PRELIMINARY REPORT ON THE LINGUISTIC CLASSIFICATION OF ALGONQUIAN TRIBES

BY

TRUMAN MICHELSON



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INTRODUCTION

In order to determine the linguistic classification of the Algonquian tribes, the writer visited in the season of 1910 the Piegan of Montana, the Northern Cheyenne of Montana, the Northern Arapaho of Wyoming, the Menominee of Wisconsin, and the Micmac of Restigouche, P. Q., Canada. Later in the year the Ojibwa of White Earth (Minnesota) sent a delegation to Washington, and the oceasion was utilized to procure a few grammatical notes from them. During the season of 1911 he visited the Fox of Iowa, and the Sauk, Kickapoo, and Shawnee of Oklahoma. In the winter of 1911-12 he spent a few weeks at the nonreservation school at Carlisle, Pa., and there had an opportunity to obtain some notes on Northern Arapaho, the Cree of Fort Totten (listed officially as Turtle Mountain Chippewa), Menominee, Sauk, Ojibwa, Ottawa, Potawatomi, and Abnaki. The results of the field work of 1911 and 1912 could be incorporated only in the proof-sheets of the present paper. For some Algonquian languages dependence has also been placed on the unpublished material of the Bureau, some manuscripts of the late Dr. William Jones (for Kiekapoo) and of Mr. W. Meehling (for Malecite), and the published material. Prof. A. L. Kroeber very kindly furnished some of his Arapaho texts to supplement those of the writer. Prof. J. Dyneley Prince generously offered the use of his collection of consonantic clusters in Passamaquoddy and Abnaki. Owing to unforeseen circumstances these can not be published here, but they have been of assistance in determining the general character of Eastern Algonquian, and his helpfulness is appreciated. Thanks are due also to Dr. Robert H. Lowie, of the American Museum of Natural History, for the privilege of using some Northern Blackfoot texts. Dr. Edward Sapir, of the Geological Survey of Canada, with characteristic liberality, placed his field-notes on Cree, Montagnais, Abnaki, Malecite, and Delaware (collected in the season of 1911) at the

writer's disposal; but they were received too late to make possible the insertion of extracts, except in the proof-sheets.

While it is too early to publish in detail the results of the writer's investigations (this applies especially to Blackfoot, Chevenne, and Arapaho), still in view of the purely geographic classification by Mooney and Thomas in the Handbook of American Indians, C. C. Uhlenbeck in *Anthropos* (III, 773–799, 1908), and F. N. Finck in his Die Sprachstämme des Erdekreises (Leipzig, 1909), a preliminary linguistic report may be acceptable.

The linguistic classification of Algonquian tribes in the present paper is based essentially on the occurrence of consonantic clusters and a few other phonetic phenomena, and on the pronominal forms of the verb.

It will be seen that the various tables introduced throughout this paper to illustrate grammatic forms are rather uneven, because in many cases the writer has not ventured to abstract the personal terminations proper from the examples given in the authorities. It will be remembered that none of the older and only a few of the recent writers take into account instrumental particles; the result (combined with inaccurate phonetics) has been that often it is too hazardous to venture an opinion as to what the form actually was. Likewise the exclusive and inclusive first persons plural are frequently not distinguished, and here the writer has had to follow his own judgment.

In conclusion, his thanks are due his colleague, Dr. John R. Swanton, for assistance in preparing the accompanying map (pl. 103).

Notes on Pronunciation

It is believed that the reader will have little trouble in understanding the symbols employed in this paper, as much the same system is employed as in the Handbook of American Indian Languages (Bulletin 40, B. A. E.). However, the following notes may prove useful.

Piegan:

x is post-palatal, approximately between German ch in ich and ch in bach.

x is post-velar.

There are no sonant stops.

CHEYENNE:

 \underline{w} is a voiceless semivowel.

v is bilabial.

x is the surd velar spirant.

c is the surd alveolar spirant.

ě and ŏ (employed by R. Petter) represent whispered vowels.

Акарано:

x is the surd velar spirant.

x is the same, weakly articulated.

tc is an intermediate with predominating surd quality, approximately between English ch in church and j in judge.

b is a pure sonant.

g is post-palatal; its sonancy is not so marked as that of b.

The surd stops are ordinarily unaspirated; when aspirated, the aspiration is indicated by (').

 \hat{e} is very open.

 θ is a surd spirant articulated between the tongue and upper teeth, nearly on the flesh.

(') indicates aspiration.

n indicates the nasality of the vowel.

CREE(FORT TOTTEN):

I has the sound of obscure i.

 \bar{c} is long and close.

(') indicates an aspiration; it is approximately a weak x; 't is apt to be heard as θt . Pure surd stops are easily distinguished, but the corresponding sonants are stronger than those of English; final q gives almost the impression of aspirated k (k).

CREE (RUPERT'S HOUSE: see p. 247):

ts' is alveolar, between ts and tc.

o is close and short.

CREE (MOOSE):

 \bar{a} has the sound of long close \bar{e} .

Montagnais (from Doctor Sapir's notes):

ts' is palatized, between ts and tc.

 $\hat{\epsilon}$ is long and very open.

MENOMINEE:

 $\check{\bar{e}}$ $\check{\bar{i}}$ and $\check{\bar{o}}$ $\check{\bar{u}}$ are nearly indistinguishable.

g is very strong; finally it gives nearly the same impression as aspirated k (k).

FOX, SAUK, AND KICKAPOO:

For Fox, see Handbook of American Indian Languages (Bull. 40, B. A. E.), pt. 1, pp. 741–745.

Here it may be remarked that in all three dialects there are no true sonams; they are much stronger than in English.

 tk , tt , and tp among the younger people are but feebly to be distinguished from k,t, and p, respectively.

tc in Fox and Sauk is intermediate, nearly between ch in chill and j in judge; in Kickapoo it is a pure tenuis, approaching ts.

The final vowels are spoken much more faintly by the younger generation than by those advanced in years.

The writer believes Doctor Jones's hw is simply voiceless w (\underline{w}).

SHAWNEE:

Surd and sonant are difficult to distinguish.

 θ is the surd interdental spirant.

 \tilde{c} \tilde{i} and \tilde{o} \tilde{u} are extremely difficult to distinguish.

The final vowels are somewhat more easily heard than in Fox. Sauk, and Kickapoo. to among the older generation is pronounced as such; among the younger people it resembles more nearly to in sound.

n and m are consonants that are hardly sounded—merely indicated—in words by themselves; a vowel preceding renders them full sounding.

(*) indicates an arrest.

OJIBWA (of Baraga):

 \tilde{a} has the sound of \tilde{a} .

Algonkin (of Lemoine):

 \hat{a} has the sound of \tilde{a} .

Ottawa:

 $\bar{\imath}$ is long and close.

Surd and sonant (especially when final) are difficult to distinguish; final g has nearly the same sound as k^{ϵ} .

 η is post-palatal.

DELAWARE:

n', etc. of Zeisberger indicates n followed by an obscure vowel.

Abnaki (of Sapir):

i has the sound of i.

q has the sound of close q.

4 has the sound of nasalized obscure 4.

MALECITE (of Sapir):

 \hat{e} is long and very open.

p has the sound of p weakly articulated.

Passamaquoddy:

 \mathring{u} has the sound of oo in good.

m is syllabic.

MICMAC:

g has the sound of velar g: apt to be heard as r.

 \dot{l} and η are syllabic.

ALGONQUIAN LINGUISTIC GROUPS

The Algonquian tribes linguistically fall into four major divisions, namely: Blackfoot, Cheyenne, Arapaho, and Eastern-Central. Each division is discussed in the following pages under the appropriate head.

Blackfoot (Siksika)

This division includes the Piegan, Bloods, and Blackfeet proper. According to Wissler,¹ the linguistic differences among the tribes are mainly in the choice of words and idioms. The same authority states that the Northern Blackfeet seem to differ more from the Piegan than the latter do from the Bloods. The present writer can describe only the language of the Piegan of Montana from personal observation. It is characterized by an abundance of harsh consonantic clusters and long consonants. The latter occur usually between vowels but may occur in clusters. The first of the following tables shows all the clusters ² of two consonants found in one of the writer's longer texts; the second, all the clusters of three consonants in the same text:

Initial			Second	member	of cluster		
conso- nant	q	k	t	p	8	ts	tc
k					ks		
t							ttc
m					ms		
8		sk	st			sts	stc
ts		tsk		tsp	tss		
Ţ.		ұk	Ţt.	Įp.	ŢS		яtс
x	πq		xt	rp			rtc

Social Life of the Blackfoot Indians, p. 8, New York, 1911.

² In this and similar tables some combinations are given which are not clusters in the strictest sense of the word, but they are introduced here for convenience and on account of their importance.

Initial consonant	2d conso- nant	3d eonso- nant
k	$\left\{\begin{array}{cc} k \\ s \end{array}\right.$	s k
t	ts x	p { t s
p	s	$\left\{\begin{array}{c}k\\s\end{array}\right.$
n	8	k
s	k t s	$ \begin{cases} k \\ s \\ ts \\ t \\ ts \end{cases} $
	ts	$\begin{cases} k \\ p \end{cases}$
ts	r	k
ž	k	8
χ	q	t

SUMMARY

Consonants permitted initially: $k, t, p, n, s, ts, \tau, \tau$. Consonants permitted medially: q, k, t, s, ts, τ . Consonants permitted finally: k, t, p, s, ts.

It is likely that ts and tc represent a sound intermediate between these two. The following clusters also were noted in the same text: xqtt, skks, stspss.

The following are all the clusters of two consonants found in three texts of Northern Blackfoot taken down by Dr. Robert Lowie:

Initial conso- nant			Second 1	member	of cluster		
	k	g	t	p	8	8	m
q					qs		
k					ks		
p					ps		
8	sk		st	sp		sts	
x	xk	xg	xt	xp	IS	xts	rm
ts	tsk				tss		

It is clear that xg is due to mishearing.

The following table shows all the clusters of three consonants in the same texts:

Initial consonant	2d conso- nant	3d conso- nant
k	8	k
p	8	$\left\{\begin{array}{c} k \\ t \\ p \end{array}\right.$
8	k ts	$\begin{cases} k \\ s \\ k \end{cases}$
ts	ts	k
x	$\left\{\begin{array}{c} k \\ q \\ p \\ t \end{array}\right.$	s t

The following cluster of four consonants occurs in the same texts: xkst.

It will be seen by comparing the tables of such other Algonquian languages as have numerous clusters that such a condition as obtains in Blackfoot (Piegan) is unique. So far as the writer can judge, the clusters are genuine, not pseudo. The origin of most of them is obscure. Some are due to the assibilation of t before i. It is likely that the cluster sk is original, as can be demonstrated for st in certain cases. For the latter, note $nestoa^3$ 1 (chances not to occur in the writer's texts); Cree nista 1 also; and the instrumental st in $nitcitanistaw^a$ 1 said to him $(ni-aw^a$ 1—him; stem ani) is to be associated with a similar instrumental in Cree.

However, the formation of the verbal compounds is typically Algonquian and most of the personal terminations of the present independent mode are patently Algonquian. The terminations in $-pinn\bar{a}n^a$ (e. g., $ni-pinn\bar{a}n^a$ we [excl.]) are to be associated with Fox $-pen^a$, Passamaquoddy -ban. Similarly, $ki-puw\bar{a}wa$ ye, is to be connected with Fox and Shawnee $-pw^a$, Passamaquoddy -ba. The form $ki-\bar{a}w\bar{a}w^a$ ye—him has an exact equivalent in Cree and Menominee. The forms $ni-\bar{a}w^a$, $ki-\bar{a}w^a$ i—him, thou—him, respectively, agree with Cree, Fox, Menominee, and Delaware (one form) as opposed to Ojibwa, Algonkin, Shawnee, and Eastern Algonquian.

Forms like ki— $oxpinn\bar{a}n^a$ we—thee, you (not in writer's texts; based on Tims; cf. Uhlenbeck, op. cit., p. 8, bottom) certainly sug-

¹ For one or two probable sources besides those given here, see p. 232.

² This change has been already noted by C. C. Uhlenbeek, Original Blackfoot Texts, p. 95, Amsterdam, 1911.

³ J. W. Tims, Grammar and Dictionary of the Blackfoot Language, London, 1889.

⁴ J. Horden, Cree Grammar, p. 99, London, 1881.

gest Passamaquoddy k—lpen, which might be taken for k—ulpen, but as a matter of fact the u has nothing to do with the termination; owing to the phonetics of the language if a vowel following l is eliminated, thereby causing the l to become final or immediately to precede a consonant, the preceding vowel takes an o or a u tinge (see the discussion of Eastern Algonquian, p. 283). Now is it not possible that there is a similar phenomenon in Piegan and that the termination should really be given as ki— $xpinn\bar{u}n^a$, in which the x represents a secondary change of original n, as does the l of the Passamaquoddy form? The same query would apply to certain other forms not dealt with here.

To judge from Tims, the termination for we(exel.)—him agrees in formation with Cree and Ojibwa. The agreement with the latter is no doubt purely fortuitous.

Forms like nestoa (Tims) I show agreement with Cree.

According to the writer's information some demonstrative pronouns have reference to the state of the object designated, that is, whether at rest or in motion; but some informants contradict this. It is a matter that deserves special attention.

Summing up, we may say that though Blackfoot must be classed apart from Eastern-Central Algonquian, it has the closest affinities to Fox, Eastern Algonquian, and Cree.

CHEYENNE

Cheyenne possesses consonantic clusters, though not in so great profusion as Piegan. By consulting the various tables it will be seen that some of the clusters are peculiar to the language. As is mentioned more than once in this paper, the fact that such Algonquian languages as have numerous clusters differ with respect to the types of clusters tends to show that most of these are unoriginal.

The following clusters of two consonants were noted in three of the writer's Cheyenne texts:

Initial			Second	member	of cluster	г	
con- sonant	k	t	n	s	c	ts	υ
t	tk					tts	
n				ns	nc		
8	sk	st.				8ts	
c	ck	ct					cv
ts	tsk		tsn				
r	xk	xt		xs		xts	
v				vs	vc		

¹ Or it may be that the original sound is lost and that the x is an accretion, as x in $ki-ixpuw\bar{a}w^a$ YE-ME (cf. Fox ke-ipwa),

The cluster tsn so far as noted is a pseudo-cluster, but the others, so far as the writer has been able to analyze them, are genuine. The following clusters of three consonants were noted in the same texts: nst, xst, mst, nsts, stn, the last being certainly a false one. The following clusters were noted as occurring finally: sts, ns, nsts, xs, vs. A single cluster (st) was observed initially, and that but once; hence it is likely an initial vowel was not heard.

The origin of the clusters that apparently are genuine is practically unknown. One case of xp seems merely to have developed from p, e. g., woxpi white (Fox wapi). The clusters sk and st are probably original (see discussion of Cree, p. 238. Unfortunately the writer has not been able to find corresponding expressions in Cree for such Cheyenne words as possess these clusters).

There are a number of words of patent Algonquian origin. Examples are: woxpi white, $mah\bar{\sigma}^i\underline{w}iw^a$ wolf, nic two, nive four, $mataxtu^a$ ten, $matama^a$ old woman, $n\bar{a}$ and, misi eat, mi give, $\bar{a}m\bar{i}$ move.

It should be noted that under unknown conditions Central Algonquian n appears as t (compare the treatment in Cree, p. 239; but the two languages do not agree wholly in the usage); furthermore, this secondary t, as well as original t, becomes ts before a palatal vowel. Examples are hitana MAN (Fox ineniwa), nitanōwitatsi'ma Let us Gamble together (tsi = Fox, etc., $t\bar{\imath}$). Original k under unknown conditions appears as n. This, together with the other phonetic changes stated above, renders most of the forms of the independent mode intelligible. Thus, ni—ts i—thee; ni—tsemě i—you; ni tsemenő we(excl.)—thee; ni—ěmenő thou—us(excl.).1 It will be noted that the structure for I—YOU, WE (excl.)—THEE agrees with Natick, Algonkin, and Peoria. The terminations for we (excl. and incl.), intransitive, approximate the Ojibwa type. The termination for you (intrans.) is $ni-m^a$ (Petter $ni-m\check{e}$), which phonetically approximates Algonkin, Ottawa, and Ojibwa rather than Peoria. (It may here be mentioned that Peoria, Ottawa, and Ojibwa all belong to the same division of the Central Algonquian languages.) The termination for we(excl.)—him (na—on, Petter) has a correspondent in Natick and Eastern Algonquian. The terminations with the third person singular animate as subject are obscure. Those with the inanimate plural as objects patently are to be connected with the nominal suffix for the inanimate plural. With the assumption that original intervocalic q is lost, some additional forms take on a more Algonquian appearance. So violent a change is paralleled by the apparent change of -p(A)m- to -m- and -p(A)t- to -xt-.

¹ The last three forms are taken from Rodolphe Petter's Sketch of the Cheyenne Grammar, in *Mem. Amer. Anthr. Ass.*, 1, pt. 6, 1907.

Cheyenne possesses a mode that is frequently used in narration as an indicative; it happens that but few of the forms occur in the writer's texts. The third person singular animate, intransitive, ends in -s: the third person plural animate, intransitive, in -wus (the initial sound is represented by w merely for convenience. The writer has been unable to determine its exact value; it is heard now as v, now as w; the only thing absolutely certain is that it is bilabial); HE—HIM is-us; THEY (an.)—HIM -owus; to distinguish third persons, the intransitive third person has an obviative -niwus. Assuming the phonetic change of tc to s, it will be seen that the forms resemble the Fox, Shawnce, and Peoria eonjunctive. The ni of -niwus corresponds to the ni of Fox -nitci, etc.

The termination of the plural inanimate can be derived from the normal Central Algonquian termination by the phonetic laws stated above. At the same time it greatly resembles the Natick and Piegan forms, which apparently can not be derived from this source.

Summing up, we may say that although Chevenne must be classed as a distinct major branch of Algonquian languages, yet it has close affinities with the Ojibwa division of the Eastern-Central major division: but as consonantic clusters beginning with a nasal and followed by a stop are not permitted, and the clusters sk and st occur, we must assume rather a more northern origin. If the Moiseyu really are the Monsoni, as James Mooney thinks (Mem. Anthr. Ass., I, 369, 1907), there is historical support for this assumption. The fact that Natick in the ending of the termination of the present independent mode resembles the Ojibwa type probably led Petter (ibid., 447) to consider Cheyenne 1 closer to Natick. The latter does permit consonantic clusters with a nasal as the prior member and a stop as the second member, but it does not agree entirely with Ojibwa in this usage; note especially the present suppositive (subjunctive) mode. But it should be noted that the cluster st is not permitted, though sk is; and the eluster st is a distinct trait of Algonquian languages of northern origin (cf. Eastern Algonquian, Montagnais, Cree, Blackfoot).

Arapano

This division includes Arapaho proper, Gros Ventre (Atsina), two dialects that are on the verge of extinction, and one dialect that at present is either absolutely extinct or is spoken by only very few indi-

¹ According to the writer's present information there are two Sutaio (a tribe that became incorporated with the Cheyenne) who can still speak their own language, namely, White Bull (Ice) of the Northern Cheyenne and Left Hand Bull of the Southern Cheyenne. Unfortunately the former ceased work before any texts could be secured from him, and the writer has heard only recently of the latter's ability to speak his own language. For this reason no accurate idea of the language can be given here. Cheyenne traditions are unanimous, however, in stating that the language was intelligible to the Cheyenne.

viduals. The writer can describe from personal investigation only Arapaho proper; he has been informed by members of this tribe that Gros Ventre is readily understood by them. According to Dr. A. L. Kroeber, the dialect mentioned as possibly absolutely extinct closely resembled Blackfoot; according to information received, the Piegan of Montana say a body of them joined the Arapaho and still speak their own language. This matter requires careful investigation. It is to be hoped that Doctor Kroeber will publish at an early date his comparative vocabularies of the dialects and also those phonetic laws of Arapaho proper that he has discovered and courteously communicated to the writer.

That Arapaho is an Algonquian language is shown by such words as $h\bar{i}ne'n$ man, $ni^nse^{\epsilon}e$ my elder brother, $no^{n\epsilon}t\hat{a}ne^{\epsilon}$ my daughter. $n\bar{e}'s\bar{i}'$ MY GRANDCHILD, $n\bar{i}s^i$ TWO, $n\ddot{a}s\hat{a}$ THREE, $y\bar{e}^in^i$ FOUR, $b\ddot{a}t\ddot{a}t_Ax$ TEN. bätebi old woman, netä my heart, hä sitä ea it is hot; as well as by the system of the possessive pronouns. Some of the more radical phonetic changes that the author has observed (some of these had been anticipated by Doctor Kroeber) are tc becomes θ : $-ni\theta$, Fox $-nitc^i$; p becomes θ : netc' water, Fox nepi, netc' my arrow, Fox nepi; k becomes h: hi- THY, Fox ke-, hâwa Not, Ojibwa kāwin; p becomes q(k): $s\bar{\imath}s\bar{\imath}g\hat{a}^{\varepsilon}$ DUCK, Fox $c\bar{\imath}c\bar{\imath}p^{a}$; w becomes n: $no^{n}ku$ RABBIT, Ojibwa $w\bar{a}'p\bar{o}s$; m becomes b (and w?): bätebi old woman, Fox metemo'a, bätätax ten: skw becomes x': $w_A x'^a$ bear, Cree $m_A s k w_A$, Fox $m a' k w^a$. With the assumption that y becomes n, and g + a, a final whispered vowel, becomes ⁶, a number of verbal pronominal forms grow clearer in formation. (How these changes may distort words almost beyond recognition may be shown by $ni^x tceb g \hat{a} hut$ He Runs by: ni(x) is a common verbal prefix (?); $tceb = Fox pemi; gahu = Fox -pah\bar{o}_{-}; -t'$ the pronominal ending.) Doctor Kroeber has already remarked that in nominal forms the inanimate and animate plurals are not distinguished, though they are in verbal forms.¹ The exclusive and inclusive first person plurals are not distinguished in verbal forms, according to information received by the writer, but they certainly are in the possessive pronouns. It is thus seen that Arapaho has become very specialized. In the writer's judgment, no Algonquian language has deviated farther from the normal.

Arapaho is characterized by very weak nasal vowels, which when pronounced rapidly, however, betray scarcely any nasality. The glottal stop is extremely common. There are a number of consonantic clusters, but none of more than two consonants.

¹ See Bulletin of the American Museum of Natural History, vol. XVIII, p. 5, 1902.

The following table shows all the consonantic clusters found in the writer's Arapaho notes of 1912:

				Arapaho)		
Initial conso- nant			Second 1	nember (of cluster		
	k	g	t	n	1	tc	8
t				tn	t		
b		bg		bn			bs
8	sk		st	sn	8		
x		xg	πl	rn		rtc	•

It has not been feasible to separate genuine and pseudo clusters. The x before t and tc is exceedingly weak. The clusters in the writer's Arapaho notes of 1910 were of the same general character but contained θg , θd , θn , and vn also. No clusters begin or end a word.

It will be seen that the clusters differ fundamentally in character from those of Piegan, Cheyenne, and Eastern Algonquian. This fact points decidedly to the clusters, with certain exceptions, in all of these languages as secondary in nature and not original.

The grammatical analysis is extremely difficult. It is clear that many secondary phonetic changes have taken place in the welded verbal compound, and so have obscured the stems. However, a sufficient number are clear enough to warrant the assertion that the general structure of Arapaho agrees essentially with the general analysis of Algonquian given by Dr. William Jones. The instrumental particles occur in the correct position. Of these the writer has been able to recognize b (Fox, etc., m; no m exists in Arapaho), n, h, t, w.

The personal pronouns of the independent mode (with certain apparent exceptions in the negative verb) are suffixed. Here is a very striking difference between Arapaho and normal Algonquian. The fact that the terminations are suffixed (not partially prefixed and partially suffixed) suggests that in origin they are conjunctive endings (compare Micmac), and so far as the writer has been able to find cognates at all for them (in only a decided minority of instances), it has been with the terminations of this mode. Doctor Kroeber, above cited, has noted that Cheyenne n- as the prefix of the second person singular, independent mode, apparently corresponds with Arapaho -n. This the writer considers improbable, as it would be incredible that in Arapaho a verbal pronoun that in all other Algonquian languages is prefixed, should be suffixed.

There are some formations that seem thoroughly un-Algonquian; e. g. $h\hat{e}\theta o^n hok$ he, she told him, her, them (an.), the obviative of which is $h\hat{e}\theta \bar{e}^i hok$. This formation is rare; the writer has met it but a few times, always in words of the same, or approximately the same, meaning. The stem of the examples given is hok; $h\hat{e}$ is allied with $h\hat{e}\bar{e}$; so far as known at present there are no phonetic equivalents for the incorporated pronominal elements in any other Algonquian language. The prefixing of the termination for he—him, her, them (an.) before the initial stem is thoroughly un-Algonquian, and can not be paralleled elsewhere in these languages. The occurrence of the objective pronominal elements immediately after an initial prefix (?) is another anomaly.

To sum up, Arapaho seems to have become specialized at an early period, but it is likely that when the phonetics of the language are better understood more points in common with Eastern-Central Algonquian will become apparent; and it is possible that borrowing from a non-Algonquian stock may be shown.

EASTERN-CENTRAL

Although the Eastern branch presents considerable differences from the Central branch—chiefly in the abundance of consonantic clusters—it is perfectly obvious that, compared with Blackfoot, Cheyenne, or Arapaho, it belongs intimately with the Central group. See the discussion of Eastern Algonquian (p. 280).

CENTRAL SUBTYPE

All these dialects are very intimately connected. To say that one dialect is not closely connected with another means merely that the relations between the two are not so close as between one of the dialects and a third. The lexical correspondence is very marked and the correspondence in the grammatical terminations is close. In the independent mode (or indicative mode) the correspondence is not so close as in the subjunctive. The reason for this is probably that in the latter case there is nothing to connect the personal endings with, and that in transitive forms the single pronouns (which are always suffixed) expressing both subject and object are so specialized that it is not possible readily to analyze them into their component elements, whereas the pronominal endings of the independent mode are unquestionably to be associated with the possessive pronouns and therefore vary more. (The Sauk, Fox, and Kickapoo forms in -pena, the Shawnee forms in -pe, and the Sauk, Fox, Kickapoo, and Shawnee forms in -pwa are wholly anomalous.) However, in the case of the independent mode, the analysis is far clearer than in

other modes. The transitive forms are based mainly on the combination of intransitive ones, sometimes part being prefixed and part suffixed, or both parts are suffixed. In certain forms it is necessary to assume certain pronominal elements which are totally unconnected with the possessive or independent pronouns, but which nevertheless reoccur in other modes than the independent.

The writer's classification of the dialects of the Central subtype is based on a study of the present independent and subjunctive modes, together with phonetic and a few other considerations.

It is possible to formulate certain subdivisions of the group. These are—

Cree-Montagnais.

Menominee.

Sauk, Fox, Kickapoo, together with Shawnee, the last-named being somewhat removed from them.

Ojibwa, Potawatomi, Ottawa, Algonkin, with Peoria somewhat removed from them.

Natick.

Delaware.

It may be further noted that Cree-Montagnais, Menominee, Sauk, Fox, Kickapoo, and Shawnee collectively form a unit as compared with any other of the subdivisions.

CREE-MONTAGNAIS

CREE

 $^{^{-1}}$ Moreover, under unknown conditions a sibilant is retained before k in Fox, Ojibwa, etc., and these agree in the retention or loss of the sibilant.

² Rand, Dictionary of the Language of the Micmac Indians, Halifax, 1888.

HEAVEN, Abnaki spemk, Passannquoddy spemek HIGH, Shawnee spemegi above (in the sky), Fox a'pemegi, Peoria pämingi; Cree miepun it snows, Fox me'pu- to snow, Natick muhpoo it snows; Cree mietig wood, Fox me'tegwi, Shawnee mtegwi, Menominee me'tig (probable mishearing for me'tig), Ojibwa mi'tig (Jones), me'tig (Turtle Mountain, Michelson), Natick mehtug, Delaware mehittuck, Minsi michtuk.¹

It should be noted likewise that Cree t(tt) corresponds under unknown conditions to n (or its phonetic correspondent) in the other Central Algonquian languages as well as in Eastern Algonquian. Thus Cree atak star, Fox $an\bar{a}gw^a$, Shawnee alagwa, Peoria alangwa, Ojibwa anang, Delaware allanque, Natick anogks: Cree atim dog, Fox $anem\bar{o}^{\dagger a}$, Natick anum, Delaware allum, Ojibwa animosh, Malecite ulamus (the last two really are diminutives).

Below will be found tables for the Cree present indicative and subjunctive-participial modes.³ The phonetic laws stated above should be kept in mind to see the correspondence with other Algonquian languages.

It is gathered from Doctor Gatschet's notes on the pronunciation and his graphic fluctuation of k, k, rk in the same words when corresponding to ${\rm Cree}\ sk$, that the true value in Peoria is k. By this is inferred the same regarding p. Examples are lacking to show the correspondent to ${\rm Cree}\ st$, but the inference made at any rate is plausible. The writer's conclusions regarding ${\rm Fox}$, Sauk, Kickapoo are based on Doctor Jones's and his own texts; those on Shawnee are from Doctor Gatschet's graphic variants as well as the author's own notes (that apparently there are also some secondary changes in Shawnee); those on Menominee rest on the writer's own notes; those on Ojibwa are formed mainly from a study of Doctor Jones's texts, though partly from the writer's notes; in other cases the assumption rests on analogy. The quotations from the manuscripts of the late Doctor Jones are available through the liberality of the Carnegie Institution of Washington. Most of the Ojihwa words cited in this paper are from Baraga; they are easily distinguished by lack of most diacritical marks and by the use of sh for c. Similarly, the Cree of the writer can be easily distinguished from that of Horden or Lacombe. Such words and grammatical terminations as are taken from or based on Doctor Sapir's field notes on Cree, Montagnais, Abnaki, Malecite, and Delaware, are expressly noted as such.

² Abnaki wdamis HIS DOG, Passamaquoddy ndemis MY DOG, both cited by Prince, are forms puzzling to the writer. See $American\ Anthropologist$, N. s., IV, 316, 317, 324, 684. Even so, the statement that Cree t can correspond to n, etc., of the other dialects, will stand.

^a These are extracted from Horden (Cree Grammar, London, 1881) with the exception of the inanimate forms both as subjects and objects, which are extracted from Lacombe. The latter forms are not readily found in Norden and the table in Lacombe is highly confusing in other forms. That the forms exist in Moose Cree is shown by the texts in Horden's Grammar.

	П	we excl.	we incl.	thou	ye	he	they an.	تىد سىد	they inan.
Intrans	at-	ne-nan	ke-nanow	ke-	ke-nowow	·n-	-u'uk		n.a
me	ke—ttin		ke-anaaow ke-anonowuk ki_{enow ki_{enow	ke-in ke-ina - ke-ow ke-ow ki-en	ke—inovovo ke—inan	ne—k nc—konan ke—konow kc—k ke—kowow -āö -āô	ne – kwuk ne – konowuk ke – konowuk ke – konowuk ke – konowuk - awuk - awuk - awuk		
		we excl.	we incl.	thou	уе	he	they an.	it	they inan.
Intrans	-han	-yak	-yuk	unh-	-yāk	1-	-tcik	, ki	$\begin{cases} -ki \\ -kwaw \end{cases}$
me	1		1	-chun	-cyāk	32.	-itcik -itwow		
us exel	ı	I	I	-eyak	-eyak	-eyumî't	-eyumi'teik -eyumi'twow -ttu'kwuk		
us incl	-tlan	-ttak	1 1		1 1	-ttn'k -sk	-ttu'kwow -skik -skwow		
you	-ttakwuk	-ttak	l:	1	1	-ttak	-ttakwak -ttakwow		
him	-uk	-ukil	-uk	-nt	41k	-at	-atcik -atwow		
them an.	-ukik	-ukitwow	-ukik -ukwow	-ntcik -atwow	-ākwuk -ākwow	-at	f-atcik f-atwow		
it, them, inan.	-aman	-amák	-amak	-aman	-amek	-ok	-akwaw -akik		

While at Carlisle in the winter of 1911–12 the writer had an opportunity of studying for a brief period the Cree spoken at Fort Totten, North Dakota. Below are tables for the present independent mode and for what was intended (by the writer) to be the subjunctive of the same tense. Apparently there was some misunderstanding, for the forms of the latter correspond with Lacombe's "suppositif" of the "subjunctif" and Horden's future tense of the subjunctive.

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	П	we exci.	we incl.	thou	ye	he	they an.	Ħ	they inan.
Intrans	ni-	ni—nān	$ki-n\bar{a}n$	ki—nān	ki—nāvāva	D.H=	-w.Ag		F. 17 -
me	ki—tin ki—tināwāwa ni—āwa ni—āwa ni—āu-4g ni—ān	ki—tinān Ki—tinān ni—qūān ni—qūāng ni—dūāng		ki— in ki — in a ki — in a a ki a a a ki a a a ki a	ki-ināwāwa ki-inām 	ni-g mì-gunān ki-gunān ki-g ki-guuāua -ēu -āu	ni—gu1g ni—qundan1g ki—gundan1g ki—gundau4g ki—guwdu4g -ēw.1g -ēw.1g		
	I	we excl.	we incl.	thou	ye	he	they an.	Ħ	they inan.
Intrans	-yāni	-yā'ku	-ya'ku	-yAni	-yēgu	-tci	-twāwi	-'ki	-'kuāwi
me	-(âni -(fgu -Aki -Aguâv: i -Amâni	-fā'ku -fā'ku -diyā'ku -aiyā'ku -amā'ku	-ayya'ku -ayya'ku -ayya'kuaiwi -awya'kuaiwi	-iyani -iyaku 	iyêgu iya'ku — —aiyêgu —-aiyêguani 1 mêgu	-itei -kuya'ku -kuya'ku -cki -kuyêgu -âtei -atei	ituāuri kuyā kuāuri kuyā kuāuri ekuyāgu inguri -ātuāuri -ātuāuri -ātuāuri		

We will first discuss the indicative forms. In the following Montagnais is left out, as the relations of Cree and Montagnais are treated specially below. Here it is sufficient to say that the two with phonetic differences are essentially a linguistic unit. Statistics follow:

1-YOU (pl.) no correspondent; composed of the intrans. forms for I and YOU with phonetic changes.

1—им agreement with F., Men., D. (one form).¹

I—тием an. agreement with F., Men., D. (one form).

1—гт agreement with Men., А., Ој.

1—тием inan. agreement with Men., S.

WE (excl.) intrans. agreement with D. (one form).

WE (excl.)—THEE agreement with D. (one form).

WE (exel.)—You agreement with D. (one form).

WE (excl.)—HIM agreement with Oj., A., D. (one form).

WE (excl.)—THEM an agreement with Oj., A., N.

we (excl.)—it agreement with A.

WE (excl.)—THEM inan. formation same as WE (excl.)—IT.

WE (inel.) intrans. (Horden) no correspondent.

WE (incl.) intrans. (Fort Totten) agreement with Oj., A.

WE (incl.) HIM (Horden); cf. Men.²

we (incl.)—им (Fort Totten) agreement Oj., А.

WE (incl.)—THEM an. (Horden) no correspondent, cf. Men.²

WE (incl.)—THEM an. (Fort Totten) agreement with Oj., A.

WE (incl.)—IT (one form, Lacombe) no correspondent.

WE (incl.)—IT (one form, Lacombe; Fort Totten) agreement with A.

WE (incl.)—THEM inan. formation same as WE (incl.)—IT.

THOU—US (excl.) no correspondent; composed of Thou intrans. $+i+n\bar{a}n$: cf. Fox ke-ipena for the formation.

THOU—HIM agreement with Men., F., D. (one form).

THOU-THEM an. agreement with Men., F. D.

THOU-IT agreement with Men., Oj., A.

THOU—THEM inan. formation the same as THOU—IT.

YE intrans. no correspondent; same formative elements found in YE—ME.

YE-ME no correspondent; composed of the intrans. form for YE +i.

YE—us (excl.) no correspondent; formation precisely the same as Thou—us (excl.).

YE—IIM agreement with Men., D. (one form); cf. also Oj., A., S., N., Pass.

¹ The following are the principal abbreviations used in this paper: Λ., Algonkin; an., animate; C., Cree; D., Delaware; excl., exclusive; F., Fox; inan., inanimate; incl., inclusive; M., Micmae; Men., Menominec; Mont., Montagnais; N., Natick; Oj., Ojibwa; Ot., Ottawa; P., Peoria; Pass., Passama-quoddy; Pot., Potawatomi; S., Shawnee.

² Lacombe gives a variant that agrees absolutely with Menominee.

YE—THEM an. agreement with Men., D. (one form); cf. also Oj. A., S., N.

YE—IT no correspondent; ef. Oj., A., S.

YE-THEM inan. formation the same as YE-IT.

HE—US (excl.) agreement with F., Oj., A., D. (one form).

HE—US (incl.; Horden) agreement with Men.

HE—us (incl.; Fort Totten) agreement with F., Oj., A. (D.?).

HE-YOU agreement with F., Men.

HE—HIM agreement with F., Men. (N.?).

не—тнем an. agreement with F., Men.

HE—IT agreement with F., Men., P., Oj. (one form).

HE—THEM inan. agreement with F., Men., P.

THEY an.—us (excl.) agreement with F., Oj., A., N., D. (one form).

THEY an.—US (incl.; Horden) agreement with Men.

THEY an.—us (incl.; Fort Totten) agreement with F., Oj., D.

THEY an.—YOU agreement with F., Men., D.

THEY an.—HIM agreement with F., Men.

THEY an.—THEM an. agreement with F., Men.

THEY an.—IT agreement with F., Men., P.

THEY an.—THEM inan. agreement with F., Men., P.

THEY inan. no correspondent.

Common Central Algonquian agreements are naturally not included in the above statistics. Phonetic changes have caused certain terminations to resemble Ojibwa rather than Fox, e. g., HE—ME, THEE, but these are not included, as the formation is identical. The customary final n is not here added to the forms for 1 and THOU when intransitive, as it seems to be purely a phonetic product. The forms for THEY an.—ME, THEE look strange in comparison with other Algonquian languages, but in the writer's opinion a phonetic archaism is the disturbing factor.

It may be mentioned here that in the statistics given in the discussion of other Central Algonquian languages they inan, intrans, is not noted, as all agree (so far as material is available), as opposed to Cree. It will be seen that the greatest number of agreements is with Menominee, with Fox (Sauk and Kickapoo) second, and Delaware, Ojibwa, and Algonkin about equal, in the third place. The statistics likewise show that the unity of Cree-Montagnais, Menominee, Sauk, Fox, Kickapoo, and Shawnee mentioned on page 238 applies especially to Cree-Montagnais, Menominee, Sauk, Fox, and Kickapoo. It is due almost entirely to the very intimate relationship between Sauk. Fox, Kickapoo on the one hand and Shawnee on the other (see pp. 252, 258) that the last-mentioned language must be attached to the group. (Sauk, Fox, Kickapoo are practically one language, with slight variations (see pp. 252, 258). In the entire discussion of the

statistics throughout this paper it is understood that all are in agreement, unless the contrary is expressly stated.)

The discussion of the subjunctive-participial does not require such elaborate statistics.

The variant forms of the third person plural animate both as subject and object, ending in -w, are stated by Horden to be distinctive of East Main Cree, with the exception of the variants for THEY an.—IIIM, THEM an, which occur elsewhere as well. The forms under discussion closely resemble the correspondents in Menominee, Algonkin, Ojibwa, and (to a lesser extent) Ottawa. (In Ojibwa They an.—us excl. has different formation, but has the characteristic ending.) Moreover, the respective forms of the second table of Fort Totten Cree (which is discussed below) show the same general structure. The other forms of the third person an, plural as both subject and object (except HE—THEM an., which is a true subjunctive) correspond to the Fox, Shawnee, and Ojibwa participial—not subjunctive. Even so, THEY an,—Us (excl.) agrees with Fox (and approximates the Shawnee form), not Ojibwa. I—You agrees with Menominee, Ojibwa, and Algonkin. WE (excl.)—THEE, YOU is a true active common Central Algonquian form as opposed to the Ojihwa (and probably Potawatomi) correspondents, which are passives in structure.

Outside the above, excluding phonetic differences, as the presence of the nasal in Ojibwa (also in Delaware), the agreement between Cree, Ojibwa, and Fox in this mode is remarkable. It is a matter of great regret that hardly a single transitive form of the Peoria subjunctive or participial is found among Doctor Gatschet's papers. The terminations of the participial, subjunctive, and conjunctive modes are closely allied in Algonquian (compare the tables in the Handbook of American Indian Languages). Fortunately Doctor Gatschet has left examples of transitive forms of the Peoria conjunctive, so we can make some conjectures concerning the subjunctive. It possessed the nasal as in Ojibwa, and the forms for the third person plural animate, both as subject and object, corresponded exactly with the exception of we incl.—THEM an., THEY an.—HIM, THEM an., to Cree. The personal terminations for WE—THEE, YOU (pl.) were the true active ones; HE—US (excl.) agreed with Fox and Cree, as also that for they an.—us (excl.). (For the last two cf. Shawnee, Algonkin, and Menominee.) The form for 1-you (pl.) agreed with Ojibwa, Algonkin, and Cree. Herein we find an important point of contact with Peoria. (See, however, p. 271.) It should be noted that the Micmac conjunctive agrees partially with Peoria in having forms for the third person plural animate both as subject and object that correspond to the Fox participial, not conjunctive. We may accordingly conjecture that the Micmac subjunctive agrees partially with Cree in the same way. This together with the retention of the consonantic clusters sk, sp, st constitute important points of contact between Cree and Eastern Algonquian. The Natick present subjunctive approximates closely to the Fox present subjunctive and so agrees to a certain extent with Cree, but it should be noticed that practically all the forms with the third person animate, singular and plural, as subject are entirely different in structure from either the Cree or the Fox correspondents. The Delaware subjunctive shows marked peculiarities of its own and therefore presents few points of agreement with Cree, none in fact which are not shared by other Central Algonquian languages.

The discussion of the second table of Fort Totten Cree must necessarily be brief, as the sole object of its introduction is to illustrate the variant forms of East Main Cree with the third person plural as subject and object in the present subjunctive, and the correspondents in Menominee and Ojibwa. As is stated above, the table really corresponds with Horden's future tense of the subjunctive and Lacombe's "suppositif" of the "subjonetif." The forms for HE, THEY an. us (excl. and incl.), you are certainly passives in formation (cf. the Ottawa correspondents of the subjunctive); but in every case Lacombe gives variants which are actives, and Horden gives these alone. Again the variants given by Lacombe for we (excl. and incl.) —mm, them an.; YE—mm, them an. (which alone are given by Horden) in structure have the same formation as the correspondents of the present subjunctive. The Fort Totten Cree forms are composed of the respective intransitive subjects combined with the common objective form of the third person animate, namely \bar{a} , which undergoes phonetic change before the initial y of the suffixes (the forms given by Lacombe do not show this change). The forms of the Fort Totten Cree in which the animate objects are plural exhibit the identical formation but have the characteristic w suffix. form given in the table for YE—THEM and is reconstructed by the writer; the form -atwāwi, obtained by direct questioning, is surely due to some misunderstanding, as it patently is the form for THOU-THEM an. It should be noticed that in the forms for WE (excl. and inel.)—нім; we (excl.)—тнее, you; thou, ye—us (excl.) Lacombe's Cree terminates in -i, not -u as Fort Totten Cree does. In the forms for we (exel. and inel.) intransitive, we (exel. and incl.)—IT, THEM (inan.), Lacombe gives forms with both -i and -u. Horden gives only the forms with $-\bar{a}$ (his transcription for long close \bar{e}) corresponding to Lacombe's -i. Fort Totten Cree in these personal terminations has -u, and this only. It should be mentioned that corresponding to Horden's t before $-\bar{a}$ (his symbol for long close \bar{e}), the Cree of Lacombe and of Fort Totten have tc (ti in Lacombe) before -i throughout. Again, Horden's Cree in the form for YE intrans. ends in $-w\bar{a}$, whereas Lacombe's and Fort Totten Cree end in -u. It should be added that Lacombe in the forms for HE—THEM an. and THEY an.—IT, THEM inan. gives variants which resemble the corresponding subjunctive (participial) ones in structure, as well as forms which agree with the Fort Totten correspondents. It need scarce be said that neither Lacombe nor Horden distinguishes surd and sonant, nor 'k from k, in his paradigms.

The formation of a preterite with a suffix pun in both the indicative and the subjunctive is an important point of contact with Ojibwa

(see the discussion of that language, p. 269).

Another special point of contact with Peoria that should be noted is that the inanimate plural, nominative, ends in -a; yet notwith-standing these points of contact with Cree, Peoria (as will be shown later) belongs rather with Ojibwa.

The dialectic variations as $n\bar{n}na$ 1, $n\bar{v}ra$, $n\bar{v}ya$, $n\bar{v}\theta a$ are well known and need no discussion. However, it should be mentioned that the so-called Cree of Rupert's House is not Cree at all, but Montagnais. This the writer infers from a comparison of Doctor Sapir's notes on the Cree of Rupert's House with his notes on Montagnais, as well as with Lemoine's Dictionnaire Français-Montagnais (Boston, 1901). The following (taken from Sapir's manuscripts) will illustrate the point under consideration: mA'skwAts Bears, nikA'mqwats they sing, ts inikA'mqn' thou singest. (See the discussion of Montagnais below.) According to Skinner (loc. cit.), the Fort George Indians speak the same dialect as those at Rupert's House.

MONTAGNAIS

As was stated above, excluding phonetic changes Montagnais is practically the same language as Cree. Some of the phonetic changes which Montagnais has suffered are: k (Cree k, Fox k) becomes tsh before i (Fox e and $\bar{\imath}$, Cree e), tshi- thou (verbal), Fox ke-, Cree ke-, tshi- initial stem meaning completion, Fox kī[ci]-, Cree ke-; k (Cree k, Fox g) becomes to before final i and e, even if these are lost, -uts (ending of animate pl. of nouns), Cree -uk, Fox -Agi, -uts (third person pl. animate, independent mode, intransitive), Cree -wuk, Fox - $w_A q^i$, -ts (sign of locative singular animate), Cree -k, Fox -qⁱ, -iats (first person pl. excl. intransitive, subjunctive mode), Cree $-y\bar{a}k$, Fox $-y\bar{a}g^e$; sk before i becomes ss; Cree askiy LAND, Montagnais assi (Fox a'ki); tsh[i]t (Fox k[e]t) becomes st, stuki THY EAR, as compared with utuki HIS EAR, tshiiu THY BODY, kutaui Thy father, staiamiau thou prayest, as compared with ntaiamiau I PRAY; t[u]k becomes to before e, -tse (sign of the dubitative), Cree $-tok\bar{a}$, Fox -tuge; k[e]sh becomes tsh, tshiuelin thou art HUNGRY for ke + sh; tc[i]k[i] becomes ts, -ats (subj. mode; third per-

¹ Skinner, Notes on the Eastern Cree and Northern Saulteaux, p. 11, New York, 1911.

son pl. an. subj., third person sing. an. object) as compared with Cree -atcik, Fox (participial) -ātcigi: sk[i]k[i] becomes ss, -ss (subj. mode, third pl. an. subj., second person sing. object), Cree -skik, Fox -' kig^i (part.). Further, it may be noted that final - w^a , w^c after consonants, has a history in Montagnais different from that in Cree. Observe Montagnais ni—ku HE—ME (independent mode), Cree ne—k, Fox ne— gw^a , tshi—ku HE—THEE (independent mode), Cree ke—k, Fox ke—gwa, -iku (first person pl. incl. of subjunctive), Cree -yuk, Fox - $yAgw^c$. These phonetic changes are of extremely wide application. It is unnecessary to give tables showing the verbal terminations as they agree with those of Cree. It may be noted that -u corresponds to Cree -w and -u to Cree -w, except in the first person pl. incl., where we find -u. The reason for the latter is not clear.

After emphasizing the essential unity of Cree and Montagnais it may be well to point out some individual traits of the latter. In the first place though there is a pan (Cree pun) preterite, it is confined to the indicative and does not occur in the subjunctive. Another point is that the "suppositif" of the mode "subjonctif" is clearly allied to the Fox potential subjunctive for which there is no correspondent in Cree (compare Mont. -iakukue we (excl.), -ikuakue we (incl.), -iekuekue YE with Fox -yAgāge'e, -yAgAgu'a, -yägägu'a, respectively). The other intransitive persons in Montagnais have the characteristic ku but have no correspondents in Fox. The transitive forms do not correspond closely, though there are resemblances between the two languages; hence tables are not given. In closing, it may be added that the Montagnais on-me, etc., has the appearance of a passive in structure, but there are several points which are not clear. (The above examples of Montagnais and Cree are taken, respectively, from Lemoine and Horden, with the exception of Cree askiy, which is from Lacombe. It will be seen by consulting the tables of Fort Totten Cree that the terminal k of Horden is doubtless the strong (impure) sonant g of the former, Fox, Sauk, Kickapoo, Ottawa, etc. A couple of examples of Sapir's Montagnais, ts'inipahā'wats thou killest THEM an. (Fox kenepahāwagi), ts'īnipahê'wats he killed them an. (Fox kīcinepahāwagi), ickwe'wats women (Fox i'kwäwagi), illustrate the principles mentioned above. The writer suspects that Skinner's tcī a (Rupert's House Cree) тной is really ts īya. The initial ts at once classes the word as Montagnais. It is true that according to Lemoine the ordinary Montagnais correspondent has I, not y; but it should be noticed that in Cree dialectically kiya occurs (see Horden, Cree Grammar, p. 3, London, 1881; Lacombe, Dictionnaire de la Langue des Cris, p. xv, Montreal, 1874). The Rupert's House Cree then would correspond to this.)

In discussing the relations of other Eastern-Central Algonquian languages, it is understood that Montagnais agrees with Cree unless

the contrary is expressly mentioned. Hence the fact that Montagnais sometimes is not mentioned merely means that it agrees with Cree.

MENOMINEE

Menominee is characterized by peculiar consonantic clusters due to the elimination of the final i of initial stems; thus, $w\ddot{a}pm\ddot{a}'w_Aq$ THEY BEGAN TO CRY (Fox $w\ddot{a}pi$ -), $w\ddot{a}pketep\bar{\imath}p_A'xtaw^a$ HE BEGAN TO RUN SWIFTLY (Fox wäpi-, ke'tci-), nikēsnāwā'wag i have seen them (Fox $nck\bar{i}cin\bar{a}w\bar{a}w_Aq^i$), $k\bar{a}tem\bar{a}'w_Aq$ they are crying hard (Fox kc'tcimaiyowagi), kēspīwa he has come (Fox kīcipyäwa), kikēsmē $k\bar{a}n\bar{e}qun\bar{a}w_{A}q$ they fought us (Fox $kek\bar{i}cim\bar{i}g\bar{a}t\bar{i}he$ $gun\bar{a}n_{A}g^{i}$). This elimination may cause a double consonant, as $p\bar{i}p\bar{i}mm\bar{e}k\bar{a}t\bar{o}w_Ag$ they Fought as they went along (Fox $pemi + pyämīgātīw_Ag^i$), $p\bar{i}p\bar{i}mm$ - $\bar{e}s\bar{e}w^a$ he went past easing himself (Fox $pemi + py\ddot{a}m\bar{i}siw^a$), $w\ddot{a}pp\bar{i}p_A'xtaw^a$ HE BEGAN TO RUN (Fox $w\ddot{a}pi+py\ddot{a}$ -). The combination of the subordinating particle As with initial stems also gives rise to clusters—for example, $Asp\bar{e}m\bar{a}tis\bar{e}yA$ we shall live. The only true consonantic clusters that occur within the same morphologic division of a word are sk and sp; the latter alone is important in determining the general relations of Menominee. Examples are: kēspin perhaps, Cree kīspin, Ojibwa kishpin; icpāmiya above, Cree ishpimik, Ojibwa ishpiming, Fox a'pemigi (see discussion of Ojibwa, p. 261). The combination xt agrees with Micmac, e. g. $p\bar{n}$ paxtawa he is coming on the run, Michae pôxtamkāsid he went ox. Surd and sonant are exceedingly difficult to distinguish; likewise \tilde{e} and \tilde{i} . The writer was unable to determine these with absolute accuracy; the sounds are given as taken down. Whispered vowels are easy to hear after w; in other cases it is questionable whether they actually exist. A peculiarity of Menominee is that Central Algonquian s under unknown conditions becomes n; thus $n\bar{o}$ nese My father (Fox $n\bar{o}se$), $na^{\varepsilon}ne'$ My elder brother (Fox nesese), poninäwa he stopped in his flight (Fox ponisäwa, -onä- walk (Fox -usä-).

A table of the independent mode follows.

	П	we (exel.)	we (incl.)	thou	ye	he	they an.	Gug Progr	they inan.
Intrans	ni-	ni—mināwa	ki—mināu ^a	72. 20.	ki—mwāwa	-wa	-wAg	-w.i	-wAni
me			1	ki—i	ki—imwāwa	ni	ni—gug		
ns (excl.)	1	ı	1	ki-inuāwa?	ki—inwāwa	ni—gunāwa	ni—gunāw.Ag		
us (incl.)		1	1	1	ì	ki—gunāwa	ki—gunāwAg		
thee	ki-n	ki-ninemināwa	1	1	1	ki-g	ki—gug		
you	ki-ninimwāwa	ki—ninemināwa	1	1	l	ki—guwāwa	ki—guwāwAg		
him, her	ni-āwa	ni-Anāwa	ki-Anāwa	ki-āwa	ki—āwāwa	-äwa	-дтид		
them (an.)	ni-awag	ni-Anāwag	ki—Anāw Ag	ki—āwag	ki—āwāwAg	-äwa	-ёшлд		
it, them (inan.). ni-1n	n F—in	ni-ämināwa	ki-AE	ki-An	ki-A mwāwa	-4 m	-4 mng		

It will be seen that Menominee has many forms quite peculiar to itself, and that the agreements with Cree-Montagnais are far more numerous than with any other languages of the Central subdivision; those with Fox are next in order of number. For the agreements with Delaware, see the section on that language. Details follow:

I—You no correspondent; nearest N.

1—HIM agreement with C., F., D.

I—THEM an. agreement with C., F., D. (N.?).

I—IT agreement with C., A., Oj., Ot. I—THEM inan. agreement with C.

we (excl.) intrans. no correspondent; nearest P., Oj., A., Ot., N.

WE (excl.)—THEE no correspondent; nearest P., N.

we (excl.)—You no correspondent; nearest N., A., Ot. (P.?).

WE (excl.)—HIM no correspondent; structure as WE (incl.)—HIM.

WÈ (excl.)—THEM an. no correspondent; ef. WE (incl.)—THEM an.

WE (excl.)—IT no correspondent.

WE (exel.)—THEM inan, no correspondent.

we (incl.) intrans. no correspondent; nearest P., Oj.; cf. also C.

WE (inel.)—HIM; ef. C.1

WE (inel.)—THEM an.; ef. C.1

we (incl.)—it no correspondent.

WE (incl.)—THEM inan. no correspondent.

THOU—US (excl.) no correspondent.
THOU—IIIM agreement with C., F., D.

THOU—THEM an. agreement with C.,

THOU—IT agreement with C., A., Ot., Oj.

THOU—THEM inan. agreement with C.

¹ Lacombe gives a Cree variant which is the exact correspondent.

YE, intrans. no correspondent; nearest P., N.; cf. also Oj., Ot., A.; for last syllable cf. C.

YE—ME no correspondent; nearest N.; cf. also A., Oj., Ot.

YE—US (excl.) no correspondent.

YE—HIM agreement with C., D.

YE-THEM an. agreement with C., D.

YE-IT no correspondent.

YE-THEM inan. no correspondent.

HE—US (excl.) no correspondent; for the structure cf. HE—US (incl.)

HE—US (incl.) agreement with C.

HE—YOU agreement with C., F.

не—нім agreement with С., F. (N.?).

HE—THEM an. agreement with C., F. (N.?).

HE—IT agreement with C., F., P., N., Oj. (one form).

THEY an.—us (excl.) no correspondent; cf. they an.—us (incl.).

THEY an.—US (incl.) agreement with C.

THEY an.—YOU agreement with C., F., D.

THEY an.—HIM agreement with C., F.

THEY an.—THEM an. agreement with C., F.

THEY an.—IT agreement with C., F., P.

THEY an.—THEM man. agreement with C., F., P.

Where all agree with or without phonetic changes, no record has been made. In certain cases it is impossible to be sure whether phonetic changes have not disguised agreements.

THEY inan., intrans., looks strange as contrasted with the common Central Algonquian form (on the Cree correspondent, see p. 244); however, it is merely because the word from which it is taken chances to have a vowel before the termination, and not a consonant. The same is to be observed in Kickapoo, and doubtless other dialects; thus Kickapoo tetepyāanⁱ, i. e., tetepyāwanⁱ (see p. 258) THEY inan. ARE ROUND (analysis: tetepi circle, initial stem; -ā- secondary connective stem, inan. copula; -wanⁱ termination of the third person inan. pl. intrans. independent mode after a vowel as contrasted with -ōni after a consonant). [Note -niwanⁱ in Fox as compared with -ōni, the ordinary termination of the third person pl. inan. intrans. independent mode; see Handbook of American Indian Languages (Bull. 40, B. A. E.), pt. 1, p. 833.]

It should be specially noted that Menominee, Cree, and Fox agree in having the objective forms of it and them inan. expressed by a single form as opposed to Ottawa, Algonkin, Ojibwa, and Shawnee. It is a common Algonquian feature that in subordinate modes the forms are expressed by single pronouns.

A table for the subjunctive mode is not available; however, the writer can give some information concerning the relations indicated

by it. Many of the forms seem peculiar to Menominee and are difficult to analyze. 1—vou agrees with C., Oj., A., Ot., in structure and presumably also with Peoria. 11E—US (excl.) has no correspondent (the form is -iyame), but distinctly approaches the correspondents of C., F., S., A., and presumably P. The forms of the third person plural animate both as subject and object closely resemble the correspondents in Oj., A., the East Main Cree of Horden, certain variants given by Lacombe in his Grammaire de la Langue des Cris (Montreal, 1874), and to a lesser extent the correspondents in Ottawa. The corresponding forms of Horden's future of the subjunctive, and Lacombe's "suppositif" of the "subjonetif," as well as the supposed present subjunctive of Fort Totten Cree also closely resemble them. It goes without saying that the Menominee forms lack the nasal of the Ojibwa, Algonkin, and Ottawa. On the other hand the various forms of Cree possess an extra syllable with w.

To sum up, we may say that although Menominee must be classed by itself, yet it is perfectly clear that it belongs intimately with Cree-Montagnais, etc., on the one hand, and with Sauk, Fox, and Kickapoo on the other.

SAUK, AND CLOSE LINGUISTIC COGNATES

The differences between Sauk, Fox, and Kickapoo consist of a trifling modification of pronunciation, vocabulary, and idiom. Shawnee is slightly removed from them. To facilitate the discussion of the relations of the last-named language to them as well as the relations of the entire group, tables for the independent, conjunctive, and subjunctive modes in Fox, and for the same modes in Shawnee, are given.

FOX INDEPENDENT MODE

it they lnan.	-ōni			it they inan.	-ki	
	-wi				- k i	
they au.	-wAgi	ne—gögi ne—gunānagi ke—gunānagi ke—gunānagi ke—gunānagi -āuagi -anogi		they an.	-wātci	-iwātci -iyametci -nagwe -ki -nāgwe -awātci -amoretci
pe	-414	ne-gwa ne-gwa ke-gundina ke-gwa ke-guudwa -dwa -dwa		he	-tci	-itci -iyametci -iyametci -iki -iki -iki -ingwe -dici
ye	ke-pwa	ke—ipwa ke—ipwa 	IVE MODE	ye	-งุนัยพ.ะ	-iyâgwe -iyâge
thou	ke-	ke-i $kc-ipena$ $kc-ipena$ $ke-diva$ $ke-diva$ $ke-a$	FOX CONJUNCTIVE MODE	thou	-yani	-iyani -iyâge
we incl.	ke-pena	kt-āpīna kt-āpīna kt-āpīna		we incl.	-улдие	
we excl.	ne—pena	ke—nepena ke—nepena ne—āpena ne—āpena		we excl.	-yāge	-nâge -nâge -nâge -sgetoi -smâge
1	ne-	ke-ne ke-ne ne-āwa ne-āwa ne-a		I	-หูดักก๋	-nāni -n4gowe -4gi -Amāni
	Intrans	me			Intrans	me

FOX PRESENT SUBJUNCTIVE MODE

	I	we exel.	we incl.	thou	ye	he	they an.	ij	They inan.
Intrans.	-yāne	-yāgc	-yagwe	-yAnc	-หลัฐพ.c	-10	-אימונ	-, ke	-ke
me				-iyanc	-iyagwe	-ite	-iwāle		
us exel.	1	1		-iyāgc	-iyage	-iy.t mete	-iy4mctc		
us incl		1		i	1	-n.1gwc	-n.1gwc		
thee	-nane	-nāge	1	1	1	-,kc	kc		
nos	-n.1gowe	-nāge		1	1	-nagwe	-nāgwc		
him, them, an	-,190	-1gete	4gwc	-116	-àgwe	-āte	-āwātc		
it, them, inan	-,1 manc	-,1 māge	-лимдше	4 m.4 nc	4 mägwe	-1gc	1 mowafe		_
1			_		_	_			1
			SHA	SHAWNEE INDEPENDENT MODE!	SNDENT MODE	11			
	-	wo oxe	we incl	thou	9.4	he	they an.	. 	they inan.

it they i										
they an.	-(wA)gi	ni—gōgi	ni—gunāgi	ki—gunāgi	ki-gōgi	ki-gou'āgi	ŏ āwāli	ō-áwahi	ō -ānāmā	ō anāwa
he	2:11-	ni— gwa						ō-ahi		ō—āna
ye	kipwa	ki—ipwa	ki-pe	1	1		ki-āwa	ki ānāgi	ki anāwa	ki -anāwa
thou	ki-	ki — i	ki—ipe	1	1	1	ki a	kiāgi	ki a	ki ana
we incl.	ki-pc					1	ki apc	ki -āpc	$ki - \bar{a}pc$	ki-āpe .
we excl.	ni-pe				ki -lepe	ki lepe	ni ape	ni-apc	ni ape	ni — $\bar{a}pe$
	ni-		1	1	ki le	ki-lepwa	ni-a	ni-āgi	ni-a	ni-ana
	Intrans	, m	us exel.	us inel.				them an		them inan

If may be noted that the late Doctor Gatschet recorded in the independent mode hu- for ō- in the transitive forms of the third person animate, singular and plural; the writer thinks the former are probably more nearly correct; Doctor Gatschet likewise recorded u for o in the forms HE, THEY an.—YOU.

SHAWNEE CONJUNCTIVE MODE

								!	
	-	we exel.	we incl.	thou	уе	he	they an.	it	they incu.
Intrans	-yā	-949c	-yague	-yani	-yàgwe	-tei	-wātci	-80	JA-
me	1	1	1	-iy,tni	-iyägwe	-itei	-iwātei		
us excl.	ı	1	1	-iyāgc	-iyāgc	-iy,1 megitci	-iy.t megitei		
us incl	1	1	ı	1	1	-lague	-lagu'c		
thee	-la	-lāge	ł	1	1	ki	100		
you	-lagō	-lāgc	1	ı	1	-luäguc	-luague		
him, them, an	19i	-Agitci	-Agwc	-Alci	-ägwc	-ātei	-āwātei		
it, them, inan.	-4 mā	-Amāge	-лтадие	-Amani	-Amägure	-49i	-,1 mowātci		
			SHZ	SHAWNEE SUBJUNCTIVE MODE	NCTIVE MODE				
	_	we excl.	we incl.	thou	ye	he	they an.	ii	they inan.
Intrans	-yā	-yâgc	-yAgwc	-yānc	-หลัฐนาด	-itc	-uāte	<i>-8c</i>	-0.0
me		ļ	ı	-iyane	-iyägu'c	-ite	-iwātc		
us excl	1	1	ı	-iyāgc	-iyāgc	-iya megite	-iy.4 megite		
us incl	ı	1	1		1	-lugwe	-lague		
thee	-la	-lāgc	1	ı	1	-0.6	-8c		
you	-lagō	-lāge	1	1	1	-luäguc	-lwāgwe		
him, them, an	-490	-Agite	-Agwe	-416	-ägwe	-áte	-āwāte		
it, them, inan	-4mā	-Amage	-amagaic	-4 mane	-A mägure	-49c	-Amuwāte		

SHAWNEE

The forms 1 — HIM, THEM an., THEM inan.; THOU—HIM, THEM an., THEM inan.; YE-HIM, THEM an., IT, THEM inan.; HE-YOU (pl.), HIM, THEM inan.; THEY an.—YOU (pl.), HIM, IT, THEM inan. agree with Ojibwa, etc., in structure. For the probable noteworthy agreements with Peoria, see the discussion of that language. It is quite clear that one of the Delaware dialects agrees in the formation of HEus (excl. and incl.), they an.—us (excl. and incl.), even if there is but the form HE—US (excl.) in the table to support the assertion. Passamaquoddy agrees in the forms for 1—YOU (pl.) HIM, THEM an.; THOU-HIM, THEM an.; YE intrans.; YE-ME, HIM; HE-US (excl. and inel.); HE-YOU (pl.), HIM; THEY an.-HIM. It is probable that the forms for HE-THEM an. and THEY an.-THEM an. are shared by Passamaquoddy (and Algonkin) but the phonetics are not certain. The forms correspond nearly to the Fox possessive pronouns for HIS (an. pl.) and THEIR (an. pl.). It is unfortunate that the inanimate forms of Passamaquoddy are not available, as they might show further agreements with Shawnee. However, it may be noted that I, THOU, YE—THEM (inan.), YE—IT agree also with Cree. Natick curiously shows apparent agreement in HE—us (incl.), and so presumably would he—us (excl.). However, they an.—us (excl.) shows a different formation, and hence presumably they an.—us (incl.) would also. The agreement with Delaware in the form for HE—HIM may be noted in addition to the one already mentioned. (For another one, see the discussion of Delaware, p. 277.)

The forms with the termination -pe, though unique, are certainly to be associated with the Fox -pena even if the two do not entirely coincide. Those with the termination -pwa make it certain that Shawnee is related very intimately to Fox, etc., for no other Central Algonquian languages have the termination, though it is found (modified phonetically) in Eastern Algonquian, and an allied form occurs in Piegan. The forms for I, THOU—IT point also in this direction.

The terminations of the two subordinate modes given agree with Fox, Cree, and Micmac in lacking the nasal of Ojibwa and Peoria, and Delaware, and the terminations are to be associated with those of Fox. The w of the forms for HE, THEY (an.)—YOU is unique at present, otherwise the forms are normal. The forms HE, THEY an.—US (excl.) are to be associated distinctly with the Fox correspondents, though the syllable -ge- suggests the Ojibwa correspondents. The first person singular intransitive agrees with Delaware and Micmac. I—THEE at present is unique, but if complete schedules were available for the various Delaware dialects and for the eastern subdivision of the Eastern-Central branch, correspondents would doubtlessly be found. 1—IT, THEM inan. agrees with Delaware.

¹ In giving these statistics no account is taken of such forms as are common Central Algonquian.

Phonetically Shawnee differs somewhat from Fox. The sibilant is retained in the cluster sp, which appears as 'p in Fox though retained in Ojibwa (but not in Peoria): spemegi on mgu, Fox a'pemegi (see the discussion of Cree and Ojibwa, pp. 238, 261). The combination $-w^a$ is lost after i and \bar{a} , as in Ojibwa: Shawnee hileni MAN, Fox ineniwa; Shawnee hugimā chief, Fox ugimāwa. 1 It may be noted that $-w^a$ is lost after e under unknown conditions when corresponding to Fox: pembe (Fox pemusäwa) he walked on, piewa (Fox (pyäwa) HE CAME. The combination -wa- is lost medially under unknown conditions: pyēgi they went (Fox pyäwagi) as contrasted with hiwaki (Gatschet, confusion of surd and sonant; Fox hiwagi) THEY SAID. The sound s of Fox is replaced by the interdental surd spirant and the preceding vowel is ordinarily syncopated: $n\bar{o}\theta a$ my father (Fox $n\bar{o}sa$), $k\bar{o}k\bar{o}m\theta ena$ our (incl.) Grand-Mother (Fox $k\bar{o}'komesen\bar{a}na$), $^n\theta e\theta a$ MY ELDER BROTHER (Fox nesesa). Corresponding to Fox, Ojibwa, Menominee, etc., n, Shawnee has l and n under unknown conditions, agreeing, however, with Peoria, Delaware, and (partially) Eastern Algonquian in this use.

To sum up, we may say that while Shawnee has certain features of its own, it stands nearest to Fox, and next to Eastern Algonquian; in fact it stands nearly halfway between the two. It will be seen that Ojibwa shares but these persons of the independent mode, namely, YE-THEM an., THEY an.-YOU (pl.), which are not shared by Passamaquoddy. (No account is taken of the agreements in the inanimate objective forms, as we have no correspondents available in Passamaquoddy by which to test them.) On the other hand, Passamaquoddy shares the following forms with Shawnee which are not shared by Ojibwa: I—YOU (pl.), YE intrans., YE—ME; THEY an.—IIIM. The forms for HE—US (excl. and incl.) presumably are phonetic correspondents; those for HE-THEM an. and THEY an.—THEM an. probably are equivalents. The Passamaquoddy forms for we (excl. and incl., intrans.), we (excl.)—Thee, you; THOU—US (excl.); YE—US (excl.), coinciding phonetically with the respective Fox forms, are closely similar to the corresponding Shawnee forms. Accordingly, it may be that many of the apparent points of contact with Ojibwa are due merely to the latter having certain points in common with Eastern Algonquian and Cree (this last has reference particularly to the inanimate objective forms above noted). The fact that Ojibwa in the independent mode shares only the terminations for HE—US (excl. and incl.), and THEY an.—US (excl. and incl.), with Fox as opposed to Passamaquoddy, while the latter shares numerous terminations with Fox as opposed to Ojibwa, and at

¹ It is possible that the last change may account for the differences in certain persons of the independent mode in Fox on the one hand and in Ojibwa and Shawnec on the other; but it is also possible to consider the terminations as differing in morphologic structure. The same point occurs in certain other cases,

the same time a goodly number of terminations with Ojibwa as opposed to Fox—certainly points in the same direction. For Cree (Fort Totten) likewise shares the terminations for ue—us (excl. and incl.) and they an.—us (excl. and incl.) with Ojibwa and Fox. Now Ojibwa shares in the independent mode no terminations with Fox as opposed to Cree, while the latter shares a number with Fox as opposed to Ojibwa (see below), at the same time having some points in common with Ojibwa as opposed to Fox (see the discussions of Cree and Ojibwa, pp. 247, 267, 268). Therefore the fact that Ojibwa shares with both Cree and Fox the terminations mentioned may be pure chance. Now if Ojibwa and Fox are only remotely connected, it is improbable on the face of it that Shawnee, which is most intimately related to Fox, should be closely connected with Ojibwa also. Consequently, there remain but few points of contact between Ojibwa and Shawnee that are certain.

SAUK, FOX, AND KICKAPOO

We have seen above that Sauk, Fox, and Kickapoo¹ differ from one another by very trifling modifications of pronunciation, vocabularies, and idioms, and that Shawnee is intimately related to them. The close connection of the Eastern Algonquian dialects is to be noted. It may be well to show that the Shawnee forms for THEY an.—us (excl. and incl.), you (pl.) are much closer to the Fox forms than the corresponding forms of Passamaquoddy are to the latter, even if the Shawnee forms are not absolutely identical with the Fox correspondents. On the other hand, Passamaquoddy shares absolutely with Fox the terminations in -pena which Shawnee only approximates. Yet Passamaquoddy shares the ban preterite of Ojibwa (see

¹ The first two are somewhat more closely related than either is to the third. In the discussions of the interrelations of Algonquian languages it is to be understood that Sauk and Kickapoo agree with Fox, though this is rarely mentioned.

Characteristic of Sank is the use of the singular for the plural also in the obviative (objective) case, and in possessive pronouns of the third person (singular and plural). Thus Sauk utanemāhani pyānīwani means either His dog is coming of his dogs are coming. The Fox expressions for these are, respectively, utanemāhani pyānīwani, utanemāhamāi pyānīwani (by chance in the phrase Sauk utanemāhani lacks the m suffix which Fox has; but even in Sauk the writer has heard the word with the m suffix, though (purely by accident) not in this particular phrase). Note, too, Sauk i'kwāwa neskinawāwa neniwani cemamegu äne'tamāgutei usīmehani, which means either the woman hated the man because her younger brother had been slain by him, of the woman hated the man because her younger brother had been slain by them, of the woman hated the men because her younger brother had been slain by them, of the woman hated the men because her younger brother had been slain by them, of the woman hated the men because her founger brother had been slain by them, of the woman hated the men because her founger brothers had been slain by them, of the woman hated the men because her founger brothers had been slain by them, of the woman hated the men because her founger brothers had been slain by them, of the woman hated the liandbook of American Indian Languages (Bulletin 40, part 1, of the Bureau of American Filmology). Her younger brothers and her younger brothers are distinguished by the respective terminations -1ni and -a'i; the obviatives man and men would be kept apart by the identical respective suffixes; but the subordinate verb would nevertheless have the ending -tcl.

Kickapoo agrees with Fox against Sauk in these respects, and so must be counted as nearer the former than the latter. Nevertheless in phonetics Kickapoo is further apart from them than either is from the other. In Kickapoo a special feature is a weak w which is either heard as full sounding, as h, or not at all. Doctor Jones's and the writer's texts exhibit these variations, and strangely enough agree in such variations for the greater part. An example is $ugim\bar{a}w^a$, $ugim\bar{a}h^a$, $ugim\bar{a}^a$ cheef (selected from Poctor Jones's texts; Sauk and Fox $ugim\bar{a}w^a$). In their native syllabary Kickapoo exhibit the variation of recording and not recording the w.

the discussion of that language, p. 269), and this feature forces us to rank it as more distant from Fox than is Shawnee. The consonantic clusters of Passamaquoddy, even if for the greater part these are secondary and due to the phonetic elimination of vowels (see the discussion of Eastern subtype, p. 283), also point in this direction.

The fact that Piegan in certain persons of the independent mode shows distinct affinities to Fox has been briefly mentioned above and is treated more fully in the discussion of Piegan (p. 231).

We have seen that Ojibwa is connected only remotely with Fox, but it may be noted that the Ojibwa subjunctive mode of the dubitative conjugation corresponds to the Fox interrogative subjunctive; but to what an extent the transitive forms agree is questionable, as these are not given by Doctor Jones.

Peoria undoubtedly belongs with the Ojibwa group of Central Algonquian languages; still there are some points of contact with Fox. It should be noted that the sibilant is not retained before p as in Ojibwa, e. g. Ojibwa ishpiming, Shawnee spemegi, Fox a pemegi, Peoria pämingi above, in the sky. The fact that Peoria is in certain respects phonetically more archaic than Ojibwa makes certain terminations of the indicative seem to resemble Fox rather than Ojibwa (see the section on Ojibwa, etc., pp. 267, 271); but there is one termination, namely, that for they an.—IT, them inan., in which the question of phonetics does not arise and which agrees entirely with Fox as opposed to Ojibwa.

The relation of Natick to Fox is not particularly close. In the discussion of the former language it is pointed out that most of the present suppositive mode corresponds to the Fox present subjunctive and that certain persons of the "præter" suppositive mode

correspond to the Fox potential subjunctive.

From the statistics given in the discussion of Menominee it will be seen that there are no certain agreements with Fox (Sauk, Kickapoo) that are not shared also by Cree and Montagnais, while Menominee shares quite a few terminations with Cree and Montagnais which are not shared by Fox. The forms that are peculiar to these four languages, with the possible exception of Natick in the first two—the orthography is not clear—are HE—HIM, THEM an., THEY an.—HIM, THEM. The agreement of Delaware (one form) with these four dialects in the forms for I—HIM, THEM an., THOU—HIM, THEM an. is noteworthy. The fact that the inanimate plural in the objective forms of the independent mode in Cree-Montagnais, Menominee, Sauk, Fox, Kickapoo is expressed by the same forms as the inanimate singular as opposed to Ojibwa, Algonkin, Ottawa, Potawatomi, and Shawnee, is remarkable. Peoria presumably agrees with the first group.

The agreement of Ojibwa, Fox, Cree, and Montagnais in the form for they an.—us (incl.) of the independent mode may be noted, as also

the agreement of Fox, Ojibwa, Cree, Montagnais, and Delaware (one form) in the termination for HE—US (excl.). (Note that Fort Totten Cree agrees with Fox and Ojibwa in the forms for HE, THEY an.—US (excl. and incl.).)

Fox, Shawnee, Cree, Montagnais, and Natick lack the nasal in the present subjunctive which Ojibwa, Peoria, and Delaware have. It will be seen that Cree agrees with Fox, as opposed to Ojibwa, in the forms we (excl.)—Thee, you; he—us (excl.). Note that Algorkin agrees with Fox and Cree in the first two instances and approaches them in the last. Presumably Ottawa agrees with Algonkin in the last form as it does in the first two. Few transitive forms of the Peoria present subjunctive are available, but it is certain that Peoria is in substantial concord with Algonkin and Ottawa. The Cree forms with the third person plural as subject or object correspond to the similar Fox participial forms. In some of these forms therefore Ojibwa seems close to Fox, but most of them are entirely different in structure from both Cree and Fox. Cree and Ojibwa agree in the form for 1—You (pl.) as opposed to Fox. The remarks made concerning Cree apply with certain limitations to Montagnais. (For these, see the discussion of that language, p. 248.) It is a matter of great regret that so few Peoria subjunctive forms are to be found among Doctor Gatschet's papers; for the Peoria conjunctive agrees in the forms for the third person plural animate as both subject and object (with the apparent exception of the forms we (incl.)—Them an. and they an.— IT, THEM inan.) with the Fox participial rather than with the Fox conjunctive, resembling Cree in the case of the present subjunctive. Now, as may be seen by reference to the Algonquian sketch in the Handbook of American Indian Languages, the terminations for the conjunctive, subjunctive, and participial are closely allied; hence it is very probable that the Peoria subjunctive is in similar agreement. (See, however, p. 271.) It is remarkable that Micmac in the conjunctive, though lacking the nasal, agrees with Peoria in that many forms in which the third person animate plural is either subject or object coincide with the Fox participial rather than with the subjunctive; but the forms for YE-THEM, HE-THEM, THEY-YOU correspond to the Fox conjunctive, not participial. The forms for не—нім; тнеу an.—нім, тнем an. differ in structure. (See the discussion of the Eastern subtype of Eastern-Central major division of Algonquian languages, p. 287.)

In the discussion of Montagnais it has been pointed out that the "suppositif" of the "mode subjonetif" is allied with the Fox potential subjunctive. It is repeated here to emphasize the northern affinities of Fox.

The relations of Fox to Delaware may be briefly dismissed. That Delaware shares in the independent mode the forms for 1—1111,

THEM, and THOU—HIM, THEM an. with Fox, Menominec, Montagnais, and Cree has been already pointed out as well as the agreement (one form) with Fox, Ojibwa, Cree, and Montagnais in the termination for HE-US (excl.). The concord of Delaware, Fox, Cree, and Montagnais in the ending for THEY an .- Us is of importance in that it shows the northern relationships of Delaware, but a striking similarity is to be found in the fact that Delaware has a correspondent, though altered considerably phonetically, to Fox -pena. As noted above, this termination is found alone in Fox but has correspondents in Eastern Algonquian and Piegan, and Shawnee approximates it. The forms which have the equivalent of -pena in Delaware are: WE (excl., and incl.?), intransitive; WE (excl.)—THEE, YOU (pl.), HIM; THOU—US (excl.); YE—US (excl.). In all these, however, Delaware has another form as well. The forms for we (incl.) are not given by Zeisberger, but it is reasonable to believe that they would be the same as the inclusive forms, that is where they would occur, with the substitution of k' for n'. It may be added that Delaware has a correspondent to the Fox conjunctive mode. (For other points, see the discussion of Delaware, p. 277.)

OJIBWA AND CLOSE LINGUISTIC COGNATES

The following compose this group: Ojibwa, Ottawa, Potawatomi. Algonkin, and (somewhat removed from them) Peoria, etc. A feature of the group is the accretion of a nasal. Delaware agrees with the group in this respect and this is to be considered a special point of contact with the Ojibwa group. Examples are: Fox utci whence, Ojibwa, Peoria ondji, Ottawa undji (Gatschet), Delaware untschi; Fox aneta some, Cree atit (for the phonetics, see the discussion of Cree, p. 239), Ojibwa anind, Peoria alenda, Delaware alinde; Fox Anāgwa STAR, Cree atak, Shawnee alagwa, Peoria alangwa, Ojibwa and Algonkin anang, Delaware allangue. Other examples can be readily found by consulting the tables of verbal terminations. The formation of the negative verb by means of a suffix ssi (or slightly varying forms) apparently is found in no other Algonquian languages. Examples are: Oiibwa kâwin kiwâbamigossi he does not see thee, kiwâbamigossig they DO NOT SEE THEE; Peoria wapamissokō do not look at me, kikülindansiwa she did not know (Fox ke'k+äne+itä-), Ottawa kuwimshe kikikänedissiwak (Gatschet) they are not yet acquainted with EACH OTHER (Fox $k\overline{\imath} + ke'k + \ddot{a}ne + t\overline{\imath} + w_Ag^i$ they had known each OTHER). A sibilant is retained before p (as in Menominee and Shawnee) in Ojibwa, Ottawa, and Algonkin, though not in Peoria (the writer can give no information about Potawatomi on this point): Cree kīcpin (kīspin) 1F, Ojibwa kishpin, Ottawa kīcpin; Algonkin kicpin; Cree ishpimik above, Ojibwa ishpiming, Peoria pämingi, Shawnee

spemegi, Fox a'pemegi (cf. Menominee icpämiya over and above). It is pointed out in the section on Sauk, etc., that Shawnee shares the loss of -wa with Ojibwa after i and ā, e. g., Fox ineniwa, Menominee inäniwa, Cree (Moose) ileliw, Shawnee hileni, Ojibwa ineni, Ottawa nine, Potawatomi nene (Peoria läni-a; see below); Fox ugimāwa, Menominee okēmāwa, Cree okimaw, Shawnee hugimā, Ojibwa ogima, Algonkin okima, Ottawa ûgima (Gatschet), Peoria kimā. Final wa is lost after e(ä) in Ojibwa, Algonkin, Ottawa, and Potawatomi: Fox i'kwäwa woman (Shawnee i'kwäwa), Cree iskwē·u, Ojibwa i'kwä, Algonkin ikwe, Ottawa 'kue (Gatschet), Potawatomi kwä (Gatschet).

OJIBWA, POTAWATOMI, OTTAWA, AND ALGONKIN

According to Dr. William Jones, Ojibwa, Ottawa, and Potawatomi are very closely related. This opinion is confirmed by Doctor Gatschet's notes and by personal information. Doctor Jones makes the observation that Potawatomi has a tendency to slur over syllables; this also can be confirmed from Doctor Gatschet's notes and the writer's personal information (e. g., nenwag men, Ojibwa neniwag).

Following is the table for the Ojibwa independent and subjunctive modes, taken from Bishop Baraga's Grammar of the Otchipwe Language (second edition, Montreal, 1878). The second n of nin in the independent mode is the accretion spoken of above. Under certain conditions it is omitted. Presumably Algonkin agrees in the usage. (It may be noted that apparently the dialect of the Mississippi band of Ojibwa at White Earth, Minn., does not completely agree with the usage given by Baraga in his paradigms.)

The very close relationship of Algonkin may be seen from the tables showing the Algonkin present, independent, and subjunctive modes, extracted from Lemoine's Dictionnaire Français-Algonkin (Quebec, 1911).

OJIBWA PRESENT INDEPENDENT MODE

they inan.	<i>uo-</i>									
it	(2)									
they an.	-wag	nin—gog	nin-gonanig	ki—gonanig	ki-gog	ki—gowag	o—awan	o-awan	$\left.\right\}$ 0 — $\hat{a}nawa$	o-ánawan
he	(3)	nin-g	nin—gonan	ki—gonan	ki-g	ki-gowa	o—an	o—an	[-4m [o-an	o_ûnan
ye	ki—m	ki—im	ki—imin	1	1	ı	ki—awa	ki—awag	ki—anawa	ki—ânawan
thou	ki-	ki—(i)	ki—imin	ſ	1	1	ki-a	ki-ag		ki—ánan
we incl.	ki—nnin		1	1	1	1	ki—anan	ki-ananig	ki—âmin	ki—ûmin
we excl.	nin-min		1	1	ki-go	ki—gosn	nin-anan	nin-ananig	nin—amin	nin-dmin
I	nin-	1	1	1	ki-n	ki-ninim	nin-a	nin-ag	nin—an	nin-anan
	Intrans	me · · · ·	us exel	us incl	thee	you	him	them an	it	them inan

¹ The ending proper in some cases is lost phonetically; in others it has not been recorded. Among the forms collected from the Mississippi band of Ojibwa at White Earthis kiniboʻwa sue mas nies; the -wa was inaudible but was indicated by the lips. The ending -wa=Fox -wa, Cree -w (i. e. wa), etc.

2 The termination is lost phonetically, e. g. sanagad it is Difficult = Fox sanagad it is difficult = Fox sanagad it is difficult. Fox sanagad it is preficult. pendent mode intransitive).

OJIBWA PRESENT SUBJUNCTIVE MODE

	they an.	-wad	-iwad	-iiangidwa	-nangwa	-kwa	-negwa	-awad	-awad	-amowad
	he	p	-id	-ijangid	-nang		-neg	-ąq	-ad	-ang
	уе	-ieg		-iidng	ı	1	ı		-egwa	-ameg
· ·	thou	-ian	-iian	-iiáng	1	1	1	-aq	-adwa	-aman
	we incl.	-iang	1	1	1	1	ı		-angwa	
	we exel.	-iáng		1	1	-goian	-goieg	-angid	-angidwa	-amang
	1	-ian		1	1	-nån	-nagog	-ud	-agwa	-dman
		Intrans	me	us excl	us incl	thee	nod	bim	them an	it, them, inan

ALGONKIN PRESENT INDEPENDENT MODE

they inan.	wo										
1	(lost phoneticon ally)										
they an.	-wak	ni—gok	ni-gonanik	ki-gonanik	ki—gok	ki—gawok	o-awan	o—awà	o-anawa	o—anawan	
he	(lost phoneticwak ally)	ni—k	ni—gonan	ki-gonan	ki-k	ki-gowa	np-o	O J	uv-o	o-anan	HODE
ye	ki-m	ki—im	ki-imin	1	l	1	ki-au'a	ki-awok	ki-anawa	ki—anawan	BJUNCTIVE N
thou	7. 7. 7. 7. 7. 7. 7. 7. 7. 7. 7. 7. 7. 7	ki—[i; lost pho- ki—im netically]	ki-imin	1	1	1	ki-a	ki— ak	ki— an	ki— $anan$	ALGONKIN PRESENT SUBJUNCTIVE MODE
we inel.	ki—min	ı]	Ì	.1	ki-anan	ki-ananik	ki-anan	ki—anananin	ALGONKIN
we excl.	ni—min	ı	ı	}	ki-nimin	ki nimin	ni-aaan	ni-anonik	ni-ananan	ni—anananin	
I	ai-	1		1	ki— n	ki nim	ni-a	ni ak	ni-an	ni—anan	
	Intrans	me	us excl.	us incl.	thee	you	bim	them an	it	them inan	

they inan.	~c								
it	-1-								
they an.	-watc	-iu'atc	-iamindwa	-inangwa	-kwo	-nagwa	-awotc	-owatc	-o mawate
he	-tc	•	-iiamintc		-k			-átc	_
. ve	-ieg	-iieg	-iiang	-	1	1	-ca	-cama	-ameg
thou	-ian	-iian	-iiang	1	1	1	-atc	-atwa	-aman
we incl.	-iang	I	1	1	1	. 1	-ang	-angwa	-amang
we excl.	-iang	1	1	1	-nang	-naag	-ûngitc	-angitwa	amâng
I	-iân	1	1	1	-nau	-nagok	-ak	-akwa	amûn
	Intrans	me · · · ·	us excl.	us incl	thee	you	him	them an	it, them, inan, .

The independent mode will be discussed first. WE (excl.)—THEE, you agrees in structure with the correspondents in Ottawa, Potawatomi, Natick, and Peoria (the writer lacks a form to prove this for Peoria in the form WE (excl.)—You, but the inference is justifiable). They approximate the Menominee correspondents. WE (excl. and incl.)—IT agrees in structure with Ottawa and the Cree of Fort Totten; WE (excl. and incl.)—THEM inan. agrees with Ottawa (it will be remembered that in Cree the third person plural inanimate coincides with the singular). HE—THEM an., and THEY an.—THEM an. agree with Passamaquoddy in formation.

The subjunctive mode now will be taken up. WE (excl.)—THEE, YOU agree in formation with Cree, Fox, Shawnee, Natick, Delaware, and presumably also with Peoria. (The correspondent in Ottawa for we (excl.)—you is not absolutely certain: see below.) The Ojibwa correspondents are passives in structure; the same may be said of the same forms of the Ojibwa independent mode. WE (excl.)— HIM, THOU—HIM, HE intrans., HE—ME, HE—US (excl.), HE—HIM, HE-THEM an., THEY an. intrans., THEY an.-ME, THEY an.-HIM, THEY an .- THEM an., THEY an .- IT, THEM inan. are conjunctives in structure and agree (with the regular phonetic differences) absolutely with the corresponding forms in Fox, and with the exception of HE—US (excl.) and THEY an.—US (excl.) (which differ slightly in structure, though exhibiting the same type of formation) also with those of Shawnee. Peoria agrees with the Algonkin forms under discussion in the terminations for we (excl.)—HIM, THOU—HIM, HE intrans., HE-ME, HE-HIM, THEY an. intrans., THEY an.-HIM, THEY an.-IT, THEM inan. The Algonkin form for THEY an.—US (excl.), though agreeing with Ojibwa in the final syllable, nevertheless agrees with Fox (and partially with Shawnee and Cree) in morphological formation. It should be noted that the structure of HE—us (excl.) and THEY an.—us (excl.) is fundamentally the same in the corresponding forms of the Fox, Shawnee, Cree (and Peoria?) subjunctive; the Fox, Shawnee, and Peoria conjunctive; the Fox and Shawnee participial.

With the exceptions noted above, Algonkin agrees completely with Ojibwa in the present tense of the independent and subjunctive modes.

The writer's personal experience with Ottawa was confined to a few hours at Carlisle; hence but a brief description can be given. Syllables are slurred over as in Potawatomi, though probably not to so great an extent. Examples are $kw\bar{a}bAmim$ ye see Me, $km\bar{n}nin$ I give thee. Final n is almost inaudible; compare the suppression of final m, n, l in Nass (Handbook of American Indian Languages, part 1, p. 288). In some cases the writer has consistently recorded the sound as a mere aspiration, e. g. in the independent forms for we (excl. and incl.)—IIIM, HE—US (excl. and incl.). In the objective forms of

THEM inan, the writer has consistently recorded the terminal n as full-sounding, as also in the forms for I—IT, THOU—IT, HE—IHM, HE-THEM an., HE-IT, THEY an.-HIM, THEM an., THEY an.-IT. In the remaining cases where final n is to be expected in the independent mode, excepting the form for I—THEE, the writer has been inconsistent in the recording and non-recording of the sound in question. problem is further complicated by the fact that the informant likewise spoke Ojibwa, and gave certain forms with the terminal n as Ojibwa and the correspondents without them (at least to the writer's ear) as Ottawa. Hence it is possible that confusion of dialect may account for the apparent inconsistency noted above. It may be mentioned that the late Doctor Gatschet's notes on Ottawa show forms without terminal n when etymologically expected; but the writer can not say whether the former was consistent in his usage. Another point in phonetics worth noting is that the terminal vowel in the forms I—HIM, THOU— HIM, YE—HIM is distinctly aspirated. Surd and sonant when terminal are extremely hard to distinguish. This applies especially to d and t. The writer is convinced that with the possible exception in the forms HE—THEE, IT, THEY inan., intransitive, of the subjunctive, k does not occur terminally, and that forms which sound as if containing this really end in strong (impure) sonant g. Medially surds and sonants are far easier to keep apart. Corresponding to Ojibwa and Algorian terminal nq in the subjunctive the writer consistently heard a post-palatal y without a following stop.

Turning now to the verbal forms of the present independent and subjunctive which show the general relationship of Ottawa to other members of the group: In the independent mode the forms for WE (excl. and inel.)—it, them inan.; we (excl.)—thee, you agree in formation with Algonkin as opposed to Ojibwa. (The form for we (excl.) —THEE, YOU k—ninim is noteworthy for the difference in phonetics as compared with the Algonkin correspondent.) In the same mode Ottawa agrees with Ojibwa as opposed to Algonkin in the forms for HE— THEM an., THEY an.—THEM an. Distinctive of Ottawa (apparently) is the fact that the form for they an.—It is the same as they an.—Them inan. In the subjunctive it may be noted that the forms for WE (exel.)—IIIM, THOU—HIM, HE intrans., HE—ME, HE—HIM, HE—THEM an., they an. intrans., they an.—me, they an.—him, they an.—them an, are subjunctives (cf. Ojibwa) and not conjunctives (cf. Algonkin). The forms that the writer received for HE—US (excl.), THEY an.—US (exel. and inel.), THEY an.—THEE, THEY an.—YOU are passives in formation, probably due to some misunderstanding. The structure of we (excl.)—Thee (and presumably we (excl.)—You) agrees with Algonkin as opposed to Ojibwa. It should be noted that the form for they an.—it, them inan., anāwād, apparently is absolutely unique, but the form evidently is to be associated with it, them inan. in objective forms of the independent mode.

The writer's personal information on Potawatomi is too slight for him to make very definite statements concerning its precise relationship with Ojibwa, Ottawa, and Algonkin. As stated above, all are very intimately related. Potawatomi agrees with Algonkin and Ottawa in the structure of the form for we (excl.)—Thee, you of the independent mode as opposed to Ojibwa. On the other hand it agrees with the latter language in the formation of WE (excl., and presumably incl.)—IT, THEM inan., of the same mode as opposed to Ottawa and Algonkin. Potawatomi possesses some marked characteristics of its own in the formation of the independent mode; WE (exel.)— μ_{IM} ($n-\bar{a}min$) and we (incl.)— μ_{IM} ($k-\bar{a}min$) have no correspondents in any Central Algonquian language noted thus far. The forms resemble strongly the inanimate correspondents, but the instrumental m (not t) distinctly proves that they must be animate. The component elements are the respective intransitive correspondents combined with the common objective pronoun, third person animate, \bar{a} . The plurals of the forms under discussion must have had a similar structure. They an.—You (k—gom) is unquestionably a passive in formation. Apparently they an.—it has the same termination as THEY an.—THEM inan.

Owing to phonetic differences, Cree, Menominee, Ojibwa, Algonkin, Ottawa, Delaware, and Passamaquoddy seem to agree in the forms for HE—ME, THEE as opposed to Sauk, Fox, Kickapoo, Shawnee, and Peoria, but Penobscot and Montagnais demonstrate that the phonetic change, though the same in the dialects mentioned, is merely a parallel development and has no significance in determining the ethnic relations of the tribes. The umlaut of Passamaquoddy in the forms demonstrates that the change in that dialect at least was a very recent one. In the same way Ojibwa-âm is merely the phonetic equivalent of Fox Amwa and Peoria -amwa.

The Ojibwa present, of both independent and subjunctive modes will now be discussed. Bearing in mind the comments made above on Algonkin, Ottawa, and Potawatomi, this will make clear the general linguistic relations of the entire group. The special points of Peoria are considered below. It may be mentioned here that ordinarily in the statistics of linguistic agreements given throughout this paper the agreement of Algonkin, Ottawa, and Potawatomi with Ojibwa is not noted. Where the agreement of Peoria is important, the fact of the agreement is noted. We will begin with the independent mode.

As noted in the discussion of Fox, Ojibwa shares no terminations with that language which are not shared by Cree except the terminations for HE, THEY an.—US (incl.) which are allied to the forms for HE, THEY an.—US (excl.) and THEY inan. intrans. (Fort Totten Cree agrees with Ojibwa and Fox in THEY an.—US (incl.).) For

this reason we can definitely state that Ojibwa has few, if any, special points of contact with Fox. As is pointed out in the discussion of Shawnee, Ojibwa shares the following forms with that language: I—нім, тием an.; тнои—нім, тнем an.; YE—нім, тием an.; не— YOU (pl.), HIM; THEY an.—YOU (pl.), HIM. It will be observed that Passamaquoddy likewise shares these forms except that for YE—THEM an. It should be noted that the Shawnee forms for I, THOU, YE, HE, THEY an.—THEM inan.; YE, THEY an.—IT certainly are closely connected with the Ojibwa correspondents. It is unfortunate that the Passamaquoddy equivalents are not available. However, it should be noted that Cree agrees in general structure with Shawnce in these forms with the exception of HE, THEY an.—THEM inan., they an.—it. On account of the unsatisfactory material at our disposal, it is best to abstain from a discussion of the relations of Ojibwa to Delaware regarding the independent mode here and refer the reader to the section dealing with Delaware. It will be noted that Ojibwa and Natick show some very marked agreements in the independent mode, namely, in the terminations for the first (excl., and incl.?) and second persons plural as both subject and objects. Owing to the deficient orthography, it is difficult to establish other close relations with Natick, but it is clear that in a considerable number of cases Natick differs from Ojibwa. With Cree, Ojibwa shares no forms that are not shared also by other Algonquian languages outside the Ojibwa group. (Forms are lacking to prove this for WE (incl.)—HIM, THEM an.; but the inference can be made with certainty.) The same applies to Menominee. The Menominee forms for we (excl. and incl.), ye intrans., ye-me approximate the Ojibwa correspondents, but it should be noted that in these cases Natick likewise resembles them. The same applies to 1, WE excl.— (The form we (incl.) intrans. is lacking, but the analogy of we (excl.) intrans, permits us to infer the form.) The agreement of Cree and Menominee with Ojibwa in the forms of I, THOU—IT, and their approximation in the forms for YE—HIM, THEM an. should be noted; as also the approximation of the Cree form for YE—IT.

We will now proceed to discuss the subjunctive. The presence of the nasal as in Algonkin, Ottawa, Potawatomi (?), Peoria, and Delaware will be noted. But Ojibwa has little in common with the last language in this mode outside the presence of the nasal. The terminations of the third person animate, plural, as both subject and object, for the greater part are in -wa. It should be noted that Peoria differs most from Ojibwa in the same persons of the conjunctive and hence presumably (see below) in the subjunctive. Algonkin and Ottawa agree with Ojibwa in this formation. It is a matter of regret that a table for the Potawatomi present subjunctive is not available, as it would be of great assistance in determining the pre-

cise relations of that language to the other members of the division. A similar formation is found in Menominee and also in Cree (East Main). See the section on Menominee. Owing to phonetic changes, Ojibwa and Cree seem to agree often as opposed to Fox, Peoria, and Shawnee, but this is quite accidental. The terminations for we (excl.)—thee, you are really passives in formation; Algonkin and Ottawa represent the original type. The formation of the terminations of the—us (excl.), they an.—us (excl.) is characteristic of Ojibwa, quite irrespective of the fact that the last ends in -wa. The forms are certainly allied to the forms for we (excl.)—him, them an. The termination for i—you agrees with Cree and Peoria as opposed to Fox. Exclusive of the formations mentioned, the agreement between Ojibwa, Cree, and Fox in this mode is remarkable.

There are a few other points to be considered. Ojibwa can form a preterite in ban. Cree and Delaware have a correspondent and the formation of past tenses of subordinate modes by means of this suffix is an important point of contact between these languages. It is remarkable that Montagnais, though sharing the formation in the indicative, apparently lacks it in subordinate modes. Penobscot and Malecite likewise share the formation in the indicative, but the writer ean not say whether they use it in the formation of past tenses of the subordinate modes. However, here we find a point of contact with Eastern Algonquian. Peoria has a similar formation but with a suffix pa. So far as known to the writer, its use is confined to the independent mode. Delaware possesses the same formation and it is also used to build up past tenses of subordinate modes. It is found also in Natick but seems to be confined to the independent mode. In Miemae it is attached to the conjunctive mode (which is used as an indicative) to form a past tense of the indicative; it is used in the subjunctive also, to judge from l'Abbé Maillard's Grammaire de la Langue Mikmaque (New York, 1869). On the same authority it may be added that Miemae apparently has the equivalent of the Ojibwa ban preterite, but only in the subjunctive, not elsewhere. These features make the Micmac forms seem so strange.

To sum up, Ojibwa chief linguistic relations are with Ottawa, Potawatomi, Algonkin, and (somewhat removed) with Peoria (see below). It has relations also with Eastern Algonquian and Cree; it is apparently but distantly related to Fox (also to Sauk and Kiekapoo); it apparently has important points of contact with Shawnee, but, as stated in the discussion of that language, these, for the greater part, may be due to the fact that Shawnee has much in common with Eastern Algonquian. Ojibwa and Delaware, exclusive of the nasality and the ban preterite (both of which are striking), have not very much in common, but the trouble may be with our material. Ojibwa is not closely related to Menominee.

PEORIA

It was noted above that Peoria 'certainly belongs to the Ojibwa group, as is shown by the accretion of a nasal and the formation of the negative verb. However, it possesses some strongly marked traits of its own. First of all, it has both n and l corresponding to Ojibwa, Menominee, Fox, etc., n under unknown conditions, and it agrees with Shawnee and Delaware in this use and to a certain extent with Eastern Algonquian. Further, a sibilant is not retained before p as it is in Ojibwa, e. g., $p\ddot{a}mingi$, Ojibwa ishpiming, Fox $a'pemeg^i$. Below appear the tables of the Peoria independent, conjunctive, and subjunctive modes so far as the writer has been able to construct them from Doctor Gatschet's notes and texts. The transitive forms of the independent mode are all taken from texts. Apparently Doctor Gatschet mistook the conjunctive for the independent. The confusion of surd and sonant has been left unchanged.

PEORIA INDEPENDENT MODE

	1	we excl.	we incl.	thon	уe	he	they an.
Intrans	$ni \begin{Bmatrix} n-\\ m- \end{Bmatrix}$	nin nim}-mina	ki-mina	ki-	ki-mwa	-u·a	-waki
me	_	_	_			ni-kwa ·	n-koki
us excl	_	_	_			ki-gana	
us incl	_	_		_	_		
thee		ki-lämina		_		ki-kwa	
yon	ki-limwa			_	_		
him	nd—a					-a	
them an	ni-aki 2						
it, them inan.						-amwa	-amōki

PEORIA CONJUNCTIVE MODE

	1	we excl.	we incl.	thou	Уe	h⊬	they an.
Intrans	-yani	-yangi	-yangu'i	-yani	-yikwi	-dji	-wadji
me	_			-iyani	-iyikwi	-ita	-itciki
ns excl	_	_	_	-iyangi	-ianyi	-ia minda	-iaminciki
us incl	_	_	_	_	_	-langwa	-langwiki
thee	-lani	-langi		_	_	-atciki	-*kiki
you	-lakaki	-langi	_	_	<u> </u>	-läkwa	-lakwiki
him	-aki	-akinci	-angwi	-adji	$-\epsilon kwi$	-ata	-atciki
them an	-akiki	-akinciki	-angwi	-adjiki	-ckwi(ki?)	-atciki	-atciki
it	-amani				•	angi	amawatcı

PEORIA SUBJUNCTIVE MODE

	1	we excl.	we incl.	thon	ус	he	they an.
Intrans	-yanä	-yanglä	-yangwä	-yanä	-yikwä	-tä	-watä
him	-akä		-angwä	-atä	-äkwä	-atä	-awata

¹ The writer has not sufficient material to warrant dealing with the question of the exact relation of Peoria to Miami, etc., beyond stating that they all seem intimately related.

² Miami.

Owing to the fact that Peoria phonetically is more archaic than Ojibwa in some respects, some of the forms of the independent mode seem to resemble more closely Fox than Ojibwa (the same applies to the conjunctive mode). But passing these over, Peoria has at least these formations which have no correspondents in Ojibwa: I—YOU (pl.); WE (excl.)—THEE; THEY an.—IT, THEM inan. The first two agree with Algonkin, Ottawa, Potawatomi, and Natick, the last with Fox, Cree, and Menominee. It is a matter of regret that Doctor Gatschet made no systematic collection of indicative forms. as some of them might prove to be important in establishing the relations of Peoria. However, from the meager terminations that the writer has been able to collect, it is possible to infer with certainty the forms for I—THEE, THOU—HIM, THOU—THEM an., YE—ME, YE-HIM, YE-THEM an., HE-YOU, THEY an.-THEE, THEY an.-YOU; and these confirm us in maintaining that Peoria belongs with Ojibwa, Ottawa, Algonkin, and Potawatomi. The form for HE—US (excl.) is extremely interesting: unless there is a phenomenon similar to that in Ottawa, and unfortunately we have not sufficient material to determine this, we have a point of contact with Shawnee (which geographically would not be surprising). If the form in question is really identical with the Shawnee form, then we can infer with absolute surety that the forms for HE-US (incl.), THEY an.-US (excl. and incl.) agree with their Shawnee correspondents.

The Peoria conjunctive and subjunctive are discussed in the sections dealing with Cree and Sauk. The terminations of the conjunctive, in which the third person plural animate is subject or object, correspond to the Fox, Shawnee, and Ojibwa participial mode. Now, as in Algonquian the terminations of the conjunctive, participial, and subjunctive are very closely allied, we may infer that the Peoria subjunctive in these persons agreed with the conjunctive. It will be observed that, with the apparent exception of the terminations for HE—THEM an. and WE (incl.)—THEM an., these forms would agree (as do those of the conjunctive) with the Cree subjunctive. (In reading Doctor Gatschet's texts the writer has met with -atci and -awatci, the terminations for HE-HIM, THEM an., THEY an.-HIM, THEM an., respectively. These are true conjunctive forms. The question hence arises to what an extent his notes giving the forms in the table should be accepted. The true conjunctive forms agree with the Fox and Shawnee correspondents of the same mode, and with the Algonkin correspondents of the subjunctive mode.) Even substituting the Ojibwa participial for the subjunctive in these persons, THEY an.—US(excl.) represent a different structure from that of the Ojibwa correspondent; note also the same difference exists in the form for HE—US (excl.) (see the discussion of Algonkin and Menominee, pp. 252, 265). THEY an.— IT, THEM inan. is a true conjunctive and agrees exactly with the Fox and Shawnee form of the same mode, and the corresponding Algonkin form in the subjunctive mode. It should be noticed that Micmae partially shares the feature of the Peoria conjunctive. In the other forms of the conjunctive Peoria agrees with Fox (Shawnee nearly), Algonkin, Cree, and Micmae (treating conjunctive and subjunctive as interchangeable) in the terminations for we (excl.)—THEE, YOU; HE—US (excl.); (with Natick also in we (excl.)—THEE, YOU); with Ojibwa, Algonkin, and Cree in the form for I—YOU (pl.). The other forms call for no comment.

From its phonetics Peoria, as said above, seems to resemble Fox closely in some particulars. But its more northern relationships are shown by the fact that the nominative plural of the inanimate noun ends in a, agreeing absolutely with Cree, and also by the fact that it shares with Cree and Montagnais a set of terminations that correspond to the Fox interrogative conjunctive and subjunctive, but lack the final syllable ni, whereas Ojibwa and Algonkin have the n even if the final vowel may be lost.

In closing the discussion of Peoria it should be mentioned that this language, together with Fox, Sauk, Kickapoo, and Shawnee, are the only Algonquian languages in which every animate noun and inanimate noun are known positively to end in the nominative singular in a and i, respectively (excluding cases in which wa is lost phonetically in Shawnee). It is possible that others also may share this feature. Menominee and Ojibwa should be especially investigated with a view to securing additional information on this point.

NATICK

That Natick belongs to the Central subdivision and not to the Eastern subdivision of the Eastern-Central major division of Algonquian languages is patent from the personal terminations of the verb in the present tense (affirmative form) of the indicative and suppositive (subjunctive) modes. Compare the following tables, extracted from Eliot:²

	I	we excl.	we incl.	thou	уе	he	they an.
Intrans	n-	n-mun		k-	k-mwao	-u 3	-u·og
me us exel	_		_	k—∈h k—imun	k—imuw k—imun	nk	n-kquog n-kqunnonog
us incl	_	_	_		_	k-kqun	n nquinonog
thee	k— sh	k-numun	-	_	_	k—k	k-kquog
you	k-numwo	k-numun	_		_	k-km	$k-k \omega oog$
him	n-[?]	n-oun		k-[?]	k-au	-uh	-ouh
them an	n-bog	n-ounonog		k-ing	k-mg	-uh	-ouh
it, them inan.(?)	n— u m u n	n-umumun		k-umun	k-umumwo	$\begin{cases} -umun\\ -um^1 \end{cases}$	$\leftu m w o g \right $

¹ Though the writer worked with the Mississippi band of Ojibwa (living at White Earth, Minn.) only a short time, he was able to determine the fact that in the independent mode the termination for THOU—ME in the same mode has a final whispered -i.

² In Moss. Hist. Soc. Coll., 2d ser., 1x, Boston, 1832.

³ Taken from Iorms in J. H. Trumbull's Natick Dictionary (Bull. 25, Bur. Amer. Ethnol.).

	1	we excl.	we incl.	thou	уе	he	they an.
Intrans	-on	-og		-an	-óg	-og?	-ohettit?
me	_	_	_	-ean	-€óg	-it	-hettit
us excl	_	_	-	<i>-€09</i>	-cog	-kqueog	-kqueog
us incl	_	_		_	_		
thee	-non	-nog	_	_	_	-kquean	-kqueon
you	-nóg	-nog	_	_	_	-kqueòg	-kqueòg
him	-og	-ogkut		avdt	-óg	-ont	1 -
them (an.)	-og	-ogkut		-odt	-óg	{-ont -ohettit	-a'hettit
it, them inan.(?)	-umon	-umog		-uman	-umóg	-uk	-umohettii

We will first take up the terminations of the indicative. I—YOU, YE intrans., YE-ME resemble the correspondents in Peoria and Menominee. Owing to the deficient orthography, a positive conclusion as to which of these Natick most closely resembles in the forms under discussion is not possible. It is probably the latter. WE (excl., intrans.); WE—THEE, YOU; THOU, YE—US (excl.); YE—HIM patently are to be associated with the Algonkin equivalents (and hence partly the Ojibwa ones). I, WE (excl.), THOU, YE—THEM an. presumably have the same affinities. HE—US (incl.) resembles the Shawnce (as certain others do as implied by the agreement with Algonkin) and Passamaquoddy (possibly also Peoria). HE—HIM apparently is to be connected with the Cree, Menominee, and Fox equivalent, but the phonetics are uncertain; THEY an.—THEM an. probably is to be associated with the Algonkin and Shawnee correspondent. WE (excl.)—HIM has a counterpart in Passamaquoddy. The forms with the inanimate object(s) are plainly composed of the intransitive forms and the pronominal element to be seen in Fox -Amwa, -Amowate, etc.: see section 34 of the Algonquian sketch in the Handbook of American Indian Languages (Bulletin 40, B. A. E.), pt. 1. The final n in I—IT, THOU—IT, HE—IT presumably is a purely phonetic accretion. It should be mentioned expressly that -umwoq They an.— IT is not to be directly connected with Cree -Amwag, as is shown by the forms of they an.—ME, thee (Cree ni—gwag, ki—gwag, respectively). The corresponding inanimate forms of Delaware should be compared.

It should be noticed that the personal terminations of the suppositive mode do not have the n as do the Ojibwa group and Delaware, thus agreeing with Fox, etc., Cree-Montagnais, Menominee, and Micmac. A detailed discussion is uncalled for. Most of the forms have the closest correspondence to Fox. The following find their closest correspondents in Delaware: ne—thee, he—you, he—them (one form) an., they an.; intransitive, they an.—me, they an.—they an.—they an.—us (excl.) resemble the Delaware correspondents.

20903°—28 етн—12——18

The terminations of the "præter" tense of the suppositive mode are patently allied to those of the present tense of the same mode. The distinctive mark is a final s. It will be observed from the following table that the endings for HE—ME, HE—HIM, HE—THEM an correspond to the Fox potential subjunctive:

	1	we excl.	we incl.	thou	уо	he	they an.
Intrans	-08	-ogkis		-as	-ógkis	-ogkis	-ohettis
me us excl	_ _ _			-cas	-cógkus	-is	-(e)hettis
thee	-nos -nógkus -nogkus	-nogkus -nogkus -nogkutus		-08		-kqueogkus	-kqueas -kqueógkus -ahellis
t, them in-	-nogkus -nogkus -umos	-nogkutus -umogkus		-08 -umôsa	-ogkus -ogkus -umógkus	-os -ukis	-anettis -ahettis -umahettis

The negative verb is formed by the insertion of $-\infty$ - (o), which apparently corresponds to Delaware -wi-. Examples are: Natick $kuppaumun\varpi p$ i did not pay thee, Delaware $atta\ k'pendolowip$ i did not hear thee.

The inanimate plural of nouns resembles the Piegan and Cheyenne forms.

The cluster sk is kept as in Cree and the Eastern subtype of the Eastern-Central major division of Algonquian languages; the combination of a sibilant + p and t presumably become 'p and 't, respectively, though this is not certain, owing to the deficient alphabet: Cree micpun it is snowing, snow, Fox me'pu- to snow, Natick muhpoo it snows; Cree mictig wood, Fox me'tegwi tree, Shawnee mtegwi, Ojibwa me^xtig (Turtle Mountain), Natick mehtug, Delaware mehittuek, Minsi michtuk; Cree miskawew (Lacombe) he finds him, Fox me'k- to find, Malecite muskuwan he found her, Natick miskom he finds it; Cree maskwa bear, Fox ma'kwa, Shawnee mkwa, Ojibwa ma'kwa, Peoria maxkwa, Natick mosq. (There are also cases where a sibilant apparently is retained before p in Natick.) The characteristic consonantic clusters of the Eastern subtype are wanting, and it should be noticed that l also is lacking, confirming the opinion that Natick belongs to the Central type.

Owing to the deficient alphabet it is difficult to determine the true consonantic clusters of the language. The groups -dt- and -gk- and -bp- are merely graphic for strong sonants so characteristic of many American Indian languages. The accretion -n-, -m- occurs but does not agree with Ojibwa in usage, now having it where lacking in Ojibwa, now lacking it where Ojibwa has it. Thus, wompi white,

Ojibwa wâbi, Fox wâpi: wonkqussis Fox (really a diminutive), Ojibwa wā'guc; anogqs star, Ojibwa anang, Delaware allanque, Peoria alangwa, Fox Anāgwa, Cree atak (for the phonetics, see the discussion of Cree, p. 239).

The lexical correspondence with the dialects of the Central subtype is far greater than is indicated in Trumbull's Natick Dictionary. (The same may be remarked of the Pequot-Mohegan material published by Speck and Prince.) However, at the present time it is impossible to say in which language the greatest number of correspondents are to be found.

DELAWARE

Zeisberger's material as contained in his grammar is not good:2 The forms of the various dialects are given without assigning each form to its proper dialect (see Zeisberger, p. 113, footnote); in the same paradigm some transitive forms have instrumentals, while others lack them; the spelling of one and the same personal termination is frequently absolutely inconsistent (e. g., -que, -ke); some passives are given as active transitive forms, and in at least one instance (possibly in more; see below) an inanimate objective form is given as animate. Under these unfortunate conditions the tables here given for the present indicative and subjunctive are bound to contain errors, for in the absence of Delaware informants representing the three dialects the writer has had to use discrimination as to the rejection or retention of certain forms. For this reason it is impossible to make very definite statements concerning the general relationships of Delaware among Algonquian languages. Yet the tables will have one result at least, albeit a negative one, namely, that the common supposition that Delaware is intimately connected with Eastern Algonquian (Micmac, Malecite, Passamaquoddy, Penobscot, and Abnaki) is certainly a mistaken one. On the possibility that the three Delaware divisions, Munsee, Unami, and Unalachtigo, were really separate tribes, each having special points of contact with different Central-Algonquian languages, though mutually intelligible, and that the apparent unity was only political, see page 279.

¹ A Grammar of the Language of the Lenno Lenape or Delaware Indians, Philadelphia, 1830.

² Others also have criticized Zeisberger adversely (see Brinton, The Lenape, p. 105, Philadelphia, 1885, who holds that the criticisms were unnecessarily severe. Correct his last reference to 1869-70, p. 105 ff).

	I	we exel.	we inel.	thou	ye.	he	they an.
Intrans.	n'-	$n'-\begin{cases}nen \end{cases}$		Ř'-	k'-{hhima newo	n- -, n	-wak -newa w-newa
me		1	ı	k'-i	k'—thhimo	$n' \begin{cases}k\\gun\end{cases}$	gaak \[\n^* - ge \end{genewa}
us exel		ı	1	k'—{incen fihkena	ineen jihena k'—jihenaa jihenoak jihummena	n '— $\begin{cases}gun\epsilon\epsilon n\\guna\end{cases}$	n'{geneen {n'_}gehena [n'?]_gunanak
us incl	ı	1,	ı	ı	1		[k'-geneen [[k'?]-gunanak
theе	$k' - \left\{ \frac{-ll}{len} \right\}$	k [toncen	1	-	ı	$k'-{k \choose gun}$	\\ \\ \\ \\ \\ \\ \\ \\ \\ \\ \\ \\ \\
nok	к"гонни пао	к. (гойналао Гойнена	1	I	I	k'—guwa	[k'—gehhima [[k'?]—guwawak
bim	$n'-\begin{cases} an\\ a\end{cases}$	n fancen othena		k^{\prime} — $\begin{cases} an \\ a \end{cases}$	$\left. ight\}_{k'\left\{awawatopawa ight.}$	-gol	-awall -anewa w'-anewa -gal
them an.	$n - \begin{cases} awak \\ ancwa \end{cases}$	awananak n' awananak awawano		$k - \begin{cases} a w a k \\ a n e w o \end{cases}$	$\left. \left. \left. \right\}_{k'} - \left\{ awawak \ awawall \ awawawall \ awawall \ a$	-awak w'awak	-awawak w'-awawak -awawall -gok
It (them inan.?).	n' amen	n'—amahhena		[k-?] amen	[k'?]—атоћћита		-amenewa

Intrans. -yan -yane -y		1	we excl.	we incl.	thou	ye	he	they an.
-lyane -iyenke	Intrans.	-ya -yane	-yenke		-yane	-hcdne	-1c	-chtite
	те				-iyane	-iyeqûc	-ite	-ichtite
-llane -lenque -quonne -quonne -lenque -quonne	us exel,			I	-iyenke	-iyenke	-ducuke	-quenke
deque	thee			i I		1 1	-duonne	-duonne
-achtc	you	-jedne	-leque	1	1	1	-dacidae	-dueque
-awake -awongue -awongue -achtigue -achtigue -achtigue -achtigue -achtigue -achtigue -achtigue -awintite -awangue -amane -amane -amane -amengue -amen	him	f-achtc f-ake		-andue-	-anne	-aque	-ate	-achtite
-ama (-amengue -amane -amane -anke	them an.	{-achtite -awake		-anoudae	-awonne -achte	-awake -achtique	-achtite	-achtite
		-ama	-amenque	,	-amane	-anegue	-anke	-amichtite

We will first discuss the independent mode. The first thing that will be noticed is the diversity of forms for one and the same person as subject and object. Such diversity is not found among other Algonquian languages and at once arouses suspicion that the multiplicity of forms is due to the fact that the different forms really belong to separate dialects. When we note further that the different forms point to contact with different Algonquian languages, the probability of this inference is heightened. Thus, n'—neen we (excl. intrans.), k'—loneen we (excl.)—Thee, k'—ineen THOU, YE—US (excl.), agree with Cree-Montagnais: n'—hhena we (excl., intrans.), k'—lohhena we (excl.)—THEE, k'—ihhena THOU, YE—US (excl.) agree with Fox and Passamaquoddy; n'-a 1- $\operatorname{HIM}, k'-a$ THOU — HIM agree with Passamaquoddy, Shawnee, and Ojibwa; n'—awa 1 иім, k'—awa тнои—нім with Fox, Menominee, and Cree-Montagnais; n'—guna HE—US (exel.) agrees with Passamaquoddy, Shawnee, and Peoria(?); n'-quneen HE—US (excl.) with Fox, Cree-Montagnais, and Ojibwa; n'-aneen WE (excl.)—IIIM agrees with Ojibwa and Cree-Montagnais: agrees with Fox.

The cognates of the remaining forms so far as available

will now be given: n'—awak, k'—awak 1—THEM an., THOU—THEM an.. respectively, have correspondents in Fox, Menominee, and Cree-Montagnais; k'—awawa YE—IIIM agrees with Menominee and Cree-Montagnais; (n'?)—gunanak, (k'?)—gunanak they an.—us (exel. and incl., respectively) agree with Fox, Fort Totten Cree, and Ojibwa (the former also with the Cree of Horden and Montagnais); k'-guwa HE—You (pl.) has a correspondent in Shawnee, Passamaquoddy, and Ojibwa; k'—guwawak they an.—you (pl.), one in Fox, Menominee, and Cree-Montagnais; n'-gun, k'-gun have counterparts in the Montagnais forms for on-me, te, respectively; w'-he (intrans.) has a correspondent in Eastern Algonquian, -u HE intrans. corresponds to Fox, Shawnee, and Peoria -wa, Cree -w, Montagnais -u; -qok THEY an.—THEM an. is a passive and corresponds to Fox -gōgi; the forms n'-, k'—ll, len; k'-; k'—i; -wak; n'—k, k'—k, n'—gook; k'—gook are common Central Algonquian; k'—ihenook YE—us (excl.) is a pluralized form of k'—ihhena; k'—awawak YE—THEM an. agrees with Menominee and Cree-Montagnais and illustrates the same formation; -awall THEY an.—HIM (with phonetic differences) is close to the Ojibwa correspondent: if w'- is to be restored, it coincides exactly; as it stands it agrees with the Passamaquoddy correspondent; the forms n'—gehhena, k'—gehhimo are palpably passives and really should not have been included; -qol пЕ—пім, to judge from Shawnee and Passamaquoddy, is really a passive; as a plural they an.—him, it seems an extension of this; ef. n'-geneen (graphic variant for n'—guneen); the same applies to k'—geneen (Fox ke—gunāna; there are correspondents in Ojibwa and Cree); w'—anawak (presumably a variant of w'—anewak) in its last part decidedly resembles Cree mowanewun they (indefinite third person plural animate) are EATING THEM (third person plural animate); 1 so it is clear that the terminations with newo are built up on some such system, though it is possible that some of the forms contain inanimate objects, not animate objects as given in the table (see the tables of the Ojibwa and Algorithm independent mode, pp. 263, 264). The forms n'-an, k'-an, w'-an are clearly of the same formation as Malecite ktian Thou TELLEST HIM; tian, otian HE TELLS HIM (stem ti); unfortunately there is no example available in Malecite for I-HIM. The forms with inanimate object(s) show the same type of formation as the Natick correspondents. The conjectural initial k' restored by the writer is confirmed by Sapir's notes. In closing the discussion of the independent mode it may be pointed out that it is impossible for one and the same dialect to contain both k'—guwa and (k'?)—guwawak (see the tables for Fox, Cree, Shawnee, and Ojibwa).

The present subjunctive does not require so detailed a report. It has the nasal as have Ojibwa and Peoria, but otherwise the forms are

far closer to Fox and Natick. The forms with the third person animate, singular and plural, as subject are the same in structure as those of the latter in nearly all cases and represent a formation otherwise unknown in Central and Eastern Algonquian. Some of the terminations seem peculiar to Delaware.

The forms -inke they an.—Me, -inde we (excl. or incl.?)—Them, which, following Zeisberger, one would be forced to consider transitive forms of the subjunctive, in reality are indefinite passive conjunctives (Fox -igi, -etci, Peoria -ingi, -ända, respectively). Again following Zeisberger, -geyenke, -geyane, -geyeque they an.—us (excl.), thee, you, respectively, would have to be considered transitive forms, but they are simple passives. The termination -amanque we (excl.)—them an really contains an inanimate object (see the tables for Fox and Ojibwa). Observe that i—it has an exact correspondent in Shawnee. Certain persons have n' and k' prefixed indiscriminately in the same forms and have been omitted from the above scheme as unreal (n' and k' are suggestive of the indicative).

Delaware has a p, and panne preterite. The former is shared by Peoria, Natick, and Miemac; the latter is found in Ojibwa; Cree, Montagnais, Malecite, and Penobscot (for the combination of both in the subjunctive mode, see the discussion of Ojibwa, p. 269).

The suffix of the future *-tsch* is presumably the same as Fox $-tc\bar{a}^i$ VERILY.

It should be mentioned that Delaware has a relative mode that corresponds to the Fox, Shawnee, Micmac, and Peoria conjunctive. The forms given are too few to constitute a complete series but the important point that the first person singular intransitive ends in -ya, as in Shawnee (cf. Micmac), is certain.

Delaware has consonantic clusters but to what an extent is not clear from the inadequate phonetic system employed by Zeisberger. Some of these clusters are due to changes of a sibilant with a voice-less stop, e. g., u'xkwäu (Sapir) woman, Cree iskwē·u. Others are patently due to the elimination of vowels, e. g., n'milguneen ne gives us (excl.), Fox nemīnegunāna, tulpe turtle, Abnaki tolba, Scaticook tūlipās (really a diminutive), Natick tonuppasog (pl.). Others are due to the combination of the signs for the preterite with the final consonant of the present. A nasal before stops agrees with Peoria and Ojibwa in this use as opposed to Fox, Shawnee, Cree, Montagnais, and Menominee. The origin of other clusters is quite obscure. It is doubtful whether there are true long consonants in Delaware; there is reason to suspect that their apparent existence is due merely to a faulty or deficient phonetic system.

It was shown above how Delaware exhibits great diversity in points of contact with other Algonquian languages; attention may here be drawn to the fact that since Fox and Shawnee are closely related to each other and both to the Eastern Algonquian languages (see the discussion of Sauk, Fox, etc., p. 258), agreement on the part of Delaware with any of these would imply a certain amount of agreement with the others, and as Fox has some decided points of contact with Cree, a similar state of affairs exists as to the latter language. However, these generalities do not answer specific questions. Though it is hazardous, as noted above, to give an opinion on the subject, the writer ventures to believe that Delaware as Zeisberger has presented it is not a single dialect but a composite. The facts of the case probably will be best satisfied by assuming one dialect the closest relationship of which was with Shawnee, but which shared with Fox (the phonetic representative of) -pena (Shawnee -pe), and another the closest relationship of which is with Cree-Montagnais, both of which assumed dialects had points of contact with Ojibwa and Natick. In the opinion of the writer there is not sufficient evidence at present to warrant the belief that another dialect had especially close relations with Eastern Algonquian, though it is possible there was a dialect that shared a few forms with Eastern Algonquian that were not shared by the other Delaware dialects. But all these theories must remain conjectures more or less plausible till all the Delaware dialects shall have been entirely restudied with the aid of living informants.

EASTERN SUBTYPE

The existing dialects composing this group are Micmac, Malecite, Passamaquoddy, Penobscot, and Abnaki. As mentioned above, these are all characterized by peculiar consonantic clusters and by certain grammatic terminations. However, as compared with Blackfoot, Cheyenne, or Arapaho they belong in the Central group, for there are numerous patent correspondents to the latter in vocabularies and in the discussion of Sauk, Fox, etc., it has been shown how intimately they are related to Fox and Shawnee in the verbal terminations. The correspondence in vocabulary with the Central type is far more general than has been supposed. The peculiar terminations are not very startling and show no more specialization than those of other Algonquian languages of the Central subtype. The peculiar terminations of the Miemae verb are due to the fact that the supposed indicatives are really correspondents to the Fox conjunctive. So in its last analysis the consonantal clusters are the distinguishing feature of the group. Below is a list of consonantic clusters in each of the following: Micmac (from one of the writer's longer texts). Malecite (from one of Mr. Mechling's longer texts), Passamaquoddy (from one of Doctor Gatschet's texts, of moderate length), and Penobscot (from Prof. J. Dyneley Prince's glossary in his article on Penobscot in Amer. Anthr., N. S., XII, No. 2, 183–208, 1910):

MICMAC

Initial conso- nant		Second consonant of cluster														
	p	b	t	d	k	g	m	n	· l	8	tc	dj	L?			
p			pt		pk				pl							
p b								bn	bl							
t	tp				tk											
d							dm	dn	dl							
k	kp		kt						kl	ks	ktc		k L f			
g							gm	gn	gl			i				
n	mp		mt	md	mk				ml	ms	mtc					
n	np		nt		nk1		n m			ns	ntc	ndj				
Z	lp	*lb	lt	ld	lk	lg	1m	ln		ls	ltc					
8	sp		st		sk		sm	sn	sl							
tc					tck											
dj					djk		djm	djn	djl							
x			xt							28	xtc					

¹ Probable mishearing for ηk : nk in the Malecite and Passamaquoddy tables likewise is ηk .

The semivowel w occurs after b, d, k, g, n, l, s, kk, pk, tk, nk, sk, tck. The only long consonants observed are tt and kk. These are of rare occurrence.

It has not been possible as yet to determine whether all these clusters occur in the same morphologic parts of words or are due to combinations of different morphologic components. The same statement applies to the clusters of the other languages discussed.

In the text the following clusters occur finally: tk, pk, mk, nk, lk, tek, djk, sk, kt. Initially only kl occurs; w in initial combinations occurs only after k.

MALECITE

Initial consonant	Second member of cluster												
	p	b	t	d	k	g	m	n	l	8	to		
р b			pt.		pk					ps			
t	tp	th			tk	tg	t m		tl				
d									dl				
k	kp		kt				km	kn	kl	ks	kte		
g							gm	gn					
m	mp			m d	mk			m n		ms			
n	np		nt	nd	nk								
l	lp			ld	lk		lm	ln		ls			
8	sp		st		sk				sl.				
z		4							zl				
lc					tck								

The semivowel w occurs after b, k, g, s, tk, tg, pk, sk.

The following clusters of three consonants occur: msk, stck, std.

The initial clusters that occur in the text are: sk, sp, km, kn, tb, ps, sl, tl. The semivowel w in initial combinations occurs only after k and g. The clusters which occur terminally are: kt, ktc, ptc.

PASSAMAQUODDY

Initial	Second member of cluster														
eonso- nant	р	b	t	d	k	g	m	n	l	8	tc	ts			
p			pt				pm	pn							
b t					tk										
đ									dl						
k	kp		kt							ks	ktc				
g															
m			mt	md	mk			mn		ms					
n	np								nl	ns		tsn			
l			lt			lg		ln							
8	sp		st		sk										
tc					tck										
x			xt		xk			xn	xl	23					

The following clusters of three consonants occur: ntk, nsk, ksk, psk, stck, xsm.

The semivowel w occurs after k, g, l, sk, xk, tk, lg.

The following two long consonants occur: ss, ll.

These clusters have been observed initially: kt, kp, km, ks, ktc. Finally, the cluster sk was observed. The semivowel w was noted as occurring after k and g of initial consonants.

PENOBSCOT

Initial		Second member of cluster												
onsonant	p	b	t	đ	k	g	m	n	l	8	3			
p b			bt						pl	ps				
t d					tk									
k g				,				!	gl	ks				
m . n		nb	nt	md nd	nk	ng ng		1			n			
l s	sp		lt st	ld sd	lk sk	lg		ln						
zn	P		zt		tck			zn						

The semivowel w occurs after k, g, d, l, m, sk, mk, te.

The only true consonantal clusters observed initially were sk, sp. After initial g and k, w occurs. The only final consonantic cluster noted was ps.

The following long consonants were noted: kk, pp, ll, ss. Two clusters of three consonants were observed: bsk, nsk.

An examination of the tables will show that the old view that Micmae alone of Eastern Algonquian differed especially from Central

Algonquian by reason of clusters, is incorrect.

The consonantal clusters of such words that have known equivalents in Central Algonquian are due for the greater part to the elimination of vowels. Thus Micmae kesaptug after he looked at it (for $k\bar{e}si + \bar{a}pi + t + ug$; Fox $k\bar{i}c\bar{a}pitag^i$), wapk in the morning (Fox $w\hat{a}bAg^i$), m_Andu DEVIL (Fox $m_Anit\bar{o}w^a$), elmied HE WENT ON (Malecite elimialit when he (obs.) went away, Fox initial stem anemi yon way); helno, Penobscot alnobe Indian (Shawnee hileni, Ojibwa ineni, Fox ineniwa, Cree iyiniw man); Penobscot spumki heaven, Abnaki spemk heaven (Passamaquoddy spemek high, Cree ishpimik, Ojibwa ish piming, Shawnee spemegi, Fox a'pemegi, Peoria pämingi (cf. Menomince Acpämiya); Micmac kospemk at the lake (Passamaquoddy kůspemuk on a lake; Cree kuspamuw road which goes beside tim-BER WHERE THERE IS WATER); Penobscot pebonkik in the north (Fox $pep\bar{o}n^i + a'kig^i$); Penobscot $w\bar{o}btegua$ wild goose (for $w\bar{o}b$ - cf. Fox wâpi-, Natick wompi- white); Penobscot n'weweldamen i know IT (-el-=Fox -äne-); Micmac elmodjig dogs; Malecite ulamus (really a diminutive), Delaware alum; Ojibwa animosh, Fox Anemō'a, Natick anum, Cree atim (for the phonetics see the discussion of Cree, p. 239); Abnaki kidasnj'm' (Sapir) thy stone (Fox keta'seni'm', cf. Abnaki sin' stone): Malecite k'pmo'sêba' (Sapir) ye run (Fox kepemusäpwa). When a vowel is lost after l (corresponding to Fox n, Shawnee and Delaware l) and a consonantal cluster arises this way, or if the l thereby becomes final, the preceding vowel takes an o (u) tinge; if the preceding vowel be i, then o attaches itself thereto. To make clear the examples of this it is necessary to state that the cluster pw becomes p or b (note that pw does not occur in the tables given above). Thus Malecite k_{A} nimiol 1 see thee (stem nimi; intervocalic instrumental h lost), Passamaquoddy ktekamal i strike thee (-m- is an instrumental particle); compare Fox ke—ne, Shawnee ke—le; for Malecite kanimiolpa i see you (pl.), Passamaquoddy ktekmulpa i strike you (pl.); cf. Fox ke—nepwa, Shawnee ke—lepwa. (It may be as well to mention that Fox ke—nepwa is made up of ke—pwa and ne, and is not a morphologic unit.) Micmae dagamulkwa HE STRIKES US, inclusive, corresponds to Fox -menagwe, in which m is the instrumental particle, e the phonetic insert, nagwe (Shawnee -laque) the termination for

HE—US (incl.) of the conjunctive mode. The participal -ultiteig in Micmae (and the corresponding forms of the other dialects) corresponds to Fox -netīteigi, in which n is the instrumental particle, e the phonetic insert, $t\bar{\imath}$ the sign of reciprocity, tcigi the third person animate intransitive of the participial.

It should be noted that the elimination of vowels sometimes causes nasals and liquids to become syllabic, a phenomenon which Sanskritists call $sampras\bar{a}rana$, e. g. Passamaquoddy nikwaxsan red stone (PIPE) (cf. Fox $meckw-+asen^i$).

Especially should it be observed that the clusters, consisting of a sibilant +k or p, are kept exactly as in Cree (see the discussion of Cree, p. 238). Thus Cree amisk beaver, Stockbridge (Edwards) amisque, Ojibwa ami'k, Delaware amochk, Fox ame'kwa, Shawnee hamakwa, Peoria amäkwa, Abnaki pep8nemesk8 winter beaver, Micmac pŭlŭmskw beaver of third year (Rand); Cree miskawew he finds him, HER, Fox me'kawäwa he finds him, her, Natick miskom he finds it, Malecite muskuwan he found her; Cree ishpimik above, Ojibwa ishpiming, Fox a' pemegi, Peoria pämingi, Shawnee spemegi, Menominee icpämiya above, Penobscot spumki неаven, Abnaki spemk неаven, Passamaquoddy sp*emek* high; Cree kuspamuw road which goes BESIDE TIMBER WHERE THERE IS WATER, Micmae $k\bar{o}$ spemk at the lake, Passamaquoddy kûspemuk on a lake; Cree iskwew woman, Fox i'kwäw^a, Natick squaw, Delaware ochqueu, Micmac kēsigō-ēskw^a оьр WOMAN. Since sp and sk are original, it is probable that st is likewise. The cluster is not common, and the writer has not found in Central Algonquian analogues as yet to such words as contain it. Yet it is perhaps possible to establish the claim indirectly. Micmac kēsēwistodidi means after they had finished speaking; it is to be presumed that the $st\bar{o}$ corresponds to Fox $t\bar{o}$ (see section 21.7 of the Algonquian sketch in the Handbook of American Indian Languages, part 1). The 't points phonetically to an original *st. These clusters strongly point to a more northern origin than Fox had.

It is true that the origin of many clusters can not be explained at present, but it is not unreasonable to believe that the application of the foregoing principles will explain many more when our knowledge of the languages shall have increased, and perhaps phonetic laws yet to be discovered will account for the remainder. For the consonantic clusters in Piegan, Cheyenne, Arapaho, and Eastern Algonquian are so fundamentally different that it is improbable that any of their types are original. It may be assumed, then, provisionally that the Central type, from which true consonantic clusters are lacking, with certain limitations, shows the most primitive condition of Algonquian languages.

An original o or u under unknown conditions seems to umlaut the vowel of the preceding syllable to o, u, as does postconsonantal w. Thus, Malecite tioqul HE WAS TOLD; this stands for *tegoli (cf. Shawnee $oteg\bar{o}l^i$ HE WAS TOLD), in which $o-g\bar{o}l^i$ is the passive termination and te the initial stem. Penobscot k'namiogona HE SEES US (incl.), Abnaki k'namiogonna are additional illustrations. The terminations are for *ke-quna (cf. Shawnee); -he-, the instrumental + the e insert, has suffered the changes shown above and the h is lost; the stem is nami. Passamaquoddy ndekamugun HE STRIKES US (excl.) and kdekamugun he strikes us (incl.) are for *ne-meguna and *kemeguna, respectively: m is the instrumental particle; e the phonetic insert which has been umlauted to u. Other examples of this umlauting will be mentioned in the discussion of the verbal endings. Examples in which a w (either maintained or lost) has caused umlaut are: Penobscot namiukw ne sees me (for n'n-), Abnaki n'namiok, Passamaquoddy ndekamuk ne strikes me (Fox ne—gwa; rest explained above); ktekamuk he strikes thee (Fox ke—gwa).

Below are tables of such forms of the Passamaquoddy independent mode (present tense) and of the Micmac conjunctive (which is used like the indicative) mode as the writer has been able to extract from Doctor Gatschet's papers.

PASSAMAQUODDY PRESENT INDEPENDENT MODE

	1	we excl.	we incl.	thou	ye	he	they (an.)
Intrans	n-	n-b.i n	k—b _A n	k-	k-ba		-wuk
me	_	_	_	k—i	k—iba	n—k	-
us exel	_	_		k—ibAn	k—ibAn	n-gun	n-gunwuk
us incl	— .	_	-	_	-	k-gun	k-gunwuk
thee	k-l	k—lpen	<u> </u>	-	_	kk	k-guk
уон	k— lpa	k— $lpen$	_	_	_	k-guwa	k-gua
him	n—a	n—an		ka	k—awa	u—al	-awal
them (an.) .	n-ak		k-anwuk	k-ak	k—awa	u-a	u-awa

MICMAC CONJUNCTIVE MODE

1	we excl.	we incl.	thou	уe	he	they (an.)
me —	_	_	-in -iek	$-i\epsilon k$	-it	-idjik
us incl — —	-	_		_	-lk8	-lkwik
you -lox	-lck -lek	-	_	_	-sk -lox	-skik -lox
himuk them (an.) . -gik	-uget -ugidjik			-ox -ox	-adl -adji	-adidl -adidjik

In comparing the forms with other Algonquian languages it is necessary to keep in mind the phonetic changes hinted at above. In the Passamaquoddy independent mode the u and w umlaut occurs in the forms for he—me, us (incl. and excl.), thee; they an.—me, us (excl. and incl.), thee, you. The agreement in the use of l with Shawnee, etc., in contrast with Fox, Ojibwa, Cree, etc., n should be noted; also the elimination of vowels and the phonetic changes involved.

While treating of the linguistic relations of Fox and Shawnee, it was necessary to treat Passamaquoddy at some length. It was shown that Passamaquoddy is very closely related to Fox on the one hand and to Shawnee on the other. The form for wE (incl.)— THEM an. approximates most closely the corresponding Cree and Montagnais form, though not identical with them. The relationship is the same in the case of WE (excl.)—HIM. This last approximates the form in Cree, Montagnais, Delaware (one form), and Ojibwa; it coincides with the analogue in Natick and by chance with that in Chevenne. We say by chance, as Chevenne has no other special agreements with Eastern Algonquian, whereas, as was pointed out in the discussion of Fox, Natick happens to share another termination. The form for THEY an.—us (incl.) approximates the Cree, Montagnais, and Menominee analogues. The agreement of the last named with Passamaquoddy is undoubtedly fortuitous, due simply to the fact that Menominee as well as Eastern Algonquian shows certain affinities with Cree-Montagnais. The form for YE-THEM an. apparently is the same as that for YE—HIM. The form for THEY an.—US (excl.) is based on the same formation as THEY an.—US (incl.). The fact that Passamaquoddy shares certain persons of the independent mode with Ojibwa was shown in the discussion of Fox. But it should be noted that all such persons are likewise shared by Shawnee.

There is given below a table of the Abnaki present independent mode so far as the writer has been able to extract the terminations from Doctor Sapir's notes:

	1	we excl.	we incl.	thou	уе	he	they an.
lntrans	nI- (n-)	(n)-bIna*		ki- (k-)	k-ba*],	-wak*
me	_			k-i			(n)—gok
us excl			_	k-ibIna'	k-ibIna'	[(n)-gabina']	
us incl	_		_	_	_		
thee	k-i	k-lbina'	_	_	_		$k-gqk^*$
you	k-l.ba'	k-lbina'	_	_	_		
him	(n)—A*	(n)-Ablna		k-4	k—Amba*	0-4	
them an	(n) — $A \eta k^*$			k-17k'	k-Amba'	0-4 l	

A detailed discussion is uncalled for. It should, however, be noted that Abnaki agrees with Fox as opposed to Shawnee (and Passamaquoddy) in the forms for YE—IIIM, THEM an. Initial n apparently is lost before certain consonants. This accounts for the strange appearance of certain forms. The form for WE (excl.)—IIIM agrees with Fox as opposed to Passamaquoddy. IIE—US (excl.) is the equivalent of Fox $ne-g\bar{o}pena$, of the indefinite passive, independent mode. It may be noted that Malecite agrees with Passamaquoddy in this respect. From Doctor Sapir's notes it would seem that in Malecite a faint final w is retained after k where etymologically required, which is lost (or at least not recorded by Doctor Gatschet) in Passamaquoddy. The writer's available material is too scanty in the case of Malecite and Penobscot to give tables for them; but it is certain that they agreed essentially with Passamaquoddy and Abnaki.

As Eastern Algonquian shows certain points in common with Cree-Montagnais as opposed to Ojibwa, etc. (see pp. 238, 284) it may be that the pan preterite is really a point of contact between Eastern Algonquian and the former; but this is forcing matters, as certain personal endings of Eastern Algonquian agree with Ojibwa, etc. (those shared also by Shawnee), as opposed to Cree-Montagnais. (For additional points of contact between Eastern Algonquian and Cree-Montagnais, see p. 245, in the discussion of the Micmac conjunctive.) Despite the usual view of the subject, the relations of Eastern Algonquian with Delaware are not close. On consulting the tables given in the discussion of Delaware it will be seen how few terminations of the independent mode phonetically coincide with those of Passamaquoddy. There are no agreements between the two that are not shared either by Fox or Shawnee; as a matter of fact, Delaware agrees in some cases with Fox as opposed to Shawnee and Eastern Algonquian. But, as was shown in the discussion of Delaware, the existing material is poor, and it is clear that the several Delaware dialects had different linguistic relations. At present, however, there is not sufficient evidence to show that any one of the dialects had especially close relations with the Eastern branch of the Eastern-Central group of Algonquian languages.

A table of the Micmac conjunctive from Doctor Gatschet's notes is here given because the one from the writer's notes and texts contains too many unfilled schedules. The table is supplemented by the form for HE—US (excl.), Amet, and these intransitive forms are given:

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1 WE (excl.) WE (incl.) THOU YE HE THEY (an.) IT, THEY (man.)
-i -ieg -igwa -in -yo -d -djig
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The forms which Doetor Gatschet gives as -adl and -adidl are considered broken Micmac at St. Anne de Restigouche. The current forms are -adjl, -adidjl, yet one of the informants, a woman upward of eighty, constantly used the forms given by Doctor Gatschet. The question of dialectic variation must be taken into account, as Doctor Gatschet's material came from New Brunswick. Final surds and sonants are exceedingly hard to distinguish at St. Anne de Restigouche, but this difficulty is not encountered with those occupying a medial position. In the opinion of the writer there are, finally, neither true surds nor sonants, only intermediates.

A detailed discussion of the forms is uncalled for. There is l corresponding to Fox n, of course, but the forms themselves morphologically approximate very closely the Fox analogues; as was pointed out in the discussion of Sauk, etc., however, certain terminations resemble the Fox participial rather than the subjunctive, thus partially agreeing with the Peoria conjunctive and the Cree subjunctive. The termination for the first person singular intransitive apparently coincides phonetically with the Shawnee and Delaware analogue. The form for HE—US (excl.) is important as showing the fact that the relations with Ojibwa, Delaware, and Natick are not close. It should be noted that the forms with the third person singular animate as subject suggest relationship with the Fox subjunctive rather than conjunctive. The terminations -adl and -adidl certainly contain the obvialitive l, but though the former is clear enough in formation (-ad+l), the latter is not.

It may be noted that there is another conjunctive form for the third singular, namely, -tc, e. g., pemietc when he walks along; this resembles closely the Fox analogue. The other terminations seem to be based on the ordinary conjunctive mode with the addition of a suffix (?) g with certain phonetic modifications.

There is a dual, e. g., kispanadidjig they are tired, as compared with kispanedjig they two are tired. The actual terminations seem to be the same; the -di- on the face of it apparently corresponds to Fox -tī-, the sign of reciprocity. This is brought out by such expressions as $m_A d n_B d n$

To sum up the general relations of Eastern Algonquian, we may say that the group is very intimately related to Fox and Shawnee; next, to Cree-Montagnais; not closely to Ojibwa; and remotely to Delaware and Natick. The relations with Piegan are not sufficiently clear to justify a positive statement, but it should be observed that

certain personal terminations of the independent mode have close analogues (which are shared by Sauk, Fox, Kickapoo, and partially by Shawnee).

The material at the writer's disposal does not permit a strong characterization of the individual traits of the various dialects composing the Eastern subtype of the major Eastern-Central division of Algonquian languages. According to J. Dyneley Prince and W. Mechling (personal communications), Penobscot, Abnaki, Passamaquoddy, and Malecite are more closely related to one another than any one is to Micmac. According to information received, Micmac can understand Malecite without much difficulty. A characteristic of Micmac is the apparent lack of forms corresponding to the independent mode of the other dialects; but the latter have forms corresponding to the Micmae conjunctive. The preterite "indicative" of Micmae is based on the conjunctive, whereas in the other dialects it is based on the forms of the independent mode; but the principle of formation is alike. According to Prince, the differentiation of Penobscot and Abnaki is comparatively recent. The writer, however, does not consider Abnaki nasalized vowels archaic; on the contrary, he believes the Penobscot pure vowels more original. Passamaquoddy and Malecite are very similar to each other and may prove to be practically identical. In closing the discussion of the Eastern subtype, the writer thinks it well to add that in his judgment the r which appears in the works of the older writers was an intermediate between r and l; hence they recorded it with the sound with which they associated it.

Summary

Algonquian tribes linguistically fall into four major divisions: Blackfoot, Cheyenne, Arapaho, and Eastern-Central. The Blackfoot major group shows some unmistakable signs of contact with Sauk, Fox, and Kickapoo of the Central subtype and with Eastern Algonquian. Chevenne exhibits affinities with the Ojibwa subdivision of Central Algonquian, though it has also some rather northern affinities. It is premature to venture an opinion with which language or languages Arapaho is to be most intimately associated. The Eastern-Central major division is divisible into two subtypes, Central and Eastern. The Central subtype has further groupings within itself: Cree-Montagnais, Menominee, Sauk, Fox, Kickapoo, and Shawnee; Ojibwa, Ottawa, Potawatomi, Algonkin, and Peoria; Delaware (see the discussion of this language, p. 279), and Natick. Eastern Algonquian may perhaps be divided into two groups, Miemac, on the one hand, and the remaining extant dialects (which, collectively, may be designated Abnaki), on the other. The very intimate connection of Eastern Algonquian with Sauk, Fox, and Kickapoo, as well with

Shawnee, should be emphasized. Owing to the peculiarity in Micmac, noted on page 289, it is not possible to be so confident as to whether this relationship extends as intimately in this language; but the conjunctive mode points in this direction.

1 It will be noticed that on the accompanying map showing the distribution and interrelation of the Algonquian dialects (pl. 103), there are many names of dialects not dealt with systematically in the texts. This is because the existing material did not make such treatment feasible. The author does not doubt that Nanticoke, etc., are Algonquian dialects. (Dr. Frank G. Speck, of the University of Pennsylvania, has kindly made for the use of the writer extracts from manuscripts in the library of the American Philosophical Society, demonstrating that Nanticoke belongs to the Eastern-Central major division of Algonquian languages. Unfortunately verbal forms were practically absent; so until our knowledge of Unami, Unalachtigo, and Munsee shall be more extensive, it will not be possible to settle definitely the exact position of Nanticoke. Hence it is probable that the other southern Algonquian dialects along the Atlantic coast belong to the Eastern-Central division.) In this connection it may be stated that Pennacook is assigned to the Abnaki-Micmae group, partly for geographical reasons, partly on account of the history of the tribe. The early French and English writers can not be relied on regarding the intimate or remote relationships among the various Algonquian dialects, except where they can be corroborated by existing dialects. The reason for this is not far to seek. As before stated (p. 237), the Central Algonquian dialects are very intimately related, and philology at the time had not reached a point where fine distinctions could be made. It will be remembered how recently it has been possible for philology to determine the interrelations of the dialects within the major divisions of Indo-European languages, and how deficient even to-day is our knowledge of the interrelations of the major divisions of those languages. Moreover, inaccurate phonetics would blur out many distinctive points. It is simply a waste of time to attempt to unravel the vagaries of the orthography of the older writers in the case of dialects existing to-day. The accompanying map does not attempt to represent the distribution of Algonquian dialects at any one period. It will be remembered that our knowledge of the various tribes was not synchronous. It would have been feasible to make a map showing their localities, with dates, provided the interrelations were not have been leastnet to make a map showing their localities, with dates, provided the interestations well not shown; but the prime object was to show the interrelations. (A case in point is the localization of the habitat of the Sauk. They were first known in the eastern peninsula of Michigan, only later in the locality shown on the map.) The authority for the localizations can usually be found in the Handbook of American Indians (Bulletin 30, B.A.E.). With respect to the map the following departures from the color scheme should be noted: Prince Edward Island and Cape Breton formed part of the Micmae territory. Manitoulin Island and the peninsula between Georgian Bay and Lake Huron were occupied by Ottawa and the peninsula between Lakes Superior and Michigan east of the Menominee by Chippewa.

It may be noted that under the name Abnaki, the Abnaki (properly speaking), Malecite, Passama-

quoddy, and Penobscot are included.

The form Chippewa on the map follows that of the Handbook of American Indians; the form Ojibwa in the text conforms to the orthography of the Handbook of American Indian Languages (Bulletin 40, B, A, E).

From Edwards' Observations on the Language of the Muhhekaneew Indians, reprinted in Mass. Hist. Coll., 2d ser., x (Boston, 1823), p. 81 ff., some notes may be made on the language of the Indians of Stockbridge, Mass., though unsystematically. The words amisque beaver, spummuck heaven at once show the dialect does not belong with Delaware. So does paumseauk we (excl. or incl.?) walking (Fox pāmusāyāge or -y-4gwe) by lacking a nasal in the pronominal ending. The words nphtuhquissehnuh we are tall, nmeetschnuh we eat (both exclusive in formation) demonstrate that the dialect is not to be associated with Natick, Delaware, or the Abnaki group. The termination n-nuh suggests that the termination for we incl. intrans. was k-nuh: this last coincides with a variant Cree correspondent given by Lacombe. On the other hand n-nuh and k-nuh resemble very much the Menominee correspondents save the lack of the m syllable. On a later occasion the writer will return to this particular point. Here it may be said that the m + vowel is not so vitally important as the other portions of the termination. The phonetics of metooque woon are also against intimate relationship with Cree. The word ktuhwhunoohmuh i love you resembles closest the Natick form; but nduhwhunuw i love him has a different look. The phonetics of nogh my father suggest affinity with Delaware; cf. nuxua my father (Sapir). These notes were made subsequent to the printing of the map (pl. 103).

It is needless to say that all Algonquian tribes and subtribes could not be shown on the map for want of space.

ADDENDUM

It was impossible to insert in the text the results of the writer's field work in the summer, autumn, and winter of 1912, but the most important results may be summarized briefly here.

Piegan (of Montana) has whispered vowels terminally after w and nasals; x is distinctly post-velar; final k is distinctly aspirated. Gros Ventre (Atsina) sheds little light on Arapaho, sharing with the latter practically all deviations from normal Algonquian. Potawatomi differs more from Ojibwa, Ottawa, and Algonkin than these do from one another. According to communications from Doctor Sapir of the Geological Survey of Canada and Doctor Radin of the International School of Ethnology and Archeology, the Ojibwa dialeet at Sarnia, Ontario, seems to be highly specialized. The intimation given in the section on Delaware that Zeisberger's material represents no single dialect was borne out by the writer's experience with the Munsee of Kansas and the Delaware of Oklahoma. Apparently no distinction can be drawn to-day between Unami and Unalachtigo. The phonetic system of Zeisberger is very deficient. Every stop occurs as surd, sonant (after nasals), surd aspirate (terminally), and glottalized. Voiceless l occurs medially before consonants in both Delaware and Munsee, and terminally in the latter (where it seemingly is lost in the former). Long consonants are common, also consonantic clusters, owing largely to elimination of vowels. Umlaut is caused by w. On the whole, both Delaware and Munsee have suffered very considerable phonetic changes from normal Central Algonquian; Munsee is by far the more archaic of the two. In Munsee whispered vowels occur initially, medially, and terminally (after w). In Delaware seemingly they are found medially and terminally after w. In both, s, y, w, and loccur glottalized as well. The variety of forms given in the table is due in part to dialect mixture, in part to phonetic changes. Some of the forms are due possibly to mishearing; some contain double objects; others seemingly are to distinguish third persons; still others owe their origin to causes which are unknown although the forms exist to-day. The statement that one dialect had the closest relations with Cree-Montagnais and another with Shawnee, is wrong. Zeisberger's inadequate phonetics were wrongly interpreted. It is clear that both Delaware and Munsee are closely related and, though they can not be easily classed with any other large group, it is clear that they approximate the Ojibwa group in important points, and

Ottawa in particular. Phonetically, however, in some points they approximate more closely Peoria and other languages belonging to the same group. (Zeisberger does not distinguish -k [Fox $-g^i$] and $-kw^a$ [Fox $-gw^a$]: both are written -k; the case of $-mw^a$, which remains in Munsee but undergoes certain changes in Delaware, is somewhat similar.) From Doctor Sapir's notes it would seem that the Delaware of Oklahoma and that of Canada (Smoothtown) differ in certain points.



APPENDICES

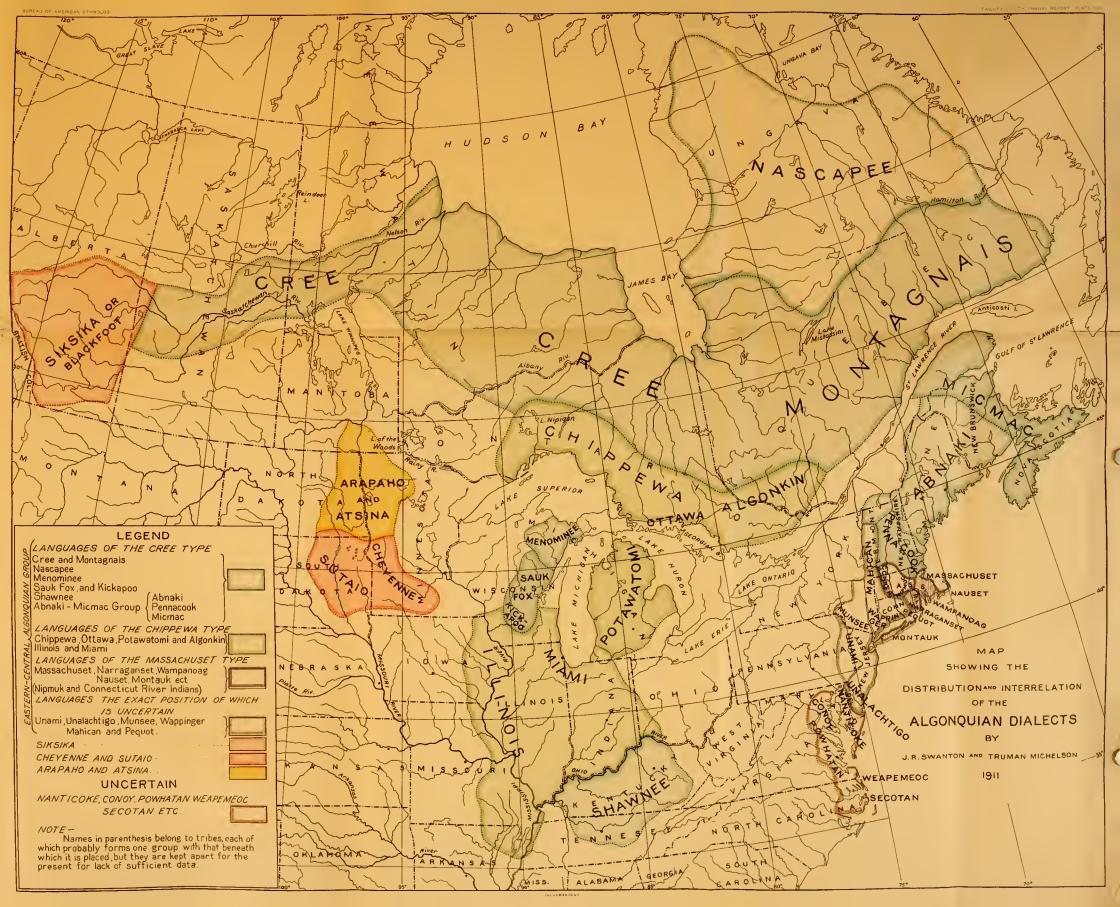
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NATICK, AND DELAWARE SUBJUNCTIVE MODE, PRESENT TENSE

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