

How to put together a Navajo word:
Young and Morgan's
The Navajo Language

JOYCE McDONOUGH
UNIVERSITY OF ROCHESTER
Paris-Diderot, 11 May 2017

Summary so far:

CORE VERB consisting of two LEXEMES

contain all obligatory marking

is always rightmost two (or three) syllables in the complex

Stems are robust

Supported by phonetics, phonology, phonotactics

$$\begin{array}{ccc} \sigma & & \sigma \\ \left[\left[\text{BASE} \right]_x + \left[\text{BASE} \right]_y \right]_{VC_{\text{COMPLEX}}} \\ \text{MODE.1s} & & \text{VL.STEM.IPV} \end{array}$$

EXPONENTS

INTERNAL CHANGES

Navajo words

sodi'niiszjĥ	I start saying a prayer
sodiszin	I say a prayer, pray
sohodizin	it's a prayer, say a prayer
sodidĭ'néeszjĭł	I will start a prayer
sodizin bá hooghan	church

Navajo words

hadanishkaad

I drive it down from a height

hadaashkaad

I drop it down from a height

hadaashzhoo

I slide down from a height

hadaashtłíish

I fall down (AnO)

hadaashtłeeh

I lowered it, dropped it (mushy)

hadaashteeh

I unload it (AnO)

hadaááłtį

I unloaded it (AnO)

(Y&M:d377-381)

Navajo words

bik'eenééh it peels off

bik'eesdzǫ́s I pull him off him

bik'eessóqs I peel it, stripped it off

bik'eeshjooł I take it off him (non-compact)

bik'i- ish I.jool

bik'idilkqoh it's covered with a layer

bik'i-di I.kqoh

(handout Y&M:d202)

Navajo words

'iisdziih I inhale

'iisdzǫ́is I tow it out of sight

'iigéés I screw it in

'iisgis I do the laundry

'iisxaas I scatter it (violently)

'a-is ø.ghaas

(bił) 'iisdis I wrap it up (in something)

'i-i-is ø.dis

(handout Y&M:d478)

Young and Morgan 1987

*The Navajo Language:
A Grammar and Colloquial Dictionary*

Two parts

- Grammar (1 – 205)
- Appendices (206 - 437)
- **Dictionary** (1 - 1069)

Young and Morgan w Midgette, 1992
The Analytic Lexicon of Navajo

arranged by roots and 'themes'

Position class template for Navajo verb

Hoijer 1967; Young and Morgan 1987:g38)

KEY (from left to right):

0	<i>Direct object of postposition. Possessive prefix with nouns.</i>	Disjunct
Ia	Null postposition	
Ib	Adverbial – Thematic (‘postpositional stems’)	
Ic	(Reflexive)	
Id	(Reversionary)	
Ie	(Semeliterative)	
II	(Iterative)	
III	(Distributive Plural)	

IV	Direct Object Pronouns	Conjunct
V	Deictic Subject Pronouns	
VIa	Adverbial – Thematic	
VIb	Adverbial – Thematic	
VIc	Transitional / Semelfactive Aspect markers	
VII	Modal - Aspectival Conjugation markers	
VIII	Subject Pronouns	
IX	‘Classifier’	

Core (minimal) verb

X	Stem	Stem
---	------	-------------

Navajo

Core verb

- rightmost two syllables

YM 1987:37-38

Disjunct	Conjunct							Stem
0 Ib Ia Ic Id II III	IV V VIa VIb VIc	VII	VIII	IX				X

σ

σ

MODE inflected for Person and Number

VERB VL.STEM

‘STEM SETS’

valence (‘classifiers’).stem shape



$(afs)_{\text{DIS}} - (afs) - \text{MODE}$

Stem sets

VL.STEM

Disjunct	Conjunct	Stem
0 1b 1a 1c 1d 1e 2 3	4 5 6a 6b 6c 7.8	9.stem

Core (minimal) verb word

- smallest morphosyntactic unit
- 2 syllables

hánísh	łt'ááh
há-nísh	ł.t'ááh
af- TAM	VERB

háníshłt'ááh

I'm flying in to pick something up

hánisht'ááh

I'm flying in to pick something up

Dictionary entry from Y&M 1987:d415 for *hánisht'ááh*

hánisht'ááh(I), *hánasht'ah*(R), *háníłt'a'*(P), *hádeesht'ah*(F), *háosht'ááh*(O)
(I), to fly it after it (a plane), (i.e. to arrive flying it for the purpose of getting it). *Ha'át'íisha' chidí naat'a'í háníłt'a'*, what did you come after?/ *Bił hánisht'ááh*, to take him after it by plane, to accompany him after it (with the subject of the verb as pilot).
Naat'aanii ba'álchíní Hoozdodi bił hánisht'ááh nt'éé k'asdaa' chidí naat'a'í lá nihídeezgoh, I took the superintendent to Phoenix after his family and another plane nearly ran into us./
(414) (*łt'ááh: to cause to move flying.) (há-.)

All dictionary entries have three parts
principal entry is 1st Singular Subject.IPV (I)

All dictionary entries have three parts

(21) hánisht'ááh(I), hánasht'ah(R), háníłt'a'(P), hádeesht'ah(F),
háosht'ááh(O) (ł), to fly it after it (a plane), (i.e. to arrive flying it
for the purpose of getting it).

(22) Ha'át'íisha' chidí naat'a'í háíníłt'a', what did you come after?

Bił hánisht'ááh, to take him after it by plane, to accompany him after it
(with the subject of the verb as pilot).

Naat'aanii ba'álchíní Hoozdodi bił hánisht'ááh nt'ée k'asdaá' chidí naat'a'í
łá nihídeezgoh, I took the superintendent to Phoenix after his family and
another plane nearly ran into us.

(23) (*łt'ááh: to cause to move flying.) (há-.)

MODES

hánisht'ááh(I), hánásht'ah(R), hánílt'a'(P), hádeesht'ah(F), háosht'ááh(O)

(ɬ), to fly it after it (a plane), (i.e. to arrive flying it for the purpose of getting it).

hánisht' <u>ááh</u>	(I) IPV	imperfective
hánásht' <u>ah</u>	(R) REP	repetitive
hánílt' <u>a'</u>	(P) PFV	perfective
hádeesht' <u>ah</u>	(F) FUT	future
háosht' <u>ááh</u>	(O) OPT	optative

∅, ɬ, l d 'classifier' (VL) valence marker ɬ.t'ááh_{IPV}

I arrive flying it for the purpose of getting it.
fly it to go after it (a plane)

Stem sets refer to the combination of the classifier (VL) and the different stem shapes that appear with that classifier

ł.t'ááh_{IPV}

in each of the modes of the verb word

Second part of dictionary entry is the corpora

Ha'át'íisha' chidí naat'a'í háíníł't'a', *what did you come after?*

háíní ł't'a'
NPFV.2 VL.STEMSET PFV

Bił hánisht'ááh, *to take him after it by plane, to accompany him after it (with the subject of the verb as pilot).*

Naat'áanii ba'álchíní Hoozdodi bił hánisht'ááh nt'ée
k'asdaá' chidí naat'a'í lá nihídeezgoh,
*I took the superintendent to Phoenix after his family
and another plane nearly ran into us.*

Dictionary entry from Y&M 1987:d415 for *hánisht'ááh*

hánisht'ááh(I), *hánasht'ah*(R), *háníłt'a'*(P), *hádeesht'ah*(F), *háosht'ááh*(O)
(ł), to fly it after it (a plane), (i.e. to arrive flying it for the
purpose of getting it). *Ha'át'íisha' chidí naat'a'í háníłt'a'*, what did
you come after?/ *Bił hánisht'ááh*, to take him after it by plane, to
accompany him after it (with the subject of the verb as pilot).
Naat'aanii ba'alchíní Hoozdodi bił hánisht'ááh nt'éé k'asdaa' chidí
naat'a'í lá nihídeezgoh, I took the superintendent to Phoenix after his
family and another plane nearly ran into us./
(414) (*łt'ááh: to cause to move flying.) (há-.)

All dictionary entries have three parts
principal entry is 1st Singular Subject.IPV (I)

Third part of dictionary entry: the VL ('cl') + stem shape unit
left edge morphemes

(414) (*łt'ááh: to cause to move flying.) (há-.)

ł.t'ááh_{IPV}

VL.stem_{IPV}

‘Stem sets’

ROOT: T'ÁÁH ‘FLY’

Y&M 1987:G344

in APPENDIX V: ROOT/STEM/THEME INDEX

Third part of dictionary entry

(*łt'ááh: to cause to move flying.) (há-.)

há-4 : lb. há-, Pos. lb, for, after (to get)

hánisht'ááh (I)



há

‘go after’

łt'ááh

‘cause to move by flying’

hánísht'ááh

há ---- łt'ááh

hánísht'ááh

há nísh t'ááh

hánísht'ááh

há **nísh** t'ááh

4th part of dictionary entry: INFLECTIONAL PARADIGMS YM:1987:g200ff

I. IMPERFECTIVE					II PERFECTIVE	
PERSON	Ø	NI-	SI-	YI-Ø	NI	
sgl.					Ø - Ł	D - L
	(1)	(2)	(3)	(4)		
1.	yish	nish	shi	yiish	ní	nish
2.	ni	ní	sí	sii	yíní	yíní
3.	yi	yí	-	yii	yí	yí
3o.	yi	yí	-	yiyyii	yí	yí
3a.	ji	jí	-	jii	jí	jí
3i.	'a	'í	-	'ii	'í	'ís
3s.	ha	hó	-	hwo	hwó	hwó

hánisht'ááh

Y&M 1987: Appendix I Base and Model Paradigms

16 Inflectional Paradigms / Conjugations

4th part of dictionary entry: INFLECTIONAL PARADIGMS YM:1987:g200ff

I. IMPERFECTIVE					II PERFECTIVE	
PERSON	Ø	NI-	SI-	YI-Ø	NI	
sgl.					Ø - Ł	D - L
	(1)	(2)	(3)	(4)		
1.	Ø-IPV.1	N-IPV.1	SIPV.1	Y-IPV.1	ní	nish
2.	Ø-IPV.2	N-IPV.2	SIPV.2	Y-IPV.2	yíní	yíní
3.	Ø-IPV.3	N-IPV.3	—	Y-IPV.3	yí	yí
3o.	Ø-IPV.3o	N-IPV.3o	—	Y-IPV.3o	yí	yí
3a.	Ø-IPV.3A	N-IPV.3A	—	Y-IPV.3A	jí	jí
3i.	Ø-IPV.3I	N-IPV.3I	—	Y-IPV.3I	'í	'is
3s.	Ø-IPV.3S	N-IPV.3S	—	Y-IPV.3S	hwó	hwó

hánisht'ááh

Y&M 1987: Appendix I Base and Model Paradigms

4th part of dictionary entry: INFLECTIONAL PARADIGMS YM:1987:g200ff

I. IMPERFECTIVE					II PERFECTIVE	
PERSON	Ø	NI-	SI-	YI-Ø	NI	
sgl.					Ø - ɛ	D - L
	(1)	(2)	(3)	(4)		
1.	yish	nish	shi	yiish	ní	nish
2.	ni	ní	sí	sii	yíní	yíní
3.	yi	yí	-	yii	yí	yí
3o.	yi	yí	-	yiyii	yí	yí
3a.	ji	jí	-	jii	jí	jí
3i.	'a	'í	-	'ii	'í	'ís
3s.	ha	hó	-	hwo	hwó	hwó



4th part of dictionary entry: INFLECTIONAL PARADIGMS YM:1987:g200ff

From Y&M1987:d200

“The 16 Base and Extended Paradigms constitute the foundation upon which all verb bases are conjugated”

“The changes in prefix shapes [to these Base Paradigms] triggered by the Secondary Determinants [POSITIONS I – VI prefixes] are determined partly by their phonetic constituency and partly by their status as Disjunct or Conjunct elements.”

4th part of dictionary entry: INFLECTIONAL PARADIGMS YM:1987:g200ff

From Y&M1987:d200

“The 16 Base and Extended Paradigms constitute the foundation upon which all verb bases are conjugated”

“The changes in prefix shapes [to these Base Paradigms] triggered by the Secondary Determinants [POSITIONS I – VI prefixes] are determined partly by their phonetic constituency and partly by their status as Disjunct or Conjunct elements.”

há prefix (Disjunct)

affects changes in the shape of **MODE** paradigms

hánísh~~t~~'ááh

¹ há- **nísh** ~~h~~t'ááh

² há- **ní** t'ááh

³ há- **í** t'ááh

^{3o} há- **í** t'ááh

^{3a} há- **jí** t'ááh

há prefix (Disjunct)

affects changes in the shape of **MODE** paradigms

hánísḥt'ááh

1	há nísh	łt'ááh
2	há ní	łt'ááh
3	há	łt'ááh
3o	há í	łt'ááh
3a	há jí	łt'ááh

4th part of dictionary entry: INFLECTIONAL PARADIGMS YM:1987:g200ff

I. IMPERFECTIVE					II PERFECTIVE	
PERSON	Ø	NI-	SI-	YI-Ø	NI	
sgl.					Ø - ɛ	D - ɛ
	(1)	(2)	(3)	(4)		
1.	yish	nish	shi	yiish	ní	nish
2.	ni	ní	sí	sii	yíní	yíní
3.	yi	yí	-	yii	yí	yí
3o.	yi	yí	-	yiyii	yí	yí
3a.	ji	jí	-	jii	jí	jí
3i.	'a	'í	-	'ii	'í	'ís
3s.	ha	hó	-	hwo	hwó	hwó



NPFV n-Perfective

háníłt'ááh PFV

há	ní	łt'ááh
há	íní	łt'ááh
há	í	łt'ááh
há	í	łt'ááh
há	jí	łt'ááh

Dictionary entry from Y&M 1987:d415 for *hánisht'ááh*

hánisht'ááh(I), *hánasht'ah*(R), *hánílt'a'*(P), *hádeesht'ah*(F), *háosht'ááh*(O)
(ł), to fly it after it (a plane), (i.e. to arrive flying it for the
purpose of getting it). *Ha'át'íisha' chidí naat'a'í hánílt'a'*, what did
you come after?/ *Bił hánisht'ááh*, to take him after it by plane, to
accompany him after it (with the subject of the verb as pilot).
Naat'aanii ba'alchíní Hoozdodi bił hánisht'ááh nt'éé k'asdaa' chidí
naat'a'í lá nihídeezgoh, I took the superintendent to Phoenix after his
family and another plane nearly ran into us./
(414) (*łt'ááh: to cause to move flying.) (há-.)

page 414

Pg 414 paradigm forms | há- + NI-conjugations (IPV, PFV)

há- Ib

PERSON	NI — IMPERFECTIVE	NI-PERFECTIVE Ø-Ł	SI-PERFECTIVE Ø-Ł
1	hanish	hani	hase
2	hani	haini	hasini
3	ha	hani	haas
3o	hai	haini	hais
3a	haji	hazhni	hajis
3i	ha'i	ha'ni	ha'as
dual			
1	hanii	hanii	hasii
2	hanoh	hanoo	hasoo

Pg 414 paradigm forms | há- + NI-conjugations (IPV, PFV)

há- Ib

PERSON	NI — IMPERFECTIVE	NI-PERFECTIVE Ø-Ł	SI-PERFECTIVE Ø-Ł
1	háish	háish	hase
2	hání	hání	hasíni
3	há	há ^{IPV}	haas
3o	háí	háini	hais
3a	háji	házhni	hajis
3i	há'í	há'ni	has
1	hánii	hánii	hasii
2	hánish	hánish	hasoo

af-MODE VERB

MODE = constitutes INFL

I'm flying in to pick something up

há- Ib

PERSON	NI — IMPERFECTIVE	NI-PERFECTIVE Ø-Ł	SI-PERFECTIVE Ø-Ł
1	hanish	łt'ááh	
2	háńí	łt'ááh	
3	há	łt'ááh	
3o	háí	łt'ááh	
3a	háji	łt'ááh	
3i	há'í	łt'ááh	
1	háńi	łt'ááh	
2	háńoh	łt'ááh	

IPV requires the IPV stem set łt'ááh

Pg 414 paradigm forms | há- + NI-conjugations (IPV, PFV)

há- Ib

PERSON	NI — IMPERFECTIVE	NI-PERFECTIVE Ø-Ł	SI-PERFECTIVE Ø-Ł
1	hanish	hání t'a'	hase
2	hání	haini	hasini
3	há	hání	haas
3o	háí	haini	hais
3a	hají	hazhni	hajis
3i	há'í	há'ni	ha'as
1	hanii	hanii	hasii
2	hanoh	hanii t'a'	hasoo

I flew in to pick something up

Paradigm forms on page 414

há- Ib

PERSON	NI — IMPERFECTIVE	NI-PERFECTIVE Ø-Ł	SI-PERFECTIVE Ø-Ł
1	hanish	hani	hase
2	hani'	haini'	hasini'
3	há	hani	haas
3o	hai'	haini'	hais
3a	haji'	hazhni'	hajis
3i	ha'i	ha'ni'	ha'as
1	hanii	hanii	hasii
2	hanoh	hanoo	hasoo

PFV's require the PFV stem set **łt'a'**

Paradigm forms on page 414

há- Ib

PERSON	NI — IMPERFECTIVE	NI-PERFECTIVE Ø-Ł	SI-PERFECTIVE Ø-Ł	
1	hánish	hání	hase	łt'a'
2	hání	hailní	hasíni	łt'a'
3	há	hání	haas	łt'a'
3o	hái	haini	hais	łt'a'
3a	hají	hazhni	hajis	łt'a'
3i	há'i	há'ni	ha'as	łt'a'
1	hánii	hánii	hasii	łt'a'
2	hánoh	hánoo	hasoo	łt'a'

PFV's require the PFV stem set łt'a'

Paradigm forms on page 414

há- Ib

PERSON	NI — IMPERFECTIVE	NI-PERFECTIVE Ø-Ł	SI-PERFECTIVE Ø-Ł	
1	hānīsh	hānī	hase	łt'a'
2	hānī'	hāilnī'	hasīnī'	łt'a'
3	há	hānī'	haas	łt'a'
3o	hāi'	hāinī'	hais	łt'a'
3a	hājī'	hāzhnī'	hajis	łt'a'
3i	hā'i	hā'nī'	ha'as	łt'a'
1	hānīi	hānīi	hasīi	łt'a'
2	hānoh	hānoo	hasoo	łt'a'

THIS VERB DOESN'T INFLECT IN THE S-PERFECTIVE
(see dictionary entry)



hánisht'ááh(I), hánásht'ah(R), **hánílt'a'(P)**, hádeesht'ah(F), háosht'ááh(O)
(t), to fly it after it (a plane), (i.e. to arrive flying it for the purpose of getting it).

hánílt'a' (P)

THIS VERB INFLECTS IN THE N-PERFECTIVE

this information is in the dictionary entry for this word

What we need to know
or

What a fluent speaker knows

- Shape of the stem from that word's **VERB**
STEM SET (VL.STEM) FOR EACH MODE
- **MODE** conjugations (inflectional classes) for that word
- The shapes of the prefix+**MODE** units in paradigms
- The possible **MODE** + **stem** combinations

MODE UNITS DETERMINE
THE **INFLCL** A WORD FORM IS ASSOCIATED TO

all the words belonging to an **INFLCL**
conjugate in similar ways

& linked in dictionary to their paradigm patterns

hánisht'ááh

hánish ł't'ááh

há-nish ł.t'ááh

af-**MODE** VL.**STEM**_{VERB}

	<i>verb word</i>	<i>VERB (VL stemshape)</i>	
1	hánishbáås	*ł.báås	I come for it in wheeled vehicle
2	hánishááh	*ø.ghááh	I walk, go after it
3	hánishkááh	*d.kááh	I walk, go, come after it (3+)
4	hánish'aash	*ø.'aash	I walk, go, come after it (2)
5	hánish'nééh	*d.nééh	I crawl after it
6	háshishzhee'	*ł.zhee'	I hunt game animals

Dictionary entries

these forms belong to the same **INFLCL**

these forms belong to the same **INFLCL**

their **stem sets** differ

including their ‘classifiers’

hánisht'ááh

hánish ɬ't'ááh

há-nish ɬ.t'ááh

af-**TAM** VL.**STEM**_{VERB}

	<i>verb word</i>	<i>VERB (VL stemshape)</i>	
1	hánishbáás	*ɬ.báás	I come for it in wheeled vehicle
2	hánishááh	*ø.ghááh	I walk, go after it
3	hánishkááh	*d.kááh	I walk, go, come after it (3 ⁺)
4	hánish'aash	*ø.'aash	I walk, go, come after it (2)
5	hánish'nééh	*d.nééh	I crawl after it
6	háshishzhee'	*ɬ.zhee'	I hunt game animals

Dictionary entries

these forms belong to the same **INFLCL**



how the words are put together



in two parts

the **MODE** unit
for that word form

INCLUDING ANY PREFIXES IN ITS MEANING BASE

and the **VERB** –

THE STEM SET FOR THAT WORD FORM

hold the **MODE** unit

vary the **VERB** unit

AF- MODE **VERB**

bits'a'nís *tbąąs*

drive away from it

VERB

bits'a'nísbąqs

drive away from it

VERB

bits'a'níshkqóh

swim away from it

VERB

bits'a'nish'eet

sail away from it

VERB

bits'a'níshdlóósh move away 'on all fours'



VERB

<i>bits'a'-nísh</i>	<i>tkóq̣h</i>	swim away from it
<i>bits'a'-nísh</i>	<i>ø'eeł</i>	sail away from it
<i>bits'a'-nísh</i>	<i>ldlóósh</i>	move away 'on all fours'
<i>bits'a'-nísh</i>	<i>tḅaqs</i>	drive away from it

STEM SETS DETERMINE

the 'content' meaning of verb

a combination of the classifier + stem shape

all the words with this stem/root **DZÍÍS**
refer to action of ‘pulling an object’

& linked in **Appendix V** to the stem sets
(VL.STEM SHAPE)
this root occurs in

hold the **VERB** unit

vary the (af) **MODE** unit

Verb : **DZĭ̃s** ‘pull’

af-**MODE** **VERB**

‘iis ødzĭ̃s pull or drag O out of sight

Verb : **DZị̆̆̌S** ‘pull’

af-**MODE**

‘iisdzị̆̆̌S pull or drag O out of sight

af-MODE

‘adaas ‘iisdzĩs pull down from a height

af-MODE

‘aɫs’ásdzĩ̥s pull apart

af-MODE

haasdzíís pull O out (like a splinter)

af-MODE

bíis 'iisdzĩs pull and add to a pile

af-**MODE**

bikiisdzĩĩs cover O

af-MODE

‘adah ch’ésdzíís drag O over the edge

Verb : **DZÍÍS** ‘pull’

af-**MODE**

‘iis ødzíís pull or drag O out of sight

‘adaas ‘iis ødzíís pull down from a height

‘aʔs’ás ødzíís pull apart

bíis ‘iis ødzíís pull and add to a pile

bikiis ødzíís cover O

‘adah ch’é ødzíís drag O over the edge

haas ødzíís pull O out (like a splinter)



what Y&M use instead of the template to form verbs

break verb into two parts:

MODE unit - including prefixes to the **MODE**
&
VERB (VL.STEMSHAPE) unit

each with its own paradigms and paradigm types

each with its own paradigms and paradigm types
linked in the dictionary to their conjugational classes
via **MODE** paradigms

and thus to related forms that conjugate the same way

thus these paradigms
**result in organization of forms that reside in
very dense neighborhood of related forms**

Stem sets

Y&M 1987:Appendix V

STEMS SETS

“...constitute a fundamental resource on which native speakers draw subconsciously to elicit the multiple stem shapes required by various modes and aspects in which a given verbal root is expressed.”

Y&M 1987:g302

STEMS SETS

“...constitute a fundamental resource on which native speakers draw subconsciously to elicit the multiple stem shapes required by various modes and aspects in which a given verbal root is expressed.”

Y&M 1987:g302

Stems conjugate in the same 5 modes of the full words

STEMS SETS

“...constitute a fundamental resource on which native speakers draw subconsciously to elicit the multiple stem shapes required by various modes and aspects in which a given verbal root is expressed.”

Y&M 1987:g302

stems conjugate in the same 5 modes of the full words

imperfective (I)	repetitive (R)	perfective (P)	future (F)	optative (O)
IPV	REP	PFV	FUT	OPT

STEMS SETS

“...constitute a fundamental resource on which native speakers draw subconsciously to elicit the multiple stem shapes required by various modes and aspects in which a given verbal root is expressed.”

Y&M 1987:g302

stems conjugate in the same 5 modes of the full words

imperfective (I)	repetitive (R)	perfective (P)	future (F)	optative (O)
IPV	REP	PFV	FUT	OPT

but ‘stem sets’ for any word require VL (‘classifiers’) affixes

STEMS SETS = VL.STEM SHAPE

ROOT: **TAAŁ** act w feet move quickly
6 stem sets

VL	IPV	REP	PFV	FUT	OPT	Asp
∅	∅taał	∅tal	∅táál	∅tał	∅taał	MOM
∅	∅tał	∅tal	∅tał	∅tał	∅tał	SEM
∅	∅tał	∅tal	∅táál	∅tał	∅tał	REP
ł	łtaał	łtal	łtáál	łtał	łtaał	MOM
d	dtaał	dtał	dtáál	dtał	dtał	REP
l	ltał	ltał	ltáál	ltał	ltaał	CON

shapes of stems: tał táál taał taal tał

STEMS SETS = VL.STEM SHAPE

ROOT: **TAAŁ** act w feet move quickly
6 stem sets

ASP - *of full word form*

VL	IPFV	REP	PFV	FUT	OPT	Asp
∅	∅taał	∅tal	∅táál	∅tał	∅taał	MOM
∅	∅tał	∅tal	∅tał	∅tał	∅tał	SEM
∅	∅tał	∅tal	∅táál	∅tał	∅tał	REP
ł	łtaał	łtal	łtáál	łtał	łtaał	MOM
d	dtaał	dtał	dtáál	dtał	dtał	REP
l	ltał	ltał	ltáál	ltał	ltaał	CON

word aspect

1b, d, e, 2, 3, 6a, b, c

[Mode.Subj

Aspects
Momentaneous
Continuative
Durative
Repetitive
Conclusive
Semelfactive
Distributive
Diversative
Reversative
Conative
Transitional
Cursive

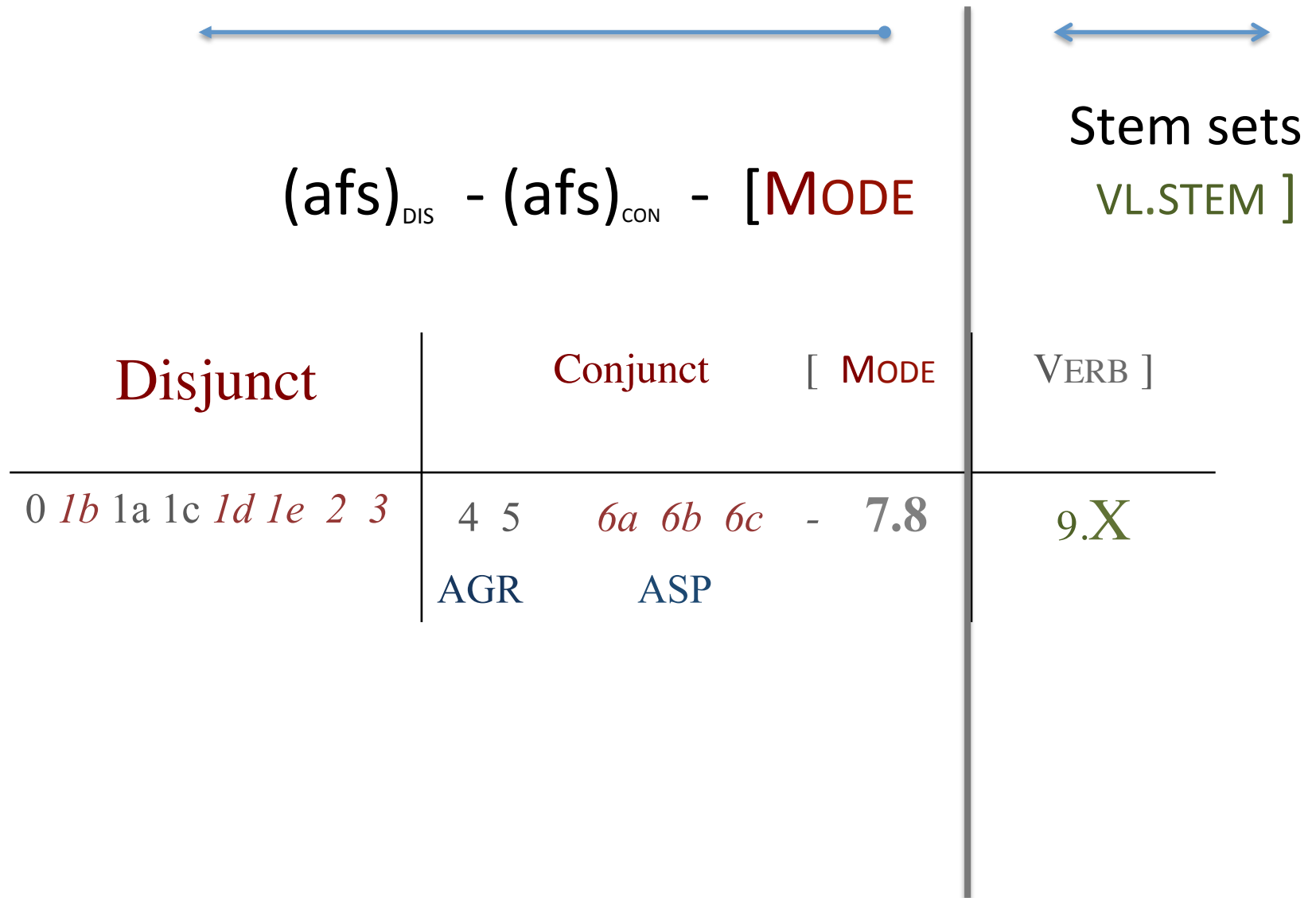
Subaspects
Inceptive
Inchoative
Semeliterative
Serative
Stative
Completive
Terminative
Terminal
Prolongative
Reversionary

Modes
Imperfective
Perfective
Usitative
Iterative
Progressive
Future
Optative

[**Base**

IPV REP PFV FUT OPT ?

Verbal complex



IPV REP PFV FUT OPT - STEMS

MODE conjugations Y&M:200ff

'BASE PARADIGMS'

IPV **PFV** PROG FUT OPT

(2)

∅ ∅ - ł

d - l

n ∅ - ł

d - l

s ∅ - ł

d - l

y ∅ - ł

d - l

16 conjugation patterns in **MODE**
(2 PROG)

IPV **REP** **PFV** **FUT** **OPT** = **STEMS**

MODE conjugations - 12 conjugation patterns

IPV **PFV**

ø	ø - ł d - l	'in act of doing something' 64% IPV 32% PFV
n	ø - ł d - l	'terminative' 18% IPV 21% PFV
s	ø - ł d - l	'stative' 0.7% IPV 32% PFV
y	ø - ł d - l	'transitional' 17% IPV

I. IMPERFECTIVE					II PERFECTIVE	
PERSON	Ø	NI-	SI-	YI-Ø	NI	
sgl.					Ø - Ł	D - L
	(1)	(2)	(3)	(4)		
1.	yish	nish	shi	yiish	ní	nish
2.	ni	ní	sí	sii	yíní	yíní
3.	yi	yí	-	yii	yí	yí
3o.	yi	yí	-	yiyyii	yí	yí
3a.	ji	jí	-	jii	jí	jí
3i.	'a	'í	-	'ii	'í	'ís
3s.	ha	hó	-	hwo	hwó	hwó

há-nish lt'ááh

Y&M 1987: Appendix I Base and Model Paradigms

16 Inflectional Paradigms / Conjugations

1b, d, e, 2, 3, 6a, b, c

[Mode.Subj

Aspects	Subaspects		Modes
Momentaneous	Inceptive	IPV	Imperfective
Continuative	Inchoative	REP	Perfective
Durative	Semeliterative		Usitative
Repetitive	Serative	PFV	Iterative
Conclusive	Stative	FUT	Progressive
Semelfactive	Completive	OPT	Future
Distributive	Terminative		Optative
Diversative	Terminal		
Reversative	Prolongative		
Conative	Reversionary		
Transitional			
Cursive			

-from Young and Morgan 1987

Both USITATIVE & ITERATIVE use the same stem – **REP**
PROG uses **FUT** stem

USITATIVE, ITERATIVE, PROGRESSIVE

From Y&M1987:d200

“The ø-Imperfective and the Usitative are distinguished *by stem shape alone*. The Iterative is derived by adding the Disjunct prefix ná-, POSITION II, to the Usitative”

The expression of
ø-Imperfective - Usitative - Iterative
realized at *the word level*
as a relationship between Mode and Stem elements.

...it's a result of the interaction between a specific stem set and an inflected element from the ØIPV Base Paradigm

IPV & USITATIVE use different stems

	IPV	USIT	STEM
	IPV STEM	REP STEM	
Ø	yish dlá	yish dlíh	DLA - drink
s	dah shish teeh	dah shish tééh	l.TEEH- set up AnO
n	baa nish teeh	baa yish tééh	l.TEEH – bring AnO

difference between Usitative and Imperfective
is realized in the **stems** that the forms take

ITERATIVE- USITATIVE used same stem (REP)

ITERATIVE requires ØIPV (and not NIPV) MODE

1b –ná	Iterative	Disjunct prefix	outside the conjunct
	IPV	ITER	
yishleeh		náshdleeh	I (repeatedly) become
yish ø.leeh		ná- ish d.leeh	
baa nishheeh		baa náshgééh	I (repeatedly) haul it to him
nish- ø.heeh		ná- ish d-hééh	
yiníł'ı		néinil'ııh	he's looking at it (repeatedly)
yiní ł'ı		ná- yiní l'ııh	
ni-nish ø.tláád		niish d.tłi'	I'm stopping, I usually stop
		ninásh d.tłi'	I repeatedly stop

Using iterative (REP stem) to build meaning

1b –**ná** Iterative d- (6) ‘inceptive’
IPV ITER

dishdziih	ńdishdzih	I’m (in act of taking a breath)
d-ish ø.dziih	ná- d-ish d.dziih	I’m breathing (repeatedly)

dishhááh	ńdishdááh	I starting to go
d-ish- ø.ááh	ná- d-ish d-ééh	I’m pacing back and forth

disyéés	ńdísyis	I’m in the act of dodging something
d-ish ø.yéés	ná- d-ish ø.yis	I’m twitching or jerking around

‘anishneeh	ná’anísh’nah	I’m choking
’a-nish ø.neeh	ná-’a-n-ish d.nah	I hiccupping

ná- disjunct outside the inner ‘conjunct’ complex-

ASPECT of the full word is a result of the compound (conjoining)
of the two inflected **LEXEMES** of core verb
includes (at least) prefixes from two other positions in word

1b ná- 6c di-
[ná # di- [Mode Stem]_{core verb}]_{VComplex}

Stem shapes & conjugation patterns:

IPV	REP	PFV	FUT	OPT
IPV	USTI/ITER	PFV	FUT/PROG	OPT

Role of word unit: Aspect

(af) **MODE** + **STEM SET**

Imperfective **MODES** + **VL.DLÁÁ'** 'drink'

Imperfective
(Continuous)

Usitative
(Momentaneous)

Terminative
(Momentaneous)

yish *d.dlá_{IPV}
ØIPV.1s

yish *d.dlíġh_{IPV}
ØIPV.1s

ni- **nish** *t.dlíġh_{IPV}
term-nIPV.1s

Role of whole word unit: Aspect

(af) **MODE** + **STEM SET**

Imperfective **MODE**'s + **VL.DLÁÁ'** 'drink'

Imperfective
Continuous

Usitative
Momentaneous

Terminative
Momentaneous

yish
ØIPV.1s

*d.dlá_{IPV}

yish
ØIPV.1s

*d.dlíh_{IPV}

ni- nish *t.dlíh_{IPV}
term-nIPV.1s

Role of whole word unit: Aspect

(af) **MODE** + **STEM SET**

Imperfective **MODE**'s + **VL.DLÁÁ'** 'drink'

Imperfective
Continuous

Usitative
Momentaneous

Terminative
Momentaneous

yish ***d.dlá**_{IPV}
ØIPV.1s

yish ***d.dlíih**_{IPV}
ØIPV.1s

ni-nish ***l.dlíih**_{IPV}
term-nIPV.1s

Role of whole word unit: Aspect

(af) **MODE** + **STEM SET**

Imperfective **MODE**'s + **VL.DLÁÁ'** 'drink'

Imperfective Continuous	Usitative Momentaneous	Terminative Momentaneous
yishdlá _{CON}	yishdlííh _{MOM}	ninishdlíísh _{MOM}
yish d-dlá	(y)ish d-dlííh	ni-nish ł-dlííh
ØIPV.1SG VL-IPV	ØIPV.1SG VL-IPV	CESS-nIPV.1SG. VL-IPV
<i>I drink it</i>	<i>I always drink it</i>	<i>I finished drinking it</i>

yish ***d.dlá**_{IPV}
ØIPV.1s

yish ***d.dlííh**_{IPV}
ØIPV.1s

ni- nish ***ł.dlííh**_{IPV}
Term-NIPV.1s

The subaspect of a verb can be determined
by the conjugation patterns of the **MODE** elements
by differences in the **STEM SET** alone
or by a combination of the above

understand the pattern of interdependencies of the
elements in the verbal complex

STEMS SETS = VL.STEM SHAPE

ROOT: **YÍÍH** eat

VL	IPV	REP	PFV	FUT	OPT	Asp
∅	øyííh	d.yííh	øyáá'	øyííł	øyáá'	MOM/TRANSITIONAL
∅	øyá	d.ííh	øyáá'	øyííł	øyáá'	DURATIVE
∅	øyá	d.ííh	øyá	øyííł	øyá	CONTINUATIVE

ASPECT:

Mom: eating

Transitional, mom/ term: begin to eat, finished eating,
finish eating a meal,

Durative/Continuative: eat all over (like a termite), eating around (town)

Distributive: sample foods

STEM SETS = VERB BASES

TLÁÁD stop or halt 345

ASP	VL	IMP	REP	PRF	FUT	O
MOM	l	<u>tłáád</u>	<u>tłi'</u>	<u>tłah</u>	<u>tłił</u>	<u>tłáád</u>
MOM	ł	<u>tłáád</u>	<u>tłi'</u>	<u>tłah</u>	<u>tłił</u>	<u>tłáád</u>

TŁÍISH- to move independently through the air 346

MOM	∅	<u>tłíish</u>	<u>tłish</u>	<u>tłizh</u>	<u>tłish</u>	<u>tłíish</u>
CON	∅	<u>tłiish</u>	<u>tłish</u>	<u>tłizh</u>	<u>tłish</u>	<u>tłiish</u>
REP	ł	<u>tłish</u>	<u>tłish</u>	<u>tłish</u>	<u>tłish</u>	<u>tłish</u>

(no frequency values for these verbs from corpora)

All primary aspects work this way

Root 'eat' **Үҗи**

various aspects are realized by relationships between the two elements in the CORE VERB and the prefixes in the positions in *conjunct* and *disjunct* domains.

The very rich aspectual system is pretty intuitive, but's its **paradigmatic** and build off of **combinations of existing elements**.

Young and Morgan, 1987

the template to construct well formed words

the elements and how they vary and interact

Young and Morgan, 1987

Dictionary entries

Fully inflected words associated to their **INFLCL**'s
w full paradigms

Young and Morgan, 1987

Word is compound of two distinct morphemes
from two distinct paradigm types

- **MODE** inflectional paradigms (same page as entry)
- **VERB** VL.stemshapes - stem sets

Young and Morgan, 1987

Both parts are inked to their paradigms
in 2 Appendices (I, V)

Young and Morgan, 1987

Stem sets (Appendix V)

VL.STEMSHAPE

are fundamentally linked to
the full word forms they appear in

Things to consider

- patterns of association between the elements
 - the relationship of the stem shape to the aspect system
 - the object and indirect object agreement markers
 - the differences in role of disjunct vs conjunct morphs
 - the rest of the complex....
-
- nouns

naadąą't'áá dadootł'izhígíi 'green corn'

naadąą'	t'áá	dadoo ł.tł'izh	-ígíi
corn	'just'	'they are green'	-nom

Dene Speech Atlas

Seeds for the Future

Home About DSA Dene Language Groups The Sound Inventory Open Web Resources



DSA Visitor Tools

- Download Google Earth
- Download DSA kmz layer file
- Visitor Survey

Contact

email: DeneSpeechAtlas AT rochester.edu

- **Dene Speech Atlas**
- Department of Linguistics
- University of Rochester
- Rochester New York 14627

Dene Speech Atlas

The **Dene Speech Atlas (DSA)** provides information about the *sounds of the languages* of the First Nations Dene in communities of the Mackenzie River Basin and in surrounding areas. There are at least five Dene language groups in this geographic area:

- *Dene Sų́líné*
- *Dogrib*
- *North Slavey*
- *South Slavey*
- *TsuuTʼina*

<http://ling.rochester.edu/DeneSpeechAtlas>

These Dene communities, represented in the DSA, are located in the **Northwest Territories, Alberta, Saskatchewan, and Manitoba**. A google earth interface has been developed in which communities are linked to information about the language group (see link in sidebar). The information on this site includes phoneme inventories of the consonant and vowel sounds of each language, in orthographies used in the specific community, and transcriptions into the **IPA** (international

Supported by NSF #0853929.

Any opinions, findings, and conclusions or recommendations expressed in this material are those of the author(s) and do not necessarily reflect the views of the National Science Foundation

5/11/17