

REDUPLICATION

Reduplication, or the doubling of one syllable in a word, is a very common process in Dakota. In fact, all stative cores, many active cores and some nouns have reduplicated forms. Some examples of this process are below

šá	ptéčedarŋ	sápA	háŋskA	wašté
šaša	pteptéčedarŋ	sab:sápA	háŋskaska	waštéšte
to be red	to be short	to be black	to be tall	to be good

Reduplication is used for various purposes in Dakota, although all of them are related to some sort of plurality. For example

íŋyaŋ kiŋ he sápe	íŋyaŋ kiŋ hená sab:sápe
That rock is black.	Those rocks are black.

With active cores, reduplication marks not a plurality of the subject, but a plurality of the action, either in space or time. For example, given an action, the reduplicated form can mean *doing that action time and time again*, where the action is distributed in time, or *that action occurs here and there*, where the action is distributed in space. Some examples are below:

čháj kiŋ kaksé

He cut the wood.

šiná kiŋ yuǰdǵéčē

She tore the blanket.

namáǰtake

He kicked me.

thadó kiŋ kaksákse

He chopped up the meat.

šiná kiŋ yuǰdǵéǰdečē

She ripped the blanket up.

makhá naǰtǰǰtake

He stomped on the ground.

Reduplication is a fairly common process throughout the world's languages, but is rare in the languages of Europe. If reduplicating a word sounds like a strange concept, it's likely because English does not have any in-built reduplication processes like Dakota does. However, as reduplication is such a common feature of human languages, from time to time small cases of reduplication do pop up in spoken English; consider the following conversation for example

Hey man! Do you wanna hang out this evening?

Ah, I'd love to, but I gotta write a history paper, been putting it off all week!

Bahhhhhh history-shmistory, just do it tomorrow or something dude!

Conversational English has developed a form of rhyming reduplication (replacing the first consonant of the reduplicated word with *shm*), taking a word such as *blah* and replacing it with *blah-shmah*, to give the meaning *blah doesn't really matter*.

Another example of reduplication in conversational English is the reduplication of an entire word for contrast. Again, this is most easily exemplified with a fake conversation (between some imaginary roommates):

Hey guys! I just brought a cake home, if you want some!

Mmmmm, cake! Wait...is it, like, carrot-cake? Or cake-cake?

Here, *cake-cake* has the meaning of *not carrot cake*. One final example of almost-reduplication in English is the pattern that takes *fast* to *faster* and *faster*, or *hard* to *harder* and *harder*.

REDUPLICATION PATTERNS

The process of reduplication treats contracting and non-contracting words differently; as a general rule non-contracting words reduplicate a single syllable, whereas contracting stems reduplicate their final CVC se-

quence (the final consonant-vowel-consonant sequence which appears before the *a* which gets deleted in contraction).

Single syllable words are the easiest; they reduplicate just by repeating themselves in their entirety, and the final stress appears on the second syllable.

ská	ǵí	thó	šá	zí	tké
skaská	ǵǵí	thothó	šášá	zízí	tketké
white	brown	blue/green	red	yellow	heavy

Two-syllable words usually reduplicate their second syllable, leaving the stress where it originally was

wašté	manúŋ	idé	uŋspé	kaksÁ
waštéšte	manúŋnuŋ	idéde	uŋspéspe	kaksáksA
to be good	to steal	to ignite	to learn something	to chop up

However, if the word is a contracting word, the final syllable does not reduplicate (as the final syllable contains the deletable *a*) and instead the preceding syllable and the following consonant reduplicate.

hóta	šičA	théča	zúka	sápA
hod:hóta	šig:šičA	thek:théča	zug:zúka	sab:sápA
to be gray	to be bad	to be new	to be drenched	to be black

The pattern behind these sound changes is explained below:

SOUND CHANGES IN CONTRACTION

The sound changes which occur in reduplication are exactly the same as the sound changes which take place in contraction; the general pattern is that voiced consonants become unvoiced, and unvoiced become voiced. A table of all occurring sound changes is below:

č	t/d	ǵǵčA	ǵǵnd:ǵǵčA
č	k/g	šíčA	šig:šíčA
p	b	tópa	tob:tópa
t	d	átaya	ád:ataya
k	g	thókeča	thog:thókeča
z	s	yúza	yus:yúza
ž	š		
ǵ	ń	káǵA	káń:káǵA

The one case that needs some more explanation is when the final consonant is č. As can be seen in the above table, here there are two choices for what č can contract to, either *d* or *g*, depending on the circumstance. Luckily, there is a very predictable pattern behind this.

there is no
voiced
counterpart of č
in Dakota, so it
has to become
something else

If the word in question begins in one of the following consonants, then a final č will contract to *k* or *g*.

s š n t č z ž d th čh

The reason for this is that these sounds are all produced near the same part of the mouth as *t* and *d*, and so if č contracted to this instead, the resulting word would be harder to say. Some examples of this process are below:

šéčA	théča	žíŋča	ečhádaŋ
šek:šéčA	thek:théča	žíŋk:žíŋča	ečhák:čhadaŋ
to be dry and dead	to be new	to sniffle	soon

And, if the reduplicating syllable begins with any other consonant, then the final č contracts to *d* or *t* instead.

Dissimilation also
occurs in English:
br often
becomes by
before u,
consider
February, which
is pronounced
almost
universally as
feb-you-wary.

khíŋčA	ńíčáhAŋ
khíŋd:khíŋčA	ńíd:ńíčáhAŋ
to scrape smth off	to trip and fall

While this process is most notable when it comes to the consonant č, Dakota will change the final consonant of a reduplicating syllable whenever it is too similar to the following consonant. This sort of process is called *dissimilation*.

Here are some further examples of dissimilation in Dakota reduplication: *t* will become *k* when it occurs near *s*, and *n* will become *k* when occurring near *č*.

súta	čónana
suk:súta	čok:čónana
to be firm	to be few

CONSONANT CLUSTERS

All of the above examples of contracting words reduplicate a syllable which starts with a single lone consonant. When a contracting word reduplicates a syllable that begins with a consonant cluster, keeping the final consonant as above would produce a sequence of three consonants in a row within a single word, which is prohibited in Dakota. (For example, if *ksápa* reduplicated as expected, it would produce **ksabksapa*, which has the three-consonant sequence **bks* in it). To prevent this, the final consonant is simply deleted, and these words reduplicate just like non-contracting words. The following examples below illustrate this:

remember, the combinations *th*, *kh*, *h* and *ph* all represent a single consonant sound

ksápA	sdúta	ńdókA
ksaksápA	sdusdúta	ńdońdókA
to be wise	to slide through an opening	to have holes
ptúzA	mnúǵA	šníńA
ptuptúzA	mnumnúǵA	šníšníńA
to be bent over	to produce crackling sounds	to be wilted

IRREGULAR REDUPLICATIONS

Some Dakota words have irregular reduplicated forms, the most notable of which is the stative core *thánka*, meaning *it is big*. This has two possible reduplicated forms, one which is regular, and one which is irregular.

thánka	thąk:thánka	thąkínkinyą
	to be big / great	

A few other irregular reduplications are below:

witkó	íṅyaŋkA
witkótkoka	íṅyáŋg:yaŋka
to be crazy	to run

STRESS AND REDUPLICATION

The pattern of stress for single syllable words was already mentioned; the stress on the the reduplicated form falls on the second syllable. Furthermore, if a word originally has second-syllable stress, then its reduplicated form will always be stressed on the second syllable as well.

ińá	iděǵA	kańbóǵA	aphÁ
ińáńha	iděń:deǵA	kańbóńboǵA	aphápha
to laugh	to shine	to drift in the wind	to hit it

Thus, the cases of interest are words which are initially stressed on the first syllable. When it comes to these, the location of the stress depends on whether it is a stative or active core undergoing reduplication.

Stative cores place the stress on the second syllable (even when the original stress occurred on the first syllable) For example:

sápA	púzA	ptéčedaŋ	ńóta
sab:sápA	pus:púzA	pteptéčedaŋ	ńod:ńóta
to be black	to be dry	to be short	to be gray

There are exceptions to this process, such as *ńáŋskA*, which has initial stress, and its reduplicated form *ńáŋskaska* does as well.

Active verbs however retain first-syllable stress after reduplication

ǵópA	phátaŋ	psíčA	káǵA
ǵób:ǵopA	phád:phataŋ	psípsíčA	káń:káǵA
to snore	to butcher	to jump	to make it

THE A-E CHANGE

Reduplicating a word can change whether or not that word undergoes the *a-e* change. Reduplication will never make a changeable word out of a non-changeable word, so the only cases that need to be discussed are those which end originally with a changeable *A*. If the word in question is a contractible word, then its reduplicated form will continue to undergo the *a-e* change. For example,

ǵópA	snízA	šícĀ	šécĀ
ǵób:ǵopA	snisnízA	šig:šícĀ	šek:šécĀ
to snore	to be deflated	to be bad	to be dry

However, non-contracting words lose their ability to ablaut after reduplication: even if the word itself undergoes the *a-e* change, its reduplicated form does not.

háŋskA	čhaphĀ	aphĀ	kaptĀ
háŋskaska	čhaphápha	aphápha	kaptápta
to be tall	to stab it	to hit it	to cut through it

Following is an example of two similar sentences, one with ablaut and one without.

isáj uŋ čhamaphé k'a makte nuŋs'é
He stabbed me with a knife and almost killed me.

isáj uŋ čhamaphápha k'a makte nuŋs'é
He stabbed me repeatedly with a knife and almost killed me.

THE K-Č CHANGE

If cores are reduplicated on a syllable which can undergo the *k-č* change, then both of the resulting *k*'s turn to *č*'s, even if one of them is no longer near the vowel which triggered the change to begin with. This is easier to see via example. Take the verb *káǵA*, *he made it*, and its dative form *kičáǵA*, *he made it for her*. These two words reduplicate as follows:

káġA	kičáġA
káĥ:kaġA	kičáĥ:čaġA
to make something	to make something for somebody

The reason why the reduplicated form of *kičáġA* is this, and not *kičáĥ:kaġA*, is the order in which the word is created. First, *kičáġA* is created from *káġA*, and at this point the *k* has already become a *č*. Then, this word is reduplicated, so it is the syllable *čaġ*, and not *kaġ*, which actually undergoes the reduplication.