

SENECA IROQUOIS CONCEPTS OF TIME

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ABSTRACT/RESUME

Popular awareness suggest that one difference between Native and non-Native people is to be found in the difference between linear and cyclical time. The author reviews Seneca concepts of time and finds that they more closely parallel English ideas than the language by itself would indicate. Both objective and subjective determinants of time are culturally manipulated.

La prise de conscience populaire suggère qu'une différence entre les autochtones et les allogènes se trouve dans la distinction entre le temps linéaire et le temps cyclique. L'auteur étudie les concepts du temps chez Seneca et constate qu'ils font plus étroitement un parallèle aux idées anglaises que la langue elle-même l'indiquerait. Tous les déterminants objectifs et subjectifs du temps sont manipulés du point de vue culturel.

Popular awareness of differing time concepts has sifted out from the professional linguists and anthropologists. One teacher from an elementary school in Salamanca, New York confided the following story. A Seneca child berated for continually appearing late at school replied: Well, you must realize that we Indians have a different concept of time.

Popular awareness of this difference has often been couched in the terms *linear* time and *cyclical* time. The word "minute" in modern Seneca, *jo:no?ska:t*, refers originally to the raised notch on a tally stick. Clocks consisting of two hands and numbers on a circular face are an innovation brought to the Iroquois by Westerners. It is interesting to note that the people who perceived minutes in terms of the notches on a tally stick have been characterized by cyclical time, while those who invented the clock are represented as perceiving time in linear terms. It appears that a reappraisal is in order.

The motive and methodology of the following essay is to be found in ethnography. A descriptive approach, unhampered by a concern for showing either uniqueness or similarity between Native American and Western cultures, has long been needed in the area of time concepts. An introduction to time concepts based on the systematic investigation of observable and observed data is the task at hand.

The language of Time

A similar description of time philosophy to that provided by Benjamin Whorf for the Hopi might well be developed on the basis of Iroquoian morphology (Carroll, 1956). Iroquois words show similar morphological emphases: there is a morphological poverty of tense markers and a corresponding morphological abundance of aspect markers; the morphological distinction between noun and verb roots is very weak. These two factors especially proved to be mind-boggling to Whorf, who jumped to the conclusion that such linguistic characteristics if not giving rise to, at least corresponded to perceptions of reality that emphasized quality over sequence and relationship over entity.

In more recent years Whorf's theories have been harshly criticized (Black, 1959; Malotki, 1983). Linguistic evidence in abundance proves that the Hopi language is as capable of reference to past and future, to concrete objects and empty space, as is any other language. It merely uses in many cases other than morphological means of doing so. It is quite possible to express past tense in other ways than the use of suffix, prefix, or vowel change within a word. On the other hand it has been noticed that aspect of verbs in English can also be indicated quite effectively through adverbs and other circumlocutions. Widely differing languages are capable of express-

ing a similar variety of concepts using differing means. Recognizing this, Whorf was wrong in his description of Hopi perception of time. It might be suggested that linguistic structure does not necessarily reflect perception structures as Whorf too optimistically thought. In the same vein, care should be taken in concluding that linguistic versatility automatically precludes perceptions of time that may well be wholly foreign to Western thought. Despite the usefulness of linguistic data, these are insufficient for the description of Native American cosmological thought. Native American philosophy cannot be deduced from linguistic data any more than Western philosophy can be deduced from Greek grammar.

Linguistic morphology ought not to be used as a basis for suggesting, as is often done, that Native American thought focuses on process, while Western thought (jubilantly less scientific) focuses on static being. It is typical that Seneca, like some other Native American languages, does not make a morphological distinction between process and stasis, but it does make a semantic one. This means that one word, usually analyzed as a verb, expresses what in a Western language will appear as a noun in one case and a verb in another. Thus for example *hato:wa:s* translates as either "hunter", or "he hunts".

Time as an abstract term does not seem to occur in Seneca speech, but could easily be lexicalized using Native Seneca roots. It is just as possible to talk about time concepts in Seneca as it is in English if any Seneca speaker ever felt that such an activity was actually worthwhile. Expressions of time occur only dimly separated from spatial expressions in Seneca, just as is the case in English. Perhaps the four most common categories of such expressions in both Seneca and English are 1) time in terms of observed moving objects, that is the passage of time, 2) time in terms of motion relative to the observer, that is length of time, 3) time in terms of dispensable matter, or amount of time and 4) time in terms of spatial position.

The passage of time can be illustrated by the word *'oahto*. This word and its many forms are used in reference to passing by or through in terms of space, or in terms of time, the passing by of an expected event. In modern usage this word is used to mean "past the hour." A related verb refers to passage through one phase, cycle, or going from one point to another. The form of this verb differs from the preceding in a way reminiscent of the difference between Chafe's first and third causative (Chafe, 1967:52). For example *hé:ahwas* can mean either "he goes from one point to another" or "he's had a birthday."

One of the most common Seneca words referring to passage of time is *heyo:eh* meaning "it's time for..." or "the time arrived." Many passage of time expressions are derived from this root. Another word similar in English

usage of one referring to going, running (for example, a machine), and continuing in time, going on. Thus 'ohté:tyo:h can mean "it's going (moving in space), it's running (for example, a refrigerator), or it's going on (in time)."

Reference to time in terms of length can also be illustrated. In both English and Seneca time can be long or short, but strangely enough it is rarely if ever thick or thin in either English or Seneca. Both languages recognize long and short as either the way time seems or more objective measurement, such as short nights in summer.

Reference to time in terms of amount is peculiar, and hardly fits into either cyclical or linear concepts. Time is more like a sack of flour when you say someone has loads of time on his hands. You can run out of time in both Seneca and English: 'okestoh, "it's used up, dried up, the time has run out."

Perhaps a fourth category of time-space expressions ought to be given in which striking similarities between Seneca and English are apparent. This is position in space in regard to position in time. Although Seneca morphology does not express (except in rare, specialized cases) past, present, and future as do for example the English words *goes* and *went*, this does not mean that events are not *perceived* as being past, present or future. For example the word *no?ke:?* means either "behind" or "afterward." The word 'o:eto:h means either "it's ahead" or "it's in the future." There is absolutely no reason why these correspondences should not be reversed, yet they are the same in English and Seneca. There is no reason whatever why past and future should not correspond to over and under, but they do not in either English or Seneca.

There are single units, words referring to days, months, and years in Seneca. These can be expanded by expressions referring to so and so many years or days to come or so and so many days and years ago. Cycles of successive periods of time (in English names of days of the week or months of the year) appear in Seneca. The names of the months are precontact, but the names of the days of the week are lexicalizations which came about under the influence of missionaries. Oddly enough, perhaps one of the most striking differences between English and Seneca language of time is illustrated in the names of the days of the week, yet even this difference reflects not so much a different time concept as a different worldview in general. Some of the names for days of the week reflect actions typically performed on those days under missionary influence. An example is the word for Saturday, *nijenoktowaes*, meaning "they wash the room then." Often words for things in English are descriptive of shape or color, whereas the corresponding Seneca expression is more active. A good example is *waté:nya?ja?s*, literally *translated* "the neck breaks", but meaning the flower violet.

Some Native American expressions may seem exotic, but do not necessarily indicate exotic time concepts. While Westerners get on in years, Senecas cross winters. The exotic correspondence of moons and months is not etymologically foreign to European languages.

In sum, it can be said that language as such gives no evidence of a time concept among the Senecas which differs perceptibly from a time concept evidenced in the English language. A great many linguistic similarities can be pointed out, nearly all of which are almost certainly of pre-contact origin. Linguistic differences in temporal expressions are contrasting morphological means in English and Seneca to express tense and aspect. Semantic differences may be a Seneca preference for active, functional description, although this is not unknown in English, for example *practice time*. If there are distinctive Seneca concepts of time, they will be revealed not so much in the structure of language, but in how people use words, what they have to say about what they believe and do, and in what one can actually observe Seneca people doing.

Experiencing Time

Three natural time divisions seem to be prominent in traditional ways of experiencing time among the Senecas: the day, the month, and the year. The year is marked by distinct seasons with traditional activities in hunting and agriculture determining how each of these are experienced.

Culturally determined aspects of the year are the calendric ceremonies (Tooker, 1970; Fenton, 1936). The time of calendric ceremonies is determined by the observation of the phases of the moon, the ripening of the various crops to which the ceremonies refer, and the observation of the stars for Midwinter. The month of course is determined by the observation of the moon. Many of the names of months are etymologically unclear, but some seem to be descriptive of change in weather or temperature, the growth cycle, or human reaction to these, indicated by the autumn month of *kahsa ?khneh*, "month when I cough." There is disagreement not only among communities but among individuals as to order and names of the months. This seems to be the result of trying to adapt a loose descriptive system in such a way as to correspond to the fixed months of the Western calendar. No one, it seems, remembers to say, "We Indians have a different concept of the month." Rather there is constant disagreement over the proper correspondences. People do regard the phases of the moon to some extent in agricultural pursuits, and to a great extent in determining the appropriate time for calendric ceremonies. The two conflicting perceptions of the month are not consciously realized. They are consistently compartmentalized in practice, so the conflict arises only in the matter of determining Seneca

translations for the names from January to December.

The Seneca day is not perceived in terms of sunset and sunrise as might be expected, but rather in terms of the meridian noon. The beginning and ending of the day (defined here as one complete rotation of the earth) is midway between two noons, but this is not an important *point* of time in Seneca perception and is not sharply defined. The important point of time is noon which is called *ha'tewé:nishé:h*, "the middle of the day." Noon divides the day into two parts. In theory these two parts are very different in quality and this quality has an effect on everything that happens. Ritually it can be noted that certain ceremonies must be performed before noon and others after noon. The forenoon ceremonies include most of the public rituals or thanksgiving rituals and the recitation of the Good News of Handsome Lake at Midwinter. The afternoon (in practice we would say evening) ceremonies include most of the medicine society rituals, whether at Midwinter or *otherwise*. Certain kinds of stories belong traditionally to winter and to afternoon rather than forenoon. The color of a falseface mask is determined as red or black depending on whether it was made in the forenoon or afternoon. It is possible to define almost everything that can be done in terms of whether it is appropriate for before or after noon, and those things that must be done during both times generally have culturally determined appropriate variations depending on the time of day. For most people now, however, this division is perhaps meaningless except as it relates to ritual, but the perception of the day as being divided specifically by noon remains, even though this may have no affect on behaviour. A similar attitude toward midnight remains among Westerners, even though they may not order their lives according to a belief in witches.

By contrast with Western perceptions, the period of the day before noon, that is, beginning sometime vaguely in the pre-dawn or *setehjiah* and ending when the sun has passed the zenith, is especially marked, while the other part of the day is unmarked. The forenoon is special, one might almost say (to use a word strangely typical of popular description of Native americana) sacred. The after noon period is unmarked and general, although one could hardly call it secular considering the abundance of ritual that must be situated within it because of its being inappropriate to forenoon.

The year is divided in a similar way as the day, again with focus on middles rather than beginnings and endings. There is no emphasis on a New Year, or beginning of the year. New Year as applied to the Midwinter festival is inappropriate. The year is seen vaguely to begin around the winter solstice but the natural phenomenon which is followed is the rise of the Pleiades. The time of Midwinter is determined by the following moon. Midwinter is the ceremonially marked event, but a similar festival occurs in the summer,

Green Corn.

The Seneca perception and experience of time can be seen to be determined by at least three factors: 1) the natural occurrence of day, month, and year; 2) ecological factors tangent to hunting and agriculture; and 3) the culturally-determined tendency to perceive all things in terms of pairs and middles rather than beginning and end-defined wholes. Beyond these traditionally recognizable factors, one must constantly be aware of the fact that Seneca life is tempered by the influence of the White world. School and work impinge upon modern Seneca life, so that even traditionally determined aspects are affected. For example the school and work week mean that one-day calendric ceremonies, such as the Strawberry Dance or Harvest, are usually set on the nearest appropriate Saturday when more people can get away from work. Traditionally no "week" was recognized.

Qualifying Time

Up to this point the role of language and environmental factors has been approached. A third point of departure will now be taken, one focusing on ways in which the physiological human condition impinges on the perception of time. It will be noted that Seneca people relate in particular ways to the necessity of sleeping and waking, maturing and aging.

Until now everything that has been said applies to perceptions of time that largely cover the whole community. Even Christians, at least marginally, experience the aspects of Seneca culture already described. In this section, however, there is at least one point at which it is very difficult to demonstrate a generalized experience, and that is the relationship of time to sleeping and waking. Much has been said and written about the role of dreams in Seneca life and ritual, the dream guess and soul wish, and the role of dreams in diagnosing disorders and prescribing remedies. This whole configuration is beyond the scope of this study; the question now is how do Seneca people perceive the relationship between time spent in dreams and time spent awake.

Dreams are determinative in the sense that they reveal what ought to be done in waking time in order to preserve or reestablish a balanced order in waking life. They are not therefore prophetic or revelatory in the sense of being omens generally, although this too can occur among Seneca people. Dreams are generally seen as being instructive, indicating what needs to be done upon awaking. The fact that the dream experience so closely impinges upon waking action suggests that dream time and waking time are exceptionally closely connected. The Seneca does not escape from the real world into a world of dreams and fantasy. Such awareness exists in Western experience as well in the form of psychology and superstition, but Western

experience has room for escape fantasy as well. There is no evidence that this kind of quasi-other time exists in traditional Seneca experience. For Seneca people traditionally, all dreams are indicative, but there is no way of knowing to what extent things have changed in contact times.

It has by now become apparent that much in the way Seneca people relate to time has to do with the idea of what is appropriate. This is true in every society when it comes to the question of rites of passage, appropriate actions at given periods in the process of maturity and aging. Such life crises can be seen as discontinuities in time, broken time. Among the Senecas this is expressed in the rites of name-giving. Traditionally this is done for everyone during the first year of life, at the age of maturity, and then at different times as exceptional changes in life roles take place. No name change for marriage has been documented as traditional. At the present time these traditional expressions of aging apply only to a minority of people active in longhouse tradition. For some a double system of naming applies, while others only have the Western name and surname. Interestingly enough, fieldwork appears to indicate that Seneca women experience marriage as a time crisis from which they never recover. Seneca women consistently end autobiographical accounts of their lives with marriage.

Rituals at specific intervals after burial, beginning with the ten-day feast and continuing in annual death feasts, express continuity in the face of the natural discontinuity produced by death. The Seneca tendency to require perceptual balance is thus expressed in the timing of life crisis rituals, some expressing desired discontinuities during life, others expressing desired continuities after death. Preoccupation with continuity and discontinuity is to be noted throughout Seneca culture and may be seen to be one of the central themes of traditional Native narrative.

One may go so far as to suggest that the cosmological question of continuity and discontinuity is the major philosophical cleavage between the old religion with its cosmology of continuity, and the Handsome lake Longhouse revival with its acceptance that the world may end and its prophecies that it will soon do so (Deardorff, 1951 ;Parker, 1968). In the Handsome lake Gaiwiyo religion, this brings on an altogether new preoccupation with the future, the time of the end of the world.

The immanent end of the world, end of time, has a very practical effect upon behaviour and perception. Accidents, aging, wearing out of utensils, all may become omens of the end of the world. The breaking of a wampum *bead* in one of the belts during the Six Nations meeting in 1974 was interpreted by some to indicate that the world was coming to an end. The death of a chief or Longhouse official usually turns the minds of some to the end of the world. The Gaiwiyo prophecies are couched in terms of lifespans.

There are to be three generations and then the world will end. That event can therefore be expected sometime between 1875 and 2025.

The Curtin and Hewitt collection contains a story of a journey to the sky world. One of the travellers returns after a few years to find that the town from which they left had disappeared and in its place was a stand of large trees. At some distance he discovered another town, where, when he told his name and experiences, there was an old woman who verified that according to the old people in her childhood, such a party did start out from their town in their youth. This story was collected in 1896, before the theory of relativity was heard of. It is probable, however, that the story should be interpreted to indicate that time and space are intimately related in such a way that there may exist a decollage between the times of two different places (Hewitt, 1918).

An episode from this interesting story is found in another manuscript, No. 480 in the Hewitt collection in the Smithsonian Institution. It shows how the same story can be used to support different intentions. In this case rather than cosmic continuity as noted above, there is a strong emphasis on the precariousness of the world and its immanent end.

The Woman and the Dog in the Moon

A woman is sitting in the moon and she is busy embroidering with porcupine quills, near her is a bright fire, and over the fire hangs a kettle with something boiling in it, by her side sits a large dog who watches her continually. Once in a while she gets up lays aside her work and stirs whatever is boiling in the kettle, while she is doing this the dog unravels her work.

This is going on continually, as fast as she embroiders the dog unravels, or if she could finish her work, or if she ever does the end of the world will come that instant.

Celebrating Time

Enough material has been examined that it has become apparent that although Seneca people probably perceive time very much as do people all over the world, there are a few cultural determinants which affect the ways in which they related in the past and relate today to their experience of time. It appears that the idea of Native American thought as focusing on process and Western thought as focusing on static and processual concepts exist universally, but are applied perhaps to different situations empirically using different linguistic means. It has already been noted that one and the same morpheme in Seneca may carry the double semantic load of process and

stasis as semantically determinable alternatives in any given utterance. A systematic study of what situations require a processual description and what situations a static description might be of interest in mapping Native American philosophical concepts. But this remains to be done.

On the other hand, rule of thumb ethnographical responses to Native American time behaviour are also too generalized and too unsystematic to be of scientific value. One has the impression that the ethnographer fails to find a concept of waiting among Native Americans, as well as a concept of waste of time. Indians neither wait nor waste time, or from another point of view they are either waiting around or wasting time most of the time. Such perceptions fail to describe reality, but do indicate that some cultural difference does in fact exist.

Any local community will experience time in view of its local experience. As the story above indicated, change, especially physical change, might be closely allied to time. Thus the growth of trees and the shift in settlement sites are strong indexes of time. On the Allegany, the spring flood and the transporting of *lumber* to Pittsburgh must *have* been one of the most important indexes of time for many people several generations ago.

The calendric cycle in regards to ceremonial has been noted to be important. It is undoubtedly true that this cycle has been and perhaps still is so important for some people that they can be with some degree of accuracy characterized as having a "cyclical" concept of time. But this has been undoubtedly true of large segments of Western populations, where history has little meaning, but the harvest of crops, the letting out of school, and the coming of Christmas largely determine the experience of time.

In summary the following remarks can be made. Seneca language appears to have the same possibilities for expressing time concepts as does English. Beyond this, there is evidence to suggest that actual speech has been, even from precontact times, nearer to English ways of expressing time than the language itself would necessitate. Objective determinants of time are culturally manipulated to mark morning as a special time, and this affects both ritual and, at least formerly, life in general. Subjective determinants of time are culturally manipulated to mark time spent in sleep as determinative through dreaming. Finally, the philosophical concern with continuity and the end of the world is seen to be of extreme importance in Seneca life at least from the last century and maybe even longer. In sum, the distinctive characteristics of time among the Seneca people may be said to be 1) a special regard for the time of day before noon, 2) a regard for dreams as determining behaviour during waking time, and 3) a preoccupation with cosmic continuity and the end of the world. Anything more exotic must wait for systematic verification.

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