry, gestures and changes of voice to relate the drama.

The hero of their trickster tales is a character named Ture which means 'spider'. The Azande therefore belong, in this respect, to the West African culture area. Ture is a monster of depravity, a liar, a cheat, lecher, murderer; he is vain, greedy, treacherous and ungrateful. In fact, everything against which Azande warn their children. He is presented with little moralizing, never really malicious. There is an almost endearing innocence about him. What Ture does is the opposite of all that is moral. In reality Azande show many of Ture's characteristics, that is a tendency to show off, a sense of humor, and admiration of slimness.

It is significant that the authority of kings, so prominent in their lives, are not mentioned in the folklore. Witchcraft is also scarcely mentioned yet it plays a dominant part in reality. There is no reference made in the tales to over 100 years of Arab and European occupation, or to their secret societies and initiation rites. It could be that these subjects are too close to reality to figure in imaginative stories which take them into a world of fantasy. (Evans-Pritchard, p. 20)

Tales of Ture are purely fiction and fantasy. There are only two widely known stories known as myths that have been recorded. One
tells how the royal clan originated, the other is the remarkable feats performed by two witch doctors.

Another tribe in central Africa that offers a slight contrast is the Hadjerai. They live in villages on the sloping platforms around towering Mount Gera bordering the savannah. Somehow they have managed to ward off newer tribes and preserve their ancient ways. (Fuch, Preface) There are clans who assert that they are the descendents of a particular animal. (Fuch, p. 12)

The author who collected these stories, many of which were told him during daylight hours, got them from women who were acclaimed as noted story-tellers as well as men. (Fuch, p. 45) During the daylight sessions, other women would bring something to do while a story was being told. The audience would suggest or volunteer more.

The main figure in the animal stories is the hyena who is regarded as ugly, stupid, and insatiable. His rival, the squirrel or jackal, is depicted as intelligent, quick-witted and very crafty. There are stories of wizards and witches who eat men. It is during the night these supernatural creatures turn into hyenas and snakes to eat men's souls. (Fuch, p. 36) Other themes in the stories deal with love, fertility, faithless wives, and revenge.

The Hadjerai fear hunger above everything else and for that reason they have only a few stories on the subject. This is especially so during the rainy season when the fate of the village is decided for the whole year. They are afraid to even speak of hunger for the spoken word might become reality and take effect at any moment. (Fuch, p. 107)

God is important in the stories that have been passed on from
generation to generation over a period of hundreds or perhaps thousands of years. He is imagined in human terms. He lives in heaven most of the time, occasionally comes to earth, and is sometimes good and sometimes evil. (Fuch, p. 141) Everyone has oracles that require prayers and sacrifices of beer, but these are seldom mentioned in the folklore.

There are stories of friends that appear many times. Women never come between the friendships of two men, for it is considered too precious for any wise man to let a woman upset it. (Fuch, p. 169)

Death is a strange and ever present reality to the Hadjerai. They believe it is a demon who kills people by the order of God. It is known from ancient tales that somewhere in the wilderness there is a village where deaths live. When anyone dies a death song is sung that goes back to ancient time. Like all their oral literature it is passed down by word of mouth.

The Valuhya tribe lies east of Lake Victoria in Kenya. These people are quickly being acculturated into western ways through the extensive missionary system. Many of the old stories are being forgotten as children enter a new way of life. The beauty of the stories is in the way they are told aloud before an audience. Here again the facial expressions, the abrupt hand movements, "the turning aside to spit on the ground when terribly disgusted, and the abject fear they know so well how to picture when they tell of the giants plundering and killing." (Hoyt, Notes)

The stories contain repeating wailing songs and lullabies. The giant stories are weird with cruel endings. Cannibalism, practiced in surrounding territory, seems to be the reason their belief in
giants and goblins is so pronounced. There are stories "stressing the sacredness of a promise of oath and the terrible power of a curse. These all end in a cruel punishment to the one who has not kept a promise." (Hoyt, Notes)

There are stories of everyday life, such as famine, greediness, how to strike a good bargain or be a good blacksmith. There are stories explaining origins and habits of animals and such natural events as death. They fear the spirits of the dead and try to appease them through sacrifice.

The giants in the stories take different forms; they are more animal than human often having several tails and multiple mouths which suggest their cannibalistic tendencies. They live in a far away land not suitable for people and are always the enemies of man. Only lightning and thunder can kill them. Swallowed people are released by cutting off the dead giant's fingers. They are always stupid or dumb.

Riddles are told mostly for children and proverbs are spoken by the elder wise men.

Folktales of the Thonga of South Africa have literary, ethnographic and philosophical value in their life. Stories are told at night often at the conclusion of games. Story-telling is considered the most refined and pleasing of games, and is strictly a night-time occupation. Story-tellers are of all ages and of both sexes. Tales are classified as animal trickster tales with the Hare as the trickster who outwits larger animals by his intelligence and cunning. Fairy stories that are similar to our "Cinderella" where the despised triumph over the elders who hate them; ogres
tales where triumph of wisdom of feeble creatures over horrible cruel monsters is shown; moral tales where just punishment follows such faults as curiosity, jealousy, obstinacy, unkindness, disobedience, laziness, self-confidence, or selfishness. On the other hand kindness and pity are rewarded. Actual fact stories, that are told purely for entertainment, and foreign tales which have come from Moslem, Portuguese or English sources are also present.

One tale might easily be placed in two or more categories. The animal folklore is generally devoid of moral purpose, but a moral idea may be detected in some of the episodes.

"The literary value varies greatly according to the story itself, and to the narrator." (Junod, p. 214) Tales can be short and insignificant or true compositions in which there is order and design. Songs may form the framework of a story. Repetition is a favorite devise. A narrator's performance adds to the interest of any story. These Bantu tales are very old, but the same version is different every time it is told.

The root idea of all their folklore seems to be the triumph of wisdom over brute force. Probably because this is a natural and satisfying concept.

Alice Werner acknowledges many similarities of the Bantu folklore of South Africa. The tribes she is speaking of include the Zulus, Xosas, Basuto, Bechuana, Thongas, and Mashona. In general the Bantu do not try to account for the origins of the human race; their legends seem to assume that the particular tribe is the human race. They frequently fail to distinguish between a non-human creator, and the first human ancestor. (Werner, p. 13) Nearly all Bantu have
the legend of the chameleon to explain how death came into the world, or rather why death was not prevented from coming. No unsophisticated African will touch a chameleon if he can help it, nor do they even like to watch a European touch one. (Werner, p. 33)

The dead are supposed to go on living underground indefinitely just like they do on earth. There are many stories describing the adventures of people who have accidentally reached this lower country, usually by following a burrowing animal into a hole. This idea is found in stories wherever Bantu is spoken. (Werner, p. 19)

The idea of one God, as Otiose, is probably believed by all Bantu. There are many stories of a heaven country populated by heaven people. Mortals can reach such a place by a spider web, climbing a tree or a rope.

The dead, which all Bantu honor and recognize, are often depicted in their ghost stories. Snakes, lions or birds are frequent mediums for returning spirits. The possibility that the dead can even return to life is frequently assumed in folktales.

They have legends of past great chiefs whose memory lives on for generations. Animals can also be culture heroes. In many Bantu tribes there is a wonder-child hero. They all have the common characteristics of a woman in difficulty who is helped by an ogre demon, or animal after promising to give it her next born child. A birth takes place and the child is always precocious. Next the child always finds a way to escape the mother's attempt to hand him over to the demon; finally the ogre is killed. There are even sagas which are a series of legends following the lives and adventures of heroes that are probably historical figures. Mythical
elements are incorporated into the legends and stories of the 
Liongo in East Central Africa.

Cannibals appear in many legends, particularly those of the 
Zulu. They are not common men, but are magnified into giants and 
magicians. The ideas here, as elsewhere, probably developed in times 
of famine, and were more of a ceremonial nature. The man-eaters 
eventually fled and the practice died out. (Werner, p. 172)

Ogre stories are popular and are probably found in all parts 
of the Bantu area. Stories of escape by throwing things which turn 
into a rock, a fire, a forest of knives, a lake or a river are 
familiar. Many tales deal with marriage to such creatures. The 
Hyena, as well as the lion and the leopard, has the ability to 
assume human form at will; sorcerers can assume the forms of these 
animals. The legend of a monster which swallows the population of 
a village, or whole country and is then slain by a boy hero is 
popular in this area as well as all over Africa. The swallowing 
monster can be an elephant, any female monster, pumpkin or a 
cannible ogre. In ogre tales, a frog or tortoise will often swallow 
children in order to save them from the ogre producing them safe 
and sound at their home later in the story.

The literature is rich in explanatory tales. Lightning is 
most often conceived of as a bird, or even a particular bird. A 
rainbow is nearly always looked at as a malignant and dangerous 
phenomenon for it is believed that it stops rain - quite enough to 
classify it an enemy. Often it is associated with ant heaps, in 
which it is supposed to live, or snakes. Bagandu call the rainbow 
Musoke, and is thought of as the patron of fishermen. They are
the exception.

The Brer Rabbit stories originally came from Africa by way of the Negro slaves who seem mostly to have belonged to Bantu-speaking tribes. Every story of "Uncle Remus" can be shown to exist in a more primitive form in Africa. Rabbits do not exist in Africa, but they are similar to the hare who is the most prominent figure in the tales. (Werner, p. 925)

The tortoise is the next most favorite character in the folktales and in some ways is more successful in triumphing over his enemies than the hare. Among the Baronga, frogs rival the hare.

Africa is rich in folklore. Hundreds of thousands of stories have been collected. They have a distinctive flavor of their own, yet have much in common with folklore of Europe and Asia. The characters Africans love, such as the animal trickster, infant prodigy, slow thinking ogres are also common to a great part of folklore everywhere. One of Africa's distinctive features is the realism and lack of sentimentality. Other features occurring constantly are the cautionary themes, explanatory themes, dilemma situations in which the hero has to choose between two agonizing alternatives and the audience participation. In Africa there are two basic types of stories: those to entertain and those to present a moral. The surprising aspect is that there is as much uniformity as there is considering the lack of written records. (Johnston, pp. 40 - 41)

Much of African folklore is inspired by their identification with the underdog. (Werner, p. 304) The idea that Africa is a continent without history, poetry or mythology is completely false. (Werner, p. 322)
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Paria Plateau Survey
ARCHAEOLOGICAL INVENTORY OF INDIAN RUINS, COCONINO COUNTY, ARIZONA
j. loring haskell

The Paria Plateau has been a source of interest and consternation to southwestern archaeologists since the days of Neil M. Judd's entadas through the area for the Bureau of American Ethnology. Although nearly 50 years have passed since his reconnaissance, little in the way of a systematic archaeological survey had been done in the region until the inception of this season's work. As a result of this paucity of information, the Paria Plateau has been looked upon as a mysterious repository of a rumored wealth of large and small prehistoric sites. In addition it has long been known to be intimately associated with the enigmatic Virgin Branch of the Anasazi. In 1930 the Gila Pueblo Foundation did survey a small portion of upper House Rock Valley west of the main north-south access road; however little is known of the scope of this work due to poor recording procedures.

This report is concerned with the results of the 1967 archaeological survey conducted in the area of the Paria Plateau. This season's work was initiated on June 19, 1967, with field work continuing through June and July. The analytical phase of this year's project was entered August 1, 1967, and was continued throughout the month. All work was done under the aegis of the United States Bureau of Land Management.

J. Loring Haskell's report was prepared while a graduate student at the University of Arizona.
THE ARIZONA STRIP
As a result of sandy conditions prevailing in many areas of the Paria Plateau, travel is a difficult and laborious task at best. Although the plateau has a well-spaced network of ranch and jeep roads, these can be traversed only in a four-wheel drive vehicle. In most instances sites can be reached only on foot due to the extremely poor driving conditions encountered upon departing from these roads.

During the survey site characteristics were recorded on the Museum's site survey cards. All pertinent data were later transferred to the Bureau of Land Management's site inventory forms. As each site was recorded its location was plotted on the appropriate United States Geological Survey sheet, namely the House Rock Spring SE and NE quadrants as well as the Paria Plateau SW quadrant. In addition each site was located on aerial photographs provided by the Bureau of Land Management. Each aerial photograph used during this season's work was given a sheet of plastic acetate on which each site was marked with a dot and its appropriate site number. Stone catalog cards were used to record all ground stone and bed rock mortars found in the field. Collections were made at each site and designated with the proper site number and provenience. Black and white photographs were taken at each site and, in some instances, 35 mm. color slides were taken as well.

In the field sites were numbered consecutively PPS 1 through PPS 108. Upon return to the laboratory each site
received NA numbers 9601 to 9708, as well as BLM trinumeral numbers AR 02-01-01 to AR 02-01-108. Where possible all names of places, washes, and topographical features assigned by the United States Geological Survey maps have been preserved.

**PHYSIOGRAPHY**

The Paria Plateau is situated in the northeastern portion of the Arizona Strip in Coconino County, Arizona, at approximately 111° 95' west longitude and 36° 50' north latitude. The plateau lies directly northwest of Lee's Ferry, Arizona, and is paralleled below its southern escarpment by U. S. Highway 89A.

In its larger geographic relations the Paria area forms part of the Colorado Plateau province. The Paria Plateau is an area of sedimentary beds of Triassic and Jurassic age, inclining gently northward. Its southern boundary is marked by a formidable escarpment that rises 1000 ft. or more above the surrounding country. The entire region lies at an elevation of between 5200 ft. near the Arizona-Utah state line in Coyote Valley and 7100 ft. near the rim of the plateau. On the west the Paria is bordered by House Rock and Coyote Valleys out of which the plateau rises in a series of bench-like platforms. Through most of this particular area these platforms terminate in small cliffs. However, in the more southerly and northerly portions of the valleys cliffs rise
hundreds of feet from these platforms. In these places few, if any, benches interrupt the precipitous slope that leads to the top of the Paria Plateau. Valley areas adjacent to the escarpment are deeply eroded resulting in numerous box canyons.

Geology

The Paria Plateau is composed primarily of Mesozoic sandstones. Crosscutting the region are several north-south trending monoclines that displace these strata along the eastern and western margins of this topographical feature. The region's most characteristic deposit is the massive Navajo Sandstone unit which is believed to be of eolian origin (Gregory 1931: 13). Along the escarpment the red sandstone weathers to either a rusty or dark purplish shade. Invariably, these deposits show black streaks which result from water that has repeatedly trickled down over the faces of this formation. This unit forms the abundant dune sand that characterizes the Paria Plateau more than anything else. In numerous places the easily eroded Navajo Sandstone has been finely sculptured into buttes, natural arches, and zoomorphic shapes. In addition this deposit is characterized by innumerable small caves and alcoves. Crossbedding on a large scale is another salient feature of this unit which often displays abrupt and repeated truncations. Underlying the above, the Wingate Formation forms the Paria's second important sedimentary layer. Although not as striking
in appearance as the Navajo unit, it shares many features with that deposit: crossbedding, probable eolian origin, vermilion color, and concretions that are constantly eroding out of it.

House Rock and Coyote Valleys owe their existence to the erosion of the soft Chinle and Moenkopi Formations where they have been brought to the surface as a result of the East Kaibab Monocline (Gregory 1931: 129). Thick marly shales compose the most conspicuous parts of the Chinle, but wherever the Chinle is exposed over areas of considerable size as it is along the basal portions of the Vermilion Cliffs, it gives rise to the familiar badlands topography (Gregory 1931: 11). These mud hills form a conspicuous part of these valleys' landscapes as they take on various hues of gray, pink, lavender, and yellow. In these areas fragments of silicified wood frequently are found that have been eroded out of this deposit. Along the eastern margins of these valleys the Chinle often forms long slopes which are occasionally broken by a thin horizon of limestone as in the northeastern portion of Coyote Valley. Shinarump Conglomerate is generally present at the base of the upper Triassic Chinle Formation; however in House Rock and Coyote Valleys it caps only the eroded upper surface of the Moenkopi Formation. The field party observed that the most conspicuous outcroppings of Shinarump and Moenkopi are along the monocline. Shinarump is characterized by lenses of conglomerate
that contain abundant amounts of silicified wood. At certain localities this wood attains lengths of 5 to 6 ft. and is up to 3 ft. or more in circumference. Although observed only in Coyote Valley, the Moenkopi Formation there consists of red sandy shales which are characterized by prominent ripple marks and occasional impressions of rain drops. The western boundary of House Rock and Coyote Valleys is delimited by the richly fossiliferous Kaibab Formation. Throughout the western portions of these valleys fossil brachiopods, sponges, and crinoid stems have eroded out of the limestone due to periodic ephemeral sheet wash.

**Surficial Deposits**

Four types of surficial deposits occur in the Paria Plateau region: alluvial deposits, detrital soil, talus, and eolian sand. In all areas of the Paria Plateau, as well as in its immediate environs to the west, the humic content of the soil is relatively low despite heavy growths of conifers and herbaceous plants in most areas above 5800 ft. elevation.

House Rock and Coyote Valleys are characterized by long, fingerlike alluvial fans and bajadas where there is a coalescence of these features. A detrital soil characterizes the floors of both valleys. This detritus seems to be composed primarily of scree derived from the Kaibab Formation. Paralleling the escarpment there are huge deposits of talus resulting from great masses of rock that have
fallen from the faces of the cliffs. Talus is found in all areas bordering on the scarp. On the plateau eolian sand is the primary surficial deposit with many areas being composed of unconsolidated barchans and blowouts.

**FLORA**

For the Paria Plateau region the general aspect of the floral community is exceedingly variable in size and density. Some species are rather general throughout the area while others are locally abundant and still others are sporadic. The Paria is included within the Upper Sonoran life zone; however, occurring within this zone, there are numerous micro-environments with biota peculiar to these ecological niches.

In the valley areas the dominant plant communities are of a xerophytic type. They include sage brush (*Artemesia tridentata*) and rabbit bush (*Chrysothamnus nauseosus*). These shrubs usually range in size from about 1 to 4 ft. in height with some scattered taller ones. Generally speaking these plants become more luxuriant on the valleys' higher slopes. In color they vary from a silvery gray to a bluish-green which tends to give these communities a somewhat mottled appearance. Usually the area between shrubs has a fair cover of herbs and grasses; however there are often places where a considerable amount of bare ground is exposed. In addition cacti are locally abundant in the
valleys' drier and rockier areas. These cacti communities are characterized by several varieties of hedgehog (*Echinocereus aggregatus* and *Echinocereus engelmanii*), prickly pear (*Opuntia aurea*), pincushion (*Mammillaria arizonica*), and Utah cactus (*Utahia sileri*).

In places where there are seeps and springs, mesophytic plants are the dominant type. These localities are usually situated at the heads of box canyons and are dominated by gambel oak (*Quercus gambelii*) and mountain mahogany (*Cercocarpus montanus*). Along the margins of these places there are often heavy concentrations of the ubiquitous Russian thistle (*Salsola kali*).

Above 5800 ft. in elevation the floral array is remarkably uniform, although there is some local variation resulting from topographical differences. Soils vary from nearly pure sand to occasional sandy gravels. In places where the Chinle Formation has weathered, clay is present in goodly amounts. Above this level the dominant plants are pinyon pine (*Pinus edulis*) and juniper (*Juniperus monosperma*) which occur together in mixed stands and differ widely in size and frequency from one place to the next. On top of the plateau the trees and brush are much more luxuriant. As a rule there is a fair to good grass cover in most places, particularly in those areas that have been chained. *Grama* and *Galleta* are the principal grasses. Smaller shrubs and herbs occur in locally dense stands in open places.
wherever the continuity of the dominant plants is broken. For example in areas of dunes, cow tobacco (*Penstemon ambiguus*), prairie spiderwort (*Tradescantia occidentalis*), paintbrush (*Castilleja coccinea*), and bittercress (*Cardamine hirsuta*) have established sizable communities. These barchans usually support an abundant growth of rabbit bush (*Chrysothamnus nauseosus*) and narrow-leaved yucca (*Yucca angustissima*). Sage brush (*Artemesia tridentata*) is fairly common over the entire plateau. The floral array also includes several varieties of prickly pear (*Opuntia engelmannii* and *Opuntia aurea*), Arizona pincushion (*Mammillaria arizonica*), and buckhorn cholla (*Opuntia scanzocarpus*), which are locally abundant.

The area adjacent to the escarpment's rim can be considered a separate ecological niche due to the peculiarity and distinctiveness of the array of plants. The pinyon pine (*Pinus edulis*) assumes a scrubby and grotesque growth which can be attributed to the strong winds frequently encountered there. Mormon tea (*Ephedra divergens*), littleleaf mountain mahogany (*Cercocarpus intricatus*), and gambel oak (*Quercus gambelii*) comprise the dominant plant community. The ubiquitous prickly pear often occurs in locally thick stands. As for the smaller shrubs and herbs, branching fleabane (*Enigeron divergens*), cow tobacco (*Penstemon ambiguus*), and paintbrush (*Castilleja coccinea*) are fairly common.
Among the Paria's indigenous denizens frequently observed or heard during the 1967 season were chipmunks, cottontails, jackrabbits, and kangaroo rats. Coyotes were heard each evening and on several occasions during the day on the plateau. In addition the area supports a considerable porcupine population as evidenced by the large number of pinyon trees that have been stripped in numerous places of their bark. Badgers are undoubtedly one of the commonest and most abundant carnivores inhabiting the region. Although none were observed first-hand by the survey party, their burrows were present in most areas covered by this season's work. As for felids, one mountain lion, which reportedly had been preying on stock in the vicinity of Two Mile Spring, was seen in a rocky area immediately south of "The Fang." In addition mountain lion tracks were observed on several occasions in other portions of the plateau. The area seems to support a fair-sized deer population as evidenced by tracks, fecal material, and antlers. According to local informants deer seem to be concentrated in the area lying within a few miles of the escarpment. Elsewhere on the plateau they are reported to be quite sparse during much of the year. In years of unusually heavy snows on the Kaibab Plateau the Paria's deer population reportedly shows a concomitant increase due to its somewhat lower elevation and the availability of more and better feed. Bats may well
be among the Paria's most common mammals; as they were observed in considerable numbers each evening at dusk.

As for the remainder of the faunal assemblage, lizards were found to occupy all biotic niches in the Paria region. Snakes were conspicuously on the sparse side and those sighted were non-poisonous species. Although rattlesnakes are known to occur in the area, none were observed by this season's field party. In the amphibian class no adult desert toads were seen on the plateau; however they must undoubtedly occur in respectable numbers, as all weathering pits containing some water harbored large numbers of tadpoles.

The avian population seemed to be concentrated for the most part close to the escarpment, as well as near seeps and springs. Of those observed, jays, bluebirds, swifts, hummingbirds, and whip-poor-wills were the most evident. As for the carrion eating species, the Paria harbors an assortment of hawks, falcons, and crows. A solitary golden eagle was seen by the field party close to "The Fang" in mid-July.

**HYDROGRAPHY**

All drainage in the Paria region is tributary to the Colorado River which lies to the south. For the western portion of the Paria Plateau drainage is into either House Rock or Coyote Washes with the former emptying directly into
the Colorado River approximately 15 mi. south of Marble Canyon and the latter flowing north to meet the Paria River and thence to the Colorado.

The characteristic stream of the area is an intermittent one which usually flows only in places along its course in response to the effects of local showers. During the summer months this shower activity, although often locally intense, is usually brief in duration resulting in ephemeral sheet wash. In sharp contrast the winter rains are usually of a more general character with the result that House Rock and Coyote Washes become through-going streams.

Presumably, the prehistoric occupants of this region were faced with periodic water shortages; as the only available moisture for horticultural purposes is that derived from the seasonal rains. For this reason the great preponderance of archaeological sites recorded for this area are situated adjacent to washes; thereby leaving the remainder of the region sparsely settled.

As might be expected there are numerous springs and seeps which emanate from the Navajo Sandstone of the Vermilion Cliffs. Substantial numbers of sites were recorded in the immediate vicinity of many of the larger ones, for example, Hod Brown and House Rook Springs. On the Paria itself weathering pits are the principal source of water, and these occur wherever the bedrock Navajo Sandstone has been exposed. These saucer-like depressions fill with water
during periods of rainfall and frequently last for considerable periods of time. Some of those observed in the vicinity of Corral Valley attained sizes of as much as 20 ft. in diameter and depths of from a fraction of an inch to as much as 4 ft. However, the bulk of these average between 5 and 10 ft. across and are usually only a few feet in depth. Now, as in the past, these are favored watering places for both wild and domestic animals as evidence by quantities of fecal material concentrated in the immediate vicinity. Consequently, it can be assumed that they were of paramount importance to the prehistoric occupants of the plateau, not only in their hunting activities, but also for their own personal needs. Most of these "pockets" have lips over which excessive amounts of water can escape. As a result washes often have their sources in these places, for example, the area around Corral Valley.

CLIMATE

For the Paria region meteorological statistics concerned with temperature and precipitation are meager and unsatisfactory. However, there are a number of weather stations in the immediate area at Lee's Ferry, Page, Jacob Lake, Fredonia, and Kanab, Utah. In addition seasonal records are available for the buffalo ranch located in lower House Rock Valley. Although these stations tell little of the actual conditions prevailing on the plateau itself, they do give a
reasonably satisfactory picture of weather conditions at comparable elevations in the immediate vicinity. Nevertheless, it should be stressed that these same conditions do not necessarily prevail on the Paria Plateau.

The influence of geographical location in the distribution of rainfall is immediately apparent when comparing the available data. As with the precipitation pattern in this area, temperature is noticeably influenced by elevation and topographical features, too. Generally speaking, the lower elevations have increasing mean annual temperatures and decreasing amounts of precipitation. Conversely, most localities lying above the Vermilion Cliffs are characterized by a higher annual rainfall. On the whole the region's climate is arid to semi-arid. Rainfall records for the surrounding area show average means that are either under 10 in. or just slightly above. The annual distribution of precipitation is rather erratic with the driest months occurring during the start of the growing season, April through June. The months of maximum rainfall are July, August, and September with the latter receiving substantially lower amounts. The period from December through March witnesses a return to somewhat wetter conditions; however, as during the summer rainy season, these rains have a tendency to be on the capricious side. During the winter months snowfalls on the higher elevations are not at all uncommon.

For the Paria region temperature extremes range from over 100° to well below freezing. The summer months are
hot and generally dry with daily highs of near 100°. Temperature changes of 30° or more in a 24 hr. period are not at all uncommon for much of the area. Undoubtedly, the growing season for the House Rock-Coyote Valley area is about 125 to 130 days, thus providing ample time to mature most crops. However, the marginality of the Paria's higher elevations for horticultural pursuits makes that area unsuitable for this purpose; as at least 120 frost free days are needed for the maturation of Zea mays, and these conditions undoubtedly are not met today on a year-to-year basis.

During the summer surface winds are usually dry and moderate; however strong winds were encountered on several occasions during the field party's reconnaissance of the area. On the plateau there was almost a continual breeze out of the southwest which, coupled with the low relative humidity, made for somewhat more comfortable conditions. According to local informants, strong winds are quite common on the plateau during the winter, often buffeting the area for several days at a time. For much of the surrounding region the prevailing wind direction is from the west to southwest. For the average annual precipitation and temperatures for the region surrounding the Paria Plateau, as compiled by the United States Weather Bureau, see Table 1.

ECOLOGICAL SUMMATION

The Paria Plateau is a large wedge-shaped outcropping of sedimentary rock of Jurassic age. Its most conspicuous
### TABLE 1

AVERAGE ANNUAL PRECIPITATION AND TEMPERATURES
Region Surrounding Paria Plateau

United States Weather Bureau

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<th>STATION</th>
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<td>Coconino</td>
<td>7900</td>
<td>17.08</td>
<td>47.3</td>
<td>-</td>
</tr>
<tr>
<td>Page</td>
<td>Coconino</td>
<td>4270</td>
<td>5.11</td>
<td>58.1</td>
<td>203</td>
</tr>
<tr>
<td>Kanab, Utah</td>
<td>Kane</td>
<td>5010</td>
<td>12.88</td>
<td>55.5</td>
<td>145</td>
</tr>
<tr>
<td>Paria, Utah</td>
<td>Kane</td>
<td>4000</td>
<td>8.45</td>
<td>-</td>
<td>-</td>
</tr>
</tbody>
</table>
feature is its southern margin, the Vermilion Cliffs. From various vantage points along the escarpment one can easily see the Colorado River gorge and the San Francisco Peaks lying to the south. Surficial deposits are primarily locally derived eolian sands which in many places are unstabilized. Water is scarce in most areas of the plateau; however, where sizable weathering pits occur, generally there is enough water to last the duration of the dry season. The flora and fauna are Upper Sonoran. Xerophytic plants predominate in valley areas, as well as in drier and rockier localities at higher elevations. These plants grade into mesophytic trees, shrubs, and herbs at higher elevations and in places where there are springs and seeps as at the heads of many box canyons which adjoin the western edge of the escarpment. Climatically, the region is semi-arid to arid, being characterized by showers, rapid runoff, rapid evaporation, and substantial diurnal-nocturnal temperature changes.

**DISTRIBUTION OF SITES**

The uneven distribution of sites depicted on the House Rock Spring and Paria Plateau base map is misleading. The distribution unquestionably reflects the local ecological situation. In both House Rock and Coyote Valleys the heaviest concentration of sites occurs adjacent to washes on alluvial deposits and on the benchlike terraces that rise in a series of shelves up to the Paria Plateau. On the
plateau sites are concentrated on the Paria's higher knolls and ridges which are outcroppings of Navajo Sandstone. At these localities the vegetation can be considered, generally speaking, to be on the luxuriant side. In the valleys open and exposed localities with little relief and sites away from the washes were definitely shunned by the prehistoric population. On the plateau areas characterized by unstabilized barchans and low gradients were avoided as well.

Habitation and workshop sites recorded by the 1967 Paria Plateau Survey may be classified as open, talus, or cliff sites. Open sites were located on alluvial fans, bajadas, knolls, and stabilized barchans, while talus sites were situated on the upper-most portions of the detrital material. Cliff sites consisted of one cave and a shelter. Site frequency and occurrence are shown in Table 2.

SITE LOCATION AND ENVIRONMENT

Open sites comprised 104 of the 108 sites recorded for the 1967 survey. This group includes both prehistoric and historic sites. Sites occurred on alluvial deposits, knolls, terraces, and sandy ridges. For the prehistoric open sites room estimates ranged from 0 to 50 with the majority having from one to 10 rooms. All pueblos recorded by the field party were one-story structures. Talus sites are uncommon due to the frequency of rock falls. Only two talus sites were recorded during this season's work. In both instances
<table>
<thead>
<tr>
<th>LOCATION</th>
<th>HOUSE ROCK AND COYOTE VALLEYS</th>
<th>PARIA PLATEAU</th>
<th>TOTAL</th>
</tr>
</thead>
<tbody>
<tr>
<td>Open</td>
<td>87</td>
<td>17</td>
<td>104</td>
</tr>
<tr>
<td>Talus</td>
<td>2</td>
<td>0</td>
<td>2</td>
</tr>
<tr>
<td>Cliff</td>
<td>2</td>
<td>0</td>
<td>2</td>
</tr>
<tr>
<td>TOTAL</td>
<td>91</td>
<td>17</td>
<td>108</td>
</tr>
</tbody>
</table>
these sites were located on steep talus slopes. Apparently they were momentary stopping places along a prehistoric trail which seems to run along the top of the talus slope. Although small caves occur rather frequently along the Vermilion Cliffs, they were not commonly used by the prehistoric peoples of the area, due primarily to their small sizes. Only one such site was recorded for this season, and it was not in pristine condition; as it had been subjected to livestock damage, rock falls, and repeated Anglo occupation.

At least 52 of the 108 sites recorded this season were located close to major springs, seeps, or weathering pits. All sites were within easy access of arable land which consists of alluvial fans, bajadas, or stabilized dunes. Pinyon pine was within easy access of all sites. As noted above clay occurs in those areas having outcroppings of the Chinle Formation; thus it was readily available to 14 prehistoric sites. In addition many washes just away from these clay-bearing regions contain naturally tempered clays which are the consequence of redeposition. The Chinle Formation also contains large amounts of silicified wood which was apparently held in high esteem by the prehistoric knapper of the Paria country for the fabrication of his tool kit. In addition silicified wood occurs in those places where there are outcroppings of Shinarump Conglomerate. At such localities there is a plentiful supply of cobbles that would have been suitable for use as manos and hammerstones.
SOCIO-CULTURAL IMPLICATIONS

The Paria Plateau, as well as every other ecological niche, has population limits set for it by the availability of exploitable resources; thereby determining in a sense the configuration a particular culture, possessing a primitive technology, may take. Thus, the prehistoric pueblo people of the Paria had to meet these limitations set by their environment in order to have a viable culture. Judging by the heavy concentrations of archaeological sites in the more favored areas, they met this challenge admirably. However, it should be stressed that in every ecological niche these conditions can be met in a number of ways. For example, the puebloans practiced small-scale horticulture in the Paria region while the Paiute, possessing a more impoverished culture and coming into the area after A. D. 1150, arrived on the scene practicing what was essentially a Desert Culture way of life which emphasized the systematic exploitation of the region's biota. Consequently, on the basis of this season's archaeological survey, it is possible to make a few inferences about the settlement pattern and social organization of the Virgin Branch's Anasazi.

As mentioned above there are no permanently flowing streams in the area. However, the great preponderance of sites are situated on the tops of alluvial fans, bajadas, knolls, and ridges that are adjacent to normally dry washes.
These areas, as might be expected, usually foster a luxuriant growth of juniper-pinyon, as well as a host of other plants and herbs. Thus, the former occupants preferred these localities to the valley areas, which, so far as can be discerned on the basis of present evidence, were shunned by the puebloans. Consequently, they had to rely almost exclusively on adequate rainfall and ephemeral sheet wash for a satisfactory harvest. In the country occupied by the contemporary Hopi much the same situation prevails; as a successful harvest depends solely upon the exigencies of the weather. There, as on the Paria Plateau, rainfall is frequently less than 10 in. annually, and, even when it does rain, it may not fall where needed or it might fall in such torrents that crops are uprooted and subsequently destroyed. Thus, as in the days of the Paria's prehistoric pueblos, farming is a hazardous occupation due to insufficient precipitation and frequently uncontrollable floods.

In order to guard against such calamities these people probably planted several fields of maize, squash, and beans as do the Hopi. However, societies possessing a relatively primitive technology can do little to assure a dependable and adequate supply of moisture to thirsty crops when confronted by an environment such as the Paria has to offer. Consequently, they seem to have resorted to a complex ceremonialism which probably emphasized the magical control of the elements as do the present-day Hopi. This approach
seems to be substantiated archaeologically by the presence of kivas and ceremonial ceramic types at many sites. As practiced by the Paria's prehistoric inhabitants, farming required no complicated systems of canals, terraces, or dams. Instead, their crops were planted along the banks of the region's normally dry washes, thus explaining the relatively heavy concentrations of sites, large and small, in these particular areas. Each pueblo was undoubtedly independent and self-sufficient and most of its inhabitants normally spent most of their time there. In all probability their method of farming was the concern of each household or of the clan (Dozier 1960: 156). As a result these villages were sedentary as evidenced archaeologically by the presence of large middens at many sites thus indicating lengthy occupations. Horticultural techniques had been perfected to the point that they permitted the aggregation of a larger number of individuals. Cultivated plants were undoubtedly the primary food source and, most of the time, apparently provided a dependable surplus. In addition the area adjacent to the escarpment supports at the present time a fair-sized deer population, which in aboriginal times was probably larger thereby resulting in another potential food resource. It would seem reasonable to assume that the Paria's bountiful supply of wild vegetal resources were probably utilized to some extent by these people, as well.
It seems likely that their social organization was clan based and it may have been hierarchically arranged to some extent, resulting in a preponderance of ascribed, rather than attained, statuses. Thus, chiefs and clan elders may have resided in preferential locations of the pueblo. Religion was undoubtedly formalized and externalized in kivas, ritual prayer, and offerings to propitiate the often malevolent spiritual world, thereby assuring a successful harvest. Archaeologically, the formality of their religion is reflected in the differentiation of utilitarian and ceremonial wares which are present in varying numbers at most sites.

STRUCTURES

Generally speaking, the prehistoric structures found in upper House Rock and Coyote Valleys are amorphous in shape; as they have for the most part crumbled into rambling low mounds. Invariably, they are situated on small knolls and alluvial fans. The angular limestone blocks from which they are constructed display no signs of having been intentionally shaped. Apparently they were utilized as found, resulting in the use of substantial amounts of mortar during construction. No trace of the mortar was noted during the course of the survey. At some of the better preserved sites many of the smaller structures appear to have been circular in form. Occurring in the same area there are often larger
sites which exhibit the typical rectangular puebloid shape. In the area immediately southwest of Two Mile Reservoir, several upright, slab-lined pithouses and storage cists were found that were of sandstone construction. At a number of sites circular structures, possible kivas, were fashioned from the same building materials in a similar manner. Masonry dwellings of one to three rooms predominated in areas bordering on the valleys. However, individual structures ranged in sizes up to 35 rooms. The orientation of most habitations appears to have been to the east with fewer numbers facing south. Orientation was determined by the presence of what appear to have been doorways and trash deposits. Some sites had no visible masonry.

On the Paria Plateau pueblo dwellings were of red Navajo Sandstone with slab-type construction. In a number of instances these structures still had walls two to three feet high. However, as in the environs of House Rock and Coyote Valleys, the mortar binding these slabs together had long since deteriorated leaving no visible traces. On the plateau the orientation of structures seems to have been to the east or to the south.

**PETROGLYPHS**

Petroglyphs are not particularly common in the Paria Plateau country. Only two such sites were recorded during this season's work, and both of these were located in upper
House Rock Valley in areas relatively close to major springs. For the most part figures depicted were geometric, anthropomorphic, and zoomorphic. The paucity of this type of site is surprising in view of the fact that the area is studded with suitable rock surfaces. Where found, they appear to have been the work of a solitary individual who had momentarily stopped to peck a few figures in the enticing-looking sandstone. At these sites there is no other evidence of material culture. One panel of petroglyphs had been pecked into a large sandstone boulder due east of Hamblin's Headquarters while the other occurred in a small box canyon in the vicinity of Two Mile Spring. During the 1967 field work no petroglyphs were recorded for either Coyote Valley or the Paria Plateau.

**LITHIC MATERIAL**

Lithic material was found not to be particularly abundant at any site during this season's work. Artifactual material and lithic debris were collected where feasible. When not collected stone artifactual material was recorded on the museum's stone catalog forms and left in the field. Lithic material consisted of chipped stone and ground stone. Bifacially worked projectile points, knives, and a solitary drill comprised this season's chipped stone collection. In shape projectile points ran the gamut from relatively crude triangularly notched types to elegantly knapped, lanceolate
varieties. Materials used in their manufacture include quartz, chalcedony, agate, and jasper. Silicified wood was commonly used by the pueblos in order to acquire these materials. In addition to the above several crude scrapers were recovered as well. These implements were fabricated from Kaibab Limestone as they were richly fossiliferous. One exceptionally large and crude spear point, also knapped from Kaibab Limestone, was recovered as well.

Ground stone included metates, manos, a maul, and several bedrock mortars. All metates and manos were left in the field and recorded on the appropriate forms. No whole metates were evidenced. In addition at no site were they common, which undoubtedly can be attributed to pot hunters who have vandalized many sites in the area. One finely worked maul was recovered this season. This sandstone specimen is characterized by a deeply pecked groove that girdles the maul, providing it with a suitable haft. Bedrock mortars were recorded at several sites. These roughly circular depressions had been systematically pecked into the soft Navajo Sandstone and were approximately 5 mm. in depth.

CERAMICS

In the collection of ceramic material a bias towards the decorated wares was maintained. No collection was intended to reflect a true statistical relationship of pottery types found on the site. The feeling of those involved was
that decorated wares were more sensitive to cultural change; therefore they were better suited to analysis and were indicators of temporal and cultural affinity. Collections were kept isolated by provenience and returned to the Museum.

The sherds were washed and stamped with the NA site numbers and, where applicable, a letter to indicate subdivisions and units of the same site. The sherds from the larger sites were analyzed in the universe of the site alone. Later, the sherds from each site collection were sorted by types and analyzed again in the universe of the total collection. The first analysis provided the analyst with the opportunity of becoming acquainted with the types involved in this particular survey.

Using the published type descriptions of Colton (1952, 1955, 1956) and the research collections at the Museum of Northern Arizona, the materials were sorted by wares and types. The classification was based exclusively on macroscopic examination with the exception of one type, Logan-dale Gray, which was determined by a chemical method. Design form, presence or absence of slip, clay, and temper were the primary considerations in the classification. (See Table 3.)

There were no whole vessels in any of the collections. Gray and corrugated wares were analyzed and sorted rapidly as the emphasis was on the decorated wares to which more attention was devoted. Although the assumption was
### TABLE 3
CERAMICS - ALL PROVENIENCES

<table>
<thead>
<tr>
<th>STYLE</th>
<th>TOTAL NUMBER SHERDS RECOVERED</th>
</tr>
</thead>
<tbody>
<tr>
<td>Tusayan Gray Ware</td>
<td></td>
</tr>
<tr>
<td>Virgin Series</td>
<td></td>
</tr>
<tr>
<td>North Creek Gray</td>
<td>1388</td>
</tr>
<tr>
<td>North Creek Corrugated</td>
<td>844</td>
</tr>
<tr>
<td>Washington Corrugated</td>
<td>1179</td>
</tr>
<tr>
<td>Coconino Gray (tooled)</td>
<td>1</td>
</tr>
<tr>
<td>Shinarump Gray Ware</td>
<td></td>
</tr>
<tr>
<td>Shinarump Brown</td>
<td>184</td>
</tr>
<tr>
<td>Shinarump Corrugated</td>
<td>251</td>
</tr>
<tr>
<td>Logandale Gray Ware</td>
<td></td>
</tr>
<tr>
<td>Logandale Gray</td>
<td>2</td>
</tr>
<tr>
<td>Tusayan White Ware</td>
<td></td>
</tr>
<tr>
<td>Kayenta Series</td>
<td></td>
</tr>
<tr>
<td>Sosi Black-on-white</td>
<td>54</td>
</tr>
<tr>
<td>Dogoszhi Black-on-white</td>
<td>19</td>
</tr>
<tr>
<td>Black Mesa Black-on-white</td>
<td>45</td>
</tr>
<tr>
<td>Virgin Series</td>
<td></td>
</tr>
<tr>
<td>North Creek Black-on-gray</td>
<td>227</td>
</tr>
<tr>
<td>Sosi style</td>
<td>227</td>
</tr>
<tr>
<td>Dogoszhi style</td>
<td>74</td>
</tr>
<tr>
<td>Hurricane Black-on-grey</td>
<td>20</td>
</tr>
<tr>
<td>Saint George Black-on-grey</td>
<td>73</td>
</tr>
<tr>
<td>Shinarump White Ware</td>
<td></td>
</tr>
<tr>
<td>Virgin Black-on-white</td>
<td></td>
</tr>
<tr>
<td>Sosi style</td>
<td>397</td>
</tr>
<tr>
<td>Dogoszhi style</td>
<td>183</td>
</tr>
<tr>
<td>Black Mesa style</td>
<td>51</td>
</tr>
<tr>
<td>Toquerville Black-on-white</td>
<td>46</td>
</tr>
<tr>
<td>Shinarump white</td>
<td>24</td>
</tr>
<tr>
<td>San Juan Red Ware</td>
<td></td>
</tr>
<tr>
<td>Deadman Black-on-red</td>
<td>3 (?)</td>
</tr>
<tr>
<td>Middleton Black-on-red</td>
<td>41</td>
</tr>
<tr>
<td>Middleton Red</td>
<td>26</td>
</tr>
<tr>
<td>Tsegi Orange Ware</td>
<td></td>
</tr>
<tr>
<td>Medicine Black-on-red</td>
<td>43</td>
</tr>
<tr>
<td>Tusayan Black-on-red</td>
<td>153</td>
</tr>
<tr>
<td>Citadel Polychrome</td>
<td>26</td>
</tr>
<tr>
<td>Tusayan Polychrome</td>
<td>34</td>
</tr>
<tr>
<td>Unidentified Grey Ware</td>
<td>3</td>
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<tr>
<td>Unidentified White Ware</td>
<td>67</td>
</tr>
<tr>
<td>Unidentified Red Ware</td>
<td>178</td>
</tr>
<tr>
<td>Unidentified Polychrome</td>
<td>4</td>
</tr>
<tr>
<td>TOTAL</td>
<td>5640</td>
</tr>
</tbody>
</table>
made that some quantity of the material would be from the Virgin Branch described by Colton in 1952, the distinction was difficult to make in many cases between analogous types of the Kayenta branch. Those sherds which could not, for various reasons, be classified into types were classified into wares. Those sherds which seemed not to fit existing type descriptions were similarly disposed of. In the case of some of these sherds, however, there were sufficient quantity and recurrence to warrant tentative description.

Descriptions

Included in the breakdown of wares and types is a type style heretofore undefined. This is the Virgin Black-on-white, Black Mesa style. There seemed to be no type described that fell inside the Shinarump White Ware with Black Mesa style; whereas in the Tusayan White Ware, St. George Black-on-gray is the analogous Black Mesa style of the North Creek type. About 8 per cent of the Virgin Black-on-white sherds fell into this category; hence this separate style was included.

Another type which was not defined, but which showed up in sufficient quantity to justify mention, was a highly oxidized black-on-white that demonstrated a familiar residual clay core, diagnostic of the Shinarump Wares, a thick white slip (more often gray from oxidation than dead-white as in Virgin Black-on-white), and a brown paint that seemed to use the same pigments that were found in the paste. This,
of course, could not be determined conclusively unless chemical analysis was done on the sherds. However, sherds of this type were found in more than one site and showed enough similarities that there may be a new type necessary. In this analysis they were classified under unidentified Black-on-white.

Materials

Tusayan Gray Wares:

There was no difficulty in defining and sorting the gray wares. Even with the collection biased, these types proved to compose over 68 per cent of the collection. As stated before they were rapidly analyzed and sorted; for it was felt that they were of little significance. However, it is important to note that these types could have been just as well sorted into Kayenta series groups; as there is no macroscopically observable distinction. The distinction made between types like North Creek Gray, an affinis Lino Gray, Washington Corrugated and Moenkopi Corrugated were purely arbitrary.

Shinarump Gray:

As a general rule, the Shinarump Brown and Corrugated presented no difficulty in analysis. The ware is distinctive because of the purple residual clay speckled throughout by an opaque quartz temper. However, in some cases oxidized North Creek Corrugated and Shinarump Corrugated demonstrated the same color and texture. In such cases the
distinction was made on the basis of the temper. Opaque temper was usually a sign of Shinarump Corrugated and the large transparent quartz crystals indicated North Creek Corrugated. There also seems to be some disagreement among those involved in Virgin Ceramics as to the validity of Shinarump as a type. Some feel that Shinarump is merely a style of Tusayan-Virgin Gray Ware and that it should be classified as North Creek material. From a taxonomic point of view this would also require a re-definition of Virgin Black-on-white and its corrugated counterpart, Toquerville Black-on-white. From the material in this collection it is the feeling of the analyst that there is a distinction between Shinarump Ware, both white and gray, and the existing Kayenta series Tusayan Gray and White Wares. Shinarump Gray Wares composed about 11 percent of all the gray wares, but a greater part of it was found only in the early sites in the south of the valley.

Logandale Gray Ware:

There is only one type in this ware. Logandale Gray is very easy to recognize, but this must be done before washing as its tempering components are soluble in even the weakest solutions of hydrochloric acid. Several of the specimens of this type were completely destroyed in the acid bath. However, this can be avoided by acquainting the field personnel with the type and by marking the bags as they are returned to the Museum. Its limestone temper, paste, and its chalky, pitted surface make it very distinctive.
Tusayan White Ware:

The distinctions between the material of Kayenta and Virgin Series Tusayan White Ware are extremely unclear. The analysis was greatly slowed down by confusion of the two types. Finally, experience with the types led the analyst to draw a distinction that is solidly founded, but perhaps somewhat arbitrary in terms of any cultural significance. It was generally accepted that the paste of the Kayenta series is fine tempered pale gray with closely packed layers of clay. The Virgin material is described by Colton (1952) as having a "large quantity of angular fragments." As a rule the fine material with a definite layer of slip was classified as Kayenta, and the coarser, tan core with extremely thin slip or no slip was classified as Virgin material. On this basis it proved no problem to separate the design styles into Sosi, Dogoszhi, and Black Mesa. In terms of the Kayenta material the distinction was somewhat arbitrary between the Sosi Black-on-white and the Black Mesa Black-on-white. When there was doubt the sherd was classified as Sosi Black-on-white.

The Tusayan White Wares composed about 56 per cent of the total white wares, the other half being composed completely of Shinarump White Ware.

As a rule the Shinarump White Ware presented little difficulty in analysis. The slip was always distinctively
thick and creamy. The core demonstrated the typical Shinarump color and texture. The only difficulty with this material appeared in particularly weathered sherds from sites in the northern part of the valley. Here it was difficult to determine whether the sherds were slipped or not. In these cases the color and texture of the core alone were used as criterion to classify the sherd. As mentioned before the Virgin Black-on-white sherds that had a Black Mesa design style were classed as a new subdivision: Black Mesa style Virgin Black-on-white.

The Redwares:

All the redware material was extremely weathered, in particular the San Juan material. In relation to the black-on-white material, the redware did not carry too much statistical weight. Unidentified redware sherds accounted for 118 of the sherds. Of the total redware sherds the San Juan material composed 21.4 per cent; whereas the Tsegi Orange consists of about 79.6 per cent. Approximately the same percentages prevailed in the unidentified redware between Tsegi Orange and San Juan Red Ware.

The redware from this area was, as a rule, pretty much nondiagnostic; as most of the sherds were too small or grossly weathered. There were a number of unidentified polychromes that showed deviant traits, but they were in such minority that it was impossible to arrive at any conclusions about them. The most prevalent type was Tussayan
Black-on-red, most of which was concentrated in the area of the central valley around NA9650. Sites from the Plateau proper exhibited little or no redware and those from the north showed an expected increase in percentage of San Juan Red Ware.

In the subsequent work in this area it is suggested that the bias indicated previously be maintained. Unless some new technique or more precise ceramic analysis is intended in this area, the grayware and the corrugated ware are of no diagnostic value and their quantity merely slows down the analysis. Although there is no difficulty in analyzing them, there is a logistic problem that arises merely out of their mass. Work in the future must be directed toward devising other methods and techniques for dealing with the gray and corrugated ceramics.

It should be reiterated that the protection of Fugitive Red materials and limestone temper materials begins with the collection. The field personnel should be familiar with these types.

The technique of two analyses, each in the universe of a different dimension, is extremely useful for initial acquaintance with the material, but once the analyst has become familiar with the ceramics the purpose is lost. A consciousness of the material as a whole, the types as a complete range, not only maintains the initial cultural significance of the analysis but also expedites it. When
restricted to the universe of each provenience, the analyst is unable to develop a range of variation on which to base his classification. In this particular collection it became evident that much of the material could fall into several classifications. However, the limitations of the analysis prevented significant groupings of types.

As a whole, the analysis demonstrated several interesting relationships of types involved. The main point to be noticed is the similarity of types which suggests that, perhaps, the types are arbitrarily established to satisfy conditions of individual sherds or groups of sherds and to ignore the preponderance of similarities. The distinction between the Tusayan Gray Ware of the Virgin and Kayenta branches and the distinction between Tusayan White Ware of the Virgin and Kayenta branches is a good example. From the collection on hand it is the feeling of the analyst that there is no real distinction and that the pressures of any pre-existent taxonomy force the analyst to make distinctions that are not really there.

**CERAMIC INTERPRETATION**

As mentioned above the prehistoric cultures of the Arizona Strip have been assigned to the Virgin Branch of the Anasazi root. However, in light of mounting archaeological evidence, it seems probable that the Virgin Branch represents a western extension of the Kayenta Branch.
The temporal range of this season's ceramic assemblages is from approximately A. D. 1100 to A. D. 1250, thus encompassing the period assignable to late Pueblo II and early Pueblo III. The ceramic assemblages from the Paria country are essentially uniform, regardless of the particular area they come from or the nature of the dwelling unit. However, a few generalizations can be made about the frequency and spatial distribution of the ceramic types in the area of upper House Rock and Coyote Valleys as well as in the southwestern quadrant of the Paria Plateau. Generally speaking, there are certain ceramic types that are prevalent throughout the region reached by this season's reconnaissance. Washington Corrugated and North Creek Gray seem to have been in general usage in all sectors of the Paria country. In terms of frequency of sherds North Creek Gray seems to have been slightly more popular in Coyote Valley than in upper House Rock Valley, while the reverse is true for Washington Corrugated. Shinarump Corrugated and Shinarump Brown likewise exhibit a similar frequency and spatial distribution. There are other types which seem to evidence a more sporadic spatial distribution, for example, Toquerville Black-on-white is scarce in the Paria country, but nonetheless, it occurred in all areas covered by this season's survey. Other types evidencing a similar frequency-distribution are Black Mesa Black-on-white and Hurricane Black-on-gray. North Creek Black-on-gray seems to occur somewhat more frequently
on the Paria Plateau and in Coyote Valley with both Sosi and Dogoszhi styles equally represented. Virgin Black-on-white, Sosi style, is found in all areas while the Dogoszhi style seems to be limited to areas of Coyote Valley and the Paria Plateau. Tusayan Black-on-red occurs in greatest frequency from the Two Mile Spring area north to Utah. Medicine Black-on-red is found in all areas but is always scarce. As for the other redwares, Middleton Red and Middleton Black-on-red occur most often in House Rock Valley and are scarce elsewhere. Intrusive polychromes are found in all sectors of the Paria country; however in no instance are they prevalent. These types include Citadel and Tusayan Polychromes.

**SUMMARY**

The 1967 survey of the Paria Plateau region yielded a large amount of data on an area that was hitherto virtually unknown archaeologically. The preceding report is not intended to be the final word on the archaeology of the Paria Plateau as further papers will be written in the future as the project progresses.

The Paria Plateau region lies at an elevation of between 5200 and 7100 feet. The plateau is an area of gently inclined beds of Triassic and Jurassic age. On the west its boundary is marked by the monoclinal upper House Rock and Coyote Valleys. Access to the plateau is limited on the south by the escarpment; however several trails are known to lead up the
precipitous cliff. All drainage in the area is tributary to the Colorado River. The characteristic stream of this area is an intermittent one which usually flows only in places along its course due to the spotty nature of the precipitation pattern. For this reason the prehistoric occupants settled primarily along the many washes dissecting the area, or else in the vicinity of major springs and seeps. Besides being near water resources, these sites are frequently close to localities of suitable building materials, arable land, pinyon, and clay. Water is the one resource that is in short supply; however enough water for domestic needs probably could be derived from weathering pits, springs, and seeps on a year-round basis. Water for horticultural uses depended solely upon the exigencies of the weather.

The prehistoric occupation of the Paria Plateau country was limited to the 12th and 13th centuries, that is, late Pueblo II and Pueblo III times. In upper House Rock and Coyote Valley most sites are located in the open on ridges and alluvial fans. On the plateau sites are confined primarily to the larger and more prominent knolls and ridges. Generally speaking the prehistoric structures found in upper House Rock and Coyote Valleys consist of amorphous piles of boulders. Ruins vary in size and complexity from isolated one-room dwellings to multiple-roomed pueblos with Kivas; however small sites with from one to three rooms are the most prevalent. Limestone boulders or sandstone slabs
were the preferred building materials in the valley and plateau areas, respectively. In both areas the mortar binding these materials together has weathered away leaving no trace. For the most part structures are of four types: pueblos, pithouses, kivas, and storage cists. A number of pithouses were recorded, but these can be defined only with difficulty as they exhibit few formalized features. Round structures, probable kivas, were recorded at most of the larger sites. Storage cists were encountered at only one site. These were small, circular, slab-lines structure. Many sites show signs of having been occupied over considerable lengths of time while others display no visible evidence of a trash midden, thus indicating only a seasonal occupation. As evidenced by this season's work, petroglyphs are scarce in the Paria country as only two such sites were recorded. Both chipped and ground stone were present at most sites. Actual lithic work camps, however, were conspicuously lacking which undoubtedly can be attributed to a lack of suitable raw materials. Only one such site was recorded during this season's reconnaissance. At most sites, pottery is common with the majority being made between A. D. 1100 and 1250. Intrusive ceramic types indicate trade between the Virgin Branch and the Anasazi heartland to the southeast. Vessel forms include both jars and bowls. At the smaller sites little or no pottery is found. When it does occur, it is primarily of a plain utilitarian type. For larger sites,
however, both plain utilitarian and decorated ceremonial types are much in evidence. Large amounts of gray wares were present at the majority of sites and were assignable to both Tusayan and Shinarump Gray Wares.

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This project was conceived and initiated by Virgil L. Hart and Gene Herron of the Arizona Strip Office of the Bureau of Land Management. Their successors, Garth M. Colton and Edward Pittman, respectively, brought about the inception of field work. The staff wishes to express grateful appreciation to Edward Pittman for the benefit of his consultations, his many kindesses, and his enthusiasm in anthropological research, all of which contributed to the merits of this work.

The staff conducting the field work consisted of John L. Haskell, field archaeologist, George A. Foster, Joseph J. Lischka, and Samuel D. Mayhew, all assistants in anthropology. Mr. Haskell led the field party for the field season and wrote the report on the 1967 survey. Mr. Foster assisted in the field work and attended to all logistics and
matters of site survey reporting and documentation. Mr. Lischka and Mr. Mayhew assisted in the field work, and Mayhew did the ceramic study and report.

Alexander J. Lindsay, Jr. was Senior archaeologist and administrative coordinator for the project. Keith Anderson and William D. Wade provided ceramic identifications. Clarice B. Covert and Mary Swank processed the collections recovered from the sites. Albert E. Ward provided preliminary research on the status of archaeological work on the Paria Plateau. Walter B. McDougall and John W. Weaver identified flora specimens removed from the study area. Katherine Bartlett expedited library research. William J. Breed assisted in problems associated with the geology of the Paria Plateau region. Mrs. Calvin H. Jennings was secretary to the project.

In the Paria area Mr. John Rich generously permitted the field party to use a cabin for its base camp. Other persons gave freely of their knowledge of the region, and we would like to express appreciation to Jim Glover, Fay Hamblin, Trever Leach, and Mel Schopman.

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Chapantongo, Hidalgo
Native Medicine and Curing: 1969, with Some Observations Concerning Beliefs in Witchcraft

darrell l. casteel

During the spring semester of 1969 at Wichita State University I was involved in an independent study of native medicine, curing and witchcraft in Mexico and Latin America. The following study plan was based upon that semester's work:

Mexico and all other Latin American countries share a cultural tradition—witchcraft, sorcery and native medicine and curing. The Indian and Mestizo populations exist primarily in areas aside from the major population centers. There exist enclaves in the major cities of monolingual indigenous persons who cling to remnants of traditional medicine and curing. Because of the necessities of maintaining their identity in the face of pressures to change, many of these traditions have undergone change in surface appearance and name, but the underlying complex remains basically the same. It is a documented fact that witches, brujos and brujas and the accompanying complex brujería, as well as the native curers (curanderos) and herbalists do still function as one of the major sources of medical aid for the peasant populations of Mexico (Foster 1948, Brand 1951, Beals 1946, Kelly & Palerm 1952). The illnesses treated by the curers include spirit loss, psychosomatic illnesses, hypochondria, and physical

The data presented in Darrell Casteel's paper was collected while participating in an ethnological and linguistic field school sponsored by the University of Oregon and Washington State University.
ailments such as cuts and broken bones. The range of cures includes the use of such herbs as peyote, marijuana and the alkaloid mushrooms of Mexico, as well as many others. These cures may take great amounts of time. In cases of actual physical ailments such as cuts, broken bones, etc., the native curer and herbalist will often do the job as efficiently as Western medical technologists. At the present time our understanding of these practices is most seriously limited.

My specific plan of study was based upon the following consideration. Frake, in Hymes (1964) feels that native taxonomies of disease based upon native perceptions, rather than medical taxonomies of Western medicine, have a reality of their own. Hence, the following plan was developed in rough outline form:

1. Folk taxonomies of disease
   a. Natural cause
   b. Supernatural cause (spirit loss)

2. Taxonomy of cures
   a. Natural--nature healing by herbs
   b. Supernatural--healing through curer or witch

3. Taxonomy of curers
   a. Herbalist--native "doctor"
   b. Witch or priest

4. Taxonomy of herbs

Based upon field observation, the problem outlined above was unworkable in a two month field school, and, consequently the following study proposal was developed:
Study Proposal
Chapantongo, Mexico
July 15, 1969

I feel it is possible to establish a taxonomy of the following:

1. Herbs, used as native medicine
2. Illnesses as defined by the mestizo population in the area of Chapantongo, Mex.
3. The perception of the diseases known to the native medical specialists.

The establishment of a taxonomy is possible with the aid of native specialists. At the present time I have introductions to two such specialists. Both have consented to aid me in my study. The aid will be in the form of descriptions of the complete curing process. This involves the following:

1. Procurement and preparation of herbal medicines
2. Prescriptions based upon examination of the patient
3. The process of curing.

I hope to be able to follow one case from beginning to end. This study will be purely descriptive in nature.

Due to my lack of time and understanding of the necessary ethnographic skills, my original plan was overly ambitious. Consequently, the final paper is a description of native medicine and curing.

II. GEOGRAPHY AND HISTORY OF CHAPANTONGO
Since Chapantongo is the village in which this study was conducted, a description of the geography and history of the
area is necessary to properly establish the setting.

Chapantongo, Hidalgo, Mexico is the county seat (cabecera) of the municipality (municipio) of Chapantongo, one of the 27 municipios within the Valle del Mezquital. The 822,000 hectares (one hectare equals approximately 2.3 acres) of the Mezquital comprise approximately 40% of the land surface of the state of Hidalgo. The Valle del Mezquital is divided into two zones--53,000 hectares under irrigation supervised by the P.I.V.M., and 769,000 hectares of semi-arid land. The total population of the twenty-seven Mezquital municipios is 337,000, representing 30% of the total population of the state. The above figures are taken from a bulletin published by the Patrimonio Indigena del Valle del Mezquital (Corona del Rosal 1968).

Chapantongo lies in the uplands of one of the fingers of the Sierra Madre Oriental. More accurately, the town lies at 7,800 feet above sea level, in a high long valley in two small extensions from the major system of the Sierra Madre. It is built in a river valley with an extensive system of natural springs (manantiales) which supplies potable water to Chapantongo and Alfajayucan, 16 kilometers distant. This means that there is a natural movement of water-carried soil deposits, which has improved the amount of usable land in the immediate vicinity of the village. Due to the existence of the natural water system as part of the riverine system, irrigation and earlier dams are now holding sizable amounts
of some of the richest crop land around Chapantongo. There seems to be enough water to serve the basic economic, agricultural and living needs in Chapantongo.

There exists, to my knowledge, no flat land in or around Chapantongo. Erosion of the top soil is a major problem for the peso agriculturalists of Chapantongo. The topsoil in most of this region is three to thirty inches above rocks, primarily igneous in origin. This rock erodes quickly, but not as fast as the thin topsoil. Magueys, mesquite, cacti and other types of desert succulents are the most common flora.

Chapantongo, or more precisely Chiapantango, literally means place of the waters (lugar de aguas). Natural springs abound in and around the village. According to local traditions, the site of Chapantongo has been occupied since pre-hispanic times. There are pot sherds and evidence of various types of construction in that area that seem to date from pre-Toltec times. Ceramics that seem to fall into the classic sequences of Teotihuacan orange ware, classic Toltec, and an overriding post-classic Aztec sequence are found in abundance at Chapantongo. In association with the various pottery sequences are other archaeological manifestations, such as walls, interred pyramids and some heiroglyph-covered stones of megalithic proportions.

The village was taken over following the conquest of Mexico. Oral traditions maintain that by 1570 the Spanish had taken possession of the village and by the year 1574 had
built their first chapel, which is now a part of the present church structure of Chapantongo.

About the same time the lands and people in and around Chapantongo became part of the hacienda/encomienda system which was so prevalent in all of Mexico from the Conquest until the Revolution of 1910 (Henry Parkes 1966). Vestiges of this system are still visible in the Rancho Teneria and in the old cattle pens and settlements of the old haciendas in Chapantongo.

During the 1930's there was a small war between Chapantongo and Santiago Loma over the ejido lands (grant lands under the 1917 federal land redistribution program) in the municipio. This was the last armed conflict in which the villages were engaged.

The village has, according to the last official census in 1966, 1,581 inhabitants, with approximately 1,700 inhabitants in the rest of the municipio. It is a mestizo village of much the same type found throughout Mexico (Redfield 1965). Most Chapantongo residents are subsistence farmers who own or use small plots of land. There are few absentee large land owners. The commercial district is centered around the square plaza that typified many of the towns and villages that were established by the Spanish. The major commercial enterprises in Chapantongo are stores (tiendas), restaurants and an array of shoe shops, carpenter shops and bars. One finds very little in Chapantongo that can be identified as
"Indian". There seems to exist an open hatred for anything that can be identified as "Indian". For instance, Indian carrying nets (ayates) are rarely found in Chapantongo, and they are never used with the tump-line. They are instead slung over the shoulders. Likewise, no one in Chapantongo municipio speaks Otomi, even though the municipio is surrounded on all sides by Otomi populations. The Otomis are considered to be backward, ignorant, without regard for themselves, and lacking the motivation to change. According to my informant, Otomis regularly attend the Sunday market in Chapantongo, but none live in the village proper or in the municipio. So Chapantongo is an old village with almost all the various forms of architecture from stone to adobe to new cement block, but lacking entirely the organ-pipe cactus and stone and maguey homes of the Otomi.

The village is quite modern in many aspects. It has both electricity and running potable water. There exist two schools, the public federal school with grades one through six and the private Catholic school which offers grades one through four. There are two health service facilities in Chapantongo. One is the Health Center (Centro de Salud), under the federal Secretary of Health and Assistance (Secretaria de Salud y Assistencia), maintained and manned by the doctors from the medical schools of Mexico doing their obligatory social service (servicio social) under the training programs for doctors. The other is the private dispensary in the Catholic
Aid Center. Both of these are at present manned by the doctor from the Health center.

Chapantongo has bus service from the Valle del Mezquital line. The town lacks rail, telephone, and telegraph connections. No daily newspaper service from the major centers close by (Mexico City, Pachuca, etc.) is available. Service for telephone and telegraph are available at Alfajayucan, sixteen kilometers to the north on the road leading to Highway 45. Train service is available at Sayula, twenty kilometers to the south on the unpaved road that leads to Tula, forty-five kilometers south of Chapantongo. The lack of telephone and telegraph does not mean Chapantongo is isolated from the outside world. There are many radios and televisions in Chapantongo.

III. ENVIRONMENT AND ITS EFFECTS

Special developments or new ecological niches for the people of Chapantongo are not presently available. Further, many of the traditional means of existence are rapidly disappearing. Consider the following examples:

1. No new lands to develop.
2. Local weaving trade disappearing.
3. No new developments in animal husbandry.
4. No new products of local manufacture.
5. More and more young people are migrating away from Chapantongo to other population centers of Mexico.
6. No new entrepreneurs.

The accumulative effects of the above make changes of major proportions in the present environment highly improbable.
These conditions bear directly upon the problem of special importance to me. They help explain why the traditional systems such as native medicine, curing and witchcraft persist. Even though presented with the choice between western and traditional medical practices, they continue to use the traditional practices, which seem to be in line with the static nature of the social system and subsistance system.

IV. NATIVE CURERS

According to Dr. Federico Otero, Health Center in Chapantongo, there are two kinds of curers—limpiadores and curanderos. I asked Dr. Otero to describe the limpiadores and following is that description.

Limpiadores

Most families in Chapantongo have one limpiador, an adult member of the family. These persons know, more or less, the way to treat most of the common everyday illnesses that affect the members of the average family. The principal types of problems dealt with by the limpiador are: a pain in the stomach (dolor de estomago), cleaning the kidneys (limpiar de rinones), pain of the head (dolor de cabeza), refreshing the intestines (refrescar de los intestinos), and purifying the blood (purificar de sangre). Any adult who wishes can learn the ritual formulas and applications of these various "cures". For problems which the home remedy does not effect
a cure, one goes to a limpiador of greater reputation outside the immediate family.

The limpiador is not considered to be of the same level of ability as a curandero. Because he lacks the reputation, as well as the basic ability and "medical" knowledge of the curandero, the limpiador is less potent. So an individual with a serious illness begins with the family limpiador, goes next to a limpiador of more repute, then finally to the curandero.

Curanderos

The curandero can be distinguished from the limpiador primarily by reputation, i.e., an initial success in curing. In a total of 1,311 interviews about belief in curanderos less than a dozen persons expressed disbelief in the abilities of expert curanderos to cure a range of diseases from the common cold (gripe) to tuberculosis and cancer. This shows the extent of the belief in the ability of noted curanderos.

The above data indicates the present strength of traditional medicine in the village. Don Pepe Galven, municipal president of Chapantongo, is the most influential curandero in Chapantongo. This community leader, one of the persons supposedly most responsible for progress, is at the same time helping to maintain traditional medical practices. This is the same situation, more or less, with Senora Hernalinda Candia of San Pablo, about ten kilometers from Chapantongo.
She is most highly respected and known throughout the whole region, from distances as great as one-hundred kilometers. Senora Candia and Don Pepe Galvan have and share a tradition, which is a blend of western medicine, European, prehispanic, and contemporary Mexican beliefs.

The types of illnesses treated by the curanderos give some interesting insights into the beliefs of the people who are treated and the curanderos who do the treating: Heart attacks (ataques del corazon), tuberculosis, sexual debility (debilidad sexual), bile (bilis), fright or shock (susto), ulcers (ulceras), cuts and broken bones (all classes)—the list goes on. As can be seen, these curers are considered specialists, capable in most instances of caring for the needs of the believing population in the presence or absence of western medicine.

Dr. Federico Otero stated that of the two-hundred patients he sees (average per month), most, if not all, have consulted a limpiador or curandero before seeing him and will likely report back to this same person after his visit.

Curandero/brujo

According to the opinions of my informants, with one exception, there are no curandero/brujo in Chapantongo. The curandero/brujo is one who uses both major curing practices—herbal medicine and witchcraft. The curing process used depends upon the curers diagnosis of the ailment. The diagnosis is the
same as used by other native curers, but in the case of an illness that defies description or in which the herbal cure has no effect, the curandero/brujo then resorts to divination of the illness by witchcraft. Moreover, curandero/brujos can be enlisted to cause illnesses to others by use of witchcraft. Informants say curandero/brujos exist in the surrounding ranchos, pueblecitos, and sierras, but not in Chapantongo. Yet, no one was willing to discuss this subject in the open, only behind closed and locked doors. (Miguel Tovera Lopez and others). There was a great fear manifest in my informants. For example, three members of one family stated that many in Chapantongo believed in witches and witchcraft, and believed that curanderos who know how to manipulate plants to their will could also use this knowledge in the practice of witchcraft. Talking about this subject could only be done once they felt sure that it would not reflect unfavorably upon themselves. These are the same people who stated there are no brujos in Chapantongo. This is a good example of the real and ideal expression of culture. These people do believe that Don Pepe Galvan and his mother-in-law—also his father before him—and Senora Hermalinda Candia of San Pablo are possibly curandero/brujos. This is based upon a belief in their superior curing abilities, and their competence in manipulating people and unknown forces.
Role and Recruitment

The status limpiador is easily achieved and retained. It is less complex and more readily diffusible to other members of the household unit. A parallel might be noted to our own culture. Here parents often play the role of low-level medics, applying the techniques of western medicine and "folk" remedies. Limpiadores do not ordinarily recruit, because of the generalized nature of their knowledge. One of the family members will learn enough about curing to continue the practice after the principal curer either dies or stops practicing. The number of limpiadores would number in excess of one-hundred in Chapantongo, while the number of curanderos is less than five for the population of approximately 1,581.

Curanderos, on the other hand, have a more highly refined knowledge. Their status is achieved, and this status is validated by successful performance of the role. After having achieved the role or curandero, one rarely loses the prestige associated with it by poor performance. There are built-in mechanisms for the explanation of failure. According to Don Pepe Galvan and Senora Candia, the failures arise from conditions which are beyond the curandero's ability to cure because of possible divine intervention or because the patient did not follow the prescriptions precisely. To the knowledge of my informants, no curandero had lost his role because of poor performance. Some are considered better than others, but none
are thought to be totally ineffective. Curandero recruits are generally children of curanderos. Often it is a tradition in a family for one or more of the members to actively pursue this knowledge. (Arriving at this level is a lucrative enterprise.) Don Pepe Galvan told me that both his father and grandfather before him were curanderos and he was continuing what he calls a tradition. I asked if one of his children would follow him and he stated that he thought so. I do not know if the curandero would actively try to recruit in case there would be no one in the family to carry on. Senora Hermalinda Candia in San Pablo has trained her daughter, who will follow in the tradition of her mother.

One informant, Don G. from a small village on the coast of Veracruz, told me that when one knows he is intended to help or cure others and has no immediate source of instruction he seeks out a person willing to apprentice him. For instance, should I desire and show through diligent work my desire to be a curandero, they would apprentice me. So I see a possible analogous situation between Veracruz and Chapantongo.

Rank

Having achieved the role of curandero, one has a position of high rank. This is true both in Chapantongo and other areas of Mexico (Redfield 1940). I cannot state, however, that this is a universal in Mexico. Public knowledge and awareness helps one move into positions such as president of the municipality, or being considered a voice worth hearing in any matter of
public discussion. The curandero is in the upper class or elite in Chapantongo.

V. NATIVE MEDICINE

The principal flora in Chapantongo includes the various types of cacti and maguey. The garambullo cactus bears edible fruit and is also used for the curing of cuts. Another plant of this same category is the pulque maguey. The honey water (agua miel) of the maguey is used for making the alcoholic drink pulque, and the small leaf (pinca) of the white maguey (maguey blanco) is used in the treatment of postema (translation unknown). The above are excerpts from some formulas given to me by Sra. Hermalinda Candia. Severo Gonzalez and Don Cristobal Olguin told me that the horned toad (Chameleon) is commonly used to stop aigre, which is a pain in the body. One puts the Chameleon in one's clothes and the pain will stop almost immediately.

The above are just a few examples of elements of the plants which are used to cure. Also, it helps set the stage for the next section.

Specific Herbs

The following is a simple listing of herbs and their related uses. Some of the herbs will be written in formula form as they were presented to me.

The following materials were given by the limpiador, Miguel Tavera Lopez:
Manzanilla--used in tea form for general pain of the stomach.

Ojacin--used in tea form for a stomach refresher and cleanser.

Rosa de Castilla (Rose of Castile)--same as Ojacin

Cabello de maiz (Hair of corn)--tea form to clean the kidneys.

Estafiate--tea form for pain in the stomach

Yerba de Indio--tea form for pain of the stomach

Alfalfa--tea form good for kidneys

Ajo (Garlic)--eat natural with one glass of water for rheumatism

Cebolla (onion)--eat in natural state for rheumatism

Limon (lemon)--natural and dried skin in tea form to purify the blood.

Jitomate (Red Tomato)--natural or cooked for refrescant for the intestines

Jugo de Maguey (Juice of Maguey)--natural unfermented juice of the leaf or agua miel for hits, abrasions and bruises. Unfermented juice of the plant has the same uses.

Peyajito de Maguey (Small sucker plant from the Maguey)
Mash the very small plants and apply the resulting liquid for cuts.

Tabacillo (Small tobacco leaves)--use the vapors of the dried natural leaf or place the green leaves below the foot in shoe or sandal--vapors for headache or pain in the head--green leaves used for bunions or corns.

Panales de Abispa--the honey--helps recover from shock

Cafe Puro (Raw doffee)--ripe coffee beans are eaten to settle the upset stomach when one is vomiting

Miel con Limon (Honey with lemon)--honey with lemon juice natural for cold and anemia in children
Tequila con limon (Tequila with Lemon juice—natural for colds in adults.

The following recipes were prepared and presented by Sra. Hernalinda Candia. They are recipes for specific treatments.

Para la Bilis y Susto

Tomar tecito caliente de:
Flores de tilia de las 2
Flores de junco de las 2
Flores de toronjil de las 3
Ajenjo
Canela (Cinnamon)
Anis de estrella (star anise)
Huashi
Barbas de Coco (beard of coconut)
Cascara de naho blanco
(Se toma en ayunas y al acostarse)

The above is for fright and shock, also for cure or recovery of ghost fright or exposure.

Para la tos, asma y bronquitis

Se toma un te caliente de
Flores de sauco
Flores de violeta
Flores de bonaja
Flores de bugambilla
Flores de gordo lobo
Tabachin
Itamo real

The above is for the cough of asthma and bronchitis.

Para el Corazon

Flor de Platano (flower of the banana)
Flor de manita
Flor de gardenia (flower of the gardenia)
Flor de pito
Flor de Magnolia (flower of the magnolia)

De una flor se secan 4 partes para 7 tomas. En ayunas se toma sin endulzarlo.
Para los Pulmones

For the heart, dry 4 parts of each for 4 drinks. Drink it without sweetening.

Se compan 4 or 5 Guajes ciriales se les hacen un agujerito de donde depende la rama. Se llenan de Buen Vino Blanco. Se topan y se dejan 8 días en reposo. Se toma una copa en ayunas.

Translation:
Buy 4 or 5 guaje plums and make them into a water syrup. Fill a liter container with good white wine. Close and let rest for 8 days. Take one glass when needed.

Para Dolores de Huesos Y Reuma

Se hacen unos vapores de Romero.
Romero
Ruda
Salvarreal de Castilla
Salvarreal de Bolita
Hojas de Eucalipto (eucalyptus leaves)
Hojas de Piru (Piro leaves)
Sochapatle
Panela
Laurel (Laurel)

This is for bursitis, pains in the bones and rheumatism. Make the above into a stew and use in compress or hold the affected part above the vapors.

Para la Postema

Se toma una posima de:
Una penca de maguey pinto
Una Penca de maguey guapilla
12 puas de maguey blanco
Palo mulato
Cascara de Habo blanco
Tejocotes
Pasas ciruela
Pasa chiquita
Concha de armadillo
Una copa de alcohol
1 gramos de azucar
1 gramos de azucar cande
Se pone a herbir en un litro de agua a que queda en medico
litro de agua. Se pone a serenar y se toma en ayunas.

The above is for internal hemorraghes. One drinks whenever
necessary.

Also, there are two small booklets of diseases, herbs and
cures. These are used to aid when Sra. Herma Linda Candia cannot
define the illnesses or does not know the proper herbs to use.

Zerox copies of these are included in Appendix I.

The following materials were supplied by Don Pepe Galvan.

1. Toloache--Loco or Jimson Weed
   This herb has curative and poisonous qualities. It is
effective for hemorrhoids. Use six leaves of this plant, and
when this is well cooked apply to the affected area, as hot as
the patient can stand. Use care not to take internally for it
has a strong poison.

2. Epazote
   It is in general use for beans, as a flavoring. It is
medicine for parasites of the stomach. The method of use is
to cook it, not letting the patient smell it or inhale the
odor. Later, have the patient drink the resulting product,
and the parasitic molestation will stop.

3. Epazote de Zorrillo
   This serves for intense stomach pain. Cook a root and
drink the brew as hot as possible.

4. Tianguis
   This herb has medical qualities and is effective for
infection of the intestinal tract. Make a drink from the
root and drink two or three times daily. May be sweetened
if one likes it.

5. Rosa de Castilla
   This has a rose of the color "rose" and the flower is
used as a laxative. It must be cooked and then taken. Has
no poison.

6. Artemisa o Santa Maria
   This herb has curative qualities for deafness not caused
by wounds or other grave illnesses. Grind the roots and leaves
and when well ground introduce into the ear. If it continues
to bother, apply another time. Contains no poison.
7. Sauco

This plant grows to the height of three meters. The flowers and the plant are curative. The formula calls for Hitamo Real, ciruela pasa, leaves of eucaliptus, 50 drops of 96% pure alcohol. Should be taken hot, when the patient is in the bed. Is medically effective for a cough.

8. Malba

This is a good laxative when one is constipated. It is particularly good when one is seriously ill. Cook the leaf until mushy, then let cool and eat with a spoon. It is not poisonous and the root is used to clean the intestinal tract in the form of an enema.

Perception of Application

As can be seen, these herbs have a prescribe manner of application. This is clearly shown in the preceding examples of herbs for curing specific illnesses.

Often as not the purpose of the application of herbs is to restore the natural and necessary balance in the body. Should the balance not be reestablished, the illness could become more serious, and in some cases of serious illness, could cause death.

Another point of prime importance is the cause of the imbalance, whether it comes from natural or unnatural causes. For instance, fright or shock (espanto or susto) caused by an accident or exposure to a ghost can be either a physical or mental illness, or both.

IV. CURING

Treatment of disease involves certain western patent medicines. Use-patterns parallel those for herbal medicine.
Often the herbal medicines and the prescription for their use are presented in the same fashion as the western medicine. The curandero tries to make the interview situation as professional as possible. Not that this in any way establishes a doctor/patient relationship. The persons involved are often friends apart from their professional relationship. Most strangers are introduced by a patient/friend of the curandero.

Regardless of how professional the curandero acts or reacts to the patient, these basic elements are distinct from the western medical approach. First, the "office" of the curandero is in the home, where the patient often interacts with the family of the curer. So immediately the patient is more at ease. When compared to the medical doctor with his sterile office and clinical professional approach, the native curer and more familiar surroundings are naturally preferred by the patient. Second, the native specialist uses principally herbs, many of which are known to the patient. Many of the illnesses, herbs for curing, etc., are part of the "oral" traditions of a people, and in Chapantongo this is the case. People know these traditions, even though they would probably not try to cure themselves of serious illnesses. Third, the basic approach seems to me different from the approach of the practitioners of western medicine. Western medicine tends to concentrate upon the physical (or biological) aspect of illnesses. The patient often has to face the mental adjustments of illness by himself. With native medical practices this is not true. Lacking part of the technical
proficiency in diagnosing illnesses, the native curer has to depend upon a catalog of symptoms which are revealed by the patient and interpreted by the curer. Up to this point both doctor and curandero are essentially the same. But at this point there comes a decided change in the practices. While gathering the life history, the native curer is building rapport with the patient. It is necessary to build in the qualifications for possible failure. (See page 13). This while process tends to build greater faith and as a consequence the total curing "Complex" is greater than its parts. Lastly, the whole physical environment is natural and native. The patient is at home, comfortable in a setting of constant values shared by the participants.

VII. WITCHCRAFT

I further believe, from the reaction to the questions concerning the two principal curanderos I met and interviewed that both Sra. Hernalinda Candia and Don Pepe Galvan are practicing witches. No one but Senor E., however, stated they were! I realize this does not constitute proof. The existence or non-existence of a belief in witchcraft is difficult to prove, but a reticence to talk shows a community-wide awareness. With some there was a reaction of fear. Possibly it was my expectation, but in some instances open fear or astonishment at my questions was registered.
Observed Effect and Specific Related Information

Don E., Federico Otero, Miguelito, Don Cristobal, Olguin, Don Sanchez (police officer of Chapantongo), and Don Pepe Galvan have all recognized, in one context or another, the existence of brujos or bad people who know how to kill with poison herbs (a class of herbs never described to me). All these people say there is a class of herbs to make things bad (yerbas para hacer mal). Also, there are believed to be persons who can use or control this information and much more.

Miguelito, for example, told me of a woman who had died of a tumor in the stomach, and everyone in Chapantongo believed it was placed there by a witch. But Miguelito stated that he did not believe in witches. At this time he further stated there was a general belief in witches in Chapantongo. I then asked if diseases were all the same, and Miguelito stated that no, there were both good and bad diseases. I asked how one could distinguish one from the other. He stated that the good can be cured, but often the bad cannot. He said that bad illnesses (enfermedades malas) come from witches, whereas the good or natural illnesses were a part of the life around one and, as a consequence, could be cured. In further conversation I questioned Don Cristobal Olguin and Don Sanchez about this same subject. I asked if there were classes of disease and, if so, what the classes were. The reply was an unhesitating and firm yes, there were different kinds of illnesses. Then I asked again about the classes. Good and bad was the answer. What caused the bad? Witches, was the reply.
My next question concerned witches in Chapantongo. There are none, it seems, in Chapantongo, but there are witches in other areas around Chapantongo, and they cause diseases which the local curanderos and medics can't cure. They also stated that any disease that could not be explained by a run of bad luck, regardless of the nature, was believed to be witchcraft. In these terms, then, witchcraft has great influence in the lives of the people of Chapantongo.

Illustrating further points about witchcraft are the following descriptions of specific phenomenon related to or believed to be caused by witches:

Mal de Ojo (Bad Eye)
Disease of the eyes of children caused by a small insect called "Zancudo". It is often called glass eye by English-speaking peoples. The eye glasses over and becomes milk-white.
This is also the name of a disease of adults which is caused by the malevolent look of a "brujo" (witch) which causes problems of sight, headaches which can't be cured and an intense pain from closure of the head and respiratory passages of the head.

Espinias de Nopal (Spines of the Cactus)
This is a malevolent act of a witch, which causes or empowers the spines of a large nopal to attack the person who has been embrujada (bewitched). The attack is made as the person passes in the vicinity of the nopal (cactus). This is believed to be one of the main indicators of the presence of brujos, also one of the principal demonstrations of their (the witches') abilities.

La Negra Noche (The Black Night)
This is a special night which has a distinct set of conditions. It will be unusually warm or cold for the time of year. It will be "nublado", a condition of heavy, low clouds, and a completely black night. On this night special spirits roam or are released, supposedly by brujos. These spirits are capable of
destructive acts, which includes the act of killing.

There are three such spirits in Chapantongo. One inhabits the large tree in the road at the northwest corner of the plaza. The spirit that inhabits the tree is believed to be able to kill people. Should one sit under this tree on the "negra noche" the spirit would kill that person, or so it is believed. For this reason people who live in the vicinity of the tree will not pass in front of it on these special nights. The people will detour three to four blocks around, just so they will not pass in front of it.

The second spirit is in one room of the house of Don Cristobal Olguin at the Restaurant Jardin. This spirit is supposed to have killed one driver from the bus line Valle Del Mezquital. Other drivers have reported awakening in the middle of "La Negra Noche" while being strangled by a pair of hands of an invisible being. Now drivers will not sleep in this room on these special nights. The room is closed with a heavy wood log, chains and padlock to keep anyone from entering or anything from exiting from the room on this night.

The third spirit lives near the "Tanque" ( a large pool formed by one of the major springs of Chapantongo). I did not get a description of this spirit, other than the belief that it exists.

These are all the special manifestations of witchcraft that I obtained during my stay. I heard mention, but could not get a description of, special spirits from "Indian" times. What they were or why they were mentioned is not clear. I know that Chapantongo was a village site in prehispanic times, but what importance this has I do not know.

Don E. and his family related the following to me:

"A witch never uses salt, for salt is a most powerful medicine against them. Witches are capable of dividing in half and the top half is the part that roams about killing, casting spells or causing harm. So should a person find the bottom half of the witch's body, all he has to do to render the witch ineffectual, or to stop it, is pour salt on it. The witch will also die if only the bottom part is salted, because both parts must rejoin for the witch to live."
Don E. and his family further stated that in the last twenty years or so several people have been accused of witchcraft. Of those accused, where it was of general public opinion that these persons were indeed witches, they have been killed. That is the fate of a witch even today, so I was told. The witch is hanged from the tree that has the "spirit" at the northwest corner of the plaza. They are then shot and buried with casket and cross. From seven to nine persons have been so executed for witchcraft over the past twenty years. So, part of the folk belief is as follows: if you are suspicious of a person, watch and see if he or she uses salt. If not, then the one suspected has great possibilities of being a witch.

VIII. OBSERVATIONS AND CONCLUSIONS

The most common diseases treated by the doctor, Federico Otero, at the Health Center are:

For children:
1. Bronchial pneumonia
2. Intestinal parasites
3. Tonsilitis
4. Malnutrition

For adults:
1. Cirrhosis of the liver
2. Amoebic dysentery

He treats approximately two-hundred patients per month for the above ailments. Don Pepe Galvan, on the other hand, treats approximately twelve-hundred patients per month. I find Don Pepe's figure a little hard to believe. Yet, I know that his medicine has greater acceptance than western medicine in
Chapantongo. I believe that both of these medical specialists are treating the same basic diseases, but Don Pepe does not identify his patient's problems in these terms. The same may be said for all the limpiadores and curanderos in Chapantongo, and Senora Hermalinda Candia in San Pablo.

There has been a Health Center in Chapantongo for three years, yet a large percentage of the medical needs of the community are met by the native medical specialists. Consequently, I feel it is reasonable to postulate and state the following: native medicine and curing practices constitute a strong cultural tradition in Chapantongo and the surrounding area. These practices are slow to change and I believe they will continue for some time in the future.

At present the belief in witchcraft is in the terms which I have described. It does not lie on the surface and indeed it is difficult to obtain sufficient information concerning witchcraft. Admittedly, my information is sketchy at best. This aspect of Mexican culture needs a great deal more study. In my opinion, this is something that cannot be thoroughly studied in two months. I may be overstating my case concerning witchcraft, but this is my tentative conclusion based upon observations from this summer.

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