Reading Navajo

Copyright (c) 2010 by Frank W. Hardy, Ph.D.

Introduction

You read English but perhaps not Navajo. Anyone who knows how to read English is well on the way to reading Navajo. The two systems have much in common. Actually, that fact is a double edged sword, because sometimes our knowledge of the English spelling system can get in our way. Some of it you need to remember, some of it you need to forget. This is especially true for the vowels. And among vowels it is especially true of e and e. We'll talk more about this as we continue. In any event, I won't try to teach you what you already know. We'll focus on how the two systems (English, Navajo) are different.

Consonant letters and letter combinations that you already know from English are b, ch, d, g, h, j, k, l, m, n, s, sh, t, w, y, z. We'll see these letters in our examples, but I have nothing really to tell you about those. You already know them.

Consonant letters and letter combinations that we'll want spend some time with are ch', dl, dz, gh, hw, k', kw, ', t, tt', tt', tt', ts', ts', x, zh. If you count the letters you know (16) and you count the letters you'll want to know more about (16), it looks like you're about half way there and we haven't even started yet. Then there are the vowels (a, e, i, o). We'll take those first.

Part 1: Vowels

Vowels a and o

We'll start with two of the vowels (a, o) and save the other two for later (e, i). All four Navajo vowel sounds require comment when we compare them with English, but we'll take them two by two so as to avoid making this any more complicated than it needs to be.

Comparison with English

English has a difficult vowel system. In Navajo it's much more systematic. Thus, in Navajo a always says ah, e always says eh, i always says ih, and o always says oh. I'll give examples of these below. In English, on the other hand, a almost never says ah. The English word "pot" gives us the ah sound that we're talking about, but doesn't use the vowel a to spell it. Navajo e and e come close to the corresponding English short vowels e and e (as in "pet" and "pit"). However, Navajo e sounds like the English long vowel e (as in "broke"). I had to include this about English for completeness, but now let's focus on Navajo. The Navajo vowel system makes a lot more sense than the corresponding English system, because English vowels have gone through some important changes over time. So there we need to understand some history.

I said the Navajo vowel system was systematic, but I didn't say it was simple. Navajo can do more things with its vowels that English can. Navajo vowels can be low (a) or high (a),

short (a) or long (aa), plain (a) or nasal (a). And you can have combinations of these things. An alert reader will have noticed that I called one and the same vowel (a) low, and short, and plain. Is there a contradiction here? No. The vowel a in Navajo is all of these things. It's low, short, and plain (i.e., not nasal). Consider some examples.

Low v. high

In the word $\acute{a}ko$ the a says ah and the o says oh, as we would expect, but the a is high and the o is low. We could write the word $\acute{a}ko$ like this:

But we don't. It's easier to add a little tone mark above the a. This conveys the same information as drawing lines to indicate relative pitch, but it's easier to type. Think of the tone mark as an arrow pointing up. The first vowel of $\acute{a}ko$ has a higher pitch than the second vowel. Its pitch contour is high, low.

In the word $j\delta$ the δ still says oh but this time it's high. How can we be sure this vowel is high? Because of the mark above it. When there's no mark above a vowel in Navajo, it's low. The pitch of vowels that have tone marks is slightly higher than that of of vowels which don't have them.

```
jó (not easily translated) jó'akon "so then"
```

In the first example $(j\delta)$ the vowel is high. In the second example $(j\delta'akon)$ only the first vowel is high, but the next two (a, o) are low. So that's tone. Let me just add that some folks see all the little marks and think they make words pretty. This might be true, but it's not their primary function. Don't think of tone marks as decoration! Let me try to illustrate why this is important. In the following two examples the only difference between two very different words is a tone mark.

```
ni "you (singular)"
ni "he (or she) says"
```

Here's another set of what linguists call minimal pairs.

```
anii' "face"anii' "waist"anii' "nostrils"
```

Sorry to use examples with i (i) and ii (i) before coming to them. We'll study those vowels later. But I had to illustrate my point here that tone marks are a significant part of the spelling of a word in Navajo. If there's a tone mark, the tone is high. If there's not a tone mark, the tone is low.

You might have noticed the tiny mark in between δ and a in $j\delta'akon$. We'll talk more about that later too. It's a glottal stop. You'll see another glottal in the word for "fire" (next page).

Short v. long

Some vowels in Navajo need to be longer than others. For example, in the word $a'\acute{a}\acute{a}n$ ("hole") the first vowel is low and the second one is high. (We know this from the tone marks.) But there's one other difference. The first vowel is short and the second one is long. Vowel length is very easy to spot. If the vowel is long, you write it twice. This doesn't give it a different sound, as happens so often in English. It's the same sound, but you hold it longer. Here's another case where a contrasts with aa. (Compare the second vowel of dooda [a] with the first vowel of naaltsoos [aa].) The one is short, the other long. (Both examples are low.)

dooda "no"
naaltsoos "paper"

Whenever you see two o's or two a's written side by side (oo, aa), they go together to form one long vowel. Notice the difference in sound between the a in dooda and the aa in naaltsoos. The a in dooda is short, the aa in naaltsoos is long. But in both cases the basic sound quality is ah. Length is the only difference. (The oo in both words is long.)

Plain v. nasal

There's one more distinction to present. Navajo vowels can be plain (like the o in $\acute{a}ko$) or they can be nasal (like the o in $\acute{k}o'$ ["fire"] or $n \acute{a}hook os$ ["north"]). In the case of $h \acute{o}z h \acute{o}$ ("happiness"), the first vowel is plain (\acute{o}) while the second is nasal (\acute{o}) . Both are high and both are short.

kọ' "fire"
náhookọs "north"
hózhó "happiness"

Further examples

ayol "breath" hadoh "heat"

dadohní "you each say (it)"

ádadohní "you each say thus"

danohsin "you each want"

dabidohní "you each say (it) to him/her"

Notice one more thing before we go on. That h at the end of hadoh ("heat") is not part of the vowel. It's a consonant just much as b or d or g. It's sound is just a puff of air at the end of the word, but in Navajo that puff of air functions as a consonant. You find the same thing in each of the last five words (above).

Summary

In Navajo the vowel a always says ah and the vowel o always says oh. But these vowel qualities can be pronounced low or high, short or long, plain or nasal. Linguists describe a and o

as non-front vowels, based on their position in the standard type of vowel chart shown below (see fig. 1).

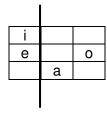


Fig. 1. Vowel chart.

Discussing these things is not how you learn them. For that you need examples. The words shown below should all be familiar to you, so you'll know what the sound is. What we're interested in here is how to spell words that sound like that.

Vowel e

The vowels e and i will probably take more getting used to in Navajo than a and o. Or not. Let's see. Navajo *e* always says *eh*. We find it in the word *hane'* ("story"). In Navajo, *e* occurs only about half as often as a and i. Navajo o also occurs with about the same frequency as e. I'm sure there are historic reasons for this. Anyway, that's what happens.

Group 1 (*e*)

hane' "story"

"story about it" baa hane'

yaa halne' "he (or she) tells about it"

Group 2 (*é*)

Diné

tsé "rock" átsé "first"

"the People" dibé "sheep" "land" kéyah "donkey" télii wolyé "it is called" "in order to . . . " biniyé

hoolyé "it (an area) is called"

Group 3 (ee)

beesh "metal"

bee "by means of it" yileeh "it becomes . . . "

niteel "broad"

neezdá "a number of people sit"

honeeni "fun"

nádleeh "it turns back into . . . "

tónteel "the sea"

Group 4 (éé)

bééhózin "there is knowledge about it"

béégashii "cattle"

Vowel i

Navajo i always says ih, as in the English word "thin." Thus, we have words like bi ("him/her"), where the i is high (actually high, short, plain), and words like dii ("this") where it is long (actually high, long, plain). Here are some other examples of the i family of vowels.

Group 1 (*i*)

kin "rectangular building"

shimá "my mother"
Diné "the People"
dibé "sheep"

sidá "he (or she) is sitting"

tsin "tree" chizh "firewood"

Group 2 (í)

bí "him/her"

ání "he (or she) says thus"

jiní "one says (it)" ájíní "one says thus"

Group 3 (ii)

dadii'ní "we each say (it)"

Group 4 (íí)

díí "this"

Group 5 (î)

```
nili "he (or she) is . . ." jili "one is . . ."
```

sizį "he (or she) is standing"

Group 6 (îî)

```
bíchíth "its muzzle" (e.g., an ox; see 1 Timothy 5:18)
néidíth "it usually eats it again" (e.g., a dog; see 2 Peter 2:22)
```

Group 7 (ìì)

ásdijd "it ran out; all gone"

Group 8 (ì)

bich'į' "to it"

We haven't said anything yet about the letter combination ch', as in bich'i' ("to it") (above). I'll give examples of that in a later section.

Falling and Rising Tone

Something I haven't talked about yet is that tone can fall. For that matter it can also rise, as when you ask a question like, $Do\acute{o}sh \acute{a}k\acute{o}t'\acute{e}e da$? ("Isn't that right?") In this question the $o\acute{o}$ rises and the $\acute{e}e$ falls, illustrating both principles. But you will almost never see an example of rising tone. It's possible that you might see one sometime, but don't hold your breath. On the other hand falling tone is pretty common, so we'll show examples of that.

Falling *ée*

```
béeso "money"
bohónéedzá "it is possible"
bítséedi "before him/her"
```

Falling *ii*

```
níigo "saying" nilíinii "one who is . . . " (third person)
```

The last example given above (nilinii) is especially interesting. For the record this is the verb nili ("he is") plus the suffix -ii ("the one which"). What you might expect when bringing this verb and its suffix together is something like niliini (with nasal hooks under the falling vowel). The spelling conventions of the language could have developed that way, but did not. By convention words that end with a nasal vowel and are followed by a suffix like -ii are not written

with nasal hooks. Instead of the nasal quality of the vowel appearing as nasal hooks, it appears as what we call a ligature. (A "ligature" joins two other things. It's kind of a linguistic version of glue.) The n between nilii and ii, making niliinii, is where the nasality goes. So adding a ligature follows actual usage. This is how people say it.

Nasalized Vowels

Nasal vowels can do all the same things that plain vowels can do, but there just aren't as many of them. They are much less common than plain vowels. Just for drill, let me show you what I mean. In the data I'm using for this paper there are 7971 examples of words that have low, short, plain i. Since there are more examples of this than of anything else, I call the table in which low, short, plain i occurs table 1 (below). Corresponding to this is table 8, where we have low, short, nasal i. Calling this table 8 means that seven other groups of letters occur more frequently. Table 8 occurs on the top row, but it's toward the bottom of the list in terms of the number of examples it contains.

Notice that high, short, plain vowels (table 2) come next in frequency after low, short, plain vowels (table 1). After these we have long, low, plain vowels (table 3), followed by high, long, plain vowels (table 4). When we get to vowels with falling tone (tables 9, 10), there aren't many examples of those – whether plain or nasal.

T	able	1
	7	9

i	7971
a	5571
О	1767
e	1235

Table 8 (=1)

	(=1)
į	250
ą	120
Q	96
ę	-

Table 2

á	3905
í	2904
é	2078
ó	1529

Table 5

(=2)		
į	1388	
á	827	
Ó	285	
é	_	

Table 3

aa	2474
ee	1976
ii	1970
00	1804

Table 7

	(=3)
ąą	481
įį	233
QQ	34
ęę	-

 faile 4

 áá
 1270

 íí
 1134

 éé
 862

 óó
 316

l able 6 (=4)	
áá	840
íí	321
ģģ	11
ę́ę́	3

i able 9	
íi	209
ée	120
óo	117
áa	30

Table 0

Ta	ble 10 (=9)
íį	4
áą	2
éę	-
ģο	-

For the most part the other vowels can be nasal and we have at least a few examples for each, except there are no examples of long, falling, nasal $\delta \varphi$. The word for Sunday in Navajo comes from Spanish Domingo, which could be written $Dam \delta \varphi$. People often say it that way. But in the Bible the translators spell it $Dam \delta \varphi$ (see Mark 16:2; John 20:1, 19; Acts 20:7), or $dam \delta \varphi$ (Matt 28:1; Luke 24:1). In one passage its $Dam \delta \varphi$ (Mark 16:9) without nasal hooks. So we still have no example of falling, nasal $\delta \varphi$, at least in the Bible portions represented here.

I should add that tone can only fall on a vowel that's long. Above I could have said falling, long, nasal $\phi \rho$, but there's no such thing as falling and short. So there's really no need to say long. If the tone falls, the vowel has got to be long.

Discussion

Navajo long *ee* and long *ii* might be the most difficult vowel sounds you have to deal with when learning to read Navajo. There are consonant combinations to learn that will be new and different and they might seem difficult at first, but you'll be able to deal with those. The problem with *ee* and *ii* is that they aren't totally new or different. To my knowledge double *ii* doesn't occur in English, but double *ee* does. (Think of the word "geese.") Once you learn how to spell in English, it just seems like a word like *hastiin* ("man") ought to be spelled *hosteen*. But that's not how we do it. In Navajo the sound *ah* is always spelled *a* and the vowel sound in the English word "geese" is always spelled *ii*. So *hosteen* is not *hosteen*, but *hastiin*. Same sound, different rules. The first spelling uses English rules, the second one uses Navajo rules. What we're working on here is Navajo, so we'll spell it the second way.

Part 2: Consonants

Above I gave two lists of consonants and said that one would be familiar to you from English (b, ch, d, g, h, j, k, l, m, n, s, sh, t, w, y, z), the other not (ch', dl, dz, gh, hw, k', kw, ', t, t', tt, tt', ts, ts', x, zh). There are 16 items on both lists. We'll focus on the second one.

I'll need to recycle an old term at this point and give it new meaning for our discussion of consonants. Above I used the word "plain" to describe vowels that are not nasalized. With respect to consonants we'll use this word to indicate when consonants are not glottalized.

Plain Consonants

The eleven plain consonants in our second list above are dl, dz, gh, hw, ', kw, t, tt, ts, x, zh. Ironically this subset includes glottal stop. Glottal stop is not a glottalized consonant. It's a plain consonant produced with the glottis. Glottalization is something else altogether. In Navajo glottal stop (') is a consonant just like k or z.

I include x in our second list (of unfamiliar consonants), even though you know it from English, because really you don't know it from English. What you do know about x from English will be misleading when it comes to reading Navajo. We'll have to learn it again. It's a different letter than anything you've seen in English. Another single letter on the list that, like ' and x, does not occur in English is barred l (t). Barred t indicates the sound at the end of t ("it will be"), or the beginning of t ("horse").

The other items on our list of plain consonants requiring discussion are combinations of letters you already know (dl, dz, gh, hw, kw, ts, zh), plus one combination involving barred l (tl). So far this is everything except the five glottalized consonants to be discussed in a later section (ch', k', t', tt', ts').

Single letters

Glottal stop. Glottal stop is an important letter in Navajo. Sometimes it doesn't get much emphasis, but you can hear it in the word $j\delta'akon$ ("so you see") (above). You can hear it at the end of words such as

 $\begin{array}{ccc} \acute{e}\acute{e}' & \text{"clothes"} \\ k\varrho' & \text{"fire"} \\ s\varrho' & \text{"star"} \end{array}$

You can also hear it at the beginning of any word which begins with a vowel, Thus, $\acute{a}ko$ ("so then") could be written $\acute{a}ko$ (with initial glottal stop), and it was written that way, i.e., at the beginning of all vowel-initial words, in 1956. This fact made the 1956 New Testament confusing to some potential readers, because the mark is unnecessary at the beginning of a word. In the 1975 revision the translators started leaving it off and that convention has been followed ever since. We no longer write glottal stop at the beginning of vowel-initial words.

So far we've talked about glottal stop at the end of certain words (where it is needed) and at the beginning of certain words (where it is not). It can also occur between vowels in the middle of a word such as $j\delta'akon$. When used under such circumstances it separates the vowels and helps keep them distinct from each other.

 $Navajo\ x$. Navajo x is an emphasizer. It's sometimes used to show contempt or strong emotion, as in the following word pair.

Doo yá'áshóo da. "That's too bad."

Doo yá'áshxóo da! "That's really not right!"

Another example is daacha ("they cry"). This is the unemphasized form. But when used in Revelation 18 to describe people who are really weeping and wailing, it's spelled daachxa (with x). Another similar example pair would be

nichǫ'í "It's spoiled, wrecked, disfigured."

nichxo'í "It's spoiled and I feel strongly about it!"

That's one use for x. There are two more. One of these is the case where a word contains an s and an h sound is needed immediately after it. If the letters s and h were printed together it would look like sh and that letter combination is a single sound (e.g., shi "me"), not an s followed by a separate h. So in cases like this an x is used in place of the h.

jidéesxéél "One should remain silent."

jiisxį "One killed him."

That last example occurs in 1 John 3:12, where it appears three times. The verse is talking about the story of Cain and Abel.

The last case where Navajo x occurs in words such as xosh ("cactus"), sometimes spelled hosh.

Barred 1. I've mentioned two examples of barred *I* in Navajo. This letter occurs frequently so let me give a handful of others before going on.

tid "smoke"

bit "with him/her"

tigai "white"tikan "sweet"bidit "His blood"

alhosh "he (or she) is sleeping"

Letter combinations

The letter combinations we'll look at together in this section are dl, dz, gh, hw, kw, ts, zh, all of which involve letters familiar to you from English, plus tl, which used the new character barred l. I've been saying letter combination, but perhaps I should refer instead to compound letters, because even though two marks are combined, there is only resulting sound.

Compound letter dl. The compound letter dl is the first sound of dlo in baa dlo hasin ("mockery"). Here are some further examples.

adlání "drinker"

oodlá "he (or she) believes"

nádleehii "that which reverts, turns back into"

daniidlí "we each are . . ."
bi'oodla' "his/her faith"
naaldlooshii "animals"

Compound letter dz. The compound letter dz is the first sound of dzit ("mountain").

ádzaa "he (or she) made"bidziil "he (or she) is strong "nádzá "he (or she) returned"

asdzání "woman" hódzą́ "wisdom" báhádzidgo "terribly"

Compound letter gh. The compound letter gh rarely occurs as the first sound of anything. Earlier spellings of words that do put gh at the beginning ($gh\acute{o}naan\acute{i}di$ "on the other side) are usually spelled with a w today ($w\acute{o}naan\acute{i}di$ "on the other side"). Word-initial gh spellings date a document. They show that it wasn't produced recently. Most of our examples of gh occur in the middle of a word.

bighan "his/her home" naaghá "he (or she) walks about"

agháago "a lot"

Compound letter hw. The compound letter hw does occur at the beginning of words, and also word-medially, but never at the end. Navajo hw indicates the same sound as English wh, e.g., "what," "when," "where." But the Navajo spelling makes more sense, since the puff of air comes before the w when we say this, even in English where the spelling is reversed.

hwiinéé' "one's voice" hwe'asdzą́ą́ "one's wife" hwe'oodlą́' "one's faith" hwiih sélį́į́' "I got full"

Compound letter kw. The compound letter kw is the second consonant in dikwii ("how much?"), as in, Dikwiish baah $ilip{i}$? ("How much is it worth?").

kwá'ásiní "friends"

kwiidiiniid "he (or she) said thus to him/her" (This is shorthand for kóyidiiniid.)

Compound letter ts. The compound letter ts is the first sound of tsé ("rock"). It occurs frequently.

```
átsé"first"tsin"tree"atsoo'"tongue"nitsaago"large"bitsii'"his/her hair"titso"yellow"attso"all"
```

Compound letter zh. The compound letter zh is found in the word $azh\acute{a}$ ("but," "although"), and in the following examples.

```
hózhó "happiness"
yázhí "small"
```

bízhi' "his/her name"

shizhé'é"my father"

yizhchį́ "he (or she) was born" hoolzhiizh "the time has come"

Glottalized Consonants

Every glottalized consonant is by definition a letter combination, because to spell such sounds we start with a consonant (ch, k, t, tl, ts) and add glottal stop (ch', k', t', tt', ts'). Whenever you add one thing to another, that's a combination. Every glottalized consonant is written as a consonant combination, or compound letter, that includes glottal stop. But the sound represented by these letter combinations is just one sound – an ejective, where the air in the speaker's mouth is expelled quickly.

Glottalized sound ch'

The glottalized sound ch' contrasts with ch, as in chidi ("car"). The glottalized form of the sound is found in words such as

```
ch'ał "frog"
ch'il "plant"
ch'osh "bug"
bich'į' "to it"
Nítch'i Diyinii "Holy Spirit"
ch'iniyá "he (or she) went out"
```

Glottalized sound k'

The glottalized sound k' contrasts with the simple k, as in kin ("rectangular building") and is found in such words as

```
k'é"kinship"ak'i"on something"bik'ehgo"according to it"k'os"cloud"ak'ah"fat"atk'is"friends"
```

Glottalized sound *t'*

The glottalized sound t' contrasts with plain t, as in $t\delta$ ("water"). Glottalized t' occurs, for example, in the following words:

```
át'é "It is . . ."
yit'iní "It is visible."
ásht'í "I am . . ."
deet'á "It was given."
naat'áanii "ruler"
aneest'a' "fruit"
```

Glottalized sound tl'

The glottalized sound tt' contrasts with plain tt, as in ditt' e' ("wet"). Examples include the following forms.

```
tl'oh "grass" tl'\acute{e}\acute{e}' "night" tl'\acute{o}\acute{o}\acute{t} "string" nitl'iz "It is tough."
```

Glottalized sound ts'

The glottalized sound ts' contrasts with plain ts, as in tsin ("tree"). Examples of the glottalized sound ts' include:

```
íits'a' "sound"
ałts'áá' "apart"
hats'íís "one's head"
łeets'aa' "plate"
diséts'áá' "I heard . . . "
```

Conclusion

That's it. The next step is to do some reading. Practice on a passage that's familiar to you, so the meaning can come through as you try to practice reading the sounds. Study the same passage on different days until you can read it comfortably and fluently. And remember that reading is not primarily about reproducing sounds; it's about understanding the sense. The whole point of the exercise is to convey meanings.