

# SEMANTIC ANALYSIS OF A FEW ANATOMICAL TERMS OF THE 18TH-CENTURY DELAWARE INDIANS<sup>1</sup>

AUGUST C. MAHR

*Department of German, The Ohio State University, Columbus, 10*

In continuance of his semantic studies in the aboriginal culture area of the 18th-century Delaware, this writer wishes to present a semantic analysis of a few representative anatomical terms. They derive from the same source which had yielded the Delaware tree names such as analyzed in last year's volume of *The Ohio Journal of Science* (Mahr, 1954). It is the Rev. David Zeisberger's *Dictionary in Four Languages*, compiled by him and a few other Moravian missionaries in the Tuscarawas Mission area of Eastern Ohio, during the 1770's and 1780's. With no discrimination between the two main Delaware dialects, Unami and Munsee, the Delaware word material is listed in the fourth column of the *Dictionary's* 362 manuscript pages; the three others being, from left to right, English, German, and Onondaga, an Iroquoian dialect of Eastern New York State: Zeisberger (1887). This remarkable work will henceforth be cited, in these pages, as, 'the Dictionary'.

Although it is not intended to burden the reader with linguistic details, yet we cannot dispense with a reasonable minimum, which is inherent in the method, and which must be, and can be understood also by him who is not a linguist.

Whenever the *Dictionary* is directly quoted, Zeisberger's and other Moravians' spelling of Delaware words, which is based on their native German phonology, has been transcribed, in these pages, into a more intelligible form of writing, mainly based on English spelling usage. For example, *sch* has been changed into *sh*, *g* into *k*, *b* into *p*, *-eu* into *-ew*, *j* into *y*; while the vowels, *a*, *e*, *i*, *o*, *u*, also when duplicated for length, have retained their German sound values, the same applying to *ch* (as in Scottish, *loch*). Wherever *tch* occurs, it is the equivalent of *ch* (as in English, *church*). Zeisberger's *wu-*, or *we-* (*w* plus sheva), is represented in these pages by *w'-*; analogously, *mu-*, or *me-*, by *m'-*. Where (') occurs, following any other consonant, or preceding a vowel, it has the sound value of a 'stop'.

These phonological approximations were adopted after a careful check against the sound conditions in Delaware dialects extant today, such as presented by Voegelin (1946).

As to our topic, it may be noted that, on the aboriginal level, the modern science of anatomy would have been entirely meaningless to the Delaware (or the other American Indians, for that matter); as devoid of sense or purpose as any of the descriptive or taxonomical studies of animals and plants, rated so highly by the White Man.

## BODY (generic)

The Delaware Indian's awareness of his body was tantamount to an awareness of the functional mechanics of the body's parts. Nevertheless, in the *Dictionary* there occurs a term *hák/ai*, defined as 'body', Germ. 'der Leib'. The stem *hak-*, likewise present in *hák/ii*, 'land, ground, soil', evidently carried a basic connotation of 'plane', in the sense of 'two-dimensional extension'. This is made

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into something tangibly concrete by the noun-affix *-ai*, which gives it the approximate meaning of 'plane-bounded something', that is, 'a tri-dimensional body'. Primarily stereometrically determined, it assumes a *personal* significance when appearing pronominally prefixed as *n'hák/ai*, 'myself', or *k'hák/ai*, 'thyself'. Not any more, though, than the English term 'person', does Del. *hák/ai* carry a connotation of 'body (as organism)'.

#### BODY (as organism)

Yet for this latter concept there also occurs a name in the Dictionary, likewise defined as 'body', Germ. 'der Leib'. It is here given analytically rewritten so as to reveal its multiple-stem connotations: *\*wachichu/'chew'/hée/pi*, a compound from *wachichu-*, '(it is) full, bulky' (also defined as 'mountain, hill'); *-achéwi-*, an adjective denoting, 'strong, spirited'; *-hee-*, a transitive-verb stem with the meaning of 'to make, to constitute (the thing indicated)'; and finally a noun-affix *-pi*, signifying 'matter, substance, material'. Hence the composite meaning of *\*wachichu/'chew'/hée/pi*, for 'body (as organism)', appears to be: 'matter constituting spirited bulk'.

#### BODY TISSUES AND SUBSTANCES

Hunters as they were, the Delaware Indians as well as other American aborigines were in the habit of cutting animal bodies apart, thus growing familiar with the various tissues and related substances; and also with the fact that these were essentially the same in the body of Man. Hence the names for them, such as listed in the Dictionary, show no discrimination either.

#### SKIN

The fact that for 'skin' there occur two terms, *chai* and *chees*, is easily explained from their Dictionary definitions: *chai* is defined as 'skin', while *chees* in one place is called 'hide', Germ. 'die Haut', but in another is defined as 'leather'. This indicates that *chees* was used for 'processed skin', as a market term in the Indian-White skin trade. It appears however that *chai* likewise could apply to 'skin (as a utility)', as long as the skin's provenience from a living animal was still in evidence; as for instance in *ask/chái*, 'a fresh skin' (*askiwi* meaning 'raw'). As a word formation, *\*ch/ái* most likely is shortened from *\*ach/ái*, in the Unami dialect, or *\*wochk/ái*, in the Munsee or Early Unami. The prefix *ach-* (*\*wochk-*) signifies '(existing) on the top, or, on the surface'. The noun-affix *-ai*, which follows it, invariably indicates 'concrete manifestation of (phenomenon mentioned)'. Hence the composite meaning of *\*ch/ái* is: 'substance existing on the surface'.

In the other term, *\*ch/hées* (Dict., *chees*), the prefix *ach* (*\*wochk-*), '(existing) on the surface', precedes a participle affix, *-hees*, signifying: '(animate) object, or person, habitually making, or doing, (the thing indicated)'. Hence the basic meaning of *\*ch/hées* is 'that which habitually makes (constitutes) something existing on the surface'.

A pertinent remark may here be in order because of its wider applicability. Doubtless it was the mere difference in the sound of their slightly divergent semantic components, which kept these two terms from being applied synonymously; for it is most likely that, among the many people who used them day in and day out, not a single one was still conscious of their basic meaning, at a time when they had long become fixedly associated, throughout the entire Delaware nation, with definite objects of definite properties. This is true not only for these two names for 'skin' but for practically all the terms analyzed in these pages; with the possible exception of the one or other in which the basic meaning may have persisted so near below the surface of the accepted usage that the popular mind had remained aware of it.

## MUSCLE

What is 'muscle' to the anatomist, is 'flesh' in common parlance, and 'meat' to the hunter. In the Dictionary, all three of these are covered by the term *\*o/yóos*, defined in one place as 'flesh', and in another, as 'meat'. Evidently it is connected, both etymologically and semantically, with Del. *\*w'yáw'/ew*, '(being) good, strong, efficient'. This connection is confirmed by an early-17th-century Virginia-Indian listing, *wiaaws* (*\*w'yáaws*), with the definition, "the Leane of any Flesh"; Strachey (1612), Sheet 9. Hence, a basic form *\*w'yáw'/s*, for *\*o/yóos*, appears indicated. It is compounded with the initial stem *\*w'yawch-*, which possessed a comprehensive meaning of 'desirable, by virtue of his (or its) superior qualities'. It is followed by the inanimate-noun affix *-s*. Thus the basic meaning of this name for both 'flesh' and 'meat' is '(desirable) quality-matter'.

## BONE

In their name for 'bone', *wochk/án*, the Delaware expressed no concern with the structural function of 'bone' as support of the animal body, but the term *wochk/án*, apart from its use as 'bone (generic)', rather applies specifically to such bone only, as forms the surface confines of body cavities, the thoracic one, for instance. The stem, *wochk-* denotes '(existing) on the surface (of)'. Combined with noun-affix *-an*, 'substance, matter, thing', the composite meaning is 'surface matter' or 'surface thing'. For this reason, none of the Delaware names for skeleton bones of the extremities is formed with *wochk/án* as a component, each having its own appellation indicative of a specific property.

## TENDON

Another body tissue significant to the Indian was the 'tendon', which was found to be connected with both flesh and bone and therefore instrumental in all outer movements of the body. Under the heading 'sinew', Germ. 'Flechse, Sehne', the Dictionary carries the following terms for 'tendon': *\*(w)'tch/héet*, or, *\*(w)'chsh'/héet*, a variant, probably Unami, of the former. Another term is *\*hát/hees*. The two first-mentioned are compounded with a stem *\*(w)'tch'kw-* (or Unami *\*(w)'sh'k-*) denoting '(being in) motion'; followed by a participle affix, *-heet*, indicating that '(it, at this moment is,) making, or doing (the thing mentioned)'; the composite meaning being: 'that which is making (bringing about) motion'.

The other term for 'tendon', *\*hát/hees*, is formed with a verb stem, *hat-*, potentially meaning, depending on the formative, either 'to be there *passively*', or 'to be there *as an agent*'. Here evidently meaning 'to be there as an agent, to function', *hat-* is combined with the participle affix, *-hees*, which signifies that a '(person or animate thing, is habitually) making, or doing (the thing indicated)'; *comp.*, Voegelin (1946), page 148, §84:9. The composite meaning is: 'that which habitually makes (causes to) function'.

These analyses clearly show that the Delaware names for 'tendon' really define the function of a nerve, rather than of a 'tendon'. This is not at all surprising in an aboriginal culture area in the 18th century, if one considers that even today popular usage in most European languages, including English and German, fails to differentiate between 'tendons' and 'nerves'. This misconception has been persisting despite the fact that not only the nature of the nerves but even the functional difference between motor and sensory ones had been discovered as early as about 300 B. C. by Herophilos of Chalcedon, a physician of the Alexandrian school of medicine. Yet the fact remains that not even Herophilos himself, though rightfully regarded as "the father of anatomy", had arrived at a clear separation of nerves from tendons; Singer (1941), page 199b.

## BLOOD

Being hunters and warriors, the Delaware naturally were familiar with 'blood' and its being encountered everywhere in the animal body, running in 'blood vessels', which spill it when cut or torn. They knew that too heavy a loss of blood resulted in death, yet they had no knowledge of its physiological function. 'Blood' to them was no more than a 'red animal-substance'. This is indicated in the basic meaning of their name for 'blood', *móok/um*, which according to the Dictionary meant both 'blood' and 'blood vessel'; while the German definitions of one of the entries, 'Blut' and 'Geblüte', show that in addition *móok/um* also signified 'the mass of blood in a living animal, or human, body'.

Evidently *móok/um* is a contraction, probably Unami, of *\*m'hóchk/'m*. Its initial component is a stem *\*m'hochk-*, often occurring as *machk-*, and denoting 'red' or 'reddish brown'. It precedes the noun affix *-m* (*-um*, *-am*), the most common meaning of which is 'animal, or vegetal, substance' respectively. This adds up to the composite meaning of 'red animal-substance'.

## FAT

This non-initial noun-affix, *-m* (*-um*, *-am*) indicating 'animal substance' is likewise present in one of the Dictionary's two names for 'fat', *\*po/'m/i*, which appears to be compounded from a stem *po-* denoting 'swelled, bulging', as for instance in *póa/wi*, 'pregnant'. It precedes the noun affix *-m*, 'animal-substance'; which is followed by the place-time adverbial affix *-ii* (*-ee*) with its dual connotation of 'now-and-here'. This gives *\*po/'m/i* a basic meaning of 'bulging animal-substance (existing) now-and-here'.

The Dictionary's other term for 'fat', spelled *wikul*, is also listed in Brinton's Lenape-English Dictionary (1889), with the definition 'fat in an animal's belly'. This limiting addition, 'in an animal's belly', prompts an analytical rewriting, *\*wíchk'w/ool*, compounded from *\*wíchk/ew*, '(it is) enveloping'; and an inanimate-plural verb suffix, *-ool*, indicating that 'they have completed (the process mentioned)'. Thus the basic meaning of *\*wíchk'w/ool* is: 'they have completed enveloping'; or more explicitly: 'they (that is, the pieces of fat) thoroughly envelop (things in an animal's belly)'.

It is semantically significant that the Dictionary lists these two terms for 'fat (as an animal-body substance)' also with the definition 'tallow', Germ. 'Unschlitt', that is, 'fat (as a utility)'; while under the heading 'grease', Germ. 'Fett, Schmeer', there occurs *\*shaach/'m/éw*. It is compounded from a stem *shaach-*, meaning 'slippery'; *-m-*, 'animal-substance'; and 3rd-pers.-sing. verb-suffix, *-ew*, 'it is'. Composite meaning: '(it is) a slippery animal-substance'. The Dictionary even goes one semantic step farther, right into the accultural domain: under the heading 'oil', that is, the White Man's vegetable oil, it not only lists *\*shaach/'m/éw* but also *\*po/'m/i*, expressly adding the definitions 'oil, fat, tallow'. This indicates that about 1782, when this entry was made, the two terms, for all practical purposes, had become synonyms.

## BILE

With no inkling of its physiology, yet as consumers of game animals all the more wary of its bitter taste, the Delaware hunters were well acquainted with 'bile'. Under the heading, 'gall', Germ. 'die Galle', the Dictionary carries two terms: *\*wíi's/'m/i* and *\*wíi's/'w/i*. Doubtless the initial component of both is a stem, *wíi's-*, 'bitter (of taste)'. In *\*wíi's/'m/i* it is combined with *-m*, 'animal-substance'; and place-time affix *-ii*, 'now-and-here'. The composite meaning is 'now-and-here (exists) bitter-tasting animal-substance.'

The other name, *\*wíi's/'w/i*, with no reference to 'animal-substance' is directly formed with an adjective *\*wíi's/'wi*, 'bitter (of taste)', again affixed with *-ii*,

'now-and-here'. Its basic meaning is '(something) bitter-tasting now-and-here'. In analogy with Shawn. *wiih/wi*, which is defined as both 'bile' and 'gall-bladder' (Voegelin, 1938-40), the same may apply to Delaware, which moreover has previously been shown to possess *one* name, \**m'hóchk/m*, for both 'blood' and 'blood vessel'.

#### BRAIN

As the Delaware name for 'brain' the Dictionary lists, *tump* (spelled: *tumb*). This term (as do other Delaware names for body parts) never occurs without a possessive prefix, mostly the indefinite possessive, *w'*-. According to an inviolable Delaware speech habit, this *w'*- (or any other possessive particle) could not be prefixed to a stem beginning with a vowel, without the intrusive consonant *-t-* between *w'*- and the initial stem vowel. Hence, *tump*, as listed in the Dictionary, must be analytically rewritten, \**wt/uump*. The stem, \**-uump*, following the possessive unit, *wt-*, is a (Unami) dialect form of \**w'mp*, which denotes something like, 'contained inside-matter'. This meaning may be inferred from the presence of \**w'mp*, with vowel implement, *-ii:* in the Dictionary, as \**wiimp* (spelled, *wimb*), defined as, 'heart of a tree'; and, again as \**wiimp* (spelled, *weimb*), defined as 'the marrow of a bone', in Strachey's vocabulary of the Virginia Indians (who were Southeast-Algonquians, if not even Delaware), which he compiled, during the first decade of the 17th century, while living among them as a companion of Capt. John Smith, of Pocahontas fame. On the basis of this dual occurrence of \**wiimp* and its definitions here quoted, it appears justified to ascribe to \**wt/uump*, 'brain', the primary meaning of, '(somebody's) contained inside-matter', or even, '(somebody's) marrow'. This seems all the more plausible since 'bone marrow' and 'brain matter' are so similar in both their appearance and consistency that those aboriginal hunters could easily have regarded them as one and the same substance.

Substance, and no more; for the Delaware term carries no connotation whatsoever of 'thinking' or 'reasoning'; nor did there, or even *could* there, exist an *associative* link between 'brain' and 'mind'. Why not, we will shortly see.

#### HEAD

This naturally leads to a discussion of 'the head', the seat of the brain. It is significant that the Delaware and the Shawnee possessed an identical name for 'head', listed in the Dictionary as \**w'iil*. This appellation is strongly evaluating, due to the fact that, again in both Delaware and Shawnee, \**w'iil-*, as a prefix in compounds, also denotes 'superior qualities', and specifically 'potent virility; valor', when applied to a male, animal or human.

In Shawnee however, but not in Delaware (or, maybe, *no longer* in Delaware) there exists another term for 'head', which is *-tépee* and occurs in compounds only; with an almost identical parallel form, (-)*tépi*, defined as 'brain', and never appearing without a possessive prefix. Its basis is a primary stem, \**l'p-*, apparently of considerable antiquity in that it joins two elemental roots. The first, *l'*-, is a primary demonstrative particle expressing 'here, there (is)', and necessarily followed by another element indicating *what* there is. In the case of *l'p-*, this implement is an equally elemental root *-'p*, denoting 'position on top' or 'upward tendency'. Thus the basic meaning underlying the Shawnee term for both 'head' and 'brain' is 'here, there (it is) on top'. Most likely, at an earlier stage of their language the Delaware too used \**tép/i* (or a similar compound) as their name for 'head', which in Zeisberger's days (about 1780) had ceded to that evaluating term \**w'iil* with its connotation of 'superior qualities'. That this is what happened may indirectly be inferred from Strachey's Virginia-Indian (Delaware) vocabulary of about 1612, which lists a name for 'head', *mmtabukham*, whose semantic nucleus likewise is that stem *-l'p-*, stressing the head's 'position on top'; Strachey

(1612), Sheet 10. Analytically rewritten, Strachey's Virginia-Delaware form presents itself as *\*m'm'/löp/úchk/'äm*, which in (Zeisberger's) Eastern Delaware, if a parallel term had existed, might have appeared as *\*w'm'/t'p/úchkw/'m*. The first component, *\*w'm'*-, most likely is an unaccented form of *\*wémi-* (Virg.-Del. *\*mémi-*?), a superlative-prefix denoting 'all, most'; *-t'p-* is that semantic nucleus, meaning 'on top'; *-uchkw-* is a stem signifying 'solid body' or 'solid object'; and *-m* indicates 'body substance, body part'. This adds up to a basic meaning 'topmost solid body-part'.

May it be noted that this primary stem *t'p* may constitute a connecting link, be it ever so small, between the East-Algonquian and the Central-American language-and-culture areas, since its relation with Nahuatlán (Aztec) *-iépe/tl*, 'mountain top, hill', can hardly be doubted.

The high evaluation of the 'head', such as implied in the name *w'iil*, cannot be due to the fact that the main nerve center, the brain, is located in the head, for it is evident that those Indians, *aboriginally*, had no notion of these brain functions. True, they knew that brain injuries usually were fatal; and that therefore the surest and quickest way of disposing of an enemy was to drive a tomahawk into his head, or to mash it with a war-club. Yet, of the deeper reason for this they had no inkling. The brain, to them, was just a body substance like any other, which did not rate a special evaluating name as did the head. It did not occur to them that this brain matter was the place where their thoughts, opinions, resolutions were hatched. Popular belief in wide areas of the earth regards the heart as the seat of human emotions. The Delaware and Shawnee, as well as other American Indians, not only shared this belief but they also regarded the heart as the cradle of rational thought, as we will presently demonstrate.

#### HEART AND THINKING

Prefixed, as so many names for body parts, with the indefinite possessive *w'*-, the Delaware term for 'heart', listed in the Dictionary, is *\*w't'éeh'*. Similar, if not even identical, parallels occur in the related East-Algonquian dialects such as Shawnee, Miami, Mohican, etc. Likewise present in Delaware, as well as in those other languages, is a stem *-t'h'*-, defined as 'to think', whose *accented* form is *(-)'éeh'*, defined as 'heart'. This basic and ancient stem *\*t'/h'* seems to be a combination of the elemental demonstrative *\*t'*-, 'here, there (it) is', with *-h'*, an equally elemental root-stem probably indicating '(involuntary) movement of body-organ'. This gives *\*t'/h'* a basic meaning of 'here is movement'; obviously referring to 'the heart-beat'.

Further, the Dictionary lists a verb *\*w'teli/t'éh'/en* with a definition 'to think', but basically meaning 'one's heart to be thus (inclined)'. Here the element *-t'éh-*, signifying 'heart', is preceded by *w'teli-*, an adverbial prefix denoting 'thus; in this particular manner', and followed by the verb-affix *-en*. While in this compound the association with 'heart' is inevitable, it is more than doubtful whether as late as the 1780's when the current meanings for *-t'éh'*-, 'heart' and 'thinking', had been entered in the Dictionary, the *primary* association with the 'beat of the heart' was still alive in anyone's mind.

#### HEAD AND "SENSES"

This should make it evident why it was hardly in honor of the 'brain' that the Delaware coined that evaluating name for 'head': *w'iil*, with its emphasis on 'superior qualities'.

Yet, not even on the most primitive aboriginal level will it be surprising to find the 'head' being rated 'superior'; for the simple reason that the human animal cannot have been long to discover his head to be the seat of four of those so-called "senses", on which he incessantly relies: sight, hearing, smell, and taste; while only the fifth, touch, extends all over the body.

## SIGHT

The Dictionary lists a term *\*(w)'sh'k/i'i/nk* in three different places, under three different headings: (1) 'eyeball', (2) 'eye', and (3) 'face'. The common denominator in these three definitions is 'movement'. This is evident from the fact that *\*(w)'sh'k/i'i/nk* is based on an intransitive-verb stem, *\*(-)'sh'k-*, 'to be in motion'. This gives the composite noun (really a participle) the basic meaning of '(thing) being in motion now-and-here (-ii-)'. This 'being in motion' most of the time was observed as the truly distinguishing feature of the 'eye', particularly the 'eyeball', and thereby of the human 'face', and led to the coining of that one name for all three of them. Considering the paramount importance of the eye for the hunter-warrior, one is surprised to find in this Delaware term for 'eye' no connotation whatsoever of 'sight' or 'vision'.

Among the various verbs defined in the Dictionary as 'to see', 'to look', 'to gaze', etc., the intransitive *\*wáap/iin* clearly is the one which means 'to see (as function of the eye)'. It is based on an East-Algonquian stem *waap-*, primarily signifying 'light, bright, white, shining, etc.'; Voegelin (1938-40), pages 411-412; the final *-iin* is an intransitive-verb affix indicating 'to be (in said condition)'. Thus *\*wáap/iin* basically means 'to be in a condition of light, brightness'. Evidently the idea behind it was that the eye, although *not the source* of light, yet *made it to be light* for its possessor. Goethe, the German poet, expressed a similar thought in these two lines: *Wär' nicht das Auge sonnenhaft,/die Sonne könnt' es nicht erblicken*" (in translation: "Were not of sun the eye possessed,/the sun it never could perceive").

It may be noted that the Delaware term for 'being blind' metaphorically, and maybe even euphemistically, stated that the afflicted person was 'blindfolded'. The term for 'being deaf', by the way, is a similar understatement, implying that the deaf person 'by and by is thoroughly stopped up'.

## HEARING

The organ of hearing, 'the ear', is named in Delaware *\*w'hitt/ew/achkw*, which usually occurs in the plural. As so many other names for body parts, it is not used without a possessive prefix, here *w'-*. This precedes a stem *hitt-*, which primarily indicates 'spreading apart' (as in *m'hitt/ukw*, 'a tree', and *\*m'hitt/achp/-oákan*, 'childbirth'). It is combined with 3rd-pers.-sing. verb-suffix *-ew*, 'it is, it does (the thing indicated)'; which is followed by a non-initial noun-stem *-chkw* (*-uchkw*, *-achk*, *-aak*), basically meaning, 'wood, tree, solid object (in compounds)'; Bloomfield (1946), page 105, §60. This adds up to the composite meaning '(somebody's) solid object, it spreads away', that is, from the side of the head.

There is no Delaware intransitive verb for 'to hear (as function of the ear)'. The transitive one which comes closest to it is *\*ach/kiin/chen*, listed in the Dictionary under the general heading 'to hear'. Its composite meaning approximately is 'to receive-by-ear (*-ch/en*), very sharply (*ach/kiin-*)', and it is necessarily to be followed by a grammatical object. The Dictionary's definition is 'to hear well'.

A close second, likewise occurring under the heading 'to hear', is *\*pen/t/ámen*. Its initial component is *\*pen/t* (properly, *\*pem/t*), a combination of a stem *pem-* denoting 'movement onward, or toward', and *-t-*, instrumental affix implying 'by ear'. This is followed by the transitivizing verb-affix *-amen*, 'to carry out (action indicated)'. Hence, the basic meaning of *\*pen/t/ámen* is 'to carry out action of moving toward (an object) by ear'; that is, 'to really hear it'.

## SMELL

For the organ of smell, 'the nose', a Delaware name, *\*w'kéw/an*, is listed, which in another place of the Dictionary is defined as 'beak (of a bird)'. From

Shawnee parallels it becomes apparent that in both dialects the term denoting both 'nose' and 'beak' was based on East-Algonquian \**k'w*, a stem indicating 'projecting freely (from basis); being unattached'; Voegelin (1938-40), pages 308-309. Prefixed with the indefinite-possessive *w*-, and followed by the noun affix *-an*, \**w'k'ew/an*, 'nose, beak', reveals a basic meaning of '(indefinitely possessed) freely-projecting thing'.

For the personal-transitive verb 'to smell (something)' the Dictionary carries *mel/ám*, a verb in which the transitive *-aam* is preceded by a stem *mel-* (*m'l*-). Since evidently it is likewise present in Shawn. *mool-*, 'awareness of danger, of future happenings' (Voegelin (1938-1940), page 366), the accepted meaning of Del. *mel-*, 'smelling; perceiving by nose', may well represent a very ancient meaning elementally lodged in East-Algonquian \**m'l*, 'getting the scent of something', occasionally as a foreboding of impending danger.

Here is the reason why this stem *m'l* appears almost primeval: being a direct opposite to the primary root *-p'*- 'position on top, upward tendency' (*cf.*, above, page 367), *-m'*- indicates 'position below, downward tendency'; note that \**p/uchkw*, basically meaning 'solid thing (*-chkw*) tending upward (*-p-*)', signifies 'a rock, cliff', while \**m/úchkw*, 'solid thing tending downward (*-m-*)', is the Delaware name for 'beaver' (going down into the water). In *m'l*, this root *-m-*, 'tending downward', combines with another primary root, *-l-*, evidently an instrumental indicating that something is done by 'breathing'; note: \**l'v'éh/heen* (or, with emphatic stem reduplication, \**l'h'v'éh/heen*) 'to draw breath' (*cf.*, above, page 368: (*-l'éh'*), 'heart'). This gives *m'l* a basic meaning of 'tending downward breathing', which perfectly describes an animal, such as a dog, picking up the 'scent' of something 'by sniffing' the ground.

May it be remarked that the shift of meaning, in Shawnee, from 'scenting (by nose)' to 'becoming aware (of danger, or future events)' is far from being limited to Shawnee but rather is a wide-spread semantic phenomenon. The English-speaking nations 'scent a plot'; the Germans say 'Gefahr wittern' ('to scent danger'); the French speak of 'avoir vent de quelque chose', which literally means 'to have the wind of something', 'le vent' being 'the wind' which carries 'the scent'.

#### TASTE

The Delaware knew the surface of the tongue to be the seat of their "sense" of 'taste'. Sufficient evidence of this is their personal-transitive verb \**noochkwá/t/amen*, defined in the Dictionary as 'to lick with the tongue'. In its basic meaning, though, this Delaware verb possesses no connotation whatsoever of either 'licking' or 'tongue', but rather is formed with a personal-transitive verb-stem \**noochkw-*, which indicates 'examining, investigating'. Semantic analysis of its remaining components shows that \**noochkwá/t/amen*, 'to lick with the tongue', basically means 'person to cause (*-t/amen*) the examining (of something)'. Nothing is said about 'the tongue' being caused to do the examining.

Neither does the Delaware name for 'tongue', \**w'il/a'no* carry a connotation of 'taste'. Except for their initial component, the prefix *w'il-*, 'of superior quality', neither Del. \**w'il/a'no* nor its Shawnee parallel \**w'il/a'ni* can be analyzed with certainty. It is not unlikely, though, that there exists a connection with Shawn. *w'iilenwi*, meaning 'fat part of meat' (that is, 'superior meat'), which even may be a more basic, and less specific, form of Shawn. \**w'il/ani*, 'tongue'; the same applying, analogously, to Del. \**w'il/a'no*, 'tongue', with a conjectural basic meaning of '(thing) being of the nature of superior meat', in brief, 'being fleshy'.

With no semantic relation to 'tongue', two transitive verbs occur in the Dictionary, defined as 'to taste (something)': *kut/ánt/amen*, and *mesh/ánt/amen*. Both employ the formative complex *-ant/amen* meaning 'person acting (*-ant-*) to carry out (*-amen*) (the action indicated)'. In the one, this formative complex

is preceded by a verb-stem \**ku't*-, 'to swallow'; in the other, by a verb-stem *mesh*-denoting 'to stop, halt, impede'. It amounts to this: 'to taste something' according to the one verb, is tantamount to 'swallowing' it. According to the other, it is identical with 'to suspend the swallowing of it' long enough to get its 'taste'.

In analogy to the other categories of sensory perception previously examined, the Dictionary lists numerous verbs indicating diverse aspects of 'taste'; specifically, 'taste sensations' evoked by various substances. Such verbs, for instance, as 'to taste pleasant', or 'unpleasant', 'sweet', 'sour', 'bitter', etc. Most of these are formed with stems entirely unrelated to each other, and since they have no bearing on anatomical terminology they will not be discussed in these pages.

#### SUMMARY

This semantic analysis of Delaware anatomical terms may be summed up in the following statements: (1) in Zeisberger's days, each of these aboriginal terms possessed a popular meaning, accepted and known as the name of a body tissue, body substance, etc. Semantically, they are *secondary* meanings which correspond with the definitions of the terms in the Dictionary; (2) by an analysis of its Delaware multiple-stem equivalent, each of these *secondary* meanings can be traced to its basic significance, which is revealed by the composite meaning of its *primary* constituents; (3) while all of these basic meanings are descriptive, some also are evaluating, others stress the consistency of a body substance, others emphasize the dynamic function, or the mere motion, or some other striking features, of inner or outer parts of the body; (4) with a few obvious exceptions, these basic meanings are most unlikely to have survived in the consciousness of the 18th-century Delaware, from whose lips Zeisberger and his collaborators had gathered this anatomical terminology and its current meanings, such as recorded in the definitions of the Dictionary.

#### LITERATURE

- Bloomfield, L. S.** 1946. Algonquian. Linguistic Structures of Native America. New York, Viking Fund Publ. 6: 85-129.
- Brinton, D. G.** 1888. A Lenâpé-English dictionary. The Historical Society of Pennsylvania, Philadelphia.
- Mahr, A. C.** 1954. Aboriginal culture traits as reflected in 18th-century Delaware Indian tree names. Ohio Jour. Sci. 54: 380-387.
- Singer, C.** 1941. Medicine, History of; caption, Encyl. Brit. 1941, 15: 197-206.
- Strachey, W.** 1612. Harrington, J. P., ed. The original Strachey vocabulary of the Virginia Indian language. Smithsonian Institution, Bur. Am. Ethn. Bull. 157 (Anthrop. Paper 46), pp. 189-202, plus sheets 1-16.
- Voegelin, C. F.** 1938-40. Shawnee stems, etc. Indiana Historical Society. Prehistory Research Series, Vol. I.
- . 1946. Delaware, an Eastern Algonquian language. Linguistic Structures of Native America. New York, Viking Fund Publ. 6: 130-157.
- Zeisberger, D.** 1887. Zeisberger's Dictionary. A Dictionary in four languages, viz. English, German, Onondaga, and Delaware (fol. 1-362). MS Harvard University Library; publ. by E. N. Horsford, Cambridge, Mass. Out of print.