AN OFO PHONETIC LAW

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1. Importance of Ofo to comparative Siouan
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1. In an earlier article in the International Journal of American Linguistics I have endeavored to prove that certain consonant groups—chiefly those in which the last component was a stop sound—were at one time contracted into a single stop consonant in languages of the Dhegiha branch of the Siouan family. I succeeded in collecting a sufficient number of examples to show that the consonant arising in this way corresponded to the series which Dorsey terms sonant-surd. In the course of my demonstration an attempt was made as well to account for this evolution in Dhegiha by the application of phonetic principles, and I finally thought my views were corroborated by establishing intermediate forms surviving in Hidatsa.

By the time my paper was about to be sent to America, I had just started to peruse the material which Swanton collected in 1908 from the last survivor of the Ofo tribe, published in form of an Ofo-English Dictionary, in BAE-B47 (1912), pp. 319 sqq. This was a fortunate coincidence, for without my attention directed toward the problem of the Ponca sonant-surds, I should no doubt never have suspected that this fragmentary list of words and phrases would contain anything of value for the comparative study of the Siouan languages. It was therefore with no little surprise that I first recognized principles of Ofo phonetics, perfectly analogous to those already laid down for the northern Siouan languages, and finally also “missing links” in the chain of demonstration thus far established.

As appears from Swanton’s historical résumé (p. 12), Ofo is now an extinct language. Once spoken along the lower course of the Yazoo river and on the Mississippi, it was most closely related to the language of the neighboring Biloxi tribe, equally on the verge of extinction. Swanton1 thinks both are more closely related to the eastern than to the northern Siouan dialects, and if by “eastern” we understand such a language as the now extinct Tutelo, I think the statement is fairly reasonable; in any case, as far as those particulars go which are to be treated in the present paper, the latter language often shows striking Ofo analogies (cf. for instance Tutelo ita’ni, itá’n, Ofo ithon’, itho’fi great). As to Catawba—another eastern language near extinction—in so far as it is to be reckoned among the Siouan languages at all, I fail to see any Ofo analogies whatsoever.

In the article referred to, while dealing with initial consonant clusters, I expressed my opinion that an original “qt- appears as iht- in Hidatsa, thus making possible the identification of Hidatsa iht’a great, large with certain common forms in the other Siouan languages (Mandan xta, xte, Dakota t’a’ka, etc.). The question arises whether or not all initial clusters obtain a prosthetic i- in Hidatsa, as one would expect. True

enough, the initial clusters in this language, judging from the material contained in Matthew’s Dictionary, are very rare, but on account of the ambiguity of initial i- (it is in many cases a petrified possessive prefix his, hers) I find myself at a loss when looking for definite analogies. In certain cases, moreover, (e.g., Hidatsa to'hi blue, cf. Ponca tu) the supposed initial cluster is quite differently represented in Hidatsa.

The importance of Ofo for our knowledge of primitive Siouan lies in the fact that this language reiterates the principle formulated for Hidatsa, as we see from the form itho’ni, itho’ big, large. It differs, however, on two points from the Hidatsa form (at least according to the description given by Swanton; see above), namely (1) by showing no direct trace of the lost implosive (appearing as -h- in Hidatsa), and (2) by retention of the aspiration of the second consonant in the cluster, as in Dakota (cf. itho’ni and Teton t’aq’ka). In this way we lose in exactness on one point what we gain on another.

As soon as the identification of Ofo itho’ni, Hidatsa ihti’a, Dakota t’aq’ka (where the former bridges the gap between the latter two) is rendered irrefutable, we may look for the solution of other cases of initial Dhegiha sonant-surds by an examination of Swanton’s short vocabulary. There appears to be in Ofo a great number of words beginning with a vowel, where the other Siouan languages lack it, and to make the study of these cases as complete as possible I shall give the entire list of them. Since i- appears in Hidatsa ihti’a as well as in Ofo itho’ni, I consider it most appropriate to begin with cases of this vowel.

2. The Ofo word has an initial i-, where incontestable correlatives in Dhegiha and Dakota begin with a consonant, in the following cases (the spelling of the forms is simplified as far as to leave phonological values unimpaired):

Ofo ifthepi’, ifthi’pi black: cf. *Biloxi supi’, Osage ça’be, Ponca sa’be, Dakota sa’pa (notice that Ofo i corresponds to Siouan s, z, as in afha’n’ white (= Dakota saq, amon’fi iron (= Dakota ma’za)).

Ofo iftaptan’ ten: cf. Osage ça’ton five, Ponca sa’ta five, Dakota za’pta five (for -ft-, cf. the preceding word and further below).

Ofo itca’ki hand, fingers: cf. Biloxi tcak hand, Osage sha’ge hands, paws, claws, Hidatsa ša’ki human hand, Dakota šake’ nails, claws, hoofs. In this case there is some doubt as to the i-, which may be the possessive prefix (cf. Hidatsa isa’ki his, her hand).

Ofo itca’nti the heart: cf. Biloxi yandi, yanti, id., Dakota ča’te’, id. The same remark holds for this word as for the preceding one.

Ofo itce’pi door: cf. Biloxi aye’pi, aye’wi door, Osage ti’zhebe (house) door, Ponca ti-je’be, id.

Ofo itchi’ fat, oil, grease: cf. Biloxi te’i grease, Dakota waš’i fat.

Ofo itcho’hi green, unripe: cf. Biloxi tohi’, to’hi blue, green, Ponca tu, id., Dakota t’o, id. The Ofo form is not quite identical with those in the other languages, but may be said to bear the same relation to the latter as Dakota sa’pa dirty, defiled, blackened to Dakota sa’pa black (cf. Boas, Some traits of the Dakota language, in Language, vol. 13). Cf. Ofo itho’hi, below.

Ofo ichoti neck, throat: cf. Biloxi do’di the throat, Osage do’dse throat, gullet, Dakota dote’ throat (here i- is probably the possessive prefix).

Ofo itco’n’, itca’n’, i’teo tree, wood: cf.
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Biloxi aya' tree, wood, Osage zho', id., Ponca ja', id., Dakota č'a, id.

Ofo ithe'fi, the'fi belly: cf. Osage tse'če, Dakota tezi' belly (here i- is probably the possessive prefix).

Ofo itho'hi, ito'hi blue: cf. Ponca tu, Dakota t'o, id.

Ofo itho'ni, itho'n big (see above): also cf. Ofo itho' grow.

Ofo ito' (ito'ki) man, male: cf. Biloxi indoke' male animal, Osage doga', Ponca nu, Dakota mdo, mdoka' man, male (< *mlo).

Ofo itxa' ahe' deer horn: cf. Biloxi ta, ita' deer, Osage ta, id., Ponca ŭa, id., Dakota 'a, id.

Ofo i'ntco, intco' body, flesh, corpse: cf. Biloxi yo (1) body, etc., (2) fruit of any plant, Osage zhu body, Ponca ju, id., Dakota čo (Riggs) kernel, meat of grain.

Ofo ifhi' foot (this form was recorded once by Swanton along with tcifhi'): cf. Biloxi si, Osage gi, Ponca si, Dakota siha' foot.

Ofo i'fhu seed: cf. Biloxi su, id., Osage wato'-cu squash or pumpkin seed, Dakota su seed.

3. We shall now enumerate some words beginning with any of the other vowels:

Ofo a'pha head, cf. Biloxi Pa, Osage pa,5 Ponca Pa, Dakota p'a head.

Ofo athi' house(s): cf. Biloxi ti, Osage tsi house, Ponca ri, Dakota t'i, id. (also = live, dwell).

Ofo aphe'ti, aphi'ti fire: cf. Biloxi pe'ti fire, Osage pe'dse, Ponca re'de, Dakota p'e'ta, id.

Ofo a'ni, ani' water: cf. Biloxi ani', ni water, Osage, Ponca ni, Dakota (Teton) m.ni (mani), (Santee) mi'nii, id.

Ofo atchu'ti red: cf. Osage zhu'dse, Ponca kon'dse plums, Ponca kan'ke, Dakota ka'ta, id.

Ofo atchu'fki dog: cf. Biloxi tcu'iki, tcunki' dog, Osage shon'ge dog, wolf, Ponca ca'fe horse, Dakota s'ka dog, horse, etc.

Ofo a'ho bone: cf. Biloxi aho', adu' bone, Osage wahiu' a bone, wahi'

\[ \text{*k, p, ʰ, etc., are sonant-surds, corresponding to Ponca k, p, ʰ; historically they take the place of original aspirated tenues as well.}\]

the consonant alternation *l-: *č-: cf. Ofo itcho'iti, above).

Ofo akhi'isi (aki'isi) turtle: cf. Ponca ke, Dakota ke (Riggs), Mandan pke.

Ofo ako'si bee: cf. Biloxi ka'xi', id. (Ofo s corresponds to x in the other languages, as in nashu'si = Biloxi ni'uxwi', Ofo nashe' listen, where sh = s + h: cf. Dakota nah'q' hear, no'ge ear).

Ofo amo'fis, amo'fi iron, pot, etc.: cf. Biloxi ma'sa iron, metal, Osage mo'že, id., Ponca ma'že, id., Dakota ma'za, id.

Ofo amo'k'i breast: cf. Biloxi mak, Osage mo'že chest, breast, Dakota maku' breast (cf. below).

Ofo atchu'ński dog: cf. Biloxi teu'ńki, teu'ńki dog, Osage sho'ge dog, wolf, Ponca ca'fe horse, Dakota s'ka dog, horse, etc.

Ofo a'ni, ani' water: cf. Biloxi ani', ni water, Osage, Ponca ni, Dakota (Teton) m.ni (mani), (Santee) mi'nii, id.

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Ofo atchu'fki dog: cf. Biloxi tcu'iki, tcunki' dog, Osage shon'ge dog, wolf, Ponca ca'fe horse, Dakota s'ka dog, horse, etc.

Ofo atafte' (-fthe') burn (and others in ata-): cf. Osage da-, Ponca ne- (this prefix is lacking in Dakota). The relation Osage d-, Ponca n- recurs in Osage doga', Ponca nu male, Osage dse (< *de), Ponca ne-u'0ican lake,6 where Dakota has (Santee) md-, (Teton) b.l-, originally perhaps *ml-. Here—as in some other cases—it is to be noticed that Hidatsa, too, has an initial a- (ara-, Matthews ada-, prefix denoting action by fire).

Ofo ato' potato: Biloxi ato', ado' potato, Osage do, Ponca nu, Dakota mdo (cf. under atafte').

Ofo a'ho bone: cf. Biloxi aho', adu' bone, Osage wahiu' a bone, wahi'

\[ \text{The last part of the word = Osage uthi'sho marching around in a circle (suggesting a round body of water).}\]
bones (probably vowel change in the plural: cf. Chippewa noča stone, nica stones), Ponca wahí'ge the bones, Dakota hu bone, bones (mihu, nihu my, thy bones), hi tooth, teeth (mahi my teeth), showing the same vowel change (the original function of the front vowel is presumably diminutive).

Ofo upo'fi night: cf. Biloxi psi, pus, pus' night, dark, Ponca ra'ze evening, Dakota kpa'za, tpa'za dark(ness).

4. Regarding the initial vowel in Ofo we may safely say that it is a mutable or at least movable element.7 We may compare the following forms in Ofo: itho'ii big, beside itca'ki tañi thumb (big finger), no'upi txo'n Christmas (big day), a'ni tha'n the ocean (big water), i'n'tufi txo'n large room; atchu’ti red, beside a’ni tchu’ti, abo’ki tchu’ti Red river, pa-tchu’ti red-headed; upo’fi night, but o’n’taske phu’n morning star; ate’kna I go, beside bokxi’ tekna I am going abroad; in these examples the initial vowel is missing after another vowel. Besides we find many other word pairs, such as amo’fiki: mo'fiki breast, i’dokfahi: do’kfahi old man, a’pha head: pa-tchu’ti red-headed, etc. (along with others mentioned already before), where the alternation originally may have been motivated in the same way as in the first case.

In Biloxi, too, we find the same circumstance (I have usually given the Biloxi forms without the initial vowel, following the practice in Dorsey and Swanton’s vocabulary).8 In other respects the adventitious vowel shows a certain stability. I have found no example of an alternation between different vowels in the same words, and the fixed quality of the vowel often remains even when we pass from one language to another. Thus we find i- (apart of course, from the cases where this vowel is a clear possessive prefix) in Ofo ito’ as well as in Biloxi inđoke’ man, male, in Ofo itxa, Biloxi ita deer, and a in Ofo athi, Biloxi a’ti, ti house, Ofo ani, Biloxi an’i, ni water, Ofo amo’ni, Biloxi amasi’, masi’, ma’sa iron, Ofo ato’, Biloxi ato’, ado’ potato, Ofo aha”, Biloxi asa”, sa” white, Ofo ațchut, Biloxi ațčutka, te’zt, te’ti red, where even Tutelo has asuñi, aṣani, aṣai, aṣei and aṣut, aṣuti, aṣćut, respectively: in the latter language we find i’ta’i, ita’n great (= Ofo itho’i),9 but aṭi house (= Ofo athi’, Biloxi a’ti, ti).10 As example of a divergent representation we may quote Biloxi aya’n tree (= Ofo itco”), Biloxi aye’pi door (= Ofo itcepi), Biloxi atci’n’i (te’gni”i) fat (= Ofo itchi), and Tutelo aṣẹpi, aṣúp black (= Ofo ithipi), otò green (= Ofo iθobi).

We started the discussion of initial vowels in Ofo by quoting the analogy of Hidatsa ihti’a and Ofo itho’i great. Yet the former word appears to be the only one of this type out of the few Hidatsa words that I am able to identify with corresponding Ofo forms (on the whole it appears that Hidatsa is far more distantly related to Ofo than are even Dakota and Dhegiha, while Ofo, Biloxi, and Tutelo apparently constitute a linguistic group of their own). The question now arises whether it is possible to explain the adventitious initial vowels in Ofo and other southern and eastern Siouan languages as supporting vowels before original consonant clusters, as evidenced by Dakota forms or indirectly by the oc-

7 These vowels are often represented as short, e.g., akhu give (a = English short u), ato’ potato, itho’i big, etc., but this probably has nothing to do with their origin. If athi’ house differs from athi’ father (with original *a-) in Swanton’s notation, this fact still does not prove that an inorganic initial vowel is of shorter duration, for in the same notation we find the’fi belly, in which i- most certainly is a possessive prefix (in primitive Siouan *i-).

8 BAE-B 47.

9 In Tutelo also this word loses its initial vowel after another vowel, as in ye-tañi, ye-tañi, etc., ocean.

10 Notice that a- occurs in this word in Hidatsa also (ati’), which latter form has no pre-aspirated t and probably represents an original *a-t’i.
currence of sonant-surds in Ponca, or in general by initial stress in the living Siouan dialects.

5. That most consonant clusters, whether initial or middle, are simplified in Ofo is beyond doubt: cf. Ofo ta'fe bite, Dakota yaksą', id. (Siouan y- > Ofo d, t, Siouan s, z > Ofo fh, f), Ofo tu'fah'sha tear, Dakota yuksa'ksa break off (the original Ofo form of which must have been *yusasa: cf. Osage thi'ge cut with scissors). The few cases of remaining consonant clusters in Ofo (e.g., ktxe, kte kill: cf. Dakota kte, id.) are probably of secondary origin, depending on a later syncope: cf. Biloxi ksaⁿ, Ofo kfaⁿ five, Biloxi kte, kte' hit, which latter either equals Dakota kat'a' (Riggs; ka'ta') kill by striking or kikte' kill one's own; that the Ofo form does not represent original *kte further becomes likely on account of the aspirated t, which, as we have said (note 3), may render an original glottalized *t', as in Dakota kat'a'. In Biloxi many other cases of the same type might be quoted, such as tcti red (= Ofo atchu'ti), psi night (also pusį = Ofo upo'fi), etc. Exception has of course to be made for such clusters as remain in all Siouan languages, e.g., sk, st, etc., as in Ofo cpaⁿ rotten (= Dakota śpa cooked, burnt, or frozen).

6. That the initial vowel, which characterizes Ofo, Biloxi, and Tutelo, at least in many cases is an anorganic prosthetic element of secondary origin appears from two considerations: (1) that it is difficult to explain the loss of this vowel in Dakota and Dhegiha if it were ancient in Siouan, and (2) that it is often missing in Ofo, Biloxi, and Tutelo, especially when a vowel precedes in close context. The problem would be solved without difficulty if we did not have to consider the different representation of the supporting vowel.

The reason for the differentiation between prosthetic i- and a- (of u- we have but a single instance, with which we shall deal later on) is not immediately perceived. Evidently it cannot be accounted for by the nature of the following consonant, neither by the root vowel. It thus remains to seek the different representation in the nature of the lost implosive, which latter is unfortunately in most cases an unknown quantity. In the few cases where it may be ascertained from comparison either with Dakota forms or with unsyncopated Hidatsa forms we find, however, that an original labial consonant often enough corresponds to a prosthetic a- in Ofo, of which the following examples give evidence:

Ofo ani' water: cf. Dakota (Teton) m.ni, Hidatsa wi'iri (mi'di), Ponca and Osage ni (< *mni).

Ofo akhīsī turtle, if related to Dakota ke, Mandan pke, Ponca ke, Osage ke from *pke or *mke).

Ofo atho'hi run: cf. Dakota ptą'yą flurried (from *pțan-).

Ofo ato' potato: cf. Dakota mdo, Ponca nu, Osage do (from *mlo).

Ofo atchu'ki dog: cf. Hidatsa mašu'ka (Matthews), Dakota šu'ka, Ponca cañ'ge, Osage sho'ge (from *mșonk-).

Ofo ako'ni peach: cf. Hidatsa makata plums (Matthews), Dakota qa'ta, Ponca kan'de, Osage koń'dse, id. (from *mkant-); Biloxi tk'a'na, tokona' is hardly connected.

In the last two examples the relation between the Hidatsa and Dakota forms is as between Hidatsa mata', Dakota ptąye'tu, Mandan pta autumn (cf. also Osage toń fall of the year).

We may add the verbal prefix ata- (expressing action by heat). Here the Ponca and Ofo representations (na- and da-, respectively) let us suppose the same initial cluster as in ato' potato (probably *ml-).

The only word which breaks with the above system is Ofo ito' (ito'ki) man, male (Biloxi indoke', id.), to which correspond Dakota mdoka', Ponca nu, Osage doga' (hence probably originally *mlo-). But as
to this word we may question whether it—may not be a possessive prefix: cf. Biloxi nsa intoki’ buffalo bull (lit. buffalo, her male?). In any case it is not improbable that such a form was at one time generalized as a convenient means of distinguishing between the words male and potato (in Ofo ito’ and ato’, respectively). It might therefore rather be said that Ofo ito’ represents original Siouan *i-mlo, not *mlo.

The theory that a labial implosive evolves a prosthetic a-, not an i- (as do presumably the other lost consonants), finds its support—as it seems—in the verbal inflection in Ofo. In this language we find a class of verbs which probably form the first person singular by a single *m- (cf. Dakota mda, mde, Ponca bëš, bëe, Osage bthe I go: from original *m-ya-). In the 2d person Ponca and Osage have a form in *s- (Ponca cna, cne, Osage sstse you go: cf. Ponca e’gi-m-a” I do, e’gi-j-a” you do), the origin of which is not clear. This paradigm recurs in Ofo, where te, ti (< *ya-) go has the following forms in the 1st and 2d persons singular: a-te’kna I go, c-te’kna you go (here, as mostly elsewhere, c represents the English sh). In Biloxi the form is n-de’- (kne) in the 1st person.

According to the same paradigm the (Ofo) verbs -to’hi see and -khu give are conjugated: a-to’hi, c-to’hi (cf. Biloxi n-do’hi I see: Dakota t’ai’ visible), a-khu’hi I am giving it to him (cf. Biloxi xku I gave it to); we must then assume that *m-y- (like *m-l-) gives nd- and *m-k-, xk- in Biloxi.

It may perhaps be objected here that a-does not necessarily represent a Siouan *m, but, on the contrary, that both in Ponca and Osage a- is a common sign of the 1st person singular, corresponding (in meaning and function) to the Dakota wa-. Whatever the origin of this a-,11 it does not enter into the paradigm in which s- functions in the second person. Furthermore, Ofo has an alternative 1st person prefix in ba- (e.g., ba-tu’acha I wash, ba-bute I shine, etc.), which evidently formally covers Dakota wa-, whence a third form *a- would seem superfluous.

It is worth noticing that Ponca ri I come back (beside gi he comes back: from *m-ku, *ku) corresponds to Ofo a-ku’kna I come (cf. kiu’kna he comes), and this evidently is a very old form. In Osage the verb do’be see (= Ponca da’ba-) is conjugated as follows: a’to’be, a’shto’be, do’be, corresponding to Ponca ra’be, eta’be, da’be, in which we may conclude that the first person at one time contained the complex *m-tampa. It is evident that a- is a later increment in Osage, which I think can be explained from the occurrence of the same initial element in verbs originally containing the verbal prefix a- (e.g., Osage a’do’be escort, of which the 1st person singular is a’to’be, from *a-m-tampa-). This a- must have been mixed up with the a- of the 1st person singular, found in the parallel conjugation (e.g., Ponca a-na’a”a I hear, which is na-wa’-h’o in Dakota), so that we obtain the contaminated form a’to’be I see in the single verb also, and then also a’shto’be in the second person. We find similar contaminated forms in Ofo also, e.g., a’tho’hi run (= Osage to’hi I hear): a-wa’ was understood as the verbal prefix a-, whence the 2d person was made a-c-tho’hi you run (cf. c-to’hi you see, to a-to’hi I see), and the 1st person became a-ba-tho’hi I run, instead of *batho’-hi (corresponding to Osage a- to’a-bthi I run; also cf. Dakota č’at’-ma-ptya my heart runs, i.e., I am angry). The same thing has happened to Ofo ahu give, which was originally a form used in the 1st lost. It still occurs in Osage (e.g., u-wa’-ce I start a fire, from u-ce’, u-wa’-dse I seek, from u-dse’ = Dakota o-wa’-de), but evidently only as a glide between u and a (as it is absent in every other case). In Ponca the same verbs have u-a’- in the first person singular.

11 I think it might be explained in the following way: After the verbal prefix o- in, into (in Dakota o-, but in Ponca and Osage u-) the w of the personal prefix wa- I was merged into the u-sound and
person singular (*m-ku, *m-ku I give), alternative to bakhu (= Dakota wa-ku', Osage a-ku I give). When, however, a- came to be regarded as the verbal prefix, a new form a-ba'-khu was made (analogous to Dakota a-wa'-təwə I look at, from a-təwə look at).12

It now remains to account for the vowel u- in Ofo u-pofi night. Here we know incidentally that the lost consonant must have been either k or t (cf. Dakota kpa'za, tpa'za dark), but since the u-shade in the prosthetic vowel could have been effected by neither of these, nor from the following o (as we may ascertain from comparison with other similar words), the idea must be abandoned that u- originated from a supporting vowel in this word, which instead might be identified with Dakota o'kpaza, o'tpaza darkness, night, Osage u'pāče evening.

7. The following phonetic law may thus be established for Ofo: initial consonant clusters were at one time pronounced with a supporting vowel, which was a- before a labial, in other cases i-. The cluster was eventually simplified, much on the same lines as in Dhegiha, aspiration in the last component remaining as in Kanza. A similar law appears to be valid for Biloxi and Tutelo also.

In consideration of these facts, Hidatsa iht'i'a and Dakota t'q'ka great are more easily derivable from a common source. By so doing we must grant preference to the form recorded in Hidatsa Texts over the one given by Matthews (iqt'i'a, with a palatal fricative). The most primitive stem attainable appears in any case to be *Xta-, as far as Dakota and eastern Siouan goes; in assuming relationship with the Hidatsa word, we must further reduce the primitive stem to *Xta-, or even *Xt- (where X stands for a certain non-labial stop). To determine the latter with safety, we must await the further results of comparative American Indian linguistics, as it is likely that no living Siouan dialect is phonetically conservative enough to be capable of furnishing the answer.

Some of the Ofo words quoted above afford special points of interest. Thus we find an intrusive -t- in ifthepi black and ift'apta ten. Here it seems possible that Ofo has preserved an original cluster by metathesis of a harsh combination (*ts?) to one tolerated in Ofo (*st > ft?).14 In such a case we shall have to restore primitive bases *t(a)s'ap- (*t(a)s'ap-) and *t(a)sap(o)t-, respectively. The accent in the Dakota and Dhegiha forms warrants the loss of an initial syllable in either word.

Ofo i-tca'ki hand, i-tca'nti heart, i-tchoti neck, i-the'fi belly, i-fi' foot, and perhaps some others (for i-to' man, male, cf. above) no doubt contain a possessive prefix his, her, etc.; hence we find regular stress in Dakota sake', c'te', dote', tezi'). The irregular stress in Osage (sha'ge, do'dse, tse'qe) may perhaps be due to the influence exerted by frequent use of the possessive forms (it is often quite impossible in American languages to express such words without a possessive prefix).

In Ofo ope come inside (bo'phe, to'phe I, you come inside)15 we have, of course, the same prefix as in Dakota o'p'a enter a camp, Ponca ri u-ra' enter a lodge. The aspiration in the Dakota form is borne out by Ofo. In my previous article I postulated a primitive form *pqa: perhaps the *q, which in other positions seems to change to *p.

12 Swanton gives aba'khu in the specialized sense of I give to eat, but as the verb ku give is neither in Dakota nor Dhegiha composed with the prefix a-, I think that this latter sense is not originally distinct from that of give.


14 In itchepi' dirt, dust, however, the difficulty is avoided by the change of *s (cf. Dakota ša'pa dirty) to te (= English ch) in Ofo, in which sound the supposed initial *t- is readily merged.

15 In Tutelo ope-wa means go (o-wa-pe-wa I go, etc.).
x in Dakota as well as in Ofo (cf. Ofo nashe' listen, Dakota nah'o', Osage no°Ko' hear, < *naq-) is responsible for the aspiration of the preceding p.

Among the Ofo words beginning with the prosthetic a- several problems arise. Apha' head (as against pa-tchu'ti red-headed) may, in analogy with some of the verb forms, be explained as a petrified possessive form, = my head (< *m-p'a; cf. Dakota ma-p'a' my head). If this is so, the Dakota and Dhegiha forms (p'a and pa, respectively) are to be understood in the same way (sonant-surd p arising from *p-p'- < *m-p'-). In Ofo athi' house, however, the initial a- should no doubt be explained differently, as it occurs in Hidatsa as well (ati'); for the Dhegiha form, cf. my previous paper on sonant-surds in Ponca-Omaha (p. 84).

Before original s and š (= English sh) any labial must be preserved in Dakota (as p-). Hence Ofo afha'n' white, atchu'ñiki dog, atchu'ti red, cannot strictly correspond to Dakota sq, su'ka, Ponca ji'de, respectively. In these words we must count with movable prefixes, the precise function of which may presently not be ascertained.

In the stems beginning with m- (amo'ñiki iron, amo'ñiki breast), it is more difficult to assume an original cluster, since the common movable prefix *m(a)- might be supposed to fuse with the stem-initial m-, as in Dakota ma'za, etc. The Hidatsa form uwa'ca (c = ts: Matthews gives u'etsa), on the other hand, rather seems to correspond to a Dakota form *o-ma'za, which I do not think is attested. Could it be possible that such a form once existed and that the general forward accent in this word is due to it? But amo'ñiki breast, ribs should doubtless be judged as apha' head, i.e., with a petrified 1st person possessive prefix. Since this form, then, may be strictly analogical, amo'ñi is the only example to support the passing of *m-m- into am- in Ofo. The accent in Dakota (maku', as against Osage mo'ge: cf. the forms with possessive i-) renders it highly probable that we have here a form with a possessive prefix. In the same way Ofo, Biloxi ahe' horn, aho' bone may be explained (cf. Dakota mihu' my bone, leg): that *m- turns into an implosive consonant before h becomes likely when we consider Dakota e'pa (Teton e'p'a) I say, from *e-m-ha (cf. Hidatsa ha'-, he'- say), the difference being that the implosive is altogether suppressed in the former languages.

To sum up, we shall point to the following general characterization of the forms quoted in the preceding paragraphs: regardless of the manner in which the primitive Siouan form is to be restored in every particular case, the fact still remains that the occurrence of a prosthetic vowel in Ofo, Biloxi, and Tutelo is almost without exception concomitant with the appearance of initial sonant-surds in Ponca, as well as with initial word stress in the Siouan languages at large.

16 It should be noticed that most people usually give the names of bodily parts by prefixing my (or sometimes your), at the same time pointing at the part in question.

17 Dealing with these words merely from a Siouan point of view, I have been forced to assume that *m- is a form of the 1st person possessive prefix. Looking at the problem more generally, I feel inclined to think that this movable *m(a)- in Siouan is in reality a correlative to the Algonquian (Blackfoot) m(o)-, in for instance motoká'ni head, m-oke'kin breast, etc., where it expresses an indefinite owner.