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N. KONHA, THE LAST TUTELO.

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THE TUTELO TRIBE AND LANGUAGE.

BY HORATIO HALE.

(Read before the American Philosophical Society, March 2, 1883.)

The tribes of the Dakota stock, under various designations—Osages, Quappas, Kansas, Otoes, Omahas, Minitarces (or Hidatsas), Iowas, Mandans, Sioux (or Dakotas proper) and Assiniboins, have always been regarded as a people of the western prairies, whose proper home was the vast region lying west of the Mississippi, and stretching from the Arkansas River on the south to the Saskatchewan on the north. A single tribe, the Winnebagoes, who dwelt east of the Mississippi, near the western shore of Lake Michigan, were deemed to be intruders into the territory of the Algonkin nations. The fact, which has been recently ascertained, that several tribes speaking languages of the Dakota stock were found by the earliest explorers occupying the country east of the Alleghenies, along a line extending through the southern part of Virginia and the northern portion of North Carolina, nearly to the Atlantic ocean, has naturally awakened much interest. This interest will be heightened if it shall appear that not only must our ethnographical maps of North America be modified, but that a new element has been introduced into the theory of Indian migrations. Careful researches seem to show that while the language of these eastern tribes is closely allied to that of the western Dakotas, it bears evidence of being older in form. If this conclusion shall be verified, the supposition, which at first was natural, that these eastern tribes were merely offshoots of the Dakota stock, must be deemed at least improbable. The course of migration may be found to have followed the contrary direction, and the western Dakotas, like the western Algonkins, may find their parent stock in the east. As a means of solving this interesting problem, the study of the history and language of a tribe now virtually extinct assumes a peculiar scientific value. Philologists will notice, also, that in this study there is presented to them a remarkable instance of an inflected language closely allied in its vocabu-

lary and in many of its forms to dialects which are mainly agglutinative in their structure, and bear but slight traces of inflection.

In the year 1671 an exploring party under Captain Batt, leaving "the Apomattock Town," on the James River, penetrated into the mountains of Western Virginia, at a distance, by the route they traveled, of two hundred and fifty miles from their starting point. At this point they found "the Tolera Town in a very rich swamp between a breach [branch] and the main river of the Roanoke, circled about by mountains."* There are many errata in the printed narrative, and the circumstances leave no doubt that "Tolera" should be "Toter." On their way to this town the party had passed the Sapping [Sapony] town, which, according to the journal, was about one hundred and fifty miles west of the Apomattock Town, and about a hundred miles east of the "Toleras." A few years later we shall find these tribes in closer vicinity and connection.

At this period the Five Nations were at the height of their power, and in the full flush of that career of conquest which extended their empire from the Georgian Bay on the north to the Roanoke River on the south. They had destroyed the Hurons and the Erics, had crushed the Andastes (or Conestoga Indians), had reduced the Delawares to subjection, and were now brought into direct collision with the tribes of Virginia and the Carolinas. The Toteras (whom we shall henceforth know as the Tuteloes) began to feel their power. In 1633 the French missionaries had occasion to record a projected expedition of the Senecas against a people designated in the printed letter the "Tolere,"—the same misprint occurring once more in the same publication.† The traditions of the Tuteloes record long continued and destructive wars waged against them and their allies by the Iroquois, and more especially by the two western nations, the Cayugas and Senecas. To escape the incursions of their numerous and relentless enemies, they retreated further to the south and east. Here they came under the observation of a skilled explorer, John Lawson, the Surveyor-General of South Carolina. In 1701, Lawson traveled from Charleston, S. C., to Pamlico sound. In this journey he left the sea-coast at the mouth of the Santee river, and pursued a northward course into the hilly country, whence he turned eastward to Pamlico. At the Sapona river, which was the west branch of the Cape Fear or Clarendon river, he came to the Sapona town, where he was well received.‡ He there heard of the Toteros as "a neighboring nation" in the "western mountains." "At that time," he adds, "these Toteros, Saponas, and the Keyawees, three small nations, were going to live together, by which they thought they should strengthen themselves and become formidable to their enemies."

* Batt's *Journal and Relation of a New Discovery*, in N. Y. Hist. Col. Vol. III, p. 191.

† Lambreville to Bruyas, Nov. 4, 1636, in N. Y. Hist. Col., Vol. III, p. 484.

‡ Gallatin suggests that Lawson was here in error, and that the Sapona river was a branch of the Great Pedee, which he does not mention, and some branches which he evidently mistook for tributaries of the Cape Fear river.—*Synopsis of the Indian Tribes*, p. 85.

They were then at war with the powerful and dreaded Senecas—whom Lawson styles Sinnagers. While he was at the Sapona town, some of the Toteran warriors came to visit their allies. Lawson was struck with their appearance. He describes them, in his quaint idiom, as "tall, likely men, having great plenty of buffaloes, elks and bears, with every sort of deer, amongst them, which strong food makes large, robust bodies." In another place he adds: "These five nations of the Toteros, Saponas, Keiauwees, Aconechos and Schoicories are lately come amongst us, and may contain in all about 750 men, women and children."* It is known that the Toteros (or Tuteloes) and Saponas understood each other's speech, and it is highly probable that all the five tribes belonged to the same stock. They had doubtless fled together from southwestern Virginia before their Iroquois invaders. The position in which they had taken refuge might well have seemed to them safe, as it placed between them and their enemies the strong and warlike Tuscarora nation, which numbered then, according to Lawson's estimate, twelve hundred warriors, clustered in fifteen towns, stretching along the Neuse and Tar rivers. Yet, even behind this living rampart, the feeble confederates were not secure. Lawson was shown, near the Sapona town, the graves of seven Indians who had been lately killed by the "Sinnegars or Jennitos"—names by which Gallatin understands the Senecas and Oneidas, though as regards the latter identification there may be some question.

The noteworthy fact mentioned by Lawson, that buffaloes were found in "great plenty" in the hilly country on the head waters of the Cape Fear river, may be thought to afford a clue to the causes which account for the appearance of tribes of Dakota lineage east of the Alleghenies. The Dakotas are peculiarly a hunting race, and the buffalo is their favorite game. The fact that the Big Sandy river, which flows westward from the Alleghenies to the Ohio, and whose head waters approach those of the Cape Fear river, was anciently known as the Totteroy river, has been supposed to afford an indication that the progress of the Toteros or Tuteloes, and perhaps of the buffaloes which they hunted, may be traced along its course from the Ohio valley eastward. There are evidences which seem to show that this valley was at one time the residence, or at least the hunting-ground, of tribes of the Dakota stock. Gravier (in 1700) affirms that the Ohio river was called by the Illinois and the Miamis the Akanseas river, because the Akanseas formerly dwelt along it.† The Akanseas were identical with the Quappas, and have at a later day given their name to the river and State of Arkansas. Catlin found reason for believing

* Lawson's "History of Carolina;" reprinted by Strother & Marcom. Raleigh, 1880; p. 384.

† "Elle" (the Ohio) "s'appelle par les Illinois et par les Oumiamis la rivière des Akanseas, parceque les Akanseas l'habitoient autrefois."—Gravier, Relation du Voyage, p. 10. I am indebted for this and other references to my esteemed friend, Dr. J. G. Shea, whose unsurpassed knowledge of Indian history is not more admirable than the liberality with which its stores are placed at the command of his friends.

that the Mandans, another tribe of the Southern Dakota stock, formerly—and at no very distant period—resided in the valley of the Ohio. The peculiar traces in the soil which marked the foundations of their dwellings and the position of their villages were evident, he affirms, at various points along that river. It is by no means improbable that when the buffalo abounded on the Ohio, the Dakota tribes found its valley their natural home, and that they receded with it to the westward of the Mississippi. But the inference that the region west of the Mississippi was the original home of the Dakotas, and that those of that stock who dwelt on the Ohio or east of the Alleghenies were emigrants from the Western prairies, does not, by any means, follow. By the same course of reasoning we might conclude that the Aryans had their original seat in Western Europe, that the Portuguese were emigrants from Brazil, and that the English derived their origin from America. The migrations of races are not to be traced by such recent and casual vestiges. The only evidence which has real weight in any inquiry respecting migrations in prehistoric times is that of language; and where this fails, as it sometimes does, the question must be pronounced unsolvable.

The protection which the Tuteloes had received from the Tuscaroras and their allies soon failed them. In the year 1711 a war broke out between the Tuscaroras and the Carolina settlers, which ended during the following year in the complete defeat of the Indians. After their overthrow the great body of the Tuscaroras retreated northward and joined the Iroquois, who received them into their league as the sixth nation of the confederacy. A portion, however, remained near their original home. They merely retired a short distance northward into the Virginian territory, and took up their abode in the tract which lies between the Roanoke and the Potomac rivers. Here they were allowed to remain at peace, under the protection of the Virginian government. And here they were presently joined by the Tuteloes and Saponas, with their confederates. In September, 1722, the governors of New York, Pennsylvania, and Virginia, held a conference at Albany with the chiefs of the Iroquois, to endeavor to bring about a peace between them and the southern tribes. On this occasion Governor Spotswood, of Virginia, enumerated the tribes for which the government of his Province would undertake to engage. Among them were certain tribes which were commonly known under the name of the "Christanna Indians," a name derived from that of a fort which had been established in their neighborhood. These were "the Saponies, Ochineeches, Stenkenoaks, Meipontskys, and Toteroes," all of whom, it appears, the Iroquois were accustomed to comprehend under the name of *Todirichrones*.*

Some confusion and uncertainty, however, arise in consulting the colonial records of this time, from the fact that this name of *Todirichrones* was applied by the Iroquois to two distinct tribes, or rather confederacies, of Southern Indians, belonging to different stocks, and speaking languages

*N. Y. Hist. Col., Vol. v, p. 635 et seq.

totally dissimilar. These were, on the one hand, the Tuteloes (or Tote-roes) and their allies, and, on the other, the powerful Catawba nation. The Catawbas occupied the eastern portion of the Carolinas, south of the Tuscarora nation. At the beginning of the last century they numbered several thousand souls. As late as 1743, according to Adair, they could still muster four hundred warriors. A bitter animosity existed between them and the Iroquois, leading to frequent hostilities, which the English authorities at this conference sought to repress. It was the policy of the Iroquois, from ancient times, always to yield to overtures of peace from any Indian nation. On this occasion they responded in their usual spirit. "Though there is among you," they replied to the Virginians, "a nation, the Todirichrones, against whom we have had so inveterate an enmity that we thought it could only be extinguished by their total extirpation, yet, since you desire it, we are willing to receive them into this peace, and to forget all the past."*

The Catawba language is a peculiar speech, differing widely, if not radically, both from the Dakota and from the Iroquois languages.† The only connection between the Catawbas and the Tuteloes appears to have arisen from the fact that they were neighboring, and perhaps politically allied tribes, and were alike engaged in hostilities with the Iroquois. The latter, however, seem to have confounded them all together, under the name of the tribe which lay nearest to the confederacy and was the best known to them.

One result of the peace thus established was that the Tuteloes and Saponas, after a time, determined to follow the course which had been taken by the major portion of their Tuscarora friends, and place themselves directly under the protection of the Six Nations. Moving northward across Virginia, they established themselves at Shamokin (since named Sunbury) in what is now the centre of Pennsylvania. It was a region which the Iroquois held by right of conquest, its former occupants, the Delawares and Shawanese, having been either expelled or reduced to subjection. Here, under the shadow of the great confederacy, many frag-

* N. Y. Hist. Col., Vol. v, p. 660.

† Gallatin, in his Synopsis classes the Catawba as a separate stock, distinct from the Dakota. The vocabulary which he gives seems to warrant this separation, the resemblances of words being few and of a doubtful character. On the other hand, in the first annual report of the Bureau of Ethnology connected with the Smithsonian Institution (Introduction, p. xix) the Katába (or Catawba) is ranked among the languages of the Dakotan family. My esteemed correspondent, Mr. A. S. Gatschet, whose extensive acquaintance with Indian linguistics gives great weight to his opinion on any subject connected with this study, informs me (March 31, 1882) that this classification was conjectural and provisional, and that his subsequent researches among the few survivors of the tribe have not yet resulted in confirming it. They show certain traces of resemblance, both in the vocabulary and the syntax, but too slight and distant to make the affiliation certain. We shall have, as he remarks, "to compare more material, or more attentively that which we have, to arrive at a final result."

ments of broken tribes were now congregated—Conoys, Nanticokes, Delawares, Tuteloes, and others.

In September, 1745, the missionary, David Brainerd, visited Shamokin. He describes it in his diary as containing upwards of fifty houses and nearly three hundred persons. "They are," he says, "of three different tribes of Indians, speaking three languages wholly unintelligible to each other. About one half of its inhabitants are Delawares, the others Senekas and Tutelas."* Three years later, in the summer of 1748, an exploring party of Moravian missionaries passed through the same region. The celebrated Zeisberger, who was one of them, has left a record of their travels. From this we gather that the whole of the Tuteloes were not congregated in Shamokin. Before reaching that town, they passed through Skogari, in what is now Columbia county. In Zeisberger's biography the impression formed of this town by the travelers is expressed in brief but emphatic terms. It was "the only town on the continent inhabited by Tuteloes, a degenerate remnant of thieves and drunkards."† This disparaging description was perhaps not unmerited. Yet some regard must be paid to a fact of which the good missionary could not be aware, namely, that the Indians who are characterized in these unsavory terms belonged to a stock distinguished from the other Indians whom he knew by certain marked traits of character. Those who are familiar with the various branches of the Indian race are aware that every tribe, and still more every main stock, or ethnic family, has certain special characteristics, both physical and mental. The Mohawk differs in look and character decidedly from the Onondaga, the Delaware from the Shawanese, the Sioux from the Mandan; and between the great divisions to which these tribes belong, the differences are much more strongly marked. The Iroquois have been styled "the Romans of the West." The designation is more just than is usual in such comparisons. Indeed, the resemblance between these great conquering communities is strikingly marked. The same politic forethought in council, the same respect for laws and treaties, the same love of conquest, the same relentless determination in war, the same clemency to the utterly vanquished, a like readiness to strengthen their power by the admission of strangers to the citizenship, an equal reliance on strong fortifications, similar customs of forming outlying colonies, and of ruling subject nations by proconsular deputies, a similar admixture of aristocracy and democracy in their constitution, a like taste for agriculture, even a notable similarity in the strong and heavy mould of figure and the bold and massive features, marked the two peoples who, on widely distant theatres of action, achieved not dissimilar destinies.

Pursuing the same classical comparison, we might liken the nearest neighbors of the Iroquois, the tribes of the Algonkin stock, whose natural traits are exemplified in their renowned sachems, Powhatan, Philip of Pokano-

* Life of Brainerd, p. 167, Am. Tract Soc. edition. Quoted in the "Life of Zeisberger," by De Schweinitz, p. 71.

† Life of Zeisberger, by De Schweinitz, p. 149.

ket, Miantonomah, Pontiac, and Tecumseh, to the ingenious and versatile Greeks, capable of heroism, but incapable of political union, or of long-sustained effort. A not less notable resemblance might be found between the wild and wandering Scythians of old, and the wild and wandering tribes of the great Dakotan stock. Reckless and rapacious, untamable and fickle, fond of the chase and the fight, and no less eager for the dance and the feast, the modern Dakotas present all the traits which the Greek historians and travelers remarked in the barbarous nomads who roamed along their northern and eastern frontiers.

The Tuteloes, far from the main body of their race, and encircled by tribes of Algonkin and Iroquois lineage, showed all the distinctive characteristics of the stock to which they belonged. The tall, robust huntsmen of Lawson, chasers of the elk and the deer, had apparently degenerated, half a century later, into a "remnant of thieves and drunkards," at least as seen in the hurried view of a passing missionary. But it would seem that their red-skinned neighbors saw in them some qualities which gained their respect and liking. Five years after Zeisberger's visit, the Iroquois, who had held them hitherto under a species of tutelage, decided to admit them, together with their fellow-refugees, the Algonkin Nanticokes from the Eastern Shore of Maryland, to the full honors of the confederacy. The step received the commendation of so shrewd a judge as Colonel (afterwards Sir William) Johnson. At a great council of the Six Nations, held at Onondaga in September, 1753, Colonel Johnson congratulated the Cayugas on the resolution they had formed of "strengthening their castle" by taking in the Tedarighroones.* At about the same time a band of Delawares was received into the League. When a great council was to be convened in 1756, to confer with Colonel Johnson on the subject of the French war, wampum belts were sent to nine "nations" of the confederacy.† From this time the chiefs of the Tuteloes, as well as of the Nanticokes and the Delawares, took their seats in the Council of the League, a position which they still hold in the Canadian branch of the confederacy, though the tribes whom they represent have ceased to exist as such, and have become absorbed in the larger nations.

It would seem, however, that their removal from their lands on the Susquehanna to the proper territory of the Six Nations did not take place immediately after their reception into the League, and perhaps was never wholly completed. In an "account of the location of the Indian tribes," prepared by Sir William Johnson in November, 1763, the four small tribes of "Nanticokes, Conoys, Tutecoos [an evident misprint] and Saponeys," are bracketed together in the list as mustering in all two hundred men, and are described as "a people removed from the southward, and settled on or about the Susquehanna, on lands allotted by the Six Nations."‡

Though the Tuteloes were thus recognized as one of the nations of the

* N. Y. Hist. Col. Vol. vi, p. 811.

† Stone's Life of Sir William Johnson, Vol. 1, p. 484.

‡ *Ibid.*, Vol. ii, p. 487.

confederacy, and as such kept up their distinct tribal organization, they were regarded as being in a special manner the friends and allies of the Cayugas. The latter, a tribe always noted for their kindly temper, received the new comers within their territory, and gave them a site for their town, which of course brought with it the hunting and fishing privileges necessary for their existence. The principal Cayuga villages were clustered about the lake to which the nation has given its name. South of them lay the land assigned to the Tuteloes. Their chief settlement, according to a careful observer, was on the east side of Cayuga inlet, about three miles from the south end of Cayuga lake, and two miles south of Ithaca. "The town was on the high ground south of the school-house, nearly opposite Buttermilk Falls, on the farm of James Fleming. On the Guy Johnson's map of 1771, it figures (by a slight misprint) as Todevigh-rono. It was called in the Journal of General Dearborn, Coreorgonel; in the Journal of George Grant (1779), Dehoriss-kanadia; and on a map made about the same date Kayeghtalagealat."*

The town was destroyed in 1779 by General Sullivan, in the expedition which avenged, so disastrously for the Six Nations, the ravages committed by them upon the settlements of their white neighbors. The result, as is well known, was the destruction of the ancient confederacy. Of the broken tribes, some fragments remained in their original seats, submitting to the conquerors. All the Mohawks, the greater part of the Cayugas, about half of the Onondagas, and many of the Oneidas, with a few of the Senecas and Tuscaroras, followed Brant to Canada. The British government furnished them with lands, mostly along the Grand River, in the territory which in ancient times had been conquered by the Iroquois from the people who were styled the Neutral Nation. The Tuteloes accompanied their friends the Cayugas. A place was found for them in a locality which seemed at the time attractive and desirable, but which proved most unfortunate for them. They built their town on a pleasant elevation, which stretches along the western bank of the Grand River, and still bears the name of Tutelo Heights. Under this name it now forms a suburb of the city of Brantford.

Fifty years ago, when the present city was a mere hamlet, occupied by a few venturesome Indian traders and pioneers, the Tutelo cabins were scattered over these heights, having in the midst their "long-house" in which their tribal councils were held, and their festivals celebrated. They are said to have numbered then about two hundred souls. They retained apparently the reckless habits and love of enjoyment which had distinguished them in former times. Old people still remember the uproar of the dances which enlivened their council-house. Unhappily, the position of

*I am indebted for this and much other valuable information to my friend General John S. Clark, of Auburn, N. Y., who has made the location and migrations of the Indian tribes the subject of a special study. Of the above names Dehoriss kanadia is apparently a corruption of the Mohawk words *Tehoterigh kanada*, Tutelo town. The other words are probably, like most Indian names of places, descriptive designations, but are too much corrupted to be satisfactorily deciphered.

their town brought them into direct contact with the white settlements. Their frames, enfeebled by dissipation, were an easy prey to the diseases which followed in the track of the new population. In 1832, the Asiatic cholera found many victims on the Indian Reserve. The Tuteloes, in proportion to their numbers, suffered the most. The greater part of the tribe perished. Those who escaped clung to their habitations a few years longer. But the second visitation of the dreadful plague in 1848 completed the work of the first. The Tutelo nation ceased to exist. The few survivors fled from the Heights to which they have left their name, and took refuge among their Cayuga friends. By intermarriage with these allies, the small remnant was soon absorbed; and in the year 1870, only one Tutelo of the full blood was known to be living, the last survivor of the tribe of stalwart hunters and daring warriors whom Lawson encountered in Carolina a hundred and seventy years before.

This last surviving Tutelo lived among the Cayugas, and was known to them by the name of Nikonha. Okonha in the Cayuga dialect signifies mosquito. *Nikonha* was sometimes, in answer to my inquiries, rendered "mosquito," and sometimes "little," perhaps in the sense of mosquito-like. His Tutelo name was said to be Waskiteng; its meaning could not be ascertained, and it was perhaps merely a corruption of the English word mosquito. At all events, it was by the rather odd cognomen of "Old Mosquito," that he was commonly known among the whites; and he was even so designated, I believe, in the pension list, in which he had a place as having served in the war of 1812. What in common repute was deemed to be the most notable fact in regard to him was his great age. He was considered by far the oldest man on the Reserve. His age was said to exceed a century; and in confirmation of this opinion it was related that he had fought under Brant in the American war of Independence. My friend, Chief George Johnson, the government interpreter, accompanied us to the residence of the old man, a log cabin, built on a small eminence near the centre of the Reserve. His appearance, as we first saw him, basking in the sunshine on the slope before his cabin, confirmed the reports which I had heard, both of his great age and of his marked intelligence. "A wrinkled, smiling countenance, a high forehead, half-shut eyes, white hair, a scanty, stubby beard, fingers bent with age like a bird's claws," is the description recorded in my note-book. Not only in physiognomy, but also in demeanor and character, he differed strikingly from the grave and composed Iroquois among whom he dwelt. The lively, mirthful disposition of his race survived in full force in its latest member. His replies to our inquiries were intermingled with many jocose remarks, and much good-humored laughter.

He was married to a Cayuga wife, and for many years had spoken only the language of her people. But he had not forgotten his proper speech, and readily gave us the Tutelo renderings of nearly a hundred words. At that time my only knowledge of the Tuteloes had been derived from the few notices comprised in Gallatin's Synopsis of the Indian Tribes, where

they are classed with the nations of the Huron-Iroquois stock. At the same time, the distinguished author, with the scientific caution which marked all his writings, is careful to mention that no vocabulary of the language was known. That which was now obtained showed, beyond question, that the language was totally distinct from the Huron-Iroquois tongues, and that it was closely allied to the languages of the Dacotan family.

The discovery of a tribe of Dakota lineage near the Atlantic coast was so unexpected and surprising that at first it was natural to suspect some mistake. The idea occurred that the old Tutelo might have been a Sioux captive, taken in the wars which were anciently waged between the Iroquois and the tribes of the far West. With the view of determining this point, I took the first opportunity, on my next visit to the Reserve, in October, 1870, of questioning the old man about his early history, and that of his people. His answers soon removed all doubt. He believed himself to be a hundred and six years old; and if so, his earliest recollections would go back to a time preceding by some years the Revolutionary war. At that time his people, the Tuteloes, were living in the neighborhood of two other tribes, the Saponies and the Patshenins or Botshenins. In the latter we may perhaps recognize the Ochineeches, whom Governor Spotteswood, in 1703, enumerated with the Saponies, Toterocs, and two other tribes, under the general name of Christanna Indians. The Saponies and Tuteloes, old Nikonha said, could understand one another's speech. About the language of the Patshenins, I neglected to inquire, but they were mentioned with the Saponies as a companion tribe. When the Tuteloes came to Canada with Brant, they parted with the Saponies at Niagara Falls, and he did not know what had become of them. His father's name was Onusowa; he was a chief among the Tuteloes. His mother (who was also a Tutelo), died when he was young, and he was brought up by an uncle. He had heard from old men that the Tuteloes formerly lived on a great river beyond Washington, which city he knew by that name. In early times they were a large tribe, but had wasted away through fighting. Their war parties used to go out frequently against various enemies. The tribes they most commonly fought with were the Tuscaroras, Senecas, and Cayugas. Afterwards his tribe came to Niagara (as he expressed it), and joined the Six Nations. He knew of no Tutelo of the full blood now living, except himself.

This, with some additions to my vocabulary, was the last information which I received from old Waskiteng, or Nikonha. He died a few months later (on the 21st of February, 1871), before I had an opportunity of again visiting the Reserve. There are, however, several half-castes, children of Tutelo mothers by Iroquois fathers, who know the language, and by the native law (which traces descent through the female) are held to be Tuteloes. One of them, who sat in the council as the representative of the tribe, and who, with a conservatism worthy of the days of old Sarum, was allowed to retain his seat after his constituency had disappeared, was

accustomed to amuse his grave fellow-senators occasionally by asserting the right which each councillor possesses of addressing the council in the language of his people,—his speech, if necessity requires, being translated by an interpreter. In the case of the Tutelo chief the jest, which was duly appreciated, lay in the fact that the interpreters were dumfounded, and that the eloquence uttered in an unknown tongue had to go without reply.

From this chief, and from his aunt, an elderly dame, whose daughter was the wife of a leading Onondaga chief, I received a sufficient number of words and phrases of the language to give a good idea of its grammatical framework. Fortunately, the list of words obtained from the old Tutelo was extensive enough to afford a test of the correctness of the additional information thus procured. The vocabulary and the outlines of grammar which have been derived from these sources may, therefore, as far as they extend, be accepted as affording an authentic representation of this very interesting speech.

There is still, it should be added, some uncertainty in regard to the tribal name. So far as can be learned, the word Tutelo or Totero (which in the Iroquois dialects is variously pronounced Tüteriñ or Tehötirigh. Tehütüli, Tütei and Tütie) has no meaning either in the Tutelo or the Iroquois language. It may have been originally a mere local designation, which has accompanied the tribe, as such names sometimes do, in its subsequent migrations. Both of my semi-Tutelo informants assured me that the proper national name—or the name by which the people were designated among themselves—was Yesáng or Yesáh, the last syllable having a faint nasal sound, which was sometimes barely audible. In this word we probably see the origin of the name, Nahyssan, applied by Lederer to the tribes of this stock. John Lederer was a German traveler who in May, 1670—a year before Captain Batt's expedition to the Alleghenies—undertook, at the charge of the colonial government, an exploring journey in the same direction, though not with equal success. He made, however, some interesting discoveries. Starting from the Falls of the James river, he came, after twenty days of travel, to "Sapon, a village of the Nahyssans," situate on a branch of the Roanoke river. These were, undoubtedly, the Saponás whom Captain Batt visited in the following year, the kindred and allies of the Tuteloes. Fifty miles beyond Sapon he arrived at Akenatzy, an island in the same river. "The island," he says, "though small, maintains many inhabitants, who are fixed in great security, being naturally fortified with fastnesses of mountains and water on every side."* In these Akenatzies we undoubtedly see the Aconechos of Lawson, and the Ochineeches mentioned by Governor Spotteswood. Dr. Brinton, in his well-known work on the "Myths of the New World," has pointed out, also, their identity with the Occaneeches mentioned by Beverley in his "History of Virginia," and in doing so has drawn attention to

* See "*The Discoveries of John Lederer*," reprinted by O. H. Harpel. Cincinnati, 1873, p. 17.

the very interesting facts recorded by Beverley respecting their language.*

According to this historian, the tribes of Virginia spoke languages differing so widely that natives "at a moderate distance" apart did not understand one another. They had, however, a "general language," which people of different tribes used in their intercourse with one another, precisely as the Indians of the north, according to La Hontan, used the "Algonkine," and as Latin was employed in most parts of Europe, and the *Lingua Franca* in the Levant. These are Beverley's illustrations. He then adds the remarkable statement: "The general language here used is that of the Occaneeches, though they have been but a small nation ever since these parts were known to the English; but in what their language may differ from that of the Algonkins I am not able to determine."† Further on he gives us the still more surprising information that this "general language" was used by the "priests and conjurers" of the different Virginian nations in performing their religious ceremonies, in the same manner (he observes) "as the Catholics of all nations do their Mass in the Latin."‡

The Akenatzies or Occaneeches would seem to have been, in some respects, the chief or leading community among the tribes of Dakotan stock who formerly inhabited Virginia. That these tribes had at one time a large and widespread population may be inferred from the simple fact that their language, like that of the widely scattered Algonkins (or Ojibways) in the northwest, became the general medium of communication for the people of different nationalities in their neighborhood. That they had some ceremonial observances (or, as Beverley terms them, "adorations and conjurations") of a peculiar and impressive cast, like those of the western Dakotas, seems evident from the circumstance that the intrusive tribes adopted this language, and probably with it some of these observances, in performing their own religious rites. We thus have a strong and unexpected confirmation of the tradition prevailing among the tribes both of the Algonkin and of the Iroquois stocks, which represents them as coming originally from the far north, and gradually overspreading the country on both sides of the Alleghanies; from the Great Lakes to the mountain fastnesses of the Cherokees. They found, it would seem, Virginia, and possibly the whole country east of the Alleghanies, from the Great Lakes to South Carolina, occupied by tribes speaking languages of the Dakotan stock. That the displacement of these tribes was a very gradual process, and that the relations between the natives and the encroaching tribes were not always hostile, may be inferred not only from the adoption of the aboriginal speech as the general means of intercourse, but also from the terms of amity on which these tribes of diverse origin, native and intrusive, were found by the English to be living together.

* See the note on page 303 of Dr Brinton's volume, 2d edition.

† *History of Virginia* (1st edition), p. 161.

‡ *Ibid.*, p. 171.

That the Tutelo tongue represents this "general language" of which Beverley speaks—this aboriginal Latin of Virginia—cannot be doubted. It may, therefore be deemed a language of no small historical importance. The fact that this language, which was first obscurely heard of in Virginia two hundred years ago, has been brought to light in our day on a far-off Reservation in Canada, and there learned from the lips of the latest surviving member of this ancient community, must certainly be considered one of the most singular occurrences in the history of science.

Apart from the mere historical interest of the language, its scientific value in American ethnology entitles it to a careful study. As has been already said, a comparison of its grammar and vocabulary with those of the western Dakota tongues has led to the inference that the Tutelo language was the older form of this common speech. This conclusion was briefly set forth in some remarks which I had the honor of addressing to this Society at the meeting of December 19, 1879, and is recorded in the published minutes of the meeting. Some years afterwards, and after the earlier portion of this essay was written, I had the pleasure, at the meeting of the American Association for the Advancement of Science, held in Montreal, in September, 1882, of learning from my friend, the Rev. J. Owen Dorsey, of the Smithsonian Institution, who has resided for several years as a missionary among the western Dakotas, and has made careful researches into their languages and history, that they have a distinct tradition that their ancestors formerly dwelt east of the Mississippi. In fact, the more southern Dakotas declare their tribes to be off-shoots of the Winnebagoes, who till recently resided near the western shore of Lake Michigan. A comparison of their dialects, made with Mr. Dorsey's aid, fully sustains this assertion. Mere traditionary evidence, as is well known, cannot always be relied on; but when it corresponds with conclusions previously drawn from linguistic evidence, it has a weight which renders it a valuable confirmation.

The portrait of old Nikonha, an accurate photograph, will serve to show, better than any description could do, the characteristics of race which distinguished his people. The full oval outline of face, and the large features of almost European cast, were evidently not individual or family traits, as they reappear in the Tutelo half-breeds on the Reserve, who do not claim a near relationship to Nikonha. Those who are familiar with the Dakotan physiognomy will probably discover a resemblance of type between this last representative of the Virginian Tutelos and their congeners, the Sioux and Mandans of the western plains.

THE TUTELO LANGUAGE.

In the following outline of Tutelo grammar, it has been deemed advisable to bring its forms into comparison with those of the western languages of the same stock. For this purpose the Dakota and Hidatsa (or Minnetaree) languages were necessarily selected, being the only tongues of this family of which any complete account has yet been published.

For the information respecting these languages I am indebted to the Dakota Grammar and Dictionary of the Rev. S. R. Riggs (published in the Smithsonian Contributions to Knowledge) and the Hidatsa Grammar and Dictionary of Dr. Washington Matthews (published in Dr. Shea's Library of American Linguistics), both of them excellent works, of the highest scientific value.

The Alphabet.

The alphabetical method which has been followed by me in writing this language, as well as the Iroquois dialects, is based on the well-known system proposed by the Hon. John Pickering, and generally followed by American missionaries, whose experience has attested its value. The modifications suggested for the Indian languages by Professor Whitney and Major Powell have been adopted, with a few exceptions, which are due chiefly to a desire to employ no characters that are not found in any well-furnished printing-office.

The letters *b, d, k, l, m, n, p, s, t, w, y, z* are sounded as in English, the *s* having always its sharp sound, as in *mason*. The vowels are sounded generally as in Italian or German, with some modifications expressed by diacritical marks, thus :

- a*, as in *father* ; in accented syllables written *ā*.
- ā*, like the German *a* in *Mann*.
- â*, like *a* in *mat*.
- â*, like *a* in *fall*.
- e*, like *a* in *fate* ; in accented syllables *ê*.
- ê*, like *e* in *met*.
- i*, like *i* in *machine* ; in accented syllables *î*.
- î*, like *i* in *pin*.
- o*, as in *note* ; in accented syllables *ô*.
- ô*, like the French *o* in *bonne*.
- ô*, like *o* in *not*.
- û*, as in *rule*, or like *oo* in *pool* ; in accented syllables *û*.
- û*, like *u* in *pull*.
- û*, like *u* in *but* ; in an accented syllable written *û*.
- û*, like the French *u* in *dur*.

The diphthongs are, *ai*, like our long *i* in *pine* ; *au*, like *ou* in *loud* ; *âi*, like *oi* in *boil* ; *iû*, like *u* in *pure*.

The consonants requiring special notice are :

- ç*, like *sh* in *shine*.
- g*, always hard, as in *go, get, give*.
- j*, like *z* in *azure*.
- ñ*, like the French nasal *n* in *an, bon, un*.
- g*, like the German *ch* in *Loch*, or the Spanish *j* in *joen*.

The sound of the English *ch* in *chest* is represented by *tç*; the *j* and *dj* in *judge* by *dj*.

The apostrophe (') indicates a slight hiatus in the pronunciation of a word, which is often, though not always, caused by the dropping of a consonantal sound.

In general, the diacritical marks over the vowels are omitted, except in the accented syllable—that is, the syllable on which the stress of voice falls. It is understood that when a vowel (other than the *û*) has a mark of any kind over it, the syllable in which it occurs is the accented or emphatic syllable of the word. Experience shows that the variations in the sound of a vowel in unaccented syllables, within the limits represented by the foregoing alphabet, are rarely of sufficient importance to require to be noted in taking down a new language. The only exception is in the sound marked *û*, which occasionally has to be indicated in unaccented syllables, to distinguish it from the *u*, with which it has no similarity of sound. It is, in fact, more frequently a variation of the *a* than of any other vowel sound.

Occasionally the accented syllable is indicated by an acute accent over the vowel. This method is adopted principally when the vowel has a brief or obscure sound, as in *misâñi*, I alone, which is pronounced in a manner midway between *misâñi* and *misûñi*.

Phonology.

The Tutelo has the ordinary vowel sounds, but the distinction between *e* and *i*, and between *o* and *u* is not always clear. The word for "mother" was at one time written *henâ*, and at another *tna*; the word for "he steals" was heard as *manôma* and *manûma*. In general, however, the difference of these vowels was sufficiently apparent. The obscure sound of *û* (or in accented syllables *û*) was often heard, but when the word in which it occurred was more distinctly uttered, this sound was frequently developed into a clearer vowel. Thus *histôî*, arm, became *histô*; *mîstê*, spring (the season), became *mastê*; *asûñi*, white, became *asâñi*, or (losing the nasal sound) *asâi*, and so on. The use of the character *û* (or *û*) in this language could probably be dispensed with.

The consonantal sounds which were heard were: *p* (or *b*), *t* (or *d*), *k* (or *g*), *h* (and *q*), *l*, *m*, *n*, *s*, *w* and *y*, and the nasal *ñ*. Neither *f*, *v*, nor *r* was heard, and *ç* (*sh*) only as a variant of *s*. Harsh combinations of consonants were rare. The harshest was that of *tsk*, as in *wagutska*, child, and this was not frequent.* Words usually end in a vowel or a liquid. A double con-

* In *wagutska* (Dakota, *koçka*), *suntka*, younger brother (Dak., *sunka*); *tçoñgo* or *tçuñki*, dog (Dak., *cuñka*) and many similar words, the *t* is apparently an adscititious sound, inserted by a mere trick of pronunciation. The Hidatsa carries this practice further, and constantly introduces the sound of *t* before the sharp *s*. The Tutelo *tsi*, foot, becomes *tsri* in Hidatsa; *sani*, cold, becomes *tsinia*, &c.

sonant at the commencement of a word is rare. It perhaps only occurs in the combination *tç* (*ts'k*) and in contractions, as *ksāñ'tri*, nine, for *kasāñkai*.

It is doubtful if the sonants *b*, *d* and *g* occur, except as variants of the surd consonants *p*, *t* and *k*; yet in certain words sonants were pretty constantly used. Thus in the pronouns *mīñjī'tove*, mine, *yīñjī'tove*, thine, *iñjī'tove*, his, the *g* was almost always sounded.

The *l* and *n* were occasionally interchanged, as in *lāni* and *nāni*, three, *letç'i* and *netç'i*, tongue. In general, however, the two elements seemed to be distinct. The aspirate was somewhat stronger than the English *h*, and frequently assumed the force of the German *ch* or the Spanish *j* (represented in our alphabet by *ç*). Whether there were really two distinct sounds or not, could not be positively ascertained. The same word was written at one time with *h*, and at another with *ç*.

The nasal *ñ* is properly a modification of the preceding vowel, and would have been more adequately rendered by a mark above or below the vowel itself; but it has seemed desirable to avoid the multiplication of such diacritical marks. This nasal is not to be confounded with the sound of *ng* in *ring*, which is a distinct consonantal element, and in the Polynesian dialects often commences a word. In the Tutelo this latter sound only occurs before a *k* or hard *ç*, and is then represented by *ñ*. It is, in fact, in this position, merely the French nasal sound, modified by the palatal consonant. The nasal *ñ* is also modified by the labials *b* and *p*, before which it assumes the sound of *m*. Thus the Tutelo word for day, *nahāmbi*, or (in the construct form) *nahāmp*, is properly a modification of *nahāñbi* or *nahāñp*. In all words in which it occurs, the nasal sound was at times very faintly heard, and was occasionally so little audible that it was not noted, while at other times an *n* was heard in its place. The word for knife was written at different times *masēñi* and *masāi*; that for sky, *matōñi*, *matōi*, *mantōi*, and *māñtoi*; that for day, *nahāmbi*, *nahāmp*, *nahāñp*, and *nahāp*; that for winter, *ñē*, *wāñēñi*, and *wāñēi*; that for one, *nōs* and *nōñs*, and so on. Whether this indistinctness of the nasal sound belongs to the language, or was a peculiarity of the individuals from whom the speech was learned, could not be satisfactorily determined.

The tendency of the language, as has been said, is to terminate every word with a vowel sound. When a monosyllable or dissyllable ends with a consonant, it is usually in a construct form, and is followed by another word grammatically related to it. Thus, *hisēpi*, axe, *hisēp mīñjī'tove*, my axe; *monti*, a bear, *mont nosā*, one bear; *tçōñjo* (or *tçōñki*), dog, *tçōnk episēl*, good dog; *nahāmbi*, day, *nahāmp lāni*, three days.

The following brief comparative list, extracted from the more extensive vocabulary hereafter given, will show the forms which similar words take in the allied dialects, Tutelo, Dakota (or Sioux proper) and Hidatsa (or Minnetaree):

Tutelo.	Dakota.	Hidatsa.	
<i>āli</i>	<i>ate</i>	<i>ali</i>	father
<i>īnā, henā, hentū</i>	<i>ina</i>	<i>hinu, hu, ikūs</i>	mother
<i>tāyūtčakai</i>	<i>takočku, tčīnkčī</i>	<i>idičī</i>	son
<i>sunka</i>	<i>suñka</i>	<i>tsuka</i>	younger brother
<i>ih, ihā</i>	<i>i</i>	<i>i</i>	mouth
<i>nēčī, nētsi, lēčī</i>	<i>tčēji</i>	<i>neji</i>	tongue
<i>ihā</i>	<i>hi</i>	<i>i, isa, hi</i>	tooth
<i>lōti</i>	<i>dote</i>	<i>doti, loti</i>	throat
<i>tsi</i>	<i>siha</i>	<i>itsi</i>	foot
<i>wasūt</i>	<i>nasu</i>	<i>tsuata</i>	brain
<i>wāyī, wāyī</i>	<i>we</i>	<i>idi</i>	blood
<i>uā</i>	<i>tipi</i>	<i>ali</i>	house
<i>masēñi, masāi</i>	<i>isañ, miñna</i>	<i>maetsi</i>	knife
<i>mā</i>	<i>wi</i>	<i>midi</i>	sun (or moon)
<i>nihāmpi, nihāñpi</i>	<i>añpetu</i>	<i>mape</i>	day
<i>manī</i>	<i>mini</i>	<i>mini</i>	water
<i>amāñi, amāi</i>	<i>maka</i>	<i>ama</i>	land
<i>tcūñki, tčōñgo</i>	<i>čunka</i>	<i>mačuka</i>	dog
<i>wāñēñi, wāñēi</i>	<i>wani</i>	<i>mana</i>	winter
<i>tañi</i>	<i>ptañ</i>	<i>mata,</i>	autumn
<i>asāñi, asāi, asēi</i>	<i>sañ</i>	<i>atuki, ohūki</i>	white
<i>asēpi</i>	<i>wa</i>	<i>čipi</i>	black
<i>sīi, wāsi</i>	<i>zi</i>	<i>tsi, tsidi</i>	yellow
<i>tē</i>	<i>ta</i>	<i>te</i>	dead
<i>sani</i>	<i>sni</i>	<i>tsinia</i>	cold
<i>nosāi, noñč</i>	<i>wantča, wantčī</i>	<i>nuēts, luētsa</i>	one
<i>nombāi</i>	<i>noñpa</i>	<i>nopa</i>	two
<i>nāni, lāni</i>	<i>yamni</i>	<i>dāmi, lawi</i>	three
<i>topai</i>	<i>topa</i>	<i>topa</i>	four
<i>kisāhai</i>	<i>zaptañ</i>	<i>kihu</i>	five
<i>akāspe</i>	<i>čakpe</i>	<i>akama, akawa</i>	six
<i>sāgomink</i>	<i>čakowiñ</i>	<i>sapua</i>	seven
<i>luta</i>	<i>yuta, wota</i>	<i>đuti</i>	to eat
<i>howa</i>	<i>u, uwa</i>	<i>hu</i>	to come
<i>kitci</i>	<i>watčī</i>	<i>kidičī</i>	to dance
<i>mahanañka</i>	<i>yañka, nañka</i>	<i>naka</i>	to sit, remain
<i>ktēwa, kitēsel</i>	<i>kte</i>	<i>kitahé</i>	to kill

It must be borne in mind that the sounds of *m*, *b*, and *w* are interchangeable in the Hidatsa, and that *d*, *l*, *n*, and *r* are also interchangeable. A similar confusion or interchange of these elements is to some extent apparent in the Dakota and the Tutelo languages. Taking this fact into consideration, the similarity or rather identity of such words as *mi* in Tutelo and *wi* in Dakota, meaning "sun," and *loti* in Tutelo, *dote* in Dakota, and *dote* or *lote* in Hidatsa, meaning "brain," becomes apparent.

The nasal sounds, which are so common in the Dakota and the Tutelo, are wanting in the Hidatsa, while the *s* of the two former languages frequently becomes *ts* in Hidatsa. These dialectical peculiarities explain the difference between the words for younger brother, *suntka*, Tu., *suñka*, Da., *tsuka*, Hi., between *isi*, foot, Tu., and *itsi*, Hi., between *maseñi*, knife, Tu., and *maetsi*, Hi. It will be noticed that the words in Tutelo are frequently longer and fuller in sound than the corresponding words in the other languages, as though they were nearer the original forms from which the words in the various Dakota tongues were derived.

GRAMMATICAL FORMS.

As is usually the case with allied tongues, the grammatical resemblances of the languages of this stock are much more striking and instructive than those which appear in the mere comparison of isolated words.

Substantives and Adjectives.

The Tutelo, like the Dakota and the Hidatsa, has no inflection of the substantive to indicate the plural number; but in both the Tutelo and the Dakota, the plural of adjectives is frequently expressed by what may be termed a natural inflection, namely, by a reduplication. In the Dakota, according to Mr. Riggs, the initial syllable is sometimes reduplicated, as *ksapa*, wise, pl. *ksaksapa*; *tañka*, great, pl. *tañktañka*; sometimes it is the last syllable, as *waçlé*, good, pl. *waçléçte*; and occasionally it is a middle syllable, as, *tañkiñyañ*, great, pl. *tañkiñbiñyañ*.

Sometimes the adjective in Dakota takes the suffix *pi*, which makes the plural form of the verb, as *waçlé*, good *witçasta waçlépi*, good men, *i. e.*, they are good men.

Similar forms exist in the Tutelo. The adjective, or some part of it, is reduplicated in the plural, and at the same time a verbal suffix is frequently if not always added, thus; *ati api*, good house. pl. *ati apipisel*, good houses (those are good houses); *ati itañi*, large house, pl. *ati itañtānsel*; *ati okayéke*, bad house, pl. *ati okayeyéçesel*; *ati asāñ*, white house, pl. *ati asañsānsel*. Occasionally the reduplication takes a peculiar form, as in *ati kutska*, small house. pl. *ati kotskutskaisel*. In one instance the plural differs totally from the singular; *ati suñ*, long house, pl. *ati yumpañkatskaisel*.

The plural verbal termination is frequently used without the reduplication; as, *wahtáke bi* (or *pi*), good man, *wahtáke biwa* (or *bice*), he is a good man; pl. *wahtáke bihla* (or *bihlése*), they are good men. So *teçñje bise*, good dog (or, it is a good dog), pl. *teçñje bihlése*.

The plural form by reduplication does not appear to exist in the Hidatsa.

The Rev. J. Owen Dorsey, who has made a special study of the western Dakota languages, finds in the Omaha (or Dhegiha) dialect a peculiar meaning given to this reduplicate plural of adjectives. The following ex-

amples will illustrate this signification. *Jīngā*, small, becomes in the reduplicate form *jīñjīñga*, which refers to small objects of different kinds or sizes. *Sagī*, firm, fast, hard, makes *sāsagi* or *sagāji*, which is employed as in the following example: *wēlhihīde sagījihnan kañbāha*, I wish tools that are hard, and of different kinds, them only. Here the suffix *hñān* expresses the meaning of "only;" the reduplication of the adjective gives the sense expressed by the words "of different kinds." *Sābe*, black, makes *sāsabe*, black here and there. *Gdhejē*, spotted, becomes *gdhejāja* spotted in many places. *Pñaji*, bad, makes *pñipñaji*, as in *učkañ pñipñaji*, different bad deeds. *Nūjīñja* (apparently a compound or derivative form, from *jīngā*, small), means "boy," i. e., small man; *nūjīñjīñja*, boys of different sizes and ages.* It would seem from these examples that in this language the reduplication expresses primarily the idea of variety, from which that of plurality in many cases follows. This meaning is not indicated by Mr. Riggs in his Dakota grammar, and it was not detected by me in the Tutelo, but it is not impossible that it actually exists in both languages. It is deserving of notice that while no inflection of the noun is found in the Iroquois to express plurality, this meaning is indicated in the adjective by the addition of *s*, or *hoñs*, affixed to the adjective when it is combined with the noun. Thus from *kanóñsa*, house, and *wīyo*, handsome, we have *konoñsiyo*, handsome house, pl. *kanoñsiyos*, handsome houses. So *kareñnaksen*, bad song, pl. *kareñnaksens*, bad songs; *kanākāres*, long pole, pl. *kanakarēshoñs*, long poles.

It is also remarkable that the peculiar mode of forming the plural, both of substantives and of adjectives, by reduplication of the first syllable or portion of the word, is found in several Indian languages spoken west of the Rocky Mountains, and belonging to families entirely distinct from one another, and from the Dakota. Thus in the Selish language we have *lūáus*, father, pl. *lūlūáus*; *tána*, ear, pl. *tántána*; *skūltamiqo*, man, pl. *skūlkūltamiqo*; *qáest*, good, pl. *qúsqáest*. In the Sahaptin, *pītin*, girl, pl. *pīpītin*; *tāhs*, good, pl. *tītāhs*. In the Kizh language, *woróit*, man, pl. *wororóit*; *tçinní*, small, pl. *tçitçinní*.† This has been termed, and certainly seems, a natural mode of forming the plural. It is therefore somewhat surprising to find it restricted in America to a comparatively small group of linguistic families. It is still more noteworthy that in the Polynesian dialects, which in their general characteristics differ so widely from the Indian languages, this same method of forming the plural is found, but confined, as in the Dakota tongues, to the adjective; thus we have *laau tele*, large tree, pl. *laau tetele*, large trees; *taata maitai*, good man, pl. *taata maitatai*, good men; *mahaki*, sick, pl. *mahamahaki*, sick (persons).‡ This is a subject in linguistic science which merits further investigation.

* I am indebted to Mr. Dorsey's letters for this and much other information of great interest respecting the western languages of the Dakota stock, forming part of his extensive work, which we may hope will soon be published.

† Ethnography and Philology of the U. S. Exploring Expedition under Chas. Wilkes, pp. 534, et seq.

‡ *Ibid.*, p. 244.

Numerals.

The near resemblance of the first seven numerals in the Tutelo, Dakota, and Hidatsa is sufficiently shown in the vocabulary. The manner in which the compound numbers are formed is also similar in the three languages. In the Dakota *ake*, again, is prefixed to the simple numerals to form the numbers above ten, as *ake wañjidañ*, eleven; *ake noñpa*, twelve. In the Tutelo the same word (usually softened to *age*) is used, as *agenōsai*, eleven; *agenombai*, twelve. In the Hidatsa *appi* (or *ahpi*), signifying a part or division, is employed, as *appi-duatsa*, eleven; *appi-dopa*, twelve.

In Dakota, *wiktçemna*, ten, and *noñpa*, two, form *wiktçemna noñpa*, twenty. In Tutelo the form is the same; *putçka nomba*, tens-two. In Hidatsa it is similar, but the position of the words is reversed, twenty being *dopá-pitika*, two tens.

The ordinal numbers, after the first, are formed in all three languages by prefixing *i* or *ei* to the cardinal numbers, as in Dakota, *inoñpa*, second; *iyamni*, third; *itopa*, fourth. In Hidatsa, *idopa*, second; *idani*, third; *itopa*, fourth. In Tutelo I received *einombai*, twice; *einani*, thrice; *eintopai*, four times. This rendering was given by the interpreter, but the true meaning was probably the same as in the Dakota and Hidatsa. The word for "first" is peculiar in all three languages; in Dakota, *tokaheya*, in Hidatsa, *itsika*, in Tutelo, *etāhni*.

In the Tutelo the numerals appear to have different forms; or perhaps, more accurately speaking, different terminations, according to the context in which they are used. The following are examples of these forms, the first or abridged form being apparently used in ordinary counting, and the others when the numerals are employed in conjunction with other words. The various pronunciations of my different informants—and sometimes of the same informant at different times—are also shown in these examples.

	Separate.	Construct.	Variations.
1	<i>nōñs, nōs</i>	<i>nosāi, noñsūi</i>	{ <i>nosēñ, nuseñ, noñsai, noñsa,</i> <i>nōsāñ, nōsāh, noñsah</i>
2	<i>nomp</i>	<i>nomtāi</i>	{ <i>numbāi, nomba, nūmba,</i> <i>noñmbai, noñpa, nōmbāh,</i> <i>nombaq</i>
3	<i>lāt, nān</i>	<i>nāni</i>	<i>lāni, lānih, lāniq</i>
4	<i>tōp</i>	<i>toṗāi</i>	<i>toba, topah</i>
5	<i>kisē, kisāñ</i>	<i>kisāhai</i>	<i>kisāhāni</i>
6	<i>agās or akās,</i> <i>akāsp</i>	<i>akāspē</i>	<i>akāspē, akāspei, agespeq</i>
7	<i>sāgōm</i>	<i>sagomēi</i>	<i>sagōms, sāgōmiq, sagomūñk</i>
8	<i>ṗālān</i>	<i>palāni</i>	<i>palāniq</i>
9	<i>sā or sāñ, ksāñk</i>	<i>ksāhkas</i>	<i>kasankai, ksūkai</i>
10	<i>putçk, lūtçk</i>	<i>putskai</i>	<i>butçkai, putskāni, putskāñ</i>
11	<i>āgenōsai</i>		<i>aginōsai, akīnosai</i>

Separate.	Construct Forms and Variations.
12 <i>agenomba</i>	<i>aginombai, akinombai</i>
13 <i>agelani</i>	<i>agilāli, akilāni</i>
14 <i>agetoba</i>	<i>akitōpa</i>
15 <i>agegāsai</i>	<i>akikisāhai</i>
16 <i>agegāspe</i>	<i>akikaspei</i>
17 <i>agesagōmi</i>	<i>akisagomei</i>
18 <i>agēpalāni</i>	<i>akipalali</i>
19 <i>agekesaṅka</i>	<i>akikasaṅkai</i>
20 <i>putska nomba,</i> }	
<i>putčka nombai }</i>	<i>putska nombai</i>
30 <i>putska nani</i>	<i>putčka lani.</i>
40 <i>putska tobai</i>	
100 <i>ukeni nōsā</i>	<i>okeni</i>
1000 <i>ukeni putsikai</i>	

The numeral follows the noun which it qualifies. If the noun terminates in a vowel not accented, the vowel is usually dropped, while the numeral assumes its construct or lengthened form, and is sometimes closed with a strong aspirate. Thus, from *mihāni*, woman, we have *mihān nosā* or *mihān noṅsāi*, one woman; *mikān nombaq*, two women; *mihān laniq*, three women, &c. From *tcoṅjo* or *tcoṅki*, dog, *tcoṅk nosāh*, one dog; *tcoṅk nombaq*, two dogs. From *monti*, bear, *mont nōsāh*, one bear; *mont nombah*, two bears. From *nahambi*, day, *nahāmp nosāh*, one day, *nahamp nombai*, two days; *nahamp lāriq*, three days, &c. It will be seen that the dropping of the final vowel of the noun has the effect of giving a sharper sound to the preceding consonant. When the final vowel is accented, no change takes place in the noun; thus *atī*, house; *atī noṅsai*, one house; *atī noṅbai*, two houses; *atī laniq*, three houses, &c.

No such difference between the simple and the construct forms of the numerals appears to exist either in the Dakota or in the Hidatsa. This is one evidence, among others, of the greater wealth of inflections which characterizes the Tutelo language.

Pronouns.

There are in the Tutelo, as in the Dakota, two classes of pronouns, the separate pronouns, and the affixed or incorporated pronouns. The former, however, are rarely used, except for the purpose of emphasis. In the Dakota the separate pronouns are *miye* or *miç*, I, *niye*, or *niç*, thou or ye, *iye*, or *iç*, he or they, and *uṅtiye* or *uṅtie*, we. In the Tutelo, *mim* signifies I or we, *yim*, thou or ye, *im*, he or they, which was sometimes lengthened to *imahēse*. A still more emphatic form is made with the termination *sāi* or *sāni*, giving the sense of "alone," or rather perhaps

“self,” for which meaning the Dakota employs the separate pronouns already given, while the Hidatsa has a special form ; thus :

Tutelo.	Dakota.	Hidatsa.	
<i>misāi</i> or <i>misāñi</i>	<i>miye</i> (<i>miç</i>)	<i>miqki</i>	I myself (or I alone)
<i>ysisāi</i> , or <i>yesāñi</i>	<i>niye</i> (<i>niç</i>)	<i>niqki</i>	thou
<i>esāi</i> , <i>isāi</i> or <i>isāñi</i>	<i>iye</i> (<i>iç</i>)	<i>iqki</i>	he
<i>maesāi</i> or <i>maesāñi</i>	<i>uñkiye</i> (<i>uñkiç</i>)	<i>midoki</i>	we

The Dakota *uñkiye* is said to be properly a dual form. The Tutelo apparently, like the Hidatsa, has no dual.

The affixed or incorporated pronouns have in the Tutelo, as in the Dakota and Hidatsa, two forms, nominative and objective. These forms in the three languages are very similar :

Tutelo.	Dakota.	Hidatsa.	
	<i>Nominative.</i>		
<i>ma, wa</i>	<i>wa, we</i>	<i>ma</i>	I
<i>ya, ye</i>	<i>ya, ye</i>	<i>da</i> (<i>na</i>)	thou
<i>mae, mai, wae, wai, man, mañk,</i>	<i>uñ</i>		we
	<i>Objective.</i>		
<i>mi, wi</i>	<i>ma, mi</i>	<i>mi</i>	me
<i>yi, hi</i>	<i>ni</i>	<i>di</i> (<i>ni</i>)	thee
<i>e, ei, i</i>		<i>i</i>	him
<i>mae, mai, wae, wai</i>	<i>uñ</i>		us

The objective forms are also used in all these languages as possessive pronouns, and they are affixed as nominatives to neuter or adjective verbs, in the first and second persons. The third personal pronoun is not expressed in the verb, at least in the singular number. In the plural the Tutelo indicates this pronoun by an inflection, both in the nominative and the objective. Thus *hahēwa*, he says, *hahēhla*, they say ; *minēwa*, I see him, *minēhla*, I see them.

The Hidatsa makes no distinction between the singular and the plural of the possessive pronouns. *Mi* signifies both my and our, *di*, they and your, and *i*, his and their. The Dakota distinguishes the plural by adding the particle *pi* to the noun. The Tutelo adds *pui* to the noun in the second person, and sometimes *lei* or *kai* to the third. With nouns signifying relationship, the Dakota indicates the possessive pronoun of the third person by adding *ku* to the noun. The Tutelo sometimes adds *ka* or *kai* not only in this person, but in the first and third persons, as shown in the following example :

Dakota.	Tutelo.			
<i>suñka</i>	<i>súntka</i>		younger brother	
<i>misuñka</i>	<i>wisúntk</i>	my	“	“
<i>yisuñka</i>	<i>yisúntk</i>	thy	“	“
<i>suñkaku</i>	<i>esúntka</i> or <i>esúntkai</i>	his	“	“
<i>uñkisuñkapi</i>	<i>maisúntkai</i>	our	“	“
<i>nisuñkapi</i>	<i>yisúntkapui</i>	your	“	“
<i>suñkapi</i>	<i>eisúntkai</i>	their	“	“

In the Tutelo an *e* is sometimes prefixed to the possessive pronouns, as in *ati*, house, which makes

<i>evāti</i>	my house	<i>emānti</i>	our house
<i>eyāti</i>	thy "	<i>eyātipūi</i>	your "
<i>cāti</i>	his "	<i>cāti-lei</i>	their "

In this case the final vowel of the pronouns *wi* and *yi* is elided before the initial *a* of the noun. So in *minēwa*, I see him, the vowel of the prefixed pronoun *ma*, I, is elided before the vowel of the verb *inēwa*, to see. Some other euphonic changes of the possessive pronoun in the Tutelo are shown in the following example :

Dakota.	Tutelo.	
<i>pa</i>	<i>pasūi</i> ,	head
<i>mapa</i>	<i>mīmpasūi</i> ,	my head
<i>nīpa</i>	<i>yīñpasūi</i> ,	thy "
<i>pa</i>	<i>epasūi</i> ,	his "
<i>uñpapi</i>	<i>emañkpasūi</i> ,	our heads
<i>nīpapi</i>	<i>eyīñkpasūpui</i>	your "
<i>papi</i>	<i>epasūi-lei</i>	their "

In Tutelo, *tāt'*, my father, is an anomalous form, used instead of *māt'*, or *emāt'*. With the other affixes the word becomes *yāt'* (or *itāt'i*), thy father, *cāt'*, his father (or their father), *emaāt'*, our father, *eyātpui*, your father.

A good example of the use of the prefixed personal pronouns in the Tutelo is shown in the word for son. There were slight differences in the forms received from two of my informants, as here given :

<i>witēka</i>	<i>witēkai</i>	my son
<i>yitēka</i>	<i>yitēkai</i>	thy son
<i>etēka</i>	<i>etēkai</i>	his son
<i>mañktēka</i>	<i>emañktēkai</i>	our son
<i>yitēkabūi</i>	<i>yitēkabūi</i>	your son
<i>etēka</i>	<i>etekahlēi</i>	their son

Mīnēk', my uncle (in Dakota *nīdekēi*) is thus varied : *Yīnēk'*, thy uncle (Dak. *nīdekēi*), *einēk'*, his uncle (Dak. *deqitku*), *emainek*, our uncle, *eyātpui*, your uncle, *einēk'* or *enek'-lei*, their uncle.

In the word for brother, *iñginumbāi* (or *iñkinumbāi*), the possessive pronouns are inserted after the first syllable, and in this instance they are used in the nominative form :

<i>iñwaginumbāi</i>	my brother	<i>maiñginumbāi</i>	our brother
<i>iñyaginumbāi</i>	thy brother	<i>iñyaginumbabūi</i>	your brother
<i>iñgiginumbāi</i>	his brother	<i>iñgiginumbāi</i>	their brother

The Dakota and Hidatsa have lengthened forms of the personal pronouns to indicate property in things, or "transferable possession." These are in the former, *mita*, my, *nīta*, thy, and *ta*, his, as *mita-oñspe*, my axe, *nīta-čūñke*, thy dog. These pronouns are also used with *koda*, friend, and *kitčuna*, comrade. In Hidatsa *mata*, *dīta* (for *nīta*), and *īta*, are used in a similar manner. In the Tutelo the pronouns of this form occurred in a

few examples, but only with certain words of personal connection or relations, in which their use seems to resemble that of the Dakota pronouns with the words meaning "comrade" and "friend." Thus we heard *witāmañki*, my husband, *yitāmañki*, thy husband, *etāmañki*, her husband. So *witāmihūñ*, my wife (*i. e.* my woman), *yitāmihēñ*, thy wife; and *witagūčk'ai*, my son, *i. e.* "my boy," from *wagūtč-l'ai*, boy (evidently the same word as the Dakota *kočka*, young man). In the latter example *witagūtčk'ai*, apparently expresses a lower bond or sense of relationship than *witēk'ai*,—not "my child," but "my boy," or "my youth," who may leave me and go elsewhere at any time.

In Tutelo the pronouns indicating property or "transferable possession" were commonly found in a separate and apparently compound form, following the noun, which was then sometimes (though not always) heard in the shortened or "construct" form. Thus with *hisēpi*, axe, we have :

<i>hisēp' migītowi</i> (or <i>mikītowi</i>)	my axe	<i>hisēp' mahgītowi</i>	our axe
<i>hisēp' yñgītowi</i>	thy axe	<i>hisēp' iñgītombūi</i>	your axe
<i>hisēp' gītowi</i>	his axe	<i>hisēp' gītohnēi</i>	their axe

So *sās*, bed, has *sās miñgītowi*, my bed, *sās yingītowi*, thy bed, *sās gītowi*, his bed.

With *təoñgo*, dog, we find a different form :

<i>təoñgo wəhkĩmpi</i>	my dog	<i>təongo maokĩmpi</i> (or <i>məhkĩmpi</i>)	our dog
<i>təoñgo yəhkĩmpi</i>	thy dog	<i>təongo yəhkĩmpūi</i>	your dog
<i>təoñgo eəhkĩmpi</i>	his dog	<i>təoñgo kĩmpena</i>	their dog

The first of these forms, *migītowi*, &c., is evidently the same that appears in the Dakota *mitawa*, mine, *witawa*, thine, *tawa*, his, *wñkitawa*, ours. The Hidatsa has similar forms, *matamae*, *ditamae*, and *itamae*, often pronounced *matawae*, *nitawae*, and *itawae*. Dr. Matthews regards them as compounds formed by prefixing the pronouns *mata*, *dita* (*nita*) and *ita* to the noun *mae* (or *wae*) signifying personal property, which seems a very probable explanation.

The form *wəhkĩmpi* may be similarly explained. In Dakota *kĩpá* signifies, to keep for me, and *kĩpí*, to hold or contain. The sense of property or possession is apparently implied, and *təongo wəhkĩmpi* in Tutelo probably means "the dog my property," or "the dog I have."

The possessive pronouns are used by themselves in Tutelo in the following affirmative and negative forms :

<i>mimigītowi</i> (or <i>mimigītowe</i> , or <i>mikītowi</i>)	mine, or, it is mine
<i>yñgītowi</i> (<i>yñgītowe</i> , <i>yñkītowi</i>)	thine, or, it is thine
<i>iñgītowi</i> (<i>iñgītowe</i> , <i>iñkītowi</i>)	his, or, it is his
<i>maqgītowi</i> (or <i>mahgītowe</i> , or <i>məhkītowi</i>)	ours, or, it is ours
<i>yñgītombūi</i> (or <i>yñkītombui</i>)	yours, or, it is yours
<i>gitoñnesel</i> (or <i>kitoñnesel</i>)	theirs, or it is theirs

Negative Form.

<i>kimig̃itonañ</i> (<i>kimil̃itonañ</i>)	it is not mine
<i>kiñ̃yig̃itonañ</i>	it is not thine
<i>kig̃itonañ</i>	it is not his
<i>kinagg̃itonañ</i>	it is not ours
<i>kiñ̃yig̃itombōnañ</i>	it is not yours
<i>kig̃itoqnēnañ</i>	it is not theirs

The proper form of the first personal affirmative is doubtless *mig̃itowi* (or *mik̃itowe*). In *mimig̃itowi* the first syllable is evidently from the separate pronoun *mim*, I, used for emphasis. In the Dakota the forms *miye mitawa*, me, mine, *niye nitawa*, thee, thine, &c., are used for the same purpose:

The negative form is not found in either the Dakota or the Hidatsa, and may be regarded as another instance of the greater wealth of inflections possessed by the Tutelo.

The following are the interrogative demonstrative and indefinite pronouns in the Tutelo, so far as they were ascertained. The Dakota and Hidatsa are added for comparison :

Tutelo.	Dakota.	Hidatsa.	
<i>ētowā</i> , or <i>helōa</i>	<i>tuwe</i>	<i>tape</i>	who?
<i>āteñ</i> , <i>kaka</i>	<i>taku</i>	<i>tapa</i>	what?
<i>ētuk</i>	<i>tukte</i>	<i>to</i> ; <i>tua</i>	which?
<i>t̃kēwūñ</i>	<i>tonu</i> ; <i>tonaka</i>	<i>tuami</i>	how many?
<i>tewak̃it̃ūñwā</i>	<i>tucetawa</i>	<i>tapeitam̃e</i>	whose (is it)?
<i>nēke</i> , or <i>nēk̃ñ</i> ; <i>heiki</i>	<i>de</i>	<i>hidi</i> ; <i>kiñi</i>	this
<i>yuk̃ān</i> ; <i>hēwa</i> ; <i>enā</i>	<i>he</i> ; <i>ka</i>	<i>hido</i> ; <i>hino</i>	that
<i>oh̃on</i> , or <i>oh̃o</i>	<i>ota</i>	<i>ãhu</i>	many
<i>hōk</i> ; <i>hūk</i> , <i>ōkahōk</i>	<i>owasiñ</i> ; <i>iyuqpa</i>	<i>etsa</i> ; <i>qakaheta</i>	all

The general resemblance of most of these forms is apparent. In the Tutelo for "whose?" which might have been written *tewak̃it̃ūñwā*, we see the affix of the possessive pronoun (*g̃itowe*) inflected to make an interrogative form. The Dakota and Hidatsa use the affix (*tawa* and *tamae*) without the inflection.

The Verb.

There are two very striking peculiarities in which the Dakota and Hidatsa dialects differ from most, if not all, Indian languages of other stocks. These are: firstly, the manner in which the personal pronoun is incorporated with the verb; and, secondly, the extreme paucity or almost total absence of inflections of mood and tense. In the first of these peculiarities the Tutelo resembles its western congeners; in the second it differs from them in a marked degree—more widely even than the Latin verb differs from the English. These two characteristics require to be separately noted.

In most Indian languages the personal pronouns, both of the subject and of the object, are in some measure either united with the verb or in-

icated by an inflection. The peculiarity which distinguishes the languages of the Dakotan stock is found in the variable position of these incorporated pronouns. They may be placed at the beginning, at the end, or between any two syllables of the verb. The position of the pronoun is not, however, arbitrary and dependent on the pleasure of the speaker. It appears to be fixed for each verb, according to certain rules. These rules, however, seem not yet to have been fully determined, and thus it happens that a Dakota dictionary must give the place of the pronoun in every verb, precisely as a Latin dictionary must give the perfect tense of every verb of the third conjugation. Thus, for example, in the Dakota proper, *kačká*, to bind (or rather "he binds"), makes *wakáčka*, I bind, *yakáčka*, thou bindest; *manoñ*, he steals, makes *mawánoñ*, I steal, *mayánoñ*, thou stealest; and *etčĩñ*, he thinks, makes *etčĩñni*, I think, *etčĩñni*, thou thinkest, the suffixed pronouns receiving a peculiar form. In the Hidatsa, *kiděci*, he loves, makes *makiděci*, I love, *dakiděci*, thou lovest; *eke*, he knows, becomes *emake*, I know, and *edake*, thou knowest; and *kitsahike*, he makes good, becomes *kitsahikema*, I make good, and *kitsahikeda*, thou makest good. The Tutelo has the pronouns sometimes prefixed, and sometimes inserted; no instances have been found in which they are suffixed, but it is by no means improbable that such cases may occur, as verbs of this class are not common in either of the former languages, and our examples of conjugated verbs in Tutelo are not very numerous. Among them are the following:

1. Verbs with prefixed pronouns:

lakpése, he drinks
yalakpése, thou drinkest
walakpése, I drink
hiantkapēwa, he sleeps
yahiantkapēwa, thou sleepest
wahiantkapēwa, I sleep
tēwa, he is dead
yitēwa, thou art dead
witēwa, I am dead

2. The verbs in which the pronouns are inserted seem to be the most numerous class. The following are examples:

hahēwa, he says
hayihēwa, thou sayest
hawahēwa, I say
mahanáñka, he sits down
mahayináñka, thou sittest down
mahamináñka, I sit down
ĩñksēha, he laughs
ĩñyaksēha, thou laughest
ĩñwaksēha, I laugh
oháta, he sees
oyaháta, thou seeest
owaháta, I see

The pronouns may be thus inserted in a noun, used with a verbal sense. Thus *wahlāka* or *wahlakai*, man or Indian, may be conjugated:

wahlākai, he is an Indian
wayihlākai, thou art an Indian
wamihlākai, I am an Indian

It is remarkable, however, that the pronoun of the first person plural is usually (though not always) prefixed. Thus from *mahanānka*, he sits down, we have (as above) *mahaminānka*, I sit down, and *mañkmahanānka*, we sit down. So, *maiñksēha* (or sometimes *waiñksēha*), we laugh, and *maohata*, we see. On the other hand, we find *hamankhewa*, we say, from *hahewa*, he says, making (as above) *hawahewa*. I say.

The word *manōñ*, he steals, has in Dakota the pronouns inserted, as is shown in the examples previously given. The similar word in Tutelo, *manōma* or *manūma*, has them prefixed, as *yimanōma*, thou stealest, *manōma*, I steal. But on one occasion this word was given in a different form, as *manundāñi*, he steals; and in this example the pronouns were inserted, the form of the first personal pronoun, and of the verb itself in that person, being at the same time varied, as *mayinundāñi*, thou stealest, *maninundame*, I steal. In Dakota the place of the pronoun is similarly varied by a change in the form of the verb. Thus *baksá*, to cut off with a knife, makes *hawaksá*, I cut off (with the pronoun inserted), while *kaksá*, to cut off with an axe, makes *walaksá*, I cut off (with the pronoun prefixed), and so in other like instances.

The other peculiarity of the Dakota and Hidatsa languages, which has been referred to, viz., the paucity, or rather absence, of all changes of mood and tense which can properly be called inflections, is in striking contrast with the abundance of these changes which mark the Tutelo verb. The difference is important, especially as indicating that the Tutelo is the older form of speech. It is an established law in the science of linguistics that, in any family of languages, those which are of the oldest formation, or, in other words, which approach nearest to the mother speech, are the most highly inflected. The derivative or more recent tongues are distinguished by the comparative fewness of the grammatical changes in the vocables. The difference in this respect between the Tutelo and the western branches of this stock is so great that they seem to belong to different categories or genera in the classification of languages. The Tutelo may properly be styled an inflected language, while the Dakota, the Hidatsa, and apparently all the other western dialects of the stock, must be classed among agglutinated languages, the variations of person, number, mood and tense being denoted by affixed or inserted particles.

Thus in the Hidatsa there is no difference, in the present tense, between the singular and the plural of a verb. *Kidēçi* signifies both "he loves" and "they love;" *makidēçi*, "I love," and "we love." In the future a distinction is made in the first and second persons. *Dakidēçidi* signifies

"thou wilt love," of which *dakidēcidīha* is the plural, "ye will love." In this language there is no mark of any kind, even by affixed particles, to distinguish the present tense from the past, nor even, in the third person, to distinguish the future from the other tenses. *Kidēci* signifies he loves, he loved, and he will love. The Dakota is a little better furnished in this way. The plural is distinguished from the singular by the addition of the particle *pi*, and in the first person by prefixing the pronoun *uñ*, they, in lieu of *wa* or *we*, I. Thus *kaçká*, he binds, becomes *kaçkápi*, they bind. *Wakaçka*, I bind, becomes *uñkaçkapi*, we bind. No distinction is made between the present and the past tense. *Kaçká* is both he binds and he bound. The particle *ka*, which is not printed and apparently not pronounced as an affix, indicates the future. It sometimes produces a slight euphonic change in the final vowel of the verb. Thus *káçke ka*, he will bind. *kaçkápi ka*, they will bind. All other distinctions of number and tense are indicated in these two languages by adverbs, or by the general context of the sentence.

In lieu of these scant and imperfect modes of expression, the Tutelo gives us a surprising wealth of verbal forms. The distinction of singular and plural is clearly shown in all the persons, thus:

<i>opēwa</i> , he goes	<i>opehéhla</i> , they go
<i>oyapēwa</i> , thou goest	<i>oyapepūa</i> , ye go
<i>owapēwa</i> , I go	<i>maopēwa</i> , we go

Of tenses there are many forms. The termination in *ēwa* appears to be of an aorist, or rather of an indefinite sense. *Opēwa* (from *opa*, to go) may signify both he goes and he went. A distinctive present is indicated by the termination *ōma*; a distinctive past by *ōka*; and a future by *ta* or *ēta*. Thus from *ktē*, to kill, we have *waktēwa*, I kill him, or killed him, *wakteōma*; I am killing him, and *waktēta*, I will kill him. So *ohāta*, he sees it, becomes *ohatiōka*, he saw it formerly, and *ohatēta*, he will see it. *Opēwa*, he goes (or went), becomes *opēta*, he will go, inflected as follows:

<i>opēta</i> , he will go	<i>opehéhla</i> , they will go
<i>oyapēta</i> , thou wilt go	<i>oyapétepa</i> , ye will go
<i>owapēta</i> , I will go	<i>maopēta</i> , we will go

The inflections for person and number in the distinctively present tense, ending in *oma*, are shown in the following example:

<i>waginōma</i> , he is sick	<i>waginóhna</i> , they are sick
<i>wayñjinoma</i> , thou art sick	<i>wayñjinómpo</i> , ye are sick
<i>wameginōma</i> , I am sick	<i>mañjwaginōma</i> , we are sick

Ohāta, he sees it, is thus varied:

<i>ohata</i> , he sees it	<i>ohatéhla</i> , they see it
<i>oyahata</i> , thou seest it	<i>oyahatbua</i> , ye see it
<i>owahata</i> , I see it	<i>maohata</i> , we see it

ohatiōka, he saw it
oyahatiōka, thou sawest it
owahatiōka, I saw it
ohatēta, he will see it
oyahatēta, thou wilt see it
owahatēta, I shall see it

ohatiokella, they saw it
oyahatiokewa, ye saw it
maohatioka, we saw it
ohatētēhla, they will see it
oyahätetbūa, ye will see it
maohätēta, we shall see it

The following examples will show the variations of person in the aorist tense :

halēwa, he says
hayihēwa, thou sayest
hawahēwa, I say
kīhnindēwa, he is hungry
yikīhnindēwa, thou art hungry
mikīhnindēwa, I hungry

hahēhla, they say
hayihēpua, ye say
hamañkhēwa, we say
kīhnindēse, they are hungry
kīhnindēpūa, ye are hungry
makhīhnindēwa, we are hungry.

Wakoñspēwa, I remember it, an aorist form, becomes in the preterite *wakoñspēōka*, and, in the future, *wakoñspēta*. It is thus varied in the aorist and past tenses :

wakoñspēwa, I remember it
yakoñspēwa, thou rememberest it
kikonspēwa, he remembers it

makikoñspēwa, we remember it
yakoñspepūa, ye remember it
kikoñspēhēla, they remember it

wakoñspēōka, I remembered it
yakoñspēōka, thou rememberedst it
kikoñspēōka, he remembered it

makikoñspēōka, we remembered it
yakoñspepuyoka, ye remembered it
kikoñspēlēka, they remembered it

In several instances verbs were heard only in the inflected forms. For the simple or root-form, which doubtless exists in the language, we are obliged to have recourse to the better known Dakota language. Thus *opewa*, he went, and *opeta*, he will go, indicate a root *opa*, he goes, which is actually found in the Dakota.

So *manōma* (which is probably a distinctively present tense), and *manōdañi*, both meaning he steals, indicate a briefer root-form which we find in the Dakota *manoñ*, having the same meaning. *Manōma*, which is probably a contraction of *manoñōma*, is thus varied :

manōma, he steals
yimanōma, thou stealest
mamanōma, I steal

manoñnese, they steal
yimanompūa, ye steal
mañkmanōma, we steal

From these examples it is evident that there are variations of inflection, which, if the language were better understood, might probably be classified in distinct conjugations. Other instances of these variations will be given hereafter.

It is well known that in the Iroquois, Algonquin, Cherokee, and other Indian languages, of different stocks, there are many forms of the verb, nega-

tive, interrogative, desiderative, and the like, which are among the most notable characteristics of these languages, and add much to their power of expression. The Tutelo has several of these forms, but none of them are found in the Dakota or Hidatsa, both of which express the meaning of these forms by adverbial phrases or other circumlocutions. The negative form in Tutelo is made (in a manner which reminds us of the French *ne-pas*) by prefixing *k* or *ki* to the affirmative and suffixing *na*. The tense terminations *oma*, *owa*, and *ewa*, become *ona* and *ena* in this form :

<i>inksé'ha</i> , he laughs	<i>kinksé'ina</i> , he does not laugh
<i>iñwaksé'ha</i> , I laugh	<i>kiñwaksé'hna</i> , I do not laugh
<i>wameginōma</i> , I am sick	<i>kiwameginōna</i> , I am not sick
<i>waktēwa</i> , I killed him	<i>kiwaktēna</i> , I did not kill him
<i>owaklāka</i> , I speak	<i>kowaklākna</i> , I do not speak
<i>waktēōma</i> , I am killing him	<i>kiwaktēōna</i> , I am not killing him
<i>yahōwa</i> , he is coming	<i>kiahōna</i> , he is not coming

Kiñ'kséhna, he is not laughing, is thus varied in the present tense :

<i>kiñ'kséhna</i> , he is not laughing	<i>kiñ'ksehānēna</i> , they are not laughing
<i>kiñ'yakséhna</i> , thou art not laughing	<i>kiñ'yaksé'hpuna</i> , ye are not laughing
<i>kiñ'wakséhna</i> , I am not laughing	<i>kimaēñ'kséhna</i> , we are not laughing

The interrogative form terminates in *o*, as :

<i>yaktēwa</i> , thou killedst him	<i>yaktēwo</i> , didst thou kill him?
<i>yakteōma</i> , thou art killing him	<i>yakteōmo</i> , art thou killing him?
<i>yatēta</i> , thou wilt kill him	<i>yaktē'o</i> , wilt thou kill him?
<i>yatiwa</i> , thou dwellest	<i>toka yatiwo</i> , where dost thou dwell?
<i>alēwa</i> , he is going	<i>toka alewo</i> , where is he going?

It is evident that this form is an inflection, pure and simple. It is a vowel change, and not in any manner an agglutinated particle. It takes the place of that elevation of tone with which we conclude an interrogative sentence, and which, strange to say, is not heard among the Dakotas. Mr. Riggs remarks that "unlike the English, the voice falls at the close of all interrogative sentences."

The desiderative form appears to be expressed by the affixed particle *bi* or *be*, but the examples which were obtained happened to be all in the negative, thus :

<i>owapēwa</i> , I go *	<i>kowapēbina</i> , I do not wish to go
<i>opelēse</i> , he is going, or will go	<i>kopēbenāse</i> , he does not wish to go
<i>hawilewa</i> , I come	<i>kiwilebina</i> , I do not wish to come
<i>waktewa</i> , I kill him	<i>kiwaktēbina</i> , I do not wish to kill him

The imperative mood is distinguished apparently by a sharp accent on the final syllable of the verb, which loses the sign of tense. Thus from the *ñjō*, to give (in Dakota and Hidatsa, *ku*), which appears in *maingōwa*, I

give to you, we have, in the imperative, *masā mingó*, give me a knife. *kítēse* or *kítēsel*, he kills him, gives *kíté tçõñ'ki*, or *tçõñ'ki kíté*, kill the dog.

In the western languages of the Dakota stock, certain particles prefixed to the verb play an important part in modifying the meaning. Thus in Dakota and Hidatsa the prefix *pa* signifies that the action is done with the hand. From *ksa*, Dak., meaning separate, we have *paksá*, to break with the hand; from *qu*, Hid., to spill, *paqu*, to pour out with the hand. The Dakota *na*, Hidatsa *ada* (for *ana*) are prefixes showing that the action is done with the foot. The Dakota *ya*, Hidatsa *da* (often pronounced *ra* or *la*) show that the act is done with the mouth. *Ka* (Dak.) and *dāk* (Hid.) indicate an act done by a sudden, forcible impulse, &c. Attempts were made to ascertain whether similar prefixes were employed in the Tutelo speech. It was found that in many cases the latter had distinct words to express acts which in the western languages were indicated by these compound forms. Still, a sufficient number of examples were obtained to show that the use of modifying prefixes was not unknown to the language. Thus the root *kusa*, which evidently corresponds with the Dakota *ksa*, signifying separation, occurs in the following forms:

nantkūsisel, he breaks it off with the foot

latkūsisel, he bites it off

tikūsisel, he breaks it off by pushing

lakatkūsisel, he cuts it off with an axe

The Dakota *na*, signifying action with the foot, is evidently found, with some modification, in the Tutelo *nantkūsisel* above quoted, and also in *nañ-kōkisek*, to stamp with the foot, and in *konaqlōtisel*, to scratch with the foot. So the cutting, pushing, or impulsive prefix, *lak* or *laka*, which appears in *lakatkūsisel*, is found also in *lakatkūsisel*, he cuts open, *lakaspēta*, to cut off in pieces, *lakasāse*, to chop, *lakapleh*, to sweep the floor. *La*, which in *latkūsisel* indicates action with the mouth, is found also in *lak-pēse*, to drink, and perhaps in *yilanāha*, to count or read, which has the corresponding prefix *ya* in the Dakota word *yā-wa*, of like meaning.

The affixed or incorporated pronouns are used with transitive verbs to form what are called by the Spanish writers on Indian grammar *transitions*, that is, to express the passage of the action from the agent or subject to the object. This usage is governed by very simple rules. In the Dakota and Hidatsa the rule prevails, that when two affixed pronouns come together, the one being in the nominative case and the other in the objective, the objective always precedes the nominative, as in *maynkoç'a* (Dak.) methou-bindest, *dimakidēci* (Hid.) thee-I-love. In the Dakota the third personal pronoun is in general not expressed; *kaç'ká* signifies both he binds, and he binds him, her, or it; *wakāç'ka* is I bind, and I bind him, &c. In the Hidatsa, this pronoun is not expressed in the nominative, but in the objective it is indicated by the pronoun *i* prefixed to the verb, as *kidēci*, he loves; *ikideci*, he loves him, her or it.

The Tutelo, as far as could be ascertained, follows the usage of the Dakota

in regard to the third personal pronoun (which is not expressed) but differs from both the other languages, at least in some instances, in the order of the pronouns. The nominative affix occasionally precedes the objective, as in *MAYINEWA*, I-thee-see. Yet in *kohinañ'twiyahewa*, me-thou-struckest (where the pronouns are inserted), this order is reversed. The rule on which these variations depend was not ascertained. Owing to the difficulties of an inquiry carried on through the medium of a double translation (from English into Cayuga or Onondaga, and from the latter into Tutelo), it was not easy to gain a clear idea of the precise meaning of many of the examples which were obtained. An Indian when asked to translate "I love thee," or "thou lovest me," unless he is an educated man, or perfectly familiar with the language in which he is addressed, is apt to become perplexed, and to reverse the meaning of the pronouns. The following examples, however, will suffice to show that the system of transitions exists in the Tutelo, though they do not enable us to analyze and reconstruct it completely. Many other examples were obtained, but are omitted from a doubt of their correctness.

wakteōma, I am killing him
waikteōma (for *wayikteōma*) I am killing thee
mikteōma he is killing me
yakteōma, thou art killing him
kiteōñsel, he is killing them

inēwa, he sees him (or he saw him)
minēwa, I see him (qu. *m'inēwa*, for *ma-inēwa*)
mayinēwa, I see thee
mīinēwa, he sees me
yīinēwa, he sees thee
mīinēhla, they see me

yandostēka, he loves him
yandomistēka, he loves me
yandoyistēka, he loves thee
yandowastēka, I love him
yandoyastēka, thou lovest him
yandoyistēka, he loves thee
mankiandostēka (qu. *maikiandoyistēka*), we love thee
maihandostekanēse, we love them
waiyandostēka, he loves us
waiyandoyastēka, thou loved us
yandostekanēse, he loves them (or they love him)
yandomistēkana, they love me

kohinañhīwa, he struck (or strikes) him
kohinañkyihīwa, he struck thee
kohinañmihīwa, he struck me

kohinañwalīwa, I struck him
kohinañyalīwa, thou struckest him
kohinañwaiyalīwa, thou struckest me
kohinañmañkilīwa, we struck him

gikōha (or *kikōha*), he calls to him
wigikōha, I call to him
waingikōha, (for *wayingikō'ha*), I call to thee
iñjikohāse (for *yingikohāse*), he calls to thee
iñjikopolēse, he calls to you
miñjikoha, he calls to me
yigikoha, thou callest to him
ingikopūa, they call to you
gikohanēse, they call to them

From the foregoing examples it is evident that the system of transitions in the Tutelo is as complete as in the Dakota and Hidatsa. But there are apparently some peculiar euphonic changes, and some of the pronouns are indicated by terminal inflections, particularly in the second person plural and in the third person singular and plural.

In the Tutelo, as in the Dakota and Hidatsa, substantives and adjectives are readily converted into neuter verbs by the addition or insertion of the pronouns and the verbal suffixes. It is in this manner that these languages, like other Indian tongues, are generally enabled to dispense with the use of the substantive verb. Thus in the Dakota *wīcācācā*, man, by inserting the pronoun *ma*, I, becomes *wimatācācā* or *wīcāmacācā*, I am a man, and by inserting *uñ* (we) and adding the plural affix *pi*, becomes *wiūñ'cācāpi*, we are men. So also *waçte*, good, becomes *muwaçte*, I am good, *uñwaçtepi*, we are good.

In the Tutelo the word *wahlāka*, or *wahlākai*, man, is inflected as follows :

wamihtākai, I am a man.
wayihtākai, thou art a man.
wahlākai, he is a man.
micamihtākai, we are men.
iñwahlākai, ye are men.
hūkwahlākai, they are men.

The last two forms appear not to be regular, and may have been given by mistake. *Hūkwahlākai* probably means "all are men."

This verb may take the aorist form, as :

wamihtakāwa, I am (or was) a man.
wayihtakāwa, thou art (or wast) a man.
wahatakāwa, he is (or was) a man, &c.

So the adjective *lī*, good, becomes, with the aorist affix *wa*, *līwa*, he is (or was) good ; *yimlīwa*, thou art good ; *mimlīwa*, I am good. In the

present tense we have *ebūse*, he is good ; *ebūse*, they are good ; and in the preterit, *ebūkōa*, he was good.

Adverbs.

In many cases, as has been already shown, the English adverb is indicated in the Tutelo by a modification of the verb. The negative adverb, for example, is usually expressed in this manner, as in *in'kseha*, he is laughing, *kiñtseha*, he is not laughing ; *miġilowe*, it is mine, *kimigiłonañ*, it is not mine.

Sometimes the meaning which in English would be expressed by an adverb accompanying a verb, is expressed in Tutelo by two verbs. Thus we have *ihōka*, she is sewing, apparently from a root *ihō* or *yehō*, to sew ; and *koñspēwa yehō*, she is sewing well, i. e., she is careful in sewing (lit. she thinks, or remembers, in sewing) ; *keġina yehō*, she is sewing badly, i. e. she does not well in sewing (or is not good at sewing). Here *keġina* is the negative form of *būca*, he (or she) is good.

Prepositions.

Many phrases were obtained with a view of ascertaining the prepositions of the Tutelo, but without success. Sometimes an expression which in English requires a preposition would in the Tutelo appear as a distinct word. Thus, while *ati* signifies a house, *tokai* was given as equivalent to "in the house." It may perhaps simply mean "at home." Prairie is *latāhko*, but *onñi* signifies "at the prairie."

Other examples would seem to show that the prepositions in the Tutelo, as in the Hidatsa, and to a large extent in the Dakota, are incorporated with the verb. Thus *tāhka* signifies "woods," and *tāhka aginēse*, he is in the woods. So *sūi*, hill, and *sūi aginēse*, he is on the hill. The phrase "I am going to the house" was rendered *wilēta iati*, and the phrase "I am coming from the house," by *waklēta iati*. The practice of combining the preposition with the verb is very common in the Indian languages, which merely carry to a greater extent a familiar usage of the Aryan speech. The expressions, to ascend or descend a hill, to circumnavigate a lake, to overhang a fence, to undermine a wall, are examples of an idiom so prevalent in the Indian tongues as to supersede not merely the cases of nouns, but to a large extent the separable prepositions.

Conjunctions.

In the Tutelo, conjunctions appear to be less frequently used than in English. An elliptical form of speech is employed, but with no loss of clearness. The phrase "when I came, he was asleep," is expressed briefly *wihōk, hiñka*, I came, he was asleep. So, "I called the dog, but he did not come," becomes *wagelākiok tōñk, kihūna*, I called the dog, he came not. When it is considered necessary or proper, however, the conjunction is expressed, as *kuminēna, mi Jān hiñka*, I did not see him, but John saw him. Here "but" is expressed by *mi*.

Nigás signifies "and," or "also." *Waklumíha lubús nigás maséñ*, I bought a hat and a knife. *Owakióka waktáka nigás mihéñ nomba lek*, I met a man and two women.

Li, which expresses "if," appears to be combined with the verb, at least in pronunciation; thus: *Lihóok, wagalájita*, If he comes, I will tell him; *wihúta, Jan lihóok*, I will come if John comes. It is noticeable in the last two examples that the accent or stress of voice in the word *lihóok*, if he comes, appears to vary with the position of the word in the sentence.

Syntax.

The only points of interest which were ascertained in regard to the syntax of the language related to the position of words in a sentence.

The adjective follows the noun which it qualifies, as *wahtake bí*, good man, *atí asáñ*, white house. The rule applies to the numerals, as *miháñ noñsa*, one woman, *atí noñbai*, two houses. In this respect the Tutelo conforms to the rule which prevails in the Dakota and Hidatsa languages, as well as in the dialects of the Iroquois stock. In the Algonkin languages, on the other hand, the adjective precedes the noun.

The position of the verb appears to be a matter of indifference. It sometimes precedes the noun expressing either the subject or the object, and sometimes follows it, the meaning being determined apparently, as in Latin, by the inflection. Thus "I see a man," is *minéwa waiwáŋ* (I see him a man); and "the man sees me" is *miinéwa waiwáŋ* (he sees me the man). *Tqóñko miñgō*, give me a dog; *kité tqóñki*, kill the dog. In the last example the change from *tqóñko* to *tqóñki* is apparently not a grammatical inflection, but is merely euphonic. The verb in the imperative mood sufficiently shows the speaker's meaning, and the position of the noun is a matter of emphasis. "A dog give me," not a knife; "kill the dog," don't let him escape.

A verb is placed after another verb to which it bears the relation expressed by our infinitive; as *miñgōlogkō wakté'a*, let me kill him (allow me, I will kill him). *Wakonta opéla*, I will make him go (I cause him he will go).

The euphonic changes which words undergo in construction with other words are as marked in this language as they are in the proper Dakota tongue, and seem to be often of a similar, if not identical, character in the two languages. Thus in Dakota the word *çúñka*, dog, becomes *çúñke* when a possessive pronoun is prefixed. In the Tutelo a similar change takes place when the position of the noun is altered; thus we have *tqóñko miñgō*, give me a dog; *kité tqóñki*, kill the dog. The terminal vowel is frequently dropped, and the consonant preceding it undergoes a change; thus in Dakota *yuzá*, to hold, becomes *yus* in the phrase *yus majin*, to stand holding. In Tutelo *nahāmbi* (properly *nahāñbi*) or *nahābi*, day, becomes *nahāmp* (or *nahāp*), in *nahāmp lāli* (or *nahāp lali*), three days. In such instances the two words which are thus in construction are pronounced as though they formed a single word.

VOCABULARY.

Particular care was taken to obtain, as correctly as possible, all the words comprised in the comparative vocabulary adopted by Gallatin for his Synopsis of the Indian languages. Many other words, expressive of the most common objects or actions, have been added. The alphabetical arrangement is adopted for convenience of reference, in lieu of the different order which Gallatin preferred for the purposes of his work. The Dakota and Hidatsa words are derived from the dictionaries of Mr. Riggs and Dr. Matthews, with the necessary changes of orthography which are required for the direct comparison of the three languages.

When several words are given in the Tutelo list, they are sometimes, as will be seen, mere variations of pronunciation or of grammatical form, and sometimes entirely distinct expressions. The Tutelo has no less than four words for "man," *wahitāka*, *waiyūwa* (or *waiwaq*) *yū'ikañ*, and *nōna*, which have doubtless different shades of meaning, though these were not ascertained. There are also two distinct words meaning "to see," *inōwa*, and *ohāta*, and two for "go," *opōwa* and *qalu* (or, rather *opa* and *la*, answering to *opa* and *ya* in Dakota). A more complete knowledge of the language would doubtless afford the means of discriminating between these apparently synonymous terms.

The words marked *N* in the vocabulary are those which were received from Nikonha himself. The pronunciation of these words may be accepted as that of a Tutelo of the full blood, and as affording a test of the correctness of the others.

	Tutelo.	Dakota.	Hidatsa.
<i>Alive</i>	inī, enī, inīna	ni	hiwakatsa
<i>All</i>	hūk, hōk, okahōk	iyuqpa	qukaheta; etsa
<i>And</i>	nigás	kha: tç; uñkafñ; nakuñ	iça
<i>Arm</i>	hiço (N) histo	isto	ara
<i>Arrow</i>	mañksū; mañkōi (N)	wañhiñkpe	ita, maita
<i>Ashes</i>	alapōk	tçiqota	midūtsapi
<i>Aunt</i>	watamai; tomīn	tuñwin	içami; ika
<i>Autumn</i>	tāñyi, tā'i	ptañyeta	mata
<i>Awake</i>	kiklēse	kikta	itsi; hidamitats
<i>Axe</i>	nisēp (N), hisēpi, hisēp	oñspe	maiptsa
<i>Bad</i>	okāyek (N) okāyik, ukāyik	çitça	icia
<i>Bag</i>	mañksūi	ojuha	içi
<i>Ball</i>	tapi	tapa	máotapi
<i>Bark (N)</i>	qāpi; yohiñk	çañba	midaiçi; qūpi (V)
<i>Bear</i>	mūnti (N) mōnti, mçñli	mato	daqpitsi
<i>Beads</i>	watai	totodañ	akutohi

	Tutelo.	Dakota.	Hidatsa.
<i>Beaver</i>	yāop (N) mūnaqka	tçipa	mirapa
<i>Beard</i>	yehī; istihīoi	putiñhiñ (hiñ, hair, iç'i, underlip)	iki (hi, hair)
<i>Bed</i>	sāsi	owinja	aduqūpi
<i>Beg</i>	oyāndise	da; kida	kadi
<i>Bird</i>	māyīñk	zitká; wakiñyañ	tsakaka
<i>Bird's nest</i>	mayeñgiçqta,	hoqpi	ikiçi
<i>Bite off (to)</i>	latkūsisel,	yaksá	adudatsa
<i>Black</i>	asépi, asūp (N)	sapa	cipi
<i>Blood</i>	wāyī (N)	we	idi
<i>Blue</i>	asōti	to; sota	tohi
<i>Body</i>	tēsi; yūqtéki	tañçañ; (tezi, belly)	iqo (titsi, thick, stout)
<i>Boil (to)</i>	hīehā	ohañ; ipiqya	midue
<i>Bone</i>	wahōi, wahūi	hu	hidu
<i>Book</i>	minagi	wowapi	
<i>Boy</i>	wakasik (N); guts- kai; waitiwa	hokçidañ; koçká	maqadistamatse
<i>Bow (N)</i>	inōsik, iñōsek (N)	itazipa; tinazipe	itanuqa; minuqa
<i>Brain</i>	wasōti, wasūt	nasu	tsuuta
<i>Bread</i>	wagesákwai, wāk- sákpai	aguyapi	madahapi
<i>Break (to) with foot</i>	lakatkūsisel	naksá	anaqoçi
<i>Brother</i>	niwāgenúmpai (N) iñginumbai	tcīñye	iaka; itanu; itame- tsa
<i>Brother, elder (my)</i>	witañsk; wital; wa- hiik	tcīñye; timdo	itametsa; iaka
<i>Brother, younger (my)</i>	wisuñtk, minōn	misuñka	matsuka
<i>Buffalo</i>	iap; mampañdahkai	tatañka; pte	kedapi; mite
<i>Burn (v. a.)</i>	inausfngā	ghu; aghu	anaqa
<i>Bury</i>	sūntése	ga; huaka	
<i>But</i>	mi	tuka	
<i>Buy</i>	kilomīha; wāglu- mihinta	opetoñ	mai hu
<i>Call (v. a.)</i>	kikōha; gelāki	kitço	kikuha (invite)
<i>Canoe</i>	miñkolhāpi, meñ- kolahāpi	wata; cañwata	midaluetsa; mina- luetsa
<i>Cat</i>	pūs (N) (i. e. puss)	inmuçuñka (dog- panther)	
<i>Cause (v)</i>	kouta	etçonkiya	

	Tutelo.	Dakota.	Hidatsa.
<i>Cheek</i>	ùkstéh	tapoñ, iyoqa	
<i>Cherry</i>	yosañkrota	tcañpa, kakañpidan	matsu
<i>Child</i>	wakasik; wágotst- kái (see <i>small</i>)	hokçiyopa	daka; makadiçta
<i>Chop (v)</i>	lakasāse	kaksa	naktsùki
<i>Churn (v)</i>	mampamasawohōka	botço	
<i>Claw</i>	oluskēse	tsake	tsakaka itsi
<i>Cloud</i>	maqōsi (N)	maqpiya	
<i>Club</i>	yehēti	tçañ otoza	midakaza titsi
<i>Cold</i>	sani	sni	tsiniē
<i>Come</i>	yahūa, howa, hī	uwa	hu
<i>Copper</i>	penihēi	maza	netsahiççi
<i>Count (v)</i>	yilanāha	yawa	
<i>Cranberry</i>	hohnūnk	polkañka, potpañka	
<i>Crane</i>	kainstākai	pehañ	opitsa
<i>Crow (n)</i>	kāhi	untçitçadañ	pedetska
<i>Cry (v)</i>	qāqise	tçeya	imia
<i>Cut (v) with knife</i>	lakatkōsa	baksá	naktsùki
<i>Dance (v)</i>	wagitçi (N), ketçi	watçi	kidiçi
<i>Darkness</i>	usihaa, olsiha	okpaza (hañ, <i>nighl</i>)	oktsi; tatsi
<i>Daughter (my)</i>	witēka (N), wi- ohañke, miohañk	mitcuñkçi	maka
<i>Day</i>	nahambe, nahamp, nahañpe	añpetu, añpé	mape
<i>Dead</i>	tē, tēka	ta	te
<i>Deer</i>	witāi	taqitñça	tçitatùki
<i>Devil (evil spirit)</i>	māmpā isi	wakañçitça	
<i>Die</i>	tē (N), tēolāha	ta	te
<i>Dog</i>	tçoñg (N) tçoñgo tçoñki, tçoñk	çunka	maçuka
<i>Drink (v)</i>	lākpē, lapēta	yatkañ	hi; minhi
<i>Duck</i>	ičtai (N), heistañ, manēasēi (see <i>Goose</i>)	maghaksitça; skiska	miçaka
<i>Eat</i>	naqōq (N), nahūh	noghe; nakpa	akuçi
<i>Earth</i>	amāni, amāi	maka	ama
<i>Eat</i>	lütī	yuta	duti (nuti)
<i>Egg</i>	mayiñk pōs (see <i>Bird</i>)	witka	tsakakadaki
<i>Eight</i>	pālān (N) palāni, palāli	çadoghan	nopapi

	Tutelo.	Dakota.	Hidatsa.
<i>Eighteen</i>	agepalāli, akipalāni	ake çadoghañ	aqpidopapi
<i>Eleven</i>	agenosai, akinosai	ake wanjidañ	aqpiduetsa
<i>Evening</i>	osihitewa (see <i>Darkness, Night</i>)	qayetu	oktsiade
<i>Eye</i>	tasüi, tasüye (N) (mentasüi, my e.) içta		içta
<i>Face</i>	talükna ; tarübna (mentalöken, my f.) ite ; itohnake		ite
<i>Father</i>	eäti ; tät (N) ; yät (N)	ate	ate ; tatiç
<i>Fifteen</i>	agegīsai, akekisāi	ake-zaptañ	aqpikiqu
<i>Finger</i>	hāk (see <i>Hand</i>)	nape	çakiadutsamihe
<i>Finger-nails</i>	tsutçāki, tçutçāg	çake	çakiiçpu
<i>Fire</i>	pīç (N) pēti, pētç	peça	
<i>Fish</i>	wilhoi (N)	hoghañ	mua
<i>Five</i>	kaçā (N) kisē, kisañ, kisāhi, kisāhāñi	zaptañ	kiqu
<i>Flesh</i>	wāyuqtēki, wayūq- tik	tçeppi ; tçonitça	idukçiti
<i>Fog</i>	manotihūa	opo	pue
<i>Food</i>	walūti	woyute	maduti
<i>Foot</i>	içi (N) isī	siha	itsi
<i>Forehead</i>	tikōi ; pania minte	ite	iqi
<i>Forest</i>	tāhkāi	tçoñtañka	
<i>Four</i>	tōp (N), tōpa, topai, toba	topa	topa
<i>Fourteen</i>	agetoba, akitopa	ake-topa	aqpitopa
<i>Fox</i>	tohkai	çuñgidañ	iqoka
<i>Friend</i>	witāhe, witaqā	koda ; kitçuwa	idakoe ; iko'pa
<i>Ghost</i>	wanūntçi	wanaghi	nokidaqi
<i>Girl</i>	wāgatç(N) wakasik ; kōmqāñ (N)	witçñyañna.	makadiçtamia ; miakaza
<i>Go</i>	opewa ; çala ; la	ya ; opa	nakon ; ne ; kaus
<i>God</i>	eñgyeñ, eñgā	wakañtañku	daqi, naqi (spirit)
<i>Good</i>	ebi (N), bi, pī, ipī, bīwa	waçte ; pi (obsolete)	tsūki
<i>Goose</i>	manēasān	magha	mina
<i>Grandfather</i>	ekuñi, higūñ	tuñkañçidañ	adutaka
<i>Grandmother</i>	higūñ	kuñsitku ; uñtçi	iku
<i>Grass</i>	sūnktāki (N), muk- tāgi ; otōi	peji	
<i>Great</i>	itāñi (N), itāñ	tañka	
<i>Green</i>	otō (N), otolakōi	to	



	Tutelo.	Dakota.	Hidatsa.
<i>Gun</i>	mīnkīṭē (N)	mazakañ	
<i>Hail</i>	nōq	wasu	ma'kūqpitami
<i>Hair</i>	natónwe(N), nañ'óí, natóí	natú; hiñ	ana; hi
<i>Hand</i>	hāg (N), hāki, āk	nape (çake, claw, finger-nail)	çaki
<i>Handsome</i>	pirē (N), ipī, ipikam (see <i>good</i>)	owañyag waste	
<i>Have</i>	tahoñtanēki	tiñ-maç:iñtça	itūki
<i>Hat</i>	lubūs; kotubós (N)	wapaha	apoka
<i>Hatchet</i>	(see <i>axe</i>)		
<i>He</i>	im, i	iç, iye	i, çe
<i>Head</i>	pasūye (N), pasūi	pa	atu
<i>Heart</i>	yāñti (N), yanti; tãpī	tcante (tapi, liver)	na'ta (apiça, liver)
<i>Here</i>	nei	den, detu	
<i>Him</i>	e, ei, i	ie, iç	i
<i>Himself</i>	esái, isáñi	ie, iç	içki
<i>House</i>	atī (N)	tipi	ati
<i>How many</i>	toķenuñ	tona, tonaka	tuami, tuaka
<i>Hundred</i>	ukeni, okeni	opawiñghe	pitikiqtia
<i>Hunger</i> (v)	kihñdewa	wotektehda (hun- gry)	aniiti (hungry)
<i>Husband</i>	māñki	hihna	kida, kina
<i>I</i>	ma, mi, mīm	m'iç, miye	ma, mi
<i>I alone or My- self</i>	misáñi, misái	mīye, miç, miçnana	miçki, mitsaki
<i>Ice</i>	noñli; miñgiratçah	tç igha	manūqi
<i>If</i>	li	kiñhañ	
<i>Indian</i>	wahitákai (<i>man</i>)	iktçewitçasta	amakanoqpaka
<i>Iron</i>	mañs, mās, ma- sījorāk	mazasapa	uetsa
<i>Island</i>	histék, sték, stes- tēki	wita	
<i>Kettle</i>	yesīñk	tçegha	miduqa
<i>Kill</i>	kitē (N), ktē, kitēse	kte, kata	ta, kitahe
<i>Knife</i>	masēñi, masēi, ma- sāi (N) masā	isan	maetsi
<i>Lake</i>	(see <i>Sea</i>)		
<i>Land</i>	(see <i>Earth</i>)		
<i>Laugh</i>	inksēha, iñkçē (N)	iqa	ka'
<i>Leaf</i>	otóí, otōq (N)	ape; wapa	midapa

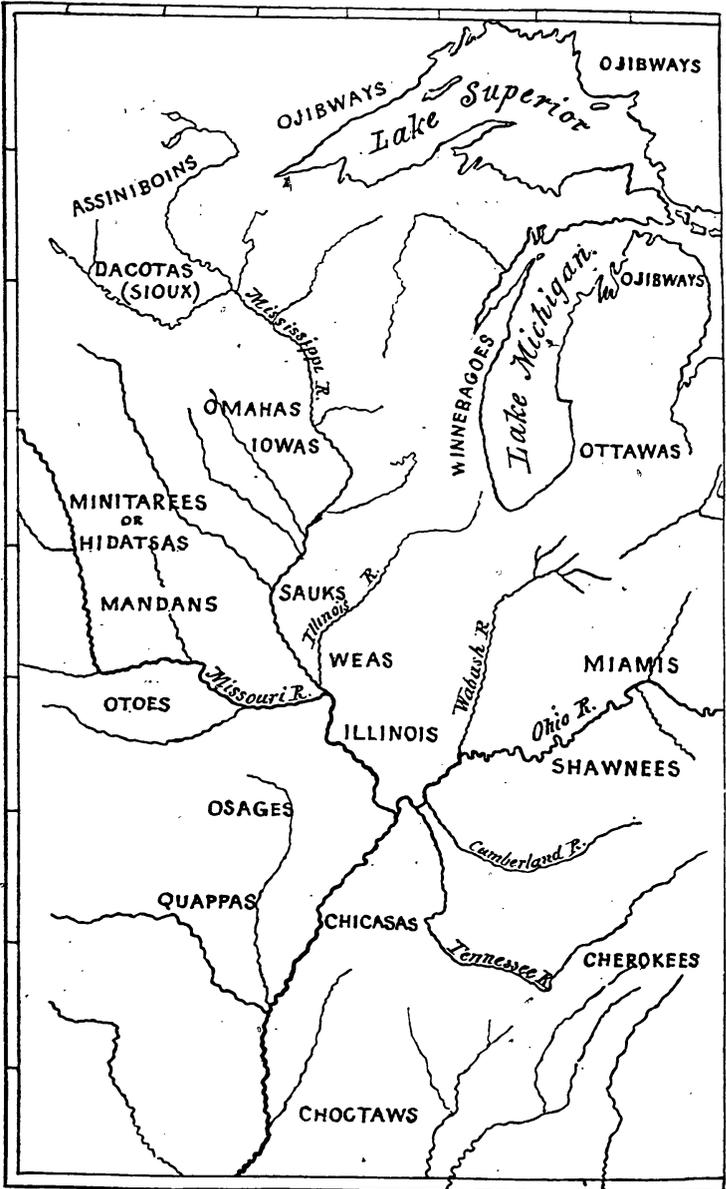
	Tutelo.	Dakota.	Hidatsa.
<i>Leg</i>	yeksā (N), ieksā, yeksāi; minī (<i>my</i> <i>leg</i>)	idiki or iniki	
<i>Long</i>	yaṛóske (N) sui; yumpaṅkatska	hañska	hatski; (tsua, <i>nar-</i> <i>row</i>)
<i>Love</i>	yandowasteka	waṛtedaka	kidēçi
<i>Maize</i>	mandaqēi, mātaqē (N)	wamnaheza	kohati
<i>Male</i>	aōma, aōñ	uñ	he, hini
<i>Man</i>	wahlahka, wāiyuā (N), waiyūwa, waiwaq; yuhkañ, nōna	witçaṛta	matse, itaka, çi- kaka
<i>Marry</i>	ohōn, ohōteha	ota	ahu
<i>Me</i>	mī, wī	ma, mi	mi
<i>Meet</i>	oaki	akipa	uzia
<i>Mine</i>	migitowe	mitawa	matawae
<i>Moon</i>	minōsā' (N), mi- mahēi (see <i>Sun</i>)	hañyetu-wi	makumidi
<i>Morning</i>	kanahāmpuai, kana- hābnen (see <i>Day</i>)	hañhañina	ata
<i>Mother</i>	inā (N), henā, henūñ ina		hidu
<i>Mountain</i>	çūqe, sūli; ohēki	qe; paha	amaqami
<i>Mouth</i>	ihī, ih (N)	i	i
<i>Myself</i>	(see " <i>I alone</i> ")		
<i>Near</i>	iñktēi, āskai	kiyedañ	atsa
<i>Neck</i>	tasēi, mintasēi (<i>my</i> n.)	tahu; dote	ampa
<i>Night</i>	usī, osī	hañ; hañyetu	oktsi
<i>Nine</i>	tsāen or tça (N), sā, sāñ, ksānk; ksā- kai, kasāñkai	naptçinwañka	nuetsapi
<i>Nineteen</i>	agekisañka	uñma-naptçinwañka	agpi-nuetsapi
<i>No</i>	yahan, ihao	hiya	desa; nesa
<i>Nona</i>	pāqtē, paqti	poghe	apa
<i>Oak</i>	tāskahōi, taskahūi (N)		midakamiqka
<i>Old</i>	hōakāi, hōhka	kañ	qe, qie
<i>One</i>	noñç (N), noñs, nosāi, noñsa	wañji, sañni	nuetsa

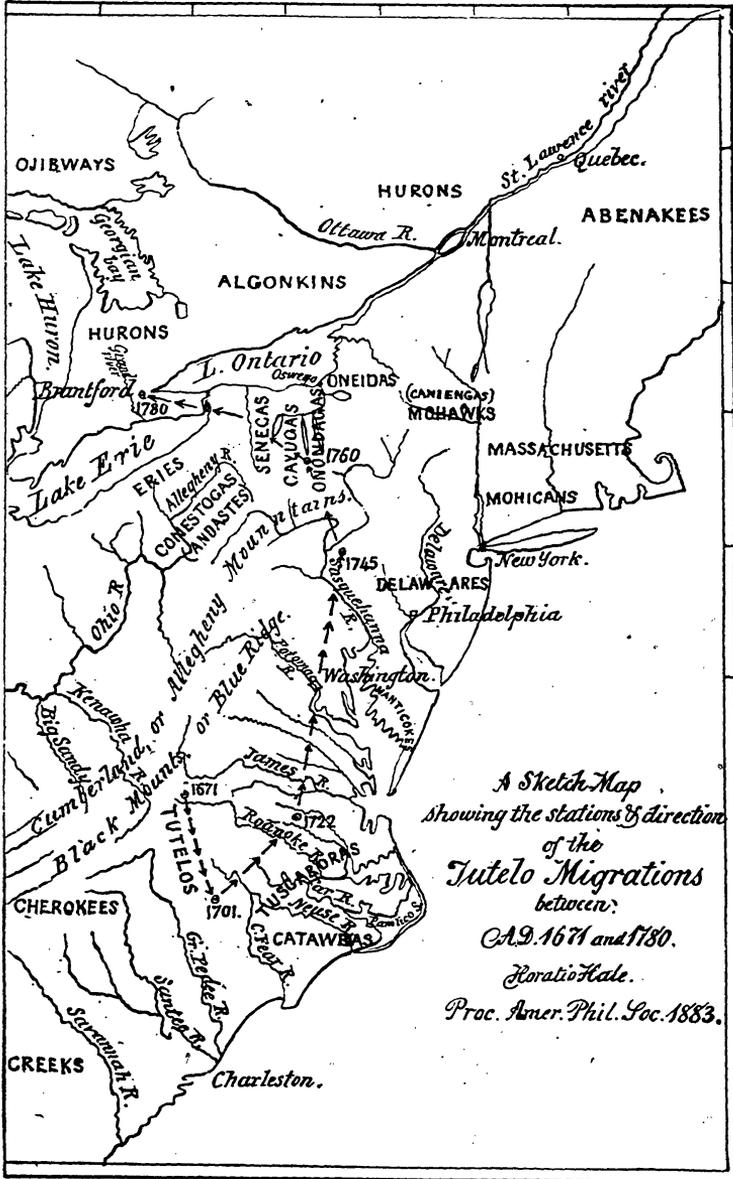
	Tutelo.	Dakota.	Hidatsa.
<i>Ours</i>	maqg̃itowe	uñkitawa	matawae
<i>Ourselves</i>	maesäi, maesäñi		midohi
<i>Partridge</i>	wustetkai	zitça	
<i>Pigeon</i>	mayütkäi, wayō:käi	wakiyedañ	
<i>Pine-trees</i>	wästi, wäste (N)	wazi	matsi
<i>Pipe</i>	yehñstik (N), ihir- tik, iheñstek (qu, "mouth-stone")	tçotañka; tçañdu- hupa	ikipi
<i>Pound (v)</i>	pahē	apa	pa
<i>Prairie</i>	latahkoi	tiñta	amaadatsa, teduti
<i>Rain</i>	qawōi (N), qawōqa, häwōhä, qawō	maghaju	qade
<i>Raspberry</i>	hasisiäi	takañhetça	
<i>Red</i>	atsüti, atçüti, atçüt	duta (<i>scarlet</i>), (<i>red</i>)	ça hiçi
<i>Remember</i>	koñspēwa	kiksuya	
<i>River</i>	taksita, taksitai	wakpa; watpa	azi
<i>Run (v)</i>	hinda, hantá (N)	inyañka	tinie
<i>Say (v)</i>	hahēwa (<i>see Speak</i>)	eya	idé
<i>Sea</i>	yetañi, yetäi, iëtañ	mde (<i>lake</i>); miñi- wañ:ça (<i>one water</i>)	minfiqtia (<i>great water</i>)
<i>See (v)</i>	ohäta, inēwa, wa- qëta	toñwañ; wañyaka; wañhidaka	ika; atsiça
<i>Seven</i>	sägóm (N), sagoméi, sagomñk	çakowiñ	çapua
<i>Seventeen</i>	agesagómi	ake-çakowiñ	aqpiçapua
<i>Sew (v)</i>	ihōha	kagheghe; ipasisa	kikaki
<i>Shoes</i>	handisonōi (N), añ- gohlēi, āgōre, āgōdē	tcañhañpa	hupa; itapa
<i>Shoot off (v)</i>	opatañsel	bopōta	
<i>Sick</i>	waginōma	yazañ	iqoade
<i>Sing (v)</i>	yāmññiyē (N)	dowañ; ahiyaya	
<i>Sister</i>	minēk (N), tahañk	tawinoqtin; tañka, tanku	inu, itaku, içamf amaki
<i>Sit</i>	mahanañka	iyotañka	
<i>Six</i>	agüs (N), akásp, akáspei	çakpe	akama
<i>Sixteen</i>	agegaspe	akeçakpe	aqpiakama
<i>Sky</i>	mañtōi, matōñi, matōi	maqpiya to	apaqi

	Tutelo.	Dakota.	Hidatsa.
<i>Sleep (v)</i>	hiyāñ (N); hianta, hiantkapewa	içtiñma	hami, hinami
<i>Small</i>	kutçkai (N), kütškai, kotskai	tçistiñna; tçikadañ; niçkodañ	kariçta mapokça
<i>Snake</i>	wāgenī	wañ; wamduçka	
<i>Son</i>	witēka (N). tēkai; qūtçkai (see <i>Small</i>)	tçinktçi (koçká, young man)	idiçi
<i>Speak</i>	niça (N), sahēnta, sahīta, hahēwa, oaklaka	ia; yaotañiñ	idé, iné
<i>Spring (n)</i>	wehahempēi, weha- éhimpē; maste	wetu (inaçté, warm)	
<i>Squirrel</i>	nistāçkai	taçnahetçi; hetk- adañ; ziça	
<i>Stamp (v)</i> <i>with foot</i>	nañkōkisek	natata, natañtañ	
<i>Star</i>	tabunītçkai (N), tap- niñskai	witçañqpi	içka daka
<i>Stay (v)</i>	nañka (see <i>Sil</i>)	yañka	açadi
<i>Steal</i>	manoñ, manōma	manoñ	mi'
<i>Stone</i>	histēki, nistēk (N)	iñyañ	amuáçoka
<i>Strawberry</i>	haspahinuk	wajuçtetça	
<i>Strike</i>	kolinūnhiwa	apa, kaçtaka	
<i>Strong</i>	itāi; soti; wāyupāki	suta; waç'aka	itsii (
<i>Summer</i>	wēhē piwa (see <i>Spring</i>)	mdoketu	ade, mande
<i>Sun</i>	mīe or mīn (N), mi (see <i>Moon</i>)	wi	midi
<i>Sweep (v)</i>	lakaplék	kahiñta	
<i>Ten</i>	pōtsk (N), putsk, butçk, putskai, putskāñi	wiktçemna	pitika
<i>That</i>	yukān; nēikiñ	ka, koñ	ku
<i>Thee</i>	hi, yi	ni	ni
<i>Their</i>	gitonnēsel	tawapi	itamae
<i>Thers</i>	kowai	hetçi; heñ; ka; kañki	hidikoa; kuadi; çekoa
<i>They</i>	imahese	iyepi	i
<i>Thing</i>	yiñgītowe	nitawa	nitawae
<i>Thirteen</i>	agelali	ake-yamni	açpinami
<i>Thirty</i>	putçka nani	wiktçemna yamni	damis-pitika

	Tutelo.	Dakota.	Hidatsa.
<i>This</i>	néke, nēikiñ	de; detčedañ	hidi; hini
<i>Think</i>	opemiha; koñspēwa	eč ñ; ečpa	idie; inie
<i>Thou</i>	yim, ya, ye	nič, ya, ye	na, ni
<i>Thousand</i>	okeni butskai, ukeni mbutskai	kektopawiñghe	pitikiqtia akakodi
<i>Three</i>	nān (N) nāni, lāt, lāni	yamni	nami, nawi
<i>Thunder</i>	tūi; tūhangrūa	otiñ	tahu
<i>Thyself</i>	yisái, yesáñi	niye, nič	niqki
<i>Tie (v)</i>	olohi	iyakačka; paqta	dutskiti
<i>Tobacco</i>	yéhni, yihñu	tčañdi	ope
<i>To-day</i>	nahámblekēñ (see <i>Day</i>)	etčin; nakaha; añ- petu kiñ de	hini-mape
<i>Toes</i>	atkasusai	siyukaja; sipiñkpa	itsiadutsamihe
<i>To-morrow</i>	nahampk (see <i>To- day</i>)	heyaketciñkañ	ataduk, ataruk
<i>Tongue</i>	netçi, netsi, letci	tçeji	dezi (nezi)
<i>Tooth</i>	ihī (N)	hi	i, hi
<i>Town</i>	māmpī, māmbī	otoñwe	ati, ati ahu
<i>Tree</i>	oni; wiéñ (N) miéñ (see <i>Wood</i>)	tčañ	mina (wood)
<i>Turkey</i>	māndáhkāi, mān- dūhkāi	zitča tañka	
<i>Twelve</i>	agenomba	ake-noñpa	aqpidopa (agpi- nopa)
<i>Twenty</i>	putska nomba	wiktcmna noñpa	nopapitika
<i>Two</i>	nomp (N) nomba	noñpa	nopa, dopa
<i>Ugly</i>	ukāyik (see <i>Bad</i>)	owañyaq sitča	icia
<i>Uncle (my)</i>	minēk'	midekçi; ate (<i>father</i>)	ate; itadu
<i>Us</i>	mae, wae	uñ	mido, wiro
<i>Valley</i>	oñqyāyūñ	kaksiza; tčokañ	amaqaktupi
<i>Walk (v)</i>	yalēwa (see <i>Go</i>)	mani	dide
<i>Warm</i>	akāteka, akātia	kata; tčoza; mačte	ade
<i>Warrior</i>	ērūtāoñe	akitčita; m deta- huñka	akimakikua
<i>Water</i>	manī (N)	mini	mini, midi
<i>We</i>	mim, mae, wae, mañ, māesáñ	uñ	
<i>Weave</i>	añktāka	yañka; kazoñta	
<i>Weep</i>	qaka	tčeya	imia
<i>Which</i>	štuk	tukte	tapa
<i>What is that?</i>	kakāñwā	taku (<i>what</i>)	tapa

	Tutelo.	Dakota.	Hidatsa.
<i>When</i>	tokēnāq	tohiñini ; kehañ	tuakaduk ; tuaka- çedu
<i>Where</i>	tøkā	toki, tokiya	torn, toka
<i>White</i>	asūñi (N), asai, aseï	asañi, sañ ; ska	atūki ; oqati
<i>Who</i>	ketoa, he'ōa	tuwe	tape
<i>Whose</i>	tewaki.ūwa	tuwetawa	tapeitamae
<i>Wife</i>	(same as <i>Woman</i>) mihañi	tawitçu	itadamia ; ua
<i>Wind</i>	maniñkiē (N), mam- ūnklēi, maminkrē, omaklēwa	tate	hutsi
<i>Winter</i>	wāneñi, wāñci	wani, waniyetu	mana ; tsinic (<i>cold</i>)
<i>Wolf</i>	mūñktagin (N), mūnktōkai, mak- tukai	çuñktoketça	motsa ; tçeça
<i>Woman</i>	mihañi, mihañ (N), mahēi	winohintçā, wiñyañ mia	
<i>Wood</i>	miyeñi, miēñ, miyēi	tçañ	mina
<i>Work (v)</i>	oknahō	qtani	dahe ; kikça
<i>Ye</i>	yim (see <i>Thou</i>)	niyepi	dido ; niro
<i>Yellow</i>	sii	zi	tsi
<i>Yes</i>	ahā, ahāñ, awāça	hañ ; ho	e
<i>Yesterday</i>	sitō	qtanihañ	hudiçedu ; huri- çeru
<i>Young</i>	yēñki	askatudañ wots	
<i>Your (pl)</i>	yiñgi:ambūi	nitawapi	





A Sketch Map
 Showing the stations & direction
 of the
 Tutelo Migrations
 between:
 AD. 1671 and 1780.
 Horatio Hale.
 Proc. Amer. Phil. Soc. 1883.