UTE ACCULTURATION AND DIETARY ADAPTATION

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This is to certify that the

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UTE ACCULTURATION AND DIETARY ADAPTATION

by

Beatrice Medicine Garner

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Beatrice Medicine Garner

THESIS ABSTRACT

Ute Acculturation and Dietary Adaptation

Beatrice Medicine Garner

The dietary adaptations of an American Indian tribe, the Ute tribe located at present on the Uintah and Ouray Reservation in the state of Utah, illustrate a general acculturative process to a new system of values as presented by the dominant White society.

The data on which this study is based was gathered during field work among this indigenous group. In addition, a careful perusal of all existant literature and governmental documents was conducted to delineate the types of change agents which enacted adjustments in the aboriginal food habits of this preliterate group of people. The data indicated that the type of change was variable with the type of change agents, e. g., missionaries among these Indians were not as effective in changing the food-ways as were governmental agents such as school teachers, agents, farmers and other directly super-ordinate personnel. A system of federal food-rationing definitely directed the food change of this group.

In this little-studied group, the carriers of a gathering-type of aboriginal culture have made distinctive adaptations to a dominant American society.

Approved Chas P Lawrence

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CHAPTER I. INTRODUCTION TO THE PROBLEM

A. Method of Obtaining Data

Data for this thesis was obtained during a field trip among the Ute Indians of the Uintah and Ouray Reservation in Utah during the summer of 1948. Seven weeks were spent in the field, one of which was spent in western Utah on the Gosiute Reservation. The remainder of the time was spent on the Uintah and Ouray Reservation in the northeastern section of Utah. Since the population of the Gosiute was a smaller one, it was used as a test case to acquaint those of the field party without previous experience with work in a cross-cultural setting.

In addition, it was felt to be advantageous to study a group which in aboriginal times had a culture similar to that possessed by the Utes at that time. These Indians did not receive the large amount of direct influence and consequent acculturation to the Plains Indian pattern that the Utes had received. Even the superficial examination conducted among the Gosiute did, in fact, prove very helpful in enabling one to make a better evaluation of cultural items found among the Utes.

As for specific field techniques, as much information as possible was obtained from the literature and from questioning personnel at the Indian Service headquarters. After arrival in the field, the practise became one of each individual worker selecting an area for concentrated investigation. He worked with a series of informants but not in the presence of the other workers. These interviews were

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usually conducted at the trading post or at the informants' homes. In the gathering of the material for this paper, the greater proportion of the interviews were conducted in the home of the informant. Trips to the surrounding country-side were taken with various informants for the purpose of gathering those forms of food collected from a wild state.

In addition, material was obtained from records belonging to the trading post and from records on file in the Indian Service Agency office. The records kept by the trading post contained itemized listings of all credit purchases with the date and name of the purchaser. Since a vast majority of trading post business is conducted on a credit basis, this was found to be an invaluable source of information on actual acquisitions of new types of foods. The trading post remains in the possession of the original family, who, in turn, were the first family to settle in this immediate area.

After the Indians of this group discovered the subject of this investigation, they cooperated fully - to the extent of providing the author with food on frequent occasions. She was usually invited to watch the preparation of the food or participated in its preparation.

A full questionnaire form was not used, but rather, the author used the schedule type of questionnaire which is used by many anthropological field workers. It consisted of an outline about which questions were directed to the informant in an attempt to obtain as complete material as possible.

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B. Discussion of Relevant Theory as Applied to Pre-literate Societies

Due to the paucity of work in the nutritive area among pre-literate peoples, it is possible to outline the major theories of each of the main contributors in this area of human relations. Various theories regarding change in dietary practises of such pre-literate societies have been advanced by social scientists. However, little has been done other than enumerations of food-gathering techniques and other food-getting activities with slightly less interest in attitudinal and habit complexes revolving around food.

One of the persons interested in the nutritional aspects of culture is Dr. Audrey I. Richards, who published a hypothetical statement in 1932, in a book which was entitled Hunger and Work in a Savage Community. Her statement that "nutrition is a biological process more fundamental than sex"[1] is a startling one and this area of the hunger drive is markedly absent from most ethnographic research. Unlike sex, this drive cannot be suppressed; it is an imperative which underlies all human interaction.[2]

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[1]Richards, Audrey I., Hunger and Work in a Savage Community (Glencoe, Illinois: The Free Press, 1932), p. 1.

[2]Oliver, Douglas L., "A Case of A Change in Food Habits," Applied Anthropology, Vol. 1, No. 2, 1942, p. 34. "The activities, institutions, symbols, and appetites derived from the bodily need for sustenance constitutes a most, if not the most important aspect of primitive cultures ... Sustained sexual frustration, however, only rarely reaches a stage beyond bodily tolerance. On the other hand, serious and sustained frustrations to the satisfaction of food needs can be tolerated by no human organism."

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Of all the biological impulses, the hunger drive is dependent for its fulfillment upon the formation of a habit complex. This food gathering complex requires an adaptation of the individual to the environment plus a workable interaction pattern which is essential to make the individual a functioning member of society. In turn, the individual, society and culture are interrelated in one process which serves to enable the continuance of the group.

According to Richards, the "nutritive impulse...has either been dismissed in a paragraph on infant psychology or split into a number of separate inherited 'urges' expressed in human institutions of the most varied and complex type."[3] Neither is an effective means of analyzing the part that nutrition plays in the structure of human society.

Generally speaking, the nutritive practises of pre-literate groups have been less spectacular and therefore, ethnological investigators have focused on other parts of the culture, on such things as rites of passage, warfare, kinship, and age-graded societies.

Man has the ability to eat a larger variety of food, but actually, his diet is limited - not so much by environmental or biological factors - but by the traditional regulations of the society into which he is born.[4] Cultural traditions impose restrictions and present conditioning processes which may cause an important effect on later relations.

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[3] Richards, op. cit., p. 6.

[4] Cussler, Margaret and DeGive, Mary L., 'Twixt the Cup and the Lip (New York: Twayne Publishers, 1953). This book deals mainly with food habits in the United States and especially with the South.

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Foods tend to assume a series of values other than those which hunger provides. Food and nutrition in a human society cannot be effectively considered apart from the cultural milieu in which they operate. In a primitive society, the connotations of nutrition are basic and seemingly apparent. Ideally, nutritional factors must be viewed as a process starting from the period of suckling and continuing until full economic status is reached by the adult. This is not the only area in which food habits operate, however. The mechanisms by which food-getting habits are formed are of consequence. Important in man's symbolic system are his primary needs; food is a basic need. The formation of sentiment systems may be studied through the medium of individual life cycles in the setting of each particular culture. This is one means of discovering the interrelationships of the functions of the social institutions in a living society.

Human relationships of a primitive society, as determined by food needs, may show how hunger and the ways of meeting this need shape the sentiments which determine the operational method of a social group. Beginning with the individual, it may be possible to show the effects of the suckling relationship on the social tradition and rules of a group.[5]

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[5] Mead, Margaret., Sex and Temperament in Three Primitive Societies (New York: William Morrow and Co., 1935) p. 39-40. This line of argument is borne out by Margaret Mead. Referring to the Arapesh, she states, "During its first months, the child is never far from someone's arms...If the child is fretful and irritable, it is carried in the sling, where it can be given the comforting breast as swiftly as possible. A child's crying is a tragedy to be avoided at all cost, and this attitude

The limits of the variations of such customs may be analyzed carefully to grasp the meaning of the individual's life processes plus its effect psychologically. This segment of the whole core of nutritional practises may also be a factor determining the social status of women and their relationship to men, and vice versa. Food, then, may be a determinant of attitudes and interactions which are centered in the home.[6] Food might be equated with trade in a system of economics, thus it is important to intra- and extra-familial relations; in turn, it places food-getting activities in a larger context dealing with the whole society.

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is carried over into later life...Suckled whenever they cry, never far distant from some woman who can give them the breast if necessary...the child has a continuous warm sensation of security." And on page 139, she further states "Mundugumore women suckle their children standing up, supporting the child with one hand in a position that strains the mother's arm and pinions the arms of the child. There is none of the mother's dallying, senuous pleasure in feeding her child that occurs among the Arapesh. Nor is the child permitted to prolong his meal by any playful fondling of his own or his mother's body. He is kept firmly to his major task of absorbing enough food so that he will stop crying and consent to be put back in his basket. The minute he stops suckling he is returned to his prison. Children therefore develop a very definite purposive fighting attitude, holding on firmly to the nipple and sucking milk as rapidly and vigorously as possible. They frequently choke from swallowing too fast; the choking angers the mother and infuriates the child, thus further turning the suckling situation into one characterized by anger and struggle rather than by affection and reassurance."

6 Richards, Audrey I., Land, Labour and Diet in Northern Rhodesia, (London: Oxford University Press, 1939), p. 6. "The habits of eating are very largely fixed and traditions of housecraft correspond to it."

Nutrition includes the whole schema of regulations by which man's food-obtaining activities are organized and controlled. The whole nutritive system in operation is the ideal to be observed. Its interrelationships with other aspects of the system of social organization, religion, economics and values should be noted. Too, the value system of an individual changes as his age and interaction pattern in a group changes and may be more salient in a process of adjustment to new systems of values and sentiments.

The formation of family sentiments and the function of the household group as a unit which produces, conserves, consumes and shares its own supply of food varies in divergent cultures. The extension of these family functions to members of the wider kinship group - considering attitudes and reciprocity - may be centered around food getting and food distribution.

Dr. Richards considers economic organization relative to this factor but also in relation to the function of ceremonialization in strengthening such bonds. She uses food as a symbol of these complex human relationships.

The use of the analysis of food habits may show the growth of human sentiments of one particular group. By taking the individual as a baby and observing his changing biological needs, his increasing age and consequent training throughout his life, this method may give an interesting view of his changing behavior patterns toward other members of the culture of which he is becoming a participant.

It must be stressed that the continuity of the child's life is important; rites of passage should not be lifted out of context. The individual should not be studied as an isolated human being, but should be considered in relation to those other persons with whom he comes in contact such as the mother as a conveyor of food who is largely responsible for the security which is essential to emotional stability. Through the feeding complex, the child establishes his relationships to the family, the kin group, and ultimately to the tribe. The native beliefs concerning lactation and its complexities also have sociological implications. The actual changes in the child's life are important, for they are related to such emotions as jealousy, father-mother (husband-wife) relations and in some cases, may have sexual connotations.

In early childhood, the food supply may influence the child's pre-occupations and attitudes. The functioning of the family to obtain food, the ceremonialization of meals, the sentiments involved in taking food from kin - all these elements and many more concerned with eating habits may contribute their share to the socialization of human beings.[7]

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[7] Ibid. pp. 8-9. "But if social values and nutritional dogmas shape a people's food habits, it is their economic institutions that enable them to produce their supplies...Agricultural and pastoral activities are governed by cultural rules, some based on empirical knowledge and some on magico-religious beliefs. These vary from tribe to tribe, even in areas where environmental conditions are very similar. Food is everywhere produced by co-operative action and it is on the success of their social organization that different people's diet depend. Man works to produce sufficient or surplus victuals under the urge of a number of economic incentives and these are culturally defined in each tribe. Distribution is a question of the utmost importance among peoples living for the most part on perishable foods and it is their different legal systems and principles of social grouping that enable them to share their supplies between the different members of classes of the community. All these social and economic factors directly affect the production and consumption of food in a native area."

This pattern becomes gradually enlarged to include a new system of values which may change with the interaction pattern of the individual or group.[8] Stabilized patterns of behavior develop between individuals as they operate in obtaining, preparing and eating food. This is in actual relation to the status system of a group.

In later childhood, the individual's nutritional habits are important, if not a dominant factor, in shaping the kinship sentiment and relationships to other members of the society. New sentiments, e.g., father-son relationships and age-graded societies may be important in this development.

Food routine which includes the getting and treating of food, teaches the child his place in a social structure. Ties are reflected and modified in new relationships and roles as the individuals interacts with different age groups and as he assumes different tasks. During the adolescent period, there are urgent and changing nutritive needs. A system of interaction growing in complexity presents new kinship and tribal rights and new and different obligations. This holds true of both sexes. At maturity, the child becomes a transmitter of this complex involving nutrition which defines the interrelationships of the people in his society.

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[8]Richards, Audrey I., "A Dietary Study in Northern Rhodesia," Africa, Vol. IX, No. 2., 1937, p. 11. "Kinship patterns and the interplay of individual character - are factors that also influence economic co-operation and food distribution."

The actual values attached to the food-getting activities and the nature of the operations are often the center of the values involved in any one culture. There is a definite relationship between the symbolic system (magic and religion), social organization and economic organization,[9] and these factors vary to make each culture a unique entity.

The roles of institutions are related to food and the complexity of the social system.[10] Economic organizations which may be kinship-determining organs are also transmitters of cultural techniques dealing with the obtainment and distribution of food. The whole complex of marriage, chieftainship, lineage and tribal solidarity may all achieve a new perspective when viewed from a functional outlook based on nurture and nutrition. The integration of rites with certain social roles in the food-gathering technique is another factor to be considered.[11]

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[9] Oliver, op. cit., p. 36. "...Food habits are not just appendecular to the main body of culture. There is a recurrent physiological need for food, and the techniques men use in producing, distributing, and consuming it affects their social interaction and ultimately leads to the organization of many of their institutions. But men do not prize food for its nutritive value alone; they raise it to symbolic status, endow it with prestige, and use it as one of their most sacred ritual paraphernalia."

[10] Richards, A. I., Hunger and Work in a Savage Community, op. cit., p. 114. "Hunger is not the only want that shapes human groupings, but it is a very fundamental one; and the isolation of nutritive institutions enables us to see the structure of a primitive society from a new point of view.

[11] Ibid., p.212. Nutrition in human society cannot be considered as a biological instinct alone,... "it is a biological process in that the constant drive of hunger gives to food-getting an interest and a value quite different from that of any other activity in which man is engaged."

Food may be symbolic in all phases of everyday living - union, taboo, fertility, and the role of women. To the primitive, food may symbolize his highest spiritual expressions, but in direct parody, it also must meet his immediate physiological needs. The psychological aspects of food in a cultural context is important - emotional attitudes, taboos, folklore and other tribal beliefs enter into the complete picture of the nutritive needs of a social group.

Of sociological importance (perhaps more so in a culture undergoing change) is the fact that the nutritive conditioning of a child and the ceremonialization of food in relation to the social customs of his group regulates his choice of diet.[12] This interrelatedness is well-defined and systematizes the individual within his family and within other social institutions, (village, peer-group, and political state) but it also systematizes these groups to the environment, technology, division of labor and symbolic system.

In his field work among the Nogovisi of Central Bougainville, Douglas Oliver[13] shows the importance of social organization and values held by the members of a culture in a process of change. In this case, the immediate family is the food-producing unit in a gardening economy

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[12] One such attitude was noted among the Navaho students in an Indian boarding school in the American Southwest. The students refused to eat salmon loaf. This presented an extension of a tribal taboo which prohibited the consumption of fish in any form.

[13] Oliver, op. cit., pp. 34-36.

within a matriarchal society with matrilineal land inheritance. While in the northern part of the area women had real authority in gardening activities with the men's jobs consisting solely of cleaning the garden sites and making the fence, in the southern part of the area, the men do all the work involved in gardening. This latter innovation was caused by the introduction of pig-raising whose care became a man's job and the new economic role was used as a device to give a man power and prestige. In this case, gardening assumed a new aspect within the society and because the innovation offered prestige to a certain group, it was accepted and had far-reaching effects on the whole native economy and social organization of this particular group of people.

Cora DuBois utilized the idea of hunger at work in a non-westernized society in her study of the Atimelangers on the island of Alor in the Netherland East Indies. She assumes that all human beings have certain "physiologically determined tensions"[14] and considers hunger as one of the most obvious ones. Her orientation to this problem is a little different from the ones previously presented due to the fact that her primary interest is in personality and culture. She attempts to demonstrate that hunger as one of the basic physiological tensions can be "acted upon by disciplines of childhood" in various contextual situations and that "it is crystallized by (or into) institutional behavior through those personality mechanisms" which she assumes to be universal to mankind.

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[14]DuBois, Cora, "Attitudes Toward Food and Hunger in Alor," in Haring, Douglas G., ed., Personal Character and Cultural Milieu, (Syracuse, Syracuse University Press, 1948), pp. 196-205.

She states that "it must be stressed again that no single tension like hunger and habits associated with its gratification will explain either the totality of culture or the dominant and stressed personality traits of its bearers."[15] Her synthesis shows the differences in the sexual roles within this culture in which the girls are trained as providers and have no major adjustment to make to the adult role; whereas, the boy has a sudden adjustment to make to the fact that there are no crisis rites to help him become ready to achieve an adult status in the society.

Although aboriginal food patterns are frequently discussed in monographs of ethnographic nature, the problem of food change has received little attention among the American Indian groups. Some of the work which has been done remains in unpublished form.[16]

Flora Bailey's article[17] concerned with Navaho dietary is primarily one which stresses cooking methods, culinary equipment, etiquette

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[15] Ibid., p. 204.

[16] Watson, J. B., Hopi Foodways - A Study of the Cultural, Nutritional and Environmental Factors in the Diet of the Hopi People, (Washington, D. C., U. S. Office of Indian Affairs, 1942) also Watson, J. B. and Michel Pijoan, M. D., A Casual Inquiry into Hopi Foodways, (Washington, D. C., U. S. Office of Indian Affairs, 1943). It was not possible to obtain these manuscripts, as they were not in the Indian Service files in Washington. As the Hopi also belong to the Uto-Aztecan linguistic group and have evolved an entirely different type to culture, it would have been interesting to note their mode of dietary adaptation.

[17] Bailey, Flora, "Navaho Foods and Cooking Methods," American Anthropologist, n. s., Vol. 42, No. 2., 1940, pp. 270-290.

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of eating and native recipes. She has noted several factors which are important ones for consideration in studying native aggregates undergoing cultural change. These are the financial status of the family, the availability of native food-stuffs in a rapidly-eroding land, the differences between the cooking methods and diet utilized by the women who have attended school in contrast to those who have had less contact with white American culture. Folk belief and practises concerning eating are also points she considers in the study.

Another study whith a different focus is the work done by Hawley, Pijoan and Elkin.[18] Their problem was to determine the degree of deculturation process in the dietary of the Zia Indians, and if such a process existed, to correlate these findings with certain physical conditions which prevailed among the children in the pueblo. Their conclusion was that certain sub-clinical and threshold avitaminosis exist among the children of school age. They attributed this condition to an inadequate intake of specific food as part of this deculturation pattern which is another way of saying that the findings indicated an insufficient intake of certain food elements which in turn was related to Zia economy. This study combined the talents of a medical doctor and two cultural anthropologists.

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[18] Hawley, Florence, Michel Pijoan, and P. Elkin, "An Inquiry into Food Economy and Body Economy in Zia Pueblo," American Anthropologist, n.s., Vol. 43, No. 4, 1943, pp. 548-557.

As an outgrowth of the program instituted by the Commissioner of Indian Affairs in 1941 which initiated a program for the study of food habits and nutrition among the Southwestern Indian and Spanish-American populations, Pijoan and Eggan published another paper which dealt principally with the problems encountered in such a study in cross-cultural situations.

Unique among the monographs which treat the problem of food change is Trinita Rivera's study in which chemical analyses were made of the various forms of aboriginal types of food in an effort to determine their nutritive value in a Coast Salish diet. She states:

> "The results are of more positive value than we had dared to hope and indicate that modern knowledge of nutrition might benefit through further exploration of such materials.
>
> The material presented here would seem to indicate that the Indians of the Pacific Northwest show very good sense about their diet. Although they are certainly as ignorant of nutritional values as the average citizen of Canada and the United States, their cultural habits and preferences have apparently furnished them with valuable dietary criteria. At least one aboriginal method of drying salmon for storage is shown by these investigations to be excellent according to modern nutritional standards.
>
> It is also well to point out that these good cultural food habits were developed within a food-gathering economy with neither agriculture nor domesticated food animals. It is suggested, therefore, that there is no necessary correlation between good food habits and the basic methods of food production."[19]

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[19]Rivera, Trinita, "Diet of a Food Gathering People with Analysis of Salmon and Saskatoons," in Smith, Mariam W., ed., Indians of the Urban Northwest, (New York: Columbia University Press, 1949), pp. 19-36.

This approach should prove singularly invaluable for it eliminates the necessity for value judgments about the relative merits of native versus "White" foods. DeCastro[20] reinforces this view on a somewhat generalized level.

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20 DeCastro, Josue, The Geography of Hunger, (Boston: Little, Brown and Company, 1952) p. 80, "The energy supply of these populations is somewhat higher than the statistics indicate, since the more primitive population groups make habitual use of various food substances the composition of which is virtually unknown to the outside world." Still speaking of hunger in the New World, he continues on page 90, "The restricted quantity of the diet as a whole, and also, to a certain degree, the wide consumption of various spices and sauces made from native plants, serve to forestall the more acute states of deficiency."

C. Presentation of Theoretical Approach

This thesis seeks to investigate the changes which have occurred in the dietary habits of the Uintah Utes, one group of the Ute Indians, who reside at present in northeastern Utah. In so far as is possible, the author hopes to trace alterations of the diet through the various change agents which have had influence on this indigenous society and to follow the modifications of the dietary habits of this native tribe in their contact with a dominant society.

In contrast to other cultures whose entire social and religious institutions and subsistence economy were based on one natural phenomenon, as for example, the Plains aggregates, what means of adaptation does a loosely integrated society utilize in making an adjustment to a new and imposed way of life?

It is theorized that such a social unit which is acquisitive in most of its cultural embellishments will show little resistence to new ideas and hence, such new innovations will likely be accepted by them with comparative ease. The reverberations of the accepted items, material or otherwise, may not become apparent for some time. It is possible that when the new cultural elements do, if they do, become obvious to the group, these elements may have already become such an intrinsic part of the culture that they are not rejected without considerable inconvenience to the human group.

It is possible that this may be especially pertinent in a society where fundamentally the pattern has been one of borrowing and adding -

with little or no alteration in making the borrowed traits uniquely their own.

What is involved in the processes of adaptation when new foods and the related techniques of preparation are introduced and accepted in such an acquiring type of culture? A cultural tradition of selecting elements from other systems may have augmented comparative ease in the transference of Ute society from its aboriginal state to the more predominate one of white American culture. What effects did the aboriginal food getting complex have on this type of a transfer?

In an effort to trace the effects of a variety of change agents and their impact on the target culture, the type of superimposed human relationships which were established to introduce the items involved in the case of food rations and their distribution to a subordinate people is of great saliency. Tangentially, the type of social structure of the administering group and its relationship to the type of existing social organization is crucial in this type of cultural adaptation.

It is further theorized that the influence of cultural compulsives from an external source which in this instance was overlaid upon a native culture has had tremendous influence on the changing food and food habits of this tribe of American natives.

The problem at hand is to deal with the socio-cultural factors

involved in a process of acculturation[21] in the area of food and the obtainment and consumption patterns revolving around it. Food habits, in this aspect, are taken to be those standardized sets of behaviors and attitudes which are manifested by the individuals who are raised in this particular cultural tradition. This set of culturally determined ways of behavior regarding food and related activities are to be considered an interrelated part of the total standardized systems of Ute Indian culture.

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[21]Many definitions of the term acculturation are presented in the literature. For example, the intermingling of cultures as mentioned in Herskovitts, Melville J., Acculturation: The Study of Culture Contact, (New York: J. J. Augustin, 1938) pp. 10-14, "Acculturation comprehends those phenomenon which result when groups of individuals having different cultures come into continuous first-hand contact, with subsequent changes in the original cultural patterns of either or both groups..." The author feels, however, that in this area of human relations, when much of the articles of change were of a material nature, Malinowski's phrase "culture contact and change" is the most applicable. His consideration of culture change in which the exisiting order of a society such as its beliefs and knowledge, its organization, tools and consumer goods is transformed seems more appropriate to this type of study. Malinowski, Bronislaw, The Dynamics of Culture Change: An Inquiry into Race Relations in Africa, (New Haven: Yale University Press, 1945). Furthermore, the term as used by Stout in which he states "... it is used to refer to the phenomena resulting from more or less continuous contact of two or more cultures. It refers, then, to diffusion on a rather large scale between the cultures immediately involved, its logical conclusion is assimilation, though in actuality, the latter state is not always reached but instead the societies arrive at a point of adjustment and thereafter retain their cultural uniqueness." Stout, D. B., "San Blas Cuna Acculturation," Social Forces, Vol. 21, October, 1942, p. 87. The author feels that this latter point is especially relevant to culture contact as applied to the American Indian, where despite decades of superordinate administration and planned social change, many facets of traditional culture still persist.

This thesis is an attempt to explore the ramifications of food habits in a cultural setting which has undergone change from its native state to one which, symbiotically, approximates "White" American culture in some ways. This form of adaptation will be analyzed within the context of the cultural areas surrounding it.

In this endeavor to delineate the process of becoming adapted to a new type of dietary, it seems that any group of human beings may be compelled to operate in accordance with several factors - the geographic and economic availability of food, the social usage of the group which would include their own specially-acquired and traditionally-defined tastes, and the patterned behavior of human relationships involved in the food-getting activities. These factors are all operative in the area of choice.

The original food pattern may become more difficult to obtain, and thus, may lose its desirability in the area of social acceptance. On the other hand, the new foods, because of their availability may tend to become socially esteemed and hence enter into the dietary patterns of the social group.

It would appear that the degree to which the new foods replaced the traditional diet depends to a large extent on the simultaneous diminishing of the use of the native diet and an ever-increasing utilization of the new foods. Other factors as the emergence of new patterns of obtaining food by working for it (trading labor for food) and the exchange of money for foodstuffs are relevant.

The author feels that the recording and collection of native food recipes and the observation of the cooking and eating patterns should constitute only a fraction of the data necessary for an anthropological study of nutritive systems. In so far as is possible, a critical examination of the social and economic institutions in necessary in order to see the problem in a context of social change.

There are certain factors which must be taken into consideration in a study concerned with pre-literate or so-called "primitive" or "peasant" societies. One of these is the linguistic factor. In most cases of the present day American Indian groups, it is possible to find bi-linguals who may be used as interviewees or as interpreters. This factor is especially pertinent in a nutritional study, for many of the native foods are referred to in the mother tongue. Other factors are such things as eating patterns which may not follow the conventional pattern of three meals a day; the feeding of children; the preparation of food; the rationalization of the foods utilized. It is obvious that a study designed for a nutritional study in modern American society might be irrelevant in its entirity to such a problem as will be presented here.

In an effort to delineate the role of the change agents within this one area, it is necessary to investigate all possible written literature to isolate the agents of change which were paramount in the development of new attitudes and values regarding this one phase of Ute Indian acculturation.

II. ABORIGINAL UTE CULTURE

A. The Life-Way

It has been only until very recent years that ethnologists[22] have turned their interests to the Great Basin area in which the Utes, Paiute, and the other very similar Shoshonean tribes of American Indians lived. Previous to this time, the area had been virtually ignored by the anthropologists except for some instances in which linguistical and musical data were collected.[23] With the exception of some very cursory reports by travelers and surveyors through this area, little information has been published.

There seems to be evidence, from both the secondary sources and the field data, that the Uintah Utes have undergone two steps in cultural adaptation. Originally, they were part of the basic Basin-Plateau cultural pattern. It seems that the first transfer was to a Plains-type culture. This proliferation was achieved largely by the addition of quasi-Plains type material traits after the acquisition of the horse. More recently, the other cultural change has been centered around the processes of acculturation to a predominantly White American society.

Both of these adaptations have involved certain processes and in order to understand the whole cultural components related to the culture change of the Ute Indians, it may be necessary to reconstruct the simple hunting and gathering type of culture which was theirs prior to their obtainment of the horse.

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[22] Anthropological workers who have been most well-known for investigation in this area are Julian Steward (1931-33), Elmer Smith (1940-41) and Florence Hawley (1948). Various archaeological reconnaisance expeditions have been in the region.

[23] Kroeber (1908), Lowie (1909), Densmore (1914) and Lowie (1919).

These generalizations are based on analyses of such cultures[24] in the Great Basin as the Paiute (both Northern and Southern) and the Gosiute Indians. These tribal aggregates have often been referred to in the literature as "Digger" Indians. This word might be termed an index as to their type of cultural achievement. Such groups show how human institutions operate within the framework of geographical possibilities. This is an anthropological truism and in these cases, indicate that even in such simple cultures, there may be some social traits which are not directly geographically and economically inspired.

The basic pattern of the people in the Great Basin area was in aboriginal times one of comparative simplicity in social organization, religion, economy and material culture. It appears that the tribes of the Inner Basin retained much of this simple cultural pattern into the historic period. Early travelers to this area described the Indians as living in cultural and economic poverty. They lived in brush shelters which were made with brush slats without roofs, their clothing was of rabbit skins, shredded bark, or of buckskin. The bow and arrow and clubs constituted their weapons of war and the hunt. One of their most outstanding material artifact was basketry of which they made both the coiled and twined variety. Social organization was predominantly a

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[24] Kelly, Isabel T., Ethnography of the Surprise Valley Paiute, University of California Publications in American Archaeology and Ethnology, Vol. 31, No. 3, (Berkely: University of California Press, 1932), pp. 67-210. Lowie, Robert H., Notes on Shoshonean Ethnography, (New York: American Museum of Natural History Anthropological Papers, 1924), No. 20, Part 3, pp. 187-314. Park, Willard Z., "Cultural Succession in the Great Basin," in Spier, L., S. Newman and I. Hallowell, eds., Language, Culture and Personality, (Menasha: George Banta Publishing Co., 1941), pp. 180-203.

biological family grouping which offered the most effective means of exploiting the environment in a gathering culture. This was extended to a loosely organized body when the families wished to hunt larger game, such as the antelope and deer. This was done at infrequent intervals, however.[25]

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[25] Beals, Ralph L., Ethnology of Rocky Mountain National Park, United States Department of the Interior, Field Division of Education, mimeographed. (Berkely: 1935). Also Park, Willard Z., "Paviotso Shamanism," in American Anthropologist, n. s., Vol. 36, 1934, pp. 108-109.

A. The Aboriginal Way of Life

The Ute Indians are one of the Shoshonean groups which in aboriginal times occupied the entire central and western portions of the present states of Colorado and the eastern portion of Utah. It seems apparent, however, that bands of the Utes ranged over southern Wyoming. The southernmost extension of their territory was in New Mexico, including much of the upper drainage of the San Juan River.[26] Early writers have assigned various territorial areas to the Ute Indians. "The country of the Utaws is situated to the east and southeast of the Shoshones, at the sources of the Rio Colorado,"[27] and the Utes were designated as those who "...inhabit the vicinity of the lakes and streams"[28] in this region. In general, the writers agree on the aforementioned territory as the range of the pre-contact Ute habitat. When the Spaniards who were the first Europeans to encounter them, met them, the Utes were in area. Fray Silvestre Velez de Escalante, who traversed their country in 1776, mentions them in his diary.[29]

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[26] Hodge, Frederick Webb, ed., Handbook of American Indians North of Mexico, (Washington: United States Government Printing Office, 1910), Report Number 30, Part 2, p. 874.

[27] DeSmet, Father Pierre-Jean, Life, Letters and Travels of Father Pierre de Smet, Edited by Chittendon and Richardson, (New York: 1905), p. 39.

[28] Stansbury, Howard. Exploration and Survey of the Valley of the Great Salt Lake of Utah, including a Reconnaissance of a New Route through the Rocky Mountains. U. S. Senate Ex. Doc., No. 3, Special Session, March, 1851. (Philadelphia: Lippincott, Grambo and Co., 1853) p. 148.

[29] Escalante, Fray Silvestre Velez de, in Duro, Cesares F., Don Diego de Penalosa y su descubrimiento del reino de Quivira. (Madrid, 1882).

The word Ute as applied to this particular group of North American Indians is of debatable origin. The native term used when referring to themselves is Nonts, the plural being Nontsi.[30] The name Utes or Utahs is usually restricted to the Ute proper. Part of the word has been used to refer to the Pa-utes which includes both the northern and southern Paiute groups. Stansbury[31] indicates that the word, Pah, in their language signifies water. The term Ute also figures into the name of the Weber Ute and the Gosiute (Goshute) which are also two groups of the Shoshonean division.[32] Prior to 1859, in the early treaties with the United States government and in reports by Commissioners of Indian Affairs, the Utes were known also as the Utahs.

Linguistic affiliation of this group is to the Shoshonean division of the Uto-Aztecan language stock. The Ute language is related to those of the Paiute, Kawaiisu, Chemehuevi and Bannock.[33] Following the linguistic map of North American Indian tribes,[34] this dialectic distribution extends from Colorado to southern California and constitutes the Plateau branch of the Shoshonean sub-family. The Plateau branch is the largest of the four branches as it exceeds in territory and number the Kern River, southern California and Pueblo branches. As in other native American

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30 Densmore, Frances. Northern Ute Music, (Washington: U. S. Gov. Printing Office, 1922) Bureau of American Ethnology Bulletin 75, p. 18.

31 Stansbury, op. cit., p. 148.

32 Steward, Julian H., Basin Plateau Aboriginal Socio-Political Groups, (Washington: U.S. Govt. Printing Office, 1938) Bulletin 120, p.264.

33 Hodge, op. cit., Part 2, p. 875. Also Swanton, John., The Indian Tribes of North American, (Washington: U.S. Govt. Printing Office, 1952), Bureau of American Ethnology Bulletin No. 145, p. 373.

34 Voegelin, C.F. and Voegelin, E.W., Map of North American Indian Languages. (Publication No. 20, American Ethnological Society, n.d.).

language stocks, dialectical differences exist in the language.[35] There does not appear to be a great difference however, and probably did not present a great hindrance to interaction between the several groups or geographical bodies of the Shoshonean division.[36] It is possible that in the western part of their area in Utah they could have become intermingled by marriage with the Shoshoni, Bannock and Paiute, and possibly with their southern neighbors, the Jicarilla Apache.[37] Steward[38] has shown that inter-tribal marriage occurred with the Gosiute to the west and is not an uncommon phenomenon where two groups are in proximity and especially when linguistic barriers are negligible.

Various estimates of the population of the Utes have been given (See Table 1). This fact is also true of the band numbers and membership and leadership of the bands.[39] References to other early writers

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[35] Kroeber, A. L., "Notes on the Ute Language," American Anthropologist, n.s. Vol. 10, 1908), pp. 47-87. Kroeber lists Marikadj as the Ute term for American. This was verified in the field (1948). Hereafter, this name will be used to indicate White American culture.

[36] Kroeber, A. L., Handbook of the Indians of California, (Washington: U. S. Government Printing Office, 1925). Bureau of American Ethnology Bulletin No. 78, p. 577. "They are all bout equally distinct from one another, except that the speech of the Hopi; the Pueblo tribe, who are territorially as well as culturally isolated from the others, is somewhat the most diverse."

[37] Hodge, op. cit., Vol. 2, p. 875.

[38] Steward, 1938, op. cit., p. 133.

[39] Indian Affairs Report, (Washington; U.S. Govt. Printing Office, 1865), p. 163. "The Utahs are divided into three bands." Indian Affairs Report, (Washington: U. S. Govt. Printing Office, 1854) p. 178. "The Utahs are a separate and distinct tribe of Indians, divided into six bands, each with a chief as follows: the Menaches, the Capotes, the Tabenaches, the Cibariches, the Tempanahgres, the Puiches."

regarding the population, division and locations of the Ute bands are cited in Bancroft[40] but generally, they seem unreliable.

TABLE 1

ESTIMATES OF UTE INDIAN POPULATION

Year	Population Estimates	Other groups included	Author	Source
Pre-Contact	10,000	All in Great Basin Area	Hodge	Bureau of Amer. Eth. Bull. 30
1845	4,500	Gosiute	Mooney	B.A. E.* Bulletin 145
1859	1,644 to 5,800	Shoshoni Bands East of Salt Lake	Steward	Basin-Plateau Socio-Political Groups
1870	4,000	None	Mooney	B. A. E. Bulletin 30
1885	3,391	None	Swanton	B. A. E. Bulletin 145
1909	2,041	None	Swanton	"
1909	1,209	None	Hrdlicka	B. A. E. Bulletin 30
1910	2,244	None	Swanton	U. S. Census
1923	1,922	Including some Paiute		U. S. Office of Indian Affairs
1937	2,163	All Ute groups	Swanton	"
1950	1,882**			U. S. Office of Indian Affairs

*B.A.E. refers to the Bureau of American Ethnology Bulletins.
**This number includes 1,588 Uintah Utes.

40 Bancroft, Hubert Howe, Bancroft's Works, Native Races in North America., (San Francisco: A. L. Bancroft and Co., 1882) Vol. 1., pp. 461-470.

TABLE II

SUB-DIVISIONS OF THE UTE TRIBE*

Name of Band	Geographical Area Occupied
Capote	The Tierra Amarilla and Chama River in northwestern New Mexico
Kosunats	The Uintah Reservation (1873)
Moache	Southwestern Colorado and northwestern New Mexico
Pahvant	The lower portion of Sevier Lake and River, Utah
Pavo'gowunsin	The upper portion of the Sevier River, south of the Salina River
Pikakwanarats	The Uintah Reservation in 1873
Sampits or Sanpet	Around San Pitch Creek with winter headquarters on Sevier River, Utah
Seuvarits or Sheberetch	In the Castle Valley country and on headwaters of San Rafael River, east central Utah
Tabequache	In southwestern Colorado, around Los Pinos
Tumpanogots or Timpaiavats	About Utah Lake, Utah
Uintah	Northwestern Utah
Wiminuche	Southwestern Colorado, in the valley of the San Juan and its northern tributaries
Yampa	Around the Green and Colorado Rivers in eastern Utah

*Based on information in Swanton, John R., The Indian Tribes of North America, (Washington: United States Government Printing Office, 1952) B.A.E. Bulletin No. 145, pp. 373-374 and Hodge, op. cit., pp. 874.

A few other bands of uncertain status included the Cumumbah, the Kwiumpus, Nauwanatats, and Unkapanukints. Two former bands were the Sogup which ranged in or near New Mexico and the Yubuincariri whose area was west of the Green River in Utah.

Many of the authorities who have worked with Ute material, among them Hrdlicka, Densmore, Steward and Swanton are agreed that there are three divisions recognized by the Utes themselves. These tribal divisions are the Tabeguache (Uncompahgre), the Kaviawach (White River), and the Yoovte (Uintah or Uinta).

The Ute name for the White River band is Ya'mpatika (Yampa-eaters);[41] the former being a name designating geographical residence. The Uintah band derives its name from the native work Uitaugump (Uinta meaning "at the edge" and ugump or pine).[42] This would seem to indicate that the dwelling place (possibly the winter abode) of this groups was at the edge of a pine-timbered area. The other recognized Ute band was the Uncompahgre. This is a corruption of the native word ankapagarits (anagar- red, and pagrits - lake).[43] This may well have been terminology designating locale of the band as this is a fairly common practise among some American Indian tribes.[44]

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[41] Hodge, op. cit., Part 2, p. 987. "The Yampa (carum gairdneri) is a plant whose roots were much used for food by Indians of the Oregon region - the Klamath, Umatilla, Ute and others; from Ya'mpa, the name of this plant in the Ute dialect of Shoshoneah."

[42] Densmore, op. cit., p. 18. "This is said to refer to a dwelling place of this band, located where two mountain streams came together at an angle, making a point of land between two streams. On this point of land was the lower edge of the pine timber, as it extended down from the mountain side."

[43] Ibid., p. 19.

[44] For example, Minneconjou is a corruption of a Dakota term which means "they who plant near the water" and Hunkpapa which means "those who live below" and are terms which are used to designate bands of the Sioux.

It may be assumed, then, that the various bands of the Ute tribe underwent something of a cultural revolution by the incorporation of the horse into their way of life by the time of the contact period. The horse seemingly made it possible for them to travel, hunt and fight[45] in large groups under the control of chiefs. The horse also gave them an accessibility to the bison and as buffalo hunting entails a degree of cooperation, a type of loosely organized band leadership evolved. It appears, however, that there was seasonal dispersement of the band[46] (for the gathering of certain foods) so it might be safe to surmise that political organization under such leadership was largely determined by the function of the activities, such as periodic hunting for large game and occasions of warfare.

Fundamentally, these comparatively stable types of band groupings allowed for a certain amount of fixed kinship groupings which were not as rigid as, for example, a Dakota tiošpaya. Certain secondary embellishments, e.g., the age-graded societies which were common on the Plains appear to be absent here. Steward holds that "there was a bare suggestion"[47] of such organizations. On the other hand, Densmore was told

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[45] Hodge, op. cit., p. 874. "They appear to have always been a war-like people and early came into the possession of horses which intensified their aggressive character." Also Swanton, op. cit., p. 375. "The Ute shared with the Shoshoni the reputation of being the strongest and most warlike of the Plateau people."

[46] Steward, op. cit., p. 236. And Bancroft, op. cit., Vol. 1, p. 435. "Although each tribe had an obstensible chief, his power is limited to giving advice, and although his opinion may influence the tribe, yet he cannot compel obedience to his wishes. Every man does as he likes...Chieftainship is hereditary in some tribes; in others it is derived from prestige." His remarks are concerned with the entire Shoshonean groups of the Basin-Plateau area.

[47] Steward, op. cit., p. 237.

repeatedly that no such societies existed.[48] Her informants stated that the only divisions of the tribe were bands which in turn were led by chiefs.

As far as the property rights of the various bands for the territory exploited for subsistence purposes, it is exceedingly difficult to make a positive statement. Apparently, there was some conception of band ownership of certain areas[49] which might possibly suggest band ownership of these areas. However, there was, it seems, much overlapping of bands in the territory which was exploited.[50] Definitely undeterminable is the extent to which this uncertain concept of land ownership pertained to seeds, animals, or to both. The direct relationship which it bore to gathering and hunting activities has never fully been delineated.

Within the historic period, however, groups of the Ute bands have been observed travelling over most of the aforementioned territory on hunting expeditions.[51] It appears that the great majority of their hunting expeditions were to the east in the Great Plains where the bison were more numerous. Warfare, too, consisted mainly of skirmishes with tribes in this eastern section of their domain.[52]

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[48] Densmore, op. cit., p. 24.

[49] Dale, H. C., The Ashley-Smith Explorations and the Discovery of a Central Route to the Pacific, (Cleveland: 1918) p. 151. The Utes wintering on Green River above the Yampa River claimed an area of 150 miles long and 100 miles wide in the Uintah Valley. These, apparently, were the Uintah Utes.

[50] Steward, op. cit., p. 237.

[51] Fremont, Harris and other early chroniclers place the Utes all over this area.

[52] Steward, op. cit., p. 222. "So far as is known, different groups of Shoshoni here never at war with one another. Between Shoshoni and Ute, relations were generally peaceable, though warfare broke out occasionally."

Harris[53] writes that the Ute had left their valley area for fear of the Comanche and at about 41° north latitude, Comance warriors had pursued Ute bison hunters. It is very probably that the other tribes in the area east of the Rocky Mountains, as the Crow, Cheyenne, Comanche and other Plains aggregates whose cultures placed a high value on warfare did find the Utes an easy prey, and, especially since all groups concerned were in search of the same subsistence commodity essential to group survival.

Contiguous cultural contact (through hunting and warfare) with the Plains tribes introduced many prominent Plains traits such as the tipi, the use of buffalo skins and rawhide, horse paraphernalia, and equipment for war. These artifacts were much in evidence when Powell made his expedition to this region in 1869.[54]

The tipi was used by the Utes, and when tipis could not be built, a conical type house which was similar to the brush shelters of the Paiute were used.[55] Thus, it appears that the older type of dwellings for the groups in the Plateau area persisted in this culture until this period. Densmore[56] states that elk hides were said to be used for the

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[53] Harris, W. R., The Catholic Church in Utah, (Salt Lake City; 1909), p. 172.

[54] Powell, John W., Exploration of the Colorado River of the West and Its Tributaries, (Washington: 1875), House Misc. Doc. 300, 43d Cong. 1st sess. p. 126.

[55] Steward, op. cit., p. 222. "The Ashley-Smith narrative stated that in 1822-1829, several thousand Indians, thought to be Ute, were wintering in conical, grass-covered lodges near the Green River in Wyoming."

[56] Densmore, op. cit., p. 25.

tipi-type dwellings; buffalo hides were used when they were available. She states that "thatched dwellings were used by those too poor to have tipis and appear to have been used by all the tribe during the summer.[57] It is likely that dwellings of this latter type were used on foraging expeditions for the obtainment of seeds, fruit, and the like.

In dealing with the material artifacts of the Ute Indians, it has never been determined satisfactorily whether they had in pre-horse times depended more upon seed-gathering than upon the hunting of small game. There is evidence that they had the full range of basketry types and techniques which were common to the other Shoshonean groups.[58] It seems logical that a change in their economy would have a similar effect on the techniques of food-getting in the previous scheme of subsistence. It appears that the two techniques of basketry - the coiled and the twined variety - was known to them and that basketry as a technique is a highly developed art in a gathering technology.[59] Ollas of tightly

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[57] Ibid., p. 25.

[58] Mason, Otis T., Indian Basketry, (London: 1905) Vol. 2., p.439.

[59] Bancroft, op. cit., Vol. 1, p. 434. Writing of their material objects, Bancroft states, "The only tools used before iron and steel were introduced by the whites were of flint, bone, or horn. The flint knife had no regular form, and had a sharp edge about three or four inches long, which was renewed when it became dull. Elkhorn hatchets, or rather wedges, were used to fell trees. They made water-proof baskets of plaited grasses and others of wicker work covered with hides. The Snakes and some of the Utahs were versed in the art of pottery, and made very good vessels from baked clay. These were not merely open dishes, but often took the form of jars with narrow necks, having stoppers."

woven, pitch-covered basketry were essential in the gathering life of these people, for in their travels in search of food in an arid country, water had to be transported.

The articles of the hunt probably included the rabbit stick, the rodent stick, clubs, knives and bows and arrows which may have been a later addition.

From the above description of the types of material traits which were a common part of a gathering group of people, it is difficult to say with positiveness that the Ute abandoned all of the technology of a food-gathering group when they assimilated the techniques of a culture based on hunting with seasonal forays into the country side for the purposes of gathering seeds, fruit and vegetables.[60] It may be reasonable to assume, however, that the type of change - mobility due to the hunt and warring, may have caused them to abandon some of the material artifacts, such as pottery, which were connected with a food-gathering economy of their previous cultural heritage.

Among the Uintah Ute, the trappings of a hunting and mobile type of life style is noticeable to a greater degree. Horse gear and hunting paraphernalia is all very much like the Plains groups.[61] The clothing of the people is much the same style, also. Dresses of the Ute women more

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[60] This is a Plains-type pattern of subsistence. Among the Dakota such vegetable plants as the timpsila (a kind of wild turnip) and the Pxa Xi (a type of tuber) plus other vegetables in season were utilized. The drying and storing of such items are the function of the women.

[61] Steward, Julian H., Notes on Hiller's Photographs of the Paiute And Ute Indians, Taken on the Powell Expedition of 1873. (Washington, U.S. Government Printing Office, 1939), BAE Publication 3543, Vol. 98, No. 18, pp. 1-40.

closely approximate the pattern set in the Plains, with the sewing of two skins down the sides and decoration with bands, floral designs and fringes being the style.

The usual objects made from skins, such as rawhide ropes, quirts, parfleche bags and other parfleche objects were predominant. The design elements on these articles followed the pattern of most of the Northern Plains Indian tribes, such as geometric designs on the saddle bags and floral designs on the rest of the horse trappings.

Of interest is the fact that the cradle board used by the Ute which followed the Plains style - a board covered with buckskin with appropriate design. This particular type is common in the areas east of the Intermontane region, but has never spread beyond the Northern Ute and the Northern Shoshoni.[62]

When the material traits and technology of the Northern Ute is considered, there is a great overlay of influence from the Plains. Cultural borrowing extends to non-material elements as well. For example, the Sun Dance, the Round Dance, and later, the Peyote Cult.[63]

As far as could be determined by the secondary material, there seems to have been no great social ritual connected with marriage within aboriginal Ute society. Bancroft[64] writes that a woman was generally

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[62] Ibid., p. 19.

[63] Park, op. cit., pp. 180-203. Also Park, Willard Z., "Tribal Distribution in the Great Basin," in American Anthropologist, 1938, Vol. 40, pp. 622-638).

[64] Bancroft, op. cit., Vol. 1, p. 435.

bought from her parents and there were instances in which girls were frequently betrothed in childhood. He states further that though polygamy was common, it was not a universal practise. Patrilocality and matrilocality were not determining factors in the placement of the newly married couple, as the biological family was the most effective means of exploiting the environment. One early writer states that residence at the home of the wife's parents for a short period was the accepted manner of setting up a household.

Concerning the burial practises of the Utes, disposal of the dead consisted of putting the body in graves which were "high up in the kanyons usually in clefts of rocks."[65] In general, the property of the deceased was destroyed at his burial place. His possessions, and in some cases, his horse was killed over his grave. Densmore writes,

> "It is said that Ouray, the Ute chief, was buried as far as could be ascertained, in a rock fissure or cave. On the burial places were the lines of horses and dogs, which, it was said, had been slain at the death of their owners. Clothing was hung above the graves, and in one instance, a quantity of corn was suspended from the branch of a tree."[66]

Apparently, there was little ceremony connected with this type of burial. The roles of shamans, medicine men, and the like seem to be

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[65] Burton, Richard F., The City of the Saints and Across the Rocky Mountains to California, (London; Longman, Green, Longman and Roberts, 1862), p. 150.

[66] Densmore, op. cit., p. 3.

absent from this ceremony, their main function centering on curing. A burial, from all evidences, seems to have been a family affair. Bancroft related the type of mourning practised by these people in their grief which ranged from very severe lamentations including lacerations, shrieking and crying to times when they were not engaged in this behavior and were rather indifferent to their loss.[67]

There are several cultural items which are recurring statements in much of the literature concerning the Ute. These are the use of slaves and the statement that the Ute devoured the heart of slain enemies in order to obtain some of the brave qualities of the slain.

Whether the Utes did or did not sell their own wives and children into slavery is a moot point, however, there may be no doubt that they did have some part in this traffic.[68] Bancroft further states that the Utes "did not hesitate to sell their wives and children into slavery for a few trinkets."[69] Further testimony to this might be borne out by the fact that the Ute slaves are mentioned in a Navaho life history.[70] It is a matter of historical record that in 1852, the legislature of Utah passed an act in which slavery was legalized in an effort to stop

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[67] Bancroft, op. cit., p. 439.

[68] Ibid., p. 435-436. Also, Simpson, J. H., Report of Explorations across the Great Basin of the Territory of Utah for a Direct Wagon Route from Camp Floyd to Genoa, in Carson Valley, in 1859. (Washington: 1876), U. S. Army Engineering Department, p. 45.

[69] Bancroft, op. cit., p. 435.

[70] Dyk, Walter., Son of Old Man Hat. (New York: Harcourt, Brace and Company, 1938) p. 11.

the abuses.[71] It was made legal for a probate judge to apportion native women and children to appropriate Marikadj persons. The time of tenure was not to exceed twenty years.

The actual break-down of the tribes who had a part in this trade and the tribes to which the captives belonged is a very tenuous type of thing, as there are no statistics relating to this phase of Ute history.

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[71] Bancroft, op. cit., p. 435-436.

B. Aboriginal Dietary Patterns

Within the framework of this type of culture, the Ute Indians lived a more or less nomadic life with increasing dependence on hunting and with seasonal foraging of the terrain for plants and animals which were then used in the traditional manner. This is, in part, similar to a Plains-type economy in which, though the diet was predominantly fresh meat, fruits and vegetables were used in their fresh state during their availability and some were dried and otherwise prepared and stored for winter use.

The dietary of the Utes during this time is very aptly summarized by the statement of one of Densmore's informants: "When we lived farther east, we ate berries, roots and meat. We dried the meat of the deer, elk, and buffalo."[72] Since the Utes occupied the western fringe of the buffalo range, it is possible that the bison in this region were not sufficient to be their main source of sustenance.[73] The Basin-Plateau pattern of setting

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[72]Densmore, op. cit., p. 30.

[73]Beals, Ralph L., Ethnology of Rocky Mountain National Park, (Berkely: 1935, U. S. Department of the Interior, Field Division of Education). p. 5. "The principal animal foods of the Ute were buffalo, elk, deer and rabbits. The buffalo were chased on horses, The small part that buffalo played in the diet is attested by the fact that when a buffalo was killed, the meat was divided into small pieces among all the band. There was no buffalo drive, apparently, such as was common in the Plains. Instead this technique was used on deer. The deer were driven into deep pits between the wings of a sage brush enclosure. Rabbits played a considerable part in the economy of the Ute. They were hunted communally. The Uintah band had rabbit nets made from bark fiber. Sometimes jackrabbits were hunted on horseback." The latter two sentences illustrates the intermediate type of culture of the Utes, the former shows Basin-Plateau traits and the latter shows Plains traits of food-getting.

fire to a brush enclosure and then killing the animals as they emerged was followed by the Utes.

In addition to this, other native foods consumed were piñon nuts, wild vegetables, and fish.[74] There is some indication that corn was eaten by the Utes.[75] Data from the early chronicles add that "the Utahs eat the cactus leaf, pinon nuts, and various barks; the seed of the bunch grass, and of the wheat, or yellow grass, somewhat resembling rye, the rabbit-brush twigs, which are chewed, and various roots and tubers; the soft sego bulb, the rootlet of the cat-tail flag, and of the tule, which when sun-dried and powdered to flour, keeps through the winter and is palatable even to white men."[76]

Various substances such as berries, grass seeds, sunflower seeds and roots were dug. Many of these foodstuffs were dried and placed in baskets which were then stored in pits dug in the ground, which were then covered with earth. Chokecherries were mashed and sun-dried while the sunflower seeds were often ground and cooked and then dried for storage.

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[74] Ibid., p. 5-6. "Fish weirs were made of willow. Fish were also caught by the Uintah Utes by shooting them with barbed arrows from a raft made of grass. Fish were eaten fresh, or cut up and split open by the women, boned, dried on a frame and stored for fall and winter feeds in caches."

[75] Densmore, op. cit., p. 30. "The piñon nuts even at the present time, are parched in hot ashes, after which the shells are removed and the nuts grown by placing it on a bread flat stone and rolling over it a rather long, round stone. The resultant meal is mixed with water and baked on heated earth, from which the ashes of a fire have been removed."

[76] Burton, op. cit., p. 581.

Long conical baskets were used by the women for gathering seeds and for carrying burdens. Powell writes that in gathering seeds, roots and other vegetables, "they have large, conical baskets, suspended from their foreheads by broad straps, and with a smaller one in the left hand and a willow woven fan in the right (seed beater), they walk among the grasses, and sweep the seed into the smaller basket, which is emptied, now and then, into the larger, until it is full of seeds and chaff..."[77]

Among the Shoshonean tribes of the Great Basin area (and in the California area), basketry hats were part of women's dress. Apparently, the hats served two purposes: (1) to protect the head from the band or carrying straps fastened to the burden basket, and (2) to protect the head from pitch when gathering pinon nuts.[78]

A special technique was used to separate the seeds from the chaff by the use of a winnowing basket (a flat fan-shaped or circular tray), the seeds were poured from one receptacle to another until all the chaff was removed by the wind. After the seeds were ground on a mano and a metate,[79] the coarser particles were removed in a similar manner. The winnowing basket was also used for roasting the seeds. Powell further explains a cooking method - "they put the seeds with a quantity of red

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[77]Powell, op. cit., p. 127.

[78]Mason, op. cit., p. 301. 'The Ute Indians make use of many kinds of seeds in their dietary.

[79]Powell, op. cit., p. 127. Seeds and nuts were also prepared for consumption by this method of grinding.

hot coals, into a willow tray and, by rapidly and dexterously shaking and tossing them, keep the coals aglow, and the seeds and tray from burning. As if by magic, so skilled are the crones in this work, they roll the seeds to one side of the tray, as they are roasted and the coals to the other."[80]

Various methods of treating poisonous roots and plants were evolved. One common one being the placing of roots in a hole in the ground and building a large fire on the dirt piled above them.[81]

Chamberlain lists some thirty plants which were utilized in the Ute dietary either directly as a food or as a medicine. He says that "the Ute proper held the richer game portions of Utah and adjacent parts and were to a much greater degree hunters, and more warlike, than most of the relative tribes. Their dependence upon the vegetable kingdom was, naturally, less intimate than with such tribes as the desert-dwelling Gosiute..."[82]

It would not be overstating the case to say that the reliance on hunting for the Ute was greater than in the situation of the adjacent tribes of the Great Basin. Though Clark states that they did "... not make a practise of eating dog meat, but do so in times of famine or great scarcity of other more palatable provisions,"[83] it is not unlikely that

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[80] Powell, op. cit., p. 127.

[81] Chamberlain, Ralph V., "Some Plant Names of the Ute Indians," American Anthropologist, n. s. Vol. 11, 1909, pp. 27-40. He lists Ute names for watermelon (shan-ti-kut) and potato (tsin); the latter term was a transference from the name of a native plant.

[82] Ibid., p. 27.

[83] Clark, W. P. Indian Sign Language, (Philadelphia: L. R. Hamersly and Co., 1885) p. 391.

this condition would reduce any group of people to eat anything available. Since the Utes were of a traditional gathering culture, the obtainment of any food in such a situation would be consumed.

The only instance in which any form of ceremonialization was followed was during parturition, when the mother was forbidden to eat meat.[84] The time allocated for the abstinence of meat consumed by the mother extended to one month during which time, she was lodged in a hut away from the rest of the family. Beals[85] notes that the father could not eat meat or drink cold water for four days. He was allowed to run in the hills but hunting was taboo for this period. Both parents were required to use sticks to scratch themselves and they were not to scratch their eyes.

A glance at the chart (Appendix B) shows the main ceremonials of the Ute Indians and reinstates the fact that there was relatively little ritualistic development revolving around food. The abundance of of food and its availability or non-availability was the determining factor in the holding of social dancing which was the main recreational and ritualistic behavior of this group of aborigines.

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[84] Ibid., p. 391. His statement reads "...her principal diet being bread and large draughts of water."

[85] Beals, op. cit., p. 6.

CHAPTER III. FACTORS OF CHANGE

A. The Background

In any work dealing with the American Indian, it is an almost impossible task not to get involved with the multitudinous treaties, agreements and disagreements concerning the particular tribal group under study and the United States government and its representatives. Since this thesis deals only with one aspect of acculturation as seen in Ute-Marikadj relations, it was felt that only the data pertinent to the problem be included. Heretofore, concentration will be upon a particular band of the Northern Utes, namely the Uintah, who were placed on their present reservation (the Uintah-Ouray) in 1882.

Julian Steward gives a very reasonable summary of the periods of contact with the increasingly Marikadj society which the Ute[86] encountered. It would seem that the early period of contact had comparatively little effect on the food and eating habits of the Utes as a whole. However, trade may have existed with the eastern tribes and with the Marikadj. Early writers mention this particular group of Indians in such a manner. The trappers and traders who were early in this section adopted the eating habits of the Indian groups whom they met in order to survive in their expeditions. One finds, however, that the expeditions of reconnaisance did have some effects on the natives. Stanbury relates that in the vicinity of the Utah Valley, many members of the native groups

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[86] Steward, Basin-Plateau Socio-Political Groups, p. 5. For the purposes of his study which deals with all the Indian groups in the Basin-Plateau area, he divides the Indian-Marikadj contacts into four periods: "(1) Exploration and penetration of the territory by trappers, approximately 1776-1840, (2) Immigration which usually passed on through the country to more fertile lands on the coast, but settled Utah and the Humboldt Valley, 1840-1860, (3) Settlement by miners and agriculturalists and the climax of strife between Whites and Indians, 1860-1870, (4) Removal of many Indians to reservations where they still remain."

hung around the camp and awaited the "least scrap that might be thrown away, which they devoured with avidity and without the least preparation."[87] His reference group were the Paiutes, however.

Apparently, the Indians availed themselves of the cattle which often accompanied the later expeditions, for Stansbury also mentions that after several cows had disappeared, one "fine fat ox came into camp with an arrow buried in his side, which perfectly accounted for the disappearance of the others."[88]

Besides the surreptitious methods employed by the Indians in obtaining meat by raiding the herds of the explorers and immigrants who transgressed their area, one finds that many of the early explorers contributed to the change of dietary by introducing new foods. From other accounts dealing with tribes in the path of the westward migration of Marikadi settlers,[89] it seems likely that this pattern was pretty well established in this phase of Indian-Marikadi interaction. However, this type of contact was more or less a sporadic affair. The early traders utilized beads and other trinkets more extensively than articles of food which presented a triple problem of storage, ability to keep without

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[87] Stansbury, op. cit., p. 148.

[88] Ibid., p. 148.

[89] Ibid., p. 255. In his trip across the Northern Plains, Stansbury mentions a meeting with a band of Dakota and remarks, "Some coffee, flour, and sugar were served out to them, together with all the tobacco I could spare." In a visit to their camp the following day, he speaks of "a squaw busily engaged over a few coals, endeavoring to fry, or rather to boil, in a pan nearly filled with grease, some very suspicious looking lumps of dough, made doubtless from the flour they had received from us yesterday." Describing a meal which was served to them by their Indian hosts, he continues (it) "...consisted of a tin pan containing a parcel of dried buffalo meat, which had been boiled in simple water, without salt, and suffered to get cold."

spoilage and mobility of trade goods from one Indian group to another. In addition to beads and guns, other material objects such as mirrors, knives, needles and fabric were the common trade objects.

Although Stansbury reports trading horses with the Uintah Utes, he does not mention the articles of barter which were in the invoice of goods which his men took to this band. Bartering for horses presents another factor in the way in which new goods of any type was introduced among the native groups of North America.

Immigration trains which passed through the Plateau-Basin region enroute to California and the Pacific Northwest had some effect on the eating habits of the groups in this area. In contrast to the earlier trappers and "mountain men" who more or less adapted to the native habits of the Indians, the immigrants were much larger numerically and had a definite definite objective in their migrations (as the California gold fields, or in the case of the Mormons, religious freedom). Of course, the influence of these groups varied in relation to the tribes they met. Concomittantly, the increasing conflict between the Indians and the Marikadi along the paths of migration was important.

The extent of the contact between the Utes and the immigrants is exceedingly hard to determine due to the fact that scarcely no mention is made of them in the published literature. Furthermore, Burton states that they were very independent.[90] There is some indication that many

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ent of White settlers."

[90]Burton, op. cit., p. 578. "Uinta Yutas are the most independ-

of the Basin groups visited immigrant trains and asked for food, especially bread, and articles of clothing.[91] As many of the early historians seldom mention groups by tribes, it is difficult to generalize from these sources. However, one may generalize from the more nomadic groups in the Plains and state that contact with immigrant trains was more one of enmity which resulted in either observation by the scouts or attack or both. In the case of attack, the spoils were utilized according to the whim of the tribe. One does not find much in the literature to supplement this as far as the Uintah Utes are concerned. Other bands of the Utes, as the White River and Uncompahgre, seem to have been the more aggressive in Indian-Marikadj strife, as witnessed by the Meeker Massacre.

Undoubtedly one of the most singular factors which had a great consequence on the Ute Indians was the settlement of Utah by the Mormon groups which began coming into the region by 1847. Beginning in the valley of the Great Salt Lake and subsequently branching out into other habitable valleys, the Mormons began building homes and settlements and cultivating farms at an amazing speed.

Interestingly, the Mormon settlements utilized native foods to a great extent during this period of establishing colonies. Stansbury relates conditions in the winter and spring of 1849 when "the inhabitants were straitened for food, and game being very scarce in the country, they were reduced to the necessity of digging roots from the ground, and living upon the hides of animals which they had previously made use of

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91 Burton, op. cit., pp. 578-579.

for roofing their cabins, but which were now torn off for food.[92]

There was much trading for food between the two groups of people. Record of a trade between an Indian woman (a member of the Walker band of Utes) and a Mormon woman: The former traded three trout for three pints of flour.[93] The Ute woman's husband, not satisfied with the barter, beat her. Upon seeing this, the Mormon woman called her husband who interfered. In the skirmish which followed, the Indian man and his male companion were killed.[94]

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[92] Stansbury, op. cit., p. 126. Also Chamberlain, Ralph V., "The Ethno-Botany of the Gosiute Indians of Utah," American Anthropologist, n. s., Vol. 11, Part 5, 1911, pp. 329-405. p. 330. "Of the plants that furnished food to the Gosiute in the form of roots, root-stocks, tubers, and bulbs, none is popularly so well known as the beautiful Calochortus nuttallii - si'go of the Indians, and hence, "sego" the common name among the white residents of Utah. It is the state flower. The bulbs of this lily were formerly gathered and used for food. Not only were they eaten in season, but they were preserved in quantity for winter use by being dried and placed in pits...from which they were taken as needed, and were then most commonly cooked with meat in the form of stews. When the Mormons first arrived in Utah and the struggle for food was so severe with them, they learned from the Indians the value of this article; and the digging of sego bulbs in the spring did much in many families to ward off starvation."

[93] Hoopes, Alban W., Indian Affairs and Their Administration, 1849-1860., (Philadelphia: University of Pennsylvania Press, 1932), p. 141.

[94] This began a period of hostilities between this band of Utes and the Mormons which lasted until the spring of 1854. Events of a similar nature led to the Gunnison Massacre - when a party of Indians visited an emigrant train headed by Hillsworth, where they asked for bread and clothing. One Indian was killed; his son swore revenge and later killed part of the surveying party of Capt. J. W. Gunnison.

After the Mormon settlement of Utah in 1849, John Wilson was appointed to the Indian Agency at Salt Lake. Writing from Fort Bridger, he stated:

> "The Mormon settlement in the Salt Lake Valley has not only greatly diminished their (the Indians') formerly very great resource of obtaining fish out of Utah Lake and its sources...but their (the Mormons') settlement, with the great emigration there and to California, has already driven away all the game."[95]

A treaty ratified in 1850 provided, among other things, that the government of the United States "will grant to said Indians such donations, presents, and implements...as said Government may deem meet and proper."[96]

This year also saw the Utah Territorial Act approved which stipulated that the territorial governor was also ex-officio Superintendent of Indian Affairs. In 1851, he ordered the territory divided into three districts. Stephen B. Rose, a Mormon, was assigned as agent to the Uintah district which included the Shoshone, the Uintah and Yampa Utes. Unfortunately, there is little material on the administration of the Uintah

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[95] Hoopes, op. cit., p. 131.

[96] Revision of Indian Treaties, A Compilation of all the Treaties Between the United States and the Indian Tribes., (Washington; United States Government Printing Office, 1873). p. 981-987. Article 12 of this treaty stipulates that not more than $30,000 per annum to supply the wants of said Indians for food and the Secretary of the Interior was to "supply said Indians with beef, mutton, wheat, flour, beans, and potatoes until such times as said Indians shall be found capable of sustaining themselves." Furthermore, the treaty states that "for the purposes of inducing said Indians to adopt habits of civilized life and become self sustaining," a sum of $45,000 was set aside to "provide each lodge or head of family in said confederated bands with 1 gentle American cow as distinguished from the ordinary Mexican or Texas breed, and 5 head of sheep." This article applied to the Ute bands.

Utes under the Mormons.[97] They considered the Indians to be the lost tribe of Israel and recruited many of them to their faith.[98] Their influence was mainly on the Uncompahgre band of the Utes and the Mormons exerted this influence later in the period of the 1800's when relations between the Mormons and the United States Indian Service became a little strained.

Thus began a system of administered human relations which characterized Indian-Marikadj relationships from then until the present. In 1855, the administrators in this area began a period of inculcation of the Indians into farming practises. Three farms were established at Payson, Nephi, and Fillmore near the Mormon capitol and much farther west of the Uintah country.

Burton makes reference to the Uintah Utes whom he places in the mountains south of Fort Bridger and in the country around the Green River. The population was estimated at about 1000 and he states further that "a band of 500, under 4 chiefs, lately settled on the Indian Reservations at Spanish Fork."[99] If this is the case, it marks the beginning of agri-

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[97] Hoopes, op cit., p. 135. Holeman was appointed Indian agent in 1851 and left Salt Lake City in 1853. In a letter to Lea, dated March 29, 1852, he wrote, "In the settlement of this city, and the adjoining country by the Mormons, they at first conciliated the Indians by kind treatment, but when they once got a foothold, they began to force their way, the consequence was a war with the Indians, and in many instances, a most brutal butchery of the Indians."

[98] Burton, op. cit., p. 580. "In the vicinity of the Mormons, many savages have become baptized, and have become nominal Saints." They seem to have categorized Marikadj into Shwap or Americans and Mormons.

[99] Ibid., p. 577.

cultural pursuits by this band of Indians. In 1857, as shown in Table III, the Indian farm at Spanish Fork produced a variety of crops on a total of 336 acres.[100]

TABLE III

FIRST CROPS GROWN BY THE UTES

Bushels	Crop
11,155	Wheat
3,360	Corn
2,000	Oats
150	Barley
40	Buckwheat
5,500	Potatoes

In addition, 12,800 squashes and beets, melons, and peas, beans and other vegetables in quantities not listed were grown.

By 1860, the yield at the Indian farm at Spanish Fork was the following: three or four thousand bushels of wheat, one thousand bushels of potatoes, and some turnips and other vegetables. Since, as the later reports indicate, much of the farming was done by Indian Department employees rather than the Indians, it seems that there were too many farms in Utah and the inefficiency of the farm personnel caused abandonment of the farms.[101]

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[100] Hoopes, op. cit., p. 156.

[101] Ibid., p. 159. "The other farms had gone to ruin; the Indians who had once lived upon them had wandered off and returned to their mountain homes.

The group which is the topic of this thesis, the Uintah Utes, were placed on a part of land set aside for them by executive order of October 3, 1861, in the Uintah Valley.[102] They were joined by the White River band in 1880. It appears also, that other minor bands of the Utes were absorbed into the Uintah-Ouray Reservation during this time.

Since, in the consideration of social change, the agency which undoubtedly is the most effective in the introduction of new items to Ute society was the United States government which administered the Ute Indians and their affairs, a careful perusal of all the Commissioners of Indian Affairs Reports were scrutinized for any material dealing with the Uintah Utes. It should be borne in mind, however, that the early period of American Indian administration was one of corruption and political favors. These reports are valuable for their presentation of trends within the indigenous society, and for the fact that in an attempt to gain more appropriations for their wards, great detail is given, in some cases, to the work of the Indian agents and their co-workers. The afore-mentioned treaty[103] stipulated that in addition to the Indian agent, a carpenter, farmer, miller and a blacksmith were to be assigned to the Ute jurisdiction.

The theme underlying the policy decision during this phase of

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[102] Kappler, Charles., Indian Laws and Treaties, (Washington, D.C. U. S. Govt. Printing Office, 1903), Vol. 1., pp. 151-152.

[103] Revision of Indian Treaties, op. cit., p. 981.

Indian administration was one of inducing the Indians to accept the habits of a civilized life. This assumption was of utmost importance in the strategy of the change agents. And, as most policy decisions in the Indian affairs of this time were more or less a "blanket" decision to cover all the tribal groups under the jurisdiction of the Office of Indian Affairs, little attention was given to the decision-making processes in the target system.

Rather, the policy followed was to make farmers out of all the Indians, despite the fact that poor land and previous native economies and work habits were pertinent factors and may have dictated other considerations had they been taken into account.

B. Food Rations and Dietary Change

By executive order of 1864, the Uintah Utes were placed on a reservation of 2,039,040 acres in what was described as "some of the best farming land in Utah and of sufficient extent to maintain all Indians."[104] Paramount in the policy regarding the civilization of all Indians, including the Uintah Utes, was an attempt to make them leave their native way of life and to settle down into the occupations of farmers and stock-raisers. During this time, all governmental programs were directed toward the eradication of old habits and tastes and the superimposition of new ones.

The programs of action directed toward the ultimate fulfillment of these goals were: (1) a restriction on the mobility of the Indians within the confines of the prescribed borders of the reservation, (2) a system of rationing foods which were provided by the treaties[105] made by the Indian tribes as payment for the lands and hunting rights which the Indians had forfeited, (3) the use of Marikadj employees to farm lands on the reservations and thus to provide models for the Indians to follow

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[104] United States Indian Comissioner's Report, (Washington: 1864), p. 56.

[105] Chief, Elizabeth, "The End of the Ration System," in Indians At Work, Vol. XII, No. 5, Jan.-Feb., 1945, p. 23-24. The actual amounts of the food rations were often specified in the treaties made between the Indian tribes and the United States government. One may cite the Black Hills Agreement of 1875 made with the Sioux Indians which stipulated these staples as rations for each individual - "one pound and a half of beef (or in lieu thereof, one half pound of bacon), one half pound of flour, and one half pound of corn, and for every 100 rations, four pounds of coffee, eight pounds of sugar, and three pounds of beans, or in lieu of the said articles the equivalent thereof, in the discretion of the Commissioner of Indian Affairs. Such rations, or so much thereof as may be necessary, to be continued until the Indians are able to support themselves."

as well as to serve as consultants when the Indians achieved such skills, and (4) a general over-all program of education into the contemporary American society of the time. The latter goal was hoped to be accomplished by the introduction of schools and a general enculturation process of the Indian children into a new way of life as presented by such change agents as the government farmers, teachers, agents, matrons and other governmental employees.

A restriction of the territoriality of a hunting and gathering people practically eliminates the previous means of obtaining sustenance from natural sources. In almost all cases of nomadic peoples, this diminution of their pre-contact range of mobility has dire effects on their eating habits. Concommitantly, the settlement of the country with its consequent scarcity of game plus the depletion of bison herds by the Marikadj hunters who used only the skins and left the remaining carcass to rot, were other factors which made adjustments to a limited territory difficult in terms of the hunt. It has been noted that by 1885, wild game was disappearing from the reservation as the settlements around the reservation increased.

By far of greatest impetus in the alteration of the eating habits of aboriginal American natives was the ration system which oftentimes preceded the organized agencies which regulated the resultant superordinate-subordinate human relationships which was the outcome of the reservation system. In many cases, the military issued rations after the Indians were confined on their prescribed areas.

The distribution of new foods to Indian wards performed several functions. It served as a system of rewards for obtaining desired habits among the Indian charges. For example, rations were used in bargaining with the Indians to subdue hostile groups and also to control the actions of the hostile groups after they were placed on the reserves. As case in point is the issue of 1881, in which the White River Band of the Utes were issued five or six times the amount of the Uintah Utes' ration as a device for keeping the former from their marauding activities. In addition to supplying subsistence needs during much of the transitional period of the beginnings of life on the reservations, the rations were also used to stop inter-tribal skirmishes, to substitute the newer types of food for the gains of the hunt (an important factor in the restriction on band mobility) and, later, the foods were used to provide an incentive to make the Indians work or to induce them to send their children to school.

Various views regarding the effects of the rationing system on Indian morals and morale have been evidenced by various agents dealing with the Uintah Utes. In 1875, the agent of the Uintah reserve made this observation:

> "The indiscriminate distribution of supplies to all industrious and idle alike, I have always regarded as demoralizing in its effect, tending rather to encourage indolence over industry."[106]

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[106] United States Indian Commissioner's Report, (Washington: U.S. Government Printing Office, 1875), p. 56.

Additional attitudes were manifest concerning the rationing of food. In 1884, thriftiness on the part of the Uintah Utes was equated by the Marikadj administrators with persistence in drawing supplies.

During the year of 1875, not more than three-eighths of the Uintah subsisted on the issue of government rations while five-eighths of them subsisted on food secured through their own efforts by hunting and gathering and the use of other native food-securing techniques.

The rations which were set up as being sufficient for the Uintah Utes consisted of the apportionments found in Table IV.

TABLE IV

RATIONS ISSUED TO UTES

Item*	Amount in Pounds
Coffee, Green Bean	½
Salt Pork	2
Bulk Lard	2
Flour	10
Navy Beans	2
Sugar	2
Salt	½
Fresh Beef**	10
Bulk Soap	½

*Tea, in an undisclosed amount, was added to this list in 1893.

**Beef was issued on a monthly basis.

This list of supplies was issued to every Ute family on a weekly basis until 1918. There were several exceptions in the amounts issued, however, for there were many shortages in the amount of supplies brought

into the agency. From 1887 to 1892, half-rations of flour, sugar, beef and coffee were distributed to the Uintah. In 1891, there were regular issues of the weekly amounts of flour and beef. However, irregular issues of sugar, salt, baking powder, coffee, soap and occasionally, bacon on a one-half subsistence ration were given.

In most of these instances when the new foods were sent to the Indians for distribution, no effort was made to instruct the natives in the preparation and utilization of the staples.[107] The new foods were often prepared by the trial-and-error method and in many cases, new techniques for the preparation of certain items seemed to diffuse with great rapidity. An example of this is the "fried" or "fry" bread of many of the Indian tribes of the Plains and adjacent areas.

Prior to 1875, the rations and annuities which were issued to the Uintah Utes were more or less viewed by the agents involved as payment for lands and these payments were accounted for in the treaties. This year marked a change in the attitude toward the issuance of these articles of food - the policy-making level of the administration made labor a condition precedent to receiving such supplies.

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[107] An instance to illustrate this may be found among the Dakota, who, not knowing how to prepare the highly valued coffee when they received it in the form of a green bean, often used the green bean without roasting it. A case cited in a personal narrative states that because no use was known for flour, it was emptied out and the sacks used for boy's shirts. See Standing Bear, Luther., My People, the Sioux., (New York: Houghton, Mifflin, 1928), pp. 71-74.

The Commissioner of Indian Affairs Report for 1876 yield the information that there were 350 Uintah Utes of a total of 639 Indians present for the weekly issues. It is noted that there were some Colorado Utes and a few Shoshone present, and at the request of the Uintah Utes, they were included in the ration list.

Another factor occurring at this time and pertinent to the demolishment of native ways of food obtainment was the passage of an act of Congress (1876) which prohibited the sale of guns and ammunition to the Uintahs. By this time, they had a complete reliance on the use of firearms in the hunt, it seems, and obviously, this would leave them only one recourse as far as the native food-getting habits were concerned which would have been the continuance of gathering practises and the hunting for small game such as rabbits and rodents. Of great significance at this period was their decision (under pressure by the agents) to do more hunting and to try their hand at farming.

Despite the fact that the amounts of foods to be rationed to the Utes were stated in the various treaties, conditions often determined what would be issued. Amounts of issues were cut indiscriminately when insufficient amounts were sent. In 1878, there is evidence that only one-fourth of a pound of flour and one-third pound of meat were issued to the Uintah Utes. During this time, they used the wheat seed given to them for planting for food during the ration shortage. In an attempt to increase their dietary intake, they began to concentrate on hunting and to venture to the settlements for flour. This is among the first evidences

in which the Ute interacted with the surrounding Marikadj element in an effort to get some new foodstuffs to supplement the rationed foods and the native economy.

The procedure established for the distribution of the supplies was that on a prescribed day, the staples were issued to those Uintahs who were present at the agency headquarters. This often necessitated a long ride from their camps into the agency for a great many of the Utes. Once a month, a herd of cattle were turned loose and the mounted Indians were allowed to shoot and dress them in the traditional manner. This last vestige of a hunting culture was abolished in 1891 when the cattle were butchered once a week in a specially-built slaughter house, the carcass hung over night, cut the next day, and then issued from the block.

This imposed, scheduled standard of food distribution seemingly established a pattern of recipiency which in turn became an expectancy-situation in Ute-Marikadj relations in this early period of reservation administration. This paternalistic attitude on the part of the policy-makers in the Indian administration of the time undoubtedly did much to establish habits of attitude and work which characterized much of the everyday life of the Uintah Utes.

Then, too, the Utes were a loosely-organized band, whose leader, as far as the Uintah band were concered, did cooperate admirably with the administrators. Reports from the Indian agent stationed on the Uintah reservation to the Commissioner of Indian Affairs has verified this at frequent intervals. In 1873, Agent Crutchlow praised Chief Taiwi (the

native name which was anglecized to Tabby and thereafter referred to as Tabby) as being an "example and counsel most salutary."[108]

Though the ration issue may have been short more often that it was sufficient to cover the complete roster of the Uintah, there appears to have been a certain amount of security manifest in the ration system. This attitude is shown by the statement of one Ute as late as 1908, when he said that "work was all right for the Sioux Indians, but the Utes were 'government people' and the government could support them."[109] A schedule of receiving rationed foods did much to create habits of food consumption based on the items issued to the members of Ute society.

Reports of 1901 indicate that the older Utes were still trying to live on their rations and annuity money while the younger and more progressive Utes were entering farming and stockraising as a means of livelihood.

The following year, the ration roll was reduced as an added inducement to make the Uintahs work for their issue for when the Indians reported their hunger, the agent offered them work. Rations were issued once a month rather than on a weekly schedule. These facts enabled the agent to reduce the beef and flour contract by twenty-five percent.

Throughout the affairs of the Ute administration (and this is applicable to the well-established system of Indian administration in general) the interpretations of the policy decisions made in the central agency may be variant with the agent in charge of the local Indian agency on small

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[108] United States Commissioner of Indian Affairs Report, 1873, p. 260.

[109] Report of the Ute agent to the Commissioner in U. S. Commissioner of Indian Affairs Report, 1908, p. 94.

items of administration. This can be illustrated with the rationing system. In 1903, and under a new agent, the beef and flour contract was cut off completely and the money used for wages for labor. This instituted a system of weekly payments which the Uintah then used to purchase subsistence items.

By 1904, the ration list included only the old and infirm and those persons incapable of gaining their own livelihood. The report states that the people suffered from insufficient food during the winter.

It is exceedingly difficult to trace the various changes in the distribution of food from this time until after 1910. The following tables[110] show the percentage of subsistence received by the Utes from rations and from other means, the total number of Indians receiving the issued foods, and the number of able-bodied Indians entirely self-supporting during the early period of Ute-Marikadj relations. The only facts dealing specifically with food issues after 1910 were for the year 1912 when ninety-one adults and seventy-six minors were given rations in payment for labor performed while the total number of adults receiving ration was four hundred and seventy-eight with one hundred and eighty-nine minors on the ration list.

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[110] These tables are the compilation of relevant data found in the sporadic mention of the Uintah Utes in the United States Commissioner of Indian Affairs Reports, (Washington: 1875 through 1948).

TABLE V

SOURCES FROM WHICH SUBSISTENCE WAS OBTAINED BY THE UNITAH UTES

Year	Indian Labor in Civilized Pursuits	Fishing, Hunting and Root-Gathering	Issue of Government Rations	Cash Annuity	Lease Money
1876	25%	13%	62%	-	-
1877	34	33	33	-	-
1878	34	33	33	-	-
1879	50	25	25	-	-
1880	50	25	25	-	-
1881	50	25	25	-	-
1882	33	33	34	-	-
1883	33	33	34	-	-
1884	331/3	331/3	331/3	-	-
1885	33	34	33	-	-
1886	25	15	60	-	-
1887	25	25	50	-	-
1888	35	25	40	-	-
1889	50	10	40	-	-
1890	50	10	40	-	-
1891	50	10	40	-	-
1892	50	10	40	-	-
1893	33	17	50	-	-
1894	30	10	60	-	-
1895	30	10	60	-	-
1896	30	10	60	-	-
1897	40	10	50	-	-
1898	20	10	65	-	-
1899	20	10	65	10	5
1900	22	8	60	-	10
1901*	31	7	42	20	-
1902	40	7	33	10	10
1903	40	7	33	10	10
1904	40	7	33	10	10

*In this year, the Uintah band was combined with the Uncompahgre and the White River bands of the Ute tribe.

TABLE VI

SELF-SUPPORTING AND NON-SELF SUPPORTING UTE INDIANS, 1912 to 1920

Year	Population	Rations Issued for which no labor was performed	Number of able-bodied Ute Indians who were entirely self-supporting
1912	1,183	500	-
1913	1,185	457	73
1914	1,172	403	65
1915	1,161	-	-
1916	1,164	490	68
1917	1,155	490	70
1918	1,162	500	85
1919	1,110	500	86
1920	1,118	-	86

The evidence in the tables presented shows that there was a decreasing dependence upon the rationed foods as the degree of acculturation to Marikadj values and sentiments began to supersede the native way of life.

It is apparent that the limitation of a geographical area heretofore exploited by a hunting and gathering people gave the group little opportunity to refuse the rationed food in order to maintain existence, and, as they acquired means of operating in an increasingly predominant Marikadj cultural context, they utilized such mechanisms as wage-earning, annuity payments, sale of natural resources, and other means for the procurement of foods which they had learned to incorporate into their dietary pattern.

C. The Annuity System

Annuity goods have always played an important part in the agreements and treaties made between the Indian tribes and the United States government. In some instances, the annuities took the form of such technological innovations as plows, wagons and other agricultural equipment. There are records which indicate that this type of technology was distributed to the Ute Indians. Wagons, especially, were given to them as a reward for the disposal of their little ponies which were considered impractical by the administrators who advocated the use of heavy draught horses or oxen.

In addition to this type of implements, household articles such as kettles, knives, dishes, and pots and pans were also included in the annuity list. Cook stoves were given to the Utes in 1883. The agent in his fiscal report for that year wrote, "Many Indians live in 'wickiups' and cook their food in the most primitive ways."[111] He also mentioned that the cooking stoves were abandoned after a short time and the Ute Indians reverted to their traditional means of food preparation. Cooking utensils were re-issued in 1893, and this was undoubtedly the second distribution.

By far, the most common articles which made up the bulk of the annuity lists were articles of clothing such as blankets, shawls, boots, ready-made clothing as hose, vests, coats, overcoats, socks, duck-suits,

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[111] United States Indian Commissioner's Report, (Washington: 1883), p. 140.

and ginghams were distributed yearly. Tipi cloth was also issued.

Beginning in 1887, the sum of $14.36 was given in per capita payment to the Uintah Utes as was specified in the treaty. This sum varied in amount from 1888 to 1920 and ranged from $12.89 to approximately $20.00, with an average of $17.70 for the thirty-three year period. Presumably this was an additional source for the purchasing of food.

Indirectly, the annuities provided a further source of income for some of the Uintahs who were allowed to freight the goods from the city of Salt Lake to the agency headquarters and thus served as a income making device. This period of freighting goods lasted from approximately 1880 until 1910.

It was by these methods that the concept of money became an established factor and provided means by which the Uintah Ute Indians were able to exchange money for foodstuffs and other necessities.

D. Farming as a Force in the Change of Food Habits

The early reports of the Indian Affairs Commissioners show that the Uintah Utes were exposed to agriculture as a planned recourse as early as 1872. At this time, they showed no interest in agriculture but much preferred the chase to labor. During this consciously-planned era of making land-based farmers out of the Uintahs, much of the early farming was done on the reservation by governmental employees who cultivated seventy—five acres during that year.

The general plan seems to have been the use of Marikadj farmers to till the land and thus set an example for the Uintahs to follow. As with most cases of administered human relations, the stress on the agricultural activities and the effectiveness of the new policy varied with the agents in charge of the reservation.

Generally, it may be said that for a period beginning in 1872 until 1888, the model was being set for the Uintah to copy. Statistics dealing with this period indicate this trend. The acreage cultivated exclusively by government men dwindled to five acres while the land cultivated by the Uintah - under the guidance of the farm agents - increased to one thousand five hundred acres in 1888.

The program of persuasion is an interesting phase of Uintah Ute and Marikadj interaction. In the early 1870's, the agent persuaded fifty lodges to follow agricultural pursuits. He advocated rewards for "special excellence or efficiency in any department of agricultural work."[112] By

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[112] United States Indian Commissioner's Report, (Washington: 1873), p. 260.

1875, the products of the farms were becoming a more important element in the Ute pattern of subsistence.

Though the Uintah planted crops under the supervision of the government "farmer", they continued to leave on hunting and visiting trips among the other bands of the Utes. In some instances, they made plans for others, notably the "farmer" to care for their crops in their absences. Much to the consternation of the administrators, these traditional roving habits were exceedingly detrimental to the general plan of teaching the Uintah Utes to farm.

The Utes were given seeds for planting, but there is evidence that they used the wheat seed for food as they needed it. The use of seeds for sustenance at any time of the year, but especially during the winter, was an aboriginal food habit. The use of seeds for food continued from about 1877 to 1880.

During this early period of administration of the Uintah Utes (1871-1875), influences from other Ute bands who had contact with the former, was felt. During this time, Douglas, a White River chief, told the Uintahs that Washington did not intend that the Utes should work and induced some Uintahs to leave with him on a visit to the south. To buttress his persuasions, he called the men who farmed "women".

These forces which counteracted the governmental programs of farming were of great importance in this early period of Ute administration. They affected the main objective which was making the nomadic Ute Indians into stabilized farmers.

The roster of governmental employees whose duties were to instruct and supervise included the agent, a carpenter, a head farmer, a herder, one laborer, an interpreter and a teacher.

The values of warfare and nomadism were still evident in 1876 when thirty of the best farmers answered the government's call to campaign against the Sioux Indians.

The following year, the agent refused to give the Uintahs the annuities unless they decided to farm, which they eventually did. Of the crops which were sown and harvested by them, the Utes favored wheat which they threshed in their native way.

Simultaneously with the emphasis on farming, stock-raising was introduced. The year 1879 showed a greater dependence on cattle for subsistence purposes than was formerly the case and this continued until 1881. At this time in Ute history, four or five of the Uintah Utes owned nearly all the cattle, hence the percentage of the populace obtaining sustenance from this source was not great. A system of bartering ponies for cattle was apparent.

The year of 1881 marked the effects of the influences exerted upon the Uintahs in an effort to make them agriculturalists. The report of the agent included this information - "The Indians make no pretensions at raising corn except for summer use, seldom or never allowing it to mature, unless it be a small portion preserved principally for seed."[113]

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[113] United States Indian Commissioner's Report, (Washington, D. C. 1881), p. 156.

Another agent at a later date (1883) noted that the season was too short for maturing corn, at this elevation of 6,300 feet above sea level.[114] This report also mentioned the use of early vegetables among the Ute - the total bushels of produce included 2,000 bushels of wheat, 150 bushels of corn, 420 bushels of rye and barley and 552 bushels of other vegetables including potatoes, peas, beans, beets and watermelons. Delineation of the amounts raised by the Indians themselves and those products raised by governmental employees is difficult to determine.

Four years later, the Uintahs were doing farm work with their own teams with the farmers supervising the work. A total of 243 acres were being cultivated by the Indians with an additional 40 acres newly broken that year. The harvest yielded 1,900 bushels of wheat, 6,000 bushels of oats, 1,800 bushels of potatoes, 50 bushels of turnips, 30 bushels of beans and 6,000 melons.

It may be noted that, in any acculturative process, all areas of the process do not proceed at the same rate. The Uintah Utes still lived in their wickiups and tipis and used the government-built log houses for granaries and storehouses. In 1889, the head of every family was compelled to build a log house.

New technological methods were making their entrance into Uintah life. They began cutting their own grains by the use of scythes, sold vegetables to the governmental employees and utilized the large irrigating ditch which was built on the reservation.

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[114] United States Indian Commissioner's Report, (Washington, D. C. 1883), p. 156.

With this impetus in agriculture, two assistant "farmers" were requested "not to work for Indians, but to teach them how to do it themselves, to help them select good places for their fields, to show them how to fence the same, and to break their land, and plant, irrigate, cultivate, and harvest their crops."[115] These new change agents assumed their positions in 1889.

The Uintah and White River bands of the Ute tribe were consolidated with the Tabequache or Uncompahgre band in 1886 - the population being respectively 481, 575, and 1,087. This factor had several effects on the acculturation process of the Uintahs, for although the Uncompahgre band had been very predatory, they, apparently for this reason, gained many more rewards and added advantages which the other two bands were not able to obtain. These advantages included a greater amount of annuity goods and food rations and the less tangible benefits of freedom of mobility and lack of pressure from the governmental agents regarding pressured participation in farming, schools, and other areas of change. This occurred despite the fact that the Uintahs had been the most progressive and industrious according to Marikadj standards and the differential treatment affected their agricultural and other "progressive" tendencies.

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[115] United States Indian Commissioner's Report, (Washington, D. C. 1886), p. 226.

It must be added, however, that throughout the whole era of administered relations with most Indian groups, various systems of rewards were presented to them. The Utes were no exception. In 1888, six hundred head of cattle were issued as an incentive for them to work at farming. Domestic fowls were also introduced to all the Ute bands with the Uintah receiving two hundred.

After this period, and as a direct result of their efforts under the guidance of the government agents, the Uintahs produced 50,000 pounds of oats which were then purchased by the government.

Throughout the period of increasing cultivation which the Utes were undergoing at this time, new and different crops were grown and garden vegetables sufficient for family use and a small excess for sale were grown. The government distribution of seed for 1891 included 10,000 pounds of wheat, 21,000 pounds of oats, 2,000 pounds of lucerne, 200 pounds of timothy, and 10,000 pounds of potatoes. Unstated amounts of garden seeds were also distributed.

This year marked the high point in the increasing tendency for the introduction of new items into the cultivation pattern on the Uintah-Ouray reservation. One hundred apple, cherry, pear, plum, apricot, crab-apple, grape, gooseberry, currant, blackberry and raspberry trees were planted by the government farmers.

A decided change in Ute-Marikadj relations occurred about this time as evidenced in a quote from the Commissioner's report which states that the Ute seem "to realize that civilization or eventual annihilation

is the question that confronts them."[116] An increased interest in agricultural pursuits resulted. Farm products for the year of 1892 showed 2,290 acres tilled and 60 more broken by the 101 Uintah families engaged in agriculture. They raised 1,050 bushels of wheat, 4,840 bushels of oats and barley, 130 bushels of corn and 1,853 bushels of other vegetables. This year also saw a re-vitalization in corn production which had not been practised by the Uintahs since 1881, although it had been planted by the other two bands.[117] The pattern of crop consumption during the growing period seemed a recurring trait with many crops being partly and some largely consumed before harvesting time. Again, 1200 fruit trees were distributed to all the Ute bands with fifteen native families setting them out.

The allottment system was instituted in 1894 with land being apportioned to the Confederated bands of the Ute tribe. Although the White River band was opposed to the division of land, the Uintahs accepted it and were making "fine progress in farming."[118]

Because of the practise of the government supplying the garden and field seeds, much of the utilization of the land for cultivation during each growing season depended upon their availability for the Utes continued their habit of utilizing the seeds for sustaining themselves.

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[116] United States Indian Commissioner's Report, 1892, p. 482.

[117] As further evidence to justify the writer's contention that Ute culture was an extremely adaptive one, the tendency of the Uncompahgre band toward cultivation of corn and the accumulation of sheep might suggest a Southwestern influence.

[118] United States Indian Commissioner's Report, 1896, p. 618.

This often disrupted the plans made by the local farmers for oftentimes, the seed requisitioned from the central agency did not arrive and thus the ultimate scheme of making the Uintahs a self-supporting tribe was postponed.

Native attitudes toward the introduction of new foods may be summarized as follows:

> "These Indians are fond of potatoes and all vegetables, and those who farm, with few exceptions, are not sufficiently advanced in husbandry to be able properly to care for the keeping of seeds...Some of these farms compare favorably with the best owned by Whites in this vicinity. All crops are raised by irrigation, with its attended difficulties which are hard to overcome, even with experienced white labor. Not an Indian, however, has given up a farm that has been provided for him."[119]

Potatoes seem to have been a staple crop while a noticeable inclination toward melons of all sorts predominated in this era. Chamberlain[120] notes that of the many new foods introduced to the Utes, and although they had native names for all, (e.g., watermelon - shan-ti-kut), the only one transferred from the name of a native plant was the term, tsin, for potato.

Concerning the work habits of the Indians in the agricultural pursuits was the observation by the agent in 1897 that it was not so much disinclination to work as a lack of sustained effort on the part of the Utes in general.

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[119] United States Commissioner of Indian Affairs Report, (Washington, 1897), p. 286.

[120] Chamberlain, "Some Plant Names of the Ute Indians," American Anthropologist, n.s., Vol. 11, 1909, p. 38.

The Utes employed Marikadj men to assist them in farming in 1898; this action was sanctioned by the reservation agent. But, and this illustrates the inconsistencies in dealing with the Indians, the next agent abolished this practise the following year and presented a new policy which allowed the Marikadj men to clear the sagebrush and level the ground, plant the crops, and return for the use of the land, seed, which the agent, in turn, would loan to the Utes who would be required to repay a similar quantity each fall and then re-borrow it in the spring. The practise of allowing Marikadj farmers to use Indian land was justified as being a good object lesson.

The turn of the century saw the Uintah Utes doing better on their farms and taking more interest in farming. A total of three hundred and sixty Uintahs and two hundred and twenty four White River Utes were farming 3,545 acres as compared to the Uncompahgre band which totaled eight hundred and ninety members who were farming 501 acres. This trend is shown in Table VI which compares the amount of produce raised by the Ute bands.

TABLE VII

AMOUNTS OF PRODUCE RAISED BY THREE* UTE BANDS, (1900)

Band	Produce in Bushels			
	Wheat	Oats and Barley	Corn	Vegetables
Uintah and White River	1,200	15,000	--	480
Uncompahgre	50	3,000	150	547

*This year marked the consolidation of facts dealing with the Uintah and White River bands.

In early 1902, as an outcome of the allotment system which took effect in 1894, the Uintahs wanted more farms assigned to them. Although they had not entirely overcome their difficulty in not saving seed for spring planting, they had established a pattern of land cultivation. Perhaps an indication of this pattern was a reduction in the ration rolls. With a new direction in Ute society, there appeared a willingness to accept employment in such activities as repairing roads, cleaning and maintaining irrigation ditches, re-building dams, gates, and other activities allied with the support of an agricultural-stock raising economy. With the inaugeration of weekly payments for this labor, an increase in purchasing subsistence was shown. Though there seems to have been an occasional selling of wood, hay and farm products, this means of obtaining monetary gain took additional impetus. This era coincided with the reduction of twenty-five percent in the beef and flour contracts which was let for rations.

Throughout this whole acculturation process, certain basic pre-contact habits seem to have persisted. Most noticeable among these were the tendencies for horse-raising and the resultant value placed on owning large herds of horses, and a continued interest in gambling. This latter diversion, plus social dancing, were mentioned most frequently in all the Indian Commissioners' reports. A strong aboriginal trait of Ute culture centered on curing and was salient at this time with the function of the medicine men still persisting.

In spite of this apparent advancement in farming technology, by

1905, reports to the effect that the results from agricultural enterprises were not commensurate with the amount of assistance rendered by the agency farmers were noted. During this year, a re-adjustment in Ute society was apparent for lands were alloted to all the members of the Ute bands[121] on the Uintah-Ouray reservation with each head of the family receiving eighty acres and each individual receiving forty acres. Thus a new concept of individual land ownership was intreduced into the indigenous society. At the same time, the reservation was thrown open to settlement under the Homestead Act and 1,004,286 acres were divided into 6,277 claims. By this latter act, all bands of the Utes were thrown into proximity with Marikadj society.

The alletment system created many disturbances in the inter-personal relations between the members of the various bands. In 1906, a group of the "non-progressive" Utes, mainly of the White River and Uncompahgre bands, left the reservation and departed for the Sioux reserve at Pine Ridge. The Utes spent the majority of the time at the Cheyenne River Agency and returned to the Uintah-Ouray jurisdiction on their own volition in 1908.

The re-distribution of the land seemingly was not sufficient to make the Utes into a self-reliant group. Using a different frame of reference, the administrators thought that the concept of individual ownership was sufficient to motivate the Utes to continue the farming practises which had been functioning under the constant guidance of the governmental

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[121] United States Indian Commissioner's Report, (Washington, D. C., 1905), pp. 5-11.

farmers. It seemed to bring into focus the fact that any change in an indigenous society often precipitates a new need for financial or technical aid of a type suited to the new development. Hence, it is not surprising to read in the Commissioner's report that the "Utes do not take to farming readily."[122]

Consequently, the duties of the government farmers were re-defined and oriented toward an re-instigation of concentrated farming procedures and to supplement his duties, a female counterpart[123] was advocated in order to reach all segments of Ute society to encourage more effective methods to facilitate change.

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[122] United States Indian Commissioner's Report, (Washington, D. C. 1908), pp. 57-58.

[123] United States Indian Commissioner's Report, (Washington, D. C. 1909), pp. 8-9. At this point, a statement of the duties of the change agents dealing direct ly with the Indians as defined on the policy-making levels is in order. "The duties of the Indian farmer are manifold. Primarily, his work is to show the Indians how to improve their allotments and to utilize the soil to the best advantage. He instructs the Indians as to the care of their stock, assists them in marketing their surplus crops, supervises the investment of the proceeds or of any funds to their credit, oversees the construction of their houses, settles their disputes, and protects their rights - in fact, he stands ready at all times to serve their interest as the occasion demands.

His duties, therefore like those of a conscientious teacher, are without boundary, although he does not lose sight of the fact that he is to instruct and encourage the Indians in a specific direction and arouse them to independent effort. At such of the smaller agencies as are not provided for with a farmer, these duties form an important part of the work of the Superintendent.

What the farmer does for the Indian men, the field matron accomplishes for the Indian women. She visits the Indian women in their homes, giving them counsel and encouragement, showing them how to keep their houses clean and orderly and make them more attractive; how to prepare and serve meals, make butter, care for milk, etc.; mend garments; how to wash and iron, and do the innumerable other things which present themselves in the life of a housewife. Besides, she is expected to exert her influence to improve their moral welfare and to impress upon the parents the importance of educating their children and training them to lives of industry.

The industrial training of the farmer and the field matron are the dynamos, together with the stockman, the carpenter, the blacksmith and many others."

By 1912, after the new approach by the change agents, the index of adaptation included these figures of the total population of the combined bands of the Ute as 1,183. Of all the able-bodied men on the reservation, 266 had been given alloted land with the sum of 85,150 acres being allotted and 179,194 acres unalloted of the lands suitable for agricultural purposes. Of this acreage, 5,691 were cultivated by the Ute Indians.[124] A percentage of 2.15 of all the cultivable and was in use. This gives an average acreage per Indian as 32.34 acres with the number of Indians who were farming for themselves as one hundred and seventy-six. The largest farm under cultivation by one Indian was 125 acres.

The major part of this farming was grain and vegetables. By 1917, following the trend of the rest of the country in a war measure, emphasis was placed on the growing of wheat, beans, potatoes, corn, and livestock for meat. A corresponding increase in cultivated acreage was noted.- 8,770 acres. Added stimulus was given to this campaign by the re-institution of farming programs in the school.

Of note is the fact that though the Ute bands were a segment of the total population, much of the external happenings had an effect on their native mode of life. They rallied to the call of growing more food and in the following year (1919), they, too, suffered from the influenza epidemic and the total acreage under cultivation feel to 7,545. Then, in an effort to raise more livestock, they began a system of irrigated pastures which further reduced areas for cultivation.

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[124]Acreage under cultivation during these years were as follows: 1914 - 5,997 acres; 1915 - 7,138 acres; 1916 - 7,134 acres; and in 1918 - 8,908 acres.

This period saw a number of new innovations in the dietary patterns of the Ute Indians as evidenced by the fact that in 1917,[125] 18 milch cows were used by Ute families, the following year - twenty, and the next year saw a decline to only two. This decline may be equated with the change in the method of caring for livestock.

As an indication of the viable nature of the native culture, it is not uncommon to find such statements as these in the literature dealing with the Utes:

> "The Indians upon reservations are not as a general thing tillers of the soil...it is only in the most exceptional cases that one will see a chicken or a pig around the premises. The Indians visit one another for days at a time and hence will not burden themselves with the care of fowls or pigs which need constant attention. This is mentioned simply as indicative of the fact that as yet the average Indian is not fitted to lead a sedentary agricultural life."[126]

At this time, rations were still being supplied to some of the indigent and dependent Indians.

During this decade, the program designed for the whole generalized American Indian problem included the improvement of health conditions, better living, extension of practical education and encouragement of agriculture. During this phase of administration of native peoples, the superintendent of the reservation with his field staff of an Indian Service farmer, a field matron, and a physician visited all the homes in their jurisdiction. Their aim was to improve domestic conditions, organize the work

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[125] No information prior to 1917 and after 1919 was found which was concerned with this particular phase of Ute dietary adaptation.

[126] United States Secretary of the Interior Report, (Washington: 1921), pp. 14-15.

so that each individual family could best utilize their resources. This was part of an attempt to fulfill their ultimate goal which included the harvesting of better crops and gardens and improved homes with an awakening interest among the Indians in these vital areas of life. The aim to make the Indian a self-supporting citizen gained impetus. It must be noted, however, that all of these aims were chosen and inflicted upon a subordinate people.

Boys and girls clubs were formed in 1924 with the main concentration on the areas of poultry-raising, sewing, bread-making, canning and gardening (corn and potatoes were the main crops).

Data dealing directly with the Uintah-Ouray reservation is practically non-existent during this time, hence, it is exceedingly difficult to demarcate the areas of sociological implications for the one particular band which is the topic of this thesis. The following material is but one indication of the adaptive process which they were undergoing at this time. Table VIII shows the population of the various Ute bands in this period.

TABLE VIII

POPULATION OF THE UINTAH-OURAY RESERVATION, (1927)

Ute Bands	Total	Males	Females	Minors	Full-Blood	Mixed-Bloods	
						More than 1/2	Less than 1/2
Uintah	499	266	233	216	332	90	77
White River	245	141	104	155	241	4	0
Uncompahgre	432	213	219	231	430	2	0
	1,176	620	556	602	1,003	96	77

The Meriam Survey[127] caused much re-evaluation on the part of the policy-makers in the Indian Service for it brought to light great inefficiencies and misinterpretations in the field. As a direct result of this survey, six agricultural directors were set up on a Service-wide basis with each reservation being assigned "expert" farmers who were to be on a par with the county agricultural agent in contemporary American society. The new agent had as his objective an efficient cultivation of moderate-sized tracts of land with crops of vegetables and furthermore, a milch cow for each family to own and care for properly. The policy of offering practical assistance and encouragement in agricultural pursuits was predominant in this approach to an old problem. Concentration on the production and storage of food based on subsistence gardening was fostered.

The facts gathered from this survey revealed that the Indians on the Uintah-Ouray reservation were doing more farming than any Indians on any other reservation. They cultivated a total of 15,243 acres.

Three new home demonstration agents were appointed to the Indian Service and this marks the initial appearance of such an occupational group.[128] Their work consisted of assisting Indian women in all that was entailed in the maintainence of a modern, well-kept home. Projects included poultry-raising, cheese-making, pest eradication, tribal arts and

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[127] Meriam, L., The Problem of Indian Administration, The Brookings Institute for Government Research, (Baltimore: Lord Baltimore Press, 1928)

[128] In 1931, personnel in this new division included one director, four supervisors of Extension, twenty-three agricultural extension agents, ten Home Demonstration agents, two hundred and twenty-one farm agents and farmers, sixty-two stockmen and forty dairymen.

crafts, food conservation and storage, improvement of bedding, home care and related activities.

The report showed a significant fact in that a large share of gardening activities were done by women. This apparently was the justification for the inclusion of specially trained agents to work with the Indian women. In the early 1930's, nutrition work was stressed.[129] Food preservation including canning and drying were fostered at the "self-help" centers on many of the reservations. Canning of fruits was outstanding but drying, especially meat, showed great stability as a method of food preservation throughout this period. As most of the data regarding this facet of dietary was issued on a Service-wide basis, it is very difficult to ascertain the actual embellishments practised by the Utes. Indications showed that throughout all the areas, the familiar food preservation habits, most notably drying, were the most practised.

The period of the depression had a definite effect on the Indian tribes. The Red Cross came to the rescue with 5,000 pounds of flour, and almost the same time, stock reduction programs among the Navaho furnished mutton to many of the tribes of the Northern Plains and other areas.

Of great significance, however, was what was termed the Indian Emergency Conservation Works, which later became the Civilian Conservation Corps - Indian Division. These work camps operated on the reservations and allowed $30.00 a month for each family head and $45.00 if he provided his own subsistence and living quarters. Tent camps immediately sprung

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[129] Reports for 1933 and 1936 stated that as a result of the increased work in nutrition, 1,649 and 1,633 Indian homes had adopted improved nutritional practises.

up around the areas where work was being done. In many instances, camps where food was served to the working men were set up. An evaluation of this type of dietary reads as follows:

> "The health of the Indians has been enormously benefitted, a natural consequence of healthy outdoor work and good food. At the start, the expense of feeding the Indians was quite high, but we made no effort to check it, realizing that sooner or later the Indian appetite would adjust itself. From many reservations we have had reports that the average weight increase was from 5 to 8 pounds per man, solid flesh and muscle, due to good food and healthful occupation. On the Osage Reservation in Oklahoma, an amusing contrast is shown - many of the Indians actually lost weight and benefitted by it."[130]

Of immediate interest to our problem is the fact that this program did have some consequence upon the Uintah-Ouray groups of natives:

> "As a leisure time training project at Hidden Camp, operated by the Indian CCC organization at Fort Duschesne, Utah, under the Uintah-Ouray reservation, 100 Hampshire Red baby chicks were purchased. Of this number, 80 pullets are now beginning to produce. A recent monthly report showed that the camp was supplied with 738 eggs. The enrollees also maintained a subsistence garden near the camp which supplied new potatoes. The camp was also supplied with sweet corn, cucumbers, beets and beans. As this camp is situated more than 100 miles from the nearest railway, the raising of these fresh vegetables and camp supplies is greatly appreciated."[131]

A re-introduction of poultry production, increased utilization of eggs, and gardening of the standard vegetable items were stimulated in this phase of Ute acculturation.

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[130] Secretary of the Interior Report, (Washington, D. C.: United States Government Printing Office, 1934), p. 104.

[131] Indians At Work, Vol. VIII, No. 9., May, 1940, pp. 33-34.

The establishment of community subsistence gardens and the building of community root-cellars began in 1935. Families of the Indian communities and members of the 4-H Clubs were assigned plots in these gardens. Three years later, 98 such gardens with a total of 1,600 families participating were noted in a Service-wide summary.

This latter concept of the establishment of communities was a part of the so-called "New Deal"[132] for the Indians and when the program was inaugerated in 1933, it attempted to give a certain cohesiveness to native life and was based as much as possible upon the social organization of the groups as it existed at the time of contact. However, and in most cases, it involved practically a whole re-organization and re-orientation within the indigenous society. With the Uintah Utes and allied bands of the reservation, it was another superimposed policy which was readily adopted.

The new administrative policy also provided for research studies to be conducted among Indian tribes in an effort to ascertain various factors in dietary habits. Such studies as the investigation of infectious dysentary among Pueblo infants and children and the relationship

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[132] Annual Report of the Secretary of the Interior, (Washington: 1940), p. 380. "In the belief that it is neither necessary nor desirable to change the dietary habits of Indian children simply because these do not coincide with our own tastes, studies of native foods and native ways of preparing food have been made in certain areas. Indian schools have then included these foods on their menus, thus giving dignity to native customs and encouraging children to evaluate their own practises before discarding them for new ways. Because of the high infant mortality among Indians, instruction in infant care is given in high schools, the class often adopting an infant and giving it full care." This paragraph indicates the degree to which the administration re-oriented its approach in an attempt to re-vitalize native Indian life.

between dental caries and dietary habits among a group of Indians in Alaska were instigated.[133] Other dietary studies were conducted among such tribes as the Pima and Papago, Hopi and other Southwestern Indian communities.[134]

Unfortunately, such studies were not attempted among the Utes or allied groups in the Basin-Plateau area.

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[133] Ibid., p. 383. According to the investigaters, the use of refined sugar was the main factor in promoting dental caries among the aborigines in Alaska.

[134] An Indian Service physician had found a serious nutritional deficiency in the diet of western Shoshone children, who, greatly improved after needed vitamins were added to their school lunches, made progress in school. Their dietary had been high in carbohydrates and fat but low in proteins. In his later studies in the Southwest, he found that certain nutritive values were deficient in this area. He noted that certain pine needles and a form of cactus contained the desired food values. This research led to experimentation with bean sprouts and to stocking fish ponds in the Pueblo area. Fred Eggan and Michel Pijoan, "Some Problems in the Study of Food and Nutrition," America Indigena, Vol. III, No. 1. 1943, pp. 15-16.

E. The School as an Agent in Dietary Change

The school ranked closely with farming as an instituted factor in changing the eating habits of the indigenous Ute society. The first school which was in operation on the Uintah-Ouray reservation was begun in 1874 with a total enrollment of twenty-five boys. It followed a day-school type of arrangement which was unsatisfactory because of the mobility of the Ute parents and hence, a boarding-type school was advocated by the administrators. Due to the shortage of funds, teachers, and a suitable building to house the school, the institution operated on a very precarious schedule until about five years later when the longest school term of seven months was completed. A mid-day meal was served to the students as an added attraction to induce school attendance. This year also saw the attendance of girls, for until then, the Utes felt that the education of girls was a useless venture. The general feeling of governmental agencies concerned with the Utes is illustrated by the statement that "the culture of the young is the only hope of this or any other band of Indians."[135]

The history of the Uintah school was one of disparate attendance on both the part of the teacher and the Uintah children. For example, in 1881, school was in session for only two months with only thirteen pupils in attendance of the twenty-five who were enrolled. During this year, the school personnel was provided by the Board of Presbyterian Missions,

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[135] United States Indian Commissioners' Report, (Washington, D. C. 1879), p. 138.

while the government provided the buildings, rations and clothing for the children and paid the Board $10.50 per child per quarter.

The following year, a teacher, a matron and a cook were the personnel of the school with an operating cost of $105.74 per student. Although the medicine men were opposed to the government-sponsored school, there was a slight increase in attendance.

The belief that "Indians are not as bright as white students but they possess a fair degree of intelligence,"[136] was reflected in the type of educational program which was basic to the philosophy of educating the Indians. The civilizing agencies were considered by the administraters to be in their order of importance, first the school and then, farming. This philosophy was reflected in the course of study which besides teaching the Indian student to become bi-lingual, also taught the boys to cut wood and to garden while the girls were taught sewing, washing, cooking, and general housework. In addition, "habits of industry and carefulness"[137] were emphasized. In most cases, "kindergarten" methods were used whenever possible.

Interesting patterns of attendance were noticed in various reports with an increased participation during the winter and absenteeism on the part of the boys during the fall and spring months. This truancy was explained by the need of their assistance for farming purposes on the Ute farms. Girls attended throughout the year with few absences. This trend may have been a reflection of a weighted curriculum in favor

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136 U. S. Indian Commissioner's Report, (Washington, 1882), p. 140.

137 Ibid., p. 138.

of teaching newer skills to the girls while the boys were used mainly to keep the school plant in running order.

Frequently, because of irregular attendance and other factors, off-reservation training to "make a permanent improvement among them" (the Uintah) was advocated.

Various forms of rewards were offered to parents whose children were in school. In 1888, a gratuity of $1,500.00 was divided among the Uintah Utes who sent their children to school. A new system of recruitment of students was initiated with the teacher going from wickiup to wickiup persuading the parents to let their children attend school. The Uintah adults were very careful to see that the recruiter left nothing resembling a "medicine bag" was left behind. Forty-four students were recruited and this largest enrollment at the Uintah school during this early period included fifteen girls. An industrial teacher was hired and the boys were taught the rudiments of farming by planting five acres of corn, potatoes, melons and garden truck. This was the first type of such training on record for the Uintah Utes which took place in a school setting. A division of $1,235.65 among the "industrious" Indians who sent their children to school was accomplished. Of the three bands, the Uintahs were the most inclined to send their children to school and so were considered the most industrious. Later rewards included log houses with brick chimneys and shingle roofs, domestic paraphernalia and other material goods.

Apparently, the Utes were quite adept at using the threat of not

bringing their children to school as a means of gaining their way in dealing with the Marikadj superordinates. In 1892, in opposition to the Ute Sow-a-wich and in support of Saw-ne-cuts to represent them, the Utes refused to bring their children into school. After the latter was chosen, enrollment at the school increased to seventy-six.

The Uintah boarding school which was housed in two buildings built in 1891, had, by 1894, an enrollment of eighty and an average of fifty-seven students. The boys harvested 230 bushels of potatoes, several loads of squash, seven bushels of beans and other vegetables. The girls continued their curricula of sewing, cooking and comments on the latter indicate a "quality and variety of dishes prepared from the materials furnished."[138]

Generally, it may be said that the Ute boys were trained in manual labor which included the care and keeping of tools, care of stabled animals, cutting wood, hauling water, milking the school cows and feeding the school pigs and fowl. The girls were trained to cook, mend, make their own garments, wash and iron. The laundry was not equipped with power machinery (1895) as it was "considered of greater importance that the girls should be taught to wash and iron in the manner suited to their respective future circumstances in life."[139]

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[138] United States Indian Commissioner's Report, (Washington, D. C. 1895), p. 32.

[139] Ibid., p. 34.

A system of "daily details" was established in which one-half of the school day was spent by the student at work in maintaining the school plant.

The girls were permitted to take yeast to their homes on Saturday and when the parents brought the children back to school on Monday, they often brought samples of the bread made by the girl in her home. Later comments by the agent were "These girls are the best cooks of any Indian girls I have ever seen."[140]

There were two schools on the reservation in 1897, with enrollment at the Uintah school being fifty-three boys and forty-seven girls. The school farm was discontinued and the boys assigned to the laundry and kitchen and to cutting wood. They bitterly opposed this type of curricula while the girls continued in the same one which was built upon the learning of household arts.

School had become an accepted institution although the "backwardness of the parents and their determination to take them (the students) home at every imaginable excuse"[141] still prevailed. Various attitudes are reflected in the reports concerning the Uintah Utes at this period in their acculturative process.[142]

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140 United States Commissioner of Indian Affairs Report, (Washington, D. C. 1900) P. 390.

141 United States Commissioner of Indian Affairs Report, (1897) p. 287.

142 Such statements as the "natural dislike of students to mental application and necessary confinement" and statements regarding the role of the personnel in "trying to impress the elder Indians with the idea that their subordinate possition is due to the lack of education" are rampant throughout the early reports dealing with Ute Indian education.

Because the enrollment of the school did not meet the expectations of the Washington office, a new recruitment system was begun with the Indian police bringing the Ute children to the school, and further means were the with-holding of rations until the children (mainly of the Uncompahgre band) were put into the school. The Uintah personnel of the school were discharged and all favors were refused for those who with-held the children.

At the turn of the century and as a result of the use of force in recruitment, sixty-five children enrolled at the Uintah school. Unfortunately, one-half of the children came down with measles, one died, and the parents removed all the children and threatened to burn the school plant.

After school was resumed, a revival of gardening at the Uintah school was undertaken with the sowing of lucerne and oats and the planting of potatoes and other vegetables. The instigation of a new type of industrial training for the girls was presented with a "family" -- three younger children were assigned to the care of an older girl. She washed, ironed and mended for her "family". Cooking classes were also organized apart from the general work of the school. This gave the Uintah girl a first chance to learn the arts of cookery, as previously, her work consisted mainly of assisting the kitchen staff in food preparation for the entire student body.

With-holding rations and other rewards from the Utes had its effect, for in 1903, the school enrollment was one hundred and six students

with five boys being sent to the off-reservation school at Carlisle, Pennsylvania. This latter trend heralded a new era in Ute-Marikadj relations. The organized forays to collect Ute children for school enrollment continued. However, Uintah children filled the school for the Uncompahgre band went on hunting trips when the schools opened and their children could not be found.

A new water system at the school eliminated much of the drudgery the Ute boys experienced. In place of carrying water, they were taught carpentering, farming, stock-raising and garden practises. Data concerning the agricultural pursuits followed by the school for the year of 1912 indicate this trend. Of the 788 acres cultivated as the school farm, 108 acres were irrigated. The value of the produce raised was estimated at $1,031.00 with the value of $921.00 consumed by the school, $85.00 sold and $25.00 on hand for that year. Increased production continued through the war years.

A synthesis of data for 1912 indicated that the total number of children of school age was three hundred and seven of which forty-nine were ineligible for attendance because of illness, deformity, or other physical reasons. This left two hundred and fifty-eight children who were eligible for school attendance. Of this number, seven were in non-reservation schools, seventy in the reservation boarding school, twenty-one in public schools, and none in the reservation day school or mission or private schools. The total school enrollment totaled ninety-eight.

In contrast, the school census for 1919 stated the total number

of children of school age as three hundred and twenty-three, of which twenty-nine were ineligible and two hundred and ninety-four were eligible. Thirty-one children were in non-reservation schools, one hundred and six in the reservation boarding school and forty-two in public schools. As in 1912, none were in either a reservation day school, a mission, or a private school. There were one hundred and seventy-nine children in school in 1919 as compared to eighty-nine seven years previously.

Throughout all the data concerning the education of the Ute Indians, there was a great variation from year to year in the numbers of students enrolled in schools. The decade ending in 1920 saw a major change in other areas of Ute life for of 1,118 Utes, 130 were able to read, write and speak English while 320 were able to speak English and 600 were what was termed "citizen's clothing."

Education personnel (from 1912-1919) included two academic teachers, nine agricultural and stockmen, seven persons working in mechanical areas (including upkeep of the school) and five persons in Domestic Science (including cook, matrons, and other kitchen help).

During the post-war period, much of the curricula remained unchanged. In 1927, however, sixty Home Economics teachers were hired in forty-four schools.[143] Small homes were built at some of the schools which were then to serve as a standard for the reservations. Most of the model homes were built at the non-reservation schools. The general over-all

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[143] Meriam, L., op. cit., p. 610. This report gave great impetus in the hiring of persons to improve home and community life in the various Indian tribes.

policy of pertinence to the home was "the development of desirable food and clothing standards which may pass to the everyday life of the Indian girls and of the Indian home." As part of this period of setting standards the Home Economics teachers were encouraged to spend at least one month of the school vacation visiting the Indian homes in order to plan the future teaching to more closely meet the needs of the local groups of Indians.

The well-established boarding school type of Indian education continued without evaluation until 1928 when the Merriam Survey found that the diet of Indian children in such schools were grossly inadequate.

> "The diet is deficient in quantity, quality and variety. The great protective foods are milk and fruit and vegetables, particularly fresh green vegetables. The diet of the Indian children in boarding schools is generally notably lacking in these protective foods."[144]

To further verify the fact that malnutrition was generally the keynote in most boarding schools, the Commissioner's report for 1929 included this statement:

> "As to diet, the average per pupil per day, even under the last allowances available, was considerably below the 37.8 cents found to be the minimum requirement set by a carefully selected committee of physicians and specialists. In 22 schools, the average figures for per pupil per day was 20 cents of which 14 cents represented food purchases and 6 cents represented food produced."[145]

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[144] Merriam, P., op. cit., pp. 11-12.

[145] United States Secretary of the Interior Report, (Washington, D. C., 1929), p. 15.

As schools were the main contact which the Ute Indian students had with the dominant society, and since this contact was sifted through several change agents, it is highly probable that their eating habits reflected this influence in their adult life.[146]

Several new agents were introduced into the general picture of Ute-Marikadj interaction in 1928 when public health nurses and trained agricultural farmers were added to the roster of employees. Their effect on Uintah Ute dietary change was not traceable, however.

During the administration beginning in 1933, the general direction in Indian education was toward the Day School rather than boarding schools in many of the areas where this was feasible. Vocational instructors attached to boarding schools which were converted to day school-type institutions worked with Indian adults in their homes. This adult program, also a part of the "New Deal" for Indians was carried on in this manner.

In 1933, the population of the Uintah-Ouray reservation was 1,228 which included 652 males, 576 females and 332 children. Of the 332 children, the school census for this year revealed this trend in Ute acculturation — 64 were in a local public school, 18 in a federal day school, 157 were in the reservation boarding school, 23 in a non-reservation boarding school, 2 in mission and private schools, and 28 children were not enrolled. These figures show that despite administrative tendencies

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[146] The writer, while teaching foods and nutrition at an Indian boarding school, managed to visit families of Indian employees during meal periods in an attempt to observe their eating habits and found a recurring pattern of "Indian-type" food prepared and consumed.

toward day school education, many more Ute Indian children were continuing their education in the traditional manner by spending the majority of their formative years in a boarding school situation. Eating habits were still being formed in such a manner, and since day schools often served noon lunches, their effect on dietary habits were undoubtedly of some consequence.

Essentially, the education of the Uintah Utes followed the pattern previously described as late as 1948, with an increasing emphasis on the teaching of cooking methods, nutrition, and other skills advocated by newer trends in Home Economics as opposed to other handicrafts such as embroidering, knitting and other skills concerned with the maintainence of the school kitchen. As the school curricula included only the ninth grade, only the rudiments of cooking and sewing could be accomplished. Vocational work for the boys included farming, range-riding, and other types of manual skills.

F. Missionaries and Their Effects on Dietary Patterns

Missionaries were not as numerous nor as early among the Utes as they were among the tribes of the Northern Plains. Undoubtedly, the first missionaries among the Utes were the Mormons and though they baptised some of the Utes, the latter were seldom very strong converts. Some of the Indian agents attributed a conversion of about half of the Ute population to Mormonism,[147] this is not to be taken as a complete indication of the extent to which the Utes became converted to this new faith nor is it to be taken as an index of the prosyletizing of the aborigines by the Saints, for though the Mormons at times tried to influence the Indians in their dealing with their administrators, it might well have been their own vested interests in Ute lands or water rights or other factors which may have caused this action. The Mormons were frequently mentioned in the early reports dealing with the Ute Indians. It seems that they, unlike most early missionaries among the Indians, did not count the number of natives present at the religious services but more or less let the Utes come and go as they pleased.

The next group of missionaries on the Ute reserve were the representatives of the Board of Presbyterian Missions which contracted with

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[147] The Commissioner of Indian Affairs stated that in 1882, one-half of the Utes belonged to the Mormon Church and that the Mormons tried to curry favor with the Indians. Furthermore, in 1884, the same agent reports that the Indians were hearty sympathizers with the Mormons and were attracted by the practise of polygamy. Much anti-Mormon sentiments is evidenced in his reports, but he does credit the Mormons with influencing the Indians to pursue agriculture as a means of livelihood.

the United States government in 1881 to provide an industrial boarding school. The extent of their participation, which apparently did not include direct conversions, was to supply the personnel for the school which they did for a period of two months during the same year. The teacher left the reservation. Missions and clergy were not provided by this group.

Various agents (administrators) held church services in their homes on the reservation, mainly for the governmental personnel, and although the Ute Indians drifted to these services, there was never any conscious conversions on the part of the personnel who nevertheless expressed a desire for missionaries among the Utes.

The Protestant Episcopal Mission entered the Ute reservation in 1895 and built a church near the Uncompahgre sub-station. The school children and adults from the surrounding neighborhood attended the services. Other mission work included the visits of two women missionaries who went into Indian homes to instruct the women and children into "ways of cleanliness and practical Christianity in home conditions."[148]

Four years later, this type of missionary activity was extended to the Uintah band of the Utes where a woman administered to their spiritual needs. Entrance into the schools was gained in 1903 where Sunday school and Chapel services were held throughout the year. Two years later, a small chapel and a small hospital were constructed among the

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[148] United States Indian Commissioner's Report, (Washington, D. C. 1897), p. 285.

Uintah where missionary work, though discouraging, was continued by two women.

By 1912, there were two missionaries and three churches among the consolidated bands of the Ute Indians with eighty of the band members professing Christianity. A total of one hundred and sixty-eight Protestants were reported by 1920.

In all, the total effect of missionaries among this particular group of Indians was not as great as it has been on other Indian tribes. It may be that, originally, the Utes did not have a strong religious development or strong warrior societies, and thus, when they were placed on a restricted area, they did not find such a period of adjustment as was presented to other groups of individuals. Furthermore, since curing was a strong point in their aboriginal culture, medicine men continued to function as late as 1915, and during the period following the confinement on the reservation, the Ute adopted the Sun Dance and later the Peyote Cult[149] and centered their religious life around these. The almost un-involved affiliations and relationships which exist today between the Utes and the organized religious bodies of Marikadj culture may be explained by these factors.

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[149] Stewart, Omer C., Ute Peyotism, (Boulder: University of Colorado Publications in Anthropology, 1948).

G. The Trading Post as an Innovation in Dietary Adaptation

Insofar as could be determined, trading posts seem to have been in operation in areas contiguous to the Uintah-Ouray reservation as early as 1872, with the exception of three years beginning in 1878 when a governmental order caused the sale of fire-arms and rifles to the Indians to be discontinued. In 1881, a trader returned to the Uintah and built a new log cabin for his establishment and this family have had exclusive trading rights with this group of Indians ever since.

With the growing use of money as a medium of exchange for labor, sales of native crafts and native resources such as hay, wood, land and with the payment of cash annuities, increased use was made of the trading post. It provided a certain amount of selection of the articles which the Utes desired and was one of the most effective means of introducing new items into the life of the Utes. The patterns of trading which were established then served as a standard for much of the later purchases. Often, the trader would accept hay, wood, or services plus the native crafts as payment for merchandise. Since most Indian groups have adapted certain elements of material goods from the Marikadj, e.g., certain patterns of calico, scarves, hats, shoes, and other articles of clothing, trading posts usually catered to this type of trade. Items of foods desired by the Utes were also stocked. Another role which the trader fulfilled was that of a pawnbroker. The trading pattern of accepting and holding personal property, such as jewelry, shawls, hats, etc., until the articles could be redeemed with money was presumably a standard

procedure. This later method of obtaining food was usually used as a last resort in the obtainment of food items.

This particular trading post served as the center for most of the Uintah section of the reservation for it was made a Post Office after 1894. It served three main functions: a place to obtain food, a place to gain information, and a gathering place for the natives.

Besides giving valuable information on the ways in which the native diet may have been supplemented with purchases from the store, the trading post owners often-times served as an outlet for the sales of Indian crafts and Indian arts thus supplying a means of exchange by which the natives could increase their dietary intake of the newer foods and foodstuffs. As many traders have lived for years among the Indians, and know the Indians more intimately, than, for example the changing governmental agents, the traders have provided trends in the acculturational processes of many groups of American natives.

In summary, it can be said that the dietary habits of the Uintah Utes have changed and it is also apparent that contact with a dominant society is one of the most forceful means by which the food habits of an indigenous group were changed. The influx of wagon trains, traders, missionaries, and finally and most effectively, the governmental agents were the determinative factors in the alteration of the prevailing native foodways.

As the aboriginal dietary pattern of the Utes seems not to have been one of plenty, they readily accepted the new foods presented by the external agents of change. In much the same manner in which the other Indian tribes obtained new foods, the beginnings of the strange and different food-consumption pattern in this Basin-Plateau type culture were the result of spasmodic occurrences. The system of administered food distribution allied with the presentation of new techniques in its production in a period of restricted territoriality contributed greatly to the adaptation in food habits of the hunting and gathering economy of the Utes.

It has been noted throughout this section that Ute Indian culture has always been an adaptive one. In addition, it has been a loosely integrated one, as far as religion, curing, social organization and other cultural elements are concerned. Thus, it appears that in the processes of change which this society encountered in the contact with a super-ordinate one, the dietary pattern shifted to one more closely resembling the standards set by the Marikadj aggregates of change agents who interacted with the Ute Indians.

CHAPTER IV. CONTEMPORARY DIETARY CHANGE: FIELD DATA

Food, food-getting, and allied human activities form an important part in a culture - especially one which is undergoing or has undergone change. New foods, taste sensations and means of obtaining the food may neccessitate an interesting reorganization of the social system. A new system of values calculated in a monetary unit, the advent of traders, missionaries, government officials, and the concept of paid labor all form a basis for the interconnectedness of food in present day Ute society.

The aboriginal food pattern of the Ute was essentially that of the groups in the Basin Area - wild game supplemented by seasonal variants such as wild potatoes (nogstedt), wild parsnips (yamp), and other roots and wild fruits. The Indian potatoes obviously constituted a large part of the early diet. May and June were the harvest months and during this time, the potatoes were dug with a pointed digging stick. The potatoes were then boiled in the peel and dried. One informant stressed the fact that one "doesn't peel them, if peel, the rains come." It is apparent that if the rains did come, they would hinder the drying process and spoil the storage. An older informant said that these potatoes were often three to four inches in length and were pounded into a sort of powder from which a gravy or gruel was made. Reducing the potatoes to a fine powder decreased the need for storage space, as the meal was packed compactly into rawhide containers. This food was an important element in the hunter's pack.

Turnips were gathered in the midsummer; they were peeled, the tops braided together and then dried in the sun. This was a valuable means of preparing for the winter supply of food for the wild turnips kept almost indefinitely and were used in soups.

Wild fruits, such as buffalo berries, choke cherries, wild strawberries, "Halvsonberries" and grapes were important additions to the Utes in the seasonal dietary change. Wild choke cherries were pulverized without the removal of seeds by using stone manos and metates. This was the woman's job, although both men and women engaged in picking the fruit from the trees. The pulverized mass was then formed into patties and sun-dried and also served as an excellent winter food. Buffalo berries were gathered by spreading a rush mat beneath the tree and beating the limbs with sticks. The berries were dehydrated. Members of several families participated in this group activity. In both the above instances, water was added to the dehydrated fruit by soaking. One of the informants said that "in the old days, they used wild honey instead of sugar and cinnamon." Both men and women engaged in these fruit-gathering activities, but the women "had more to do." It is assumed that hunting occupied a greater share of the man's time.

Meat was by far the most important and most cherished element in the aboriginal Ute Indian diet. This was perhaps the only foodstuff which had ceremonial connotation - most of the life crises were associated with its consumption for it was valued as a means of gaining strength. Meat-getting activities were strictly adhered to by the men. The social

status of a good hunter and a good provider was notable in Ute society. Venison was by far the most widely used source of protein. The flesh of the deer was cut into strips - either by the men or women - and it was hung in the sun to dry. The strips were then stored in this dehydrated state or pounded into pemmican to which was added melted suet and oftentimes, dried chokecherries. This was also stored in rawhide bags. Bear was considered a greater delicacy than venison. Bear-hunting provided a means for the hunters to leave their dwellings to go into the mountains for several days. The killing of bears was a status-raising device. Small game, such as prairie dog, rabbit, squirrel and chipmunk made up the greater share of the daily intake of food. This activity was engaged in by all members of the family.

Fish provided another means of introducing protein into the diet of the Utes. The fish were plentiful in this area and were obtained by the simple expedient of turning a mountain stream and filling a basket. This was defined as a male activity.

It is conceded that late spring, summer, and early fall were times of comparative plenty in pre-contact Ute society. During this time, kinship groups and families interacted with no regard to the confines of a limited food supply. This period was also a time for these groups to cooperate in obtaining and storing food for the winter time. These cooperative measures were limited primarily to hunting the larger animals and gathering fruits and roots; minor hunting forays were individual endeavors.

In the late fall, families returned to their winter habitats in the foothills of the mountains where fuel was plentiful. Social interaction was infrequent as a great portion of the time was spent foraging for meat to supplement the dried fruits and roots.

The Bear Dance concluded this self-imposed isolation. In the early spring, after the first thunder storm, the Utes emerged from their winter shelters and congregated for their then most important ceremony. This was not primarily a religious ceremony, but a major social event. "The people got together and some got married," stated one informant.[150]

Highly ceremonialized food habits seem to have been lacking in aboriginal times. This may have been due in part to the scarcity of food and its immediate consumption when it was acquired. In speaking of the old dances, the informants did not recall the use of special foods.

In the Sun Dance, a relatively recent part of Ute culture, fasting is a feature but is used only as a device to obtain the dancer's desire, and, in addition, it is optional. The period of fasting is four days. One woman, speaking of her brother's participation in the dance, said, "He wanted dried meat, like in the old days." An elderly man who was interviewed stated that a certain white clay mixed with water was given to the dancers at the conclusion of the ceremony. "Then they could eat what they want to," he said.

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150 This ceremony is still a part of contemporary Ute culture. Steward, J. H., "A Uintah Ute Bear Dance, March, 1931" American Anthropologist, Vol. 34, 1932, pp. 263-273.

As far as could be ascertained, food delineations on sexual lines was not followed except during pregnancy and the subsequent lactation period. Foods rich in protein (this being entirely meat) were considered proper. However, it was not believed that male virility was strengthened by the use of special foods. In fact, as measures of birth control were practised, it would be safe to assume that this belief was non-existent.

The only time that food assumed other than a mere subsistence function was during the initial and subsequent menstral periods. During this time, the girl was removed to a brush shelter apart from the family group. It was thought that the eating of flesh during this time was detrimental to the health of the girl, and consequently, the correct diet consisted of dried roots, wild potatoes, and tea made from herbs. Only one meal a day was considered sufficient. Later, in the post-contact period, the approved bill of fare during this time changed to "grease-bread" and coffee.

The word "towachi" was translated as meaning to be with child. It is interesting to note that the word "nonwach" is used to indicate the summer season and it means literally, "new born baby" and, as previously mentioned, summer in aboriginal times was a period of plenty. Most of the older informants agreed that special effort was made to supply plentiful food for the expectant mothers. Parturition in Ute society also involved removal from the site of the regular dwelling. The mother went to a special shelter within the area of the recognized home site, where more often than not, she delivered her own child. One older woman said,

"Sometimes an old lady or her (the expectant woman's) mother helped with the baby. This woman (midwife) cooked for the mother." The diet consisted of soups and gruels and foods given to the family in ordinary times, with the exception of meats.

The lactation period was an important one. "Pejepa opa" is a Ute phrase meaning being capable of nursing the child which, when translated literally, means "food in the breast". "Kapota" means the opposite -"no food in the breast" - and this state was thought to be directly connected with the conduct of the mother. "Bijewani" means a good mother or one who was able to nurse the child.

The weaning process was not begun until the child was one or two years old. It was believed that nursing the child as long as possible was a safeguard against conception. It was customary to let the child "cry until they don't think about it any more." Masticated sage brush was rubbed on the breast to terminate nursing. A common belief was that if the mother was pregnant for four days and continued to nurse the child, the latter "would get sick, or die, too."

Hunger was associated with death in that the mourners at the "cry" would destroy or burn all their possessions when one of the family died. The clothes of the survivors were torn and they were in rags. As one Ute stated, "It was very hard on those that were left. They would go hungry." During the "cry" (this is a term which the Utes apply to the public display of emotions after the death of a member of the group), the mourners were expected to think of all their dead ancestors and

become greatly saddened. This period of privation lasted almost a year. Now, however, the more acculturated Utes question the function of a "cry." One Ute woman, a federal employee, said, "We didn't have a cry when my father died. Maybe I should have, but I didn't. I think it is silly."

Undoubtedly the most effective means in the change in the food and eating habits and other acculturative processes which the Ute Indians encountered were the superordinant governmental agents. When a reservation was assigned to the Northern Utes, the federal governments were the most instrumental in presenting these strange foods through the rationing system. After the installation of a government agent, the federal service issued such staples as beans, bean coffee, bulk lard, salt pork or bacon, flour, sugar, salt, beef, and soap on a weekly basis to every Ute adult. This issue[151] was terminated in 1918. With the reservation system, came the allotment system and this further increased the dependence of the Utes on this weekly government issue of food. A new concept of land ownership was introduced with the allotment of lands and thus, the hunting and gathering area of each family was reduced.

As is the case with other Indian tribes whose food economy was based primarily on the government food issue, a staid and monotonous dietary pattern evolved. The receipt of these staples gave a seemingly richer bill of fare than had previously been known to these people. The food issue was taken as something which was due the Utes. This factor, plus the allotment system, completely changed the cultural pattern. After the first generation had lived a confined existence on allotted land, heir-

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[151] See Table IV, page 58 which lists the amounts of food issued to the Ute Indians.

ship conflicts arose between individuals in families. (This problem is still evidenced in the present day life of the Utes. Many houses are still vacant, and much of the farming land of the Uintah Basin is not utilized.) This fact compelled migration from the home allotment. Certain members who found no place in this spatial arrangement moved; not having land, they built one-room log cabins around various Marikadj settlements, i.e., Whiterocks, Neola and Ft. Duschene.

These factors further threw the Ute Indian male into a new field. He now was neither completely a hunter and gatherer nor a farmer, but a wage-earner depending almost entirely upon his ability to compete within the Marikadj society. This element of Marikadj society was comprised mainly of ranchers and farmers, and as might be expected, this force was pertinent in shaping the new ideas and values of the Utes in their orientation to American society. It was this part of the predominant Marikadj culture into which the Ute entered, as a hired hand, in most instances. In this capacity, he worked for cash returns, or more often than not, for such foods that were plentiful in these places. These foods tended to be beef, milk, eggs and butter. Indirectly, these contacts influenced and hastened the food habits which were already in flux.

Closer proximity and frequent interaction with Marikadj traders hastened the acculturation process. The same family of traders who instituted the trading post are still dealing with the Ute Indians today at one of the villages in the Uintah Basin. Old receipt books furnished excellent material for ascertaining food habits in this post-contact era.

Not only did the early trader serve as a food supply house, but he also assumed the role of pawnbroker, banker and oftentimes, financial and/or medical advisor. The records revealed that, in almost every family, cash was obtained from the trader at some time or another.

In a synthesis of ten accounts in the record books dating from December, 1907 to July, 1908, the following articles, in Table IX, were the best sellers.

TABLE IX

MOST PURCHASED ARTICLES AT THE TRADING POST
(December, 1907 to July, 1908)

STAPLES (Carbohydrates)	MEATS (Proteins)
Sugar	Bacon
Flour	Beef
Baking Powder	Beans
Crackers	Cheese
Candy*	
FRUITS AND VEGETABLES (Vitamins)	**BEVERAGES**
	Tea
Oranges	Coffee
Peaches	
Apples	**CONDIMENTS**
Tomatoes	
	Salt
CLOTHING	**MISCELLANEOUS**
Hats, Shawls, Hankerchiefs, Cloth (Yardage), Overalls, Shoes, Hose, Boots, Tents	Candles, Beads, Dishpans, "22 Shot", Cartridges, Rope, Needles, Thread Strap, Matches, Hay, Tobacco.

*Due to the quantity of candy consumed, it can be hardly listed as a confection, but would instead form an appreciative portion of the carbohydrates.

Tobacco made an infrequent appearance in this list. Three informants divulged that Kinni-kinnik is not commonly used now, however, it was used to a large extent previously and is now utilized by some of the older men on the reservation. "They used to smoke it in the old days," they stated. (The Kinni-kinnik in this area is described as a "plant about four or five inches long with round leaves that grows in the mountains.")

Under the caption, "Medical Supplies" were listed "Salve" and Mentholatum.

TABLE X

MOST FREQUENTLY PURCHASED ARTICLES
(In descending order)

1.	2.	3.
Oranges*	Coffee	Beans
Sugar	Salmon	Cheese
Flour	Apples	Corn
Tea	Crackers	
Baking Powder	Candy	
Beef	Peaches	
Canned Meat	Tomatoes	
Bacon	Lard	

*Before the advent of ice cream and soda pop.

The articles listed in Table X show that the items introduced by the rationing system did much to mold the eating habits of the Utes. Sugars led the list. The major items of daily diet which were listed at the agency headquarters of the United States Office of Indian Affairs were: meat, bread and tea.

The records show that the Ute family visited the trading-post at least once weekly, purchasing the staple foods, but more often, fruit. The meat supply provided by hunting was supplemented with beef, canned meat, and salmon. The most constant elements in these accounts were flour, baking powder, and bacon. (These ingredients are essential in the preparation of the so-called "grease" or "fry" bread.) Although coffee was a regular item, in most cases, it was exceeded by tea.[152] Monthly totals of food purchases were not large as contrasted with clothing which occupied a larger share of these records.

Another impetus in the processes of food and dietary change among the Ute Indians was the boarding-type schools which were provided for the children and which are still an important factor today. The food supply for the school children was mainly provided for by the federal government. These food items, which were mainly staples, were increased by purchases made at the trading post. The staple-type foods which were sent by the government to the Indian boarding schools were very much the same type of foods which were issued to the Indian adults in the weekly distribution of foods. The same kinds of foodstuffs were still being sent to the schools after the ration system was discontinued. Furthermore, the schools were expected to be self-supporting in some respects and much of the diet depended upon the school gardens and the livestock program.

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[152] Tea appeared on the ration lists at a much later date than coffee.

TABLE XI

FOODS PURCHASED BY THE INDIAN BOARDING SCHOOL
(January, 1907 to July, 1908)

STAPLES	Amounts	MEATS	Amounts
Flour	2 Sacks	Bacon	10 Pounds
Sugar	3 "	Cheese	20 "
Soda	(not given)	Eggs	96 Dozen
Salt	"		
Baking Powder	"	FATS AND OILS	
Yeast	"		
Corn Starch	"	Butter	39 Pounds
Rice	"	Lard	(not listed)
Macaroni	"		
Tapioca	"	BEVERAGES	
Crackers	45 lbs.		
Corn Meal	4 "	Tea	(Amount not given)
		Coffee	" " "

VEGETABLES	(Cases)	FRUITS	(Cases)
Tomatoes	5	Peaches	6
Corn	2	Pears	3
Sweet Potatoes	3	Raspberries	3
Peas	3	Blackberries	3
Beans	5	Apricots	5
Asparagus	2	Plums	1
Celery	(Amount not given)	Mincemeat	1
Onions	"		(Boxes)
Carrots	"	Cranberries	1
		Citron	2
CONDIMENTS		Oranges	1
		Currants	1
Jam	(Amount not given)	Raisins	2
Pickles		Lemons	2
Cayenne Pepper			
Sage		MISCELLANEOUS	(Pounds)
Maple Syrup			
Vanilla Extract		Candy	10
Lemon Extract		Nuts	12
Strawberry Extract		Jello	5

The preceding table shows that many sweet foods (as evidenced by the large purchases of canned fruits, flaverings, and candy) did much in directing the Ute child's taste toward foods rich in sugars. It is well to keep in mind that the children in school at the time of these purchases are the parents and grandparents of the children who are in school at the present time. Both of these groups were observed in the trading post of the village.

While these factors have been instrumental in changing the eating habits of this acculturating group, other changes in the society were occurring. The role of the Ute man became increasingly more like that of the Marikadj people in the area. Special emphasis was placed on ranching, but only subsistence farming was practised. One informant stated that the crops first planted by the Utes were corn, potatoes, and beans. This form of agriculture was instigated by governmental farm agents.

The woman's role changed, also. Her duties still centered on the home, however. She attempted to approximate the prevailing Marikadj pattern of gardening, cooking, preparing clothing, and caring for her family in the manner which was patterned after the model which was presented to her in the government boarding schools. We have seen that a definite philosophy of housecraft was formulated by the policy-makers in Indian education.

More and more, the elements of Ute society were being molded to fit into, or at least, approximate in some way the predominant cultural

pattern of Marikadj society.

In this manner, the Ute Indians developed nutritional habits which were, and are still, distinctive. Plains and Pueblo "hospitality" is noticeably absent in Ute culture with the custom of promptly feeding a visitor lacking. As far as was determinable, the present Ute diet is greatly stereotyped. Potatoes, bread, and coffee or tea, with meat added when available, is the standard pattern. The bread often takes the form of "grease" bread or a type of baking powder biscuit. This diet varies with the degree of acculturation, economic status, educational status, and the season of the year. Needless to say, the effect of Marikadj culture is noticeable and the effect varies with different individuals and families. Fruits, vegetables and canned meats find appropriate niches in these food supplies.

At the present time, the influence of the trader is far more important than that of either the teachers, ministers or governmental agents. The trader of this Ute village stated that the foods purchased most frequently by the Indian customers now are, in order of impertance, milk, tomatoes, corn, peaches, and peas. With the exception of milk, there is a striking similarity between this group of items and the predominant ones purchases by the boarding school in 1907-1908. The owner of the trading post remarked that the sale of milk had increases tremendously in the last five years. He attributed this fact to the influence of the Home Economics teacher of the Indian boarding school. He said. "They liked her." (This teacher was from Oklahoma and of Indian descent.)

It was observed that on two occasions vegetable and fruit juice were on sale at the trading post. Commenting on this, the trader said, "They just don't know how to use them." He stated that the closeness to other trading centers and the ease in reaching them made the charging of exorbitant prices unprofitable.

The diet of the present-day Ute Indians is still supplemented by wild game and wild fruits, though the use of wild roots and vegetables has declined. The wild potatoes and turnips are still stored for winter use as are the domestic potatoes, carrots and turnips. Peaches, beets, green beans and pickles are the items which are canned, although only the most acculturated and best educated do any canning at all. Water-packing the wild fruits is the most general way of preserving them now. In some instances, the drying method is still used. A few of the women make preserves and jellies, but as yet, this has not gained a large number of advocates.

The use of deer and prairie dog for food is still prevalent. The trader thought the name "prairie dog" had unpleasant connotations for he said, "Some people think it is a dog, but, actually, it is some sort of a squirrel. It's good. I've eaten it."

It is evident that the summer months are still months of plenty for there is a noticeable upsurge in business at the trading posts in the various villages. The men find jobs in the fields, herding, cutting hay, and other seasonal work. Observations indicate the ease with which the people spend their money on soda pop, ice cream and candy. All ages

indulge in the partaking of these refreshments - from one-year-old children to the very old grandmothers. One elderly woman, about fifty-five years old, was seen to have consumed three bottles of orange soda pop in fifteen minutes. The trader's wife commented, "They make a meal out of pop, candy, and ice cream." (Decayed teeth were much in evidence at the daily gatherings of these people. The "baby" teeth of children showed decay, and women in their twenties were toothless.)

The role of woman as a provider increases in the winter months for many articles of beadwork come into the store. These are often exchanged for food, for cash, or applied to the debit. The trader said that these people had a hard time during the winter. This fact was reiterated by the Ute informants.

Ceremonialization of food in present day Ute culture is nil. After participating in the Sun Dance (younger male members to gain certain desires and older men to obtain cures or curing powers), the food eaten immediately upon the close of the ceremony is watermelon. Several of the younger participants went to the refreshment stand where they drank soda pop and ate hamburgers. Undoubtedly, the only ceremonialization of food in present day Ute society occurs in the Peyote cult. Here the food follows the standards set in Oklahoma: corn, canned fruits, (usually peaches), and boiled meat. A feast following a dance or ceremony is not practised, except in the Sun Dance where it took the form of the distribution of food furnished by the Tribal Council and consisted of boiled meat, bread, potato salad, and coffee. The food was given to all.

Food has found a place in their daily social gathering which consists of playing monte at the village gambling grounds. In this instance, each individual player purchases his snack at the trading post. Only women were observed to consume these foods which consisted mostly of candy, cookies and fruit, while the game was in progress. One enterprising woman (a California Indian married to a Ute man) sells home-baked bread, rolls, pies and cakes at this gathering every week.

The only other case of food being associated with a present day ceremony was the furnishing of foodstuff by the minister after the Sunday morning church (Episcopal) service. This refreshment consisted of coffee and cake or sandwiches. During the summer, an ade was substituted for coffee. However, the serving of food is not a drawing card for the highest total of Utes attending the church services during the summer was five persons.

The influence of teachers, doctors, nurses, and other governmental personnel seems to have had some effect on present food habits. One Ute woman, the mother of six children, remarked that some of the nurses and teachers attempted to "teach us how to eat milk and not too much sweet stuff, but vegetables, and not to eat too much." Then, speaking of her children, she said, "Some people say, 'Don't have any more children, do something.' but I don't do anything. It is just like murdering. Some people do. The whites do." She said that the Utes do not express any preference as to the sex of the child. They were happy with either a girl or a boy. She thought that the boys were "bigger eaters and more

fussy than the girls." in their eating habits. She also thought they were "meaner, rough and can't mind. We have to get after them or coax them. If they are to be good and have good manners, the father has to spank them." This informant felt that birth entailed a good deal of suffering. She said that most women walked until they felt the pain. "Some don't notice and some scream. Now all of them go to the hospital. It is clean, better place, and the right food," she said. She felt that an expectant mother should ". . . eat a lot of meat and drink a lot of milk, like the doctor says." It is interesting to see many values of the dominant Marikadj society reflected in these statements.

The weaning process of the Ute child begins when it is nine months old, in most cases, but some of the mothers do not begin until the child is one or two years old. The procedure is one of simply not letting the child nurse. One mother said, "They don't ask because they don't know." The general practise is to let the child cry until he does not think about it anymore. It is definitely not good policy to tell the child "It is not good" but to keep the child firmly away. The aboriginal method of putting sagebrush on the breast is still known, but in leiu of sagebrush, black pepper has been substituted. As is true in many cultures, "Some are hard and some are easy" to wean. The belief that the nursing of a child while the mother is pregnant will cause the child to be ill is still prevalent.

It is believed that a good Ute mother will nurse her child, but if she is unable to nurse the child, a standard formula is used by all.

Canned milk is always used; the favorite being "Sego" or "Morning" brands of milk. (This may explain in part the large increase in the sale of canned milk noted previously in the sales of the trading post.) Most of the mothers agree that so many ounces of liquids "one-half water and one-half milk" is used. Oftentimes, white syrup is added to the formula. The milk is not boiled, and frequently, not heated, for it is a general belief that boiled milk makes the baby constipated. Many of the informants had no idea of what the causes of diarrhea were. The answers varied from "they had something in their stomachs" to "they eat something green."

The food pattern of today indicates that a large amount of "grease" bread, a type of baking powder biscuit, potatoes, coffee, sugar, and meat are consumed. During the summer months, carrots, cabbage, turnips, peas, and onions are welcome additions to the diet. Most of the informants said that if they had these vegetables during the winter, they would be able to economize, or at least improve their dietary intake during the winter months. Many of the Ute Indians spend most of their total income for food. Many of the people interviewed stated that during the winter, the children did not have sufficient clothing for during this time, all the income was spent for food. We have seen that the role of woman as a provider becomes increasingly important during this time.

One informant, nearly seventy years old, advised that it is best to drink a good deal of water, as it is filling and one does not feel so

hungry. When asked what she considered the best food, she answered, "Meat, and then something sweet." The interpreter said, "She means dessert, like peaches or syrup."

Most of the people who lived on an apparently lower economic level concluded that "it is hard to live like Whites" and "hard to educate children because the Indian way was the natural way." Varied answers were given to the question regarding their relations to the Marikadj elements of the reservation. "We lived on this earth the way God put us on earth - in our own way - to eat deer, berries, and things. Now we can't live like the old times.", said one elderly male informant. One seemingly more acculturated woman said, "We get along all right, but sometimes, we don't understand the laws, schools, and things like that."

Perhaps this would indicate that a well-planned educational process which included nutrition, food preservation, hygiene and health measures, child care, home nursing, and budgeting and planned use of money based on their economy would be beneficial to these people.

At present, none of the traditional foods are consumed in any large quantity in Ute society. A revival and evaluation of the traditional foods might be helpful. Many of the native foods have been forgotten by the younger generation of the Ute, and the older generation, who were indoctrinated in the earlier governmental policy of looking with disfavor and scorn at native ways, have an ambivalent attitude toward traditional foodways.

The dietary patterns of the Ute Indians have adapted to changing conditions due to a supervised reservation era of administered human relations which included controlled food rationing, the presentation of models in the role of farmers, stockmen, school teachers, and other governmental agents. Increasing contact with traders, missionaries and other members of a dominant society has introduced new items into a traditional gathering economy.

It appears that the use of wild vegetables has declined, or in some cases, disappeared from the diet of the Ute Indian families, although wild game and wild fruit remain important in the contemporary eating habits. Except for a slight increase in the use of canned milk, the diet has become more or less stabilized despite the many components of eating-complexes presented by increased interaction in Marikadj social institutions.

Recent changes have been comparatively insignificant with the continuance of the dietary pattern which had been established in the early Ute-Marikadj contact period.

CHAPTER V. SOCIAL CHANGE AND DIETARY ADAPTATION

In a process of social change, especially one dealing with the North American Indians, it is exceedingly hard to focus on end-points or objectives because the goals in the acculturational processes of these groups vary with each external group in the policy-making area and have rarely, if at all, been completely agreed upon within any such group. Such end-points are variable with the policy-makers and may fluctuate from the general policy of preservation to assimilation or to abandonment of these native peoples.

Therefore, it is quite difficult to postulate a theory or theories on social change in dietary adaptation which might hold true in the cultural contexts of the various indigenous societies.

On the other hand, several postulates (based on the Ute Indian data) may be presented to serve mainly as guide-lines in a study dealing with dietary adaptation and social change.

1. Dietary change takes place as part of an acculturative process. Within the area of acculturation, many processes are interrelated and have effects upon each other.

2. Those change agents which function in the general acculturative process may or may not function in the area of dietary change.

3. The mere introduction of new foods to an indigenous non-westernized society does not insure that these foods will be utilized.

4. Foods which are not contradictory to the cultural values may tend to be more quickly accepted than types of foods which carry a cultural stigma. There may be an affinity to foods which are of a sweet type. Salt also may be accepted with comparative ease as most human groups rely on this foodstuff to maintain a dietary balance.

5. In some groups, such as the Indian group studied, there seem to be fewer deep-seated values built up around food than around other cultural phenomenon (i. e., curing ceremonies, child-training practises, and religion) and therefore, changes in food habits may be expected to take place sooner than changes in other areas. The data suggests that a gathering culture which has operated within a narrow margin of food obtainment may have evolved fewer food taboos. On the other hand, a plentiful supply of food may tend to allow for a greater proliferation of values centered around food and its obtainment.

6. The preparation techniques involved in the introduction of new foods are often taken for granted on the part of the administrators, hence, native societies often must evolve their own unique ways of preparing food common to the dominant society. This not infrequently leads to ineffective utilization of the introduced foods.

Moreover, though techniques of food preparation may have been presented in a second socialization process (as in a boarding-type school setting), it may be economically impossible to put the techniques into operation in a reservation-home setting. This fact may be due to insufficient means of transporting desirable goods to the isolated reser-

vation community or the lack of transportation to go to the trading centers where modern technology provides refrigeration to enable the sale of fresh vegetables and fruits and other perishables.

Furthermore, though food preparation techniques may have been presented, the methods of obtaining equipment and the skills involved in the upkeep of such equipment may not have been presented along with the initial food preparation techniques. Thus, it may be possible to have knowledge of the techniques but no means of implementation on a day-to-day basis. These factors may hold true for food preservation methods. New techniques and technologies in the dominant society often do not create any new activities on the part of the members of an indigenous society.

7. As changes in the dietary patterns of pre-literate societies often precede changes in other areas of native life (for example, child nutrition and child care, re-orientations of eating schedules and the roles of individuals in new and non-traditional economic pursuits), the superimposition of systems of values and sentiments, rewards and sanctions and/or punishments in the dietary area are of pertinence in the acculturational processes.

8. The aims and objectives and the effects of vested-interest groups are important to the native-administrator (sub-superordinate) relationships which exist on many Indian reservations. These relationships may be either internal or external to the system.

9. The relations of the initiators, innovators or alignors in the subordinate groups with the superordinate segments in the realm of administered human relations has a tremendous effect on the change in native life, and may, in some cases, be a determinant factor in the dietary adaptations.

10. The roles of the initiators, innovators or alignors within the native group may have great implications on the spread of the item introduced throughout the native group. Sex roles are of relevance in the area of dietary change and adaptation. If the male activities (i.e., hunting and warring) were curbed and new roles were lacking, the food habits might change more rapidly. Women become the main agents of change for later external influences on the male may not be sufficient to re-direct his interest in the food-getting activities. In addition, the women may have considerably more influence in food change in the societies in which they have traditionally played the important role in food getting as is typical in a gathering economy.

11. The role of the individual change agent (the teacher, the "farmer", the administrator) is basic in the acculturation of the indigenous society.

12. Native foods may take on an almost ceremonial significance or, at least, a ceremonial association, after it has been dropped from the daily dietary habits. Thus, one may find an incorporation of tra-

ditional foods in recent "nativistic" movements, i. e., the Peyote Cult or a modern "Give-away."

13. The execution of change through the existing native social organizations or the complete destruction of all the existing structures has a definite effect on the social change occurring in any society. Therefore, the type of social boundaries which can be utilized is axiomatic in any phase of planned or unplanned socio-cultural change.

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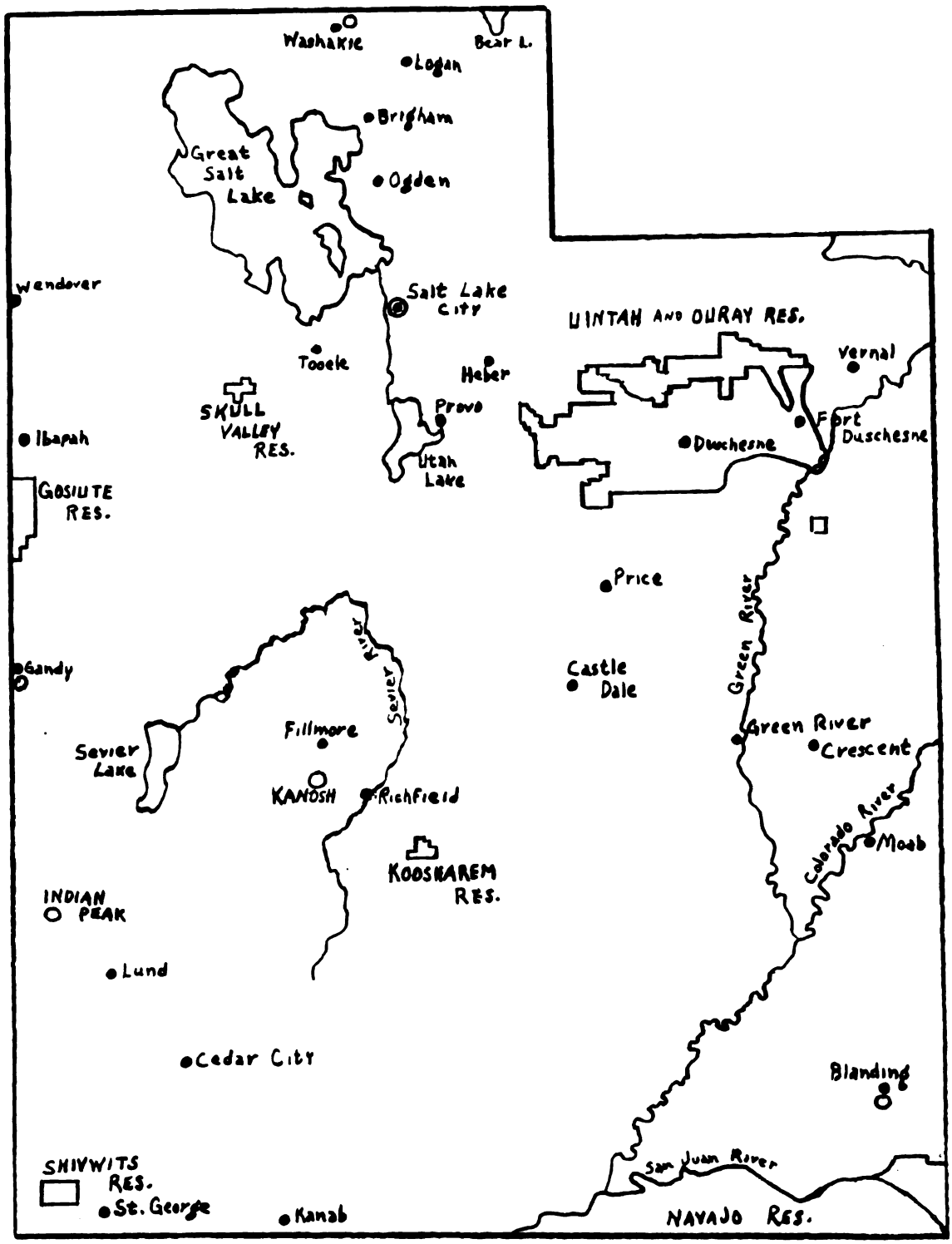
APPENDIX A



Map of the state of Utah, showing the Uintah-Ouray Reservation, and its relation to other reservations in the state.

APPENDIX B

CHART OF MAJOR UTE CEREMONIALS*

Name of Dance	Type of Dance	Occurrence	Participants	Ceremonialization of food
Bear	Social (Courting)	Early spring	Men, Women and Singers	None, but held when food was plentiful.
Scalp	War	After a war party - late afternoon or evening	Men, Women and Singers	None
Sun	Curing	At time of full moon in early summer	Male Dancers, Male Singers Women's chorus	Fasting to improve health (Optional)
Turkey (Jigging)	Social	Anytime (Popular in 1914)	Men Dancers, Male Singers	None
Women's	Social	Performed with Turkey Dance	Women Male Singers	None
Lame	Social	At any time	Women only	None
Dragging Feet	Social	After a Scalp Dance	Men and Women danced together	None
Tea (Ti'ni'thap)	Social	No definite time (a recent innovation)	Men and Women	After three songs, dancers sat, smoked a pipe. Tea was then served.
Double	Social	No definite time	Men and Women and Singers	None
Iron Line	Social	Any time	Both sexes	None

* From Densmore, F. Northern Ute Music, Bulletin 75, Bureau of American Ethnology, Washington: 1922.