Cross-cultural training for teachers of English to Navajo children is necessary because many concepts are not shared by both English and Navajo cultures. In addition, phonological, grammatical, and structural features constitute areas of wide divergence between the two languages. Similar letters and combinations of letters vary in placement and pronunciation. In the Navajo language, vowel length and nasal quality of vowels distinguish meaning, consonant clusters do not appear at the end of syllables, and the verb dominates to the extent that many English nouns when translated are verbal forms in Navajo. By distinguishing areas of sharp divergence between the two languages, a framework is presented for the development of materials, instructional techniques, and teacher training to specifically meet the needs of the Navajo student of English. (JEH)
ENGLISH AS A SECOND LANGUAGE FOR NAVAJOS
An Overview of Certain Cultural and Linguistic Factors

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FOREWORD

For more than three quarters of a century the United States Government and, in more recent years the State Governments, have been concerned with the social and economic welfare of Indian Tribes and Pueblos in the Southwest, a concern that goes back even farther in time to the earliest days of our Republic in other parts of the country. During this period formal education has been generally accepted as the most important tool with which to accomplish the purpose of leading Indian communities into closer participation in the national society—"civilization" of the Indian, as it was once called; "acculturation", as it is termed today. The long-term national objective was probably well stated by President Jefferson when, in one of his messages to Congress, he said "In truth, the ultimate point of rest and happiness for them (the Indians) is to let our settlements and theirs meet and blend together, to intermix and become one people. Incorporating themselves with us as citizens of the United States is what the natural process of things will bring on; it is better to promote than retard it. It is better for them to be identified with us and preserved in the occupation of their lands than to be exposed to the dangers of being a separate people."

A great number and variety of techniques have been applied over the course of the years as succeeding generations of Americans searched for an effective solution to Indian problems. At one period, Indian children were removed from their homes and placed in distant boarding schools in an effort to disassociate them from their Tribal language and way of life, on the theory that the vacuum thus created would be filled by English and the Anglo-American cultural system. The results were disappointing; although many variations of the approach were tried, success was elusive and minimal.

In the decade following World War II, many members of the American public urged the early transfer of responsibility for Indian education from the Federal to the State Governments, in the conviction that some magic force bound up in the Public School system would open the door to the successful education of Indian children.

The fact is that the door had already been opened, at least for a brief time, during the period from 1935 to the beginning of World War II. During the term of Commissioner Collier, Willard Beatty and his associates brought to bear on Indian education, for the first time in history, the fund of knowledge which had been amassed in the fields of anthropology, sociology, psychology and linguistics. In the light of this knowledge, a realistic picture of the problem of effectively educating
Indian children began to emerge. Recognizing the special demands of Indian education, the Bureau of Indian Affairs carried on intensive teacher training programs designed to provide the type of insight into Indian cultures and languages so necessary if the teaching staff was to succeed. The problems inherent in the teaching and learning of English as a second language were analyzed and described against a background of instruction in linguistics generally and the language of specific Indian communities in particular. Dictionaries, descriptive grammars, and other materials were developed with relation to specific Indian languages, and every effort was made to fill the void left by conventional teacher training curricula, unconcerned as it was with the special educational problems posed by cultural-linguistic minorities. World War II closed the door for more than a decade.

In the 1950's, the Public School system in the Southwest, came face to face with the problem of Indian education in greater depth than at any time in the past. Whole schools were transferred for State operation, and new public schools were built on such Reservations as the Navajo with funds made available under P. L. 815. If public school administrators and teaching staff were initially under any delusion that conventional teaching materials, curriculum and techniques were sufficient in themselves to accomplish the purpose of Indian education, the delusion was short-lived. State Departments of Public Instruction, School Superintendents and staff members quickly began to search out more effective techniques to cope with the special problems they encountered. State universities and colleges launched special training programs for teachers in Indian Schools, and again the door that closed at the beginning of World War II began to open once more--wider than ever before. So wide that it began to include non-Indian cultural-linguistic minorities such as the Spanish-American communities in the Southwest and the communities of Cuban refugees and Porto Rican immigrants that have flooded other sectors of the country in recent years. The special problem of educating such minority peoples has captured the interest of an ever increasing number of competent educators and specialists throughout the nation. Universities far removed from the front lines have joined in conducting research and training programs in such fields as the teaching of English as a second language; the new knowledge and techniques have been incorporated into the educational programs of such distant areas as Alaska, the Philippines and certain countries of South America; and a special nationwide organization known as TESOL has been formed to coordinate and give ever greater impetus to the effort. Head Start programs have been launched in many localities, including the Navajo Reservation and the Pueblos, to provide kindergarten opportunities for Indian children of preschool age; demonstration
schools are in operation; and each summer finds special workshop teacher training projects in progress at the University of Alaska, universities and colleges in the Southwest, and locations in the Indian country.

There is every reason to believe that the progress begun more than twenty-five years ago will now once more gain momentum and lead to the development of more effective methods than have ever before been available in the special field of cross-cultural education.

The present essay begins with a glance at the nature of human culture in general, and attempts to give a modicum of insight into the world-view of the Navajo through the window of the Navajo language. Against this background it may be possible to develop special teaching materials and techniques more closely adapted to specific, identified problem areas than has been the experience heretofore. Certainly a teacher who possesses knowledge of the first language of her pupils as well as the language of instruction, in a bilingual situation, is better equipped than a teacher who knows only the target language. This is especially true when the first language and culture of the pupil are radically different from the target systems.

The typing of the ensuing manuscript has been a project requiring no small degree of interest, skill, patience and perseverance--ingredients amply possessed by the typists: Betty Shannon, Theda Rushing, Barbara Manuelito and Jacqueline Savage, to whom a debt of gratitude is owing.

Robert W. Young
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1. CULTURE

In everyday parlance we use the term culture in a wide variety of contexts and meanings ranging from "proper" social deportment to the acquisition of "refined" tastes in music, literature and the arts. In addition, the term forms part of the specialized vocabulary of several disciplines, including agriculture, bacteriology and anthropology. In the latter, and in this essay, culture refers to the varied systems developed by human societies as media for adaptation to the environment in which their members live; in its totality, a cultural system constitutes the means through which the group to which it pertains achieves survival as an organized society. Such systems range from simple to the complex and sophisticated, and among themselves they exhibit a wide variety of differences in form and content.

When we speak of the culture of a society or community, we have reference to the entire gamut of tools, institutions, social values, customs, traditions, techniques, concepts and other traits that characterize the way of life of the group. The specific items that make up a cultural system, or elements as they are called, fall into two broad categories: material and non-material. In the first are included such features as tools (axes, hammers, jacks), vehicles ( wagons, cars, airplanes), clothing (shirts, dresses, shoes) and shelter ( houses, tents, hogans); and among the non-material elements of culture are such institutions as social organization, kinship systems, marriage, government, religion and language.

The content of a given cultural system is determined by a wide range of factors, including the physical environment, inventiveness, influence of surrounding communities, trade, opportunities for borrowing, and many others. For obvious reasons the material content of traditional Eskimo culture contained elements of a type not found in the cultures of the peoples living in the tropical rain forests or of those living in the hot deserts. The physical environment, in each instance, imposed different requirements for survival, and a different framework for cultural development.

Borrowing and trade have had a tremendous influence on cultural content, in modern as well as in ancient times, and a cursory glance at the present day Eskimo, the Navajo or, for that matter, virtually any community of people anywhere on earth, is sufficient to reflect the importance of these avenues for cultural change and growth. Guns, steel axes, knives, metal fishhooks, motor boats, rubber boots, stoves,
tobacco, liquor, and a host of items have been borrowed and incorporated into Eskimo culture in the course of contact with outside cultural communities; horses, sheep, goats, iron tools, wagons, automobiles, radio, television, and many other elements have been borrowed by, and have become part of the cultural systems of such people as the Navajo since their first contact with Europeans. And in another part of the world Western European and American influences have changed the way of life of a large community--Japan--in less than a century.

In Alaska, in the American Southwest, and elsewhere, the pace of cultural change has quickened with each generation as aboriginal peoples respond to changing conditions of life. To no small degree, the dominant Anglo-American system, with its emphasis on molding the environment itself to human need, has established new conditions for life and survival; new conditions so complex in nature that the institution of the school has come to occupy a position of primary importance providing, as it does, the training necessary for successful living.

Formal education, in modern American society, is designed to facilitate the successful adaptation and survival of its members within an environment and under conditions that the society itself, to a large extent, has created. The educational system is not only one that cultural minorities have borrowed, but one which the Anglo-American cultural community has imposed upon them. With reference to such culturally divergent minorities, formal education is the instrument used by the dominant society to generate and accelerate cultural change through the medium of induced "acculturation"--that is, the process through which such communities as the Navajo are induced and trained to participate in the dominant national cultural system. It is, in a broad sense, a form of cultural borrowing, differing however from the more usual process of voluntarily picking and choosing, on the part of the borrower, in that some of the stimuli for change are imposed and the initiative is taken by, the "lending" system itself. Unfortunately, the process of induced or--as it often turns out, compelled--acculturation is not without its problems for the "lender" as well as for the "borrower". The need for change is not always as apparent to the latter as it is to the former, and in the absence of recognition of compelling necessity, the borrower is sometimes reluctant to accept what is held out to him. It may not appear, from his viewpoint, to fit his requirements, or its acceptance may threaten existing institutions and practices upon which he places value.
Consequently, compulsory education, when first imposed upon Indian communities by the Federal Government just before the turn of the century, met with strenuous resistance. From the hopeful point of view of the would be "lender", schooling offered improved tools for survival in a changing environment; but from that of the "borrower" the educational process threatened cultural extinction. It removed the child from the home where he received his traditional training in the language, values, religion and other institutions of his own culture and promised to leave him ill-prepared for life in the only world his parents knew. They resisted and the "lenders" applied force. A long tug-of-war followed.

A comparable situation developed when, in the 1930's, the compelling need to conserve natural resources in the Navajo country, led to livestock reduction and the introduction of a wage economy as a new economic base for the Navajo people. From the point of view of the lending society, this was a new and superior device for survival; but from the Navajo viewpoint it threatened cultural extinction. Coupled with the process of formal education, the new economic system constituted a threat to the traditional social organization of the Tribe, as well as to the religious life of the people, not to mention the economic pursuits, residence patterns and associated values that were basic to the traditional Navajo way of life. Like compulsory education in the days of Black Horse(1), the new economic urgings so necessary from the viewpoint of the "lender" met with violent resistance by the prospective "borrowers".

Time, among other factors, is usually an important ingredient in cultural change whether it takes place through a process of voluntary borrowing or through one of induced acculturation. In the latter case, the degree of success and the quantity of time required hinge, to a small degree, on the depth of understanding attained by the "lender", and on the effectiveness of applied techniques.

The fact is that a culture is more than a system of material and non-material elements that can be listed, catalogued and classified.

(1) Black Horse (Bil'ą́ą́́́ń Bızhinii - a Navajo leader of the 1890's who was violently opposed to education. See "The Trouble at Round Rock", Navajo Historical Series No. 2., Publ. 1952 by The Bureau of Indian Affairs).
A culture constitutes a complex set of habits of doing, thinking and reacting to stimuli—habits which one acquires in early childhood and which, for the most part, he continues to sharpen throughout his life, with fellow members of his cultural community. In its totality, a cultural system is a frame of reference that shapes and governs one's picture of the world around him. Within this framework and, as Whorf\(^{(2)}\) pointed out nearly a generation ago, within the frame of reference imposed by the structure of the language he speaks, one is conditioned to look upon the world about him in a manner that may differ substantially from that characterizing another and distinct cultural system.

As a consequence, from the point of view of his own system one man, looking at a vast expanse of trees through his cultural window, may choose the expansiveness of the forest as the salient feature of the landscape, without reference to the species that compose it, and so describe the scene by applying appropriate terms in his language; another man, viewing the same scene from the vantage point of another cultural window might see and describe it quite differently as large numbers of specific types of trees—oaks, elms, maples. From the point of view of his own system one man, looking at the passage of time within the limits imposed by his cultural perspective, may conceive of it, measure and describe it only in terms of the rising and setting of the sun, the recurring phases of the moon, or the sequence of seasons; another man may add mechanical and mathematical or astronomical measurements including hours, minutes, seconds, days, months, years, decades, centuries, millennia, and light years—one system may place maximum importance on the element of time and its exact measurement, while another may attach little or no importance to the same phenomenon. Similarly, one may may look at an object and describe its color as green in contrast to blue; but another may apply a term meaning both green and blue (Navajo doot'izh, for example), and if the distinction is of paramount importance the Navajo may make it by comparison with something possessing the proper shade (tát'ii naxalingo doot'izh = blue/green like water-scum = green).

The manner in which the members of one cultural community conceive of the world around them, and their relationship with it, may differ substantially from the manner in which the members of another such community look upon and react to it—this is true even where the cultural groups concerned occupy similar physical environments, and in situations where the concepts are not conditioned by geographical factors.

\(^{(2)}\) See Language, Thought and Reality, by Benjamin Lee Whorf, Publ. 1956 by The Massachusetts Institute of Technology.
Likewise, what is "logical" and "reasonable" to one system may be quite the contrary to another. There are few, if any, cultural absolutes but many "relatives", in this regard. To a Navajo or Pueblo Indian, whose culture has developed an elaborate system through which Man strives for the maintenance of harmony with nature, the Anglo-American concept of actively controlling natural forces in the interest of Man's survival, and the media through which to accomplish this, may not always appear reasonable. A little more than a decade ago, the Navajo Tribal Council, after long debate and against the better judgment of most of the Navajo community, authorized the use of a small amount ($10,000) of Tribal funds to employ a technician to seed the clouds with silver iodide in an effort to break a period of severe drouth. The experiment met with very limited success, especially in view of the paucity of appropriate clouds and there were those who complained that the propellers of the airplane blew away such rainclouds as appeared over the horizon—so in subsequent Council action, which met with the enthusiastic support of most tribal leaders and members, the unused residue of the appropriation was diverted to defray the cost of reconstructing and carrying on a ceremony that had fallen into disuse, and which had formerly been relied upon to produce rain. The ceremonial procedure was "logical" to traditionally oriented members of the Tribe because it was consonant with the position that Man must maintain himself in harmony with nature; at the same time, the cloud-seeding process was "logical" to non-Navajos who are culturally conditioned to a scientific approach in attaining control over nature for Man's benefit. The two processes reflect fundamentally different points of view regarding natural phenomena and Man's relationship to them; they pertain to different cultural frames of reference—and, to the delight of the proponents of the ceremonial approach, it did, in fact, rain!

Borrowed elements of material culture generally find ready acceptance if they represent an obvious improvement or otherwise meet an immediate need in the estimation of the borrower. Replacement of a stone ax by one made of steel does not require radical complimentary cultural changes; both instruments have the same function. Such patently practical improvements are capable of smooth incorporation into a system, with few if any repercussions. Even the horse, whose introduction revolutionized the way of life of peoples such as the Navajo and the Indians of the Great Plains, was readily accommodated within their several cultures, apparently without seriously shaking the foundations on which those systems rested. Wagons, automobiles, trucks, radios, television, Pendleton blankets, and a host of other objects have since entered the Navajo scene, and have become part of the system without creating insuperable problems or generating a high level of resistance. The
cultural system merely flowed around such innovations, after the fashion of amoeba around its prey, and made them part of itself without seriously modifying its own basic structure. History seems to reflect the fact that people literally threw away their stone axes and knives when steel tools became available; and the production of pottery for utilitarian purposes has all but disappeared since the advent of more durable utensils for the Indian housewife.

Not so, however, with the non-material elements of culture—the institutions pertaining to religion, social organization, kinship, language, marriage or social values. The Navajo and the Pueblo did not junk his own religion for Christianity, discard his own language for Spanish or English, or drop his clan, kinship or other social system in favor of a borrowed replacement. Such non-material elements as these are among the mainstays in the cultural framework and, as such, they undergo change at a much slower rate than do those relating to the tangible material culture. The successful incorporation of such Anglo-American institutions as formal education, representative democratic government, the father-centered family, a system of justice based on coercive laws, and modern medical practices into Navajo culture has been slow and painful because they are or were elements that did not fit the accustomed cultural framework; their incorporation would necessitate a host of radical adjustments in the complex of fundamental cultural habits of the people before they could be accommodated—in fact, incorporation of the entire range of such alien institutions had profound implications for the very survival of the borrowing system itself.

The immediate value of these institutions as improved tools for survival, intangible and complex as they are, was not as readily apparent to the potential borrower as it was in the case of the steel ax, the horse or the gun. Material elements from non-Indian culture continued to be accepted and incorporated wholesale into that of the Navajo and other Indian Tribes, but incorporation of the values, customs, concepts, language, associated habits and institutions of the outside community enter slowly and painfully, often only as the result of heavy pressure.

The concept of coercion, in the sense of imposing one's will on another person or animate being without physical contact or force, is part of the Anglo-American cultural heritage, and the English language is replete with terms expressing various aspects of the concept—cause, force, oblige, make, compel, order, command, constrain, must, have to, ought to, shall—come quickly to mind. They are part of the heritage of a culture with a long history of kings, emperors, dictators, deities, governments and family patriarchs whose authority to impose their will
on others has been long accepted as part of the world view of the communities participating in the system. So deeply engrained is this area of habitual acceptance of the compelling, coercive need to do certain things that we are astonished and annoyed by the lack of concern in the same area, on the part of people like the Navajo, as reflected by the paucity of terms in the language of the latter corresponding to those listed above. How does one say ought to, must, duty, responsibility in Navajo? Such circumlocutions, from the English point of view, as "Ákéed deesháágo t'íya yá'st'één, it is only good that I shall go there," seems to lack the force of compelling necessity implicit in I must go there, I have to go there." Likewise, when "I make the horse run," the action of the horse is implicitly the result of the imposition of my will over his. "'eff' shá yilghóó, the horse is running for me," implies an action, on the part of the horse, that is essentially voluntary. Again, the Navajo expression appears to be weak and lacking in the important overtone of coercive authority--of yielding to the will of a master--to the English speaking person. And when we find that not even the deities of the Navajo pantheon or the political leaders of the Tribe are wont to issue mandates to be obeyed by men, we are likely to be as perplexed as the Navajo who finds the reverse to be true in Anglo-American society.

Navajo culture does not have a heritage of coercive religions, political or patriarchal family figures, and in the Navajo scheme of things one does not usually impose his will on another animate being to the same extent, and in the same ways as one does from the English point of view. "I made my wife sing" becomes, in Navajo, simply "even though my wife did not want to do so, she sang when I told her to sing" (she'esdzáán doó ñinizin da ndi xo'téak bidishnigó xo'táál.) From the Navajo point of view, one can compel his children to go to school in the sense that he drives him (binishchdeh) or them (binishkad) there; or he can place them in school (nininish), but none of these terms reflect the imposition of one's will independently of physical force--the children do not comply with a mandate. They are animate "objects" with wills of their own.

On the other hand, with reference to inanimate objects, lacking a will of their own, appropriate causative verb forms exist. Yikbas, in Navajo, means "it (a wheel-like object) is rolling along," while a causative form yookbás conveys the meaning "he is making it roll along; he is rolling it along" (by physical contact). Naaghá means "he is walking around," and a causative form nabiishká can be translated "I am making him walk around"--but only in the sense "I am walking him around" (as a baby or a drunk person, for example, by holding him up and physically moving him about). The causative action expressed by yookbás and nabiishká has, in both instances the same connotation; both actions
are produced as a result of physical contact, and not by the imposition of the agent's will with acquiescence by the actor. To express the concept of obliging a person to walk against his will, by mandate, one is likely to take the same approach as that described with reference to "making" one's wife sing, even though she does not wish to do so. One can, of course, order or command another person (yil'a'a) but the term carries the connotation of send him to perform an action; and it does not follow that he complies. In the Navajo cultural-linguistic framework, animate objects are more frequently and commonly viewed as acting voluntarily than as the result of imposition of another animate object's will.

The Navajo parent is likely to ask a child if it wants to go to school, rather than issue a mandate to the effect that it must go. By the same token, coercive laws are distasteful from the Navajo point of view, and the Tribal leadership has long preferred persuasion to force, even in applying "compulsory" education laws on the Reservation.

As a result, acceptance of the Anglo-American police and court system, based as it is on the principle of compulsive behavior--the enforcement of coercive laws--has still not been comfortably accommodated within the Navajo cultural framework, despite the fact that the Tribal government supports a system of Tribal courts and a well equipped police force.

Nor is the concept of impersonal punishment through the imposition of a fine or jail sentence, in lieu of payment to the victim of a crime or act of violence, "reasonable" from the traditional Navajo viewpoint. Many types of disputes, both civil and criminal, were customarily resolved in local community meetings in the very recent past, and the procedure probably continues to the present day. In some instances, such solutions involved payment of money or goods by one party to another. (3)

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(3) The author was present at one such informal "court session" not many years ago. There was a large community meeting at a certain location on the Navajo Reservation. During its course, an automobile careened down a nearby sandy road and struck a small child who was unable to extricate himself from its path. The glancing impact threw the child into an adjoining field where he lay unconscious. The mother and others rushed to the child, but withdrew when it appeared that he was dead. He subsequently revived and the meeting resumed. The driver of the automobile joined the group at the meeting, where the fact of his inebriation was immediately apparent. He was not permitted to address the group although he attempted to do so, and a gate was closed impounding his automobile within a fenced enclosure where it was parked.

At the close of the meeting the crowd moved to the fenced enclosure blocking his exit, and male members of the child's family searched the automobile for liquor while the mother of the child berated the drunken driver.
In the Final Report, Indian Research Study, conducted during the period 1957-1960 by the College of Education, University of New Mexico, under the able direction of Dr. Miles V. Zintz, an excellent analysis of conflicting cultural values relating to Southwestern Indians and Spanish American communities is provided. The authors of this report contrast a variety of conflicting cultural situations, including Harmony with Nature vs. Mastery over Nature; Future Time Orientation vs. Present Time Orientation; Saving vs Sharing; Acceptance of Change vs Resistance to Change; Adherence Close Time Schedules vs Lack of Concern for Time Schedules; Scientific Explanations vs. Non-Scientific; Aggressive Competition vs. a Non-Competitive Role; and Individuality vs Group Anonymity. To these we might add the differences that may obtain between cultural communities—and, for that matter, between strata within such a community as our own—with reference to the nature of knowledge, and the purpose and methods of education, whether the latter process be a traditional Indian or a modern Anglo-American procedure. Traditionally, in Navajo society, the acquisition of knowledge involved rote learning and practical experience. The process of rote learning was predicated on the premise that the answers to all philosophical questions are already contained in the body of folk literature (mythology, as it is often termed) and one has only to seek it out; while adequate methods relating to such practices as animal husbandry and agriculture had already been developed in Navajo culture, and therefore had only to be learned by experience. The learner was not expected to question the body of facts or the traditional methodology. To no small degree rote learning is a factor in our own Anglo-American education system, but generally we have accepted the fact that we do not possess

and demanded payment of $80.00 in damages. After a prolonged period of debate in which the two wives of the drunken driver voluntarily acted as witnesses for the child's mother, negating the pleas of their husband, the driver, who denied that he had been drinking, the clan relatives of the driver took up a collection in his behalf. It required several efforts and much additional debate to reach the required amount, but the $80.00 was finally collected and paid to the mother of the victim. The case was amicably closed in this manner; the drunken driver was scolded; he was invited back to the community; he was repentant; and peace was restored. Justice, within the Navajo cultural framework was had; retribution had been made; everyone was satisfied; and chaos had been successfully avoided.

(5) See Chapter III.
all knowledge, in an absolute sense, and we encourage our children to question and test theories and hypotheses and to themselves strive to make a contribution to the fund of human knowledge. This approach to the acquisition of knowledge reflects Anglo-American acceptance of change in the interest of "progress", and the requirement in the latter society that opinions and practices be supported by a strong rationale. Rote learning is defensible on the premise that it provides the tools required to support initiative thinking, but it is not universally accepted in Anglo-American society, as an ideal end in itself.

Many of the foregoing conflicts cannot be readily resolved within the framework of traditional Indian cultures. They constitute divergent habits, habitual attitudes and systems, which are part of the main fabric of the societies to which they belong, and change in one carries the need for change in others. Such situations sometimes resemble cards: the removal of one card in a key location threatens to tumble the entire structure.

Culture is a complex system of interrelated habits.

**LANGUAGE**

The nature and function of language assume different perspectives as they are examined by different disciplines--the psychologist, the philosopher, the linguist, the physiologist and the anthropologist are each concerned with different facets of the phenomenon of speech--but from the standpoint of the social scientist a language becomes an integral part of the culture of the people who speak it or, for that matter, who use it in any of its several secondary forms (writing, gestures, signals, signs, mathematical formulae, artistic and other representations). Whatever its form, language comprises a set of signals that serve the need, in human society, for the intercommunication of ideas and concepts. In addition, the structure and content of a given system of speech, as Whorf(6), Sapir(7), Hoijer(8) and others have pointed out--in combination with associated cultural features--establishes a frame of reference within which the process of reasoning itself takes place; it is a framework that molds the world-view of the speakers of a given language, and one that tends to confine that view to the boundaries and perspective of the cultural system in which such speakers are participants. Like the rest of culture, a system of language, with

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its characteristic patterns of expression, elements of phonology and structural features, comprises a complex set of distinctive habits. In short, the sum total of the values, attitudes, concepts and mode of expression of a community constitute the frame of reference within which its members conceive of, look upon, describe, react to, and explain the world in which they live and their relationships with it--it is their window on the universe.

The lexicon, or elements of vocabulary of a speech system can be compared to the material elements (tools, weapons, etc.) of culture--such elements of speech, like tools, may be borrowed from another language system, or existing terms, like existing tools, may be modified to meet new requirements. Words, as these units are commonly called, again like tools, may come and go. But unlike elements of vocabulary, the structural-grammatical features of a language, and the characteristic pattern in which they reflect the world of its speakers, constitute a framework that changes much more slowly; structural, grammatical features are analogous, in this context, to the fundamental elements of a culture--its institutions of religion, social and political organization, and values.

As cultures change--and none are static--those changes reflect in language, because as we have pointed out language itself is a reflection of the total culture of its speakers--a catalog and transmitter of the elements and features of the entire social system. There are few, if any, "primitive" cultures in the sense that they are rudimentary in form and content; and by the same token, there are few, if any, truly "rudimentary" speech forms (9). Cultural and linguistic systems may be, of course, relatively more or less complex, in a comparative sense; but their viability hinges on the extent to which they meet group requirements, and the demands of successful social living are rarely, if ever, simple. In fact, the languages of relatively simple cultural systems may be structurally highly complex, while those of comparatively complex societies may be quite simple--Navajo and English, for example.

(9) The language of the Aranta of Central Australia has been described as extremely simple, phonologically and structurally. Basing his statement on a study made by Alf Sommerfelt of Oslo, James H. Gray (in Foundations of Language, Publ. 1939 by Macmillan Co.) describes Aranta as a language which can express only actions and states, but not things, except in so far as they can be regarded as actions or states;***so meager is the language that it is frequently impossible to determine the meaning of its words without knowledge of the circumstances under which they are spoken, further assistance frequently being given by accompanying gestures;****
Neither culture generally, nor language in particular, are static; both are in a constant state of change for a large variety of reasons, including cultural and linguistic borrowing. English tobacco is, in its origin, a Carib Indian word; Spanish smoking (tuxedo) is an English label; and Navajo béésó (money) has its origin in Spanish peso. Sometimes vocabulary grows to meet new needs through a process of extending the meaning of a pre-existing label: English car now describes any vehicle on wheels, but it was once a term applied to a Celtic war chariot; Navajo K'aa' is the name for arrow and, by extension, bullet (bee'eldorph bik'a', gun's arrow = bullet), and leetsoii, yellow ochre is, by extension, applied to uranium ore. In other situations, new words are coined as labels for the identification of new objects: English kodak, radar; Navajo chidi naa'na'i (caterpillar tractor--literally "crawling automobile"). Verb labels, as well as names (nouns) are extended in meaning to meet new needs. Thus English start came to be applied to the process of causing a combustion engine to begin operation, and run came to be applied to the operation itself. Navajo diits'a' means "It is making a noise," and the term was transferred to describe the operation of a gasoline motor, to meaning "it is running." By analogy with other verbal constructions the term diséits'á', "I caused it to make noise," came into use to describe the act of starting a motor--i.e. causing it to make noise.

These borrowings, with other developmental changes, are part of the process through which language grows to complement other types of cultural change. However, like the replacement of a stone axe with a steel implement, changes of this type do not seriously disturb the structural and conceptual framework underlying a given speech system; rather, they enrich it and maintain it abreast of changing communicational needs.

Sweeping cultural change sometimes results in the discarding of an entire language, with adoption of the speech system of the new culture—or such change may result in the relegation of a language to a position of secondary importance. The introduction of English and other European speech forms as the languages of science and education in so-called "under-developed countries" (i.e. among cultural minority peoples) seriously affects the status of the local language and may result in its sharp decline or extinction. Many American Indian languages, as well as many tribal languages of Africa and Asia have followed, or may well follow, such a course to more or less quickly join the ranks of the myriads of dead languages (and associated cultures) of the world. At the same time, in other situations, the languages of minority cultures have survived (Welsh, for example), or have themselves become the vehicle of communication with reference to a radically changed cultural system (Japanese, for example). A system of language that does not keep pace with cultural change is not likely to survive.
A great many concepts are widely dispersed among human societies across the globe, shared in one form or another by the people of widely separated communities. Some are inherent in the very nature of things—all people share the concepts denoted by walk, run, eat, talk, see, sleep, hear, for example. Although different speech communities may conceive and express these ideas in a variety of forms and patterns, the basic concepts are the common property of all cultures.

Thus, both English and Navajo include terms with which to express the concept walk. However, they do not express it within the same frame of reference. Among the distinctions with which both languages are concerned is the number of actors: English he walks (singular) and they walk (plural); Navajo: yigáá, he is walking along; yi'ash, theytwo are walking along; and yikah, they (more than two) are walking along. Both languages express the concept walk, and both concern themselves with the number of actors, but here the similarity begins to diverge between the two speech forms. Unlike English, Navajo is here concerned with distinguishing number in three categories as one, two, or more than two actors. Furthermore, if more than two actors are involved, their action of walking may be conceived as one which is performed en masse—collectively: yikah, they (a group of more than two actors) are walking along; or it may be viewed as an action performed by each individual composing the group in reference: dełkal, they (each of a group of more than two actors) are walking along.

Both languages can express the simple command Come in!—but the English form does not concern itself even with the number of actors. Come in! may refer to one person or to a plurality of persons. In Navajo, the feature of number remains important: Yah'ainááh, come in (one person)! Yah 'oh'aash, come in (two persons)! Yah 'ochkááh, come in (more than two persons)! In addition, the action as it involves a plurality of more than two persons may be conceived, from the Navajo viewpoint, as one in which the actors respond en masse, or as one in which they respond one after the other—collective in contrast with segmental action. Yah 'ochkááh directs a group of more than two persons to come in en masse; if the group is too large to permit the action to be performed simultaneously by all of the actors, the form yah 'axochkááh is more appropriate since it has the force of directing each member of the group to perform the action, one after another—segmentally.

As we will find in discussing the characteristics of the Navajo verb, many concepts which are viewed as aspects of the same verbal action, are
described in English, by separate and distinct terms. As expressed in Navajo, the concepts go, come, walk, start, arrive, enter, join, meet, divorce, separate, find, and many others share the same set of verb stems, differing only in the adverbial and other derivativiul prefixes which modify a basic stem meaning to move on foot at a walk. Thus, each of the verbs that follow share the same (perfective mode, singular number) verb stem--yá, moved at a walk, went, came: niyá, I came, went, arrived; dah diiyá, I started off; yah'iiyá, I went in, entered; bik'íníyá, I found it, came upon it; biiyá, I joined it. The Navajo approach is comparable to such English formations as I walked off, I walked in, I went into (joined), I came upon.

Although Navajo and English share the concepts involved, the pattern governing their expression in the two languages is highly divergent. The two speech communities differ from each other in this aspect of their world view. They look at the concept of movement at a walk in different ways. Consequently, there is not a single corresponding term in Navajo that exactly corresponds to a given English term with reference to this concept--we do not have two superimposed rings representing equivalent areas of meaning with reference, say, to the English form Come in! and its Navajo correspondents. We do not have:

English
Come in!
Yah

Navajo
F-727811
'aninggh (one actor)
Yah 'oh'aash (two actors)
Yah 'oh'káash (more than two actors) collectively
Yah 'axoh'káash (more than two actors) segmentally

but rather we have (using English as the starting point):

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The basic concept expressed by the English term *Come in!* and its Navajo correspondents, is no doubt held in common by all people, irrespective of cultural-linguistic differences, but the pattern governing the manner in which the action is conceived and expressed differs radically between the two languages. However, given that all the essential elements requiring expression with regard to the idea are known (number of actors, manner of performance of the action) to the translator, there is no difficulty involved in conveying it from the English to the Navajo language. It is merely a matter of selecting an appropriate Navajo form to fit the situation as it is conceived from a Navajo viewpoint. And the same idea, as variously expressed in Navajo, can readily be conveyed in English by simply ignoring the several connotations that require expression in Navajo, but which are customarily left to the imagination of the listener in English. Neither is there any essential difficulty involved in expressing, in Navajo, concepts relating to *come, go, walk, arrive, meet, join*, etc., providing certain essential elements such as number of actors, identity of verb subject, mode and other features attaching to the action are known to the translator.

This relative ease of translation attenuates and finally disappears as the range of concepts held in common gives way to conceptual areas that are not shared by the two contrasting cultural-linguistic systems. At this point translation becomes impossible for the obvious reason that a language does not include terms for the expression of concepts that lie entirely outside the culture to which it belongs. At this point *interpretation* enters as the medium for cross-cultural communication. *Sleep, walk, eat, axe, needle, hat, good, high, sharp* are common to both Navajo and English; *atom, rhetoric, navigate, one fourth, two sixths, acre foot* and the like represent concepts that are not shared by Navajo culture and for which, consequently, there are no convenient labels in the Navajo language. The latter terms represent ideas that lie outside the Navajo world. As a result, they can be communicated from English to Navajo only by a descriptive, explanatory process to which we are here applying the term *interpretation*—in contradistinction to *translation*, which we are reserving to describe the process of trans-cultural, trans-linguistic communication by applying approximately corresponding word labels available in both languages.

To be effective, the interpreter must be thoroughly bi-lingual and bi-cultural. He must himself understand a concept sufficiently well to describe it in terms that are meaningful to, and related to the experience of, his audience. Anyone who has listened to the interpreter at the Navajo Tribal Council has been aware of the greater length of time required for the communication of certain ideas, in the Navajo language, than was necessary for their original expression, in English. In such situations the process reflects the necessity, on the part of the interpreter,
to develop, define and describe an alien concept through a clever descriptive process. If such an idea is involved as that conveyed, in English, by the term acre-foot, the interpreter may need to begin by reminding his audience of the existence of a coined Navajo term náxásdzoo xayázhí (small delimited area) which is used with a fair degree of frequency as the Navajo label for acre. Assuming that all of his listeners appear to recognize and understand the term, he can then proceed to describe an acre-foot of water as the amount necessary to cover one acre of land to a depth of one foot. If, on the other hand, his listeners do not have the concept denoted by acre, he may have to begin by defining náxásdzoo xayázhí as a square whose sides each measure about 208 feet. Having established the concept acre, he may then proceed to describe an acre-foot. Obviously, to accomplish his purpose, he himself must know the concepts involved in the English terms.

The demands on the interpreter, in the sense in which we are applying the term, can be much greater than those placed on the translator. A translator of English into Spanish does not, in fact, need to know what an acre-foot is in order to convey the idea to a Spanish speaking audience. It is enough that he know the term acre; it is not necessary that he be able to define it.

And, of course, the process of interpretation across cultures goes in both directions. There are concepts in Navajo culture that are absent in Anglo-American society. The Navajo term nádíítihí attaches to an object that is not used by Anglo-Americans—consequently, there is no convenient corresponding English label with which to describe or identify it. It must be described in terms of its physical characteristics and its functions, as "a broom-like thing made of the wing feathers of the eagle, tied together at the quill end, and used ceremonially to brush away evil from a sick or moribund person". This description is sufficient to convey as much of the concept involved to the English speaking listener as was conveyed to the Navajo listener by simple definition of the term acre-foot. Actually, in both cases, full understanding can take place only with description of the alien concept in much greater depth and detail.

Interpreters serving the Navajo and other Indian Tribal needs were poorly selected and underpaid for many years; it has only been in recent times that the quality and effectiveness of these key figures has improved. Underpayment and poor selection reflected an abysmal lack of understanding of the complex problems involved in cross-cultural communication, and the "economies" effected were offset by a correspondingly enormous cost in the form of both money and human misery. It was too commonly assumed that the interpretational process involved little more than inter-linguistic translation—a service that any school-boy could perform. Janitors, cooks, and scrub-women were drafted into service as intermediaries between doctors and patients in the diagnosis of disease; members of an audience, or other persons selected at random, had the responsibility for explaining complex technical concepts involving ideas as vague and foreign to their experience as the Quantum Theory is to most laymen in our own society; and at a still earlier period poor interpretation led to bloody battles between Indians and non-Indians. When the audience or
patient did not respond in the expected manner, the frustrated technician customarily explained failure as a result of the Indian's obstinacy--the audience or patient merely feigned lack of understanding; they or he did not want to understand.

Tests have been administered, in recent years, to a variety of interpreters who have acted as intermediaries, for long periods, in the communication of data and concepts relating to such fields as medicine, social welfare, and soil conservation. The results have all too often reflected a shocking lack of understanding of the technical concepts with which they were concerned, and the need for interpreter training has begun to receive due emphasis--along with the need to select and pay these valuable technicians on a more realistic basis. (10)

In the past patients have been examined and their ailments erroneously diagnosed because of faulty information; children have been relinquished for adoption by parents who understood that their children would be given foster care; and soil conservation structures have been built which bore little resemblance to the types of structures the interested community had been told--through an "interpreter"--would be constructed.

Cross-cultural interpretation involving, as it does, the explanation of concepts which lie outside the experience of the cultural-linguistic system of the receiver, requires special training and highly developed communicational skills on the part of the interpreter. Just any bilingual person, chosen at random, is not sufficient. In fact, the effectiveness of cross-cultural communication can be greatly enhanced if the English speaking technician, for whom an interpreter acts as intermediary, himself has some modicum of understanding of the cultural and linguistic factors that limit ready understanding on the part of the receivers--i.e. if he himself has a degree of insight into the culture and language--the world-view--of the people to whom he addresses himself. To draw an analogy, the nuclear physicist is more likely to succeed in explaining nuclear fission to the layman if he knows something of the educational background and previous experience in the sciences on the part of the person or audience to whom he addresses himself. If he uses the somewhat esoteric language of physics and proceeds with a mathematical explanation, he may find that his listener has received little or no insight into the subject. If, on the other hand, having informed himself previously regarding the educational and experiential characteristics of his audience,

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(10) See especially the reports and articles developed by the Navajo-Cornell Field Health Research Project, conducted at Many Farms, on the Navajo Reservation by Dr. Walsh McDermott, and a distinguished staff during the period 1956-1961, with especial reference to medical interpretation.
he couches his explanatory remarks in terms that lie within the scope of their experience and understanding. The effectiveness with which he communicates is likely to be greatly increased.

Cross-cultural interpretation is not exclusively a process of trans-linguistic, trans-cultural explanation involving two languages in such formal situations as Tribal Council sessions or doctor-patient relationships. The school-teacher is also a cross-cultural interpreter whenever she functions in situations involving the education of children from cultural-linguistic minorities—or, for that matter, even children from highly divergent sub-cultures related to that of the teacher herself. It is the role of such a teacher to introduce and explain a broad spectrum of new concepts to children who come to her with a different set of cultural habits and experiences. She must make such concepts meaningful to her pupils to such a degree that they become a functional part of their experience and, at the same time the teacher in cross-cultural, cross-linguistic situations must develop in her pupils the skills they require to communicate with regard to the new concepts in the language of the culture to which the new ideas relate. She is at once their interpreter and their mentor.

As in the case of most physicians, attorneys, and other technicians, the conventional training of teachers does not provide them with the special skills they require to function effectively in situations requiring cross-cultural communication. Few have taken courses in linguistics or anthropology, and those who ultimately acquire necessary skill often do so on a trial and error basis. Conventional training prepares teachers to meet the educational needs of children of their own culture—children from middle-class American society; as we pointed out previously, formal schooling essentially is an institution of Anglo-American culture designed to prepare Anglo-American children to participate in their own cultural system, with an acceptable level of economic standards and social values. The same conventional training is woefully inadequate in a classroom filled with bewildered little children with whom the teacher cannot so much as communicate.

The average cross-cultural teacher cannot be expected to attain competency in the speech system, or deeply intimate first-hand knowledge of the cultural system, of such highly divergent communities as the Navajo. The teacher cannot be expected to achieve bi-culturalism and bi-lingualism as a condition of employment desirable as it might be. However, the average cross-cultural teacher can learn something about the characteristics of the language and way of life of the children she teaches. She can, in fact, achieve a professional skill level as a teacher of English as a second
language, and as an interpreter of Anglo-American culture, providing she receives necessary technical training to prepare her for the highly specialized work involved.

The preparation of teachers whose interest lies in the field of cross-cultural education, highly specialized as this facet of the profession should be, must perforce include at least an introduction to anthropology and linguistic science. The average citizen may be able to afford the luxury of assuming that all people share his culture and world view or that, if they do not, they are inferior; but this is a luxury that the cross-cultural teacher cannot afford. She must develop a clear understanding of the fact that different cultural communities differ within a wide range of variation on the basis of their way of life, their mode of communication, and the manner in which they conceive of the world in which they live; that these distinguishing characteristics are essentially a complex system of habits; and that the relative "superiority" of one cultural system over another is debatable, assuming that both have enabled the communities involved to survive.

Like other habits, culture and language are not easily modified; in fact, existing habits commonly interfere with our efforts to acquire new skills and new understandings.

Confronted with a problem, we attempt to explain the unfamiliar in terms of the familiar, whether the problem relates to the features of another culture generally, or to those of another language in particular. We try to identify a new speech sound by relating it to some phoneme with which we are familiar in our own language; and we are so tightly bound by the peculiar set of habits attaching to our own culture and language that we even allow ourselves the extravagance of assuming that, because certain features are part of our experience and therefore logical to us, they must be part of the experience of other peoples as well. This fallacy leads us to look for tense forms in languages that are not time oriented in the expression of verbal concepts; it leads us to search for authoritative political figures in societies that are not organized around a coercive system of governmental control; and it leads us to a fruitless search for corresponding principles and figures in the religious systems of societies whose religions do not share the characteristics of our own. As cross-cultural teachers, we cannot afford the luxury of such comfortable fictions; it is essential that we broaden the background of experience and knowledge against which we develop our understanding of other peoples, other societies and other languages if we are to succeed in the area of cross-cultural interpretation and, by extension, cross-cultural education.

To illustrate, both English and Spanish use a phoneme of the type represented graphically by the letter r. It is represented in the English word
run, and in the Spanish word ron (run), but the written symbol does not, in fact, represent the same sound in the two languages. In Spanish, the phoneme is articulated by flapping the tongue tip against the alveolar ridge; in most dialects of American English the sound is produced as something of a glide, raising the tongue but without contact with the alveolar ridge. The English speaker and the speaker of Spanish each produces the phoneme in reference in accordance with his own set of speech habits, and when the speaker of one of the two languages attempts to learn the other, he draws on his past experience and transfers the phoneme with which he is familiar from his native speech to the language he is learning. The Spaniard produces the initial phoneme of English run like that of Spanish ron; and the English speaker does the reverse. The native speaker of either language immediately detects the departure from accepted norms, and a large number of such transfers from one language to another results in the "accent" that so commonly characterizes the speech of non-native speakers. So characteristic are such transfer patterns—reflecting an original set of speech habits, that we can even identify the national origin of the speaker as Spanish, German, Italian, and the like. Habits of speech, like other customary ways of doing things, are powerful forces, and if we are to learn another language we cannot allow ourselves the luxury of permanent satisfaction with the first analogies we draw between its forms and what we assume to be corresponding features of our own familiar speech system. We cannot use the Navajo language as an effective communicational tool if we remain satisfied with analogies drawn on the basis of initial experience, equating the Navajo phoneme dl with English gl; Navajo l with lth; gh with g; and ignoring the distinctive features of vowel length and tone. Nor can we substitute English patterns such as "my son is now five" and make ourselves intelligible to the Spanish speaking person by saying "mi hijo es ahora cinco," to convey the concept of age. Only the bilingual or highly imaginative listener would get our message, because the Spanish pattern requires "my son now has five years" (mi hijo ahora tiene cinco años).

In a comparable manner, we are prone to misinterpret cultural phenomena by attempting to relate what we observe to something that is familiar in terms of our own experience; or we mistakenly assume that cultural features that are familiar parts of our own system must have their counterparts in the components of other societies. The latter fallacy is illustrated by the observations of J. H. Beadle(1) who visited the Navajo Country in 1871. Mr. Beadle apparently assumed that the Navajos, like himself, must believe in a Supreme Being representing good, and a Satanic Being representing evil. Through his interpreters (a process involving English→ Spanish→ Navajo/Navajo→ Spanish→ English because no English speaking

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(1) J. H. Beadle, Five Years in the Territories

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person of the time spoke Navajo) he elicited the term Chinda (ch'iidįį) as the name applied to the Devil, and for Supreme Being he lists a name Whaillahay, with the comment that "Chinda, the Devil, is a more important personage in all their daily affairs than Whaillahay, the God." Apparently, he had posed his questions against the background of his own culture, in the delusion that the features and figures of Christianity had their counterparts in Navajo religion. Mr. Beadle would no doubt be deeply chagrined today if he knew that the Navajo term he ascribed to the Supreme Being--the one he spelled Whaillahay--was very probably xōlahēįį meaning "Damned if I know!"

It is part of the Anglo-American cultural system to distinguish between such separate categories as kinfolk and friends in describing interpersonal relationships. We normally have a close relationship with both classes, but the first, in conjunction with the associated terminology (father, mother, brother, sister, etc.), is usually applied only to persons to whom we are related by blood, marriage or adoption; the second class, with its associated terms (buddy, pal, sweetheart, etc.) is generally applied to persons to whom we are unrelated. As Anglo-Americans, this dichotomy appears so fundamental that we are inclined to assume that it must be universal. It is frustrating, from our viewpoint, to find that kinship terms are used, in Navajo, for both categories. "My friend" may equate with "my brother" (sik'įį) or "my sister" (shilah) or with a number of other kinship terms (sitsii, my younger brother; shínaal, my older brother; shideezhi, my younger sister; shádí, my older sister; shichai, my maternal grandfather; shaadaani, my son-in-law, etc.)

The fact is that, in the Navajo frame of reference, the concept of friendship is associated with kinship. The noun stem--k'ei translates "relative, kinsman", and a cognate form k'e occurs as a verbal prefix relating to friendship and, by extension, to peace. Thus shik'ei, my relatives, including clan relatives; k'e ghósh'ąįį, I am friendly with him, on good terms with him; k'énáxásdįįf, peace was restored, friendly relations returned, the war ended (lit. k'ę-, friendship, peace; -náxásdįįf, things became back, things returned to a state of durative being). Thus, in the Navajo worldview, the concepts of friendship, peace, and kinship are all aspects of the same idea; while from the Anglo-American point of view they are separate and distinct from one another.

(12) That is, my sibling of the same sex as myself. Sik'įį, used by a male to a male translates "my brother"; but used by a female to a female it translates "my sister."
It is interesting to note that, under Anglo-American influences, the term shibádí has come into use by some of the Navajo school children—it is a "Navajo-ized" form of the English term my buddy. Likewise, one hears today such terms as she'et'ééd, my girl, and she’ashkii, my boy (-friend), describing a relationship that was not part of traditional Navajo society.

A broad foundation in the nature of human culture and language provides us with a much improved background against which to understand and cope with cross-cultural problems, and specific knowledge of the culture and language of specific groups with which we work permits us to predict probable areas of cultural conflict and linguistic interference in the process of acculturation and language learning. If, as speakers of Spanish, for example, we are concerned with the teaching of that language to English speaking people, we can safely assume that such features as ser/estar, both translating to be in particular situations; por/para, both of which may translate for in particular contexts; grammatical gender as it attaches to nouns and adjectives; certain mode forms of the Spanish verb; and certain syntactic features of the Spanish sentence structure, among others, will constitute obstacles for the English speaker. The ability to predict the problem areas permits us to develop instructional materials and techniques designed to overcome obstacles far more rapidly than would be the case if we ignored these factors. The Spanish verbs es and está both translate is (he, she, it), and either one of them may be used in such a sentence as la muchacha es/está aburrida—but they result in clearly distinct meanings. La muchacha está aburrida means "the girl is bored," but la muchacha es aburrida means "the girl is a bore." Likewise, in the sentences cuando me case (subjunctive mode) voy a Santa Fé and cuando me caso (indicative mode) voy a Santa Fé, the phrases cuando me case/cuando me caso may both be translated as "when I get married." However, the first form (case) connotes that the action has not yet taken place, whereas the second form (caso) connotes repetition of the act, in this context. Thus, we would properly translate the first sentence (cuando me case voy a Santa Fe) as "when I get married I'm going to Santa Fe," while the second (cuando me caso voy a Santa Fe) might be translated "when I get married I go to Santa Fe." The Spanish form voy, I am going, I go, did not change in the two examples, but the forms translated I get married (caso/case) did change; in the example given, the reverse is true in English where the form I get married remains constant and the forms of go (I'm going/I go) change.

Of course, the future tense form iré, I shall go, could be substituted for voy, I'm going, in the first example (cuando me caso iré a Santa Fé, when I get married I shall go to Santa Fe).
Again, the Spanish word joven can function either as an adjective young or as a noun young man (or young woman) in such situations as un americano joven (adj.), a young American/un joven (noun) americano, an American youth.

The foregoing examples illustrate areas of predictable first language interference involved in the teaching of Spanish to speakers of English. Contrastive analysis of the two languages identifies such areas and permits the teacher to develop special drills and other instructional materials as a medium through which to overcome obstacles of this type.

In like manner, the teaching of English to Indian children can be facilitated and accelerated by identifying the areas of predictable cultural-linguistic interference, and using such information as the basis upon which to develop specialized teaching materials and techniques of instruction.
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A CONTRASTIVE OVERVIEW OF CERTAIN FEATURES
OF THE ENGLISH AND NAVAJO LANGUAGES

PHONOLOGY

All spoken languages are organized systems comprising a peculiar choice of distinctive speech sounds combined in a peculiar manner into meaningful units which, in turn, are uttered in accordance with a peculiar set of patterns and in a peculiar sequential order to convey meaning. The manner of production of the speech sounds; the format and pattern governing their combination into meaningful units; and the order in which such units are arranged are among the distinguishing features of a given speech system, and are in the nature of a set of habits.

For example, we who speak English produce a speech sound represented by the graphic symbol /d/ (as in did) by touching the tongue tip against the alveolar ridge behind the front teeth and, at the same time, vibrating our vocal chords; in Spanish, a sound represented by the same graphic symbol /d/ is made by touching the tongue tip against the alveolar ridge at a point just behind the base of the upper front teeth to stop the flow of breath, while at the same time vibrating the vocal chords. A common variant of this phoneme occurs when /d/ is between two vowels—whether within a word or between the final vowel of a preceding word and the first vowel of one that follows in sequence. Thus, dado, given (=dadho); he dado, I have given (=e dadho). The Spanish phoneme thus ranges from one which closely resembles the English sound of /d/ in dime, to one which approximates the /dh/ sound of mother (modhr). In Navajo, a comparable sound is made by touching the tongue tip against the alveolar ridge in about the same position as English /d/ in did, but without simultaneous vibration of the vocal chords. The manner of production, in whichever language we speak, becomes one of our habits of speech, and if our first language is English, we have a strong tendency to hear and reproduce such approximately corresponding sounds as we may find in Spanish and Navajo in the same manner as we produce them in English; or, the forward point of articulation of one common variant Spanish /d/ in dado leads us to identify it as the /th/ sound in mother—one which we produce by placing the tongue tip against the lower end of the upper front teeth. The Navajo /d/ sound strikes our ears, accustomed as they are to the phonemes of English, now as /t/-now /d/ and in such a word as 'adin (none), we may depict our confusion and uncertainty by writing 'adin, thinking that we hear both of the English stopped consonants /t-d/.
In our efforts to learn a second language we must be cognizant of the necessity to overcome interference from our habitual first language if we are to identify and reproduce, in an intelligible manner, the sounds and other features of the new language. In many instances an approximation may be intelligible, but too many approximations in place of accurate reproductions result in such a "heavy accent" or so many structural-grammatical deviations that the listener is hard put to grasp what is being said. Consider, in this respect, the peculiar pronunciation of English as spoken by people in some of the former British colonies. In some instances, the manner of production of the speech sounds is so different from that of the common dialects of American English, that one can barely understand what is being said.

In forming meaningful units, some languages employ a complex system of inflections; thus, verbs may be inflected for person by adding certain affixes to the verbal stem, as Spanish llev-o (I carry), llev-as (you carry), llev-a (he, she, carries) (the stem llev-, carry), some, like Navajo, add a prefixed subject pronominal element to the stem, as naash'á (I carry), nani'á (you carry), nayi'á (nei'a) (he, she, carries) (the stem -'á, carry)14; others, like English, rely on separate subject pronouns to identify person and number, except in certain third person forms, in the case of English, where a suffix remains--I carry; you carry; he, she, carries. Still others, like Marchegiano15 modifies the stem vowel itself in certain paradigmatic forms, as yiyy9 mette9, I put, tu mitte, you put, iss9 mette, he, she puts, (but nuyy9 mette9, we work, and vuuy9 mette9, you put).16

Word order varies from language to language according to relatively fixed patterns, as illustrated by:

Who gave it to you?

Who to-you it he-gave?

Who you-to be-it-gave?

And, of course, beyond these features are a multitude of variables involving word classes, tense, mode, aspect, voice, number, gender and

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14'-á is the imperfect mode, continuative aspektual form of a stem relating to the handling of a single roundish bulky object.

15A regional form of Italian as spoken in San Benedetto del Tronto in the Province of Le Marche.

16Met10 < mettere, to put (stem mett-).
other grammatical categories that form the framework within which meaning is expressed. In their totality these speech habits reflect the world view of the speakers of a given language, and constitute elements of interference in second language learning based as the new language is on a different system of speech sounds and grammatical-structural-syntactical patterns.

However, through a process of analysis and comparison of the features of a new language with the native speech of a learner, it is possible to identify areas of predictable first language interference and hasten the learning process through the use of special instructional materials and techniques aimed specifically at problem areas.

As one might anticipate, the Navajo and English languages are highly divergent from each other in the choice and manner of production of speech sounds, as well as in the area of structural features.

The Vowels of English(11). The vowels of English are described below (based on the dialect of Midwestern Standard American English spoken by the present writer) and they may be classed as simple and compound. The first category includes the following phonemes (i.e. speech sounds), produced in a front, central and back position:

<table>
<thead>
<tr>
<th>FRONT</th>
<th>CENTRAL</th>
<th>BACK</th>
</tr>
</thead>
<tbody>
<tr>
<td>i (bit)</td>
<td>ə (buzzes=boeəz)</td>
<td>u (put)</td>
</tr>
<tr>
<td>e (bet)</td>
<td>a (father)</td>
<td>o (love)</td>
</tr>
<tr>
<td>ɛ (bat)</td>
<td></td>
<td>ɔ (bought)</td>
</tr>
</tbody>
</table>

The compound vowels of English are composed of the simple vowels in combination with one or both of the semivowels w (well) and y (yes). They are:

- iy (see)
- ey (they)
- ay (buy)
- ɨy (boy)
- uw (do)
- ow (go)
- yuw (few)
- aw (out)

---

The compound vowels are characterized by a diphthongal off-glide in their production—compare English o in no (now) with Spanish o in no (no); English i in see (sii) with Spanish i in s' (si), yes. In each instance the Spanish phoneme is a simple vowel, produced without the off-glide of English. Needless to say, Spanish speaking people learning English substitute the closest equivalent from their first language, and conversely English speakers substitute a compound vowel with off-glide as the nearest substitute for the simple vowels of Spanish. As a result, the English speaker pronounces Spanish llevó (yeβo), he carried, as yeβvow, substituting the compound vowels /ey/ and /ow/ for the simple Spanish vowels /e/ and /o/, and the English labio-dental spirant /v/ for the bilabial spirant /β/ of Spanish. The Spanish speaker, in turn, pronounces English save (seyv) as seβ substituting approximations from his own language.

The Vowels of Navajo. Like those of Spanish, the distinctive vowel phonemes of Navajo are simple vowels, produced without off-glide. They are:

<table>
<thead>
<tr>
<th>FRONT</th>
<th>CENTRAL</th>
<th>BACK</th>
</tr>
</thead>
<tbody>
<tr>
<td>i (ni, you)</td>
<td>a (gah, rabbit)</td>
<td>o (shoh, frost)</td>
</tr>
<tr>
<td>e (ke, shoe)</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

In addition, Navajo has the diphthongs and vowel clusters:
ai (xai, winter)
oi ('ayoi, very)
ei (sei, sand)
ao (daolghe, they are called)

The back vowel o assimilates to the front vowel i in the diphthong oi to become nearly the simple vowel u (as in Spanish tu, you). Consequently, the Navajo digraph oi represents a combination of sounds similar to ey in English dew. Likewise, the quality of a in the diphthong ai moves back toward that of English o in love in such Navajo words as xai, winter; ligai, white.

As in the case of English, the vowels of Navajo have many variants, or allophones, as they are termed, depending on preceding and following phonemes. Some of the more common variants, although not occurring

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(18) See Navajo Phonology, by Harry Hoijer, Publ. 1945 by the University of New Mexico Press.
(19) See works on English phonology listed under (17) supra.
(20) See Navajo Phonology, by Harry Hoijer.
themselves as distinctive phonemes in Navajo, approximate simple vowel phonemes which are distinctive in English, as:

Navajo /i/ as in ni, you (cf. i of English it) approximates English o in love or u in just (as in "just a minute") in Navajo bímá, his mother.

Navajo o, as in ghóniíid, inside, approximates the sound of English u in put.

Unlike English, the features of vowel length, quality (nasal/oral) and fixed tonal pitch are used to distinguish meaning in Navajo.

Vowel length. Navajo vowels occur short and long--these are descriptive terms which should not be confused with such conventional English distinctions as "short" applied to the a /ɛ/ of hat, in contrast with "long" as applied to the a /ey/ of hate. In English, as we have noted, vowel length is not, in fact, the distinction between these two English phonemes; the a of hat is the simple vowel /ɛ/ (het), while the a of hate is the compound vowel /ey/ (heyt). Actual length--that is, prolongation, is not involved as a mechanism to distinguish meaning in the foregoing English examples.

In Navajo, a long vowel is, as the name implies, one in which production of the sound is prolonged. Thus, the /a/ of shá, sun, is short--it is produced quickly and is very brief in duration; in contradistinction, its long counterpart (distinguished in writing by doubling the graphic symbol a/, as in shaa, to me, is prolonged. A long vowel is heard as very long or over long when it is followed immediately by a stopped consonant such as /d/--thus, /aa/ of saad, word or language. One might say that the first example (shá) is one mora in length; the second (shaa) is two moras long; and the third (saad) is three moras or more in duration.

All Navajo vowels and diphthongs (vowel clusters) occur short and long, and length is often the only feature that distinguishes between two otherwise homophonous words:

<table>
<thead>
<tr>
<th>Short</th>
<th>Long</th>
</tr>
</thead>
<tbody>
<tr>
<td>/a/ bá, for him</td>
<td>/aa/ bááñ, bread</td>
</tr>
<tr>
<td>/e/ bitse', his stone</td>
<td>/ee/ bitsee', his tail</td>
</tr>
<tr>
<td>/i/ bitsi', his daughter</td>
<td>/ii/ bitsii', his hair</td>
</tr>
</tbody>
</table>
Vowel quality. Navajo vowels occur in a nasal as well as an oral series, somewhat after the fashion of French. In the latter language, the vowel in both beau, pretty (bo) and in bon (bɔ), good, is /ɔ/, although it is written differently, in conventional orthography in the two words; however, the /ɔ/ of beau is an oral vowel, while in bon it is nasal. That is to say, in producing the two variant forms of the sound, the air is expelled through the mouth alone in beau and through the nose and mouth together in the case of bon, a pronunciational feature which distinguishes meaning between the two words.

As in the instance of vowel length, oral/nasal quality is a feature of Navajo that serves to distinguish meaning. In fact, it may be the only distinguishing feature between otherwise homophonous words. Nasal vowels, like their oral counterparts, occur both short and long. Nasality is indicated in writing by a subscript "nasal hook".

Vowel tone. The vowel components of morphemes (24) that compose Navajo words, including syllabic (n), carry an inherent tone—that is, they are uttered at a relatively high, low, falling or rising voice level which serves to distinguish meaning. Under certain circumstances a morpheme that normally carries a high tone is produced with a low tone, and vice versa, but the important point is that tone (voice pitch) in Navajo, as in the Chinese languages, itself serves to distinguish meaning—sometimes between morphemes that are otherwise homophonous. High tone (voice pitch) is indicated graphically by an acute accent (') placed over a vowel, including syllabic /n/; and low tone by absence of a diacritic. Falling and rising tone occurs only on long vowels and diphthongs (or vowel clusters), and is indicated graphically by placing

(24) The smallest meaningful unit in the structure of a language. Wall, in English is a free morpheme—one that exists independently; the /s/ of walls is a bound morpheme—one that cannot stand alone.
an acute accent mark (') over the first letter of a long vowel, or the
first element of a diphthong if the tone is falling (nlfinii, the one
who is), or over the second letter or element if the tone is rising
(bínai, his older brother; bidoogoh, that you might bump against it).

Compare:

\[
\begin{align*}
/ii/ & \text{ xadiidzih, we will speak} \\
/aa/ & \text{ 'aadi, there (nearby)} \\
/ee/ & \text{ 'azee', medicine} \\
/n/ & \text{ nlIf, he, she, is} \\
/oo/ & \text{ 'oodziizh, that he might inhale} \\
\end{align*}
\]

\[
\begin{align*}
/ii/ & \text{ xadiidzih, you will speak} \\
/aa/ & \text{ 'aadi, there (remote)} \\
/ee/ & \text{ 'azee', mouth} \\
/n/ & \text{ nlIf, you are} \\
/oo/ & \text{ 'oodziizh, that you might inhale} \\
\end{align*}
\]

As illustrated in the foregoing summary description of the English and
Navajo vowel systems, it becomes apparent that, with reference to the
distinctive phonemes and without consideration of the many variants
(allophones) that characterize the two vowel systems, there is wide
divergence between the two languages. However, for the Navajo learning
English as a second language, reproduction of the English vowels is not
a major problem. As a generalization, Navajo vowels are articulated
more tensely than those of English, and the off-glide so common
in English is absent in Navajo--i.e. the Navajo phonemes are simple vowels
and such compounds as English/ay/, /ey/, /iy/, /aw/, /ow/ do not
occur except as certain Navajo clusters, diphthongs or long vowels
approximate such English compounds (Navajo /ai/--English /ay/; N./ei/--
E./ey/; N./ii--E./iy/; N./oo/--E./ow/ and N./ao/--E./aw/).

Navajo /o/ is more closely rounded than its closest English correspondent
/ow/ (o as in go), and the Navajo phoneme, as Hoijer observes, varies
in the usage of individual speakers from a cardinal o (the /o/ of
Spanish son, sound) to a cardinal /u/ (the /u/ of Spanish luna, moon).

Navajo /e/ and /a/ are articulated with the tongue higher toward the
roof of the mouth when followed by /i/ (as in xai, winter; séi, sand).

The Navajo learning English, and the English speaker learning Navajo,
tend to identify the sounds of the second language with those of the
speech form to which he is habituated, and the learner tends to substitute
sounds from his first language for those of the second. Consequently,
the Navajo child tends to draw analogies such as the following in learn-
ing to reproduce the phonemes of English:
<table>
<thead>
<tr>
<th>Navajo</th>
<th>English</th>
</tr>
</thead>
<tbody>
<tr>
<td>/a/ as in shimá, my mother; closely resembles English /a/ of love</td>
<td>/a/ of of father</td>
</tr>
<tr>
<td>/a/ of father.</td>
<td>/o/ of love</td>
</tr>
<tr>
<td>/ai/ as in hígai, white</td>
<td>/ay/ of buy</td>
</tr>
<tr>
<td>/ac/ as in daolghe, he is called</td>
<td>/aw/ of cut</td>
</tr>
<tr>
<td>/e/ as in ké, shoe</td>
<td>/e/ of bet; /e/ of bat;</td>
</tr>
<tr>
<td>/ei/ as in sei, sand</td>
<td>/ey/ of play(22)</td>
</tr>
<tr>
<td>/ee/ as in bee, with it*</td>
<td>/ey/ of they</td>
</tr>
</tbody>
</table>

Holm(22) reports a tendency on the part of some Navajo children to experience difficulty in distinguishing between the English phonemes /e/ and /i/ (as between pen/pin), and between the English phonemes /e/ and /i/ (as between pet/pat).

*Holm reports a Navajo pronunciation of English away as Navajo awéé’ (baby).

<table>
<thead>
<tr>
<th>Navajo</th>
<th>English</th>
</tr>
</thead>
<tbody>
<tr>
<td>/i/ as in bì, he, she</td>
<td>/i/ of it</td>
</tr>
<tr>
<td>(ii) as in dif, this</td>
<td>/iy/ of machine</td>
</tr>
</tbody>
</table>

Although Navajo short /i/ approximates the /i/ of English it, and the closer quality of long /ii/ in Navajo approximates the quality of English /iy/ in machine, Holm reports that some Navajos have difficulty in distinguishing between /i/ and /iy/ in such words as ship/sheep; hip/heap.

Holm also reports a tendency, on the part of Navajo children, to substitute a nasalized vowel /ɨ/ for /i/ in the English word pig—pronouncing it as pig. The reason for this substitution is not immediately apparent.

Although Navajo /e/ is closely comparable to English /e/ in met, there is a tendency to confuse /e/ and /i/ in the word yes, often pronounced vis). (23)

<table>
<thead>
<tr>
<th>Navajo</th>
<th>English</th>
</tr>
</thead>
<tbody>
<tr>
<td>/o/-/u/ as in tuxí, water</td>
<td>/ow/ of go</td>
</tr>
<tr>
<td>/oo/ as in shoo, look!</td>
<td>/ə/ of awl</td>
</tr>
<tr>
<td>/oi/ as in ‘ayóí, very</td>
<td>/uw/ of do</td>
</tr>
<tr>
<td>}</td>
<td>/uwíy/ of dewy</td>
</tr>
</tbody>
</table>

(22) Holm, Wayne—unpublished notebook containing many incisive observations regarding the identification and reproduction of English phonemes by Navajo children in his classes at Rock Point, Arizona.

(23) See Problems of Navajo Speakers in Learning English, by Mary Jane Cook and Margaret Amy Sharp, Publ. in Language Learning, Vol. XVI, Nos. 1 & 2.
Holm's observations do not reflect any signal difficulty attaching to the teaching of the English vowels, including those which do not occur as distinctive phonemes in Navajo (/∅/ of ought; /e/ of pat; /o/ of love; /u/ of pull and the English compound vowel phonemes /iy/ of see; /ey/ of they; /ay/ of buy; /iy/ of boy; /aw/ of now; /ow/ of go; /uw/ of few), although he recommends the use of pattern drills designed to draw the children's attention to certain contrasts including English:

/ɪ:/ /e/ (pin/pen; pit/pet; ear/air; ill/ell)
/i:/ /iy/ (hip/heap; lip/leap; ship/sheet; ill/eel; is/ease)
/e:/ /e/ (pet/pat; net/gnat; head/had; said/sad; bed/bad)
/a:/ /a/ (pat/pot; cat/cot; gnat/not; shack/shock)
/o:/ /ɔ/ (caught/cot; naughty/knotty; or/are; for/far)
/ɔ:/ /ɔ/ (putt/pot; nut/not; hut/hot; shut/shot)
/ɔ:/ /u/ (pus/puss; luck/look; shuck/shook)
/ɔ:/ /ɔ/ (dove/dove; stun/stone; nut/note; hum/home)
/ʌ:/ /ɔ/ (bull/ball; soot/sought; pull/Paul; could/cawed)
/u:/ /u/ (should/showed; pull/pole; could/code; good/goad)
/ʊ:/ /ʊ/ (should/shooed; pull/pool; could/cooed; stood/stewed)
/ʌ:/ /ɔ/ (hole/howl; cat/out; goat/gout; a boat/about)
/ɑ:/ /ɔ/ (crotch/crouch; pot/pout; lot/lout; got/gout; trot/trout)
/ʌ:/ /a/ (moo/mew; fool/fuel; coot/cute; Foo/few; poo/pew)
/ɔ:/ /ʌ/ (sign/sane; high/hay; sigh/say; die/day)
The Consonants. A glance at Table III is sufficient to reflect the areas of divergence between the consonantal systems of English and Navajo. Again, the learner of either of the two languages as a second language tends to carry over speech habits from his first language to the second, and only after careful practice does he acquire the ability to articulate the new phonemes in the manner in which they are produced by the native speaker. Table III compares the distinctive phonemes (sounds that distinguish meaning) of English and Navajo, without reference to their variant forms (allophones), as they occur initially, medially or finally in a word or syllable, or as their quality is affected by a preceding or following phoneme. Although we may not be conscious of the fact, our English phoneme /t/ varies subtly as it occurs in such situations as top (where it is aspirated - i.e. followed by a puff of air); pot (where it is not followed by a puff of air and, in fact, where it may not even be released - that is to say, the tip of the tongue may not be lowered from the alveolar ridge to complete its articulation); stop (where the preceding /s/ de-aspirates the /t/- cf. /t/ of top/stop); and in little (where the tongue tip is held in a /t/ position while the medial portion of the tongue articulates an /l/ phoneme.

Examination of Table III disclose: the fact that only the following English consonants have reasonably close correspondents in the Navajo system:

(24) See Navajo Phonology by Harry Hoijer - op. cit. supra., and The Navajo Yearbook, Reports Nos. 7 and 8, 1958, 1960.
## Comparative Phonology

### Consonants - English - Navajo

#### Table III

<table>
<thead>
<tr>
<th>Articulation-Class</th>
<th>Articulation-Class</th>
<th>Articulation-Class</th>
<th>Articulation-Class</th>
<th>Articulation-Class</th>
<th>Articulation-Class</th>
</tr>
</thead>
<tbody>
<tr>
<td>Labial</td>
<td>Dental</td>
<td>Alveo-Palatal</td>
<td>Palato-Velar</td>
<td>Glottal</td>
<td></td>
</tr>
<tr>
<td>English</td>
<td>Navajo</td>
<td>English</td>
<td>Navajo</td>
<td>English</td>
<td>Navajo</td>
</tr>
<tr>
<td>STOPS</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Voiced</td>
<td>b</td>
<td>-</td>
<td>d</td>
<td>-</td>
<td>g</td>
</tr>
<tr>
<td>Unvoiced</td>
<td>-</td>
<td>b</td>
<td>-</td>
<td>t</td>
<td>k, kv (= qu)</td>
</tr>
<tr>
<td>Unaspirated</td>
<td>-</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Aspirated</td>
<td>p</td>
<td>-</td>
<td>t</td>
<td>k', kv'</td>
<td></td>
</tr>
<tr>
<td>Glottal</td>
<td>-</td>
<td>t'</td>
<td>-</td>
<td>-</td>
<td>V</td>
</tr>
<tr>
<td>AFFRICATES</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Voiced</td>
<td>dzh (= i)</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Unaspirated</td>
<td>-</td>
<td>cz, ch (= i)</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Aspirated</td>
<td>ch</td>
<td>ts, t'r, ch, ts'</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Glottal</td>
<td>ts' t'' ch''</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>SPIRANTS</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Voiced</td>
<td>v*</td>
<td>dh</td>
<td>z, zh</td>
<td>z, zh</td>
<td>sh, (ghw)</td>
</tr>
<tr>
<td>Unvoiced</td>
<td>f*</td>
<td>th</td>
<td>s, sh</td>
<td>s, sh</td>
<td>s, xw</td>
</tr>
<tr>
<td>LATERALS</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Voiced</td>
<td>l</td>
<td>l</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Unvoiced</td>
<td></td>
<td>t</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>NASALS</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Voiced</td>
<td>m</td>
<td>m</td>
<td>n</td>
<td>n</td>
<td>ng</td>
</tr>
<tr>
<td>INVERTED</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Voiced</td>
<td>r</td>
<td>-</td>
<td>y</td>
<td>y</td>
<td></td>
</tr>
<tr>
<td>SEMI-VOWELS</td>
<td>w</td>
<td>w(ghw)</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

*labio-dentals
<table>
<thead>
<tr>
<th>English</th>
<th>Navajo</th>
</tr>
</thead>
<tbody>
<tr>
<td>/b/p/ as in bit, pit</td>
<td>/b/ in bibi nibi, his stomach</td>
</tr>
<tr>
<td>/d/ as in did</td>
<td>/d/ in daan, springtime</td>
</tr>
<tr>
<td>/g/ as in go</td>
<td>/g/ in gah, rabbit</td>
</tr>
<tr>
<td>/k/ as in kin</td>
<td>/k/ in kin, house</td>
</tr>
<tr>
<td>/kw=qu/ as in quill</td>
<td>/kw/ in kwii, here</td>
</tr>
<tr>
<td>/z/ as in buzz</td>
<td>/z/ in biziiz, his belt</td>
</tr>
<tr>
<td>/zh/ as in pleasure (plezher)</td>
<td>/zh/ in bizhi', his name</td>
</tr>
<tr>
<td>/s/ as in sis (sister)</td>
<td>/s/ in sis, belt</td>
</tr>
<tr>
<td>/sh/ as in shoe</td>
<td>/sh/ in shoo, look!</td>
</tr>
<tr>
<td>/h/ as in him</td>
<td>/h/ in 'ahbini, morning</td>
</tr>
<tr>
<td>/l/ as in let</td>
<td>/l/ in le', let it be so</td>
</tr>
<tr>
<td>/m/ as in man</td>
<td>/m/ in ma', coyote</td>
</tr>
<tr>
<td>/n/ as in no</td>
<td>/n/ in noo', cache</td>
</tr>
<tr>
<td>/w/ as in was</td>
<td>/w/ in waa', bee weed</td>
</tr>
<tr>
<td>/y/ as in yes</td>
<td>/y/ in yas, snow</td>
</tr>
<tr>
<td>/dzh/ as in gin</td>
<td>/dzh/ in j', day</td>
</tr>
<tr>
<td>/tsh/ as in chin</td>
<td>/tsh/ in chin, filth</td>
</tr>
</tbody>
</table>

The following consonants have no correspondents between the two languages:

<table>
<thead>
<tr>
<th>English</th>
<th>Navajo</th>
</tr>
</thead>
<tbody>
<tr>
<td>/t/ as in toe</td>
<td>/t'/ in t'iiis, cottonwood</td>
</tr>
<tr>
<td>/v/ as in vice</td>
<td>/k'/ in k'ad, now</td>
</tr>
<tr>
<td>/f/ as in fun</td>
<td>/kw'/ in kw'os, cloud</td>
</tr>
<tr>
<td>/dh/ as in mother</td>
<td>'/ in de', here</td>
</tr>
<tr>
<td>/th/ as in thin</td>
<td>/dzi', mountain</td>
</tr>
<tr>
<td>/ng/ as in sing</td>
<td>/dl/ in dloh, laughter</td>
</tr>
<tr>
<td>/r/ as in run</td>
<td>/ts/ in tsin, wood</td>
</tr>
<tr>
<td></td>
<td>/t/ in t'ah, ointment</td>
</tr>
<tr>
<td></td>
<td>/tx/ in tx6, water</td>
</tr>
<tr>
<td></td>
<td>/ts'/ in ts'in, skeleton, bone</td>
</tr>
<tr>
<td></td>
<td>/t'/ in t'ee', night</td>
</tr>
<tr>
<td></td>
<td>/ch'/ in ch'ah, hat</td>
</tr>
<tr>
<td></td>
<td>/gh/ in xooghan, hogan</td>
</tr>
<tr>
<td></td>
<td>/x/ in xis, pus</td>
</tr>
<tr>
<td></td>
<td>/xw/ in xwihi, satiety</td>
</tr>
<tr>
<td></td>
<td>/t/ in tid, smoke</td>
</tr>
</tbody>
</table>

Although the English speaking learner of Navajo has the greater burden in the form of consonant phonemes that bear little or no resemblance to those of his own language, and which must therefore be learned without reference to his past experience, the Navajo speaking learner of English
must acquire the ability to articulate a large variety of more or less familiar phonemes in unaccustomed word positions and, worse yet, he must learn to articulate a wide variety of consonantal clusters to which he is almost totally unaccustomed from his past experience.

In Navajo any consonant may occur as a syllable-initial, but only eleven (11) of the Navajo consonant phonemes may occur in syllable-final position. The only Navajo consonants that occur in final position are:

- /d/ as in abid, stomach
- /g/ as in deg, up
- /ʃ/ as in de', here
- /s/ as in sis, belt
- /sh/ as in shash, bear
- /z/ as in biziiz, his belt
- /zh/ as in shaazh, knot
- /n/ as in sin, song
- /l/ as in siil, vapor
- /i/ as in diiz, blood
- /h/ as in ch'ah, hat

The Navajo affricates conventionally written as /j/, /dz/, /d/, /ts/, /ts'/, /tʃ/, /tʃ'/, /ch/, /ch'/ are not consonantal clusters as the orthography might imply, but rather they are simple unit phonemes sometimes written /ʃ/, /ʃ/, /ʌ/, /ʌ/, /ʃ/, /ʃ/, /ʃ/, /ʃ/, and /ʃ/ respectively.

There are very few consonantal clusters in Navajo, comparable to such English clusters as /ks/ in six, /ksth/ in sixth or /ts/ in hits, although of course a number of Navajo consonants are found in juxtaposition in such situations as /ʃ/ in seis, I killed it; /lgh/ in yilgho, he is running along; /sgh/ in seešg, he was killed. Consonantal clusters, in Navajo, comprising syllable initial elements, usually involve the phonemes /ʃ/ or /gh/ and occur in such emphatic-augmentive or depreciative forms as 'aššxo all; dzghašdi, right here; bitsxis, his whip; or in depreciative forms such as sxu', big ugly star; shxash, nasty, ugly bear; /dzgh/ as dzghil, ugly, nasty mountain; /ʃ/ as in ʃ'ʃ', big ugly horse. Some Navajo verbal stems, in certain paradigms, customarily include /ʃ/- thus, ntsxaaz, very big and corpulent; 'adahodéshh'aad', I became bored.

English uses a large variety of consonantal clusters, such as /ʃl/ in glow, wiggle; /tʃh/ in eighth; /fl/ in flu; /fr/ in from; /tr/ in true; /ksth/ in sixths.

It is difficult to acquire the ability to hear and produce a phoneme in an unaccustomed position, even though one may have had long experience with the phoneme involved or with a combination of phonemes that resemble it. Thus, for the English speaking person, the cluster /ts/ is common in word final position, as in nits, but aside from a few borrowed words "tze-tze fly", for example, /ts/ does not occur in initial position (and, for that matter, many English speakers pronounce se-tse for tze-tze under any circumstance). It is difficult for the English speaking person to hear or reproduce the contrast between such Navajo words as sin, song/tsin, wood/ ts'in, bone. By the same
token it is awkward for the Navajo learning English to hear and reproduce nits. Even Sam is awkward for the Navajo because although /m/ is a phoneme of his own speech system, it never occurs as a syllable or word final element in Navajo. The Navajo is aware of its occurrence at the end of such an English word as Sam, but he tends to reproduce the sound without completely articulating it - his vocal chords cease vibration before he opens his lips to release the stoppage; as a result, he pronounces /Səm/.

And acquisition of the ability to reproduce many of the consonantal clusters of English poses as many problems for the Navajo learner as the Navajo phonemes /tɬ/, /t/, /tɬ'/, /dz/, /k'/ etc., do for the English speaking learner of Navajo. One's first language habits interpose many obstacles in learning a second language. Many new phonemes are mis-identified, and many substitutions are made by the learner to facilitate the reproduction of strange and awkward speech sounds pertaining to the new language. English lacks the phonemes /gh/ and /tɬ'/ of Navajo; the closest English correspondents are /g/ and /kl/ respectively. Consequently, the English speaking person substitutes English /g/ for Navajo /gh/ in xooghan (hogan, home), pronouncing the word "hogan," and /kl/ for /tɬ'/ in the word tóotl'izh, (blue, dime) to produce "doklish" (final/-sh/ for/-zh/ because the latter does not occur as a word final in English). In fact, in the English pronunciation of xooghan, Navajo /x/> /h/; the vowel length is ignored; /gh/> /g/; and the vowel of the second syllable commonly becomes /ɛ/ to produce (howgen). As we shall see, Navajos tend to make many analogous changes and substitutions in learning to pronounce English words. In large part, the types of substitutions to be expected by the learner of either of the two languages as a second language can be predicted on the basis of contrastive analysis and comparison of the phonologies of the two speech systems.

The consonants of Navajo are described below, comparatively with those of English:

**The Stopped Consonants.** As the term implies, this class of speech sounds is produced by momentarily cutting off the flow of air from the lungs at some point of articulation, by means of the lips, tongue, teeth or larynx. If, at the time of articulation, the vocal chords are drawn together in such position that a vibration (humming sound) is produced, the resulting consonant is called a voiced or sonant sound; if, at the time of articulation, the glottis is open in such position that the vocal chords do not vibrate, the resultant consonant is unvoiced or surd. Also, if a little puff of air follows production of a consonant it is described as aspirated, whereas such a phoneme produced without the puff of air is said to be unaspirated. Lastly,
momentary closure and reopening of the glottis during the articulation of a consonant results in an explosive effect; such consonants are said to be glottalized, and are exemplified by the /k'/ of Navajo K'ad, now, for example.

The flow of air from the lungs may be stopped, with varying degrees of pressure, by closing the lips (to produce a labial stop such as /b/; by placing the tip, blade or back portion of the tongue against the palatal area (roof of the mouth) (to produce such sounds as /d/, /g/); or the glottis itself may be closed by drawing the vocal chords tightly together (to thus produce a glottal stop).

To distinguish the English stopped consonants /b/, /d/, /g/, from the stops written /b/, /d/, /g/ in Navajo, we will use the symbols /b/, /d/, /g/ for the latter.

The Labial Stops:

English /b/-/p/ - Navajo /b/. In English, the labial stops are produced by drawing the lips together rather loosely to stop the flow of breath. The English phoneme /b/ is voiced, while /p/ is its unvoiced correspondent. The phoneme /p/ occurs both aspirated and unaspirated in English, depending upon its position, and upon phonemes that immediately precede or follow it. Before a vowel, for example, it is usually aspirated, as in the words pat, pot, pit, put (p'et, p'at, p'it, p'ut - in which \( \sqrt{ } \) represents the little puff of air that produces aspiration). Compare voiced /b/ and unvoiced /p/ in: bob/pop; rib/rip; dabble/dapple; blush/plush. The ears of the English speaker are accustomed to hear the difference between /b/ and /p/ because the voicing of /b/ and the lack of voicing of /p/ distinguish meaning. The aspiration, in English, is incidental.

Among the variants (allophones) of English /p/ is a phoneme which is not aspirated although it occurs immediately before a vowel where aspiration is normally expected (p'it, p'ut, for example). The unaspirated variant occurs when /p/ is immediately preceded by the spirant /s/, as in spot. To hear the difference, pronounce pot (p'at)/spot (spat); pin (p'1n)/spin (spin).

This unaspirated or "de-aspirated" sound is mentioned here because the Navajo phoneme /b/ is very closely similar to the /p/ of English spot. Navajo /b/ is a bilabial stop which is neither voiced nor aspirated, and /b/ is the closest Navajo correspondent to both of the English phonemes /b/ and /p/. By previous experience the Navajo learner of English as a second language is unaccustomed to hearing the distinction between the voiced and unvoiced bilabial stops of English.
In addition, Navajo /b/ occurs only as a syllable initial element, and never as a syllable final.

The Navajo learner tends to hear and reproduce English /b/-/p/, indiscriminately, as his own familiar phoneme /b/ pronouncing bull/pull; butt/putt; bin/pin without the distinction which the native speaker of English customarily associates with the two sounds. Also, in view of the fact that Navajo /b/ does not occur in a final position comparable to English /b/ in rib or /p/ in rip, the Navajo tends to hear and substitute a glottal stop ∨ for these English phonemes in syllable or word final position. The Navajo learner pronounces sto' (sda') for English stop; da' for top; ba' for bob (sometimes with lip closure mimicking the native speaker's visible production of final /-b/ /-p/, but with the stoppage actually occurring in the glottis first - (the lip closure thus has no acoustic value because the flow of air has already been cut off at a point below the lips.)

The Navajo phoneme /b/ never occurs in consonantal clusters such as English /bl/ in bloom; /br/ in brew; /bz/ in stabs (stebz)

The above observations point to the need for contrastive drills designed to make the Navajo learner conscious of the basic distinction between voiced /b/ and unvoiced /p/, and to develop in the learner the ability to identify and reproduce the two phonemes as they occur in English.

Such combinations as the following may prove helpful in accomplishing this purpose:

**Initial /p/-/b/**

<table>
<thead>
<tr>
<th>/p/</th>
<th>/b/</th>
</tr>
</thead>
<tbody>
<tr>
<td>Bill/pill; bull/pull; ban/pan; bin/pin; butt/putt; bale/pale; bun/pun; bush/push.</td>
<td></td>
</tr>
</tbody>
</table>

**Final /p/-/b/**

<table>
<thead>
<tr>
<th>/p/</th>
<th>/b/</th>
</tr>
</thead>
<tbody>
<tr>
<td>Mob/mop; lab/lap; tab/tap; rib/rip.</td>
<td></td>
</tr>
</tbody>
</table>

**The Clusters:**

<table>
<thead>
<tr>
<th>/bl/</th>
<th>in blush, able</th>
</tr>
</thead>
<tbody>
<tr>
<td>/br/</td>
<td>in brow, robber</td>
</tr>
<tr>
<td>/bd/</td>
<td>in stabbed (stebd)</td>
</tr>
<tr>
<td>/bz/</td>
<td>in stabs (stebz)</td>
</tr>
<tr>
<td>/bn/</td>
<td>in ribbon (ribn)</td>
</tr>
<tr>
<td>/bnz/</td>
<td>in ribbons (ribnz)</td>
</tr>
<tr>
<td>/pl/</td>
<td>in plush, apple</td>
</tr>
<tr>
<td>/pr/</td>
<td>in prow, roper</td>
</tr>
<tr>
<td>/pt/</td>
<td>in stopped (stapt)</td>
</tr>
<tr>
<td>/ps/</td>
<td>in stops</td>
</tr>
<tr>
<td>/pn/</td>
<td>in open (owpn)</td>
</tr>
<tr>
<td>/pnz/</td>
<td>in opens (owpnz)</td>
</tr>
</tbody>
</table>

**The Alveolar Stops.**

English /d/ - /t/ - Navajo /Ñ/. All of these phonemes are produced by pressing the tongue tip against the alveolar ridge behind the upper
front teeth to thus stop the flow of breath. English /d/ represents a voiced sound, while English /t/ represents the unvoiced correspondent. English /t/, like /p/ is usually aspirated when it immediately precedes a vowel. Compare the /t/ of 'top/pot.

As in the case of /p/ when preceded by /s/ and followed by a vowel, /t/ is likewise "de-aspirated". Compare: t'op/stop; t'ub/stub. (√ represents aspiration.)

The sound of /t/ in stop very closely approximates that of Navajo /d/ which is neither voiced nor aspirated. Navajo /d/ is the closest correspondent for English /d/-/t/. The Navajo is not accustomed to hearing the distinction between the voiced and unvoiced alveolar stops of English. He tends, consequently, to substitute his familiar Navajo /d/ for both of the phonemes /d/-/t/ of English. Such English words as do/to; elder/eater tend to be pronounced alike.

Although Navajo /d/ occurs as a syllable or word final element (tsiid, ember; saad, word, language) both of the English alveolar stops tend to be replaced by Navajo √, the glottal stop. This is especially true when the final English stop is /t/. Thus: pit>pi'; sat>sa' (sæ'); hat>ha' (he'). Sometimes, in the pronunciation of English final /d/-/t/, Navajo learners begin to articulate the alveolar stop but close the glottis before completing it. When this happens the alveolar stoppage is negated because the air has already been cut off at the larynx.

Drills such as the following may be helpful in drawing the learner's attention to the distinction between voiced English /d/ and unvoiced /t/:

**Initial /d/-/t/**

dill/till; din/tin/; dim/tim; dome/tome; die/tie; dough/toe;
do/to; dell/tell

**Final /d/-/t/**

lid/lit; nod/not; sad/sat; bid/bit; bad/bat; bud/but;

**The Clusters**

/dz/ in buds (bods) /ts/ in lots
/dt/ in saddle /tl/ in battle
/dd/ in added (edges) /td/ in grated (greytad)
/dr/ in adder (edges) /tr/ in eater (iyt r)
in drew /true
/dn/ in Eden (Ydtn) /tn/ in eaten (iytn)
/dnz/ in Edens (Ydtnz) /tnz/ Kittens (Kittns)
The Palatal Stops.

English /g/-/k/-/kw/- Navajo /g/-/k/-/kw/. In the palatal stop position, involving that series of sounds produced by raising the back portion of the tongue against the palato-velar, or back area of the roof of the mouth to stop the flow of breath, Navajo has unvoiced, aspirated phonemes comparable to English /k/-/kw/. Compare Navajo Kin, house/English Kin; Navajo Kwii, here/English quill (=Kwil). The aspiration is greater in production of the Navajo phonemes, but they are otherwise closely comparable.

English /g/ is the voiced stop in go, while Navajo /8/ is the unvoiced, unaspirated stop in gah, rabbit. It sounds much like the unvoiced, unaspirated palato-velar stop in English skat.

The Navajo phoneme /8/ occurs as a final element in a few words, such as deg, up; 'at'oiq, shoulder blade, but the Navajo phonemes /k/ and /kw/ never occur in syllable or word final position.

As in the case of the other stopped consonants, the Navajo learner often substitutes the glottal stop for final /g/-/k/ in English words. Thus, big/pig/pick may all be pronounced alike as /ki/.

Contrastive drills may be helpful, such as:

**Initial /g/-/k/,**

<table>
<thead>
<tr>
<th>English</th>
<th>Navajo</th>
</tr>
</thead>
<tbody>
<tr>
<td>gill</td>
<td>kill/quill</td>
</tr>
<tr>
<td>gay</td>
<td>kay</td>
</tr>
<tr>
<td>gat</td>
<td>cat</td>
</tr>
</tbody>
</table>

**Final /g/-/k/,**

<table>
<thead>
<tr>
<th>English</th>
<th>Navajo</th>
</tr>
</thead>
<tbody>
<tr>
<td>hog</td>
<td>hawk</td>
</tr>
<tr>
<td>bog</td>
<td>baulk</td>
</tr>
<tr>
<td>bug</td>
<td>buck</td>
</tr>
<tr>
<td>pig</td>
<td>pick</td>
</tr>
<tr>
<td>tug</td>
<td>tuck</td>
</tr>
</tbody>
</table>

**The Clusters:**

<table>
<thead>
<tr>
<th>English</th>
<th>Navajo</th>
</tr>
</thead>
<tbody>
<tr>
<td>/gr/ in grow, bigger</td>
<td>/kr/ in crew, picker</td>
</tr>
<tr>
<td>/gz/ in pigs</td>
<td>/ks/ in picks</td>
</tr>
<tr>
<td>/gl/ in wiggle</td>
<td>/kl/ in pickle</td>
</tr>
<tr>
<td>/gn/ in wagon</td>
<td>/kn/ in chicken</td>
</tr>
<tr>
<td>/gnz/ in wagons</td>
<td>/knz/ in chickens</td>
</tr>
</tbody>
</table>

In Navajo, the phonemes /g/-/k/ are often palatalized before the vowel /e/, and often labialized before /o/. That is to say, /g/ is pronounced /gy/ and /k/ becomes /ky/ before /e/, as in bigod (=bigwod), his knee; bikee' (=bikye', his shoe); tâdishgâsh (=tâdishgyčâsh), I am shearing it.

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The glottal stop ♯ does not occur as a distinctive phoneme in English, but it has a high frequency rate in Navajo where it does function as such. It occurs either at the beginning or end of a syllable, as in 'e'e'aah, west; 'abe', milk. In fact, no Navajo word actually begins with a vowel; the production of vowels which would otherwise be in a syllable-initial position begins actually with a closed glottis. The component words in the Navajo sentence Dif 'ashkii 'Akoné 'yah 'Ifydago 'Azee' 'Ayffína', are not blended or "run" together as they would be in English, but are separated by glottal closures, so the sequence becomes Dif/ 'ashkii/ 'Akoné'/yah/ 'Ifydago/ 'Azee'/ 'Ayffína' (when the boy went in there he swallowed a pill). This type of word juncture sounds "choppy" to the English ear, and Navajo learners carry it over to English, beginning word-initial vowels with a glottal closure to produce such sequences as who/ 'is/ 'it? in lieu of who is it (huw 'izzat?). The "Choppiness" of the Navajo learner is immediately apparent to the native speaker of English. This speech habit, so deeply ingrained in the Navajo, is very difficult to modify.

The glottal stop ♯ occurs occasionally in English speech, but not as a distinctive phoneme. It occurs as the hiatus between the two elements of "huh uh" (ho'o) and "oh oh!" (o'ow), and it may be heard as a separation between the word elements in such a sentence as who/ 'is/ 'it? when it is uttered with exaggerated emphasis and clarity. No effort is made to represent this phoneme in conventional writing, and the ♯ (apostrophe) is commonly used to represent it in the transcription of such a language as Navajo.

The Spirants. This category of speech sounds is produced by constricting the passage through which air is forced out under pressure from the lungs. Such constriction may be accomplished by approximating the lips to each other without complete stoppage to produce a bilabial spirant such as the /B/ of Spanishvoy (bøi), I go; it may be produced by placing the lower lip loosely against the tip of the upper front teeth to produce the labiodental /f/-/v/ of English fine/vine; a constriction can be formed by placing the tongue tip against the ends of the upper front teeth to produce the /dh/-/th/ of English bathe/bath (beydh/bæth); the front portion of the tongue can be held close to the alveolar ridge to produce /s/-/z/ as in bus/buzz; the blade of the tongue can be brought close to the forward portion of the palate to produce /zh/-/sh/ of pleasure/sure (plezhr/shur); and the back portion of the tongue can be raised close to the velar or back palatal area to produce the /x/-/gh/ sounds of Navajo xai, winter/ 'aghass', wool (cf. Navajo /x/ and German /ch/; (the latter is articulated farther forward than the Navajo phoneme, but they are acoustically comparable), finally a spirant may be produced by narrowing the glottis, without complete closure. The glottal spirant may be produced either as a voiced or unvoiced phoneme. It occurs both in English and Navajo and is written /h/ as in hill (hil), hoe (how); naah'aash, you two go about, ch'ah, hat, 'ahbíñí, morning. It may also occur labialized in English whys (hway), and Navajo hwaah, wheh: , and voiced in English who (huw), how (hau), and in some pronunciations of 'ahbíñí, morning.
In the pronunciation of many Navajo speakers the spirant /x/ is weakly articulated, and for purposes of simplification, Navajo words containing /x/ are written with /h/ in ordinary spelling. Thus, haa (for xaa), how?; his (for xis), pus. Actually, /x/ and /h/ are distinct phonemes in Navajo, and although /x/ occurs as a syllable-initial and /h/ as a syllable final, the converse is not true. Where an attenuated /x/ occurs in such a word as xaa/haa, the phoneme remains a velar, not a glottal spirant.

The post-palatal spirants occur both voiced and unvoiced in Navajo, as noted above; both are palatalized before /e/ and /i/ and labialized before /o/. Thus xis (=xyis) pus; dighin (= dighyin), holy; 'axééh (='axyééh), gratitude; bighéél (=bighyéél), his load; xó (=xwo), he, she; bighoo' (=bighwoo'), his teeth. In fact, the palatalization before /i/- /e/ and the labialization before /o/ is heard so loudly that, in simplified spelling, /ghy/ is commonly written as /y/ and /ghw/ as /w/, as in diyin (for dighin) holy; wolyé (for gholghé), he is called.

The English spirants /s/-/z/, /sh/-/zh/ have close correspondents in Navajo. As a result, they occasion little difficulty for the Navajo beginner, with the exception of English /z/ in final position which, as Holm observes, is often replaced by /s/, despite the fact that all of the spirants in reference occur both as syllable initial and final elements in Navajo. Holm reports difficulty in producing final /z/ (in such words as his, buzzes (=boz9z)) where it is often replaced by /s/.

Drills involving words containing final /-z/ may prove helpful

\[
\text{has} \quad (\text{hez})/\text{jazz} \quad (\text{jez})/\text{razz} \quad (\text{rëz})/\text{rose} \quad (\text{rowz})
\]

Likewise, consonantal clusters of the following types:

\[
\begin{align*}
/\text{zd}/ & \text{ in buzzed (bozd)} \\
/\text{zl}/ & \text{ in fizzle (fizl)} \\
/\text{zlz}/ & \text{ in fizzes (fizlz)} \\
/\text{zm}/ & \text{ in bosom (buwzm)} \\
/\text{zmz}/ & \text{ in bosoms (buwzmz)} \\
/\text{zn}/ & \text{ in raisin (reyzn)} \\
/\text{znz}/ & \text{ in raisins (reyznz)} \\
/\text{zøz}/ & \text{ in rises (rayzøz)}
\end{align*}
\]

\[
\begin{align*}
/\text{st}/ & \text{ in stew, last} \\
/\text{str}/ & \text{ in strew, oyster} \\
/\text{strz}/ & \text{ in Øysters (Øystrz)} \\
/\text{sl}/ & \text{ in slew, whistle (hwisl)} \\
/\text{slz}/ & \text{ in whistles (hwislz)} \\
/\text{sld}/ & \text{ in whistled (hwisld)} \\
/\text{sn}/ & \text{ in snow, listen (lisn)} \\
/\text{snz}/ & \text{ in listens (lisnz)} \\
/\text{snd}/ & \text{ in listened (lisnd)} \\
/\text{sp}/ & \text{ in spot, gasp} \\
/\text{spz}/ & \text{ in gasps} \\
/\text{spl}/ & \text{ in split} \\
/\text{spr}/ & \text{ in sprain} \\
/\text{sk}/ & \text{ in skin, ask} \\
/\text{skr}/ & \text{ in screw}
\end{align*}
\]

The English labio-dental spirants /v/-/f/ and the dentals /dh/-/th/ do not occur in Navajo nor do they have close correspondents. They must be taught as new phonemes. Fortunately, they are articulated in a visible position; and the manner of production can be readily demonstrated. Holm reports that children learn to produce /f/-/v/ readily in syllable-initial position, but experience difficulty when the same phonemes occur as finals. In the latter instance, he reports the substitution of /v/ or /h/ for final /f/, and /v/, /h/, /b/ and sometimes /f/ for final /v/.

Contrastive drills of the following types may prove helpful:

**Initial position:**

vine/fine; vend/fend; vale/fail; vast/fast

**Final position:**

save/safe; have/half; strive/strife

Clusters involving /f/-/v/ are very common in English, and include such types as:

- /vl/ in wewnild (wiyvl)
- /vlz/ in weevils (wiyvilz)
- /vr/ in waver (weyvr)
- /vrrz/ in wavers (weyvrrz)
- /vz/ in halves (hevz)
- /vd/ in saved (seyvd)

Also, with the compound vowel /yuw/:

- /vyuw/ in view (vyuw)
- /vyuwz/ in views (vyuwz)
- /vyuwd/ in viewed (vyuwd)

The English spirants /dh/-/th/ likewise constitute new and unfamiliar phonemes for the Navajo learner, and neither of them has a close correspondent in Navajo. Like /v/-/f/, their production can be demonstrated visually by the teacher. Navajo children often substitute Navajo /d/ for /dh/-/th/, especially when the phonemes occur after a vowel, and /s/ is often substituted when the occurrence is word initial. Holm reports

substitutions of $\checkmark$, /h/, /\d/, /\ell/ and /s/. The pronunciation modr for mother (modhr) and fadr for father (fadhr) is often heard among Navajo learners. Holm\textsuperscript{a} also observes that mispronunciation of these phonemes by Navajo beginners is not as much "mechanical" in nature as it is a trait stemming from the prevalent mispronunciation of the sounds by adult speakers.

Contrastive drills of the following types may prove helpful:

Initial /th/-/dh/:
- thin/sin; thick/sick; think/sink; though/so; that/sat; this/sis

Final /th/-/dh/:
- bath/bass/bat; both/boss/boat;
- Beth/Bess/bet;
- bathe/base/bait; lathe/lace/late

The clusters involving /dh/-/th/ include such awkward (for the Navajo) combinations as:
- /dhz/ in bathes (beydhz)
- /dhr/ in other (odhr)
- /dhrz/ in others (odhrz)
- /dhd/ in bathed (beydhd)

The Laterals.

English and Navajo both use the voiced lateral /l/ as in English lid/dill; Navajo lá, expletive/biil, squaw dress. In addition, Navajo uses the unvoiced correspondent /l/ as in *lid, smoke/diil, blood. The phoneme /l/ relates to the phoneme /l/ as /s/ relates to its voiced correspondent /z/ - i.e. /l/-/l/ are articulated in the same position, just as /s/-/z/; the pairs are distinguished by the fact that, in each instance, the first of the pairs is unvoiced and the second is voiced.

The phoneme /l/ occurs in word-initial and word final position in both languages. English initial /l/ in let is produced by touching the tip of the tongue against the alveolar ridge, while /l/ in such words as well, Wilbur, is produced by many speakers without actually bringing the tip of the tongue into contact with the alveolar ridge. The Navajo phoneme is produced like the /l/ of let, whether in syllable initial or final position. Thus, in the word siil, steam, the phoneme is completely articulated and the vocal chords continue to vibrate until contact between the tongue tip and the alveolar ridge has been broken. Similarly, in a
Navajo word such as yilghol, he is running along, complete articulation of /l/ causes the sequence /lgh/ to sound like /l9gh/ (yil9 gho1). This characteristic is carried over into English by Navajo learners, in such words as well, bull, hole where the native speaker tends to discontinue vibration of the vocal chords before releasing contact between the tongue tip and the alveolar ridge.

Consonantal Clusters involving /l/ may require special attention where such combinations have no correspondents in Navajo:

- /gl/ in glow, wiggle (wigl)
- /bl/ in blow, bubble (bobl)
- /fl/ in flow, waffle (wefl)
- /kl/ in claw, buckle (bokl)
- /pl/ in plow, apple (apl)
- /sl/ in slow, rustle (rosl)
- /tl/ in kettle (ketl)
- /dl/ in waddle (wadl)
- /nl/ in tunnel (tonl)
- /rl/ in whirl (hwr1)
- /vl/ in weevil (wiyvl)
- /ksl/ in axle (eks1)
- /zl/ in hazel (heyzl)

Such a cluster as /gl/ in glow is misheard and erroneously reproduced as Navajo /dl/ in dlo, laughter; and /kl/ may be confused with Navajo /tl/ in tlah, ointment, just as English speakers reproduce /gl/ and /kl/ for the Navajo phonemes, as in the English speakers' mispronunciation of Navajo doott'izh, blue and tlah, ointment or t'oh, grass, as though they were doklish, kla and klo respectively.

The Affricates.

Both Navajo and English use the phoneme /ch/ (Č) as in English chin, Navajo chin, filth. The Navajo phoneme is more tensely produced and more heavily aspirated than its English correspondent, and is sometimes produced with /x/ as in chxin (an augmentive, depreciative form). In Navajo, /ch/ occurs only as a syllable initial and never in syllable final position. Drill may be necessary in some cases, especially where the phoneme occurs in final position or as part of a consonantal cluster, as:

- /ch/ in hitch (hich), catch (kECH)
- /cht/ in hitched (hicht)
- /chl/ in satchel (sECHl)

The Navajo phonemes /dz/, dzh (j), and /ts/ correspond roughly to the English consonantal clusters /dz/ as in adds (Edz), /dzh/ in gin (dzhin), and /ts/ in hits, except that articulation of Navajo /dz/ and /dzh/ begins with a Navajo /d/. To the ear of the English speaker the Navajo phoneme /dzh=j/ in jö, look, well, sounds almost as though it were cho, and this quality is carried over into English by Navajo learners. The Navajo pronunciation "dzhodzh" for English dzhodzh (judge) sounds almost as though it were "choch", and dzhin (gin) sounds like chin.
The affricates of Navajo occur only in syllable initial position, while the comparable phonemes and clusters of English occur in both word final and word-initial position. Contrastive drills of the following types should prove helpful:

/dzh=j/ - /tsh= ch/ in:

jill/chill; gin/chin; jeer/cheer  
ridge/rich; cadge/catch

/dz/ - /ts/ in:

pads/pats; leads/lets; Fred's/frets; beds/bets

When the phonemes /ch/ - /j/ occur intervocalically in English they are sometimes produced by Navajo learners with a preceding glottal stop as in the pronunciations bri'dzhes for bridges/breeches.

The Nasals.

The nasal consonants /m/, /n/, /ng/ are produced in English by cutting off the flow of air with the lips or tongue and forcing it through the nasal passages. /m/ is produced by closing the lips; /n/ is made by raising the tip of the tongue to the alveolar ridge; and /ng/ is made by raising the back portion of the tongue against the velum or soft palate.

Navajo /m/ and /n/ are comparable to the corresponding phonemes of English, except that /m/ is never syllable final in Navajo. Navajo learners often fail to articulate final /m/ fully - that is, they discontinue vibration of the vocal chords before opening the lips, with the result that such words as Sam and Rome sound as though they contained a nasalized vowel (Sé T, Rg T, in which /ŋ/ represents an unreleased phoneme.)

Drill should be provided to contrast initial and final /m/ as in:

mill/limb; male/lame; mate/tame

Likewise such clusters as the following may require attention:

mr/ in summer (somr)  
md/ in rammed (rmd)  
mz/ in rooms (ruwmz)  
m/ in camp (kmp)

nd/ in hand (hnd)  
nz/ in hens (henz)  
nr/ in runner (ronr)  
n/ in tunnel (tonl)

Holm (28) observes that Navajo children sometimes confuse /m/ - /n/, pronouncing "number" for number, "missionaries" for missionaries. He states that final /-m/ in English is sometimes replaced by /-n/, a phoneme that occurs in both syllable initial and final position in Navajo (sin, song; ni, you).

The English phoneme /ng/, as in song, is especially difficult for Navajo beginners. It is articulated in a back palatal position where, unlike the labial and dental phonemes, it cannot be easily demonstrated. Navajo beginners tend to identify /ng/ with /n/, or with vowel nasalization, to reproduce such English words as sing, seen as though they were siŋ or siin. Holm (44) reports replacement of /ng/ with the Navajo phonemes ʃ and /g/, also.

Contrastive drills involving /ng/-/n/-/g/-/k/ might be helpful.

thin/thing/thick/think (thingk)
hen/hang/heck/hank (hèngk)
sin/sing/sick/sank (sèngk)

Clusters such as the following may require special attention:

/ngd/ as in hanged (hèngd)
/nggr/ as in finger (finggr)
/nggrz/ as in fingers (finggrz)
/ngk/ as in bank (bèngk)
/ngks/ as in banks (bèngks)
/ngkr/ as in banker (bèngkr)
/ngkrz/ as in bankers (bèngkrz)
/ngz/ as in hangs (hèngz)

Inverted

This phoneme, represented by /r/ in such English words as ran, car, hurt does not occur in Navajo. It is produced in Midwestern American English much after the fashion of /l/ by raising the tongue toward the alveolar ridge, but without establishing contact. Compare: wall/war; wool/were; red/led. Navajos learning English may substitute /w/ for /r/ to produce bwain (bweyn) for brain (breyn); wed for red, kabolato for carburetor, and social "segōoldi" (for social security).

The simple phoneme may require contrastive drills of the following types:

rim/limb; rain/lane; row/low; rice/lice; right/light
brew/blue; bright/blight; broom/bloom; breast/blessed

Additional drills may be useful with reference to the numerous consonantal clusters of which /r/ forms an element, in English, as

/br/ in brown, blabber
/dr/ in drown, bidder
/fr/ in frown, offer
/gr/ in grown, auger

Holm, Wayne - Notebook Op. cit. supra
Holm suggests contrastive drills involving distinctions in meaning based on the presence or absence of /r/. Such might include:

too/true; tie/try; ache/rake; bake/break also:
one/run; wore/or/roar; will/ill/rill; way/ray;

The semi-vowels:

The semi-vowels /y/ and /w/ are generally similar in Navajo and English and occasion no learning problem. English /y/ in yes and /w/ in war are distinguished from their counterparts in Navajo yishááí, I am walking along, waa' beeweed, in that the back portion of the tongue is raised higher in producing the Navajo phonemes, resulting in the production of a weak /gh/ before /y/ and /w/.

Intonation and Juncture.

As we have noted, Navajo is a "tone-language" - one in which relative voice pitch is an inherent, integral feature of the morphemes, itself serving to distinguish meaning - cf. 'azéé, mouth/'azee', medicine; xadíidzih, you will speak/xadiidzih, we will speak; níí, you are/níí, he, she, is.

We have also noted, with reference to the vowels, that no Navajo word actually begins with a vowel - words that begin with no other consonant begin with the glottal stop ฆ. Thus, 'azee, medicine; 'ií, pine needle. This feature of Navajo reflects in the separation of word elements in connected speech which, in the pattern of English, would be closely joined. cf. English "why is Anna under an elm?" (hway-a-zee under-an-elm?) and Navajo 'Díí 'ashkii 'ayó 'ani'ííh", this boy is an awful thief. The Navajo utterance follows the pattern Díí/'ashkii/'ayó/'ani'ííh - not Díí 'ashkii 'ayó 'ani'ííh after the fashion of English, and as we have pointed out, the English speaker learning Navajo and the Navajo speaker learning English tend to carry over and substitute the rules of juncture governing their first language to the second language. As a result, the Navajo reproduction of "why is Anna under an elm" sounds "choppy" to the ears of the native speaker of English because the word elements are all separated from one another by an intrusive consonant ฆ - and the English speaker's reproduction of the Navajo utterance sounds garbled and indistinct because word elements are merged or joined in an "un-Navajo" manner.

Holm, Wayne - Op. cit. supra
Both languages utilize sentence inflections, contrasting stresses, and similar features, but the patterns governing such use differ radically.

In English, a rising voice pitch on the last word in the sentence *It was she?* indicates interrogation; *It was she with a low pitch on she changes the meaning to a mere statement of fact.* Navajo does not use this type of mechanism to convey the idea of interrogation. In the sentence *naaltsoos tsé bik'ídah siítsooz,* the sheet of paper is on the rock, the statement cannot be made a question, after the fashion of English, by changing the relative pitch level of *siítsooz* to *siítsoo'z* because (1) this technique is not used by Navajo and (2) the two syllables that compose *siítsooz* are inherently low in tone. Instead Navajo must use one or more interrogative particles to change the statement to a question. Thus: *Da' naaltsoo'siísh tsé bik'ídah siítsooz?*, *Is the piece of paper on the rock?* The particles *da'* and *-ish* signal a question.

In like manner, Navajo particles connote a large variety of other meanings which are generally conveyed, in English, by modifications in voice pitch attaching to one or more of the word elements that compose a sentence. Compare the level intonation pattern in the simple statement "this is a rock," with that in the exclamatory statement "this is a ro-o-ck!" (The superscript line represents the intonational profile.) The latter sentence, uttered with a peculiar sequence of intonations, changes the meaning from a simple statement of fact to one implying incredulity and surprise—the object had been mistakenly identified as something else and, to the astonishment of the person uttering the exclamation, it turned out to be a rock.

Similarly, stress patterns distinguish meaning in English, between such terms as *attribute* (the noun) and *attributive* (the verb); *conduct* (the noun) and *conduct* (the verb); *white-owl* and *white owl*, *long-bow* and *long bow.* There is a distinction in meaning between the statements: "He was shot with a *long-bow* (a type of bow)" and "He was shot with a long *bow* (a bow that was long)," or "I saw a red *bird* (a species of bird)" and "I saw a red *bird* (a bird whose color is red)." An analogy might be drawn between stress and intonation as the distinguishing features between *red* (the species) and *red* (a bird that is red) and tone as it functions to distinguish meaning in such Navajo words as *xadíidi'zh,* you will speak/*xadiidzih,* we will speak.

Navajo beginners read and speak English without the stress and intonation patterns that characterize the speech of native speakers of English. The English use of intonation and stress as devices to distinguish meaning is as foreign to Navajo as the tone and vowel length systems of Navajo are to English. The two systems are very difficult obstacles for either speech community in learning the other's language.

The stress and intonation system of English is very complex. (31)

(31) See *Language,* by L. Bloomfield; *An Introduction to Descriptive Linguistics,* by H. A. Gleason; and *An Outline of English Structure,* by Geo. I. Trager and H. L. Smith - Op. cit. supra. 50
GRAMMATICAL FEATURES

It becomes apparent that the Navajo and Anglo-American peoples differ from each other quite radically in terms of the frames of reference within which they look upon and react to the world in which they live. As separate cultural-linguistic communities, each is conditioned by a peculiar set of established habits of thinking, doing, and conceiving of the world—in short, each has its own peculiar world-view. Each, conditioned by its own habits, looks upon its own system as "logical and reasonable" in contradistinction to other systems which, if sufficiently divergent, appear downright outlandish and bizarre. Seen through the "cultural-linguistic window" of another society, the world scene is not only unfamiliar; it is out of perspective and out of focus. It is not, then, from this point of view, odd that the twin processes of (1) learning to participate in a second and highly divergent culture and (2) learning to speak the second language that lies at the very heart of the second culture should be fraught with so many difficulties; on the contrary, such difficulty is inherent in the fact that well established habits, cultural or otherwise are not readily modified.

Contrastive analysis of the target language and culture with first language and culture reflects essential differences in the world-view and other features which, it can be assumed, will constitute obstacles interfering in the learning process. And, of course, this is no less true of the Navajo and American Indian societies generally than it is of other cultural-linguistic communities, despite the fact that Indian groups are minority ethnic islands surrounded by the Anglo-American community.

A World in Motion. When we examine the culture and language of the Navajo people, we cannot escape the conviction that the Navajo world is one pervaded by a sense of motion—a sense of orderly progression in the succession of events, of which many types are, in fact, conceived as facets of a broader concept. These ideas represented as facets of a common concept, from the Navajo viewpoint, contrast sharply with their English counterparts wherein the same events are conceived as distinct and independent.

A detailed description of Navajo structure will be found in The Apachean Verb, by Harry Hoijer, Vols. 12, 14, 15 of the International Journal of American Linguistics; Navajo Grammar, by Gladys Reichard, Vol XXI, American Ethnological Society; The Navajo Language, by Robert W. Young and William Morgan, Published 1943, Bureau of Indian Affairs; and various publications of the Franciscan Fathers—notably Fr. Berard Haile—at Saint Michaels, Arizona.
From the Navajo point of view the various phases of the passage of a day are facets of a concept involving the Movement of a single roundish, bulky object (the sun, of course). A day begins with the emergence of the sun; it progresses through the phases of mid-morning, noon, and mid-afternoon, and eventually ends with the disappearance of the sun. The passage of a day, viewed in its entirety, is merely the progressive movement of the sun across the dome of the heavens.

Other events, such as coming into existence, follow a comparable course, starting with the beginning phases of becoming and following through to a completed phase after which a durative state of being is reached. The separate concepts become and be (3), from the English viewpoint, are facets of the same concept from the viewpoint of Navajo.

The concept denoted by English be (in position, at rest), as in "the hat is on the table", is expressed in Navajo by certain neuter static verb forms connoting that movement of an object, having ended, has resulted in a state of rest.

The net result is that the Navajo system, expressing specific concepts as facets of a broader general concept, derives a wide variety of verbal actions and states from a single verbal stem (or set of stems), whose meaning is variously modified by adverbial and other types of derivational prefixes. The facets are interrelated to the extent that they share a common verbal concept. The Navajo verbs expressing such concepts as give, lend, pick up, carry, set down, keep, be (in position) are all based on stems relating to movement (including the "Handling") of objects possessing certain physical characteristics.

For example, one such set of verbal stems is represented by /-'áá/, -'aah, -'g/ (progressive, imperfective and perfective mode forms respectively), relating to the movement or handling of a single roundish bulky object. Thus, using the perfective mode stem /-'g/: baa ní'g, I gave it to him (baa, to him; ní'g, I completed the act of moving it); ba'ní'g, I loaned it to him (=I completed the act of moving it to him on a temporary basis); ndii'g, I picked it up (I caused it to move up from a surface <ndi-); ní'ní'g, I set it down (nì', on the ground; ní'ní'g, I completed and stopped the action of moving it); séi'g, I keep it (I cause it to be at rest); si'g, it is (in position) (it is at rest); yish'áá (progressive mode stem -'áá), I am carrying it along (I am causing it to move along).

(3) Reference is only to one of several Navajo verbs relating to the concept "be" (the stems -leek, -leekh, -l~' , -l~ -progressive, imperfective, perfective and neuter).
As we pointed out above, the passage of a day begins with the emergence of the sun, an event described by a verbal prefix /xa-/; up out (as from a hole or from the far side of a hill); the day continues with the beginning phase of the sun's journey across the sky, described by the prefixes /dah/, off (as in start of, and /di-/ a verb prefix indicating inception or beginning of an action; subsequently, the sun reaches a mid-point in its journey, as indicated by the prefixes /'aini-, (3i) half, half way, and /-ni- a modal prefix indicating that the action has been (or will be) completed (to the point specified by 'aini-, in this instance). For the remainder of the day, the sun descends toward the western horizon, as indicated by the prefix /yas/, downward, and again the inceptive prefix /di-/; start; finally disappearing from sight beneath the western horizon, an event expressed with a verbal prefix /'a-/; in, out of sight. The journey viewed in its entirety, is expressed by a progressive mode form of the verb relating to the movement of a single roundish bulky object 'oo'aal, it is moving along=it is day - nizhoni'aal 'oo'aal, it is a nice day (literally "nicely something roundish, etc. is moving along"). In the verb forms relating to the passage of a day, the subject is represented by an indefinite third person subject pronoun /'a-/ (3i) someone, something (unspecified and indefinite). This pronoun is often reduced to when it is preceded by another vowel as in xa'doo'aal (=xa'adoo'aal). The following sketch diagrams the passage of a day, in terms of the succession of interrelated events that mark its passage.

TO BECOME, BE, PASS

 Verb stem: -'g, perfective mode form of a stem describing the movement or handling of a single, roundish, bulky object -(i.e. the sun, in the following forms).

(3i) The form used by most speakers is 'ainini'g, it is noon. In theory, the form should be 'aini'ni'g.

(3i) The indefinite pronoun form /'a-/ can represent either the indefinite subject or the indefinite object of a verbal action. If the movement of the sun is conceived as a free and independent action, /'a-/ in the related verb forms is the subject of the verb; if it is an action caused by an indefinite agent, in which case the verb relates to "handle", /'a-/ is the indefinite object of the action.
Prefixes: the following prefixes relate to position (of the sun) or stage of progression.

/xa-/; up out - from a hole or lower point.
/dah/; with inceptive verb forms dah is equivalent to English off (as in start off).
/a-/-', indefinite pronoun subject: something, someone.
/-di/-, inceptive prefix indicating beginning of an action.
/-'alni/- 'alni', 'half; as a verbal prefix its meaning is equivalent to half way.
/yax/; a postposition used as a verb prefix: downward.
/i-/ 'e-/; into an enclosure; out of sight.

'i'if'ẽ, it set, went down (something moved in out of sight)
\[\uparrow\]
yaa 'adeez'ẽ, it became mid-afternoon (something is on its way moving down)
\[\uparrow\]
'alnni'ẽ, it became noon (something moved half way)
\[\uparrow\]
dah 'adii'ẽ, it became mid-morning (something started to move along)
\[\uparrow\]
xm'i'if'ẽ, it rose, came up (something moved up out)
\[\uparrow\]

Aside from language, and perhaps as a result of its influence, other features of Navajo culture likewise suggest the ideas of motion, progression and the existence of things as facets of something much broader and more general. Thus the unfolding of the Navajo Creation story involves progression from a beginning in the lower worlds where Man is only a future intention to his final emergence and subsequent state of existence. Religious ceremonials begin with a preparatory phase and end with completion of a cycle of events resulting in lasting benefits. Living objects in nature, including perhaps Man himself, are conceived as duplicates - and conceivably facets - of perfect prototypes placed in the Sacred Mountains at the beginning to provide for the endless regeneration of life. And life merges with immortality in the reproductive process.
Motion has long been an aspect of the life of Navajos and other Athabascán groups, and the value placed on mobility in Navajo society is illustrated, not only by the past history of the horse on the Navajo scene, but also by the more recent history of the automobile and pickup truck. Whether or not the implication of motion in the Navajo language and that of Navajo culture have any real relationship is speculative, but the suggestion of such a relationship is present.

Whatever the case, conditioned by their respective cultural backgrounds, Navajos and Anglo-Americans may be expected to approach the description of such an activity as silversmithing in different ways. It is likely that an Anglo-American, assigned the responsibility of planning a documentary film on the subject, would begin with the silversmith at his bench, in the act of starting to shape an ornament. Or, at best, the subject might be introduced by a few scenes showing the physical lay-out of the workshop and the array of tools. Not so a Navajo charged with planning a similar presentation, according to Dr. John Adair. In this instance, conceived and planned by the Navajo director, the story begins with a scene showing the artisan's emergence into view as he comes toward the camera from a point on the crest of a hill - conceivably an introduction implying future intention. The film then proceeds methodically and progressively - "logically" against the background of the Navajo world-view - through a series of interrelated activities that finally result in the creation and subsequent existence of a silver ornament.

In the Navajo World the passage of time in general terms (as opposed to such segments of time as days, months and years), is expressed by a verbal stem that relates to the movement of celestial time-markers: -zhish, -zhilzh/ (Progressive and perfective mode forms respectively). An era or period of time begins with xaxoolzhish (xa-, up out) or with one of the inceptive forms xodeeshzhish, (it started - i.e. movement of celestial time-markers got under way) or xodideeshzhish (with reduplicated /-di/, the inceptive prefix), it started; it had its very beginning.

(36) Personal conversation with Dr. John Adair, Anthropologist and author of Navajo and Pueblo Silversmith.
(37) The same stems, with different prefixes, express the concept dance, as 'alzhish, he is dancing. There is, conceivably, something in common between the movement involved in dancing and that involved in the movement of celestial bodies. The latter, like the dancers, are constantly changing their position.
The era comes to pass in xoolzhiiizh, it came to be; the era is completed and in a subsequent static durative status in naxashzhiiizh, there was an era; the era ends in nixoolzhiiizh, a period of time came to a close; and the era extends into infinity in 'axoolzhiiizh. In a figurative sense a period of time reaches an end in bìláltxah daxashzhiiizh (bìláltxah, its tip end; dà-(h)-, up, at an elevation; xashzhiiizh, time moved and came to rest). The progressive passage of time, like the progressive passage of a day, is expressed by a progressive mode form xoolzhish, it (time) is in the process of passing (i.e. celestial time-markers are moving). The subject of the verb forms relating to the passage of time is /xo-, a third person pronoun representing time and space (something like impersonal it in English "it rains"). The following examples may prove helpful in understanding the Navajo concept:

Bilagáanaa naádéeg' nínádeinilt'ííhgo xodeeshzhiiizh (or xodeeeshzhiiizh). The White people began to raise corn (Bilagáana, white person; naádéeg', corn; nínádeinilt'ííhgo, they repeatedly bringing it (crops) to maturity; xodeeshzhiiizh, an era began; time began to pass.

Deesk'aazgo xoolzhiiizh, it became cold (weather) (deesk'aazgo, it being cold; xoolzhiiizh, an era came to be).

La'í náxáíidég' naabéexó ndaabsaahgo nixooolzhiiizh, the Navajo wars ended many years ago (la'í, many; náxáíidég', years ago; naabéexó, Navajos; ndaabsaahgo, they going about at war; nixooolzhiiizh, the era ended).

Naabéexó ndaabsaahgo naxashzhiiizh, there was a period during which the Navajos were raiders (ndaabsaahgo, they going about at war; naxashzhiiizh, there was an era).

Xaa nízhah nixooolzhish, how long will it take? (Xaa, how; nízhah, it is far (in distance); nixooolzhish, an era will end).

'Awálya góne' t'áálá'í nee ándidoozil shi'doo'niidég' k'ad bìláltxah daxashzhiiizh, my one month jail sentence is up ('awálya, jail; góne', inside; t'áálá'í, one; nee, with you; ándidoozil, a month will pass; shi'doo'niidég', what was previously said to me; bìláltxah to its tip; daxashzhiiizh, a period of time has progressed and became static.

Deesk'aazgo xoolzhish, we are in a cold spell (deesk'aazgo, it being cold; xoolzhish, an era is progressively passing).
In comparable manner, a rain storm is conceived as an event that moves along, arriving and finally passing away into the distance. Nikixonítxí, it started to rain → Naaxöáttxí, it rained (around-about over an area) yód' 'axöáttxí, it stopped raining (i.e., the rain storm passed away out of sight). And xooltxíííí, a progressive mode form describing the rain storm as something that is moving along (e.g., 'aadée' xooltxíííí, there comes the rain).

And similarly, xodooleél, it will come into existence → xaleeh, it is in the act of coming into existence → xazlígíí, it came into existence → xöli, it exists; there is.

By far the most important word class in the Navajo language is the verb, a fact which itself implies the relative importance of motion and action in the Navajo worldview. The structure of the Navajo verb is complex, embodying not only a verbal stem in one of several modal or aspectual forms, but also a complex of pronominal, modal, adverbial, post-positional or other types of prefixes. The structure of the verb, and the manner in which it is inflected, will be treated in greater detail in another section of the present sketch. At this point it will suffice to point out that grammatical distinctions expressed in the Navajo verb include mode - the manner in which the verbal action or state of being is conceived, and aspect - the kind of action involved. Navajo modes are the Imperfective (action which is incomplete); Perfective (action that is complete); Progressive (action described as being in progress); Usitative (action that occurs customarily or habitually); Iterative (action that is repeated); and Optative (action that is desired or which is described as potential). Navajo aspects include the Momentaneous (action begun and ended in a trice); Continuative (action which is described as having begun, but which is incomplete or which continues for an indefinite time); Semelfactive (action occurring one time); and Repetitive (action which involves a series of acts). The only tense form, as such, is one relating to the future. Although the time of an action is not otherwise of primary concern, from the Navajo viewpoint, the forms of the imperfective and progressive modes often require a present tense in English translation, and the perfective mode of Navajo translates as an English past tense. The following examples will illustrate the several modes and aspects. Note the variation in stem form (the last syllable of each verb complex), as well as in prefixed elements; mode and aspect are represented by special stem forms as well as by special elements prefixed to the stem. The stem is underscored in the following examples:
1. **Imperfective Mode:**
   - Momentaneous Aspect: leeh yish'aaáh (3), I am in the act of burying it in the ground.
   - Continuative Aspect: Naash'á (36), I am carrying it about (as a gun, knife, watch).

2. **Perfective Mode:** leeh yif'i (3), I buried it in the ground (i.e. I have completed the act of burying it).

3. **Progressive Mode:** yish'aaá (3), I am carrying it along.

4. **Usitative Mode:** leeh yish'aañ (3), I customarily bury it.

5. **Iterative Mode:** leeh másh'aañ (3), I repeatedly bury it.

6. **Optative Mode:** leeh ghósh'áát (3), that I might bury it.

7. **Semelfactive Aspect:** sétedé I gave him a kick.

8. **Repetitive Aspect:** Nánééá, I gave him a kicking (i.e. a succession of kicks).

9. **Future tense:** deesh'áát (3), I shall bring it.

(Most nouns in Navajo are either verbal stems which function as nouns, or they are forms derived directly from verbs).

The principles of motion and progression as features of Navajo culture in general and of the language in particular could be illustrated by a long array of examples, and concern with these principles appears to be a major point of difference between the Navajo and Anglo-American peoples as they conceive of the world in which they live; as they react to it; and as they express the essential nature of events. Each community has its own habitual frame of reference, which interferes in the process of second language/second culture learning.

Object Classification. The world about us is composed of objects which are distinguished from one another on the basis of a wide variety of essential physical characteristics. A tree, a mountain, a man and a rope are quite dissimilar in appearance—a fact which is taken for granted when the world scene is viewed through the Ango-American cultural-linguistic window. But when the same scene is viewed through the Navajo cultural-linguistic window it becomes one in which sharp notice is taken of the distinguishing features attaching to the objects that compose it.

(30) Reference is to a single, roundish bulky type of object.
Terms expressing certain types of action affecting natural objects include not only the type of action involved, but also a reference to the type of object that is subject to the action. In other words, the Navajo World is one in which objects are classified on the basis of certain common features which, as a group, distinguish them from other classes. Verbal forms relating to the movement, location and even the mastication of objects require distinctive verb stems expressing, not only the type of action involved, but the type of object as well.

Movement of objects, (including their free independent movement; falling, dropping) and handling, involves the following classes, each distinguished by a separate group of stems:

Class 1. A single, roundish, solid or compact bulky object (of the general type represented by a rock, book, bottle, hat, coin, mountain, chair, the sun).

Class 2. Non-compact or fluffy material (tangled hair or string, wool, loose hay, brush, clouds, fog).

Class 3. A single, slender stiff object (a pencil, pole, cigarette, rod).

Class 4. Mushy substance, viscous matter (mud, mortar, mush, a "beat-up" amorphous old hat).

Class 5. A single, flat flexible object (one sheet of paper, a hide, a blanket).

Class 6. Anything bundled together to form a pack, (a burden or a load, including a body of water).

Class 7. A single, slender flexible object (a rope, string, hair, snake, strip of bark) - and any object whose characteristics are unknown to the speaker.

Class 8. A plurality of objects of such size and number that the quantity is readily discernible; several separable or countable objects.
Class 9. A plurality of objects of such size and number that the quantity is not readily discernible; a profusion of objects (such as seeds, puppies, houses composing a town).

Class 10. Anything contained in an open vessel (a dish, pail, basket).

Class 11. A single animate object.

A rolling movement is expressed by two separate stems, one of which refers only to a hoop or wheel-like object (yibas, it is rolling along), and the other of which refers to a spherical or tubular object (yimas, it is rolling along).

The action of chewing (or, by extension, eating) requires the choice of one of six verb stems which classify the object as:

1. hard (corn, ice, candy, gum) (yish'aał, I am chewing it);
2. herbs; leafy matter (lettuce, grass, hay, leaves) (yishchozh, I am chewing it);
3. meat (yishghal, I am chewing it);
4. a roundish, bulky object (apple, loaf of bread, sheep's head) yishkeed, I am chewing it);
5. mushy matter (oatmeal, mush, jello) (yists'ééh, I am chewing it);
6. a plurality of separable objects (berries, eggs, snow, sheep) (yishdeel, I am chewing them).

Navajo verb forms corresponding to English give, and most forms corresponding to be (in position or location) are formed with the series of classifying verb stems relating to the handling of an object or objects - that is, movement of the object or objects as the result of continuing physical contact by a causative agent.

From the Anglo-American viewpoint, the concepts give and be (in position) are among the simplest terms in the language, and they are to be found in the earliest types of school primers and texts.

(39) With an indefinite third person object pronoun, this verb translates graze with reference to an animal. Thus, dibé 'alchozh, the sheep is grazing (dibé, sheep; 'a-, something indefinite and not named; -lchozh, he is eating it (leafy object). (cf. chxosh, a term used to imitate a splashing sound.)

(40) Some, like sikaad, it is (in position), with reference to a tree or bush, describes the bushy appearance of the object. Literally, "it bushes". Similarly, sidá, siké, naxáaztxá, translate English, he, they two, and they (two or more) are (in a sitting position); sizí, he is (in a standing position); sitxį, shitxéézh, shijié', he, they, two, they (more than two) are (in a reclining position); shizhoozh, they (slender stiff objects) are (lying) in a position parallel to one another.
From the Navajo viewpoint, a multiplicity of forms are required to express the same ideas, because the object classes require different verbal stems. Thus:

<table>
<thead>
<tr>
<th>Give it to me (41)</th>
<th>It is; they are</th>
<th>Object Class</th>
</tr>
</thead>
<tbody>
<tr>
<td>Shaa · ni'aa'h</td>
<td>si'ág</td>
<td>Single, roundish bulky.</td>
</tr>
<tr>
<td>Shaa · níjool</td>
<td>shijool</td>
<td>Non-compact matter.</td>
</tr>
<tr>
<td>Shaa · nítxít'h</td>
<td>sitxé</td>
<td>Single, slender stiff.</td>
</tr>
<tr>
<td>Shaa · nítłéch</td>
<td>sitłéé'</td>
<td>Mushy matter.</td>
</tr>
<tr>
<td>Shaa · nítsoós</td>
<td>sitłsooz</td>
<td>Single, flat flexible.</td>
</tr>
<tr>
<td>Shaa · n文昌</td>
<td>sígí</td>
<td>Load, pack, burden.</td>
</tr>
<tr>
<td>Shaa · níjé</td>
<td>sítá</td>
<td>Single, slender flexible.</td>
</tr>
<tr>
<td>Shaa · nín'fi</td>
<td>síníl</td>
<td>Plural separable.</td>
</tr>
<tr>
<td>Shaa · níjaah</td>
<td>shijaa'</td>
<td>Plural-profusion</td>
</tr>
<tr>
<td>Shaa · nifkaah</td>
<td>sítée</td>
<td>Anything in open vessel.</td>
</tr>
<tr>
<td>Shaa · nítxeeh</td>
<td>sitłéé(42)</td>
<td>Single animate.</td>
</tr>
</tbody>
</table>

In like manner, other concepts relating to the "handling" of an object, or to its movement and state of rest, are expressed in a multiplicity of forms sharing comparable action connotations, but differing as they distinguish the object classes. There is no one term to express give, be (in location), nor by the same token is there any one term to express such concepts as bring, take, put, place, carry, hang up, bury, save, keep, and many more forms derived as facets of a common verbal idea - viz. The handling of an object or objects.

As noted above, the concept handle connotes movement of a type produced by continuing contact of a causative agent with the object or objects moved. Further, the rate of movement is unspecified (as slow or fast), and might be classed as a "usual", "leisurely" or relatively slow rate. This is generally true whether the movement is caused by an agent or, in some cases, is free and independent (some stems relating to the handling of an object are also used in forms expressing the free movement of the same type of object; and in some of the latter instances the rate of movement may be relatively swift).

(41) Shaa, to me; ni'aa'h, you are in the act of moving or bringing it = Give it to me!
(42) When two animate objects are involved, the form sítée, they two are (in a reclining position) is required; and when more than two are involved, the form naaxáaztxé'.
When an object moves freely, its movement may be swift as when it falls or is dropped or thrown, and this fact often requires a distinct stem, in Navajo. Even the fact that its free movement is caused by initial action of an agent may require a separate stem; or the stem corresponding to a particular class of movement may connote a resulting visual pattern (that of spilled milk on a surface, for example), the sound it makes as it strikes a surface (in falling), or a flowing movement.

The classification of objects in terms of their physical characteristics and the manner in which they undergo movement is so important in the Navajo World-view that further discussion seems to be justified at this point.

The following table identifies the stem forms corresponding to the various classes of objects in relation to various types of movement. Only the Progressive, Imperfective and Perfective mode forms of the stems are given, in that order, by way of indentation.

<table>
<thead>
<tr>
<th>OBJECT CLASS</th>
<th>HANDLE (Move slowly)</th>
<th>DROP; THROW (Move swiftly)</th>
<th>FALL (Move swiftly and freely)</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Bulky</td>
<td>'ááì, 'aah, 'á</td>
<td>-áanii, -áne', -áne'</td>
<td>-lt'síí, -lts'iíd, -lts'id</td>
</tr>
<tr>
<td>2. Non-</td>
<td>-ajol, -ajool, -ajool</td>
<td>-ajol, -ajool, -ajool</td>
<td>-jo, -jool, -jool</td>
</tr>
<tr>
<td>compact</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>3. Slender</td>
<td>-txíi, -txííh, -txé</td>
<td>-á't'eel, -á't'e', -á't'e'</td>
<td>-kps, -kégs, -kééz</td>
</tr>
<tr>
<td>stiff</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>5. Flat</td>
<td>-atsos, -atsósos, -atsoz</td>
<td>-'al, -áád, -'ah</td>
<td>-lah, -nééh, -na'</td>
</tr>
<tr>
<td>flexible</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>6. Pack,</td>
<td>-gheé, -gheeh, -ghí</td>
<td>-gheé, -gheeh, -ghí</td>
<td>-lxéah, -lxééh, -lxéézh</td>
</tr>
<tr>
<td>load</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>7. Slender</td>
<td>-léék, -lé', -lá</td>
<td>-ldi, -ldéel, -ldéél</td>
<td>-di, -deel, -déél</td>
</tr>
<tr>
<td>flexible</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>8. Plural</td>
<td>-nil, -nifí, -nil</td>
<td>-nil, -nifí, -nil</td>
<td>-dah, -déén, -dee'</td>
</tr>
<tr>
<td>separable</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>9. Plural</td>
<td>-jih, -jáán, -jaa'</td>
<td>-káal, -kaad, -kaad</td>
<td>-dáas, -dáas, -dáás }</td>
</tr>
<tr>
<td>profuse</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>10. In open</td>
<td>-kááí, -kaah, -ka</td>
<td>-káal, -kaad, -kaad</td>
<td>-káal, -kaad, -kaad</td>
</tr>
<tr>
<td>vessel</td>
<td></td>
<td></td>
<td>-goh, -geeh, -go'(-goh) }</td>
</tr>
<tr>
<td>11. Animate</td>
<td>-ltxééi, -ltxeeh, -ltxe</td>
<td>-á't'eel, -á't'e', -á't'e'</td>
<td>-tlísh, -tlísh, -tlízh</td>
</tr>
</tbody>
</table>
Class I.- A single roundish bulky object:

The type of movement and the behavior of objects involved in various types of movement, as well as the class of the object, are features of the meaning of the verb stems listed above.

The concept to lower is expressed with an appropriate handle stem to which an adverbial element /ná-/ downward, is prefixed. The meaning becomes "to handle downward" in which "to handle" has the meaning of "to move by continuing physical contact between the agent and the object". In lowering something one retains his grip on it throughout the movement. Thus: tsé nåá'g, I lowered the rock.

But if one drops an object, its subsequent movement is free and independent of the causative agent who initiated the movement, and some verbs require a different stem connoting peculiar features of the movement which ensues. A roundish bulky object moves swiftly and heavily when dropped, tossed or thrown, and this characteristic of the movement is expressed by the stem shown under II in the table above. If the object merely moves swiftly downward, the prefixed element /ná-/ is used as in the case of To lower. Thus: tsé nåá'ne', I dropped the rock.

If the swift movement of the object is expressed as upward or horizontal, different prefixes are required before the stem, and different English verbs - quite unrelated to one another - are required to express the resulting movement. Thus: Tsé yö' 'fíáne', I threw the rock away or I lost the rock (tsé, rock; yö', away into the invisible or unknown (literally, I caused the rock to move swiftly into an unknown or invisible place); tsé yín’fíáne', I threw a rock at him (literally, I caused the rock to move swiftly against him); nán'fíáne', I pounded it (literally, I caused something roundish and bulky to move swiftly and repeatedly). One's head is also in the nature of a single roundish bulky object, and one can move it either at a leisurely rate or swiftly. Thus: yay 'aneesht'ā (based on the "handle" stem /ā/ plus a stem classifier element /-d-/ = /-t'ā/), I stuck my head in (as through an open door) at a leisurely rate of speed; in contrast with yay 'aneeshne', I stuck my head in (and took a quick look) quickly; díój' 'a'gágá' xanoolne' dóó nanesne', the prairie dog stuck his head up quickly out of his hole and took a quick look about (díój', prairie dog;
'd'gá', hole; -déé', from; xanoolne', he caused swift movement of something roundish and bulky up out [na-, up out]; dóg, and; naneesne', he caused swift movement about of something roundish and bulky, [na-, about; around]. In the latter example the prairie dog initially moves his head swiftly up out (of the hole), and he subsequently moves it swiftly about.

When a roundish, bulky object falls, its movement is free and independent, but in addition it crashes to the surface against which it falls. The stem relating to the falling of an object of the class in reference is probably cognate with ts'id, a term which imitates the thudding or crashing sound produced by falling. Compare ts'id yiists'gá', there was a crash or thud; it went crash! (yiists'gá', there was a sound; a sound was heard). Tse nátals'id, the rock fell (downward); the rock crashed down.

The free movement of a single roundish bulky object (or, in some cases, a plurality of such objects), is expressed by a variety of verbal forms, including the stem that describes the action of falling. Tse yiists'iá, the rock is sailing along (as when it is thrown through the air (yiists'iá, progressive mode form with /-l-/ instead of /-a-/ stem classifier). Other forms include:

Tse yimas, the rock is rolling along (tsé, rock; yimas, (Prog.) it is rolling along -mas, roll-with reference to a spherical or tubular object).

Tse yighis, the rock is slithering along (-ghis, (Prog.) referring to a turning movement).

Tse yildoh, the rock is wafting or floating along through the air (at a seance!) (-ldoh, (Prog.), refers to the slow wafting movement of any class of object).

Tse tseáá'dóó xadah 'ífyá, the rock came down from the edge of the cliff (tsé-, rock; -dáá'-, lip, edge; -dóó, from; xadah, downward; 'ífyá, it came. The stem/-yá/(P.) refers to the movement of a single animate or a roundish bulky object - at an unspecified or slow (walking) speed. (Cf. 'ashkii yah 'ífyá, the boy walked in).

Tse xadah 'íízázh, the two rocks came down (-'zázh, (P.) describes the movement of two animate or bulky objects at an unspecified, leisurely (walking) rate. (Cf. 'ashiiké yah 'íízázh, the two boys walked in).
Tsé xadah 'eekai, the more than two rocks came down (-kai, (P.) describes the movement of more than two animate or bulky objects at an unspecified, leisurely (walking) rate. (Cf. 'ashiiké yah 'eekai, the more than two boys walked in.))

Shit yiga₁, the sun is moving along (-g₄iI(Prog.) refers to the movement of a single animate or bulky object at an unspecified, leisurely (walking) rate. (Cf. 'ashiiki 'atxiingóó yigáá, the boy is walking along the road.)

Class 2. Non-compact Matter.

With reference to non-compact matter the same stem is used regardless of whether the matter involved is handled or whether its movement is free and independent of a causative agent, although the insertion of the /-1-/ stem classifier in the handle-drop forms makes them transitive (/-1-/ reflects the fact that the action is caused by an agent who acts on the object to cause its movement). The stem /-jo₁/ is primarily concerned with the physical characteristics of the object, rather than with the type of movement involved, and matter of the type in reference (wool, loose hair, tangled string) is not normally capable of swift movement because of its large bulk and proportionately light weight. Thus 'aghaa' náájool, expresses either I lowered the wool or I dropped the wool. Likewise, 'aghaa' yóó 'i'ifjool, I carried (handled) the wool away; or I threw the wool away (or lost it). And when the movement is not expressed as caused by an agent - when it is independent - náájool expresses the idea that the wool fell (downward) (moved downward of its own accord).

The progressive mode form yijo₁ expresses the free independent movement of non-compact matter in such a context as 'aghaa' yijoož, the wool is moving along (as when it moves along through the air or on a surface, propelled by the wind). Likewise, náájool, it arrived (non-compact matter)-as in dííša' 'aghaa' xáágé' náájool, where did this wool come from? (díí-, this; -sha interrogative particle; 'aghaa', wool; xáá-, where; -ágé', from; náájool, it arrived).

The movement of clouds and fog may also be expressed by the stem relating to non-compact matter. Thus, K'os jóxona₁ái yich'ágéh 'i'ifjool (43), a cloud moved across the sun and obscured

(43) The pronoun subject is /'a- > 'i-/, indefinite something or some one and the /-'iİ-/ of -'i'ifjool, includes the prefix /'a-/, into, plus the perfective mode prefix /-yi-/.
it (k'os, cloud; jóxonaa'áí, sun; yich'égí, obstructing it; in its way; 'i'iifjool, it fluffy non-compact matter moved). 'Ahí dah 'oojol, it is foggy; the fog is hanging in a lumpy mass ('ahí, fog; dah, up; 'oojol, something (fluffy and non-compact) is moving along). The particle dah, with forms of the progressive mode, expresses a suspended state - compare dah 'oobahs, he is parked (in a wagon or automobile); dah 'oodlíjí, he is on a drinking spree; dah 'oo'néá, family group - literally those who pause to camp together. (The use of dah to express such a suspended state is not limited to the progressive mode.)

Class 3.-A single slender stiff object.

When an object of the class in reference is lowered or otherwise handled, the stem connotes continuing physical contact by the causative agent. Thus: tsin naatxa, I lowered the pole; tsin yishtxiiìi, I am carrying the pole along.

However, if the movement involved is initially caused by an agent, but does not require continuing physical contact, the stem shown in column II of the table is required. Thus: tsin náát'e', I dropped the pole. Compare the use of the same stem in such forms as yah 'ífát'e', I put him in (jail, a corral, for example) (yah, into an enclosure; 'ífát'e', I caused him to move in); yóó 'ífát'e', I tossed it away; I lost it; ch'éénfát'e', I released him (ch'éé-< ch'i-, horizontally outward; →ná-, back again: chí-<ná=ch'éé-, a combined form -ífát'e', I brought him quickly= I brought him back out); 'ats'áánfát'e', I fired him ('ats'áá-, separated from something i.e. from his job ; {yamaasht'eeh, I am tossing it up into the air; máaat'e', he moves about hopping; he hops about {independent movement; the causative-transitivizing */-1/- stem classifier is not included in this form because the subject of the verb itself undergoes the action). This form may give a clue to the nature of the movement involved in other forms, as one that is halting, balky or clumsy- one in which the object is hard to manage.

(The same stem is used with reference to a single animate object (see class II below). Contrast the connotations of 'ashkii ch'ínát, I took (carried) the boy out ( 'ashkii, boy; ch'ínát, I moved, handled, him horizontally out), and 'ashkii ch'ínát'e', I put the boy out; or 'ashkii xanaát', I carried the boy back up (as from a cellar), and 'ashkii xanaát'e', I took the boy back out; I exhumed the boy.)
When a slender stiff object moves independently, as in the case of its falling or flying through space, the stem shown in column III of the table is required. The latter appears to describe the swift, free motion of an object of the class in reference. Thus: k'aa' náakéez, the arrow fell (k'aa', arrow; náakéez, it moved quickly downward); k'aa' yóč' 'ííkéez, the arrow got lost (yóč', an unknown or invisible place; 'ííkéez, it moved away into); k'aa' yíkés, the arrow is flying along through space (yíkés, it is moving along); ápésh' k'aa' xáádágyé' níkéez, where did this arrow come from? (ápésh', interrogative particle; k'aa', arrow xá-, where; -déé', from; níkéez, it arrived); k'aa' yánásko's, the arrow goes up into the air (as when it is tossed or shot). Compare k'aa' yánásht'eeh, I am tossing the arrow up into the air (i.e. causing its swift free upward movement). A slender stiff object is described as turning over or revolving by the term (Imperfective mode) náxooktó which, in turn describes the apparent movement of the Big Dipper and by extension functions as the Navajo noun for north.

Class 4-Mushy or viscous matter.

The type of movement involved in handling and in dropping mushy matter is not differentiated by separate verbal stems. The stem /-tioh/ is primarily concerned with the physical characteristics of the object, rather than with the type of movement involved. Thus, xashtá'ish nástásé', I lowered or dropped the mud (xashtá'ish, mud); xashtá'ish yóč' 'íításé', I carried (handled) the mud away; I tossed the mud away; or I lost the mud.

However, when mushy matter falls or moves independently it is characterized by a slow, creeping-flowing motion. (Visualize a blob of wet concrete or mortar when it falls and lands on a surface.) Thus, xashtá'ish nástxegzh, the mud fell (downward); shich'ah yóč' 'íítica'xegzh, my old battered hat got lost (shich'ah, my, hat; yóč', into an unknown or invisible place; 'íítíxegzh, it moved away - the connotation "old battered" is implied by the type of movement involved in which a soft, amorphous old hat, figuratively speaking, "flows" away like a viscous liquid or a blob of soft putty); xashtá'ish yíxegh, the mud is flying along through the air (as when it is thrown); ápésh' xashtá'ish xáádágyé' níxegzh, where did this mud come from (níxegzh, it arrived).
When matter of the type in reference moves on the surface of the earth, it "oozes". This movement is described by a variant form of the same stem without the stem classifier /-i/-, and with different prefixes. Thus, xashtl'ish nooghfsh, the mud is oozing along; xashtl'ish naanánooghfsh, the mud is oozing around (after the fashion of flowing lava, for example). (Compare 'ashkii naanánooghfsh, the boy is wobbling around.)

The act of irrigating a field involves causing water to flow slowly (ooze) around. Thus: naadá' bitxah na'nishxqegsh, I am irrigating the corn (naadá', corn; bi-, it; -txah, among; na-, about; around; ∨ = 'a-', something indefinite or unnamed as the object of the verbal action [the water, of course]; -nishxqegsh, I am causing a slow-flowing or oozing movement) (i.e. I am causing something to flow slowly - meander - about among the corn plants.)

The rapid free flowing movement of a thin, nonviscous liquid is otherwise described, by such forms as:txó yigoh, the water is flowing along (Cf. 'ashkii yigoh, the boy is falling [along] - in mid-air); txó ülì, The water is flowing (in a line, as a river or creek); txó yinah, the water is flowing along in a sheet; a sheet of water is flowing along (See class 5 III below with reference to the free independent movement of a single flat flexible object); txó dzooxal, the water is rushing along in a torrent (Cf. xal, club; nanishxal, I am beating him with a club; 'abidzii'xal, I batted it [a ball] off into space - I batted a fly-ball) (dzooxal= -dz-, jì-, off into space + progressive mode form of a verb meaning to move along in a beating or batting, battering fashion).

Class 5-A single flat flexible object.

The handling and the free movement of an object of the class in reference are distinguished by three separate stems. Thus, naaltssoos náaltssooz, I lowered (handled downward) the sheet of paper (naaltssoos, sheet of paper or book if referred to by the stems describing a single roundish bulky object); naaltssoos yishtsso, I am carrying the sheet of paper along (Cf. naaltssoos yish'áá', I am carrying the book along - the stem /-áá/ connotes that the object is a roundish bulky thing.)
But when the movement is initiated by a causative agent and is thereafter free and independent of continuing contact with the agent, as in dropping or tossing it, the stem listed in column II of the table of stems is required. Thus, naaltsoos náá'ah, I dropped the sheet of paper; naaltsoos yóó' 'íí'ah, I tossed the sheet of paper away; I lost it.

When the movement of such an object is free and independent, without reference to a causative agent, the stem listed in column III is required. This stem refers to the free movement of a sheet-like object. Ttsx yinah, the sheet of water is flowing along (txs, water); txs 'altsø yóó' 'ffín', the water all ran off-as from a watershed ('altsø, all; yóó', away into an invisible or unknown place; 'ffín', it flowed away); naaltsoos náá'na', the sheet of paper fell (downward); naaltsoos yinah, the sheet of paper is flying along through the air (as when it is propelled by the wind).

Compare a related stem with a /-d-/ classifier (which becomes /-n/ before /-n/), in 'aweé' naa'na', the baby is creeping or crawling about; and tsn baah xasis'na', I climbed the tree (tsin, tree; baah, along side it; xa-, up; - sis'na', I crawled). In both instances movement of something flat (the flat surface of one's body) is implied.

With an /-l-/ stem classifier a state of suffering (as from a disease) is derived. Jéé'ádií bidoon', he is suffering from the tuberculosis (jéé-, lungs; -ádií, they are dwindling away= tuberculosis; bidoon', he is suffering from it).

Class 6-A pack, burden or load.

Like non-compact and mushy matter, the handling and free movement of a pack or load (when initiated by an agent) are not distinguished. Thus, xéé yaágíí, I lowered or dropped the burden. Xéé yaishxééí, I am carrying the load or burden along.

But the free movement of a pack or burden in falling (and landing on a surface) shares the flowing characteristics of mushy matter. It is a soft, amorphous mass. Thus, xéé yaál-xáflgh, the pack fell (downward) (xéé, pack; burden); xéé yóó' 'tíflxáflgh, the pack got lost ('tíflxáflgh, it oozed away); diíshá' xéé xáángí 'níflxáflgh, where did this pack come from (níflxáflgh, it arrived with an oozing or slow-flowing movement).
Class 7-A slender flexible object.

The "handling" and free movement of a slender flexible object are distinguished by two separate stems although, with reference to its free movement, the same stem applies whether or not such movement is initiated by a causative agent. Thus tóóci náalá, I lowered the rope (tóóci, string; rope); tóóci yóó' 'ílélé, I carried the rope away.

The swift free movement of an object of the slender flexible class is described by the stem listed in column III. If the movement is expressed as caused by an agent, as in drop - the stem classifier /-l-/ is inserted to make the verb transitive; if the action is not expressed as one initiated by an agent, the classifier /-l-/ is omitted. (Compare Class 2 stems, relating to non-compact matter.). Tóóci nándélél, I dropped the rope (downward); tóóci nándélél, the rope fell (downward); tóóci nándélél, the rope fell (downward); tóóci yóó' 'ífíidélél, I tossed the rope away; I lost the rope; tóóci yóó' 'ífíidélél, the rope got lost; (i.e. it moved away) diisih ta'óó ci xándélél' ydéél, where did this rope come from (ndeél, it arrived)?

Compare the same stem in ma'ìì bitsoo' xándélél, the coyote's tongue is hanging out (ma'ìì, coyote; bi-his; -tsoo', tongue; xándélél, it moved out).

One moves his own body after the manner of a slender flexible object in jooa biís dédélél, I caught the ball (jooa, ball; biís, with it; in company with it; dédélél, I am under way moving like a slender flexible object); biís ninifidélél, I raped her (biís, in company with her; I moved down to the ground in the manner of a slender flexible object). The movement of plural animate objects is expressed by /-diklin such forms as diné a'myóó' 'ífíidélél, some of the people moved away (diné, people; a', some; yóó', away to an unknown or invisible place; 'ífíidélél, they moved into); chinifidélél, the deer moved out (bįi, deer; chinifidélél, they moved out - as from a canyon).

Class 8-Plural separable objects.

The "handling" and "dropping" of plural separable objects are expressed by the same stem. Thus, mósi yázhí náánil, I lowered or dropped the kittens (mósi, cat; yázhí, little); mósi yázhí yóó' 'íninil, I carried the kittens away; or I tossed away (lost) the kittens.
This stem is concerned primarily with the severality of the objects moved, rather than with the nature of the movement involved. And, as might be expected, there are many situations in which the choice of /-nil/ in preference to /-jih/ (See class 9 below) is arbitrary.

When plural objects fall or move independently of a causative agent, their action may be conceived as one which is individual or collective - each of a group or mass of plural objects or the entire group or mass as a unit. (See /-jih/, Class 9 below.) The stem /-nil/ refers to several objects, rather than to a large profusion of objects, so the emphasis in describing their free movement is on their separability and individuality. Consequently, the stem /-dah/ generally corresponds to /-nil/. Thus, nanídee', they fell (downward); yíní biîh niidee', we became worried or anxious (yíní, mental anxiety; biîh, into it; niidee', we moved); díshé' látsíi náádée' ninídee', where did these bracelets come from? (látsíi, bracelet; ninídee', they arrived). The receipt and disbursement of money (income and expenses) are expressed by terms referring to the movement of money to or away from one, as in bësø shaà xineezdee', I received an income (bësø, money; shaà, to me; xineezdee', they (coins) fell or came one after the other or time after time; bësø sîts'áninídee', it cost me money (sîts', away from me; -ninídee', they (coins) moved) or bësø sîts'ánídée' (nídée', they moved) (see class 7 above).

Class 9-A profusion of plural objects.

The movement of a profusion of plural objects is expressed by several stems referring either to the continuing physical contact involved in their movement ("handle") or to other features involved in or resulting from their action, such as the resultant visual pattern, or the nature and behavior of the mass of plural objects involved. Thus, mósi yázhí náájaa', I lowered the (armful of) kittens; mósi yázhí yóó' 'ifjaa', I carried the (armful of) kittens away.

When the objects are small and of such nature that they characteristically roll or spread out over a surface, in falling, a stem is used which relates to the spreading pattern that results when they are dropped. A handful of pebbles or beads spread out over the surface of the floor when they are dropped. Thus, máázo náákaad, I dropped the marbles (a handful or large number of marbles which rolled in a spreading pattern on the floor)
(máazo, marble; náákaad, I cause spreading movement downward). If the number of marbles were small (three or four, for example) the verb would properly be náánil, I dropped them (several objects). Likewise, máazo yódí 'ífíkaad, I tossed away or lost the (mass of) marbles.

The concept of flatness or spreading is also apparent in other verb forms based on the stem /-ka/. Thus, ŋdííkaad, I slapped him (struck him with a flat thing - "flatted" him); dibé nanishkaad, I am herding sheep (díbé, sheep; nanishkaad, I am causing them to spread about—when sheep are herded it is a spreading movement, from the Navajo viewpoint). When one knocks over a wall, hay stack, stack of dishes or even a house, the result is a spreading pattern, as in náa'ííkaad, I knocked it over (a collection of plural objects). In the form xastiin maanánookal, the man is sitting and nodding or drooping about (as when sleeping, or in a drunken stupor) (xastiin, man), the action involved is described as a spreading movement. And in the form shagh náxókaad, I was disappointed, the literal meaning is that a mass of plural objects fell down and spread out on me (shagh, beside me; náxókaad, spatial it or they fell down spreading). Compare also tšin sikaad, the tree is (in position) (tšin, tree; sikaad, it stands "bushing"; it "bushes" - i.e. it stands in a spreading fashion like a bushy object).

When a profusion of plural objects fall, the mass may be described as heavy, or the falling movement may be expressed with emphasis on the action of the individual components of the mass or group of objects. When emphasis is on the fact that the mass of plural objects is heavy, the stem /-dás/ is used; when emphasis is on individual movement of the components of a mass of objects the stem /-dáh/ is used.

From the Navajo viewpoint dirt, snow and water are conceived as masses of plural objects; dirt is composed of particles; water is made up of drops; and snow is made up of flakes. When snow falls during a snowstorm, the movement is one relating to a profusion of flakes, so yás nanííde', snow fell (yás, snow; nanííde', they (flakes) fell or moved downward), but when a mass or pile of snow falls, as from a roof, it is a collective heavy unit, so yás nááldááx, the pile of snow fell downward. Similarly, xooghan ˈaxiíh nááldááx, the hogan caved in (xooghan, hogan; ˈaxiíh, into each other; nááldááx, they (the component parts) fell or moved downward as a heavy mass. Compare yás, weight; nísdaaz, I am heavy.
Class 10-Anything contained in an open vessel.

In the sense of "handle", the stem /-káa/ refers specifically to the fact that the material involved is being moved in a container by continuing contact of a causative agent. Thus, 'atxoo' náaká, I lowered the (bowl of) soup; 'atxoo' yóó 'ííká, I carried the (bowl) of soup away.

But when a container of soup or other matter moves freely, as in falling or being dropped, the spreading action described in reference to the stem /-ji/ (class 9 above) results as the contents spreads over the floor or other surface. Soup, barries and other matter behave in this manner. The concept drop is expressed by a form which includes the transitivizing stem classifier /-à-/ indicating that the downward movement resulting in spreading of the matter involved is caused by an agent; when the matter is described as moving in similar manner, but of its own accord, the stem classifier is omitted. Thus, 'atxoo' náakaad, I dropped the soup; 'atxoo' náakaad, the soup fell; 'atxoo' yóó 'ííkaad, the soup moved away; got lost; 'atxoo' ná'ííkaad, the soup toppled over; díhdáx, 'atxoo' xáddé' yíká, where did this soup come from (yíká, passive voice form-it was brought)?

Class 11-A single animate object.

The 'handling' of a single animate object is based on a stem that, without the /-à-/ stem classifier expresses the concept lie down, recline. The movement involved would thus appear to be of a type involving the reclining position of the object, and position is an aspect of the meaning of the stem. Thus, 'awéé' nááté', I lowered the baby ('awéé', baby); 'awéé' yíshtxéé, I am carrying the baby along; niátéx, I brought him; and nécí, I laid down; sétéx, I am in a reclining position.

When an animate object is dropped, it behaves like a slender stiff object (see class 3 above), so 'awéé' nááté', I dropped the baby; 'awéé' náafíté', I knocked the baby over.

When an animate object (or objects) falls, the ensuing movement results in a "crash" of a type produced by a body, or a falling timber. This sound is imitated by tliigh, as in tliigh yísts'í', a crash was heard; a heavy thud was heard. This sound and the form which mimics it may be the basis for the verb stem /-tlish-/, describing the free (falling) movement of an animate object. Thus,
Falling also involves a free flowing (or flying) movement, and the falling of an animate object (or objects) may be expressed with relation to the flowing movement involved instead of the resultant sound when he or they strike the surface. In this event, with emphasis on the type of movement, the stem /-goh/ is used. Compare txó yigoh, the water is flowing along (txó, water); txó xágó', the water flowed up out (as from a pipe or other vertical outlet; 'adzi'igo', I tackled (at football) (‘adzi-, away into space; -ígo', I flowed); bidégoh, I collided with him (bf-, against him; -dégoh, I am underway in a flowing movement); dégoh, I tripped (I am underway in a flowing falling movement); nikidégoh, I tripped and fell (niki-, on a surface; -dégoh, I am underway flowing - i.e. I am underway moving along in a free flowing manner on a surface). 'Ashkii xądágo', the boy fell (as from a ledge or down an incline); 'ashkii naa'íigo', the boy toppled over (naa-, sidewise; -íigo', he moved in a free flowing manner); or, with transitivizing stem classifier /-l-/ 'ashkii naa'íigo', I knocked the boy over (caused him to flow sidewise).

The free, voluntary movement of animate objects is, of course, expressed in many manners.

The concepts go, come, at a walk or unspecified speed, are expressed by separate stems denoting one, two, and more than two subjects. Thus, the singular stem /-yá/ (Perfective mode) in niýá, he went or came; the dual stem /-tázh/ (Perfective) in ni'tázh, they two went or came; and /-kai/ in yíkai, they (more than) two came or went. It might be noted at this point that the same verb forms, in Navajo, express go-come, take-bring, buy-sell; and similar ideas involving the same action, but differentiated on the basis of direction with reference to the speaker. Post-positional elements specify direction, and require now one and now another verb when Navajo forms are translated to English. Thus, baa, to him,
connotes movement away from the speaker, so baa niyá, I went to him; but shaa, to me, connotes movement toward the speaker, so shaa niyá, he came to me. Likewise baa ni'g, I took it to him; shaa yin'g, he brought it to me; and bich'ëi' naăánii', I sold it to him (bich'ëi', toward him; naăánii', I traded it); and shaa nayiisnii', he bought it from me (shaa, to me; nayiisnii', he traded it).

The concept go-come at a run, is also expressed by a singular, a dual and a plural (more than two actors) stem in Navajo, as /-ghol/ (Progressive mode) in yilghol, he is running along; /-chééi/ 'axi'noolchëéí, they two are running along; and /-jah/ as in yijah, they (more than two) are running along.

Other verb forms relating to the free movement of animate objects include: yildlosh, he (a quadruped) is trotting along; noolt'ë, he (a quadruped) is galloping along; yitl'ëéí, he (a person or personified animal) is trotting along at a leisurely rate of speed; 'anook'ës, he (a person, bird or animal) is moving along in a hurry; noolt'ë, it (a snake) is wiggling along; yi'tah, it (a bird) is flying along; yi'nah, he (a person) is crawling along; yi'ol, it is floating along (anything); na'aka'oo', he is swimming about; nool, he is moving along like a coyote (said of a person in a joking sense); doolchëí, he is sniffing along (as a dog following his nose); Naalnood, he is darting about (a lizard, most commonly); yildoho, he (or anything) is wafting along through the air; yil'is, he is walking along lightly and quietly.

The expression of movement in English and Navajo is approached in highly divergent manners. Many types of movement, requiring non-interrelated English verbs for their expression, are expressed in Navajo as facets of the meaning of a single verb stem. In English there is no hint of relationship between the terms relating to the dropping of a dish full of berries and the herding of a flock of sheep. As we have noted, in Navajo, both concepts are expressed as facets of the same verbal idea (stem), which merely describes a spreading action or condition.

The Anglo-American learning Navajo faces the necessity of re-conditioning his habitual way of looking at the world. He must develop a consciousness of relationships that lie outside his customary world view, and he must learn to perceive natural objects in terms of shared physical characteristics that permit their classification within the scope of the meaning of a set of verb stems concerned with expression of such features as their shape, number and animate nature. Such re-conditioning of one's habits of perception and one's usual mode of conceiving and expressing ideas is not easy.
Nor, by the same token, is it easy for a Navajo child to re-condition his habitual way of looking at the world to accommodate the English pattern of thought and expression. It is not easy to ignore object classes; it is not easy to shift from the expression of movement in terms of the peculiarities that attach to its relationship with various types of objects to the pattern of expressing merely the type of action without reference to the nature of the object. It is not easy to learn to view and express actions as unrelated when, in the Navajo scene, they are interrelated. These are features that make one another's language difficult for Navajos and Anglo Americans. The concepts to give and to be involve merely the simple expression of an action or a state in English; in Navajo, they relate to the movement of an object of a specified class from the subject of the verb to the recipient; and to state in terms of being in position or location, being as a result of having become (as a boy becomes and subsequently is a man), being in an absolute sense (as being a rock) and being in the sense of "doing". (44)

(44) Si'á, it is (in position- a roundish bulky object), as in naaltssoos tsijshloozh biká'zháh si'á, the book is on the table; xástxiín, he is a grown man; tsé 'át'é, it is a rock; xáíshé 'át'é, who is it (that is doing - as when someone knocks at the door).
Primary and Secondary Actor: As expressed in Navajo, some types of movement are performed by the subject of the verb himself; some types are caused to take place by the subject of the verb; and still other types of movement involve a conveyance as the primary actor with the person conveyed in the role of secondary actor; lastly, the conveyance may be caused to move, transporting still another person or persons in addition to the agent.

The English concept to go may be expressed in a multiplicity of ways, in Navajo, reflecting the manner in which the movement takes place. One may go by walking, running, trotting, galloping, floating, flying or in an unspecified manner. These actions may be performed by a conveyance such as a horse, a mule, an automobile, a boat or an airplane, and the person conveyed may be not only the one transported, but provided the conveyance is inanimate, lacking a will of its own, the person conveyed may be expressed as the agent who causes the movement. He may cause an airplane to fly or a boat to move by floating. He may not cause a horse to trot or gallop, following the same pattern, however, because a horse has a will of its own.

From the Navajo viewpoint, when a person goes, he either moves as the primary or as the secondary actor. English permits such constructions as I flew to Denver, meaning, in fact, either I was flown to Denver or I caused something to fly transporting me to Denver. It would sound foolish to say Denver-góó nisist'a', I flew to Denver and back (as a bird, with my own wings); if I were the pilot causing the action I would be expected to say Denver-góó ni'asít'a', I caused something (unnamed) to fly to Denver (and back), and if I were a passenger I would so indicate by using a verb form which either expresses the fact that something unnamed (the conveyance) flew with me or that it was caused to fly with me (by someone else).

In comparable manner, from the Navajo viewpoint, one does not simply drop an object. He either drops it intentionally or unintentionally. If he drops it on purpose he is represented in the verb form as the causative agent who makes it fall; if the movement involved is unintentional on the part of the person concerned, the object itself is expressed as the primary actor. Thus, nát'oh nááát'e', I dropped the cigarette, in the sense that I caused it to fall (intentionally); but nát'oh shílák'ee xáák'eez, I dropped the cigarette, in the sense that the cigarette fell out of my grasp (unintentionally) (nát'oh, cigarette; shí-my; -lá', hand; -k'ee, place = my grasp; xáák'eez, it moved [fell] up out). Or, nát'oh sits'áá náák'eez, I dropped the cigarette (unintentionally) (sits'áá, away from me; náák'eez, it fell downward). English permits
the pattern I dropped it, irrespective of whether I intentionally caused the object to fall or whether the object fell, of its own accord, from my grasp.

The concept to go, as it involves a primary or secondary actor, is further illustrated by the following examples, using the stem /-oila, -eila, -eexit/ to float; to go by floating (i.e. by boat, where a conveyance is named or implied).

1. 'Ashkii yi'ola, the boy is floating along ('ashkii, boy; yi'ola, he (as the primary actor) is floating along).

2. 'Ashkii bi'ila 'oo'ola, the boy is floating along (in a conveyance); the boy is riding along (in a boat) (bi'ila, with him; 'oo'ola, something un-named = the indefinite pronoun /'a-/ which, in combination with the progressive mode prefix /yi-/ becomes /'oo-/, is floating along with him.

3. 'Ashkii bi'ila 'ool'ola, the boy is being taken (by boat) ('ool'ola, something un-named is being caused to float along).

4. 'Ashkii 'ool'ola, the boy is going along (by boat) ('ool'ola, he is causing something un-named to float along).

5. 'Ashkii shila 'ool'ola, the boy is taking me (by boat) (shila, with me; 'ool'ola, he is causing something un-named to float along).

6. 'Ashkii tsiinaa'eela yool'ola, the boy is sailing the boat along (tsiinaa'eela, boat; yool'ola, he is causing it to move along floating).

7. 'Ashkii tsiinaa'eela shila yool'ola, the boy is taking me by boat (shila, with me; yool'ola, he is causing it to move along floating).

The following sentences illustrate with reference to other types of movement in which one is conveyed (in the role of secondary actor):

1. Chida shila yilghod, I went by automobile (chida, automobile; shila, with me; yilghod, it arrived at a run), or Shila yilghod, I went (by automobile or other rapid type of surface conveyance) (yilghod, something un-named arrived running).

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(45) The stem forms given are the Progressive, Imperfective and Perfective Mode forms only.
2. Lįį' shił nįyá, I came horseback (ľįį', horse; shił, with me; nįyá, it arrived), or
   Shił 'anįyá, I came) by conveyance ('anįyá, something unnamed arrived at a walk or unspecified speed).

3. Shił 'ít'a', I flew (something arrived flying with me).

4. Shił 'idlloozh, I trotted (something arrived trotting with me).

5. Shił 'aneel'tég', I galloped (something arrived galloping with me).

6. Shił 'aní'éél, I sailed (something arrived floating with me).

7. Shił 'aníbbééz, I came by wagon (something arrived rolling with me).

8. Shił 'í'na', I came by army tank or caterpillar tractor (something arrived crawling with me).

9. Kp' na'albgasii nínádaaltlí'ígi shił 'įlghod, dóó 'ňlta'įį' chidi shił yįlghod, I arrived at the depot and went by automobile to the school (kp', fire; na'albgasii, the unnamed thing that it causes to roll about = locomotive = the unnamed thing that fire causes to roll about; nínádaaltlí', they repeatedly stop; -ígi, the place where; shił, with me; 'įlghod, something arrived at a run (the train); dóó, and; 'ňlta', school; -įį', as far as; chidi, automobile; shił, with me; yįlghod, it arrived at a run).

10. Shił n'dzit'i, I am riding around (shił, with me; n'dzit'i, something unnamed streaks rapidly about), or chidi shił ndzit'i, I am riding around (chidi, automobile; shił, with me; ndzit'i, it is streaking about).

11. Lįį' nashighé, I am riding horseback (ľįį', horse; nashighé, he is carrying me about--as a load or burden).

Again, in the Navajo world-view, movement is differently conceived and expressed in contrast with Anglo-American patterns. When an Anglo-American looks out the window and sees a man riding along in a wagon, the significant features are merely that he sees a wagon passing by transporting a man. If he verbalizes what he sees he may merely state
"I saw a man riding along (going by) in a wagon". The Navajo, verbalizing the same scene might say "xastiin léí' bił 'oobąsgo yiiltsą", I saw a man (whom I don't know) while something hoop-like was rolling along with him (xastiin, man; léí', a, some or another unknown to the speaker; bił, with him; 'oobąsgo, something hoop-like rolling along; yiiltsą, I saw him).

If the emphasis placed by the Anglo-American is on the fact that the man is merely moving along by wagon, he chooses either the verb ride, or the verb go; if he emphasizes the fact that the man is, at the same time, performing a causative function, (driving the wagon), he chooses the verb drive. The separate verbal forms /ride/go/drive/ all relate to aspects of the movement involved. From the Navajo viewpoint, all of the same aspects of the movement are expressed as facets of a single, common verbal idea /-bąs/ to roll (a hoop-like object).
Composition: As we have noted in preceding sections of the present essay, Navajo is essentially a verbal language; so important is the verb as a word class that many terms corresponding to other word classes in English, including nouns, adjectives and adverbs, are verbal forms in Navajo.

The Navajo verb is structurally complex. It is composed of a verbal stem and stem classifier preceded in turn by a varying number and variety of tense-modal, deictic, adverbial, postpositional, pronominal and other elements which, collectively, form the verbal base. The verb stem as well as the elements composing the base are monosyllabic, and the majority exist only as bound morphemes, somewhat after the fashion of /-ing/, /-ed/, /-tion/ in English. The verbal stem may change in form corresponding to various modes and aspects, and inflection of the verbal base reflects person and number of the subject - and of the direct object as well, in transitive verbs. Some verb stems are used as nouns, as we shall see in discussing that word class.

The structure of a Navajo verbal form is illustrated by shifshinfit's'iP, you are listening to me; you are paying attention to me. This form is composed of /shi-/ , the pronoun object me; + /-1-/ (from /-yi-/ , a prefix found on certain verbs including those having to do with seeing and hearing; /-shf-/ , the si-perfective prefix which becomes /shf-/ through assimilation to the preceding pronoun /shi-/ ; /-n-/ , the second person pronoun subject you; /-1-/ , a stem classifier; -ts'iP , perfective mode form of a stem meaning to make a sound, (hear, listen). Not only is it apparent that shifshinfit's'iP is a complete sentence in itself, but the Navajo form reflects some of the types of (morpho-phonemic) change that the elements (morphemes) composing the verbal base undergo as they merge together in a verb complex. The objective pronoun /shi-/ takes the high tone of the following syllable /-yf/ which drops /-y/- and results in the combined form /shff-/ ; and the modal prefix /-si-/ takes a high tone and assimilates to the preceding /shif-/ (that is, /s/ of /si-/ becomes /sh/ ).

The Navajo verb paradigm is complicated by a great number and variety of such changes in verb prefixed elements as these morphemes join one another to make up the verbal base. Generally speaking, the verb prefixes that precede a verb stem have a fixed order with relation to one another, just as the suffixes /-ing/ , /-ed/ follow a fixed order in English. One says singing - n : "ingsing". In analogous manner one says nixil będaxözín, (we know about it) and not nixil da beexozínx or beexodazínx.

See Hoijer, Harry - The Apachean Verb - IJAL.
(V. footnote, p.51)
The Verb Stem. The Navajo verb stem denotes action or state of being in a generalized or abstract sense - it is a "nuclear" concept - and (except as it may function as a noun in some instances) it expresses specific verbal ideas only when it is modified by prefixes representing the pronoun subject or object, modal, adverbial, or other elements. As we have noted in preceding sections, such a verb stem as (Imperfective Mode) /-'aah/ refers to the handling or movement of a single roundish bulky object. When /-'aah/ is preceded by the first person subject pronominal prefix /-sh-/ (I), and the modal prefix /mi-/ the resultant form nish'aaah conveys the meaning "I am in the act of bringing it," and preceded by the postpositional /naa/, to you, naa nish'aaah translates English "I am in the act of giving it to you."

Verb stems may vary in form as they correspond to different modes and aspects of the verb. Thus, the stem referring to the handling or movement of a single roundish bulky object has the forms:

**Progressive Mode:** /-'áá/: yish'áá, I am carrying it along.
   a) Transitional aspect: /-'aaž/: bá xwiideesh'aaž, I'll make room for him.

**Imperfective Mode:**
   a) Momentaneous Aspect: (-'aah): baa nish 'aah, I am in the act of giving it to him.

**Perfective Mode:** /-'á/: baa níí, I gave it to him (I completed the act of giving it to him).
   a) Transitional aspect: /-'á'/ bá xooi'a', I made room for him.

**Usitative Mode:** /-'ááá/: baa nish'ááá, I customarily give it to him.

Consequently, in a manner analogous to English /sing/, /sang/, /sung/ Navajo verb stems may take multiple forms corresponding to various modes and aspects. In some instances, a single stem form is used throughout as in the case of /-tl'is/, to harden. Thus:

**Progressive Mode** (Future tense): dootl'is, it will get hard

**Imperfective Mode:** yitl'is: it is getting hard

**Perfective Mode:** yítl'is: it got hard

**Iterative Mode:** nátl'is: it repeatedly gets hard
Optative Mode: ghóti'is laanaa: would that it get hard.

But Neuter: ntl'iz: it is hard.

**Stem Classifiers:** Navajo verbs incorporate one of four prefixed elements immediately preceding the stem: bound morphemes which are called "stem classifiers". These are: **zero-class** (no classifier); **d-class; 1-class** and **1-class**.

The stem /-bě/ in yóbě, he is picking them (berries) is a zero-class stem;  
The stem /-liłzh/ in shéliłzh, I crushed it, is an 1-class stem;  
The stem /-lghol/ in yilghol, he is running along, is an 1-class stem, and

The stem /-'ná/ in naxa'ná, he moves (his limbs) about, is a d-class stem.  
The d-classifier, as such, exists in Navajo only in one of its morphophonemic variant forms, although in such Athabascan languages as Carrier, in British Columbia, it still exists as /d/. Thus Carrier naxadna = Navajo naxa'ná, in which /d/ becomes /ɬ/. The d-classifier becomes / before /m/, /n/, /y/; /d/ before stem initial / = /t'/; /d/ before stem initial /gh/ the stem initial becomes /g/; before stem initial /1/ it becomes /d1/; before stem initial /z/ it becomes /dz/; before /zh/ it becomes /j/; before stem initial /d/ it merges with the stem initial.

The stem classifiers perform various grammatical functions. The /1/ classifier makes transitive or causative verb forms with certain stems, as bá xoo'á', there was room for him/bá xool'á', I made (caused) room for him; and the /d/ and /1/ classifiers replace the /zero/ and /1/ classifiers in passive voice forms, as 'ool'ol, he is sailing along (causing something to float along) /ool'oł, something is being caused to float along.

It is not within the scope of the present essay to describe the stem classifiers in greater detail in relation to their grammatical functions; if more detailed information is required, it will be found in detailed analyses of the Navajo verb.

**The Verbal Base:** The modal, adverbial, deictic, pronominal and derivational prefixes that precede the stem constitute the verbal base.

By way of illustration, some of the common components of the Navajo verbal base are listed below:
1. /di-/ an inceptive prefix, denoting the beginning of an action: dah diisháh, I am in the act of starting off.
The same prefix combines with the progressive mode prefix /yi-/ to form the future tense: deesháát, I shall go
(di-/+/yi-/=/dee-/ in the first person singular. Other morphophonemic changes take place as /di-/ and /yi-/ combine
with still other prefixes in the future paradigm.)

2. /náá/- again; another: náádeeshdáát, I shall go again.

3. /ná-, ní-, n-/ returning to a preceding state; back: nádeeshdáát, I shall go back.

4. /xa-/ up out: xádeesháát, I shall go up out (as from a cellar); I shall ascend (as a hill).

5. /ch'i/-, out horizontally; ch'idádeeshdáát, I shall go out (as through a door).

6. /'a/- away out of sigh; into: 'adeesháát, I shall go (away).

7. /na-, ni-, n-/ around; about: naashá, I am going about.

8. /'axéé/-, around in a circle: 'axéénišghod, I ran around in a circle; I circled (running).

9. /'axá/-, in two pieces: 'axádeeshghish, I shall cut it in two.

10. /ná-/ repetition of an action; náshdiih, I repeatedly eat it.

11. /ii-/ inherent quality: lágai, it is white; likan, it is sweet.

12. /ka-/ sickly: kanaashá, I am sickly.

13. /dzí/- into space or infinity: dzígai, a white line extends off into the distance.

14. /xi-/ segmentalized action: xáxínideéh, they are falling out one after another.

15. /'axi/-, together: 'axidiilf, they flow together.

16. /yi-/ progressive mode: yisháát, I am walking along.

17. /si-/ perfective mode: sità, it is (in position).

The foregoing are but a few examples of the many modal and adverbial prefixes found in the Navajo verbal base.
Pronoun Subject and Object: In addition to modal, adverbial and other types of elements prefixed to the verb stem, there are also prefixes representing the pronoun subject and, in transitive verbs, the pronoun object. These elements are incorporated within the verbal base, in Navajo, rather than expressed as independent elements. Thus, English "I taught it to him" is a sentence containing three pronouns: I (the subject); it, (the direct object); him, (the indirect object). Contrast the Navajo form b'biyi'il'di', I taught it to him (b'i-, the material taught); -bi-, him (the person to whom it was taught); -yiil - a complex prefix containing a marker of the first person [subject]; -l'di', perfective mode stem [including /-l/- classifier] expressing the concept learn (i.e. cause to learn).

The Navajo pronoun does not distinguish gender as in the case of English, so the pronoun /bi/, bi/ corresponds to he, she, it, as the subject; and him, her, it, as object. In addition, the Navajo pronoun does not distinguish between plural and singular in the third person, so /bi/, bi/ also represents English they, them.

As incorporated in the verbal base, the subject and object pronouns take several forms, following morphophonemic rules, the simplest of which are shown in the table below:

<table>
<thead>
<tr>
<th>Person</th>
<th>Number</th>
<th>Subjective</th>
<th>Objective</th>
</tr>
</thead>
<tbody>
<tr>
<td>1.</td>
<td>singular</td>
<td>-sh-</td>
<td>shi-</td>
</tr>
<tr>
<td>2.</td>
<td>singular</td>
<td>-ni-</td>
<td>ni-</td>
</tr>
<tr>
<td>3.</td>
<td>singular/plural</td>
<td>(zero)</td>
<td>bi-</td>
</tr>
<tr>
<td>30.</td>
<td>singular/plural</td>
<td>-yi-</td>
<td>yi-</td>
</tr>
<tr>
<td>3a.</td>
<td>singular/plural</td>
<td>ji-</td>
<td>xo-</td>
</tr>
<tr>
<td>3s.</td>
<td>-</td>
<td>xo-,xa-</td>
<td>xo-,xa-</td>
</tr>
<tr>
<td>3i.</td>
<td>-</td>
<td>'a-'</td>
<td>'a-'</td>
</tr>
<tr>
<td>Reciprocal</td>
<td>-</td>
<td>'axi-,'al-</td>
<td></td>
</tr>
<tr>
<td>Reflexive</td>
<td>singular/plural</td>
<td>-</td>
<td>'ddi-,'al-</td>
</tr>
<tr>
<td>1.</td>
<td>plural</td>
<td>-ii-</td>
<td>nixi-</td>
</tr>
<tr>
<td>2.</td>
<td>plural</td>
<td>-oh-</td>
<td>nixi-</td>
</tr>
</tbody>
</table>

The verb-incorporated pronouns are illustrated below:

1. **Singular.** The first person singular pronoun forms correspond to English I/me: yi-sh-di', I am drinking it; shi-nfiti, he brought me.

2. **Singular.** you/you: ni-di', you are drinking it; ni-nfiti, I brought you.
3. Singular/plural. The third person subject (bi) is represented by zero: 'adlاغ, he is drinking (some thing un-named - he, the subject is represented by zero).

30. Singular/plural. This is an oblique third person form representing a third person subject (bi) acting on a third person object (also bi-). It is used with transitive verbs: yiyiisخ, he killed it (or any other combination of third person subject/object in English as she killed him, he-her, she-it, he-it, etc. since gender is not distinguished in the Navajo pronoun as it is in English). The form /yi-/ is used whenever the noun immediately preceding the verb or preceding an expressed noun object is the subject of the verb - the usual order - as in the sentence 'ashkii tî'iish yiyiisخ, the boy killed the snake ('ashkii, boy, is the subject; tî'iish, snake, is the object; and the /yi-/ of yiyiisخ denotes that the subject acted on the object, both in the third person). However, if the subject/object order is reversed in the sense that the first noun is meant as the object and the second the subject, /yi-/ must be changed to /bi-/. Thus 'ashkii tî'iish biisخ, the snake killed the boy.

3a. Singular/plural is formed with the deictic pronominal prefix /ji-/ which may refer only to persons. It is used as a second person singular form in polite discourse between a married man and his married sister, and between a man and the husband of his sister's daughter. /ji-/ is also used as a term of respect in other situations, and often serves to distinguish between two third persons, in a narrative, where there might otherwise be ambiguity. In still other situations it corresponds to English one, used as a pronoun (as in "one should not do that"): ji-dlاغ, he (she) is drinking it; xo-zh-nîilî, he brought him (/zh-/ is a variant of /ji-/ as subject) /xo- is the object pronoun form corresponding to /ji-/; doo 'ajiîlâ da, one should not drink.

3g. This pronoun represents space or area, and is comparable to the impersonal it of English in some situations as in xoîîlî, it is raining along. xo-nîildoiî, I heated it (a space or room in contradistinction to nîîldoiî, I heated it - a tangible object).

3i. This pronoun represents an indefinite, un-named or unspecified third person subject or object. It is roughly comparable to English some one/ some thing: 'a-shdlاغ, I am drinking (something unspecified); xa'adziih, speaking is taking place (i.e. some one un-named is speaking).
The pronoun object is always expressed in Navajo transitive verb forms. If the object is not expressed as a definite thing, it must be expressed as an indefinite or un-named thing. Consequently, there is no Navajo form directly corresponding to English he is eating. From the Navajo viewpoint the act of eating requires, of its very nature, that something be eaten. If the object eaten is not specified it must be represented in the verb by the 3i. pronoun. Thus: yiy\text{g}, he is eating it (/yi-/) the 3o. definite pronoun form); but 'ay\text{g}, he is eating (something unspecified).

The fact that, in Navajo, the object of a transitive verb is always expressed by a pronominal form incorporated into the prefix complex of the verbal base, leads Navajo students of English to such constructions as "I am learning it English" by analogy with the Navajo correspondent Bilagáan naa bizaad bíxoosh'ahaa (Bilagáan naa, white man; bi-his; -zaad, language, speech; bíxoosh'ahaa, I am in the act of learning it).

**Reciprocal.** The reciprocal pronominal prefix corresponds to English each other, one another: 'axijooy', they see each other. (The reciprocal pronoun requires the stem classifier /d/ in zero class verb stems. cf. joo', he sees him. And /i/ class stems change the /i/ classifier to /1/ as in 'axooltxeé, they (two) are carrying each other along. cf. yooltxéé, he is carrying him along.) When the reciprocal prefix is attached to a post-position used as a verb prefix, the form is /'a1-/ (see possessive pronouns.): 'ánts'ádiit'ash, we (two) will separate ('ánts'á-, away from each other; -diit'ash, we (two) will go).

**Reflexive.** The reflexive pronoun prefix /'ádi-/ indicates that the action of the verb falls on the subject himself: tá'díísgis, I am washing myself (cf. tánísgis, I am washing it). When the reflexive pronoun is the object of a post-position used as a verb prefix, it takes the form /'ád-/ usually, as in 'ák'íneeshecbí, I drove it off myself - repelled it (as an attacker) ('á-self; -k'i-, on; -neeshecbí, I chased it).

1. **Duo-plural:** These forms correspond to English we/us: yiðlá, we are drinking it; nixiíitsí, he saw us.

2. **Duo-plural:** Corresponds to English you/you: ghoðlá, you (two or more) are drinking it; nixiíitsí, he saw you (plural). (Note that the first and second person duo-plural object pronouns have the same form.)

**Subjective Pronoun - Disjunctive.** The subjective pronouns also occur as free morphemes, and are used for emphasis or clarity, although they are generally repeated in the verb form itself; or they are used with conjunctions: shí dóó ni, I and you. The independent subjective pronouns are:
The Independent Subject Pronoun

<table>
<thead>
<tr>
<th>Person</th>
<th>Number</th>
<th>Pronoun Form</th>
<th>Equivalent</th>
</tr>
</thead>
<tbody>
<tr>
<td>1.</td>
<td>Singular</td>
<td>shí</td>
<td>I</td>
</tr>
<tr>
<td>2.</td>
<td>Singular</td>
<td>ni</td>
<td>you</td>
</tr>
<tr>
<td>3.</td>
<td>Singular/plural</td>
<td>bí</td>
<td>he, she, it, they</td>
</tr>
<tr>
<td>3a.</td>
<td>Singular/plural</td>
<td>xó</td>
<td>he, she, they</td>
</tr>
<tr>
<td>1.</td>
<td>Plural</td>
<td>nixí</td>
<td>we</td>
</tr>
<tr>
<td>2.</td>
<td>Plural</td>
<td>nixí</td>
<td>you</td>
</tr>
</tbody>
</table>

The personal pronouns also occur as (1) possessive prefixes with nouns, and as (2) the objects of postpositions. See the section dealing with the noun.

The Verb Paradigm. As we have noted, the Navajo verb consists of a stem, a stem classifier, and a complex of prefixes which make up the verbal base. Inflection of the verb involves changes in the verbal base indicating person, number, mode and aspect. These changes are accomplished by the prefixation of elements which, as they come into juxtaposition with other prefixes, undergo a wide variety of morphophonemic changes.

The verb paradigm occurs in two general forms: (1) a disjunctive form in which no adverbial or other prefix precedes the modal prefix, and (2) a conjunctive form in which adverbial or other types of prefix precede the modal prefix, joining with it or sometimes replacing it.

The Imperfective Mode

Stem: /-'aah/: Handle a single, roundish bulky object.

<table>
<thead>
<tr>
<th>Person</th>
<th>Number</th>
<th>Disjunctive</th>
<th>Conjunctive</th>
</tr>
</thead>
<tbody>
<tr>
<td>1.</td>
<td>Singular</td>
<td>biih yish'aah</td>
<td>nish'aah</td>
</tr>
<tr>
<td>2.</td>
<td>Singular</td>
<td>biih ni'aah</td>
<td>nf'aah</td>
</tr>
<tr>
<td>3a.</td>
<td>Singular/plural</td>
<td>yiih yi'aah</td>
<td>yf'aah</td>
</tr>
<tr>
<td>3a.</td>
<td>Singular/plural</td>
<td>biih ji'aah</td>
<td>jf'aah</td>
</tr>
<tr>
<td>1.</td>
<td>Plural</td>
<td>biih yit'aah</td>
<td>niit'aah</td>
</tr>
<tr>
<td>2.</td>
<td>Plural</td>
<td>biih ghoh'aah</td>
<td>noh'aah</td>
</tr>
</tbody>
</table>

Disjunctive: biih yish'aah, I am in the act of putting it into it (biih, into it; yi-, imperfective mode prefix; -sh-, subjective pronoun I); biih ni'aah, you are putting it into it (ni-, subjective pronoun you, which replaces the modal prefix /yi-/; yiih yi'aah, he is putting it into it
(yiit, 3o. person: he-into-it; /yi-/ 3o. pronoun prefix: he-it, which replaces the modal prefix /yi-/, biit ji'aah, he is putting it into it (ji-, deictic pronominal prefix: he, she, they, which replaces the modal prefix /yi-/, biit yiit'aah, we are putting it into it; /y-/ the modal prefix; -ii-, first person plural subjective pronoun); biit ghoh'aah, you (pl.) are putting it into it (gh=-modal /yi-/ before /-o-/; -oh-, second person plural subjective pronoun).

Conjunctive: In this paradigm the modal prefix /ni-/ connoting that the result of the verbal action is terminal, durative or lasting, replaces the modal prefix /yi-/. In the second person singular the modal prefix /ni-/ joins with the subject pronoun prefix /ni-/ to become /ni-/ in which the subject pronoun is represented by a high tone on the preceding prefix: /ni-you ni- ni-/ Similarly, in the 3o., 3a. and 3a. persons, the modal prefix /ni-/ becomes a high tone on the preceding syllable, as in yi'aah (=yi+ni+Paah) and ji'aah (=ji+ni+Paah).

The forms listed under the conjunctive paradigm correspond to English take, bring, give: niish'aah: I am in the act of bringing or taking; naa nish'aah, I'm in the act of giving it to you.

In the conjunctive paradigm, many types of prefixes can precede, replace, or join with the modal prefixes. For example, the compound prefix /Adi-/, up from a surface. /Adi-/ is composed of /ná-/ up, back; plus the inceptive prefix /-di-/ and is reduced to /n-/ before the following phoneme /d/. However, as will be noted in the 3o. and 3a. persons, the position of the pronominal prefixes /-yi-/ and /-ji-/ respectively is between the elements that compose the compound /Adi-/. Following morpho-phonemic rules /n-, ná-/ becomes /né-/ before pronominal /yi-/ (which drops /y-/ to give /néi-/ (from /ná+y-/ in 3o. and /n-, ná-/ becomes /n-/ before the deictic pronominal prefix /ji-/ which in turn becomes /zh-/ Thus when the compound prefix /Adi-/ is added, the resulting paradigm is: ndiish'aah (Adi+yi+sh++aah), I am in the act of picking it up; ndi'aah (Adi+yi+Paah), you are in the act of picking it up; nídii'aah (ná+di+yi+Paah), he is in the act ----; nízhdi'aah (ná+ji+di+yI+Paah), he is in the act ----; ndiit'aah (Adi-yiit-'aah), we are in the act ----; and ndooh'aah (ná+zh+Paah), you (pl.) are in the act of picking it up.

The Perfective Mode

Stem: /-é/, Handle a single roundish bulky object.

There are three basic paradigms of the perfective mode, based on the modal prefixes /yi-/ /ni-/ and /si-/ These are illustrated in the following
### Disjunctive

<table>
<thead>
<tr>
<th>Person</th>
<th>Number</th>
<th>Yi-</th>
<th>Ni-</th>
<th>Si-</th>
</tr>
</thead>
<tbody>
<tr>
<td>1.</td>
<td>Singular</td>
<td>biih yi'f'q</td>
<td>ni'f'al</td>
<td>dah sé'g'</td>
</tr>
<tr>
<td>2.</td>
<td>Singular</td>
<td>biih yi'f'q</td>
<td>yi'f'al</td>
<td>dah sin'f'al</td>
</tr>
<tr>
<td>3a.</td>
<td>Singular/plural</td>
<td>yiih yi'f'q</td>
<td>yi'f'al</td>
<td>dah yiz'al</td>
</tr>
<tr>
<td>3a.</td>
<td>Singular/plural</td>
<td>biih jii'f'q</td>
<td>jii'f'q</td>
<td>dah dzii'f'q</td>
</tr>
<tr>
<td>1.</td>
<td>Plural</td>
<td>biih yiit'q</td>
<td>niit'q</td>
<td>dah sii't'q</td>
</tr>
<tr>
<td>2.</td>
<td>Plural</td>
<td>biih ghoo'q</td>
<td>noo'q</td>
<td>dah soo'q</td>
</tr>
</tbody>
</table>

**Vi-Perfective:** biih yi'f'q, I put it into it etc. The action is expressed as one which is merely completed, in a momentaneous sense, and without implication of subsequent duration.

**Ni-Perfective:** Ni'f'al, I brought (took, gave) it, etc. The connotation is that the action of the verb is completed and subsequently in a durative state.

**Si-Perfective:** dah sé'g', I set it up (on a shelf). The connotation is that the action of the verb, having been completed, is in a durative static state.

The modal prefixes can, of course, be preceded by adverbial or other types of prefixes, in which case they may undergo morphophonemic changes. Compare:

### Conjunctive

<table>
<thead>
<tr>
<th>Person</th>
<th>Number</th>
<th>Yi-</th>
<th>Ni-</th>
<th>Si-</th>
</tr>
</thead>
<tbody>
<tr>
<td>1.</td>
<td>Singular</td>
<td>xáá'q</td>
<td>ch'iní-f'q</td>
<td>xasé'q</td>
</tr>
<tr>
<td>2.</td>
<td>Singular</td>
<td>xáínf'q</td>
<td>ch'iní-f'q</td>
<td>xasínf'q</td>
</tr>
<tr>
<td>3a.</td>
<td>Singular/plural</td>
<td>xayí-f'q</td>
<td>ch'iní-f'q</td>
<td>xaisí-f'q</td>
</tr>
<tr>
<td>3a.</td>
<td>Singular/plural</td>
<td>xají-f'q</td>
<td>ch'íjninf'q</td>
<td>xadzíz'q</td>
</tr>
<tr>
<td>1.</td>
<td>Plural</td>
<td>xaít'q</td>
<td>ch'iníit'q</td>
<td>xasíit'q</td>
</tr>
<tr>
<td>2.</td>
<td>Plural</td>
<td>xaoó'q</td>
<td>ch'inoo'q</td>
<td>xasoó'q</td>
</tr>
</tbody>
</table>

**Vi-Perfective:** xáá'q (xa-, up out; + yi-) I carried it up out, xáínf'q (=xa+yi+nf-), you carried it up out, etc. The modal prefix /yi-/ combines variously with preceding prefixed elements, as illustrated above with the prefix /xa-/, up out.

**Ni-Perfective:** Ch'iní-f'q (ch'í-, horizontally outward + -ní-), I carried it horizontally out (as through a door), etc.

**Si-Perfective:** xasé'q (xa-, up out; -sé-), I brought it up (and left it in a static position, or I am in the continuing state of having brought it up out - I have it up). Here /xa-/ is prefixed to the modal prefix /si-/.
Insertion of the /d/ classifier before the stem requires a different set of pronoun subject prefixes and the prefix /yi-/ apparently remains in combination with /ni-/ in the /ni-/ perfective paradigm, combining in a characteristic manner (cf. the progressive mode and future tense paradigms.)

<table>
<thead>
<tr>
<th>Person</th>
<th>Number</th>
<th>Yi-</th>
<th>Ni-</th>
<th>Si-</th>
</tr>
</thead>
<tbody>
<tr>
<td>1.</td>
<td>Singular</td>
<td>yishdl4'</td>
<td>biih neesht'4</td>
<td>xosist'4</td>
</tr>
<tr>
<td>2.</td>
<td>Singular</td>
<td>yinizdl4'</td>
<td>biih nifnt'4</td>
<td>xosinfnt'4</td>
</tr>
<tr>
<td>3o.</td>
<td>Singular/plural</td>
<td>yoodl4'</td>
<td>yihn noot'4</td>
<td>xast'4</td>
</tr>
<tr>
<td>3a.</td>
<td>Singular/plural</td>
<td>joodl4'</td>
<td>biishnoot'4</td>
<td>xojist'4</td>
</tr>
<tr>
<td>1.</td>
<td>Plural</td>
<td>yiidl4'</td>
<td>biih niit'4</td>
<td>xosiit'4</td>
</tr>
<tr>
<td>2.</td>
<td>Plural</td>
<td>ghoohdl4'</td>
<td>biih nooht'4</td>
<td>xosoohit'4</td>
</tr>
</tbody>
</table>

Yi-Perfective: Yishdl4', I drank it. Compare the verbal base /yi-/ modal prefix +/-sh-/, first person subject pronoun I, with that of yf'i, in which the modal prefix /yi-/ becomes /y1-/ as the marker of the first person subject.

Ni-Perfective: biih neesht'4, I put my head into it. Compare neesht'4 (= ni+yi+sh-) with nf'4, I brought it (/ni-/ becomes /nf-/ marking the first person singular. In the 3a. person the deictic pronoun prefix /-ji/-, falling between the preceding final /h/ of biih (into it) and the initial consonant of the following prefix /n-/ becomes /sh/.

Si-Perfective: 'adghh dah xosist'4, I committed a crime (i.e. I caused spatial "it" to (a scrow) move and set up alongside myself. cf. shgh dah xaz'4, I am sick - i.e. spatial it (a sorrow) sets up alongside me). (xo-, spatial it; si-perfective prefix; -s-, first person pronoun subject I).

**The Progressive Mode**

The prefix of the progressive mode is /yi-/ which undergoes certain characteristic morphophonemic alterations when it is preceded by other prefixes. Compare the verbal base in the disjunctive and conjunctive paradigms below:

(47) /-dl4'/ perfective mode stem to drink; /-t'4/ = /-t'/, to handle or move a roundish bulky object, but with the /d/ classifier.
(1) Stem: /'ááli/, handle a single roundish bulky object. The verbal base is composed of /yish-/ (yi+sh, in which /-sh-/ is the 1st person subject pronoun I); /yí-/ (yi+ni-) (in which /-ni-/ is the second person subject pronoun, dropping out to become a high tone on the preceding modal prefix); /yoo-/ (which is composed of the modal prefix /yi-/ in combination with the oblique 3o. objective pronoun /-yi-/ to become /yoo-/; /joo-/ (the deictic prefix /ji/, he, she plus modal prefix /-yi-/ which combine to form /joo-/); /yiit-/ (modal prefix /yi-/ plus first person plural pronoun subjective prefix /-ii(t)-/; and /ghoh-/ (in which the modal prefix /yi-/ becomes /gh-/ before the second person plural subject pronoun prefix /-oh-/). Yish'áal, I am carrying it along.

(2) Stem /-kaḻ/ describing a spreading, expanding action or state, and here referring to the movement or herding of a band of sheep.

The verbal base is made up, through a process of morphophonemic change, as follows: /neesh-/ (=ni+yi+sh-); /nii-/ (=ni+yi+ni+1-); /yinool-/ (=yi- (the 3o. pronoun object) + ni+yi (the modal prefix) + i-); /jinool-/ (=ji+ni+yi+1-); /niil-/ (=ni+yi+ii+1-); /nool-/ (=ni+gh+ii+1-).

Neeshkaḻ: I am herding them along; I am driving a herd along.

(3) Stem /-txéél/: handle a single animate object.

The forms given illustrate the morphophonemic changes that take place when the objective personal pronouns are prefixed before the progressive modal prefix /yi-/; as will be noted, the resultant combination is comparable to that resulting from prefixation of other types of elements.

Neeshtxéél, I am carrying you along (/neesh-/=n.i (you) + yi+sh)
Shiiltxéél, you are carrying me along (/shii-/= shi (me) + yi+ni+i)
Shoointxéél, he is carrying me along (/shooi-/= shi (me) + yi + i)
Shijooltxéél, he is carrying me along (/shijool-/= shi (me) + ji + yi + i)

The /i/ classifier becomes /l/ in the first person plural and passive voice forms.
Niiłtxéél, we are carrying you (sgl.) along (ni(you) + ii + l).

Shoółtxéél, you (pl.) are carrying me along (shí(me) + oo + i). The /yi-/ prefix, which becomes /gh/ before /o/ in the second person plural drops out when it is preceded by another prefix. The third person singular and the second person plural have the same form, coincidentally.

The Future Tense

Stem /-'ddI/ handle a single roundish bulky object.

The future tense in Navajo is formed by prefixing the inceptive prefix /di-/ to the forms of the progressive mode. Prefixation of /di-/ produces the same types of morphophonemic change as already noted in discussing the progressive mode. The simplest forms of the future tense are those in which /di-/ and progressive modal /yi-/ remain in juxtaposition throughout the paradigm. When certain other prefixes are incorporated they complicate the paradigm, especially when their position in the verbal base is such that it intervenes between /di/ and /yi/.

<table>
<thead>
<tr>
<th>Person</th>
<th>Number</th>
<th>Simple Paradigm</th>
<th>Compound Paradigm</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Sgl.</td>
<td>deesh'ááá</td>
<td>'idi'néeshchah</td>
</tr>
<tr>
<td>2</td>
<td>Sgl.</td>
<td>dií'ááá</td>
<td>'idi'nííchah</td>
</tr>
<tr>
<td>3</td>
<td>Sgl./pl.</td>
<td>yidoó'ááá</td>
<td>'idízh'nóochah</td>
</tr>
<tr>
<td>3a</td>
<td>Sgl./pl.</td>
<td>jidoó'ááá</td>
<td>'idi'niíchah</td>
</tr>
<tr>
<td>1.</td>
<td>Pl.</td>
<td>diit'ááá</td>
<td>'idi'nííchah</td>
</tr>
<tr>
<td>2.</td>
<td>Pl.</td>
<td>dooh'ááá</td>
<td>'idi'nóochah</td>
</tr>
</tbody>
</table>

(1) Stem /-'ddI/ handle a single roundish bulky object; deesh'aal, I shall bring (take, give) it. The morphophonemic changes are those which normally occur when another element is prefixed to the progressive mode prefix /yi-/

(2) Stem /-cháh/, to cry, weep.

The combination of prefixes /'i'ni-/ forms an inceptive verb form with the meaning start to, begin to. Thus: 'idi'néeshchah, I shall begin to cry. Compare: (Imperfective mode) 'i'niisheeh, I am in the act of beginning to cry; (Perfective mode) 'i'niicha, I began to cry.

In the future tense the prefix /di-/ is interposed between the two elements of the compound inceptive prefix /'i'-ni/. In the 3a. person the deictic subject pronoun prefix /ji/ (which becomes /-zh-/) can have either the position shown in the paradigm above ('idízh'nóochah) or it may precede /-di-/ ('izhdi'nóochah).
(3) Stem /-lxil/ (cognate with Progressive /-gli/, Imperfective /-ghil/, Perfective /-ghil/ meaning to push (compare: nayfîghil, he is pushing it around; yîyoghil, he is pushing it along; bikêti'á 'iighil I boosted him - i.e. I pushed on the bottoms of his feet. Also, with the /l/ classifier 'anooghil, he dozed; nearly went to sleep.) With the /l/ classifier the stem is used in terms relating to the concept pump - i.e., "cause to move by a pushing motion".

Bîkadi'yeeshxil, I will pump him (for information) The first prefix is postpositional, a variant of biká, after it; for it; + /-di/- + /yi/ + /sh/ + /-xi/. The complex /-'yeesh-/ is probably composed of /'a/- + /yi/ + /yi/ - in which the first /yi/ combines with the progressive modal prefix /yi/ to produce /yeesh/ after the fashion of /ni/- + /yi/- + /sh/ = /neesh-/. However, the meaning of the first /yi/ is not apparent. A comparable, but simpler, construction is diyeeshxil, I will kill him, in which a prefix /yi/ combines with progressive modal prefix /yi/ to produce /yee-/.

The Optative Mode

The prefix of the optative mode is /gho-/, but /gh-/ usually drops out when the prefix is preceded by another prefix. Compare:

<table>
<thead>
<tr>
<th>Person</th>
<th>Number</th>
<th>Simple</th>
<th>Compound</th>
</tr>
</thead>
</table>
| 1      | Sgl.   | ghôsh'dáî | 'i'noooshchééh | 'ôosdzif'
| 2      | Sgl.   | ghôsh'dáî | 'i'noooshchééh | 'ôodzîf'
| 3o.    | Sgl/pl.| jî'ôdéî | 'i'noooshchééh | 'ôdzîf'
| 3a.    | Sgl/pl.| jî'ôdéî | 'i'noooshchééh | 'ôdzîf'
| 1      | Pl.    | ghoot'dáî | 'i'noooshchééh | 'ôndzîf'
| 2      | Pl.    | ghooch'dáî | 'i'noooshchééh | 'ôndzîf'

(1) Stem /-'dáî/: Handle a single roundish bulky object. ghôsh'dáî laanaa, would that I might bring it; doo jî'ôdéî'atee da, one cannot bring it.

(2) Stem /-cheéh/: To cry, weep. The paradigm given includes the compound prefix /'i'ni-/ indicating inception of the verbal action (cf. Future Tense.) Thus 'i'noooshchééh lágó, would that I do not start to cry.

(3) Stem /-dzîf'/: To breathe, speak. 'ôosdzîf' lágó, would that I do not curse. The forms of this paradigm include the prefixes /'a/- + /yi/ + /gh/o/ + /s/ + /dzîf'/. The prefix /yi/ carries the meaning "against" so the form means "would that I do not speak against (something un-named)." Compare: yínîsdzih, I am cursing him; yîyîfûdzîf', he cursed him; yôdzîf' lágó, would that he does not curse him.

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The Usitative Mode

The paradigm of the usitative mode is formed with the verbal base of the imperfective mode, but with the special stem corresponding to the usitative mode wherever such special stem form exists. Thus:

Stem /-'áäh/ handle a single roundish bulky object

<table>
<thead>
<tr>
<th>Person</th>
<th>Number</th>
<th>Disjunctive</th>
<th>Conjunctive</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Singular</td>
<td>bih yish'áah</td>
<td>nish'áah</td>
</tr>
<tr>
<td>2</td>
<td>Singular</td>
<td>bih ní'áah</td>
<td>ní'áah</td>
</tr>
<tr>
<td>3o.</td>
<td>Singular/plural</td>
<td>yiíh yií'áah</td>
<td>yií'áah</td>
</tr>
<tr>
<td>3a.</td>
<td>Singular/plural</td>
<td>bih ji'áah</td>
<td>ji'áah</td>
</tr>
<tr>
<td>1.</td>
<td>Plural</td>
<td>bih yiit'áah</td>
<td>niit'áah</td>
</tr>
<tr>
<td>2.</td>
<td>Plural</td>
<td>bih ghoh'áah</td>
<td>noh'áah</td>
</tr>
</tbody>
</table>

Compare the above forms with the paradigms given for the imperfective mode. The special stem corresponding to the usitative mode is /-'Adh/ which contrasts with the imperfective mode stem /-'aah/.

Biih yish'áah, I usually put it in it.

Nish'áah, I usually bring it.

The particle /ieh/ is often used with the usitative.

/ieh/ means usually, customarily: baa nish'áah ieieh, I usually give it to him.

The Iterative Mode

The iterative mode is constructed by prefixing /ná-, n-/ , a prefix connoting repetition within the verbal base, with stem form corresponding to the usitative mode. Thus:

Stem /-'áäh/: handle a single roundish bulky object

<table>
<thead>
<tr>
<th>(1)</th>
<th>(2)</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Singular</td>
<td>bih násh'áah</td>
</tr>
<tr>
<td>2. Singular</td>
<td>bih nání'áah</td>
</tr>
<tr>
<td>3o. Singular/plural</td>
<td>yiíh néi'áah</td>
</tr>
<tr>
<td>3a. Singular/plural</td>
<td>bih néjí'áah</td>
</tr>
<tr>
<td>1. Plural</td>
<td>bih néiit'áah</td>
</tr>
<tr>
<td>2. Plural</td>
<td>bih náh'áah</td>
</tr>
</tbody>
</table>
(1) In this paradigm the iterative prefix /ná-, ń-/ is merely prefixed to the forms given in the disjunctive paradigm of the usitative mode, with certain simple morphophonemic changes apparent on summary comparison of the usitative and iterative paradigms.

Biíh násh'ááh, I repeatedly put it in it.

(2) In this paradigm the iterative prefix /ná-, ń-/ has position between the two elements of the compound prefix /ńdi-/ meaning up from a surface. Thus, nínádiish'ááh, I repeatedly pick it up (=ńí-, up + ná + di + yi + sh + 'ááh). Compare examples given under the heading Imperfective Mode.

The Neuter Verbs

There is a class of verb forms that express state of being, quality, color and other attributes. These, known as neuter verbs, are conjugated in only one paradigm. The neuter verbs are formed after the fashion of imperfectives to denote qualities and attributes of the type usually expressed by adjectives, in English. Navajo does not have a word class corresponding to the adjectives of English, except as neuter verb forms function in a comparable capacity, and with the possible exception of a few forms which are not conjugatable such as yázhí, little; -tsōh, big. Certain neuter verb paradigms are also formed as /si/, /ni/ or /yi/ imperfectives.

<table>
<thead>
<tr>
<th>Person</th>
<th>Number</th>
<th>(1)</th>
<th>(2)</th>
<th>(3)</th>
<th>(4)</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Singular</td>
<td></td>
<td>nisdaaz</td>
<td>línishgai</td>
<td>disnishjool</td>
<td>sézį</td>
</tr>
<tr>
<td>2. Singular</td>
<td></td>
<td>ndaaaz</td>
<td>ligai</td>
<td>dijool</td>
<td>sínițį</td>
</tr>
<tr>
<td>3. Singular/plural</td>
<td></td>
<td>ndaaaz</td>
<td>ligai</td>
<td>dijool</td>
<td>síițį</td>
</tr>
<tr>
<td>3a. Singular/plural</td>
<td></td>
<td>jďdaaz</td>
<td>jľgai</td>
<td>jidijool</td>
<td>dzįįțį</td>
</tr>
<tr>
<td>1. Plural</td>
<td></td>
<td>niidaaz</td>
<td>lńiįgai</td>
<td>dinįjool</td>
<td>siiįțį</td>
</tr>
<tr>
<td>2. Plural</td>
<td></td>
<td>nohdaaz</td>
<td>lńohgai</td>
<td>dinohjool</td>
<td>soozį</td>
</tr>
</tbody>
</table>

(1) Stem /-daaz/ to be heavy.

nisdaaz, I am heavy; 'ashkii ndaaaz, the boy is heavy; 'ashkii ndaazf, the heavy boy ('ashkii, boy; ndaaaz, he is heavy; -f, the one).

(2) Stem /-gai/ to be white

línishgai, I am white; kin lįgai, the house is white; kin lįgaiť, the white house (kin, house; lįgai, it is white; -ť, the one).

(3) Stem /-jool/ to be round like a ball

Disnishjool, I am round like a ball; xodijool, it (an area or space) is round
like a ball; bi' xodiiool, he is a blockhead (i.e. space is round like a ball with him) (bi', with him; xo-, pronoun subject referring to space or area; -dijool is round).

(4) Stem /-zi/, to be standing.

Sezi', I am standing; I am in a standing position. (cf. yiizi', I stood up.) Tsé sizfinii, the standing rock (tsé, rock; sizíin - it is standing; -ii, the particular one. Sizí + -ii lengthens the stem vowel, and inserts a ligature /n/ before the suffix.)

A /yi/ perfective neuter is yíjiin, it extends as a black line.

Neuter verbal forms of the following types function in situations requiring the adjective class in English. The following forms are given in the third person:

'áníts'óózi; -ts'óósi: slender, thin - ('áníts'sóózi, I am thin; 'áníts'óózi, you are thin, etc.).

Deení, sharp, (i.e. it is sharp).

ditlid, shaky; quivery (it is shaky).

dichosh, stubby (it is stubby).

ditl'o, hairy (as a goat) (it is hairy).

dítch'il, dense (vegetation (it is dense)).

dootl'izh, blue; green (it is blue).

dík'gózh, sour (it is sour).

dilchxosh, effervescent (it is effervescent).

dighol, rough (road) (it is rough).

doo yá'áshőp da, bad; no good (it is bad).

lichii', red (it is red).

ligai, white (it is white).

líkizh, spotted (it is spotted).

líkon, flammable (it is flammable).

líkan, sweet; tasty (it is sweet).

nízaad, far (it is far).

ntsaa, big (it is big).

nteel, flat (it is flat).

nítxió, clear (water (it is clear)).

nizhóní, pretty (she is pretty).

sido, warm (it is warm).

sik'az, cold (it is cold).

líbá, gray (it is gray).

Comparison: Navajo does not express the degrees of comparison of adjectivals after the fashion of English, for the obvious reason that Navajo does not include an adjectival word class. The neuter verbs express qualities, and function in a manner corresponding to that of English adjectives.
However, certain neuter forms which express physical qualities including size, distance, quantity, extent, and weight have an absolute and a relative form. The latter involves a prefix /'á-/, and usually the stem classifier /1/ or /1/, with a variant stem form.

<table>
<thead>
<tr>
<th>Absolute</th>
<th>Relative</th>
</tr>
</thead>
<tbody>
<tr>
<td>nineez, it is long</td>
<td>'áníñéez, it is long</td>
</tr>
<tr>
<td>ntsaa, it is large</td>
<td>'áníñtsxdááz, it is large</td>
</tr>
<tr>
<td>ntxeel, it is broad</td>
<td>'áníñtxéeél, it is broad</td>
</tr>
<tr>
<td>néelt'e', numerous</td>
<td>'ánéelt'e', numerous</td>
</tr>
<tr>
<td>níldíil, it is large</td>
<td>'áníldíil, it is large</td>
</tr>
<tr>
<td>ndaaz, it is heavy</td>
<td>'áníñááás, it is heavy</td>
</tr>
<tr>
<td>-tsoh, big</td>
<td>'áníñtso, it is big</td>
</tr>
<tr>
<td>nízaad, it is far</td>
<td>'áníñááád, it is far</td>
</tr>
<tr>
<td>bidziil, he is strong</td>
<td>'ábóodižíil, he is strong</td>
</tr>
</tbody>
</table>

Compare: Díí 'éé' nineez, this shirt is long /díí 'éé' 'ayóí' 'áníñnéez, this shirt is (relatively) very long. Shikin nízaadi si'g, my house is far away. (shi-, my; -kin house; nízaa-, it is far; -di, at; si'g, it sets) Nighandó shighan bìña'gi kodóó yootooji' 'áníñááá, my house is as far from your house as it is from here to Santa Fe (nighan-, your house; -dóó, from; shighan, my house; bìna'-, between them; -gi, at; kodóó from here; yootooji', to Santa Fe; 'áníñááá, it is relatively far). Nidziil, you are strong/ shilááh 'áñóodižíil, you are stronger than I am.

The concepts more than, less than, most, least are expressed by the use of postpositional or adverbial elements in Navajo. These include: /-lááh/ beyond; /-'oh/, less than; /'añáhá, 'añáháadi/ foremost.

Díí 'éé' shilááh 'áníñtso, this shirt is too big for me (díí, this; 'éé', shirt; shilááh, beyond me; 'áníñtso, it is relatively big).

Díí 'éé' shi'oh 'áníñtso, this shirt is too short for me (shí'oh, less than me; 'áníñtso, it is relatively long).

Nisneez, I am tall. Shízhé'é bilááh 'ánísnéez, I am taller than my father (shízhé'é, my father; bilááh, beyond him; 'ánísnéez, I am relatively tall).
Shi'll', ntsaaz, my horse is big/shi'll', dif ifi', yilaah 'anifitsaaz, my horse is bigger than this horse; shi'll', alashdi or aghadi 'anifitsaaz, my horse is the biggest. (shi'll', my horse; ifi', horse; yilaah, he-beyond-him; alashdi, at a place beyond something; 'anifitsaaz, he is big).

Also: dinisgho'. I am a fast runner/shijigga dinisgho', ni t'aa 'a'oh, I can run faster than you (sh, me; -ji-, on the side of; -go, being; dinisgho', I run fast; ni, you; t'aa, just; 'a'oh, less than something unnamed).

Neuter verb forms used in situations corresponding to the adjectives of English often include a noun-forming suffix /-f/, the one, the one who. Thus:

'at'edd ligai, The girl is white/'at'edd ligaiif, the white girl ('at'edd, girl; ligai, she is white; ligaiif, the one who is white).

But, 'at'edd ligai lei' yiiitsi, I saw a white girl ('at'edd, girl; ligai, she is white; lei', some, a; yiiitsi, I saw her.) or 'at'edd ligaiif yiiitsi (I saw the white girl).

The Imperative

There is no imperative mode, as such, in Navajo. With reference to an action that is to take place in the future, the future tense forms are used in an obligatory sense, as y'at'edd shá bididfinnil, tell him hello for me (y'at'edd, hello; it is good; shá, for me; bididfinnil, you will say it to him); yisggogo 'ahbinigo shaa difnáal, come to see me tomorrow morning (yisgago, tomorrow; 'ahbinigo, it being morning; shaa, to me; difnáal, you will come).

The perfective mode forms are used as an immediate imperative, as shaa nf'ääh, give it to me (shaa, to me; nf'äh, you are in the act of giving it); 'anifitsées, turn out the light (you are in the act of extinguishing something unnamed).

The negative imperative, in an immediate sense, is formed by use of the frame/t'dáado -i/and an imperative mode or neuter verb form. Thus, t'dáado yánitiixi'f, don't talk; quit talking (t'dáado, without; yánitiixi'-, you are talking; -i, the one = don't be the one who is talking); t'dáado shich'ggh sínidáhí, don't sit in my way (t'dáado, without; shich'ggh, obstructing me; sínidá - , you are sitting; -i, the one = don't be the one who is sitting obstructing me).
In the sense of a future admonition, the optative mode, usually with a negative particle /lágo/, is used: ghóóyá lágo, don't eat it; would that you do not eat it. Or, more forcefully the optative mode with /t'ááká/, as t'ááká xaóódzíih, see that you do not say anything.

The Passive Voice: Navajo has two forms of the passive voice: a simple passive in which there is no reference to the actor who causes the action, and in which only a third person can be the direct object of the verbal action; and an agentive passive in which the action of the verb is represented as caused by an un-named actor, with any other person as the direct object. The simple passive forms are constructed by prefixing the modal and adverbial elements of the verbal base directly to the verb stem. The agentive passive forms are constructed with the addition of the compound prefix /'adi-, -'di-/ into the verbal base. Both types of passive forms require the /d/ or /1/ classifier (/d/ in zero class verbs, and /1/ in /1/ class verbs).

Stem: /'-ááì, -aah, -áh, -ááì/ (49) handle a bulky object.

<table>
<thead>
<tr>
<th>Tense</th>
<th>Simple</th>
<th>Translation</th>
<th>Agentive</th>
</tr>
</thead>
<tbody>
<tr>
<td>Future</td>
<td>doot'ááì</td>
<td>it will be brought</td>
<td>bidi'doot'ááì</td>
</tr>
<tr>
<td>Imperfective</td>
<td>yit'aah</td>
<td>it is being brought</td>
<td>bi'deet'aah</td>
</tr>
<tr>
<td>Perfective</td>
<td>yit'áx</td>
<td>it was brought</td>
<td>bi'deet'áx</td>
</tr>
<tr>
<td>Progressive</td>
<td>yit'daáh</td>
<td>it is being carried</td>
<td>bi'doot'daáh</td>
</tr>
<tr>
<td>Usitative</td>
<td>yit'ááh</td>
<td>it is usually brought</td>
<td>bi'dit'ááh</td>
</tr>
<tr>
<td>Iterative</td>
<td>nát'ááh</td>
<td>it is repeatedly brought</td>
<td>nábi'dit'ááh</td>
</tr>
<tr>
<td>Optative</td>
<td>ghótt'ááì</td>
<td>that it might be brought</td>
<td>bi'dótt'ááì</td>
</tr>
</tbody>
</table>

The direct object of the agentive passive may be any person as shown in the following example:

Stem: /'-ááì/ + /d/ classifier = /'-ááì/, progressive mode, to eat.

<table>
<thead>
<tr>
<th>Pronoun</th>
<th>Agentive Passive</th>
<th>Translation</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Singular</td>
<td>shidi'doodááì</td>
<td>I'll be eaten</td>
</tr>
<tr>
<td>2. Singular</td>
<td>nidi'doodááì</td>
<td>You'll be eaten</td>
</tr>
<tr>
<td>3. Singular/plural</td>
<td>bidi'doodááì</td>
<td>he/they will be eaten</td>
</tr>
<tr>
<td>3a. Singular/plural</td>
<td>xodi'doodááì</td>
<td>he/they will be eaten</td>
</tr>
<tr>
<td>1. Plural</td>
<td>nixidi'doodááì</td>
<td>we'll be eaten</td>
</tr>
<tr>
<td>2. Plural</td>
<td>nixidi'doodááì</td>
<td>you'll be eaten</td>
</tr>
</tbody>
</table>

(49) Progressive, Imperative, Perfective, Usitative and Optative mode forms respectively.
As pointed out above, the simple passive can relate only to a third person as direct object of the verbal action. Thus dooddíí, it will be eaten, but not shiddoodíí, *I will be eaten; yiddé', it was eaten, but not shíiddé'*. The agentive passive forms must be used if the direct object is other than a third person.

**Indefinite Third Person:** As pointed out in a foregoing section, transitive verbs require expression of the direct object by means of an object pronoun incorporated within the verbal base. If the direct object is not a definite thing, it must be represented by an indefinite pronominal prefix /'a-/ someone; something (unspecified). Thus yiyá, he is eating it (a definite thing), but 'ayá, he is eating (some thing unspecified).

The same pronoun /'a-/ can also function as a subject pronoun. It is clearly the subject when prefixed to intransitive verbs; but when prefixed to transitive verbs it is not duplicated if both the subject and the object are the indefinite third person.

'ayá, he is eating (something un-named)

'adá, something un-named is being eaten

(cf. yidá, (something definite) it is being eaten; its eating takes place. (In Navajo "to operate a restaurant" is expressed as shá 'adá - literally "eating takes place for me".))

ńdíldzá, he arose/'n'idiidzá (=ni-'a-diidzá), someone un-named arose; getting up took place.

sizá, he is standing/'azá, standing takes place.

daaztsá, he died/da'aztsá, death took place.

'ajool'na', he crawled away/'o'oo'na, crawling away took place.

The spatial pronoun /xo-/ is sometimes used as a verb subject in situations comparable to that of /'a-/, but with a connotation of area or space rather than an indefinite but concrete something.

xóyá, he is wise/xódzá, there is wisdom

nizhóní, it is pretty/ 'ízhóní, beauty exists/

xózhóní, it (a place) is beautiful.

láchíí', it is red/'alchíí', there is redness/kalchii', the place is red.
yidiizts'įį', he heard it'/iists'įį', there was a noise (i.e. hearing took place)/ xodiizts'įį', there was a noise.

Forms with the indefinite or spatial pronoun as subject often function as abstract nouns in Navajo, as in xalgai, it (an area) is white, plain. Also /xo-/ occurs in such constructions as shił bééxózin, I know it (shił, with me; béé-, about it; xózin, there is knowledge or awareness); shił bééxodoxooziił, I'll find out about it (shił, with me; béé-, about it; -xodoxooziił, there will be knowledge).

**NEGATION**

The Navajo terms /dooda/, /nda/ translate no, while /'ouu'/, /'aoo'/, /lá'gí$/, /'gí)$/ express yes, uh huh.

The simplest negative frame, functionally analogous to French /ne—pas/, is /doo da/. Thus:

Deesk'aaz, it is cold/doo deesk'aaz da, it is not cold.

Doo t'áá kad silágago sélijį da, I don't want to be a soldier (doo, not; t'áá, just; k'ad, now; silágago, soldier; sélijį, I became; da, not).

Doo t'áá 'át'é t'áá łahįį dah ńda'dii'náa da, they did not all start moving back at the same time (doo, not; t'áá'át'é, all; in their entirety; t'áá łahįį', in a group; dah, off; ńda'dii'ná-, the beginning movement back by plural persons took place; starting off to move back by plural persons took place).

shił yá'át'éeh, I like it/doo shił yá'át'éeh da, I don't like it.

**TENSE**

As we pointed out previously, the Navajo language is primarily concerned with the expression of mode and aspect, and only secondarily concerned with the time of an action, with exception of futurity which is expressed by a separate paradigm as well as by other combinations.

Tense is usually expressed by the use of adverbs of time, especially /ńt'é'é$/, past time, and /dooleezi/, future time. The two forms can be translated as it was, then; and it will be, respectively.
Thus, /yisháá/’, I am walking along. Although the English translation implies present action, the Navajo verb form is in the progressive mode and it merely reflects the action as being in progress without regard to time. The addition of /át'é'ı/ projects it into the future.

Yisháá, I am walking along.

Yisháá át'é', I was walking along (I am walking along it was).

Yisháá dooleel, I shall be walking along (I am walking along it will be).

And yisháá dooleel át'é', I would be walking along. The combination of both adverbs of time translate a conditional (I am walking along it will be it was).

Baa nish'aah, I am in the act of giving it to him (Imperfective mode).

Baa nish'aah át'é', I was in the act of giving it to him.

Baa nish'aah doo leel, I shall be in the act of giving it to him.

Baa nish'aah dooleel át'é', I would be in the act of giving it to him.

Baa ní'á, I gave it to him (perfective mode).

Baa ní'á át'é', I had given it to him.

Baa ní'á doo leel, I shall have given it to him.

Baa ní'á dooleel át'é', I would have given it to him.

The adverbial form /dooleel/ is often shortened to /doo/ or to /leel/.

In addition to adverbs of time which have the force of expressing tense relationships, certain other adverbial elements are used with the several modal forms to express specific ideas. Some of these are:

A. With the Future Tense Forms:

1. /yíé/, an enclitic particle attached to nouns, verbs and pronouns. It is translatable in many contexts as aforementioned, former. Attached to a future tense form it injects the meaning wish that.
Naxodooltxii, it will rain/ naxodooltxii, I wish that it would rain.

Bi'ih diyeshxéí, I shall kill a deer/ Bi'ih diyeshxéí, I wish I could kill a deer.

2. /-go 'at'ê/, composed of the participializing suffix /-go/ and /'at'ê/, it is, added to a future tense form translates can, be able to (for sure).

Nik'ehhidedeshdleeigo 'át'ê, I can whip you (in a fight) (Nik'ehhidedeshdlee, I shall whip you).

Naxodooltbii'ígo 'át'ê, it is surely going to rain (i.e. is able to for certain) (naxodooltbii'í, it will rain).

/-go xaz'è/ is used in the same manner, and with the same meaning as /-go 'at'ê/.

3. /-go da 'at'ê/, in which /da/ injects the concept of approximately (cf. txá'a'go da shaa níníí, give me about three of them.), is used with future verb forms in the sense of might.

Yootxóógóó deeshááíigo da 'at'ê, I might go to Santa Fe (yootxóógóó, to Santa Fe; deeshááí-, I shall go; -go da 'at'ê, might).

4. /lágo/ with future and imperfective mode forms translates before, in a past time sense.

Neeznáá yiskágóo na'akái dooleel lágo xatxaalíí bi'niitsg, ten days before the ceremony was to take place, the medicine man got sick (neeznáá, ten; yiskágóo, days; na'akáí, a Yei Bichai ceremony is going on; dooleel, it will be; lágo, before; xatxaalíí, medicine man; bi'niitsg, he became ill—lit. he began to die).

B. With Imperfective Mode Forms:

1. /yédéé'/, a combination of the enclitics /yéé/ and /éé'/, ago; in past time, attached to imperfective mode forms translates English when, in a past sense.

shizhé'ê xínáháádá'í t'dá kwe'ê nixighan út'êé', when my father was living our home was right here (shizhé'ê, my father; xínd-, he is alive; -dá'í = yédéé', in the past;
t'áá, right; kwe'éd, here; nixíghan, our home; át'éé', it was).

The same combination of enclitics /yéédéé'/ attached to an imperfective mode form, and preceded by /t'ah doo/, still not, translates English before, prior to, again in a past time sense.

T'ah doo yiistsehá téé' doo ghoosháddía da át'éé', Before I saw it I didn't believe it (t'ah, still; doo, not; yiistséh-=yiistséh, I am in the act of seeing it; -éé'=éééé'; doo, not; ghoosháddía, I believe it; da, not).

2. /t'ah doo/ with an imperfective mode form translates have never, as in:

T'ah doo yiistséeh da, I have never seen him (T'ah, still; doo, not; yiistséeh, I am in the act of seeing him; da, not).

3. /k'adéé/, a combination of /k'ad/, now and /yéé/, with imperfective mode forms translates nearly, almost, as

K'adéé 'iishxáásh, I nearly went to sleep ('iishxáásh, I am in the act of going to sleep).

Chidi k'adéé yichxóogh lágo naxáníi', I bought a car just about the time it fell apart (chidi, car; k'adéé, nearly; yichxóogh, it is in the act of becoming ruined; lágo, just before; naxáníi', I bought it).

4. /le'/ an optative particle used, not only with optative mode forms, but also with imperfective and neuter verbs to mean wish that, let it be that.

K'ad yootóogi naasháá le', I wish I were in Santa Fe now (k'ad, now; yootóogi, Santa Fe; naashá, I am walking about; le', let it be, wish that).

K'ad txá'neesk'áání ła' yisháá le', I wish I were eating a melon now (txá'neesk'áání, melon; ła', a; yisháá, I am eating it; le', wish that).

'Adinídín le', let there be light.

txó ła' sél'ág le', I wish I had some water on hand (txó, water; ła', some; sél'ág, I keep it; le', wish that).
5. /t'áadoo —-íggo t'éiyá/ is a frame which, with imperfective verb forms, translates only on condition that, but in a negative sense.

T'áadoo xáilda bił xólne'ígo t'éiyá déf liél' naa deeshtxééí, I'll give you this horse only on condition that you won't tell anyone (t'áadoo, without; xáilda, any one; bił, with him; xólne', you are telling; -íggo, being the one; t'éiyá, only; déf, this; liél', horse; naa, to you; deeshtxééí, I'll give it). (t'áadoo bił xólne'í, don't tell him — lit. don't be the one telling him).

6. /t'ah doo la' — da/is a frame of particles which, with imperfective mode forms, translates wonder why never — anymore.

T'ah doo la' nánéíistséeh da, I wonder why I never see him anymore (t'ah, still; doo, not; la', a particle that expresses puzzlement and consternation; nánéíistséeh, I am in the act of seeing him again; da, not).

7. /t'áadoo —-í/ is a frame in which /t'áadoo/, without, in combination with an imperfective verb form nominalized with the noun forming suffix /-í/ translates before.

T'áadoo 'ákog' dishAíf nádzá, Before I started there he came back (t'áadoo, without; 'ákog', there; dishA, I am in the act of starting to go; -hf, the one; nádzá, he returned).

T'áadoo láf náxáí lah ti'ée'go naat'danii yég tsf'deeyáá dódó daazts'é jíní, one night, before many years had passed, the chief had a fit and died (t'áadoo, without; láf, many; náxáí, years are in the act of passing; -í, the one; láh, once; ti'ée'go, at night; naat'danii, chief, leader; yég, former; tsf'deeyáá, he had a fit; dódó, and; daaztsé, he died; jíní, it is said).

C. With the Perfective Mode:

1. /-jj'/, a postpositional enclitic used in both a locative and a temporal sense. As a locative it is translatable as up to, as far as (dziijj', as far as the mountain); in a temporal sense it translates until.

Néinídzáajj' ná yíníshtxág' dooleel, I will hold it for you until you return (néinídzá-, you came back; -jj', until, as far as; ná, for you; yíníshtxág', I am holding onto it; dooleel, it will be).
2. /doo t'áá k'ad—da/is a frame of particles which, with perfective mode forms, connotes a negative desire. It is translatable as don't want to.

Doo t'áá k'ad 'ákọ̀ nisëyáa da, I don't want to go there (doo, not; t'áá, just; k'ad, now; 'ákọ̀, there; nisëyá, I made a round trip; da, not).

3. /-dèg'/ ago, past time, has the force of if, in case, when suffixed to perfective or neuter verbs.

Béeso nee 'ásdíjjdèg' la' na'deeshníl, In case you run out of money, I'll lend you some (béeso, money; nee, with you; 'ásdíjj-, it has become none; -dèg', if; la, some; na'deeshníl, I will lend them to you).

4. /t'áadoo—góó/, /t'áadoo—góogo/, are frames which, with perfective mode forms, translate unless.

T'áadoo la'ì yídzaazgóogo dággo ch'il doo ŋdaxodoodleél da, unless it snows a lot, the plants will not come back up in the spring (t'áadoo, without; la'ì, a lot, many, much; yídzaaz-, snow fell; -góogo, unless; dággo, being spring; ch'il, plants; doo, not; ŋdaxodoodleél, they will become back).

5. /doo—-góó/ is a frame which, with the perfective mode, translates if.

Doo 'ìíyégge góó doo dah dideesháal da, I won't start off if I have not eaten (doo, not; 'ìíyégge, I ate; -góó, if; doo, not; dah, off; dideesháal, I shall start; da, not).

D. With Optative Mode Forms:

1. /laanaa/ is a particle expressing a positive wish. It is comparable to English would that.

Nhéi tsé biká'gi 'ajóixosh laanaa nísin, I wish that (would that) one could go to sleep on top of that rock.

2. /lágo/ expresses a negative wish or desire with optative mode forms.

Naxooítxá'lágo, I hope it doesn't rain.

Xaaddziih lágo, I hope you'll say nothing.
3. /t'ááká/ a combination of particles which, with optative mode forms, express the idea see that (you) do not.

T'ááká xaóódziih, see that you say nothing.

4. /le'át'éégóó/, a combination of /le'/, wish that; 'át'é-', it is; and -góó, to, toward, which with optative mode forms expresses the idea proof against.

shíníbaal doo txó biníkáoogeeh le' 'át'éégóó 'fishláa, I made my tent water proof (shíníbaal, my tent; doo, not; txó, water; biníkáoogeeh, that it might flow through it; le' 'át'éégóó, proof against; 'fishláa, I made it).

5. /-gi le' 'át'é/ with optative mode forms translates easily, without effort.

kwii dázh'dóiti'ingo txó dah sighígo 'ájóléhégí le' 'át'é, one could easily dam up the water here and form a lake (kwii, here; dázh'dóiti'ingo, that one might build a dam; -go, being that; txó, water; dah sighígo, it being impounded; 'ájóle-', that one might make it; -í-, nominalizing suffix the one; 'álle' 'át'é).

6. /doo — 'át'ée da/, this frame, with the optative translates cannot.

Doo 'ooshxáash 'át'ée da, I cannot go to sleep (doo, not; 'ooshxáash, that I might go to sleep; 'át'é, it is; da, not)

7. /t'áadoo bee — -( da) is a frame which, with optative forms, connotes lack of a means to perform the action of the verb.

T'áadoo bee dósha'í da, I having nothing with which to go (t'áadoo, without; bee, with it; dósha'-, that I might start going; -í, the one; da, not)

It becomes clear from the foregoing that Navajo and English differ radically in the manner in which the concepts of time in relation to verbal actions are expressed; and the divergence is equally great in the expression of potential, conditional, and temporal concepts which, in English, are expressed by prepositions, adverbs and other elements. There are no Navajo words equating directly with if, when, unless, can, while, before (except in a series), never, nothing, wish, hope.
THE NOUN

The nouns of Navajo derive largely from verbs. Some of them are verb stems used as nouns; some are formed after the fashion of neuter verbs; some are abstract verbal forms and some are agentive nouns formed from verbs by the addition of a noun-forming suffix.

1. **Stem Nouns.** These include monosyllabic forms of the type:

- tso, water
- sq', star
- kp', fire
- dii, blood
- tsin, wood
- ts'ìn, bone
- sis, belt
- tsd, stone
- dzil, mountain
- bis, adobe
- chin, snowstorm
- bigs, hoop

Many of the stem nouns change form when possessed:

- tso, water/shitxo', my water
- kp', star/bizq', his star
- sis, belt/siziiz, my belt

2. **Neuter Verbal.** This class is composed of a stem plus a prefix:

- dine, man; person
dine'eh, young man
dóone'é, clan
dine'ë, people; race
dibe, sheep
didze, berry
dibáá', thirst
dichin, hunger

3. **Abstract Verbal.** This class is composed of abstract verb forms used as nouns, often with the pronoun subject /xo-, xa-/ relating to space or area; or the indefinite /'a-/ some thing unnamed.

- xado, heat
- xak'az, cold
- xa'a'aah, east (= it rises)
- xalgai, plain (= white area)
- nanise', plant (= it grows about)
- neest'ë, fruit (= it ripened)

4. **Compound.** Compound nouns are formed by combining stem nouns with one another or with other word classes.

(a) Noun plus noun:

- tsésp', glass (tsé, stone + sq', star)
- keets'aa', dish (tee-, earth; -ts'aa', basket)
- tsits'aa', box (tsi-, wood; -ts'aa', basket).

(b) Noun plus postposition:

- tsintxah, forest (tsin-, trees; -txah, among)
- tséghi', canyon (tsé-, rock; -ghi', inside)
(c) Noun plus verb:

tõ'ohchin, onion (tõ'oh-, grass; -chin, smells).

tsinaabës, wagon (tsi-, wood; -naabës, it rolls about).

tsì'shldloozh, table (tsì' sh-, wood; -shldloozh, it sets - trotting pos.)

txöntxéej, ocean (txö-, water; ntxéej, it is broad).

(d) Noun plus nominalized verb:

galbì(h)ìf, cottontail (ga-, rabbit; -ì(h)ìf, it is gray; -ì, the one)

bā'h ìkànìgìf, roll (bā'h, bread; ìkàn-, it is sweet; -ìgìf, that which is)

(e) Noun plus possessed noun:

tsìn bigaan, limb (tsìn, tree; bigaan, its arm)

ì's' bìghëèl, saddle (ì's', horse; bìghëèl, its burden.)

(f) Postposition plus nominalized verb:

bá'óltxìf, teacher (bá-, for him; -óltxì', counting takes place; -ì, the one = the one for whom counting [reading] takes place).

bee'atsìdí, hammer (bee-, with it; -'atsì-, pounding takes place; -ì, the one).

bee'adìt'oodi, towel (bee-, with it; 'adìt'ood-, self-wiping takes place; -ì, the one).

(g) Agentive (nominalized verbs)

'ani'ìdhì, thief ('ani'ìdh-, he steals things; -ì, the one = the one who steals things).

'adìits'a'ìi, interpreter ('adìits'a'-; he hears something; -ìi, the particular one who).

'iisxìnìi, killer ('iisxìf-, he killed someone; -(n)ìi, the particular one who).

(h) Gentilic: Nouns relating to people (clans) are formed by adding the suffix /-nii/, people to a noun or verb:

kiyaa'ándìi, Standing House Clan (Ki-, house;
yaa'd-, it stands straight up; -nii, people).

Béésh í't'i'nii, the people who live along the railroad (béésh, iron; í't'i'-, it extends horizontally as a line; -nii, people.)

(i) Descriptive: Some Navajo nouns are descriptive verbal terms often nominalized by one of the noun-forming suffixes /-í/, /-ii/, the one or /-ígif/, that which:

chidi naa'na'-í, tractor (chidi, automobile; naa'na'-, it crawls about; -í, the one).

béeso bá xooghan, bank (béeso, money; bá, for it; xooghan, home).

'atsiniltl'ish bee 'adinídifín, electric light; ('atsiniltl'ish, lightning, electricity; bee, with it; adinídifín, light).

xatxaalíi, medicine man (xatxaal, he sings; -íi, the particular one).

'áshíh ́ikan, sugar ('áshíh, salt; ́ikan, it is sweet).

(j) Onomatopoetic: Some Navajo nouns are derived from terms which imitate a characteristic sound made by the object:

chidi, automobile (chid, sound of a motor; -í, the one = the one that goes "chid-chid").

tsídii, bird (tsid-, chirping sound; -í, the one).

(k) Locative: Most Navajo place names are terms which describe geographical features:

Yootxó, Santa Fe (yoó-, bead; -txó, water; txóghoí, Taos (txó-water; -ghoí, gurgling sound).

Na'nízhoozhí, Gallup (na'-, across; -nízhoozh-, slender objects lie parallel to one another; -í, the one = the bridge).

The Noun-Forming Suffixes.

Nouns are formed from verbs by addition of a suffix /-í/, /-ii/, or /ígif/, the one, that which, to the verb stem. The suffix /-í/ is more remote and less particular than /-ii/. Thus, xatxaalí, he sings; xatxaalíf, singer (one who sings); but xatxaalíi, singer (of a particular type = a medicine man). The suffix /-ígif/ refers to that which has the
characteristics denoted by the verb to which it is suffixed. Thus, 'áshíh likanígíí, ('áshíh, salt; likan-, it is sweet; -ígíí, the type which is = the type of salt that is sweet) = sugar.

The suffixes /-í, -ii, -ígíí/ often translate the English definite article the. 'Áshíík'í, ligaíígíí t'áiyá shíí yá'át'ééh, I like only the white dog (t'áeyá 'i, dog; ligaí-, it is white; -ígíí, the (one which); shíí, with me; yá'át'ééh, it is good).

As noted above under (g), agentive nouns are formed by adding one of the noun-forming suffixes to the third person form of verbs, as 'ani'ííh, he steals/ 'ani'íílhíí, thief (= the one who steals).

Navajo does not form nouns from other nouns, adjectives or verbs in the manner of English by the addition of suffixes corresponding to: /-ness/ (warmness); /-th/ (warmth) /-tion (consideration); /-hood/ (brotherhood); /-ship/ (craftsmanship); /-ment (interment); /-ence/ (interference); /-ity/ (possibility); /-ism/ (communism).

The nearest parallel between Navajo and English in this type of noun formation is the addition of noun-forming suffixes to a verb form to produce agentives of the type formed by addition of the suffixes /-er/, /-ist/, in English (as in kill-er, rap-ist); and perhaps the use of abstract verbs comparable to those in /-ing/, as nouns in English: being, killing; Navajo 'íl'í (or 'ídí), being; xa'a'aah, east (movement of a single roundish object - the sun - up out takes place); dah 'azká, mesa (dah, up at an elevation; setting after the fashion of an open vessel takes place. cf. siká, it - an open vessel - sets with it).

Noun Posession: As pointed out above, many nouns change form; in Navajo, when they are possessed. Thus xééí, pack/shighédí, my pack; txó, water/shitixo', my water; sis, belt/siziiz, my belt; neest'í, fruit/ bineest'í', its fruit.

Some types of nouns are never expressed without a possessive prefix, on the principle that, by their very nature, they do not exist independently of a possessor. Mountains, stones, stars, rocks and water, on the other hand, occur independently in nature. Thus, such noun forms as dzlí, tse', sqá', tse', and txó, respectively are usually expressed without reference to a possessor. But body parts and kinfolk, for example, do not occur free in nature. A hand or a mother must belong to someone, and the possessor must be expressed either as a definite or an indefinite person whose hand or mother it is; such objects to not occur "free" in nature. Hand is thus 'ála' ('á-, indefinite possessor: someone's); 'amá ('a-, indefinite possessor: someone's), mother.
In addition, one may be described as the **primary** or the **secondary** possessor of certain items, especially body parts and products. 'Atsî' translates **meat** ("a-\, something's; -tsî', flesh), and sitsî', translates **my flesh** (from my own body). But if I purchase meat at the market, I cannot refer to it possessively as sitsî'—the latter refers only to **my own flesh**. I am the secondary possessor of something else's flesh when I buy meat at the market, and the primary possessor must be represented by the indefinite pronoun /'a-/ if it is not otherwise definitely represented. Thus: she'atsî' (she-, my; -a-, something's; -tsî', flesh) my meat (but not from my own body); shibe', my milk (shi-, my; -be', milk) (from my own mammary glands), but she'abe', my milk (boughten or otherwise secondarily possessed). The primary possessor may, of course, be represented by a noun, as shidibé bitsî', my-sheep its-meat; my mutton (shi-my; -dibé, sheep; bi-, its; -tsî', flesh).

**The Possessive Pronouns:** The possessive pronouns take two general forms in Navajo; they occur as prefixes attached to nouns, and they also occur as independent forms. The same series of prefixes that occur with nouns to indicate possession occur as the pronoun object of postpositions.

The following occur as independent possessive pronouns:

| Independent | 1. Singular | shíp' | mine |
|            | 2. Singular | níw' | yours |
|            | 3. Singular/plural | bíp' | his, here, its, theirs |
| 3a.       | 1. Plural | xwíp' | his, hers, theirs |
|            | 2. Plural | nixíp' | ours |
|            |            | nixíp' | theirs |
The prefixed series occurs in three forms, as shown. These are exemplified below:

**Type A.** Noun: ch'ah, hat.

Shich'ah, my hat; nich'ah, your hat; bich'ah, his her, their hat; xach'ah, his her, their hat; nixich'ah, our hat(s); nixich'ah, your hat(s).

**Type B.** Noun: -la', hand.

Shila', my hand; níla, your hand; bíla', his her, their hand; yíla' he acting on his hand; xála', his her, their hand; 'álax, someone's hand; 'álalax, each other's hand; nixíla', our hand; your hand.

**Type C.** Noun: -ádí, older sister

Shádí, my sister; nádí, your sister; bádí, his her, their sister; yádí, he acting on his sister; xádí, his her, their sister; 'ádí, someone's sister; 'áxádí, each other's sister; nixádí, our sister; your sister.

As pointed out above, the same pronominal series are prefixed to postpositions, as:

**Type A.** Postposition: -k'i, on.

Shik'i, on me; nik'i, on you; bik'i, on him, her, it, them; yik'i, he on him (third person subject on third person object); xak'i, on him, her, it, them; xak'i, on
it (area); 'ak'i, on something; 'alaki, on each other; 'ak'i, on oneself; nixik'i, on us; on you.

**Type B.** Postposition: -ká, after (as run after).

Shká, for me; níká, for you, etc.

**Type C.** Postposition: -á, for.

Shá, for me; ndá, for you; bá, for him, her, it, them, etc.

**An Expressed Noun as Possessor:** When an expressed noun is the possessor of an object, the possessive pronoun is prefixed to the noun which is possessed. Thus: 'ashkii bich'ah, the boy's hat ('ashkii, boy; bi-, his; -ch'ah, hat); shimá bich'ah, my mother's hat (shí-, my; -má, mother; bi-, her; -ch'ah, hat); shimá bibéégashii bitsee', my mother's cow's tail (shí-, my; -má, mother; bi-, her; -béégashii, cow; bi-, its; -tsee', tail). In English, the possessive suffix /-'s, -s'/ is added to the noun which represents the possessor — English boy's hat becomes boy his-hat, in Navajo.

**Number**

In the Verb:

Some verbs use separate stems to distinguish singular, dual, and plural (one, two or more than two) actors. Thus, the stem /-yá/ (perfective) expresses the concepts go, come with reference to a single actor, as in niyá, I came; I went. If the number of actors is two, the stem /-dázh/ is used, as in niit'ázh, we two came, went. And if the number of actors is more than two, the stem /-ká/ is required, as in niiká, we came, went.

Most verbs express only singular and duo-plural number, with use of a prefix /da-/ as a distributive pluralizing element connoting not only that the number of actors is greater than two, but also that each of the actors is individually involved.

Thus: 'iidá, we (two or more) are eating (something); da'iidá, we (distributive plural) are (each) eating (something); yiit'ash, we two are walking along (prog. mode) /yiikah, we plural (more than two) are walking along (as a group)/ deñiiñíkáh (= da-yi-ní-ñí-káh), we plural (more than two) are (each) walking along. (The latter form, corresponding to the progressive mode, requires the imperfective stem /-káh/ in place of the progressive stem /-kah/.)

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In the Noun:

Number is not usually expressed in the noun, but is clear from the verb. Thus, béégashii, cow; cattle has no plural form. Compare: béégashii yah 'aalghod, the cow ran in (the perfective mode stem /-1ghod/ denotes running by one actor—therefore béégashii in the above example must be construed as singular); béégashii yah 'ahi'noonlchāg', the two cows ran in (the perfective mode stem/-lchāg/ refers to the action of running by two actors—consequently the number attaching to béégashii in this example is dual); and béégashii yah 'iijād', the plural cows (cattle) ran in (wherein the perfective mode stem /-jād/ refers to running performed by more than two actors—connoting the plurality of béégashii in this context).

Some nouns may take the distributive plural prefix /da-/ as: dzil, mountain/daadzil, mountains; ke, fire/daake, fires; tx6, water/daatx6, waters (drops of water).

The use of /da-/ with verbs implies plurality of the noun, as tsechāg'ī naxa,xin, the dog is barking; tsechāg'ī ndaxa,xin, the (distributive plural) dogs are barking.

Plurality of the noun possessed, as well as the number of possessors is implied in nixibéégashii dabitsee', our cows' tails (nixi-, our; -béégashii, cow, cows; da-, distributive plural; -bi-, their, -tsee', tail, tails).

A few nouns, relating to age groups or kinship form a plural by the addition of a suffix /-ké/ or /-ód/. Thus: 'ashkii, boy/'ashki,̈ boys; 'at'ééd, girl/'at'ééké,̈ girls; sik'ii,̈ my brother or sister (sibling of the same sex as myself)/sik'isódó̈, my brothers or sisters.

The Postposition

The postpositions of Navajo correspond generally to the prepositions of English. They are so called because they are placed after instead of before the nouns or verbs which they modify. The postpositions are of two general types: (1) Enclitic elements which are suffixed to nouns and verbs; and (2) elements which occur with an objective pronominal prefix.

(1) The first group includes enclitic elements suffixed to nouns and verbs: /-gō/, along; toward, as in dzilbaghgo, along the mountainside (dzil-, mountain; -bagh, alongside; -gō, along); yootogō, toward Santa Fe (yoot- Santa Fe; -gō, toward.)
/-gi/, at (in a general sense), as yootóogi, at (in) Santa Fe. Sufficient to verbs /-gi/ translates how to as in 'atíłógi yínashíneetse', he taught me how to weave.

/-di/, at (a specific place), as shighandi, at my home (shi-, my; -ghan-, home; -di, at).

/-yaa/, under, as tséyaakin, house under the rock (tsé-, rock; -yaa-, under; -kin, house).

/-déé', from (a general locality), as yootóodeé', from Santa Fe.

/-dód/, from (a specific point), as shighandóó, from my home (shi-, my; -ghan-, home; -dód, from).

This postposition also functions as a conjunction corresponding to English and, as shí dód shímá, my mother and I (shí, I; dód, and; shí-, my; -má, mother); 'dádóó, and then ('dá-, there; -dód, from).

/-déé', ago (past time), as in naaki nááxaiidág', two years ago (naaki, two; nááxai-, year; -(f)-déé', ago).

/-yég/, previously mentioned; aforementioned; former, as in 'áko xastxiiné (a xastxiin + yég) 'ayóó bá xoóchijd, then the (previously mentioned) man became very angry; shizhé'é yég yee shi.xoolne', my (former) father told me about it.

/-yéé often corresponds to the English relative pronoun that, which as in 'ashkii dlél yíyíltsé, the boy saw a (or the) prairie dog ('ashkii, boy; dlél', prairie dog; yíyíltsé, he saw it) but 'ashkii dlél yíyíltsáng (yíyíltsé + yéé), the prairie dog that the boy saw. /-yég/ and /-dág/, occur in combination in 'ashkii nishiguugdé', (= nishiguug + yégésáé), when I was a boy ('ashkii, boy; nishiguug-, I am; -yégésáé, at the past time when).

The second group includes postpositions of a type that usually occur only with a prefixed objective pronoun - either a definite pronoun or indefinite /'a-/; some one; some thing.

/-k'i/, on, as 'ák'i, on (some thing un-named); shik'i, on me (shí-, me; -k'i, on)

/-i1/, with, in company with, as shíl naa'aash, he goes about with me (shí-, me; -í, with; naa'aash, he goes about - a dual stem is required because the total number of persons is two: he and me; otherwise naaghá, he goes about).
/-d/, for, on behalf of, as shá 'ályaa, it was made for me (sh-, me; -d, for; 'ályaa, it was made).

/ -yaa/, under, as shiyaa xoo'a', I grew up (shi-, me; -yaa, under; xoo'a', there came to be space) (compare dah néshjíidgo xaalá nízahgo shiyaa xoo'a', when I jumped how far up did I go? - i. e., When I jumped, how much space showed under me?)

/-aa/, to; toward, as shaa nf'aaah, give it to me; bring it to me (sh-, me; -aa, to; nf'aaah, you are in the act of bringing it).

The postpositions also function as verb prefixes, as in bighá'-deeshshish, I'll poke a hole through it; 'dhí shik'iildo, I was enveloped in fog ('dhí, fog; shi-, me; -k'i-, on; -ildoh, it was wafted or floated); txá'dífýyá', I ate about here and there (tx-, among; -díffyá', I ate); sits'áníndee', I lost them; it cost me (si-, me; -ts'á- = ts'ie, away from; -níndee', they fell - i. e., coins fell away from me).

The postposition /-txah/, among, functions not only as a postposition with a prefixed objective pronoun, as in tsé bitxah, among the rocks (tsé, rocks; bi-, them; -txah, among), but also as a postpositional noun suffix in tsétxahgód, along among the rocks (tsé, rocks; -txah-, among; -gód, along); a verbal prefix in bitxaasha', I am going among them (bi-, them; -txa-, among; -ashA, I walk, go); and as a verb stem itself in bii 'ánishtxah, I am a member of it, I am among them (bił, with them; 'ánishtxah, I am among).

Postpositions of type (2) may express temporal as well as other concepts.

/t'ah bíséedi/, before (in a series of events)

Naxasdzán bikáá' txin xazl'é'gé t'ah bíséedi di né kwii la' káéxt'á' út'gé', people lived here before the ice age (naxasdzán, earth; bikáá', on it; txin, ice; xazlé', it came into existence; -gé, in the past; t'ah, still; bíséedi, in front of it, before it; di-, people; kwii, here; la', some; káéxt'á' út'gé', they live; út'gé', it was.

/dóó bik'iíj'/, after.

Doodatsaahii bi'dizhchí'é dááó bik'iíj' dijídi neeznádiin nínáñááxáig 'áxóót'íjíd jíinf, It is said to have happened four hundred years after the birth of Christ (doodatsaahii, never dies = Christ; bi'dizhchí', he was born; dááó, from; bik'i-, upon it; -jí', as far as = after; dijídi, four times; neeznádiin, hundred; nínáñááxáig, years having again passed; 'áxóót'íjíd, it happened; jíinf, it is said.)
PARTICLES

DEMONSTRATIVE, ADVERBIAL, INTERROGATIVE, ENCLITIC,
NUMERICAL, CONJUNCTIVE.

These include both free and bound forms. It will be noted that, with
respect to place, Navajo distinguishes between relative closeness and
remoteness from the speaker. Thus, the demonstratives:

/ádí/, /dídí/, /dídígí/, this, this one, this kind
(these) refers to location near the speaker.

/'áí, 'éí/, /'áídí/, /'áídígí/, /'áídígí/, that,
the one, that kind (those). These forms are composed of
locative /'á-, 'áá-, remote there plus the noun forming
suffixes /-í, -ígí/, the one, and /'a-, 'aa-, there near
the speaker plus the nominalizing suffixes.

/áílé/, that one yonder.

/naghál/, that one nearby.

/'ágí/, thither; along there.

/kó/sh/, here; along through here.

/álááh/, there, not far from the speaker.

The demonstratives /'áá-, /'aa-, /áílé/, /álááh/, (and others) take
the postpositional suffixes to form /'ádí/, there at; /áílí/, there
at; álááhí, there at. /'áíjí/, on that side; /'áíjí/, to there, as
far as there; /'áádéégí/, from there; /'áádóó/, from there (also used as
a conjunction and then), etc.

The Interrogatives: These are based on /xa-/ /da-/, what, where and
/xai-/ /xai-, who, which. To these elements are suffixed the interrogative
particles /-shá/, /-ísh/, and the various postpositional suffixes, as:

/xáíshá'/ who? /xáidígíshá'/ which one? /xádíshá'/,
where at? /xáágóshá'/, where to? /xáágíshá'/, xáágíshá'/,
where from? /xáájíshá'/, on what side, in what direction?
/xáájíshá'/, as far as where? /xa'át'íshá', xá'át'íshá'/,
what (is it)? /xa'át'ísh biniinaa/, why (biniinaa, its reason)?
/xáát'ísh biniighá/, why (biniighá, its purpose)? /xáádíshá'/,
when (in the past)? /xahgoshá'/, when (in the future)?

The Enclitic Particles: (9) English uses voice pitch, vowel length,
inversion of the subject pronoun, and other mechanisms to connote interro-
gation, exclamation and other emotional overtones. In Navajo, voice
Pitch and vowel length are distinctive features serving to distinguish meaning - they are part of Navajo phonology, and the mechanisms utilized in English would not fit the requirements of Navajo as a "tone" language. Instead, Navajo uses a variety of enclitic and other particles to convey overtones of meaning.

Interrogation is connotated by use of the particles /-shā', -ísh/ and /da'/.

**Degrees**

Díkwíshā' (or díkwísh) ninááxai, how old are you? (díkwíshā', how many? ni-, your; -nááxai, years).

Díshā' (or dísh) xáí bilíli', whose horse is this? (dí-, this; -shā', interrogative particle; xáí, who; bi-, his; -líli', horse).

Díchinish ñíli', are you hungry? (díchin-, hunger; -ísh, interrogative particle; ñíli', you are).

Nich'ah naalts'id, your hat fell. (ni-, your; -ch'ah, hat; naalts'id, it fell downward).

Nich'ahásh naalts'id, Did your hat fall? (ni-, your; -ch'ah-, hat; -ásh, interrogative particle)

The proclitic /da'/ may introduce a question with or without /-ísh/, as da'díchin ñíli', da' díchinish ñíli', or díchinish ñíli', are you hungry?

Other particles convey such emotional connotations as surprise, disbelief, disgust, wonderment, consternation, anger, fear and doubt. Some of these are:

/-'as/ connotes scornful disbelief.

Deesk'aaz'as, it's co-o-old! (as when one expected to hear that it was warm).

/-da-/ connotes wonderment.

Xáádídashā' 'ásh't'í, where am I?!

/-ga'/ connotes emphasis.

Díiga' chidi nízhóní, this is the prettiest auto.

/ía/ connotes emphasis and discovery.

Díitsé 'át'éé lá, this is a ro-o-ck! (I had thought it to be something else.)

(50) The superscript line traces the pitch levels in English.

(51) See The Function and Signification of Certain Navajo Particles by Young and Morgan, Publ. 1948, Phoenix Indian School.
Also frames such as:

/doolágó' — da lá/, connoting pleased surprise.
Doolágó' niléfí neesk'ah da lá, my, you have a nice fat horse!

/doo xanìi — da/ connotes contrariness to fact.
Doo xanìi kingóó dínìya da nisin, I thought you weren't going to town!

/lá — ni/ connotes exclamatory emphasis.
Kingóó lá déyá ni, I am going to town! (as in answer to the question where do you think you're going?)

The subordinating, adverbializing, and participializing particle /-go/ is of very frequent occurrence in Navajo, serving a wide variety of purposes. It may be suffixed to verbs, nouns, pronouns, postpositions and most adverbs. The following examples illustrate the function of /-go/:

1. With a noun: 'Anaa'go txfìdeeshnìi shà'shin nisin, I might be wounded in the war, I think ('anaa'go, being war; txfìdeeshnìi, I'll be hurt; shà'shin, perhaps; nisin, I think).

2. With a verb: Néíñìdzáago shàa dìñàáí, come to (see) me when (as soon as) you return (néíñìdzá-, you have returned; -go, when, it being; shàa, to me; dìñàáí, you will come). The form néíñìdzáago expresses the English concept when you return, but might be more literally translated as you having returned.

When the aspect of a verb is momentaneous, /-go/ often serves to translate English when, as soon as, as in the example above, or in yiizì'go 'ádésh'gilz, when I stood up, I stretched myself.

However, when the verb is a progressive, durative, continuative or static form, /-go/ translates English while, during. 'Aádìnìgo yisháagó shee nikìxìshìtxì, while I was walking along the road it started to rain on me. 'Aádi sëzi'go shììtsì, he saw me (while I was) standing there ('áadì, there; sëzi'go, I standing; shììtsì, he saw me.)

Suffixed to a descriptive verb form /-go/ functions somewhat like English /-ly/ to form an adverb, as in nìzhónígo 'ályaa, it was nicely made (nìzhóní-, it is pretty; -go, being = prettily, nicely; 'ályaa, it was made).
3. With a postposition: 'Éj beego náás diikah, with that we will progress. (éj, that; be-, with it; -go, being; Náás, forward; diikah, we (plural) will go). The force of /beego/ is something closely approximating "with-ly".)

The enclitic /-gód/, listed above under postpositional suffixes, also functions in a wide variety of situations.

With Nouns: /-gód/ is translatable as to, toward, in some contexts, and as along in others. Thus: yootógoó deya, I'm going to Santa Fe; Txábagogó yisháá, I am walking along the beach (txá-, combining form of txó, water; -bééh-, edge; -gód, along; yisháá, I am walking).

With Postpositions: /-gód/ is usually not translated, but again its force is that of along, as in tsídii dził yikáá góó naat'a', the bird is flying about (along) above the mountain (tsídii, bird; dził, mountain; yi-, he-it; -ká', above; -gód, along; naat'a', he is flying about). Naadágó bitxahgóó naasháá, I am walking about (along) among the corn plants (naadág', corn; bi-, it; -txah-, among; -gód, along; naasháá, I am walking about).

4. With Verbs: With a nominalizing suffix /-i/, the one, /-gód/ translates as the place where (to). Thus, deya'ágóó doo shi béezózin da, I don't know where I'm going (deya-, I am going; -(h) á= -i, the one; -gód, to -deya'ágóó, the place to which I'm going; doo, not; shi, with me; bée-, about it; -zózin, there is knowledge).

In the frame /t'áadoo----, or t'áadoo---- gódgo/ the meaning becomes unless, as in t'áadoo nax66144 gódgo shinaadli' 'aatsó dadoogóó, unless it rains, my corn will all dry up (t'áadoo, without; nax66144-, it rained; -gód + participializing /-go/; shi-, my; -naadáá', corn; 'aatsó, all; dadoogóó, they will dry up).

THE NOMERALS: From one to ten, the numerals are as follows:

1. t'áalí; t'áalí'
2. naaki
3. txáá'
4. dįį'
5. 'ashdla'
6. xastxáá
7. tsostsid
8. tseebíí
9. náxástå'įį
10. neeznáá

The numerals from eleven through nineteen are formed by suffixing /-ts'áadah; -'áadah/ to the above, as follows:

11. t'aats'áadah
12. naakits'áadah
13. txáá'ts'áadah
14. dįį'ts'áadah

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The numerals, by \textit{te} \textit{dinh}, from twenty to one hundred are formed by adding the suffix \textit{-diin} to those from two to ten. It will be noted that certain morphophonemic changes occur. The suffix \textit{-diin} appears to mean ten:

20. naadiin (two tens) 70. tsosts'idiin
30. txádiin (three tens) 80. tseeb'idiin
40. dízdiin \textit{"etc.} 90. náxást'ediin
50. 'ashdlaadiin 100. t'dálshádi neeznádiin
60. xastxidiin

The numerals between 20-30, 30-40, etc., are formed by use of \textit{d66baaan}, \textit{\"and in addition\} except in the twenties:

21. naadjla' 31. txádiin dôô ba'aan t'dálá'í
22. naadiin naaki 32. txádiin dôô ba'aan naaki
23. naadiin txáá' 33. txádiin dôô ba'aan txáá'
24. naadjiní\textendash 34. txádiin dôô ba'aan díí'

The suffix \textit{-di} is a multiplier, meaning \textit{times}. It is used with the numerals from one through nine and \textit{neeznádiin}, hundred, to express multiple hundreds:

100. t'dálshádi neeznádiin (one times hundred)
200. naakidi neeznádiin (two times hundred)
300. txádi; neeznádiin (three times hundred)
301. txádi neeznádiin dôô ba'aan t'dálá'í (three times hundred and in addition one)
372. txádi neeznádiin dôô ba'aan tsosts'idiin dôô ba'aan naaki (three times hundred and in addition seventy and in addition two)

For thousand, the Spanish word \textit{mil} has been borrowed under the form \textit{mil}; and \textit{million} is expressed by adding the augmentive \textit{-tsoh} or \textit{ntsaaigih} to \textit{mil}. Thus \textit{miltsoh} or \textit{mil ntsaaigih}, big thousand = million.

1000. t'dálshádi mííl 1,000,000. t'dálshádi mííltsoh
2000. naakidi mííl 2,000,000. naakidi mííltsoh
3000. txáádi, mííl 3,000,000. txáádi mííltsoh
1967: t'dálshádi mííl dôô ba'aan náxást'éidi neeznádiin dôô ba'aan xastxidiin dôô ba'aan tsosts'idiin.
1,362,531:  t'ááláhádi míil ntsaa'gił dóó ba'aan txáadi neeznádiin dóó ba'aan xastxádiin dóó ba'aan naakídi míil dóó ba'aan 'ashdládi neeznádiin dóó ba'aan txádiin dóó ba'aan t'ááá'í (one-time thousand big-one and in addition three-times hundred and in addition sixty and in addition two-times thousand and in addition five times hundred and in addition thirty and in addition one).

The term /'aíná/, middle, expresses half. /'aíná/ biláahgo/, more than half, expresses fractions greater than one half and /'aíná/ bi'ohgo/ expresses a fractional part less than one half. There are no terms to express fractions such as one-sixth, three-eighths, etc. in Navajo, although in recent years the need has been met by use of a crude decimal system based on dollars and cents: naaki yáá́l bífíghahgo, two bits worth = 25% xastxáá yáá́l bífíghahgo, six bits worth = 75%.

An ordinal system is formed by adding /góne/, inside, to the cardinals: lás'íi góne', first - or /'átsé/, /'átsé/, first; naaki góne', second, secondly; txáá' góne', third, thirdly; di'f góne', fourth, fourthly, etc.

Also, the use of the nominalizing suffix /-́f/ produces a form with the force of a cardinal, as in /txáá̱/, third (txáá̱ jį́ góne', on the third day); dį́f jį́ góne', on the fourth day, etc.
It was pointed out, in discussing the complex of prefixes that constitute the verbal base, that a number and variety of postpositional, adverbial and other derivational elements combine to modify, with specific meaning, the generalized meaning of the verb stem. The stem (in its several modal and aspectual forms) /-'dâ/, (-'aâ); -'aâh, (-'â); -'â', (-'a'); -'dâh/ (Progressive, Imperfective, Perfective and Usitative Modes) was described in terms of its broad essential meaning: the handling or movement of a single roundish bulky object. With a verbal base composed of the progressive mode prefix /yi-/ and appropriate forms of the subjective and objective pronouns, the meaning of the progressive mode stem is one corresponding closely to that of the English verb to carry, as in Navajo /yish'ââ/, I am carrying it along (a roundish, bulky object); /yî'ââ/, you are carrying it along; /yoo'ââ/, he, she, it, they is (are) carrying it along, etc. (It should be noted that the verbal base is the constituent portion of the verb complex which is inflected for person and number.) With a verbal base which includes the adverbial prefix /xa-/ , up out, the same handle stem translates the concept to carry up out (as from a basement or hole), and with the compound prefix /Adi-/, the handle stem translates to pick up, lift.

Although the number of distinct and separate verb stems is not great in Navajo (a few hundred), their broad, generalized meaning can be modified by a wide variety of prefixed elements to produce a rich and varied vocabulary. In some instances, the verb stem is used in a figurative sense; in fact, in some constructions the meaning of the stem is difficult to explain; in most constructions its force is clear.

The following are a few examples of the many and varied verb constructions that can be formed by prefixing various postpositional, adverbial and other derivational elements to the verb stems /-'aâ, -t'â/, handle a roundish, bulky object and /-yâ, -dzâ/, go, move (a single actor at a walk or unspecified gait). The stems, in both instances are the perfective mode forms, and the second of each couplet includes the /-d-/ stem classifier.

1. With the stem /-'aâ; -t'â/ handle a roundish bulky object:  
   bizêê' dê'dâ, I plotted against him; I plotted his death (bizêê, his death; dê'tâ, I am on my way carrying it).
   
   Sin xadîf'â, I started the song.
   
   xa'âf'â, the sun came up.
   
   'aîmînîf'â, it's noon.

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'i'ff'i, the sun set.

'ák'idesht'i, I took it off or put it on (a hat).

bik''idil'i, I took it off (a lid).

bidadi'inf'i, I put it on it (a lid); I covered it; I patched it (an inner tube).

bik'ixodii'lh, I accused him.

baa din'i, I turned it over to him; I gave it up to him.

naanish baa din'i, I hired him (naanish, work; a job).

t'dó baa din'i, I gave up (in a fight) (t'dó, merely).

bits'ádini'lh, I prohibited it to him (bits'á-, postpositional prefix meaning away from him).

badi'ní'lh, I permitted him.

yóó' 'adíl'i, I quit it (as a habit).

'tayóo shíní si'i, I'm quick to anger ('tayóo, very; shíní, my mind; si'i, it sets).

baa nfi', I gave it to him.

ba'ní', I loaned it to him.

sél'i, I keep it.

'aíts'áuí', I divided it in half ('aíts'á-, postpositional prefix meaning apart, away from each other).

n'dii'lh, I took it down (as from a peg).

xidii'lh, I hung it up.

tsíts'áuí', I took it out of the fire or I took it out of the water (tsíts'á-, away from fire or water).

yisdáí', I saved it (from danger or destruction) (yisdá-, into safety).
bighanisht'á, I took it away from him by force (bigha-, through him).

si'á, it is (in position or location).

xanáásht'á, I took it back out (of pawn).

'álnánásht'á; I carried it back and forth

didí'á, I put it into the fire (di-, into fire).

dah sé'á, I shelved it.

náxidee'á, I turned it over.

2. With the stem /-yá, -dzá/ go at a walk or unspecified rate (single actor):

ch'íníyá, I went out (as through a door).

nídiisdzá, I got up (ndi-, up from a surface).

déyá, I am going; I'm going to go; I'm on my way.

txadííyá, I went wandering; I wandered (txa-, postposition: among).

níyá, I came; I went.

nánísdzá, I came back; I returned (ná-, back).

bik'íníyá, I came upon it; I found it; I discovered it (bik'i- postpositional prefix on it).

nikíníyá, I started back homeward.

tsíits'áníyá, I went ashore (tsíits'á-, away from water).

bits'áníyá, I separated from him (bits'á-, postpositional prefix away from him).

ch'ééh déyá, I am tired (ch'ééh, futilely).

bágh niníyá, I got tired of it (bágh, alongside it; niníyá, I stopped going).

náás níyá, I advanced (náás, forward).
The above are only a few of the many verbal constructions based on the fundamental concepts represented by the stems meaning handle a roundish bulky object and go. English requires a number of separate and distinct verbs; Navajo requires a variety of verbal bases - complexes of prefixed elements -, adverbial and postpositional in nature which function to derive a wide variety of verbal concepts as facets of a single generalized idea represented by the stem. It is a radically different method of vocabulary formation from that of English, and one which reflects the peculiar (from the English standpoint) world view of the Navajo.
Some Navajo verbal bases connote concepts that themselves require separate verbs for expression in English. For example:

1. Pretend, feign, are expressed by the prefixed elements /'-áxodi-/', as in

   daastsaah, I am sick/da'áxodistaah, I am pretending to be sick; I am feigning illness.
   
   'ashxosh, I am asleep/'áxodishxosh, I am pretending to be asleep.
   
   yisháél, I am walking along/'áxodiyeoshlázáé, I am loitering (pretending to be walking along).

2. Get a good start on is expressed by the prefixed elements /nédíní-, nédî'ní-/, as in

   nédínifiszá, I got well under way; I got a good start; I was well on my way.
   
   nédî'níshdlágé', I got a good start on my drinking; I was well under way on my drinking spree.
   
   nédínifixaazh, I got well on my way sleeping; I had just fallen soundly asleep.
   
   nédî'nííttxa', I got well into my reading.

3. Prolongation is expressed by the prefixed elements /-dini-/, as in

   yah 'adineesdzá, I went in and stayed
   
   chidf séí yitih dinoolghod, the car got stuck in the sand (i.e., it ran into the sand and stayed there).
   
   xadineesdzíí', I talked too long

4. Again, another, some more. In Navajo, the concepts again, another, some more, are expressed by the prefix /ná-, nááná-/: 

   diné 166' yída'niiyédé', people began to eat fish/diné 166' yinááda'niiyédé', people again started to eat fish (stem requires the /d/ classifier with /ná-/). (diné, man, person, people; 166', fish; yída'niiyédé', they began to eat them)/yinááda'niiyédé', they again began to eat them).
náxookps biyaají diné la' kééndádaxat'ínígíí dzech xadaalzheeh ńt'éé' jini, some other people who lived in the far north are said to have hunted elk (náxookps, north; biyaa-, under it; -jí, in the direction of; diné, person, man, people; la', a, some; kééndádaxat'íí, they live again, some others live; -ígíí, those who; dzech, elk; xadaalzheeh, they hunt for; ńt'éé', it was; jini, it is said, people say).

Łahda la'í nináádaxaltxin leh, dóó lahda doo xózhó nináádaxaltxin da leh, sometimes it rains a lot, and sometimes it doesn't rain very much (lahda, sometimes; la'í, many, much, a lot; nináádaxaltxin, it rains again in multiple distributive /da/ showers; leh, usually; dóó, and; doo xózhó, not much) (English does not express /náá-/ again, here).

déyá, I am on my way; I got under way /náádsdzá, I again got under way.

ch'íníyá, I went out/ch'ínáánísdzá, I again went out.

la'shaaní'ah, give me one/la'shaa naáńít'aah, give me another one.

5. Reversion to a previous state: A prefix /ná-, ní-, n/ connotes reversion to a previous state—a concept comparable to that connoted by English /re-/ as in regain, re-enter, re-live, and to English back in go back.

'ifídí' daxazlíf'eg la' 'ándaasdiid, some of those that had come into being disappeared (back) — i.e., reverted to non-existence (their state before they came into being) ('ifídí', then in the past; daxazlíf', they came into existence; -eg, those which; la', some; 'ándaasdiid, they reverted to non-existence. Compare: 'ándaasdiid, they became non-existent).

Txiné 'ándaasdiid dóó ch'éénídoi, the ice disappeared (back) and the weather again became warm (i.e., the ice reverted to non-existence and the weather reverted to warmth — both of which were their previous conditions) (txiné, ice; -eg, former; 'ándaasdiid, they plural distributive deposits of ice; dóó, and; ch'éé' = ch'íná-; -nídoi, the weather warmed back up).

In English again is often required to translate both of the Navajo prefixes /náá/ and /ná-/ but in Navajo the connotations are kept separate and distinct. /náá/ is
semeliterative - i.e., it denotes that a verbal action is performed once again; while /ná-/ denotes again only in the sense of reversion or return to a previous state.

Compare: k’énáxásdlíf’, peace was restored; a treaty was signed (lit. things returned to a friendly state)/ k’énáxásdlíf’, peace was again restored; another treaty was signed (lit. things again returned to a friendly state).

Máníisdzá, I returned; I went back/ndáníisdzá, I went again/nínááníisdzá, I went back again; I again returned.

Índésdzá, I’m going back; I’m on my way back/ndáníéndésdzá, I’m on my way back/ndánísded, I went back again, I again returned. 

Certain concepts which are expressed in English by direct verbal forms, such as to have, to know, to become angry, to lack, are expressed indirectly in Navajo by use of postpositions and a verb form whose subject is a third person other than the person immediately concerned in the verbal state:

1. To have. This concept is expressed in Navajo by the postposition /-ee/, with about (in verbs of telling and knowing) and the neuter verb /xól/, it exists. The pronoun subject of the verb is the third person spatial pronoun /xo-/ translatable as impersonal it, or there - in the sense of there is. The possessor is represented by the subject of the postposition. Thus:

shee xól, I have it (it exists with me).
nee xól, you have it (it exists with you).
bee xól, he, she, it has it; they have it (it exists with him, etc.).
xíwee xól, he, she, they has (have) it (it exists with him, her, them).
níxíwee xól, we have it; you (plural) have it (it exists with us or you).

To have is a static concept - the end-point of acquiring (in which the possessed object is described as "coming to exist with one"):
shee xodooleel, I'll acquire it (it will come into existence with me).

shee xaleeh, I am in the act of acquiring it (it is in the act of coming into existence with me).

shee xazíí', I acquired it (it came into existence with me).

shee náxádleeh, I repeatedly acquire it (it repeatedly comes into existence with me).

shee xóle', that I might acquire it (that it might come into existence with me).

Likewise, with the prefix /ná-/ connoting reversion, the meaning becomes to regain it:

shee náxoodleel, I'll regain it (it will come back into existence with me).

shee náxásdlíí', I regained it.

And with the prefix /náá-/ again; another; some more:

shee nááxoodleel, I'll acquire it again.

ła' shee nááxoodoo-leeel, I'll acquire another one (or some more).

shee nááxásdlíí', I acquired it again.

ła' shee nááxásdlíí', I acquired another one, or some more.

ła' shee nááxdólí, I have another one or some more.

2. To lack; not to have: The opposite of to have is to lack, and the opposite of acquire is to peter out. These concepts are commonly expressed in Navajo with the postposition /-ee/, with, and a verb meaning to become or be non-existent. Thus:

shee 'áoodíí, I will lack (it will peter out on me).

shee 'ádííh, it is in the act of petering out on me.

shee 'ásdííd, it petered out on me.

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shee 'ánádíih, it repeatedly peters out on me.

shee 'ódódiih, that it might peter out on me.

And the neuter verb:

shee 'ádín, I lack it; I do not have it.

3. **To know:** is expressed, in Navajo, with the postposition /41/, with, in company with, and a verb meaning to be aware of. The subject of the verb is the spatial third person pronoun /xo-/ and the verb proper (-xózin) is translatable as "there is knowledge or awareness". The verb also incorporates a second postpositional element /-éé/ meaning about, concerning. To know is a static concept - the result of finding out. Thus:

**shiil bééxoodooziż́́́, I'll find out about it (shíl, with me; béé-, about it; -xoodooziż́́́, there will be knowledge).**

**shíl bééxooziţ́́́h, I am in the act of finding out about it.**

**shíl bééxoozin, I found out about it.**

**shíl béenáxoodziţ́́́h, I repeatedly find out about it.**

**shíl bééxooziţ́́́', that I might find out about it.**

**shíl bééxózin, I know it; I know about it.**

4. **To become, be, angry:** is expressed by the postposition /-á/, for, and a verb, the apparent meaning of which is to defecate. The subject of the verb is the third person spatial pronoun /xo-/ , impersonal it, things, the world. Thus:

**shá xodoochįįł, I'll become angry; I'll "get mad" (The world will defecate for me?)**

**shá xóčįįł, I became angry.**

**shá xáchľ̀', I am angry.**

**shá náxáchįįł, I become angry repeatedly.**

**shá xóčįįł, that I might become angry.**
Similarly:

shiił xózhγ̄, I am happy (lit. the world is beautiful with me).

shiił likan, I like it (lit. it is sweet with me).

shiił yá'át'ééh, I like it (lit. it is good with me).

doo shiił yá'át'éehda, I don't like it (it is not good with me).

shiił nlį́, I like him (lit. he is with me).
THE INFINITIVE

English makes wide use of an infinitive form of the verb - e.g., to have, to write, to be. Navajo has no infinitive verb form and expresses the concept in another manner, as illustrated below:

La'í nááxaiífáá' diné 'ak’ída’álichí yídaxool'ígí', men learned to write many years ago (la'í, many; nááxaiífáá', years ago; diné, men; 'ak’ída’álichí, they write; yídaxool'ígí', they learned it). Compare naabeexó bilagáana yits'ígídó 'ak’íelchí yídaxool'ígí', the Navajo learned writing from the white people (naabeexó, Navajo; bilagáana, white people; yits'ígídó, they from them; 'ak’íelchí, writing - i.e. an indefinite or un-named third person subject writes; yídaxool'ígí', they learned it).

Hitler gholghéhéeg naxasdzáán t’áá si’ígí út'éé binant’a’í deeshlééeg nízin út'éé', Hitler wanted to become master of the entire world (Hitler; gholghéhéeg, the former one who was named; naxasdzáán, world; t’áá si’ígí út'éé', the entire; binant’a’í, its boss; deeshlééeg, I shall become; nízin, he thinks; want; út'éé', it was = Hitler thought "I shall become master of the entire world").

Yóó' ándiijah daanfigo ndaxaz'ígí út'éé', they planned to run (back) away (yóó', away out of sight; ándiijah, we shall run back; daanfigo, they saying; ndaxaz'ígí, they planned; út'éé', it was).

Nich'ti' xadeesdzih nisin, I want to speak to you (nich’ti', to you; xadeesdzih, I shall speak; nisin, I want) Da' shíi díí'ashiésh nínízin, do you want to go with me? (da', interrogative particle; díí'ashí-, you will go - but in total there will be two of us. Consequently, the dual stem with a second person singular subject you — -ish, interrogative particle; nínízin, you want).

Indirect Quotation: It will be noted in the examples given above under the infinitive that concepts that might be otherwise expressed in English as an indirect quotation are expressed in Navajo as direct quotations. Thus the second example could also be translated "Hitler thought he would become master of the world", as well as "Hitler wanted to become master of the world", or literally "Hitler thought "I shall become master of the world". Indirect quotations are not used in Navajo. Rather, they are expressed as direct quotations.
WORD ORDER

As noted in previous sections, the Navajo verb contains the pronominal elements representing subject and object within the verbal base: niideegtséél, I'll see you (ni-, you - the object; -s-, I - the subject).

When the subject is also expressed by a noun, the subject noun is normally placed before the verb, and it is nonetheless represented by an object pronoun within the verb complex: shash yiíitség, I saw the bear; shash shiíitség, the bear saw me (lit. I-saw-it the bear; the bear me-he-saw).

When the object is also represented by a noun, the noun object may either precede or follow the noun subject. Usually the noun object follows the noun subject: 'ashkii shash yiíitség, the boy (subject) saw the bear (object) (lit. boy bear he-it-saw). When, in such a sequence, the first noun is the object and the second the subject, the verb takes the ordinary third person pronoun /bi/ representing the object, rather than the oblique (3o.) pronoun /yi-/ he-it: 'ashkii shash biíitség, the bear saw the boy. The latter equals shash 'ashkii yiíitség, the bear saw the boy.

The object noun or the subject noun may stand alone before the verb, as: 'ashkii yah 'iiyá, the boy (subject) went in; tsé néíidíi'g, he picked up a rock (lit. rock he-it-picked up).

When the possessor of an object and the object possessed are both expressed by nouns, the noun representing the possessor stands first: 'ashkii bidibé, the boy's sheep (lit. boy his-sheep).

Postpositions usually follow the noun to which they relate, and precede the verb: 'ashkii bá 'fishaá, I made it for the boy (lit. boy him-for I-made-it).

Demonstratives precede the noun or verb to which they relate: dif naaltssoo sha'niíitsós, lend me this book (lit. this book me-it-you-are-in-the-act-of-giving-temporarily); 'ashkii 'sádi bighan, the boy lives there (lit. boy there-at his-home).

Adverbs usually precede the verb unless they are enclitic elements suffixed to the verb stem: yiskágo náa ndéeshdá, I'll come back to see you tomorrow (lit. tomorrow you-to back-I-shall-come); but shimá ší't'éé' xínáhágáá, when my former mother was living (lit. my-mother that-was she-is-alive-when).

The above generalizations describe the simplest types of Navajo sentences. Complex sentence forms are perhaps best illustrated by the analysis of text material.
On the sixth day of the month that is called Young Eagles (February), a Sunday, the woman with whom I lived (my wife) was struck and killed (sits'gà, away from me, implies killed).

= I am now about to tell about that here.

Merely probably people-saying people-saying only

deshnìih = You have probably only heard
you (pl.)-hear it-was

about it by hearsay.

Now I am telling you exactly how it was.

I-tell-things

= after]

moving (hands of clock) [suddenly]
about-it-flies-the-one (airplane)

afternoon, about five o'clock when suddenly an airplane flew above us.

"'aadéé'44 chidi naat'a'i 42 la'45 yit'ah"44
There-nearby-from airplane one along-it-is-flying

naaghágo51 = Someone said "There comes an airplane"; it about-he-walking was one of my sons who was outdoors.

'áadáé52 k'óó53 t'óó54 nixikáá'góó55
And-then this-way merely us-above-along

Ch'ét'a56 = And then it merely flew past us.

out-horizontally-it-flew

'Éii7 k'ad52 álédéé53 t'óó60
That-one-nearby now yonder-from back

nínáádidoolghoá64 dóó44 'aadéé65
back-once again-it-will-run and There nearby-from

bidah 'idi'yoonii64 = That plane will now come back
down-from-it things-it-will-drop.

and make a drop,

díñiniid65 yiists'gá66 t'óó'47 = he was heard he-said it-was-heard outdoors-to
to say from outdoors.

1. 'Atsá Biyáázh ('atsá, eagle; bi-their; -yaazh, young ones) the Navajo name for February, the month in which eagles hatch.

2. Gholghéego (gholghe', it is called; its name is; -go, participializing suffix. When /-go/ is added to a stem with a high toned, open vowel, the vowel lengthens and takes a falling tone).
3. ņdzidígii (ńdziid-, it "months"; a month is passing; -ígii, the one which; that which. When the relativizing and nominalizing suffixes /-ígii/, /-i/, /ii/ are added to a stem whose vowel is long and high in tone, the vowel becomes short). ņdzidígii functions as a noun meaning month.

4. xastxágg (xastxá- six; -gg, in the direction of; toward). The suffix /-gg/ is used with dates somewhat after the fashion of the ordinals in English. Xastxágg translates "the sixth" (of the month in reference).

5. yooikdalgo (yoolkdalgo it is becoming dawn; -go, participializing suffix). The sequence xastxiig66 yooikdalgo is equivalent to English "on the sixth day (of a month)".

6. damíigo (from Spanish Domingo, Sunday).

7. 'aleeh ('a-, indefinite third person subject translatable as something; -leeh, imperfective mode form of a verb stem meaning to become. This form is used with reference to days. Damíigo 'aleeh is translatable as it is about to become Sunday, it is Sunday.

8. góné (inside an enclosure, as a house or room; also used with reference to a day or date, in which event it is translatable as on.)

9. 'asdzáni (woman; wife).

10. bil (postposition: in company with her; with her).

11. xinishndanii (xinishná, I live; I exist; I am alive; -nii, nominalizing suffix /-i/, the particular one. When the nominalizing suffixes /-i/, /-ígii/, /-i/ are added to a stem which is n-initial or which has nasalized vowels, and which does not end in a consonant, a ligature /-n/ is inserted. If the stem vowel is short in length and high in tone, it lengthens and receives a falling tone. The nominalizing suffix /-ii/ here relates to the entire sequence 'asdzáni bil xinishnd to translate "the woman with whom I live"--literally, woman with-her I-live-the-one). 12. átt'éé' (adverb of past time. Here it connotes that the person to whom it relates--the wife--is no longer in that capacity. It can be translated former.)

13. sits'áa' (si-, me; -ts'áa', away from. This postposition, used in context such as the above, implies that the speaker suffered less of the object--here, his wife. Sometimes /-ts'áa'/ is translatable as on, as in she'esdzáán sits'áa' daaztsg, my wife died on me--i.e. I
lost my wife through death. [lit. my-wife me-away from she-died.] In the text the English term killed must be supplied, since it is connoted or implied by the postposition and the following verb.)

14. bił ndźíñíw (bił, with her; ndźíñíw, something roundish and bulky moved down through space - fell. The postposition indicates that the movement was directed at the person - consequently the translation "she was struck").

15. 'éí (that - remote and out of sight).

16. k'ad (now).

17. kwii (here - in a general area)

18. baa (postposition: b-, it; -aa, about)

19. ch'ixoñiisñiíh (ch'i-, horizontally outward; -xo-, spatial pronoun representing the object of the verb. It might be translated as "things"; -níñiíh, I am in the act of bringing a single roundish bulky object. Stories, narrations and news are referred to by the stem -aah/ referring to an object of the class in reference. The translation is literally "I am in the act of bringing out things about it" - "I am in the act of telling a story about it.")

20. t'éóó (merely).

21. shíč (dubitative particle connoting, in this instance, supposition. It is translatable in some contexts as perhaps, presumably, and in others it is not expressed in English.)

22. jiní jınıfığo (ji-, the 3a. pronoun subject he, she, one; -ní, says; -go, the participializing suffix. In reduplicated form the meaning is "by hearsay." The verb form jini is often used in stories where it is translatable as "people say," "it was said," "as the story goes.")

23. t'éiyá (only; exclusively).

24. daahniih (you plural hear - news or gossip).

25. út'ée' (adverb of past time translatable as it was. Here it casts the verb daahniih into past time - you heard).

26. k'ad (now).

27. 'éí (that; that one - remote or out of sight; also an opocope of t'éí, t'éiyá, only. In the text it need not be translated although right might convey some of its force - right now.)
28. *ts’iddá* (really; exactly).

29. *’at’dégi* (*’átdé*, it is; -gi, a postpositional enclitic, usually used as a locative meaning at, but also used with verbs to mean how. The translation is literally how it is; the facts.)

30. *bee* (postposition: b-, it; -ee, with: with it. Used with verbs of telling, the translation is about it).

31. *nixi’il* (postposition: nix-, you (pl.); -i with; in company with. Used with verbs of telling, the postposition refers to the listener - I am telling you.)

32. *xashne’* (I am in the act of telling or relating things.)

33. *’ainf’ní’dóó* (*’ainf’*, half way; -ní’dóó, something roundish and bulky has moved [the sun]; -dóó, from. i. e., from noon.)

34. *bik’iij’* (postposition bi-, it; -k’i-, upon, plus the postpositional enclitic -j’i’, to a point. Preceded by -dóó, from, the sequence -dóó bik’iij’ means after.)

35. *ts’iddá* (really; exactly).

36. *daalb’l* (perhaps; maybe).

37. *’ashdla’igi* (*’ashdla’*, five; -igi, at. Here the reference is to the fifth hour.)

38. *’oolkiligo* (*’oolkil-*, something is progressively moving along very slowly; -go, participializing suffix. The reference is to the hands of a clock).

39. *t’ah* (still).

40. *nt’ée’* (adverb of time, translatable as it was. The combination nt’éé’ connotes suddenly, when suddenly (in the past).

41. *chidí* (automobile; something that makes a chid-chid sound).

42. *naat’a’í* (naat’a’-, it flies about; -í, the one. The nominalizing suffix /-í/ makes a noun of chidí naat’a’í, airplane - but literally the automobile that flies about.)

43. *nixik’iit’a* (nixi-, us; -k’i-, over; -it’a’, it flew).

44. *’aadgé’* (*’aa-*, a nearby place; there; -déé’, from. Translatable as from there, from nearby, or in a context such as the above here (comes).)
45. la' (a, one).

46. yit'ah (it is flying along).

47. xo'doo'niid (xo-, spatial pronoun used as an indefinite subject of the verb; -doo'niid, was said.

48. 'éí (that; that one - remote and out of sight.)

49. shighe' (shi-, my; -ghe', son. This is the term used by a man; a woman refers to her son as biyáázh.)

50. tóó'di (tóó'-, outdoors; -di, at).

51. naagháago (naaghá-, he is walking about; -go, participializing suffix. Here it is equivalent to la', was - his posture was presumed to be, not sitting, standing or reclining - but walking about. In English one would normally say "it was one of my sons who was outdoors").

52. 'áádóó ('áá-, there - a remote or invisible place; -dóó, from. Here it is used as an adverb and then).

53. kóó (this way; hereabout; here.)

54. t'éé (merely)

55. nixik4'góó (nixi-, us; -káá', over; -góó, along. The postposition /-káá/, over; above and the postpositional enclitic /-góó/ along; toward. The translation is along over us.)

56. ch'éét'a' (ch'i- horizontally out; -it'a', it flew. With a preceding enclitic /-góó/ verb forms with the prefix /ch'i-/ translate pass by. Thus the translation nixikáá'góó ch'éét'a is it flew past us (but above us); it flew past over us.

57. 'eii (that one nearby).

58. k'ad (now.)

59. áléédéé' (álé-, yonder; -déé', from.)

60. t'géé' (back; backwards).

61. nínáádíidoolghóó (ní-, back; náá-, again; -didoolghóó, it will start to run (fly).

62. doó (from; and. The postpositional enclitic doó, from, functions as a conjunction, in Navajo.)
63. 'aadéé' ('aa-, there nearby; -déé', from. Used with the force of here comes.)

64. bidah 'idi'yoonił (bi-, it; -day, down from; plural objects will be dropped one after another.

65. díínlid (he said it).

66. yiists'éél' (it was heard; there was a noise).

67. ti'óó'jil' (tí'óó', outdoors; -jil', as far as. The meaning is at a point as far as outdoors; English used the preposition from.

There follows the text of a typical Navajo story. It is reproduced herewith, but without the interlinear translation. Using the glossary, fill in a literal, interlinear translation. When you have done so, see if you can reconstruct the literal translation in such form that you faithfully represent all the important ideas from the point of view of English, re-telling the story as it might be told in idiomatic English. In other words, reconstruct the literal translation in the form of a free translation, while at the same time carrying over into English all of the significant ideas expressed in Navajo to the extent that their expression does not violate English idiom.

When you have made the free translation, list the concepts and facets of meaning connoted by the Navajo words which you have omitted because their expression is not required by English. For example, you might be expected to translate ndeeshghał as "I'll eat you up." The stem -ghał connotes the chewing or eating of meat, in contradistinction to objects of other classes - but this facet of the meaning of -ghał would be omitted because the distinction is not normally made by English.

143
GAH DÔO T'L'IISH

'Alk'idéé' gahtsoh tsétahgôdô joolwoj,
út'é' tliish tsê bik'i si'ôgo bik'ôjîlwoj jinî.
"Lâ'i yiskân'idéé" dîf tsê shik'îilts'id ni' 'âko t'âá
'îiyisî' dichin shî'nîîhi'. Shîká 'anilyeod!
Dîf tsê nahjî shâ 'ani'ah,' ni jinî.

'tl'iish. 'ôâdô gah tsêhgg
nahjî' 'uyîî'mááz jinî. Tl'iishge
nâhîdiitah dôô gahâg yîch'i' dah
'îînîlwoj, ndî t'âá 'îiyisî dichin bik'ee
doo 'asohodébëezh da. Ndeeshghâl,' ni jinî
tl'iish. "Dooda! T'âá shoq'dî! T'âá ká shoîtghal!' ni'igo
gahâg nà'ookgh jinî. "Sha'âchînî hólî!'
Shîínîlghalgo shâ'dîchînî dichin bidooghîg
sha' shin,' ni jinî gah. "Hágoonee', na'âchînîgo
shaa diînîl,' ni jinî tl'iish. "Dooda:
'ât'aháloo 'âtsé! Nléé yîlk'idêgîi bine'hî
dînî xâ' naâghâ. 'Âtsé bich'i'
diit'ash dôô ha'ât'wégo yaa ntsêkees
dooleek,' ni jinî gah. 'Âdôô
'âkôg' jînî'âázh, út'é' têlii léî' 'ákwe'é
naâghâá xâ' jinî. 'Âdôô gah
hahoolme' jinî. "Dîf tî'ish tsê hak'i
si'êg xágo hak'înîyâ' dôô nahjî' hâ
'îiyîmááz, út'é' t'âá 'îiyisî' dichin
ni jini ma'i. 'Aadod tliish tsé bikiilts'idéegi ni jini.

"Haashg yit'ego sínit'ég ni jini. "Kót'ego sét'ég ni jini, tliish sit'
út'é'éggi ni jini. 'Aadod ma'i 'ánáadf'ní ni jini, 'Tséshg t'éiyá haa
yit'ego si'ég ni jini. 'Aadod gah 'ání jini, 'Tséhigíí t'éiyá
kót'ego si'ég ni jini, tliish tséhég
tliish yikaa'jí ninéinimááž jini.

"Jo t'aá béehéžíini léj ni jini.

'Adadohníi lá'ni jini. "K'adshg ha'át'ego baa
ntsíníkees, ni jini gah. 'Aadod ma'i 'ánáadf'ní ni jini, "Jo k'ad t'aá
'altsoho k'éédahazdóød. ni jini.

bich'i' ndílyeed' ni jini.

'Aadod ma'íi telii yég 'ánáánéíini, 'Ny 'aídó' nanínaháagóó ni jini.

'Adod tliishég t'aá 'ák'ág tsé biki' si'éggo yits'ég dah diijéé' jini.
The following abbreviations are used with the entries in the glossary:

- **C.I. or C. Impf.** - Continuative Imperfective
- **C.** - Continuative aspect
- **Impf.** - Imperfective mode
- **Pf.** - Perfective mode
- **Prog.** - Progressive mode
- **F.** - Future tense
- **N.** - Neuter
- **O.** - Optative mode
- **U.** - Usitative mode

Although a detailed explanation has been provided with reference to compound noun and postposition formations, verbal forms are not consistently treated in the same manner.

The glossary is designed primarily to permit students who do not know the Navajo language to read the Navajo text. By so doing it is possible to gain a modicum of insight into the structure, syntax and other features of the language.

It will be noted that the phonemes tx, x, and gh are written:

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tx = t, x = h, gh before e, i, = y
and gh before o = w.
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Third person verbal and pronominal forms may represent he/him, she/her; it/it; they/them as the context requires.

- **áddé'**, from there (á- , there; -dé', from).
- **áddód** (á-, there; -dód, from), and then; from there.

-adzifímaazgo, (pf.) he having rolled it away; when he rolled it away (adzifímáaz- jajíjamáaz due to assimilation of /j/ to /z/ to produce /dz/; -go, participializing suffix, translatable as when in some contexts and while in others depending on whether the verbal action to which it relates is continuing or momentaneous - e. g., joolwoigo, while he is running along, níyáago, when he arrived.)

- **ahayóí**, it's remarkable.
- **ahéhee'**, thanks; thank you (ahéhee' lág, thanks a lot.)
- **ako**, so; then.
ákhóót'jidíí, (pf.) that circumstance; that happening (ákhóót'iid-, it happened thus; -igíí, noun forming suffix "that which", "the one that").

ákkóó, there; thither; through there.

ákwé'á, there; at that place (á-, there; that in a remote sense; -kwe'á, here).

ál'í', (U.) it is done; it is accomplished. Náti'íiniinálkaahgo lá ál'í'í ni, full investigation is the way to do it; tracking it clear back to its beginning is the right procedure.

aidó', also; too.

álk'idíí' (álk'i-, upon one another; -díí', in the past), long ago; once upon a time.

áitsé, first.

áltsogo, being all (t'áá áltsogo, everything).

ánáádí'ní, he again says (ání, he says).

ánáánéíni, he again says to him (cf. yiíni, he says it to him; ání, he says; ánáádí'ní, he again says).

ánádloho, (C. Impf.) he laughing; while he laughs (ánádloho', he is laughing; -go, participializing suffix).

ání, (C. I.) he says.

ani'aah (Impf.) you are in the act of carrying it - a single bulky object - away (may be used as an immediate imperative as in nahjí ani'aah, take it aside!).

anilyeed, (Impf.) you are in the act of running (away into distance). Used idiomatically with the postposition -ká, after, to mean help, aid, as in shíká anilyeed, help me! The imperfective mode form is also used as an immediate imperative.

aschoddeéézh, doo - da, (pf) things are unbearable.

át'aháa, wait; just a minute.

át'í' (at'íi), (C. I.) he is; he does.

átsé, first.
ayíismááx, (Pf.) he rolled it away.

azkánígíí (azké-, an impersonal si-perfective verb form meaning that something is at rest in the fashion of an open vessel, with noun forming suffix -ígíí) Tsé dah azkánígíí, mesa; mesa land (lit. "rock that rests up at an elevation like an open vessel").

B

baa (b-, it; -aa, about; to), about it; to him.

bééhózíní, (N.) the one that is known (bééhózin-, it is known; there is knowledge about it; -í, noun forming and particularizing suffix). T’dá bééhózíní léi’ áádohníí lá, what you (plural) have been saying becomes clear (an idiomatic expression.)

bich'í (bi-, him; -ch'í', toward), toward him; to him.

bidooghááíí, (F.) it will kill them (dichin bidooghááíí, hunger will kill them; they will starve to death. The verbal stem refers to the killing of plural objects.)

bine'jí (bi-, it; -ne'-, behind; -jí, in the direction of, on the side of), behind; on the hind.side.

bipyáági (bi-, it; -yaa-, under; -gi, at), under it; at a location beneath it.

bik'ee (bi-, it; -k'ee, because of), because of it.

bik'i (bi-, him; -k'i, upon, on, above), on him.

bik'iilts'id (Pf.) it fell on him (bik'i-, on him - postposition used as a verb prefix; -ilts'id, it - a single bulky object - fell).

bik'iilts'idéegi, (Pf.) where it fell on him; the place where it fell on him. (bik'iilts'id-, it fell on him - a bulky object; -éegi-, the aforementioned (place); -gi, at).

bik'ífílwod (bi-, him, her, it, them; -k'i-, on, upon - post-position used as a verbal prefix; -ífílwod, (Pf.) he ran; he arrived running), he came upon him; he found him; he discovered him.
ch'ééh, in vain; futile; without success.

dadi'nfigo, we saying it (dadii'nf-, we say it; -go, participializing suffix).

dadinfil'iil, (F.) we (plural) will (all) look at it; we'll take a look at it.

dah, up at an elevation; off (with inceptive verbs, as dah diilwod, he started off running).

dashdiilwod (Pf.) (da-dah, off; -sh-<ji-, he; -diilwod, he started to run), he started off running. With the postposition -ch'i', toward the meaning is "come at", "set upon", "attack", as shich'i' dashdiilwod, he came at me.

deekai (Pf.), we set out; we are on our way; we went; we came. (see deet'aazh).

deet'ázh, (Pf.) we two set out on our way; we two are enroute; we two are going (even though movement has not begun this verb is used from the beginning of one's intention to go - thus kintahgoó déyá, I'm going (to go) to town; I am on my way to town.)

dichin, hunger.

diné, man; person; Navajo.

dff, this; these.

diijéé', (Pf.) they started to run (more than two actors). Dah diijéé', they started off running. Yits'gg' dah diijéé', they ran off and left him.

diikah, (F.) we will go; let's go (more than two subjects).

diilwod, (Pf.) he started to run. Dah diilwod, he started off at a run.

dff-nil (F.), you will give (take, bring) them. (Used both as a future tense form, and as an obligatory.)
diit'ash, (F.) we two will go; let's go.

dishnítigo, I saying (dishn-, I say; -go, participializing suffix.)

doo, not (doo - da, negative frame nisín, I want it/doo nisín da, I do not want it.)

dóó, and (a postposition from used as a conjunction).

dooda, no.

dooleeám, (F.) it will be (used as an auxiliary to cast verbal concepts into future time as yáa ntsékees dooleeám, he will think about it; his opinion will be).

dzdázáhdé (N. Pf.) the aforementioned one is sitting (dzizdd-<jizdá-, he sits; -éé<yéé).

E

éé, that; that one (remote and out of sight).

G

gaháág (gah-, rabbit; -éé<yéé, the aforementioned), the (aforementioned) rabbit.

gahótsah (gah-, rabbit; -tsah, big) jackrabbit.

H

haa, how?

hááhgoóshii', very much; exceedingly; strongly; diligently.

háah'sha', 't's see; how?

háasha's (háa-, how; -shá's, interrogative enclitic particle), how? in what way?

há (h-, him; -á, for), for him; in his behalf.
hach'i (ha-, him; -ch'i, toward; to), toward him. Hach'i dah diiIw, he came for him; he attacked him (lit. toward him he started off running).

hahojoolne', (Pf.) he started the story; he began the account. (see hahoolne')

hahoolne', (Pf.) he began to speak; he started to tell a story; he began the account (ha-, vertically up out - used as an inceptive verbal prefix; -hoolne', he told.)

hágooGnee', very well; well then. (A term also corresponding functionally to Good-bye.)

hak'i (ha-, him; -k'i, on; u- on), on him.

hak'ínfyA, (Pf.) I came upon him; I found him; I discovered him. (hak'i-, upon him; -nfyA, I came).

hainfgo, (Cc Impf.) he saying it to him (haínf-, he says it to him; he tells him; -go, participializing suffix).

haná'na', (Pf.) he crawled back out (ha-, up out; -ná-, back).

ha'át'éego, how; how being.

ha'át'íl lá, what? (Ha'át'íl lá ahayóí lá is an idiomatic expression equivalent to "huh, this is really something!" "Boy, this is a real baffler!"

hodíña' (Pf.) time passed; a period of time went by.

I

ííGmááG, (Pf.) I rolled it away.

íínílwod (Pf.) you ran away. (shíká íínílwod, you ran after me; you helped me.)

íivisíí, very; extremely.

J

jíkai, (Pf.) they went; they came (more than two subjects).
C. Impf.) he, she, they say(s); people say (often used in narratives with the force of it is said).

jinígo (C. Impf.) he saying (jiní-, he says; -go, participializing suffix.)

jiní’áázh, (Pf.) they two went; came, arrived.

jó, well; see.

joolwoł, (Prog.) he is running along.

K

k’ad, now.

k’adshá’, now? (k’ad, now; - shá’, interrogative particle).

k’éédaházdop, (Pf.) it (they) became straightened back; things straightened back; things straightened themselves out again. (k’éé-k’i-+-ná-, back).

kót’éego, it being thus; this way; in this manner. (kót’é, it is thus; -go, participializing suffix).

L

lá, particle often used to connote discovery of a fact, surprise.

lágo (lá-, enclitic particle connoting discovery of a fact or surprise; -go adverbalizing and participializing suffix) si’gé lágo, finding it (a bulky object) to be resting or setting - (in lieu of si’gógo lá).

la’, particle expressing surprise - often in a negative sense. (ch’ééh la’ baa ntséskees, oddly enough I get nowhere thinking about it; I just can’t seem to figure it out).

léga, emphatic particle.

lé’f, many.

lé’l, a; a certain; one with which the speaker is unacquainted.

la’, a; one.

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M

ma'ii, coyote.

N

naaghá (C. Impf.), he is walking about; he is (in location - in this usage, it is assumed that the subject is not at rest lying down, sitting or standing, but that he is moving about).

nadíchínígo (na'áíchíní-, your children; -go adverbializing and participializing suffix translatable as "being"), being your children.

ná'ookaah (Impf.), he is begging.

nahidiitah, (Pf.) he sprang up.

nahji' (nah-, aside; -ji', as far as; up to), aside; to one side; to a point aside.

náneeztš, (Pf.) he lay back down (ná-, back; -neeztš, he lay down) (English often requires again instead of back: he lay down again.)

nanináhágoó, (C. Impf.) to where you were; to the place where you were walking about (naniná-, you are walking about; -há-<yéé, the aforementioned (place); -goó, to; toward). (See naaghá.)

ná'tšá', back; back to the point of origin.

ndeeshghai, (F.) I shall eat you (verb stem refers to the chewing or eating of meat) (n-<ni-, you; -deeshghai, I shall eat.)

ndi, but.

ndílyeed, (Impf.) you are in the act of running back; used also as an immediate imperative "run back!" (ní-, back; -dílyeed, you are in the act of starting to run).

ndíkah, (F.) we will go back; we will return; let's go back (more than two subjects). (ní-, back; -díkah, we plural will go).

ni, you.
nì', (C. Impf.) he, she, they say(s).

nì', a particle connoting recall or recollection of a past event.

ní', (nì-, you; -ch'ì', toward; to), toward you.

nìgo, (C. Impf.) (nì-, he says; -go, adverbializing suffix), he saying it.

nìjìkàì, (Pf.) they went back; they came back; they returned (more than two subjects) (nì-, back; -jìkàì, they plural went, came).

nìlààh, yonder; back there; over there.

nìjì, that one yonder; over there.

ninàwìlkaàhàw, (C. Impf.) tracking down taking place; investigating (the subject is indefinite).

ninànìmaàjì, (Pf.) he rolled it back in place (nì-, terminative action; -nè-, back; -(y)ìmaàjì, he rolled it).

út'èé' (adverb of past time), it was; then; when (in the past). (Used with verb forms to cast the verbal action into past time. E.g. joolwòjì, he is running along/joolwòjì út'èé'; he was running along.)

út'èé'ègi, where he was (út'èé' - út'èé', it was; -ègi, at).

ntsèìkëes, (C. Impf.) he thinks.

ntsèìkëesgo, (C. Impf.) he thinking; while he thinks (-go is a participializing suffix, and in some contexts it translates "while", "when" - as ntsèìkëesgo hodìfìna' literally "while he is thinking time passed")

ntsèsìkëes, (C. Impf.), I think.

ntsìnìkëes, (C. Impf.) you think.

s
dsètì, (N. Pf.) I am lying; I am in a reclining position. sètì út'èé', I was lying.
sidahigííí, (N. Pf.) the one who is sitting (sidá-, he is in a sitting position; -higííí, noun forming suffix). Diné sidahigííí, the man who is sitting (Lit. "man the one that sits." The relative pronouns of English are expressed in Navajo by such mechanisms as the noun forming suffixes.)

si'ággo, (N. Pf.) si'ág-, it -a single bulky object - rests, lies, sets; -go, adverbializing and participializing suffix - while), it setting; while it is setting.

si'áníggóó, (N. Pf.) to where it sets; to where it was setting (a single bulky object) (si'ág- > si'á, it sets; -n-, ligature element; -éé-< yéé, aforementioned (place); -góó, to; toward).

sínítí, (N. Pf.) you are lying; you are in a reclining position.

sití, (N. Pf.) he is lying; he is in a reclining position.

shaa (sh-, me; -aa, to), to me.

shé (sh-, me; -á, for), for me; in my behalf.

sha'dichíní, my children (sha-< shi-, my; -ichíní, children).

sha'shin, perhaps; might.

shich'tí' (shi-, me; -ch'tí', toward) toward me.

shik'a (shí-, me; -ká, after), after me. (Postposition used idiomatically with the verb run, to mean help, as in shik'a aniyleed, help me (lit. you are in the act of running after me).

shik'iilts'id (shi-, me; -k'i-, on, upon; -ilts'id, (Pf.) it -a bulky object - fell), it fell on me.

shí'niihiší (Pf.) it has begun to kill me.

shójíghaí, (O.) that you might eat me (sh-, me; -ójíghaí, that you might eat or chew meat) used to form a negative imperative in t'áá ká shójíghaí, don't eat me!

shoobi, t'áá—, please.

T

télíí, burro; donkey.
t'áá, a particularizing particle sometimes with the force of just.

t'ááká, don't (negative particle used with optative mode forms to express a negative imperative).

t'éiyá, just; exclusively.

tl'iish, snake

tl'iishég (tl'iish-, snake; -ég < -yég, the aforementioned), the (aforementioned) snake.

tsé, rock; stone.

tséhégé (tsé-, rock; -hég < -yég, the aforementioned), the (aforementioned) rock.

tséhígif, the rock (tsé-, rock; -hígíí, noun forming suffix with verbs and when used with nouns it particularizes with much of the force of the English definite article).

tséshá' (tsé-, rock; -shá', interrogative particle), the rock?

tsétahgi (tsé-, rocks; -tah-, among; -gi, at), among the rocks.

tsétahgóó (tsé-, rock; -tah-, among; -góó, along, toward), along among the rocks.

yaa (y-, he/it - 3rd person subject acting on 3rd person object; -aa, to; about), he about it; he to him.

yég, aforementioned; the.

yich'i' (yi-, he/him; she/her, etc.- indicates a third person subject acting on a third person object; -ch'i', toward), he toward him.

yikáa'jí' (yi-, he/him - 3rd person subject acting on 3rd person object; -káa' - , on; upon; above; -jí', to a point; to a place - lit. he-him-on-to).

yílk'idígíí (yílk'id-, it is humped; -ígíí, noun forming suffix - the one that), hill.
yiskánfdég' (yisk-, (Pf.) it has downed; -n-, ligature element; -i-, noun forming suffix; -dég', in the past), dawns ago; days ago.

yit'égō, (N.) it being; he being. Haasha' yit'égō sínít'ü ňt'éé', how was it that you were lying?

yita'gâ' (yi-, he/him - 3rd person subject acting on 3rd person object; -ts'gâ', away from), he away from him; they away from him.

yiya (yi-, he/it - 3rd person subject acting on 3rd person object; -yaa, under), he under it.
SUMMARY - CONCLUSION

In the foregoing study we have considered language and culture in general terms, and the Navajo language in specific terms. The institution of language has been examined in its role as an aspect of culture, and the cultural-linguistic system attaching to a community has been described as a mold which shapes the world-view of the people who are participants in the system. Over and above these considerations, it has been pointed out that the elements and features which constitute a cultural-linguistic system are in the nature of established habits of thinking, doing, perceiving and reacting to the world about us. The degree to which such systems differ from one another covers a wide range--some are closely related; some are essentially unrelated.

The habitual values, attitudes, ways of doing things, manner of perceiving and reacting to the world and allied factors characterizing a cultural-linguistic system not only influence the structuring of its social organization and institutions of language, religion, government and law, but these same features constitute obstacles that make understanding of and participation in another and different social group very difficult--one's own pre-formed habits interfere wherever there are areas of sharp divergence.

A system of language is a reflection of the entire culture of the people who speak it. It contains labels for all of the material elements of culture, as well as labels and mechanisms closely adapted to the need for communication of ideas relating to the non-material elements, including the values, attitudes and peculiar manner of perceiving the world attaching to the cultural system to which the particular language pertains. Obviously, a given language system, closely adapted to the communication of concepts of the culture to which it belongs, is not equally well adapted to the communicational needs of another culture whose values, attitudes, institutions and other features are highly divergent.

The communication of concepts between cultures--cross-cultural communications, as it is called--is relatively easy or relatively difficult in a degree directly proportionate to the comparative similarity or dissimilarity between the two cultural systems involved. Concepts that are shared in common by two social groups can be readily conveyed by a simple process of translation; concepts that are not shared can be communicated only through a more cumbersome and demanding process of interpretation. Translation may involve little more than the use of corresponding word labels between two
languages; interpretation, on the other hand, involves detailed explanation of alien concepts in a language which lacks convenient labels for the obvious reason that a language does not contain convenient labels and mechanisms for the expression of concepts that do not exist in the culture of the people who speak it.

A good translator is a skilled technician, and his training must include the development of a high level of competence in the languages with which he works. The training demands attaching to a good interpreter are even greater. Not only must he develop a high level of bilingual competence, but he must also gain a high level of bicultural competence—and the very need for interpretation implies a wide gap between the two cultures and languages involved.

Effective cross-cultural communication presupposes the availability of a bilingual, bicultural technician who can quickly and accurately analyze concepts requiring interpretation and explain them in terms that will be meaningful to the receiver. The process he uses in making such an analysis is, essentially, a contrastive technique in which he considers the concept against two cultural-linguistic backgrounds, identifies the areas of difficulty that will attach to its communication in understandable terms to the receiving group, and chooses an approach that will make maximum use of the principle of presenting the unfamiliar in terms of something that is familiar. The process requires a high degree of skill, imagination, resourcefulness, and knowledge of the two cultural-linguistic systems involved. He is a good, a mediocre, or a poor interpreter in a degree proportionate to the extent of his qualifications and skill.

In situations such as those involving cross-cultural communications between the Navajo and Anglo-American, interpretation is necessary in the Tribal Council House, in the hospitals and clinics, and in the offices of the social workers. But more importantly, from a quantitative point of view, the education of Navajo children is also a process of cross-cultural communication in which the teacher plays the role of interpreter. The scope of the teacher's concern covers the entire range of the culture and the language of instruction and, like the interpreter in other situations, the classroom teacher can be most effective if she possesses enough insight into the language and culture of the children to identify specific problem areas which, because they involve alien concepts, will be difficult to understand on the part of the learner. It is not feasible for every teacher to acquire all of the qualifications of a fine interpreter, including
bilingualism and biculturalism, but it is feasible to secure some modicum of insight into the language and culture of the people with whom she works, and the provision of such insight should be an integral part of teacher training wherever the children of culturally and linguistically different ethnic groups are involved in a cross-cultural educational situation. By the same token, the community worker, the social welfare worker, the physician and other technicians concerned with the communication of cultural concepts that are alien to the people with whom they are concerned should be required to undergo the special training and gain the special insight their work will require if it is to be effective. Their preparation should be at least sufficient to permit them, through a process of contrastive analysis, to identify and predict cultural-conceptual differences that will interfere in attainment of the objectives of their programs.

With reference to the Navajo language, we have reviewed phonological, grammatical and structural features that constitute areas of wide divergence in contrast with English, the language of instruction, and we have noted that the production of speech sounds, like other features of language, are in the nature of fixed habits. In the process of learning a new language, we attempt to relate the unfamiliar with what is familiar to us in our own past experience. We tend to identify the speech sounds of a new language with those of our own, a process that often leads to erroneous substitutions which at best constitute a "foreign accent", as it is commonly called; or which, at worst, may seriously impair our ability to make ourselves intelligible. And we tend to look for grammatical features in a new language corresponding to those of our native speech, on the mistaken assumption that they are a "logical" prerequisite for the communication of ideas.

When we contrast the phonological systems of Navajo and English, we find certain striking areas of divergence, including:

<table>
<thead>
<tr>
<th>Navajo</th>
<th>English</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Vowel length distinguishes meaning.</td>
<td>1. Stress accent distinguishes meaning.</td>
</tr>
<tr>
<td>2. Vowels occur in a nasal as well as an oral series, a feature which also distinguishes meaning.</td>
<td>2. Sentence pitch distinguishes meaning.</td>
</tr>
<tr>
<td>3. Use of inherent tone to distinguish meaning.</td>
<td>3. Wide variety of consonantal clusters in syllable or word final position.</td>
</tr>
</tbody>
</table>
4. Limited use of consonantal clusters, with none occurring in syllable final position.

5. Only eleven (11) simple consonantal phonemes occur as syllable finals.

6. A simple vowel system only.

7. Fifteen (15) or more phonemes that do not occur in the phonology of English.

4. Nearly all simple consonantal phonemes may occur as syllable or word finals.

5. A simple and a compound vowel system.

6. The use of six (6) consonantal phonemes that do not occur in the sound system of Navajo (v, f, dh, th, r, and ng), and which have no proximate correspondents in the Navajo system.

The above listing of obvious divergences between the phonology of English and that of Navajo can be expanded on the basis of the description set forth in the section dealing with speech sounds. Not only do the differences noted above pose a problem for the learner of either of the two languages in reference as a second language, in learning to reproduce new speech sounds or to reproduce more or less familiar sounds in strange positions; but also phonological factors become involved with grammatical features in:

8. Use of particles to express interrogation, surprise, incredulity, exasperation, and other emotional overtones.

7. Use of sentence pitch to express interrogation, surprise, incredulity, exasperation and other emotional overtones.

A great variety of differences distinguish Navajo and English with reference to grammatical structure. These include:

**Navajo**

1. Limited use of noun plurals. Most Navajo nouns are plural or singular as the context requires, the verb form often expressing noun number by implication.

**English**

1. Wide use of distinct singular and plural noun forms.
2. The Navajo verb system may distinguish number as singular, dual, plural and distributive plural by the use of special verbal stems connoting number, or by use of inflectional forms connoting number.

3. Mode (manner of acting) and aspect (kind of action) more important than tense (time of action). Modes include an Imperfective (action begun but not completed), a Perfective (action that is completed), a Progressive (action that is in process), a Usitative (action that is customarily performed), and Iterative (action that is repeatedly performed), and an Optative (action expressed as potential or desired). Aspects include a Momentaneous, a Continuative, a Semelfactive (performed once), a Semeliterative (performed once again), a Durative (lasting or static), and a Repetitive (action that is performed repetitively--a KICKING against a KICK). Modal prefixes and special forms of verb stem are the principal mechanisms employed to mark mode and aspect.

4. Navajo incorporates prefixes into the verbal base to express pronoun subject and, for transitive verbs, pronoun object. Only the subjective and possessive (person) pronouns also occur as free morphemes; the object pronoun is always a bound morpheme (i.e., incorporated

2. The English verb is not generally itself inflected for number; singular and plural number are expressed by the noun or pronoun subject (except in the third person singular of simple verb forms where a suffixed /-s/ is used).

3. Tense (time) expressed as past, present (i.e. non-past), and future. Aspects expressed as completive (perfect), durative (imperfect), repetitive. The aspect markers are /-ing, -ed/ (the present and past participial forms) with such auxiliary verbs as have, to be, keep: (I have looked, I am looking, I keep looking). The simple tenses are present (I look) and past (I looked). A number of modes are expressed by use of shall, will, may, can, do, must, ought to, have to, should, would, might, could, did, get, etcetera.

4. English expresses the pronoun subject, object and possessor by use of free forms (I, you, he/she/it, we, they; me, you, him/her/it, us, them; my, your, his/her/its, our, their).
5. The Navajo verb expresses the subject, and object (if a transitive verb) with an incorporated pronominal form even when the subject and object are also represented by nouns.

6. Navajo does not distinguish grammatical gender, even in the third person pronominal forms.

7. Navajo does not have an adjective class, as such. Neuter verbs (forms expressing a state, quality or condition without direct reference to a preceding action) perform a function comparable to that of the adjective class, in English. Neuter verb forms whose subject is spatial /xo-, xa-/ or indefinite /'a-/ sometimes function as abstract nouns, and neuter verb forms may function as adverbs by addition of the adverbializing suffix /-go/.

8. Certain Navajo verbs classify the objects to which they refer, on the basis of their physical characteristics, number and other criteria. The concepts relating to be (in position), handle (= give, take, bring, put, carry, lower, et cetera), chew, drop, fall are included in this category, a circumstance that reflects the difference in

5. English does not include a pronoun representing the subject or object if the subject and/or object are represented nominally (I ate it, but not "I ate it the apple" and not "The man he ate it the apple").

6. English distinguishes masculine, feminine and neuter gender in third person singular forms of the personal pronouns: he, she, it; him, her, it; his, hers, its.

7. English includes an adjective class, functioning generally to qualify, describe, or limit the meaning of a noun, and by adding certain suffixes, adjectives can be made into nouns (warm: warm-th, warm-ness) or adverbs (warm-ly).

8. English is concerned with expression of action or status concepts in an abstract sense. When gravity pulls an object downward, it falls; when possession of an object is transferred from a donor to a receiver, the abstract action involved is termed giving; when an object is transferred to
in viewpoint with regard to the concepts involved, and one which results in multiple forms expressing what in English are unit concepts. It is not the mere concept of falling that is expressed, in Navajo, but it is one which includes reference to the type of object involved, and to the peculiarities attendant upon performance of the action by the particular type of object involved. A number of distinct verbs are required to express the several facets of meaning attaching to the English verb to be.

9. The direction implicit in a verbal action—whether away from or toward the location of the speaker—is expressed, not by the verb, but by the post-position in Navajo. (Baa níyá, I went to him; Shaa níyá, he came to me. Similarly, take/bring; buy/sell; lend/borrow.)

10. Navajo verbs may have abstract forms in which the subject and/or object is/are expressed by the spatial pronoun /xo-, xa-/ or indefinite pronominal /'a-/. These may function as abstract nouns in some situations, and as verbs in others (xalgai, spatial it is white; a plain; 'algai, something is white; whiteness; 'ak'e'eichí, someone writes on something; writing). These forms do not correspond to the infinitives of English, although they have some of the abstract characteristics.

another person on a temporary basis, it is loaned, et cetera. Similarly, the forms of be express a wide range of concepts relating to state of being, quality, existence, and location, as well as aspect in connection with other verbs.

9. In English the direction of certain verbal actions with reference to the speaker is distinguished by separate verbs, in some instances, depending on whether the action is toward or away from the speaker or his location (go/come; take/bring; buy/sell; lend/borrow).

10. English verbs make wide use of infinitive form, with the preposition to, expressing existence or action without reference to person, number or tense. (I like to swim; I am going to eat).
11. Adverbial concepts are often expressed, in Navajo, by pre-fixed elements incorporated within the verbal base. Thus the prefix /néá/-, na:ná/- expresses again, another, some more; and the prefix /ná/- expresses reversion to a previous state or return (somewhat after the fashion of English /re/- in re-do). Navajo carefully distinguishes between repetition one more time and reversion. English expresses the concepts again, another, some more as separate ideas, and does not always clearly distinguish between action which is repeated once (again) and action involving reversion or return. The distinction is made in I'll go again, and I'll go back; but it is not expressed in peace came again, which may either imply one time more or back (if the distinction is necessary, such a verb as restore--peace was restored--is used).

12. Vocabulary formation, in Navajo, involves a limited number of broad verbal concepts expressed by stems, modified in a large number and variety of manners by adverbial, post-positional and other derivative elements prefixed to the stem. (A stem connoting the general concept of flatness or expansion is thus variously modified by prefixed elements to mean to slap, drop, knock over, clap (hands), sew, herd, drive, corner, caress). Most Navajo nouns are verbal in origin, involving verbal stems used as nouns; nouns formed after the fashion of neuter verbs; descriptive verbal phrases nominalized by addition of such a suffix as /-i, -ifí, -ii/ meaning the one which. English vocabulary involves the use of syntactic relationships to distinguish forms functioning either as nouns or verbs (e.g. a fish has scales; I fish in the lake); a large number and variety of affixes that form nouns, adjectives and adverbs. (e.g. warm, warmth, warmthly; beauty, beautiful, beautifully; kill, killer, killing--cf. Although the killer hated killing, he made a kill when he killed the deer).

13. Navajo does not use contrasting opposites to the extent or in a manner corresponding to English. English: good/bad=Navajo: good/not good; English: agree/disagree=Navajo: agree/
not agree; English: approve/disapprove=Navajo: approve/not approve; English: loved/unloved=Navajo: loved/not loved; English: tie/reloosen; English: dress/undress=Navajo: get back into one's clothes/get back out of one's clothes. But English: hot/cold=Navajo: hot/cold; English: large/small=Navajo: large/small.

14. Navajo uses certain suffixed or enclitic elements /-f, -fgí, -ii/, the one which, the one who; /-yèg/, the aforementioned one to particularize, as well as for other purposes (relativization, for example), often with the force of the English definite article the. (e.g. Nagháf 'ashkífgísha` xaa gholgé, what's the name of that (particular) boy? ɪkángí' nisin, I want the sweet one; 'Ashkii yèg 'ashdíníidi, the (aforementioned) boy said (thus) to me). The particles /tla'/, a, an, one, and /léi'/, a certain one (unknown personally to the speaker) correspond to the indefinite article of English.

15. The suffixes /-f, -fgí, -ii/ and /-yèg/ may function in given contexts with a meaning comparable to the relative pronouns of English (that, who, whom, what, which), and the locative enclitics /-gi, -di/, at, may correspond to relative where. ('Ashkii

14. An important grammatical relationship, in English, is that of relative definiteness, as expressed by the definite article the in contrast with indefinite a, an. (I saw a man/I saw the man.)

15. English uses that, who, whom, what, which, where, why as relative pronouns (The man that I saw; the man who killed him; the man whom you saw, et cetera).
neezdahí tóó gholghé, the 
boy who sat down is called Joe;
niidi ch'íxónf'ánífí bit bééxózin, 
hé'ñit ána niizháá, he knows what I told you;
Naasháháí doo shiit bééxózin da,
I don't know where I am). Navajo 
does not use a series of relative 
pronouns corresponding directly 
to those of English.

16. Navajo includes a word class 
called postpositions, because 
they follow, rather than pre- 
cede the nouns or pronouns to 
which they relate. (Shik'i, 
on me--literally me-on; 
tsé biko'd', on the rock-- 
literally, rock on-it). The 
postpositions also function 
as verbal prefixes ('ak'e'elchí, 
writing--literally, something- 
on-marking takes place). The 
postpositions of Navajo corre- 
spond to the prepositions of 
English in terms of meaning.

17. Possession, in Navajo, is ex- 
pressed by possessive forms 
of the personal pronouns, which 
are prefixed to the noun repre- 
senting the possessed object 
(gich'ah, my hat). If the 
possessor is also represented 
nominally, the noun representing 
the possessor precedes the noun 
representing the possessed object, 
and the latter carries the pos- 
sessive pronoun prefix ('ashkii 
bich'ah, the boy's hat--literally 
boy his-hat; 'ashiiké dabich'ah, 
the boys' hats--literally boys 
their (distributive plural) hats).

18. Navajo includes a system of 
cardinal numbers (t'dáá', 
one; naaki, two; txáá', three,

16. English includes a word class 
called prepositions, which 
precede the noun or pronoun 
to which they relate (to me; 
to the man). The English 
prepositions correspond to 
the postpositions of Navajo.

17. Possession, in English, is 
expressed by the possessive 
pronouns which precede the 
noun representing the object 
possessed (my hat). If the 
possessor is represented 
nominally, a suffix /-'s/ for 
singular and /-s'/ for plural 
is added to the noun repre- 
senting the possessor (the 
boy's hat; the boys' hats).

18. English includes a cardinal 
(one, two, three) and an- 
ordinal series of numbers

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et cetera), which by use of Spanish mil, thousand (Navajo miifl) and an augmented form /miiltsoh or miifl ntsaàíghû/ (literally big thousand) can count as far as multiples of a million. The suffix /-ts'áadah, -'áadah/ corresponds functionally to English /-teen/ in forming the Navajo numbers from eleven through nineteen, and the Navajo suffix /-diin/ corresponds functionally to English /-ty/. However, Navajo does not include an ordinal series except as the particle /góne'/, in; inside, used with the cardinal numbers functions to express the concept expressed by the ordinals of English. (Naaki góne', second--i.e. "two in"). Navajo lacks terms corresponding to the fractions of English. (Two-thirds, three-fourths, et cetera).

The foregoing outline recapitulates a few of the obvious areas of sharp divergence between the Navajo and English languages. Included are some of the features of Navajo that pose special problems for the speaker of English, and it can be presumed that the corresponding features of English constitute special problems for the Navajo speaking person, when either of the two learns the language of the other as a second language. In either instance, the learner must attack the problem against a contrary background of well-established habits of thought and expression.

The overview provided in foregoing pages points to the need for and provides a framework for the development of special materials, special instructional techniques, and special teacher training, all closely adapted to meet the peculiar problems of the Navajo learner, whether the latter is a beginner or an advanced student of English.