# Horen Lì'fyayä leNa'vi A Reference Grammar of Na 'vi 

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## 1. Introduction

We do not yet have an official grammar of the Na'vi language, written by Paul Frommer and blessed by the financial and intellectual property Powers that Be at Lightstorm Entertainment or 20th Century Fox. As of this writing ${ }^{1}$ it does not seem likely we'll be getting one very soon. In light of that, I decided to turn a grammar summary I wrote into a longer document.

Like that grammar summary, this document will not teach you Na'vi. Instead, it is intended to provide a concise and accurate reference on the current state of our knowlege about the language. It is based on all the analytical work that has gone on in the months since the film was released, as well as any communications from Frommer which clarify language points.

I rely heavily on the Corpus and Canon wiki pages at LearnNavi.org, without which resources this document would not be possible. The recent appearance of Frommer's own blog has also provided material. ${ }^{2}$

### 1.1. History of Decipherment

It is important for newcomers to Na'vi to understand how it is we know what we know about the Na 'vi language.

Our earliest hints about the language came out in interviews with Frommer in December of 2009, leading up to the release of the film. Na'vi had ejective consonants. It had a tripartite case division. We had a few phrases.

The big break came when someone among the IMDB refugees on their own forum posted the Na'vi word list. ${ }^{3}$ It was transcribed from the Activist Survival Guide. ${ }^{4}$ That list was republished in a public blog post on December 11th. ${ }^{5}$ All current dictionaries are based on that initial post. So, now we had enough vocabulary to start analyzing the sentences coming out in Frommer's interviews.

On December 15th, in an interview with the UGO Movie Blog${ }^{6}$ we got for the first time that fundamental Na'vi greeting, oel ngati kameie I See you. This was in addition our first sighting of

[^1]the agentive and patientive case endings. Thanks to the dictionary, we could guess -1 for agentive and -ti for patientive.

Our next big break came a few days later, with the Language Log guest blog post on December $19 t h .{ }^{7}$ This is still fundamental reading for every student of Na'vi. In it we learn a good deal about the Na 'vi sound system. It also told us enough about Na 'vi grammar to guide all our future analysis of the examples coming out in interviews.

Even now, much of what we know has come not from Frommer directly telling us, for example, "this is the genitive case ending," but by him saying in an interview that there is a genitive, and people using that information to analyze Na'vi language examples. Some of the early analysis was incomplete, which has led to some confusion, especially about case endings. Our earliest examples of the genitive were all in -yä. Only later did we see evidence of the -ä ending. One can still find older documentation giving the genitive as -yä only.

In the months since then, Frommer himself has provided larger examples of Na 'vi, each of which has been analyzed in great detail in order to extract as much grammatical information as possible. Frommer has also answered some direct questions about the language. This often confirms what we suspected from analysis, sometimes corrects what we thought we know, and sometimes gives us new information.

I have tried as much as possible to ensure that everything in this grammar is confirmed directly by Frommer himself or, absent that, by giving enough examples from Frommer's own Na'vi to make the case for the grammatical point being explained. Nonetheless, this document is necessarily provisional. It is Frommer's prerogative to tweak and update the language in light of his own understanding of the language's needs, to correct misconceptions that may have escaped his notice until now, and to fill in grammatical gaps as he gets to them. We must also assume that future Avatar movies will alter the Na'vi language in unexpected ways, not only to satisfy Cameron's demands for his movies, but from the inevitable changes a created language undergoes when actors finally speak it on the set.

### 1.2. Notation and Conventions

Na'vi text is given in bold face type and English translations in italics, fifya thus.
When a Na'vi example comes directly and unmodified from the interviews, email or blog of Paul Frommer there will be an $\mathcal{F}$ floating in the margin, as in kìyevame. The Hunt Song and the Weaving Song from the Activist Survival Guide are also so marked. Examples from the movie use $\mathcal{A}$.

This work uses the digraphs ts and $\mathbf{n g}$ instead of the scientific orthography Frommer developed (§2.1.1.3). The majority of people are more familiar with the digraph system.

In Frommer's original documentation for the actors stress accent was indicated by underlining the stressed syllable. This grammar follows that practice, as in tute person vs. tute woman. To avoid confusion with Frommer's accenting convention, this document uses a wavy underline to draw attention to parts of words or phrases.

Following the usual convention in technical linguistics works, examples that are hypothetical or have some sort of error are marked with a leading asterisk, *m'resh'tuyu. Prefixes are

[^2]indicated by putting a dash at the end of the prefix, as in fi-. Leniting prefixes (§2.2) use a plus sign, as in ay+. Suffixes are indicated with a leading dash, -it, and infixes with small brackets, «ol>. Transcription using the International Phonetic Alphabet goes between square brackets, [fi.'fja].

When quoting one of the four songs Frommer translated for the film, I use a single slash to separate lines, Rerol tengkrr kerä / ìlä fya'o avol.

Starting in September of 2011, links to citations for grammatical points are included for new material. They occur at the end of a section, and look like this: NT ( $11 / 7 / 2010$ ). Note that the dates follow European convention, Day/Month/Year. "NT" is for Frommer's blog, including his replies in comments, "Wiki" is for the LN.org Wiki, and "Ultxa" is for the October 2010 meeting. It will probably take a few months to get get complete citation coverage.

Text in maroon is for matters that seem to me to be serious questions about the language but for which no answer is currently available. Some will require simply confirmation from Frommer, others will require much deeper thought and work on his part. This grammar aspires to someday be maroon-free.

Thanks are due to LearnNavi.org members 'Eylan Ayfalulukanä, Taronyu and Ftiafpi for looking at drafts of this grammar and making suggestions. I did not always follow their advice, so any flaws are my own.

Thanks are also due to everyone who has commented and suggested corrections since this grammar first appeared.

## 2. Letters and Sounds

### 2.1. Sound System

The Na'vi language has 20 consonant sounds, 7 vowel sounds and two vocalic resonants Frommer calls "pseudovowels." LangLog (9/12/2009)

### 2.1.1. Consonants.

|  | Labial | Alveolar | Palatal | Velar | Glottal |
| :--- | :--- | :--- | :--- | :--- | :--- |
| Ejectives | $\mathbf{p x}\left[\mathrm{p}{ }^{\prime}\right]$ | $\mathbf{t x}\left[\mathrm{t}^{\prime}\right]$ |  | $\mathbf{k x}\left[\mathrm{k}^{\prime}\right]$ |  |
| Voiceless Stops | $\mathbf{p}[\mathrm{p}]$ | $\mathbf{t}[\mathrm{t}]$ |  | $\mathbf{k}[\mathrm{k}]$ | $\mathbf{\prime}[\mathrm{l}]$ |
| Affricate |  | $\mathbf{t s}[\mathrm{ts}]$ |  |  |  |
| Voiceless fricatives | $\mathbf{f}[\mathrm{f}]$ | $\mathbf{s}[\mathrm{s}]$ |  |  | $\mathbf{h}[\mathrm{h}]$ |
| Voiced fricatives | $\mathbf{v}[\mathrm{v}]$ | $\mathbf{z}[\mathrm{z}]$ |  |  |  |
| Nasals | $\mathbf{m}[\mathrm{m}]$ | $\mathbf{n}[\mathrm{n}]$ |  | $\mathbf{n g}[\mathrm{y}]$ |  |
| Liquids |  | $\mathbf{r}[\mathrm{r}], \mathbf{1}[\mathrm{ll}]$ |  |  |  |
| Glides | $\mathbf{w}[\mathrm{w}]$ |  | $\mathbf{y}[\mathrm{j}]$ |  |  |

2.1.1.1. The voiceless stops are unaspirated at the beginning and middle of a word and unreleased at the end. However, within a phrase a final stop coming before a vowel will in natural speech be released as the words flow together, oel set omum. Unreleased stops will be most noticeable at major pauses, as in oel omum set.
2.1.1.2. The $\mathbf{r}$ is an alveolar flap. The $\mathbf{l}$ is clear and front, as in "leaf," not the velarized, "dark-l" of English "call".
2.1.1.3. Frommer devised a scientific orthography in which two of the digraphs were written as a single letter, $\mathbf{c}$ for $\mathbf{t s}$ and $\mathbf{g}$ for $\mathbf{n g}$. The digraph system was easier for the actors, but it has been also used by Frommer in media interviews and in most of his own email.
2.1.1.4. Because plain stops can be used as syllable codas, the more common ejective notation, $\mathbf{p}^{\prime}$, is too ambiguous: tsap'alute is not *tsapxalute. wiki $(21 / 12 / 2009)$

### 2.1.2. Vowels.


2.1.2.1. The phoneme $\mathbf{u}$ is always $[u]$ in open syllables, and may be either $[u]$ or [ $v]$ in closed syllables. Wiki ( $20 / 5 / 2010$ )
2.1.2.2. The diphthongs are aw, ay, ew and ey. Only in diphthongs will wor $\mathbf{y}$ be seen at the end of a syllable (new) or before a final consonant (hawng).
2.1.3. Pseudovowels. The pseudovowel $\mathbf{r r}$ is a syllabic, trilled [ $\mathrm{r}:]$ and $\mathbf{l l}$ is a syllabic [l: l ].
2.1.4. Syllable Structure. Na'vi has a strict but straightforward syllable structure.

- A syllable is permitted to have no onset consonant (i.e., it may start with a vowel).
- A syllable is permitted to have no coda consonant (i.e., it may end with a vowel).
- Any consonant may start a syllable.
- A consonant cluster of $\mathbf{f} \mathbf{s} \mathbf{t s}+\mathbf{p}, \mathbf{t}, \mathbf{k}, \mathbf{p x}, \mathbf{t x}, \mathbf{k x}, \mathbf{m}, \mathbf{n}, \mathbf{n g}, \mathbf{r}, \mathbf{l}, \mathbf{w}, \mathbf{y}$ may start a syllable (e.g., tslam, ftu).
- Pxtxkxptk'mnlrng may occur in syllable-final position.
- Tsfshvzwy may not occur in syllable-final position.
- There are no consonant clusters in syllable-final position.
- A syllable with a pseudovowel must start with a consonant or consonant cluster and must not have a final consonant; this plays a role in lenition (§2.2.1) and noun declension(§3.1.1.5).
2.1.4.1. Since a syllable may have no consonant onset or coda, it is not unusual to see several vowels next to each other in a word. In that case each vowel is a syllable, muiä [mu.i.æ], ioang [i.o.ay].
2.1.4.2. In general, the sequence VCV will be syllabified V.CV rather than VC.V, so tsenge is [tse.y $\varepsilon$ ] not *[tsey. $\varepsilon$ ]. Onomatopoeia may override this, as in kxangangang [k'ay.ay.ay], where the echo effect is desired.
2.1.4.3. There are no long vowels in Na'vi, meaning identical vowels will not occur next to each other (but see §2.3.1).
2.1.4.4. Double consonants do not occur within root words, but may occur at morpheme boundaries, for example in derivations, tsukkäteng $<$ tsuk- + käteng, or with enclitics Mo'atta $<$ Mo'at + ta (§2.1.5.3).
2.1.4.5. As is usual in most Human languages, some interjections break the rules, such as oìsss, a sound for anger, or saa, a threat cry.
2.1.5. Stress Accent. Every Na'vi word has at least one stress accent, which is not predictable. In a very few situations otherwise identical words may differ only by accent, such as tute person vs. tute woman.
2.1.5.1. For this word alone, woman, an accent may be written in normal Na'vi to indicate the accent, tuté.
2.1.5.2. Some word creation processes may cause accent shifts (§5.1.2.3, §5.1.8).
2.1.5.3. All adpositions as well as a few conjunctions and particles may be enclitic. They give up their own stress accent and effectively become part of the word to which they are attached, and are written so, tsane ( $<$ tsaw + ne), horentisì ( $<$ horenti + sì).
2.1.5.4. Though a noun compound is written as a single word, the individual parts of that compound may each retain their original accent, as in tireafya'o spirit path.
2.1.6. Spoken Alphabet. Except for tiftang, the glottal stop, the names of the phonemes encode information about how the sound is used. They also have unusual capitalization when written out:

| tìttang | Ì | ReR |
| :--- | :--- | :--- |
| A | KeK | 'Rr |
| AW | KxeKx | Sä |
| AY | LeL | TeT |
| Ä | Ll | TxeTx |
| E | MeM | Tsä |
| EW | NeN | U |
| EY | NgeNg | Vä |
| Fä | O | Wä |
| Hä | PeP | Yä |
| I | PxePx | Zä |

2.1.6.1. Vowels and diphthongs are simply pronounced and spelled as themselves. The pseudovowels take a leading glottal stop, since they require a consonant onset (§2.1.4).
2.1.6.2. The name for consonants which cannot end a syllable are formed by adding ä, as in Tsä. Those which can end a syllable use the vowel $\mathbf{e}$ and repeat the consonant at the end of the name, PeP.

### 2.2. Lenition

Certain grammatical processes cause changes in the first consonant of a word. This change is called "lenition." Only eight consonants undergo lenition. Langlog (9/12/2009)

| Consonant $\mathrm{px}, \mathrm{tx}, \mathrm{kx}$ | Lenition $\mathrm{p}, \mathrm{t}, \mathrm{k}$ | Example txep but mì tep |
| :---: | :---: | :---: |
| $\mathrm{p}, \mathrm{t}, \mathrm{k}$ | $\mathrm{f}, \mathrm{s}, \mathrm{h}$ | kelku but ro helku |
| ts | s | tsmukan but aysmukan |
|  | disappears | 'eylan but fpi eylan |

2.2.1. Glottal Stop. The glottal stop is not lenited when it is followed by a pseudovowel (mì 'Rrta not *mì Rrta).
2.2.2. Adpositions. A few adpositions cause lenition when they precede a word: fpi, ìlä, mì, nuä, ro, sko, sre (and derived lisre and pxisre), wä. When suffixed they do not cause lenition in either the word they are attached to or to the following word.
2.2.3. Number Prefixes. Prefixes which cause lenition are indicated with a plus sign, rather than the usual dash, as in $\mathbf{a y +}$, the leniting plural prefix.
2.2.4. Question Prenoun. When used as a prefix, the question prenoun pe+ causes lenition (§3.3.3).
2.2.5. Numbers. Suffixed, dependent forms of the numbers are lenited (§4.1.3).

### 2.3. Morphophonology

2.3.1. Vowel Contraction. Since identical vowels may not occur next to each other, a few grammatical processes involve a doubled vowel reducing to just one.
2.3.1.1. The adjective morpheme-a-disappears when attached to an a at the start or end of an adjective, as in apxa tute not *apxaa tute.
2.3.1.2. When the dual and trial prefixes leave a sequence of two es, as in me + 'eveng $>$ *meeveng (note lenition), the two vowels contract to just one, meveng. wiki (20/1/2010)
2.3.1.3. When the prenoun prefixes end in the same vowel the following word starts with, they reduce to one, as in tsatan $<$ tsa- + atan, filva $<$ fi- + ilva (\$3.3.6). ${ }^{1}$ wiki $(18 / 5 / 2011$ )
2.3.1.4. Contraction does not occur for indefinite -o or enclitic adpositions. When two identical vowels occur next to each other, they are written with a hyphen between them, fya'o-o some way, zekwä-äo under a finger. ${ }^{2}$
2.3.2. Pseudovowel Contraction. Due to the shape of the aspect infixes, «er» and «ol», it is possible for the pseudovowels to occur immediately after their consonantal counterpart, as in *pool>lltxe. When this happens in an unstressed syllable, the pseudovowel disappears, poltxe. In a stressed syllable, the infix disappears, ${ }^{*}$ fer $)$ rrfen $>$ frrfen. Pseudovowels in monsyllables behave as though unaccented, vol from * v<ollll. wiki (23/3/2010) NT (19/6/2012)
2.3.3. Affect Infix Epenthesis. When the positive affect infix 〈eì is followed by the vowel $\mathbf{i}, \mathbf{i}$ or a pseudovowel, a y is inserted, seiyi $<^{*}$ s $\langle e i\rangle i$, veykrreiyìn $<^{*}$ veykrr<ei»̀̀n; v<ei)yll $<^{*}$ veill. NT (19/6/2012)
2.3.4. Nasal Assimilation. In many compounds as well as in some idioms, final nasals assimilate to the position of the following word, as in lumpe as a variant of pelun. Such assimilation is not always written, which may make the etymology of a word clearer, as in zenke instead of *zengke, from zene ke, or in the several idioms with the verb tìng give, tìng mikyun being pronounced tìm mikyun.
2.3.5. Vowel Harmony. Na'vi has two instances of optional regressive vowel harmony in verb infixes.

[^3]2.3.5.1. The subjunctive future infix, <iyev», most frequently appears as «ìyev», with backing of the first vowel.
2.3.5.2. The vowel of the negative attitude infix, «äng», may be raised if it is immedately followed by the vowel i, becoming «eng», as in tsap'alute sengi oe. ultax (2/10/2010)
2.3.6. Elision. In rapid speech final -e is frequently elided when the following word starts in a vowel. Kìyevamé ulté Eywa ngahu. This is not indicated in writing. But not monosyllables? ke? $\mathcal{F}$ sre?
2.3.6.1. The vowel ì in mì, sì and the adverb prefix nì- drops before the plural prefix ay+, though there is no change in writing. So, nìayfo like them is pronounced as nayfo. NT (1/7/2010)

### 2.4. Orthographic Conventions

Na'vi in general follows the spelling, punctuation and capitalization habits of English, but there are a few differences.
2.4.1. Proper Names. When taking lexical prefixes (§5.1), proper names retain their original capitalization, as in li'fya leNa'vi.
2.4.2. Quotation. Direct quotes are not punctuated with quotation marks in Na'vi. Instead it relies on the quotation particles san...sìk (see §6.21).
2.4.3. Etymological Spelling. In addition to the occasional spelling of nasals to reflect etymology (§2.3.4), there are a few grammatical processes which result in spelling that reflects the grammar more than the pronunciation.
2.4.3.1. The first person pronoun root oe, though pronounced we when taking a suffix, retains the original spelling (§3.2.2.1).
2.4.3.2. Before words starting with $y$ the plural prefix ay+ is unchanged, ayyerik. wiki $(18 / 4 / 2010)$
2.4.4. Attributive Phrase Hyphenation. Certain short attributive phrases are written with hyphens joining the elements.
2.4.4.1. Attributive phrases of color using na like are hyphenated, fisyulang aean-na-ta'leng this skin-blue flower (§6.18.3.1).
2.4.4.2. Participles of si construction verbs are also hyphenated, srung-susia tute a helping person (§6.9.1.2).

## 3. Morphology

### 3.1. The Noun

3.1.1. Cases. The Na'vi case endings change depending on whether the word ends in a consonant, a vowel or a diphthong. ${ }^{1}$

|  | Vowel | Consonant | Diphthong |
| :---: | :---: | :---: | :---: |
| Subjective |  |  | one |
| Agentive | -1 | -il | -il |
| Patientive | -t, -ti | -it, -ti | -ti, -it (-ay-t, -ey-t) |
| Dative | -r, -ru | -ur | -ru, -ur (-aw-r, -ew-r) |
| Genitive | -yä, -ä | -ä | -ä |
| Topical | -ri | -ìri | -ri |

Wiki (24/3/2010)
3.1.1.1. After the vowels $\mathbf{o}$ and $\mathbf{u}$ the genitive is just -ä, but after all other vowels it is -yä. So, tsulfätuä from tsulfätu, but Na'viyä from Na'vi and li'fyayä from lì'fya.
3.1.1.2. Nouns in -ia have the genitive in -iä, as in soaiä from soaia.
3.1.1.3. In addition to several pronouns (§3.2.2.5), there are a few nouns with irregular genitives: Omatikayaä (from Omatikaya).
3.1.1.4. Due to the similarity in sound between $\mathbf{y}$ and $\mathbf{i}$, the patientive ending -it is simplified when suffixed to a diphthong ending in $\mathbf{y}$, as in keyeyt errors instead of *keyeyit. And due to similarity in sound between $\mathbf{w}$ and and $\mathbf{u}$, the same simplification happens to the dative - $\mathbf{u r}$, as in 'etnawr to/for a shoulder instead of *'etnawur. nt (1/25/2013)
3.1.1.5. Words that end in the pseudo-vowels $1 l$ and $\mathbf{r r}$ take the consonant endings: trr-ä, 'ewllit.
3.1.1.6. The variation between the long and short endings in the patientive and dative appears to be largely a matter of style and euphony.

[^4]3.1.2. Indefinite -o. A noun may take the indefinite suffix -o, "one, some." Case endings follow the -0. Wiki $(14 / 3 / 2010)$ NT ( $5 / 9 / 2011$ )
3.1.3. Number. Na'vi nouns and pronouns may be singular, dual, trial or plural (four or more). Number is indicated by prefixes, all of which cause lenition.
\[

$$
\begin{array}{lrl}
\text { Dual } & \text { me }^{+} & \text {mefo }\left(<\text { me }^{+}+\text {po }\right) \\
\text { Trial } & \text { pxe } & \text { pxehilvan }\left(<\text { pxe }^{+}+\text {kilvan }\right) \\
\text { Plural } & \text { ay }+ & \text { ayswizaw }
\end{array}
$$
\]

3.1.3.1. The plural prefix only may be dropped if there is lenition. The plural of prrnen is either ayfrrnen or the short plural frrnen (but see §6.5.2.2). ${ }^{2}$ The dual and trial prefix are never dropped this way. $\operatorname{langLog}(9 / 12 / 2009)$
3.1.3.2. In the dual and trial, if a word begins with $\mathbf{e}$ or 'e, the resulting *ee is simplified, so me+ + 'eveng is meveng. See also §2.3.1.2.

### 3.2. The Pronoun

3.2.1. Animacy. Brief outline of animacy hierarchy might be useful here. Is a bug animate? Brief mention and defer to syntax?
3.2.2. The Basic Pronouns. The pronouns take the same case endings as nouns.

| Person | Singular | Dual | Trial | Plural |
| ---: | :--- | :--- | :--- | :--- |
| 1st exclusive | $\underline{\text { oe }}$ | moe | pxoe | ayoe |
| 1st inclusive | - | oeng | pxoeng | ayoeng, awnga |
| 2nd | nga | menga | pxenga | aynga |
| 3rd animate | po | me $\overline{f o}$ | pxe $\overline{\text { fo }}$ | aý, fo |
| 3rd inanimate | $\underline{\text { tsa'u, tsaw }}$ | mesa'u | pxesa'u | aysa'u, sa'u |
| reflexive | sno | - | - | - |

3.2.2.1. In everyday speech, when the first person root oe does not occur at the end of the word, its pronunciation changes to we, as in oel pronounced wel, oeru as weru. However, this pronunciation does not happen to the dual and trial forms, moe and pxoe, which would result in illegal consonant clusters at the start of a word, such as *mwel. This pronunciation is indicated with the accenting underline on the $\mathbf{e}$.
3.2.2.2. The non-singular first person pronouns are either exclusive (excluding the person addressed) or inclusive (including the person addressed). The inclusive ending, -ng, is from nga, which reappears in full when a case ending is added. The agentive of oeng is oengal, not *oengil.
3.2.2.3. Ayoeng has the short form awnga. Both may be used freely with any case ending, though awnga is more common.

[^5]3.2.2.4. The third person animate po does not distinguish gender - it will do for "he" or "she" in English. However, gendered forms do exist, poan he and poe she, which are declined regularly, though they do not have plural forms. See §6.3.1 for their use.
3.2.2.5. Several of the pronouns have irregular genitives with vowel changes,

| Subjective | Genitive |
| :---: | :---: |
| nga | ngeyä |
| po | peyä |
| sno | sneyä |

This vowel change occurs in all numbers, feyä $<$ fo, and in the first person inclusives, awngeyä < awnga.
3.2.2.6. In informal and clipped military speech the final ä may drop from the genitive of pronouns, ngey 'upxaret.
3.2.2.7. The third person inanimate, tsa'u, is simple the demonstrative pronoun "that." When taking case marking or suffixed adpositions it may occur as tsa'u- (most formal), tsaw- or tsa(most colloquial). The genitive is tseyä.
3.2.2.8. The reflexive pronoun sno is not altered for number.
3.2.2.9. The third person animate indefinite pronoun is fko.

### 3.2.3. Ceremonial/Honorific Pronouns.

|  | Singular | Dual | Trial | Plural |
| ---: | :--- | :--- | :--- | :--- |
| 1 exclusive | ohe | mohe | pxohe | ayohe |
| 2nd | ngenga | mengenga | pxengenga | ayngenga |

3.2.3.1. For the inclusive first person forms, use separate pronouns, ohe ngengasì (with enclitic sì and). In the film we apparently get ohengeyä.
3.2.4. Lahe. When used as a pronoun, the adjective lahe other has an irregular dative plural aylaru.

### 3.3. Prenouns

The prenouns are adjective-like noun prefixes.
3.3.1. Fì-. This prenoun is for proximal deixis, this. When it is followed by the plural prefix ay+ they contract into fay+, these. But we've seen fiay- from Frommer at least once, oel foru fiayli'ut tolìng a krr, kxawm oe harmahängaw, Jan 26.
3.3.1.1. Some nouns and adjectives pair with fi- to form adverbs, such as fitrr today and fitxan so (much).
3.3.2. Tsa-. This is distal deixis, that. When it is followed by the plural prefix ay+ they contract into tsay + those .
3.3.3. - $\mathrm{Pe}+$. This question prenoun means what, which as in peli'u which word? It is unusual in that it may be either a prefix (peli'u) or a suffix (li'upe). When prefixed, the following word takes lenition. When the prefix is followed by the plural prefix ay+ they contract into pay+.
3.3.4. Fra-. This prenoun means all, every. When it is followed by the plural prefix ay+ they contract into fray+.
3.3.5. Fne-. This prefix means type (of), sort (of).
3.3.5.1. The prefix is related to the noun fnel, also meaning type, sort. It can occur with a noun in the genitive to get the same meaning as the prefix. Tsafnel syulangä and tsafnesyulang both mean that kind of flower.
3.3.6. Contraction. When a prenoun ends with the same vowel the following word starts with, the vowels contract, as in tsatan that light from tsa-atan (§2.3.1.3).
3.3.7. Combinations. The prenouns may combine on a single word, in this order -

$$
\begin{aligned}
& \text { fi- } \\
& \text { tsa- } \\
& \text { pe+ }
\end{aligned} \text { fra- number marking fne- the noun -pe }
$$

Only one from each column may be used, and of course the question affix is only used once. The full details of this ordering are not yet confirmed for fra-.
3.3.7.1. Short plurals (§3.1.3.1) are not used with the deictic prenouns; tsaytele those matters, never ${ }^{*}$ tsatele (singular txele).

### 3.4. Correlatives

Demonstrative pronouns and certain common adverbs of time, manner and place, are simply nouns paired with prenouns. However, the system is not perfectly regular.

|  | Person | Thing | Action | Time | Place | Manner |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| this | fipo | fi'u | fikem | set | fitseng(e) | fifya |
|  | this one | this (thing) | this (action) | now | here | thus |
| that | tsatu | tsa'u | tsakem ${ }^{3}$ | tsak | tsatseng ${ }^{3}$ | tsafya |
|  | on | that (thing) | that (action) | then | there | in that way |
| all | frapo | fra'u | - | frak | fratseng | frafya |
|  | everyone | everything |  | always | everywhere | in every way |
| no | kawtu |  |  | kawkrr | kawtseng | - |
| no | o on | nothing | no action | nev | nowher |  |

Wiki (18/5/2011) NT (24/7/2011)

[^6]3.4.0.2. Plurals for these are a bit funky. Though tsa'u is from tsa- and 'u, the plural is (ay)sa'u. Confirmed, but details might be nice. How to work in tsapo?
3.4.0.3. For the forms of tsa'u, see §3.2.2.7.
3.4.1. Questions. As with nouns, the question affix -pe+ may be either a leniting prefix or a suffix.

| who? | pesu, tupe | where? | peseng, tsengpe |
| :---: | :---: | :---: | :---: |
| what (thing)? | peu, 'upe | how? | pefya, fyape |
| what (action)? | pehem kempe | why? | pelun, lumpe |
| when? | pehrr, krrpe | what kind (of)? | pefnel, fnepe |

3.4.1.1. The question word for people, tupe / pesu who, has a enormous collection of gendered and non-singular forms:

|  | Common | Male | Female |
| :--- | :---: | :---: | :---: |
| Singular | pesu, tupe | pestan, tutampe | peste, tutepe |
| Dual | pemsu, mesupe | pemstan, mestampe | pemste, mestepe |
| Trial | pepsu, pxesupe | pepstan, pxestampe | pepste, pxestepe |
| Plural | paysu, (ay)supe | paystan, (ay)stampe | payste, (ay) stepe |

The non-singular forms of pehem / kempe follow a similar pattern:

$$
\begin{array}{lc}
\text { Singular } & \text { pehem, kempe } \\
\text { Dual } & \text { pemhem, mehempe } \\
\text { Trial } & \text { pephem, pxehempe } \\
\text { Plural } & \text { payhem, (ay)hempe }
\end{array}
$$

3.4.2. Fì'u and Tsaw in Clause Nominalization. The demonstrative pronoun fi'u and inanimate pronoun tsaw are used with the attributive particle a to nominalize clauses (§6.18.4). When the attributive particle follows certain case forms of the pronoun, they contract:

| Case | Fì'u Contraction | Tsaw Contraction |
| ---: | :---: | :---: |
| Subjective | fwa $(<$ fi'u a) | tsawa |
| Agentive | $\underline{\text { fula }(<\text { fi'ul a) }})$ | tsala |
| Patientive | $\underline{\text { futa }(<\text { fi'ut a) }}$ | $\underline{\text { tsata }}$ |
| Topical | $\underline{\text { furia }(<\text { fi'uri a) })}$ | $\underline{\text { tsaria }}$ |

Wiki (18/6/2010)
3.4.3. Fmawn and Ti'eyng in Clause Nominalization. While fi'u and tsaw may nominaize clauses of most types, verbs of hearing, speaking and questioning prefer the nouns fmawn news, ti'eyng answer and fayli'u these words. There are fewer contractions:

| Case | Contraction |
| ---: | :---: |
| Subjective | teynga $(<$ ti’'eyng a) |
| Agentive | teyngla $(<$ tì'eyngil a) |
| Patientive | teyngta $(<$ tì'eyngit a) |

There are contractions only in the patientive for fmawn and fayli'u, which are fmawnta ( $<$ fmawnit a) and fayluta ( $<$ fayli’ut a). See §6.21.4 for the syntax. NT (31/8/2011)

### 3.5. The Adjective

3.5.1. Attribution. Attributive adjectives are joined to their noun with the affix -a-, which is attached to the adjective on the side closest to the noun, as in yerik awin or wina yerik for "a fast yerik."
3.5.1.1. A derived adjective in le- usually drops the prefixed (but not suffixed) a-, so either ayftxozä lefpom or, more rarely, ayftxozä alefpom. However, when the le-adjective comes before the noun, it will always have the attributive -a-, lefpoma ayftxozä.

ayftxozä lefpom usual<br>ayftxozä alefpom permitted<br>*lefpom ayftxozä an error<br>lefpoma ayftxozä correct

### 3.6. The Verb

3.6.1. Infix Location. Frommer describes three positions for verb infixes: pre-first position, first position and second position. Each position has infixes of a particular type (described below).
3.6.1.1. All infixes occur in the last (ultima) and next-to-last (penult) syllables of the verb stem, and are inserted before the vowel, diphthong or pseudovowel of that syllable, as in kä > kıìmıä and taron $>$ ťolsar<ei>on.
3.6.1.2. If a syllable has no onset consonant(s) the infix still precedes the vowel, as in omum $>$ <iv>omum and ftia $>$ ftiくats»a.
3.6.1.3. The stress accent stays on the vowel that originally had it before any infixes were added, hawnu $>$ h iilv>awnu. ${ }^{4}$

[^7]3．6．1．4．Usually，infixes are placed only in one element of a compound verb．For example，yom－ tìng feed is a compound of yom eat and tìng give．The perfective of this is not＊yol＞omtìng，but yomt＜ol＞̀̀ng．Most compound verbs will have the verb element last，which will take the infixes． A few compounds，however，do add infixes to the first element．These must be learned from the lexicon．

3．6．1．5．A small number of verb＋verb compounds take infixes in both elements of the com－ pound，such as kan＇ìn specialize in，made up of kan aim，intend and＇ìn be busy．Ultxa（2／10／2010）

3．6．2．Pre－first Position．These infixes change transitivity．They are inserted before the vowel of the next－to－last syllable of a verb，or the verb syllable if the verb has only one syllable．

| Causative | 〈eyk〉 |
| :--- | :---: |
| Reflexive | 〈äp〉 |

Wiki（ $1 / 2 / 2010$ ）Wiki $(15 / 2 / 2010)$
3．6．2．1．In casual conversation the reflexive perfective of si－construction verbs，säpoli，is often pronounced spoli．NT（3／8／2011）

3．6．2．2．The causative reflexive，＂cause oneself to，＂is formed with «äp＞eyk＞，so po täpeyk－ erkup he causes himself to die．

3．6．3．First Position．These mark tense，aspect and mood，and create participles．They are in－ serted before the vowel of the next－to－last syllable of a verb，or the verb syllable if the verb has only one syllable．They will always follow any pre－first position infixes．

|  | Tense only | Perfective | Imperfective |
| :---: | :---: | :---: | :---: |
| Future | 〈ay，＜asy＞ | 〈aly〉 | ＜ary＞ |
| Near future | 〈ìy〉，〈ìsy〉 | 〈ily ${ }^{\text {c }}$ | 〈ìry〉 |
| General | － | ＜ol） | 〈er＞ |
| Near past | 〈ı̀m | ＜ìm＞ | ＜ìrm＞ |
| Past | ＜am＞ | ＜alm） | ＜arm＞ |

LangLog（9／12／2009）Wiki（27／1／2010）Wiki（19／2／2010）

## 3．6．3．1．The futures with s mark intention（§6．7．9）．

3．6．3．2．The subjunctive infix，«iv＞，has a restricted set of combinations with fewer tense grada－ tions．

|  | Tense only | Perfective | Imperfective |
| ---: | :---: | :---: | :---: |
| Future | 〈ìyev〉，〈iyev〉 | - | - |
| General | （iv＞ | 〈ilv〉 | $\langle\mathbf{i r v}\rangle$ |
| Past | $\langle\mathbf{i m v}\rangle$ | - | - |

Wiki（9／1／2010）Wiki（30／1／2010）Wiki（30／1／2010）

3．6．3．3．There are only two participle infixes．They do not combine with tense，aspect or mood infixes．

$$
\begin{array}{lc}
\text { Active } \quad \text { 〈us〉 } \\
\text { Passive } & \text { 〈awn» }
\end{array}
$$

Since the participles are adjectives that cannot be used as predicates，they will always occur with the attributive adjective affix－a－（§3．5．1，§6．9．1）．wiki（13／3／2011）

3．6．4．Second Position．These infixes，which indicate speaker affect or judgement，occur in the final syllable of the verb，or after the first position infixes in a verb of one syllable．

$$
\begin{aligned}
\text { Positive attitude } & \text { 〈eì, 〈eiy〉 (§2.3.3) } \\
\text { Negative attitude } & \text { 〈äng, <eng〉(§2.3.5.2) } \\
\text { Formal, ceremonial } & \langle\mathbf{u y}\rangle \\
\text { Inferential, suppositional } & \text { 〈ats }\rangle
\end{aligned}
$$

Wiki（19／2／2010）
3．6．5．Examples．The rules given above are a bit abstract，so I give here examples of some pos－ sible inflections for a few verb shapes．The verbs are eyk lead as an example of a single－syllable word with no onset consonant，fpak stop as a single－syllable with consonant cluster onset，taron hunt the usual two－syllable word Frommer uses in examples，and yom•tìng feed，a compound verb，in which only the final element is inflected．

|  | eyk | fpak | taron | yom•tìng |
| :---: | :---: | :---: | :---: | :---: |
| Near past | ìmeyk | fpìmak | tìmaron | yomtìmìng |
| Reflexive | äpeyk | fpäpak | täparon | yomtäpìng |
| Refl．，near past | äpìmeyk | fpäpìmak | täpìmaron | yomtäpìmìng |
| Ceremonial | uyeyk | fpuyak | taruyon | yomtuyìng |
| Perf．，cerem． | oluyeyk | fpoluyak | tolaruyon | yomtoluyìng |
| Refl．，perf．，cerem． | äpoluyeyk | fpäpoluyak | täpolaruyon | yomtäpoluyìng |

The meanings of some of these examples stretch good sense to the breaking point．The purpose of these is only to show infix locations across a consistent set of verb shapes．

## 4. Numbers

The Na'vi language has an octal, or base eight, number system, like a very small number of Human languages. ${ }^{1}$ Rather than calculating numbers in the form $(m \times 10)+n$ (as in $(4 \times 10)+2=42_{10}$, forty-two), the numbers are calculated from $(m \times 8)+n$ (as in $(5 \times 8)+2=52_{8}$, mrrvomun, $42_{10}$ ).

### 4.1. Cardinal Numerals

4.1.1. The "Ones". The independent forms of the numerals from one to eight are:

| 1 | 'aw | 5 | mrr |
| :--- | :--- | :--- | :--- |
| 2 | mune | 6 | pukap |
| 3 | pxey | 7 | kinä |
| 4 | tsìng | 8 | vol |

4.1.2. Powers of Eight. Rather than "tens," Na'vi has "eights:"

$$
\begin{array}{llll}
8(1 \times 8) & \text { vol } & 40(5 \times 8) & \text { mrrvol } \\
16(2 \times 8) & \text { mevol } & 48(6 \times 8) & \text { puvol } \\
24(3 \times 8) & \text { pxevol } & 56(7 \times 8) & \text { kivol } \\
32(4 \times 8) & \text { tsìvol } & 64(8 \times 8) & \text { zam }
\end{array}
$$

[^8]4.1.3. Dependent Forms. When combined with powers of eight words, the basic number words take abbreviated, single-syllable forms, with lenition where possible:

| 1 | (l)-aw | 5 | -mrr |
| :--- | :--- | :--- | :--- |
| 2 | -mun | 6 | -fu |
| 3 | -pey | 7 | -hin |
| 4 | -sìng |  |  |

4.1.3.1. All of the dependent forms except "one", ( $\mathbf{l}$ )-aw, evict the final -l of the "eights" forms.
4.1.3.2. The attached dependent forms take the word accent. Combined with vol eight:

| $9(1 \times 8+1)$ | volaw | $13(1 \times 8+5)$ | vomrr |
| :--- | :--- | :--- | :--- |
| $10(1 \times 8+2)$ | vo色un | $14(1 \times 8+6)$ | vo $\overline{\text { fu }}$ |
| $11(1 \times 8+3)$ | vopey | $15(1 \times 8+7)$ | vohin |
| $12(1 \times 8+4)$ | vosìng | $16(2 \times 8+0)$ | $\underline{\text { mevol }}$ |

The pattern will continue this way with mevol: mevolaw, mevomun, mevopey, etc.

### 4.2. Ordinal Numbers

4.2.1. Suffix -ve. The ordinal numbers are formed by means of the suffix -ve, which does not alter the word accent, though it does cause changes to a few number stems.

| Ordinal | Independent | Dependent |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: |
| first | 'awve | (l)-awve | fifth | mrrve | -mrrve |
| second | muve | -muve | sixth | puve | -fuve |
| third | pxeyve | -peyve | seventh | kive | -hive |
| fourth | tsìve | -sìve | eighth | volve | -volve |

4.2.1.1. Can combine freely with nì-?

### 4.3. Fractions

4.3.1. -Pxì. Except for half and third, which have separate lexical forms, fractions are formed by replacing the -ve of an ordinal with -pxì. Note the accent shift:

| half | mawl | sixth | pupxì |
| ---: | :--- | ---: | :--- |
| third | pan | seventh | kipxì̀ |
| fourth | tsìpxì | eighth | vopxì |
| fifth | mrrpxì |  |  |

4.3.1.1. Note that unlike the cardinals and ordinals, the fraction words are nouns, not adjectives (see §6.4.5.2 for syntax).
4.3.2. Numerator. To make higher fractions, combine an attributive cardinal with a fraction noun, munea mrrpxì two fifths.
4.3.2.1. The fraction two thirds has a special form, mefan, the dual of pan.

### 4.4. Other Forms

4.4.1. Alo. The word alo time, turn combines with numbers to form instance adverbs. Four of these form compounds, 'awlo once, melo twice, pxelo thrice, three times and fralo each time, every time. All others combine as normal attributive adjectives, alo amrr poan polawm he asked five $\mathcal{F}$ times.
4.4.2. -lie. The word 'awlie refers to a single event in the past.
4.4.3. Alien Digits. When quoting English digits, Na'vi will use 'eyt for eight and nayn for nine. These are not used for counting, but for things like phone numbers.
4.4.3.1. Kew is zero. Current documentation doesn't make clear if this idea is native or imported from the Humans.

## 5. Word Building

### 5.1. Derivational Affixes

Na'vi has a number of affixes used to create new vocabulary. Several simply change the word class, such turning a noun into adjective. However, these affixes should not be considered freely productive, and the meanings of the derived forms are not entirely predictable. Only with the help of a dictionary can you be certain of a derived word's meaning (but see §6.6.8 for adverbs). Unless otherwise stated, the affixes below are not freely productive.
While there are strong patterns in how stress accent is altered by some derivational processes, there are no exceptionless rules for this. Again, only with the dictionary can you be certain of the accenting of a derived word.
5.1.1. Prefixes. These derivational prefixes rarely cause the accent to move from its original location, ngay $>$ tìngay.
5.1.1.1. Le- creates adjectives from nouns, as in lehrrap dangerous from hrrap danger.
5.1.1.2. Nì- creates adverbs from nouns, pronouns, adjectives and verbs, as in nìNa'vi Na'vily, in Navi from Na'vi, nìayfo like them, nìftue easily from ftue easy, and nìtam enough from tam to suffice.
5.1.1.3. Sä- creates instrumental nouns from verbs and adjectives, as in sänume instruction, teaching from nume, and säspxin disease from spxin sick.
5.1.1.4. Sä- also creates nouns to indicate a particular, concrete instance of a general action. A sätsyìl $a$ climb is a particular instance of the action of climbing, tsyìl. Roots may have derivations in both tì̀ and sä-, as in 'ipu humorous. Tì'ipu is the abstract concept of being humorous, that is, humor in general. Sä'ipu is a particular instance of being humorous - for example, a joke.
NT (29/2/2012)
5.1.1.5. Tì- creates nouns from adjectives, verbs and occasionally other nouns, as in tìngay truth from ngay true, tiftia study (n.) from ftia to study, ti'awm camping from 'awm camp (n.).
5.1.1.6. With these prefixes stem syllables may lose a vowel if the onset consonant is also a legal coda, nìmweypey patiently $<$ mawey-pey to be patient.
5.1.2. Negative Prefix. Some words, mostly but not exclusively adjectives, are created using the word ke not as a prefix.
5.1.2.1. When ke- comes before the adjective prefix le- the adjective prefix is reduced to just $-1-$, as in keltsun impossible compared to letsunslu possible, and kelfpomtokx unhealthy from lefpomtokx healthy.
5.1.2.2. When le-comes before ke- the negative prefix reduces to just-k-, as in lekye'ung insane from keye'ung insanity.
5.1.2.3. The ke-prefix may be used with root adjectives and participles, in which case the accent usually shifts to ke-, as in keteng different from teng same, equal and kerusey dead from rusey living. However, note keyawr incorrect from eyawr correct.
5.1.2.4. The ke- prefix may also create and combine with nouns, as in keye'ung insanity, and ketuwong alien. There are too few examples to determine accent behavior.
5.1.3. Adverbial "a-". Two stative verbs, lìm be far and sim be near have adverbial forms alìm far away and asim nearby, at close range. These are thought of as fossilized abbreviations of forms like nìfya'o a lìm (§6.6.8). They are fixed lexical items, and do not have forms such as *lìma and *sima. Wiki (17/5/2010)
5.1.4. Prefix with Infix. There is a single derivation using the combination of a prefix and an infix.
5.1.4.1. Tì-〈us〉creates a gerund. It is fully productive for verb roots and compounds (si-construction verbs, §5.3.3, cannot be made into a gerund). This is most useful when a simple tìderivation already has an established meaning, as in rey live, tìrey life, but tìrusey living. See also §6.9.2. What about yomtìng? Yomtìtusìng?
5.1.5. Agent Suffixes. These suffixes also do not cause an accent shift.
5.1.5.1. -tu creates agent nouns from parts of speech other than verbs, as in pamtseotu musician from pamtseo music, tsulfätu master of a craft or skill, expert from tsulfä mastery.
5.1.5.2. -yu creates agent nouns from verbs, as in taronyu hunter from taron hunt. This suffix is freely productive. $\mathrm{NT}(11 / 7 / 2010)$
5.1.6. Diminutive Suffix. The unstressed suffix -tsyìp may be used freely to form diminutives, on both nouns and pronouns. Personal names may lose syllables when taking this suffix, Kamtsyìp or Kamuntsyìp for little Kamun. The diminutive has three uses. NT (11/7/2010)
5.1.6.1. First, the diminutive form may be a primary lexical derivation. Such words will end up in the dictionary, such as puktsyìp booklet, pamphlet from puk book. The diminutive force is weak enough that one may use the adjective tsawl large with a diminutive without contradiction, as in tsawla utraltsyìp a large bush.
5.1.6.2. Second, the diminutive may express affection or endearment, za'u fitseng, ma 'itet- $\mathcal{F}$
syìp come here, little daughter. This use should not be taken to imply an age. The daughter in the previous sentence could be an adult.
5.1.6.3. Third, the diminutive may express disparagement or insult, fitaronyutsyìp ke tsun ke'ut stivä'nì this (worthless) little hunter can't catch anything. The disparaging tone may be directed at oneself, nga nìawnomum to oetsyìp lu txur nìtxan as everyone knows, you're a lot stronger than $\mathcal{F}$ little old me. Only context will distinguish the disparaging from affectionate use of the diminutive.
5.1.7. -Nay Suffix. This creates a new noun which indicates something lower on some hierarchy, size, rank, accomplishment, etc. The suffix receives the accent, karyunay apprentice teacher from karyu teacher. If the noun already ends in -n the suffix loses the - $\mathbf{n}$-, 'eylanay acquaintance from 'eylan friend, ikranay forest banshee from ikran banshee. It isn't productive. NT (2/28/2013)
5.1.8. Gender Suffixes. The gender suffixes are unusual in that they are used not only with nouns but also the third person pronoun (§3.2.2.4).
5.1.8.1. The suffix -an indicates males, as in poan he and 'itan son.
5.1.8.2. The suffix -e indicates females, as in poe she and 'ite daughter.
5.1.8.3. The effect of these suffixes on the accent is unpredictable, tutan male (person) from tute person, but muntxatan husband from muntxatu spouse, mate.

### 5.2. Reduplication

Reduplication is a nonproductive derivational process. Nonetheless, a few common words do use it.
5.2.1. Iteration. With words of time, reduplication indicates repetition or habitual occurrence, letrrtrr ordinary, that is, occurring daily; and krro krro sometimes.
5.2.2. Shift in Degree. With the verbs 'ul increase and nän decrease, reduplicated adverbs mark change to an extreme degree, nìul'ul increasingly, more and more, nìnänän ${ }^{1}$ less and less. NT (29/2/2012)

### 5.3. Compounds

5.3.1. Headedness. The dominant element of a Na'vi compound may come first or last in the compound. ${ }^{2}$ There is, however, a strong tendency for head-final compounds. Verb compounds are the most likely to be head-initial.
5.3.1.1. Compounds are in the same word class as their head, so txampay sea is noun, because pay water is a noun.

[^9]5.3.1.2. Like root words, compounds may change word class with the addition of the derivational affixes listed above, lefpomtokx healthy from fpomtokx health.
5.3.2. Apocope. Words may lose parts when used in a compound, as in venzek toe $<$ venu foot + zekwä finger, and sìlpey hope $<$ siltsan good + pey wait (for).
5.3.3. "Si" Construction. The usual way to convert a noun or adjective to a verb is to pair the uninflected noun with the prop verb si, which only ever occurs in these constructions. The order is fixed $\mathbf{N}$ si, with si getting all verb affixes.
5.3.3.1. In the verb irayo si to thank the order is less fixed. wiki $(12 / 5 / 2010)$
5.3.3.2. The normal $\mathbf{N}$ si word order is also broken for negation, oe pamrel ke si I don't write (§6.16.1.1), txopu rä'ä si don't be afraid (§6.13.3).

### 5.4. Common and Noteworthy Compound Elements

5.4.1. -fkeyk. Derived from the noun tifkeytok state, condition, situation, this unaccented suffix produces some words with specialized, idiomatic meanings, such as yafkeyk weather. It is nonetheless widely productive, kilvanfkeyk lu fyape fitrr? how's the condition of the river today? $\mathcal{F}$ NT (1/4/2011)
5.4.2. Hì(')-. From the adjective hì'i small, the accented prefix hì- or hì'- is used in a few words to form diminutives, but should not be considered productive (see §5.1.6), as in hì'ang insect ( $<$ hì' + ioang animal), hìkrr moment, a short time ( $<$ hì + krr time).
5.4.3. -ìva. When the noun ìlva flake, drop, chip is used in compounds, the $\mathbf{l}$ drops, txepìva ash, cinder, herwìva snowflake. NT (1/4/2011)
5.4.4. -nga'. This suffix, derived from the verb nga' contain, creates adjectives from nouns and describes something "containing" the noun, as in txumnga' poisonous. It is much less common than le-. It is possible for a noun to have both le- and -nga' derivations, lepay watery vs. paynga' damp, humid. NT (5/5/2011)
5.4.5. -pin. Derived from the noun 'opin color, this unaccented suffix is attached to color adjectives to form color nouns, rimpin the color yellow from rim yellow. A final $-\mathbf{n}$ in the color adjective will become -m by assimilation, eampin from ean.
5.4.6. Pxi-. The adjective pxi sharp is prefixed to adverbs and adpositions of time to indicate immediacy. The prefix doesn't take the accent, pxisre immediately before, pxiset immediately, right now.
5.4.7. Sna-. A shortened form of the noun sna'o group, set, clump, stand, this prefix can be freely used with living things other than people to indicate a natural grouping, such as snatalioang $a$ herd of sturmbeest, snautral a stand of trees. The prefix is used with non-living things to produce words, but this is not productive, snatxärem skeleton. NT ( $31 / 3 / 2012$ )
5.4.8. Tsuk-. Derived from tsun fko, this unaccented prefix creates ability adjectives from transitive verbs, tsukyom edible (from yom eat). The negative simply takes the prefix ke-, which also causes no accent change here, ketsuktswa' unforgettable (from tswa' forget). NT (22/3/2011)
5.4.8.1. In addition, intransitive verbs may be combined with tsuk-, with a looser relationship between the noun and resulting adjective, fitseng lu tsuktsurokx one can rest here, this place is "restable," lu na'rìng tsukhahaw one can sleep in the forest.
5.4.9. -tswo. This suffix may be freely used on any verb, and creates a noun meaning the ability to perform the action of the verb, wemtswo ability to fight, roltswo ability to sing. This suffix is related to the word tsu'o ability. $\mathrm{NT}(31 / 3 / 2012)$
5.4.9.1. The suffix -tswo is attached to the noun or adjective element of si-verbs, as in srungtswo ability to help and tstutswo ability to close.
5.4.10. -vi. From the noun 'evi, itself a shortened form of 'eveng child, the unaccented suffix-vi is used rather loosely for the spawn of something bigger or a part of a larger whole, txepvi spark ( $<$ txep fire), lì'fyavi expression, bit of language ( $<$ li'fya language). It may cause minor changes to the word it is attached to, sänumvi lesson from sänume instruction, teaching. wiki (14/3/2010)
5.4.11. "Kä-" and "Za-". The two verbs of motion kä go and za'u come (reduced to just za-) are used in some compound verbs to indicate direction of motion, kämakto ride out. Note the distinction between kä'ärìp push and za'ärìp pull from 'ärìp move (something).

### 5.5. Time

Adverbs of time are derived from nouns in a predictable pattern.
5.5.1. The Current Time. The prenoun fi- (§3.3.1) creates an adverb for the current unit of time, fitrr today ("this day"), firewon this morning.
5.5.2. The Previous Time. The accented suffix -am creates an adverb for the previous unit of time, trram yesterday, pxiswawam just a moment ago.
5.5.3. The Next Time. The accented suffix-ay creates an adverb for the next unit of time, trray tomorrow, ha'ngiray tomorrow afternoon.

## 6. Syntax

### 6.1. Transitivity and Ergativity

6.1.1. Transitivity. Na'vi marks the subject of transitive and intransitive verbs differently. To speak any Na'vi sentence with a verb requires one to understand transitivity. This means a deeper and earlier understanding of transitivity is required for Na 'vi than is usually required to learn a Human language. ${ }^{1}$
6.1.1.1. Many compound verbs are created by pairing an uninflected noun or adjective with the verb stem si to do, to make, which is only used in these compounds, irayo si to thank, kavuk si to betray. These verbs are always intransitive and use the dative for any object (§6.4.4.1).
6.1.1.2. Reflexive verbs with the «äp» infix are always intransitive, and causative verbs with the〈eyk» infix are always transitive.
6.1.2. Tripartite. Na'vi marks nouns and pronouns differently if they are the subject of an intransitive verb, the subject of a transitive verb or the direct object of a transitive verb (§6.4).
6.1.2.1. Though the English concept of the "subject" of a verb in Na'vi is divided in two depending on the transitivity of the verb phrases, this division does not apply to participles. There is a verbal object adjective (the passive participle) and a verbal subject adjective (the active participle) which is used for both subjective and agentive subjects (§3.6.2).
6.1.2.2. Na'vi is also pragmatically split-ergative. In connected discourse one may drop the subject pronoun if it doesn't change. The subject may be either subjective or agentive. See some pragmatics section.

[^10]
### 6.2. Noun Phrases and Adjectives

6.2.1. Number. Are the dual and trial collective vs. plural distributive? Or always obligatory?
6.2.1.1. When used with an attributive numeral, nouns are not marked for number, mrra zìsìt five years. wiki $(18 / 6 / 2010)$
6.2.1.2. The adjectives of quantity - 'a'aw several, hol few, pxay many, polpxay, holpxaype how many? - also take singular nouns in attributive phrases, lu poru 'a'awa'eylan he has several $\mathcal{F}$ friends. NT (16/7/2010)
6.2.1.3. In colloquial speech, number may be marked with the adjective pxay many, lu awngar $\mathcal{F}$ aytele apxay a teri sa'u pivlltxe we have many matters to talk about. nt (16/7/2010)
6.2.1.4. With verbs of identity ( $\mathbf{l u}$ and $\mathbf{s l u}$ ), the basic rule of number marking in Na 'vi is, "in referring to the same entity, express number only once per clause."

Menga lu karyu. You two are teachers.
Fo lu karyu. They are teachers.
Menga lu oeyä 'eylan. You two are my friends.
In the first two sentences, karyu is not marked for number since the pronouns are already marked, and the same for 'eylan in the third sentence. But see §6.3.2 for the question pronoun tupe. NT (30/7/2011)
6.2.1.5. General statements about a group or class use nouns in the singular, nantangil yom $\mathcal{F}$ yerikit, viperwolves eat hexapedes. NT (30/7/2011)
6.2.2. Indefinite. The adjective lahe other has the sense of else when used with indefinite nouns having the suffix -o, as in lu law 'uo alahe, ma eylan something else is clear, my friends.
6.2.3. Free Choice Indefinites. Na'vi uses the adjective ketsran no matter (what), whatever with generic nouns to create free choice indefinites. The clause with ketsran often, though not always, takes the subjunctive,

$$
\begin{array}{ll}
\text { Ketsran tute nivew hivum, poru plltxe san rutxe 'ivì'awn. } & \mathcal{F} \\
\quad \text { No matter who wants (or: may want) to leave, tell them to please stay. } & \\
\text { 'U aketsran tsun tivam. } & \mathcal{F} \\
\quad \text { Anything at all will be fine. } & \mathcal{F} \\
\text { Ketsran fya'o sivunu ngar, kem si. } & \\
\quad \text { Do it however you'd like. } & \mathcal{F} \\
\text { Pukit aketsran ivinan. } & \\
\quad \text { Read any book at all. } &
\end{array}
$$

NT (3/31/2013)
6.2.4. Apposition. Nouns in apposition ${ }^{2}$ to other nouns are in the subjective case, ayli'ufa $\mathcal{F}$ awngeyä 'eylanä a'ewan Markusì in the words of our young friend, Marcus. However, the conjuction alu is also used for this (see §6.20.1). ${ }^{3}$
6.2.4.1. Titles act as noun modifiers, and are thus not declined when used with proper names. The dative of Karyu Pawl "teacher Paul" is Karyu Pawlur.
6.2.5. Adjective Attribution. Attributive adjectives are joined to the noun they modify with the affix -a- (see §3.5.1), sìlpey oe, layu oeru ye'rìn siltsana fmawn I hope I will soon have good $\mathcal{F}$ news, lora ayli'u, lora aysäfpìl beautiful words and beautiful thoughts.
6.2.5.1. Regardless of the order of noun and adjective, the case endings always attach to the noun, never the adjective. Similarly, an enclitic adposition is always attached to the noun (see §6.5.1).
6.2.5.2. When an adverb is used with an attributive adjective, it must not come between the adjective and its noun, that is, sìkenong ahìno nìhawng very detailed examples or nìhawng hìnoa $\mathcal{F}$ sìkenong, never something like *hìno nìhawnga sìkenong.
6.2.5.3. If there are two adjectives modifying a noun, Frommer has a tendency to order them Adj - N - Adj, nìawnomum tolel oel ta ayhapxìtu li'fyaolo'ä pxaya sìpawmit atxantsan as you $\mathcal{F}$ know, I have received many excellent questions from members of the language community.
6.2.5.4. For more than two adjectives, or to use some order other than Adj - N - Adj given above, the adjectives must be put into an attributive clause with lu, yayo a lu lor sì hì'i a small, pretty $\mathcal{F}$ bird. Ultxa (2/10/2010)
6.2.5.5. The adjective may be repeated on both sides of the noun to mark intensity. The second adjective receives the phrase stress, lu po lora tuté alor she's an extremely beautiful woman. nt $\mathcal{F}$ (2/28/2013)
6.2.5.6. When repeating a noun with different adjectives ("the big dog, the little dog, the yappy dog," etc.) the prop noun ${ }^{4}$ pum is used for the repetitions, lam set fwa Sawtute akawng holum, $\mathcal{F}$ pum asiltsan 'i'awn it now seems that the evil sky-people are gone, the good ones remain.
6.2.5.7. The noun element of a si construction verb may have an attributive adjective, wina uvan si play a quick game.
6.2.6. Predication. Adjective and noun predicates both use the same construction with the verb lu be, as in reltseotu atxantsan lu nga you are an excellent artist, fisyulang lu rim this flower $\mathcal{F}$ is yellow.

[^11]6.2.6.1. Other verbs that take predicative syntax: slu become and 'efu feel, as in ngenga slìyu Na'viyä hapxì you will become part of the people, oe 'efu ohakx I am (feel) hungry.
6.2.6.2. If there is ambiguity with slu become about which constituent is the subject and which the predicate, the predicate can be marked with the adposition ne, as in taronyu slu ne tsamsiyu the hunter becomes a warrior.
6.2.6.3. Sleyku, the causative of slu become, also takes an adjective predicate, fula tsayun oeng $\mathcal{F}$ pivängkxo ye'rìn ulte ngari oel mokrit stayawm, oeti nitram sleyku nìtxan it makes me very happy that we two will soon be able to chat and that I will hear your voice. What about 'eykefu?
6.2.7. Comparison. Adjective comparatives and superlatives (big, bigger, biggest) are marked with the particle to, which, like an adposition, may come before the noun compared to or be enclitic on it (§2.1.5.3).

Oe to nga lu koak I am older than you.
Oe ngato lu koak I am older than you.
6.2.7.1. The superlative is handled with frato than all, fisyulang arim lu hìi frato this yellow $\mathcal{F}$ flower is the smallest of all.
6.2.7.2. Comparisons of equality, "as big as a tree," are handled with the idiom nìftxan adjective na noun or pronoun, as in oe lu nìftxan siltsan na nga I am as good as you. If the point of comparison $\mathcal{F}$ is a pronoun, or definite noun already part of the discourse, the topical case may be used, ngari $\mathcal{F}$ lu oe niftxan siltsan. This construction is also usable with adverbs.
6.2.8. Direct Address. When speaking to an individual directly the vocative particle ma precedes the relationship noun, noun phrase or name, oel ayngati kameie, ma oeyä eylan I see you, $\mathcal{F}$ my friends, ma Tsu'tey, kempe si nga? Tsu'tey, what are you doing?.
6.2.8.1. If multiple individuals are addressed ma is not repeated, ma smukan sì smuke brothers and sisters.
6.2.8.2. Collective nouns may take the suffix -ya, as in mawey, Na'viya, mawey (be) calm, people, $\mathcal{A}$ (be) calm!

### 6.3. Pronouns

6.3.1. Gender. The gendered third person pronouns, poan and poe, are used only when it will help to avoid ambiguity in discourse. Speakers of English and other Western European languages should take care to not use them too often.
6.3.2. Number. The forms of the question pronoun tupe have a behavior that differs from the number agreement rules discussed in §6.2.1.4. Here, the pronoun may be marked for number even when the noun has been, too. Note the answers to these questions,

Tsaysamsiyu lu tupe? Who are those warriors?
(Fo) lu 'eylan Tsu'teyä. They are Tsu'tey's friends.
Tsaysamsiyu lu supe? Who are those warriors?
(Fo) lu Kamun, Ralu, Ìstaw, sì Ateyo.
They're Kamun, Ralu, Ìstaw, and Ateyo.
The plural forms ask for the identity of individual members, while the singular asks about a group characteristic.
6.3.3. Fko. The indefinite pronoun fko is like the English pronoun "one" or the less formal "you" in the general sense, as in one doesn't say such things vs. you don't say things like that. Tsat ke $\mathcal{F}$ tsun fko yivom you can't eat that.
6.3.3.1. Fko is also used where English would use an unspecified "they" when making general statements, as in plltxe fko san ngaru lu mowan Txilte ulte poru nga They say you like Txilte $\mathcal{F}$ and vice versa. ${ }^{5}$
6.3.3.2. Fko can be used for the English passive when the agent of the verb ${ }^{6}$ is animate, as in the idiom oeru syaw fko Wilyìm my name is William, I am called William, tsali'uri fko pamrel si $\mathcal{F}$ fyape? how is that word written, how does one write that word?
6.3.4. Sno. The reflexive pronoun sno refers to the subject of the sentence. In the genitive it may be translated his own, her own, their own, etc. It is used to clear up situations found in a sentence like "he prepared his meal." Without clarification, it may not be clear if "his" refers to the person preparing the dinner or someone else:

Pol 'olem peyä wutsot. He prepared his (someone else's) meal.
Pol 'olem sneyä wutsot. He prepared his own meal.
For far, Frommer has approved forms of sno for third person antecedents only.
6.3.5. Lahe. The adjective lahe other, another can also be used alone as a pronoun, fipoti oel $\mathcal{A}$ tspìyang, fte tìkenong liyevu aylaru I will kill this one as a lesson to the others (see §3.2.4 for the form).
6.3.6. PRO-Drop. A subject pronoun (subjective or agentive) may be dropped if it is the same as the subject of the previous statement. Note the lack of a subject pronoun in the second sentence:

Fayupxaremì oe payängkxo teri horen lì'fyayä leNa'vi fpi sute a tsun srekrr tsat sivar. Ayngeyä sìpawmìri kop fmayi fitsenge tivìng sì'eyngit.
In these messages I will chat about the rules of the Na'vi language for people who can already use it. I will also try to give answers here concerning your questions.

[^12]6.3.7. Contrastive Demonstratives. To focus contrasting elements, forms of the prenouns fiand tsa- are paired with forms of the independent demonstratives fi'u and tsa'u used with alu:

## Fìfkxen alu Fì'u lu ftxìlor; tsafkxen ${ }^{7}$ alu TSA'u ngati tspang. <br> THIS vegetable is delicious; THAT one will kill you. <br> Fìkaryu alu fipo lu tsulfätu; tsakaryu alu tsapo lu skxawng. <br> This teacher is a master; that teacher is a fool.

There is also a vocal constrastive stress on the independent forms of fi'u and tsa'u in this construction. NT (31/12/2011)

### 6.4. Use of the Cases

6.4.1. Subjective. The unmarked subjective case is used as the subject of intransitive verbs, the predicate noun in predicate constructions (§6.2.6) and with adpositions.
6.4.1.1. With verbs of motion, if the destination comes immediately after the verb, the adposition ne may optionally be dropped, leaving an unmarked noun, za'u fitseng, ma 'itetsyìp come $\mathcal{F}$ here, little daughter.
6.4.1.2. The subjective is also used in exclamations, when a noun or noun phrase is used by itself as an utterance, lora aylì'u, lora aysäfpìl beautiful words and beautiful thoughts, aylì'u apawnlltxe $\mathcal{F}$ niltsan words well spoken!
6.4.1.3. A time word with the indefinite -o is used in the subjective to indicate a duration of time, zìsìto amrr ftolia ohe I studied for five years, herwì zereiup fitrro nìwotx! It's been snowing $\mathcal{A}$ all day!
6.4.2. Agentive. The agentive case is used for the subject of transitive verbs, oel ngati kameie I See you.
6.4.3. Patientive. The patientive is used as the direct object of transitive verbs, ti'eyngit oel $\mathcal{F}$ tolel a krr when I receive an answer.
6.4.4. Dative. The dative is used for the indirect object of ditransitive verbs, siltsana fmawn a $\mathcal{F}$ tsun oe ayngaru tivìng good news which I can give to you.
6.4.4.1. The object of a si-verb takes the dative, oe irayo si ngaru I thank you.
6.4.4.2. The causee for the causative of a transitive verb may be in the dative, oel ngaru tseykìye'a tsat I will make you see it (see §6.11.2).
6.4.4.3. The verb lu with the dative forms an idiom for possession, where English uses the verb "have," lu oeru ikran I have an ikran. In this construction the verb usually comes first in the clause. wiki $(28 / 1 / 2010)$

[^13]6.4.4.4. The dative of interest limits the scope of an adjective to the judgement or benefit of a particular individual, fi'u oeru prrte' lu this is pleasant to me, tìpängkxo ayoengeyä mowan lu oeru nìngay our chat is truly enjoyable (to me).
6.4.4.5. With verbs of speaking, including a word like pawm ask, the person addressed goes in the dative, oel poru polawm fi'ut I asked him this.
6.4.5. Genitive. The genitive case marks possession, as in oeyä 'eylan my friend. But see below for inalienable possession (§6.4.6.3).
6.4.5.1. The genitive can be used predicatively, as in fitseng lu awngeyä this place is ours. However, the prop noun pum possession, thing possessed is more often used, kelku ngeyä lu tsawl; $\mathcal{F}$ pum oeyä lu hìi your house is large; mine is small.
6.4.5.2. The partitive genitive marks the larger whole of which something is part, Na'viyä luyu $\mathcal{A}$ hapxì you are part of the people. This is also used with fractions, Tsu'teyìl tolìng oer mawlit smarä $\mathcal{F}$ Tsu'tey gave me a half of the prey.
6.4.5.3. The genitive is occasionally separated from the noun phrase it goes with, Na'viyä luyu $\mathcal{A}$ hapxì you are part of the people.
6.4.5.4. The genitive is also used as the object of verbal nouns, as in tiftia kifkeyä study of the $\mathcal{F}$ natural world.
6.4.6. Topical. The topical case marks the topic in a topic-comment construction. See TopicComment, §7.2, for a longer discussion of this use. The topical has a few more fixed uses, as well.
6.4.6.1. In prose, a topical noun phrase will come as early in the clause as possible: first in a main clause, but after the conjunction if in a subordinate clause. Wiki (8/10/2011)
6.4.6.2. The topical is often used with the si-verb irayo si to thank to indicate the thing for which you're giving thanks, tìmweypeyri ayngeyä seiyi irayo nìngay I really thank you for your $\mathcal{F}$ patience.
6.4.6.3. The topical can be used to mark inalienable possession, ${ }^{8}$ oeri nì'i'a tsyokx zoslolu $m y \mathcal{F}$ hand is finally healed, oeri tìngayìl txe'lanit tivakuk let the truth strike my heart, ngari tswintsyìp $\mathcal{F}$ sevin nìtxan lu nang! what a pretty little queue you have! Note in the first two examples that the $\mathcal{F}$ possessed noun need not fall immediately next to the topical. $\mathrm{NT}(11 / 7 / 2010)$
6.4.6.4. The topical can be used for the point of comparison in comparisons of equality (see §6.2.7.2).

### 6.5. Adpositions

Na'vi adpositions may govern nouns, pronouns and adverbs of place and time.

[^14]6.5.1. Position. Adpositions can fall in two places. First, they may come before the entire noun phrase they modify, and are written as separate words, ta peyä fahew akewong with (from) his $\mathcal{F}$ alien smell, ngari hu Eywa salew tirea your spirit goes with Eywa. Second, they may be enclitic, in $\mathcal{A}$ which situation they are always attached to the noun, fitrrmì letsranten on this important day, $\mathcal{F}$ ayli'ufa awngeyä 'eylanä a'ewan in the words of our young friend.
6.5.2. Lenition. Eight of the adpositions, plus two compound adpositions of sre, cause lenition in the following word. These are marked with parenthetical a plus sign, (+), in the list below.
6.5.2.1. Enclitic adpositions do not cause lenition.
6.5.2.2. Since lenition alone is also used as the short plural (§3.1.3.1), there is a chance for number uncertainty depending on the conversational context. To be clear about number, use the full plural prefix ay+; the lenited form without ay+ should be interpreted as singular. NT (1/7/2010)
6.5.2.3. Whatever word immediately follows a non-enclitic adposition will be lenited. It doesn't have to be the noun, mì hivea trr on the seventh day (not *mì kivea srr). wiki (24/8/2010)
6.5.3. Äo. Below. Äo Utral Aymokriyä under the Tree of Voices.
6.5.4. Eo. Before, in front of (place). May be used metaphorically, eo ayoeng lu txana tìkawng $\mathcal{A}$ a great evil is upon us, tokx eo tokx face to face, in person.
6.5.5. Fa. With, by means of, using. Do not confuse with hu (§6.5.10).
6.5.5.1. Fa may introduce words about to be quoted, ayli'ufa awngeyä 'eylanä a'ewan in the $\mathcal{F}$ words of our young friend.
6.5.5.2. Fa is also one way to express the causee when a transitive verb takes the causative (see §6.11.2).
6.5.6. Few. across, (towards) the opposite side. Do not confuse with ka (§6.5.13). Po spä few payfya $\mathcal{F}$ fte smarit sivutx he jumped across the stream to track his prey.

### 6.5.7. Fkip. Up among

6.5.8. Fpi (+). For the benefit or sake of. Refers to people, fayupxare layu aysngä'iyufpi these $\mathcal{F}$ messages will be for beginners, or inanimates, 'uo a fpi rey'eng Eywa'evengmì 'Rrtamì tsranten $\mathcal{F}$ nìtxan awngaru nìwotx something that matters a lot to all of us for the sake of The Balance of Life on both Pandora and Earth.
6.5.9. Ftu. From (direction). This is used mostly with volitional verbs of motion, such as kä, rikx, etc. See ta below.
6.5.10. Hu. With. Of accompaniment only - do not confuse with fa (§6.5.5). Tsun oe ngahu pivängkxo a fi'u oeru prrte' lu it is a pleasure to be able to chat with you.
6.5.11. Io. Above. Kllkxayem fitìkangkem oeyä rofa - ke io - pum feyä this work of mine will $\mathcal{F}$ stand beside - not above - theirs.
6.5.12. Ìlä (+). By, via, following. Rerol tengkrr kerä / Ìlä fya'o avol / Ne kxamtseng (we) sing $\mathcal{F}$ while going via the eight paths to the center; ayfo solop ilä hilvan fa uran they traveled along (up, $\mathcal{F}$ down) the river by boat.
6.5.12.1. It also means according to, ìlä Feyral, muntxa soli Ralu sì Newey nìwan mesrram $\mathcal{F}$ according to Peyral, Ralu and Newey were secretly married the day before yesterday. NT (5/7/2012)
6.5.13. Ka. Across, covering. Do not confuse with few (§6.5.6).
6.5.14. Kam. Ago. Tskot sngolä'i po sivar 'a'awa trrkam (or kam trr a'a'aw) he started to use $\mathcal{F}$ the bow several days ago. NT (24/9/2011)
6.5.15. Kay. From now (in the future). Zaya'u Sawtute fte awngati skiva'a kay zìsìt apxey (or $\mathcal{F}$ pxeya zìsìt kay) the Sky People will come to destroy us three years from now! NT (24/9/2011)
6.5.16. Kip. Among. Tivìran po ayoekip let her walk among us.
6.5.17. Kxamlä. through (via the middle of). Palukanit tsole'a, yerik lopx hifwo kxamlä zeswa, $\mathcal{F}$ spotting a thanator, the hexapede panicked and escaped through the grass.
6.5.18. Lisre (+). see li, §6.6.6.4.
6.5.19. Lok. Close to.
6.5.20. Luke. Without. Luke pay, ke tsun ayoe tìreyti fmival without water we cannot sustain life. $\mathcal{F}$ This may also be used with nominalized phrases (see §6.18.5).
6.5.21. Maw, Pximaw. After (time). Maw hìkrr ayoe tìyätxaw we will return after a short time. $\mathcal{F}$
6.5.22. Mì (+). In, on. This indicates being in a location. Motion inward or into is nemfa.
6.5.22.1. Mì describes location in or on the body, aylìu na ayskxe mì te'lan the words (are) like stones in my heart (from the film script), mì tal ngeyä prrnenä a sanhì lor nìtxan lu nang what pretty stars your baby has on his back. It also describes location in (or "on") a planet, li'fyari leNa'vi $\mathcal{F}$ 'Rrtamì, vay set 'almong a fra'u zera'u ta ngrrpongu everything that has gone on with (blossomed regarding) Na'vi until now on Earth has come from a grassroots movement.
6.5.22.2. It can also be used in expressions of time, fitrrmì letsranten on this important day. $\mathcal{F}$
6.5.22.3. How to explain this: law lu oeru fwa nga mì reltseo nolume nìtxan! Restriction of $\mathcal{F}$ scope, like mì sìrey?
6.5.22.4. Other idioms with mì: ti'efumì oeyä in my opionion.
6.5.22.5. Though the writing doesn't change, when followed by the plural prefix ay+ the vowel ì is dropped. Mì ayhilvan is pronounced as though *mayhilvan (§2.3.6.1).
6.5.23. Mìkam. Between
6.5.24. Mungwrr. Except
6.5.25. Na. Like, as. Ayli'u na ayskxe mì te'lan the words are like stones in (my) heart.
6.5.25.1. Na is used to specify shades of colors, fisyulang lu ean na ta'leng or fisyulang lu $\mathcal{F}$ ta'lengna ean this flower is ( $N a$ 'vi-)skin-blue. See §6.18.3.1 for attributive color phrases with na. $\mathcal{F}$
6.5.25.2. Na is used to mark the point of comparison in comparisons of equality (see §6.2.7.2).
6.5.26. Ne. To, towards (direction). This marks the destination in verbs of motion. Terìran ayoe $\mathcal{F}$ ayngane we are walking your way. Sometimes ne can be omitted (see §6.4.1.1).
6.5.26.1. Idioms with ne: ke zasyup li'Ona ne kxutu a mìfa fu a wrrpa The l'Ona will not perish $\mathcal{F}$ to the enemy within or the enemy without; zola'u nìprrte' ne pilok Na'viteri welcome to the Na'viteri $\mathcal{F}$ blog. NT (29/3/2010)
6.5.26.2. Ne may be used to disambiguate the predicate of the verb slu become (§6.2.6.2).
6.5.27. Nemfa. Into. See also mì (§6.5.22).
6.5.28. Nuä (+). beyond (at a distance). Note the contrast with few, fo kelku si few 'ora they live $\mathcal{F}$ across the lake (on the other side) vs. fo kelku si nuä ora they live beyond the lake (at a great distance $\mathcal{F}$ and out of sight). NT (15/8/2011)
6.5.29. Pxaw. Around. Po pxaw txep srew he danced around the fire.
6.5.30. Pxel. Like, as. Fwa sute pxel nga tsun oeyä hì’ia tìngopit sivar fte pivlltxe nìlor fitxan $\mathcal{F}$ oeru teya si that people like you are able to use my little creation to speak so beautifully fills me with joy.
6.5.31. Ro (+). At (locative only)
6.5.32. Rofa. Beside, alongside. Kllkxayem fitìkangkem oeyä rofa - ke io - pum feyä this work $\mathcal{F}$ of mine will stand beside - not above - theirs; maw sätswayon ayol ayoe kllpolä mì tayo a lu rofa $\mathcal{F}$ kilvan after a short flight we landed in a field beside the river.
6.5.33. Sìn. On, onto. Aywayl yìm kifkeyä / 'Ìheyut avomrr / Sìn tireafya'o avol the songs bind $\mathcal{F}$ the thirteen spirals of the world onto the eight spirit paths.
6.5.34. Sko (+). as, in the capacity of, in the role of. Sko Sahìk ke tsun oe mìftxele tsngivawvìk $\mathcal{F}$ as Tsahik, I cannot weep over this matter. NT (31/3/2012)
6.5.35. Sre (+), Pxisre (+). Before (time)
6.5.36. Ta. From (various uses). Oeri ta peyä fahew akewong ontu teya längu my nose is full of $\mathcal{F}$ ("from") his alien smell.
6.5.36.1. Ta indicates land of origin, Markusì ta Ngalwey Marcus from Galway.
6.5.36.2. Of time, ta means since, trr'ongta txon'ongvay po tolìran he walked from dawn until $\mathcal{F}$ dusk. (Also see takrra, §6.18.6.)
6.5.36.3. Frommer often uses ta Pawl from Paul at the end of his email and blog posts.
6.5.36.4. With transitive verbs ta is more likely to be used to indication motion than ftu , as in pot 'aku fitsengta get him out of here! $\mathrm{NT}(15 / 8 / 2011)$
6.5.37. Takip. From among
6.5.38. Tafkip. From up among
6.5.39. Teri. About, concerning. Fayupxaremì oe payängkxo teri horen lì'fyayä leNa'vi in these $\mathcal{F}$ messages I will chat about the rules of the Na'vi language.
6.5.40. Uo. Behind
6.5.41. Vay. Up to, until. This may be used of both time and space, tsakrrvay, ayngeyä tìmwey- $\mathcal{F}$ peyri irayo seiyi oe until that time, I thank (you) for your patience. There's a line from the video game with a local use.
6.5.41.1. The phrase vay set ke means not yet.
6.5.42. Wä (+). Against (as in "fight against"). Peyä tsatìpe'un a sweylu txo wivem ayoeng $\mathcal{F}$ Omatikayawä lu fe' his decision that we should fight against the Omaticaya was a bad one.

### 6.6. Adverbs

6.6.1. Degree and Quantity. Adverbs of degree and quantity very often follow the element they modify, 'Rrtamì tsranten nìtxan awngaru nìwotx on Earth it matters very much to us all. $\mathcal{F}$
6.6.1.1. With predicate adjectives a very common pattern is ADJ lu ADV, ngeyä lì'fya leNa'vi $\mathcal{F}$ txantsan lu nìngay your Na'vi is truly excellent.
6.6.2. With Gerunds. The gerund retains enough of its verbal nature that it, too, may take an adverb, Koren a'awve tìruseyä 'awsiteng the first rule of living together.
6.6.3. Correlative Comparisons. The verbs'ul increase and nän decrease are used idiomatically as correlative adverbs, 'ul... 'ul the more... the more and nän... nän the less... the less.
'Ul tskxekeng si, 'ul fnan.
The more you practice, the better you'll get.
'Ul tute, 'ul tìngäzìk.
The more people, the more problems.
Nän ftia, nän lu skxom a emza'u.
The less you study, the less chance you have of passing.
Nän yom kxamtrr, 'ul 'efu ohakx kaym.
The less you eat at noon, the hungrier you'll feel in the evening.
6.6.4. Fìtxan and Nìftxan. Both adverbs fitxan and niftxan are used with the conjunction kuma ( $£ 6.18 .6$ ) for result clauses,

Lu poe sevin nìftxan (or fitxan) kuma yawne slolu oer.
She was so beautiful that I fell in love with her.
In these constructions the akum/kuma must be contiguous with the fitxan/niftxan. $\mathrm{NT}(19 / 6 / 2012)$
6.6.5. Keng. The adverb keng, even, is used to prop up unexpected information, yom teylut keng oel even I eat teylu. wiki (31/12/2010)
6.6.6. Li. The primary meaning of li is already, tìkangkem li hasey lu the work is already finished. $\mathcal{F}$ NT (20/2/2011)
6.6.6.1. The negative, ke li, means "not yet," and uses pleonastic negation (§6.16.2), fo ke li ke polähem they have not yet arrived. $\mathrm{NT}(4 / 9 / 2011)$
6.6.6.2. With imperatives li indicates strong urgency, Ngal mi fitsengit terok srak? Li kä! $\mathcal{F}$ You're still here? Get going! With ko (\$6.22.1), li ko (accented on li) it means "well, get to it, then," or "let's get on it."
6.6.6.3. In answers it conveys a somewhat hesitant "yes," much like English "sort of,"

A: Nga mllte srak? Do you agree?
B: Li, slä... Well, yes, I guess so, but....
The negative of this, ke li, means something like "not really."
6.6.6.4. When paired with the adposition sre (§6.5.35) they mean "by" in the temporal sense of "before or up to but, not after," kem si li trraysre do it by tomorrow. If sre comes before the $\mathcal{F}$ noun, it combines with li into lisre, which like sre will cause lenition, kem si lisre srray do it by $\mathcal{F}$ tomorrow.
6.6.7. Nìwotx. The adverb nìwotx all (of), in toto, completely is frequently used with plural nouns and pronouns to give a collective sense, ayeylanur oeyä sì eylanur li'fyayä leNa'vi nìwotx to $\mathcal{F}$ all my friends and friends of the Na'vi language, tìfyawìntxuri oeyä perey aynga nìwotx you are all $\mathcal{F}$ waiting for my guidance.
6.6.7.1. With dual number, the sense of nìwotx is both, mefo nìwotx yolom they both ate. nT (15/8/2011)
6.6.8. Nìfya'o. A noun phrase built on fya'o can be used freely to produce adverbs of manner. Here the entire noun phrase is adverbialized, not just the word nì- is prefixed to, nì-[fya'o letrrtrr] in an ordinary way, poe poltxe nìfya'o alaw she spoke clearly.
6.6.8.1. Nìfya'o can also take attributive phrases, nìfya'o a hek in a way that's strange.
6.6.8.2. Note about sentence adverbs vs. nìfya'o forms?
6.6.9. "Kop" and "nìteng". Both kop and nìteng answer to the English adverb also. Kop has more the sense of in addition, further, while nìteng means similarly, too, likewise. Compare oel poleng kop poru tsa'ut I also (in addition) told him that to oel poleng nìteng poru tsa'ut I told him that, too.
6.6.9.1. They can even be used together, furia nga lu nitram, lu oe kop nitram nìteng since $\mathcal{F}$ you're happy, I, too, am also happy.

### 6.7. Aspect and Tense

6.7.1. The Role of Context. Na'vi verbs are frequently unmarked for tense or aspect, leaving a verb without infixes, or at most the subjunctive infix. Absent other information, such as an adverb of time or some break in discourse, an unmarked verb continues the tense and/or aspect of the verb in the previous sentence.
6.7.1.1. Although a subordinate clause may occur before the main clause, it takes its temporal and aspectual context from the main clause, oel foru fiaylìut tolìng a krr, kxawm oe $\mathcal{F}$ harmahängaw when I gave them these words perhaps I was sleeping, ti'eyngit oel tolel a krr, ayn- $\mathcal{F}$ garu payeng when I receive an answer, I will tell you.
6.7.2. The Unmarked Verb. The unmarked verb form has two additional jobs. First, it can indicate the present tense, ayngaru seiyi irayo I thank you. Second, it marks habitual or general $\mathcal{F}$ statements, nga za'u fitseng pxìm srak? do you come here often?, lu fo lehrrap they are dangerous. $\mathcal{F}$
6.7.3. Aspect. In general, Na'vi marks aspect more than it marks tense. ${ }^{9}$ It is useful to think of the perfective as a snapshot presentation of an event, while the imperfective sets the background, tengkrr palulukan moene kxll sarmi, poltxe Neytiril ayli'ut a frakrr'ok seyä layu oer as the $\mathcal{F}$ thanator was charging towards the two of us, Neytiri said something I will always remember.
6.7.4. Simultaneous Imperfective. Because the imperfective presents an ongoing state of affairs, it can be used in complex sentences to indicate simultaneous action, fitxon yom tengkrr $\mathcal{F}$ teruvon this night (we) eat while leaning. Wiki (14/3/2010)
6.7.5. Anterior Perfective. In complex sentences, the perfective in a subordinate clause can indicate the completion of an action prior to the event in the main clause,

[^15]Tì'eyngit oel tolel a krr, ayngaru payeng.
When I receive an answer, I will let you know.
Fori mawkrra fa renten ioi säpoli holum.
After they put on their goggles, they left.
6.7.6. Punctual Perfective. The perfective is used in several single verb expressions to indicate the event occurred in an instant, tslolam got it, I understand, rolun found it! Frommer says tolel, got $i t!$, is for a "flash of insight."
6.7.7. Tense. Na'vi tense, as in Human languages, simply locates an event in time.

There are too few examples of complex sentences to be sure about relative tense in subordinate clauses.
6.7.8. Proximal Tense. The proximal past and future mark events in the "near" past or future, where nearness is not an absolute scale, but is determined by context and the perspective of the speaker.
6.7.9. Intentional Future. The intentional future forms in «ìsy» and «asy» indicate the determination by the speaker to bring about a state of affairs, rather than a prediction about the future. Ayoe ke wasyem we will not fight, tafral ke lìsyek oel ngeyä keye'ungit therefore I will not heed $\mathcal{F}$ your insanity.

### 6.8. Subjunctive

The subjunctive is used much in Na'vi. Outside its use in independent sentences, the Na'vi subjunctive is highly grammaticalized, that is, its use is simply required in certain grammatical constructions without necessarily hinting at an irrealis sense.
6.8.1. Optative. It is used to indicate a wish, oeyä swizaw nìngay tivakuk let my arrow strike $\mathcal{F}$ true.
6.8.2. Nìrangal. Unrealizable wishes use the adverb nìrangal followed by the imperfective subjunctive to indicate an unattainable wish in the present, with the perfective subjunctive for an unattainable wish in the past. This can be expressed in English with phrases like, "if only" or "I wish," nìrangal lirvu oeyä frrnenur lora sanhì I wish my children had pretty stars, nìrangal oel tslilvam nì'ul if only I had understood more. Wiki (14/3/2010)
6.8.3. Modal Complement. The verbal complement to a modal verb, such as zene must, tsun can, etc., will take the subjunctive, as in ayngari zene hivum you must leave, oe new nitxan $\mathcal{F}$ ayngaru fyawivìntxu I want very much to guide you, fmawn a tsun oe ayngaru tivìng news which $\mathcal{F}$ I can give to you.
6.8.3.1. The verb controlled by the modal will not take any tense or aspect infixes, ${ }^{10}$ just the simple subjunctive. So, tense and aspect marking should go on the modal, oe namew tsive'a $I$

[^16]wanted to see, never *oe new tsimve'a. However, the controlled verb will keep its causative or reflexive marking.
6.8.3.2. Known modal verbs and verbs with modal syntax: ${ }^{11}$

| fmi | try, attempt |  |  |
| :--- | :--- | :--- | :--- |
| ftang | stop | sto | refuse ${ }^{12}$ |
| kan | intend to ${ }^{12}$ | tsun | can, be able |
| may' | try (experiential) | var | keep on, continue to |
| new | want $^{12}$ | zene | must, have to |
| sngä'i | begin, start | zenke | must not |

NT ( $25 / 5 / 2011$ ) Wiki ( $1 / 12 / 2010$ ) Wiki ( $2 / 2 / 2011$ ) Ultxa ( $2 / 10 / 2010$ ) Wiki ( $13 / 12 / 2012$ )
6.8.3.3. Note that the modal verbs are considered intransitive with the subject of the modal phrase in the subjective case, regardless of the transitivity of the controlled verb, oe new yivom teylut I want to eat teylu. But see "word order effects," §7.1.3.1, for some exceptional patterns.
6.8.4. New. In addition to the simple modal use given above (§6.8.3), new want may also introduce a subclause with a different subject than that of the new clause. The verb is transitive in this construction, and the subclause is attached to a fi'ut or futa (§6.18.4) and takes the subjunctive. Wiki (20/1/2010)

Oel new futa po kivä I want him to go (lit. I want that he go).
Ngal tslivam a fi'ut new oel I want you to understand.
6.8.4.1. The causative of transitive new will also take a futa clause, pol oeru neykew futa oel $\mathcal{F}$ yivom teyluti he made me want to eat teylu, lit. he made me want that I eat teylu.
6.8.4.2. The modal use of kan aim for intend follows the same syntax, oe kan kivä I intend to go and oel kan futa po kivä I intend him to go.
6.8.4.3. The verb sto refuse also follows the syntax of new, stolo po hivum fohu she refused to leave with them, poel stolatso futa mefo tivaron tsaha'ngir she must have refused (their request) to hunt that afternoon.
6.8.5. Other Uses. The subjunctive is also used in purpose clauses with fte (§6.17.2), conditional sentences (§6.19), with the conjunction tsnì when used with certain verbs (§6.20.7).

### 6.9. Participles and Gerunds

6.9.1. Participles. Na'vi participles are restricted in their use - they may only be used attributively, never as predicates. Since they are adjectives, they are linked to the noun they go with using the attributive affix -a- (§3.5.1), palulukan atusaron lu lehrrap a hunting thanator is dan- $\mathcal{F}$ gerous.

[^17]6.9.1.1. Some derived words have participles in them, and these may be used predictively, as in lu nga txantslusam you are wise, with the active participle tslkus)am in it.
6.9.1.2. The participles of si construction verbs are counted as a single word. They are written with a hyphen connecting si and the other word and the attributive $\mathbf{a}$ is attached to the entire phrase, not just si:
srung-susia tute
tute asrung-susi
Both phrases mean a helping person.
6.9.2. Gerunds. Any verb may be freely turned into a gerund, a noun describing the action of the verb (§5.1.4.1). They can be used with adverbs (§6.6.2), but they may not take subjects or direct objects, tìyusom 'o' lu eating is fun. Wiki (18/6/2010)
6.9.2.1. English often uses gerunds to nominalize a phrase ("running a marathon is difficult"). In Na'vi such clause nominalization is handled with fi'u or tsa'u (§6.18.4), fwa yom teylut 'o' lu $\mathcal{F}$ eating teylu is fun. Ultxa (3/10/2010)

### 6.10. Reflexive

6.10.1. True Reflexives. The reflexive infix 〈äp» indicates the subject of the verb is performing an act on themself. The subject is in the subjective, not agentive, case, as in oe tsäpe'a I see myself. $\mathcal{F}$ Wiki ( $1 / 2 / 2010$ )
6.10.2. Intransitive Reflexives. With intransitive verbs that take dative objects reflexive pronoun sno is used,

Po yawne lu snor. He loves himself.
NT (31/12/2011)
6.10.3. Detransitive. The reflexive infix may also be used to create intransitive verbs, ${ }^{13}$ such as win säpi to hurry.
6.10.4. Reciprocal. When a reflexive verb occurs with the adverb fitsap each other, the meaning is reciprocal, mefo fitsap mäpoleyam tengkrr tsngawvìk the two of them hugged each other and $\mathcal{F}$ wept. NT (30/10/2011)
6.10.4.1. With intransitive verbs that take dative objects there are two possibilities,

Moe smon moeru fitsap. We know each other.
Moe smon fitsap. We know each other.
With third person reflexives of any number, the dative of sno is used,
Fo smon (snoru) fitsap nìwotx. They all know each other.

## NT (31/12/2011)

[^18]
### 6.11. Causative

The causative infix 〈eyk increases the transitivity of a verb, adding another argument. All causative verbs are thus transitive, requiring the agentive case for the subject.
6.11.1. Causative of Intransitive Verb. When an intransitive verb is made causative, the causee, which had been in the subjective case, is in the patientive.

Oe kolä neto I went away.
Pol oeti keykolä neto She made me go away.
6.11.2. Causative of Transitive Verb. When a transitive verb is made into a causative, the causee, which had been in the agentive case, goes into the dative. This leaves the original accusative in place.

Neytiril yerikit tolaron Neytiri hunted hexapede.
Eytukanil Neytirir yerikit teykolaron
Eytukan made Neytiri hunt a hexapede.
6.11.2.1. The causee may also be indicated with the adposition fa, by means of. This defocuses the causee somewhat, focusing instead on either the causer or object.

Neytiril yerikit tolaron Neytiri hunted hexapede.
Eytukanill fa Neytiri yerikit teykolaron
Eytukan had a yerik hunted by Neytiri.

### 6.12. Ambitransitivity

A normally transitive verb can be paired with a subjective, rather than agentive, noun as the subject. This is used when the direct object is considered irrelevant and only the verbal action matters. For example, oe taron I hunt is a general statement about one's activities, where what one is hunting in particular doesn't matter. Or, $\mathrm{NT}(28 / 3 / 2012)$

Ngal pelun faystxenut frakrr tsyär?
Why do you always reject these offers? vs.
Nga pelun frakrr tsyär?
Why do you always reject everything? or such things?
This pattern of alternation can also be called an "antipassive" construction, and may be freely used in Na 'vi.
6.12.1. Omitted Object. This use should be distinguished from omission of a direct object that exists in the context. For example,

Ngal ke tse'a txepit srak? Do you not see the fire?
Oel tse'a. I see (it).
Here the direct object is simply not mentioned, rather than suppressed entirely, so the verb and subject still follow the normal transitive syntax.

6．12．2．Causative．There is no way to distinguish the antipassive in the causative．For example， the resulting action of the sentence oel poru teykaron I make him hunt could either be po taron he hunts（something we don＇t care about）or pol taron he hunts（something in particular）．ultxa（3／10／2010）

## 6．13．Commands

6．13．1．Unmarked．Commands in Na＇vi require no special infix．Positive commands are simply a verb stem，Kä！Kä！Go！Go！，mefoti yìm bind them！The pronoun may also be stated explicitly， $\mathcal{A}$ ＇awpot set ftxey ayngal（you）choose one now．

6．13．2．With the Subjunctive．A command may also use the subjunctive infix 〈iv〉．Frommer says，＂at an earlier point in the history of the language there was probably a polite／familiar dis－ tinction（the «iv＞form being the politer one），but that＇s no longer the case．They＇re used inter－ changeably．So to say＇Go！’ you can say either kivä or just kä．＂

6．13．3．Prohibitions．Negative commands are not negated with the usual negative adverb ke， but rather use the word rä＇ä，as in rä＇ä hahaw don＇t sleep．

6．13．3．1．Rä＇ä may follow the verb for special emphasis，oeti＇ampi rä＇ä，ma skxawng！don＇t $\mathcal{F}$ touch me，you moron！NT（27／11／2012）
6．13．3．2．With si－construction verbs，rä＇ä intrudes between the noun and si，txopu rä＇ä si don＇t be afraid，tsakem rä＇ä sivi don＇t do that（action）（see also §6．16．1．1）．

## 6．14．Questions

6．14．1．Yes－no Questions．Simple yes－no questions are marked with the particle srak（e）which occurs at the start or the end of the clause．When the particle appears at the end of the clause， it is usually just srak，the longer srake occurring at the beginning of the clause．Ngaru lu fpom $\mathcal{F}$ srak？are you well？

6．14．2．Ftxey．．．Fuke．In addition to srak（e）a yes－no question can be made with an idiom using ftxey choose and fuke or not．You can say either srake nga za＇u？are you coming or ftey nga za＇u $\mathcal{F}$ fuke are you coming or not？wiki（24／3／2010）

6．14．3．Wh－Questions．Use of a question word that contains－pe＋is sufficient to create a ques－ tion，kempe si nga？what are you doing？In many languages a question word must come first in the sentence．Na＇vi has no such requirement，fiswiräti ngal pelun molunge fitsenge？why did $\mathcal{A}$ you bring this creature here？

6．14．4．Tag Question．The Na＇vi tag question（Eng．＂right？＂，Fr．＂n＇est－ce pas？＂）is marked with either kefya srak or simply kefyak（ultimately derived from ke fifya srak？）．wiki（1／3／2010）

6．14．5．Conjectural Questions．Questions which the speaker doesn＇t expect even the listeners to know the answer to are marked with the evidential infix 〈ats ，pol pesenget tatsok？where in $\mathcal{F}$ the world could she be？srake pxefo li polähatsem？I wonder if the three of them have already arrived． $\mathcal{F}$ NT（30／10／2011）

### 6.15. Affect and Evidence

6.15.1. Affect. Two second position infixes are used to mark the speaker's attitude about what they are saying, «ei» for positive orientation and «äng» for negative orientation, oel ngati kameie $\mathcal{A}$ I see you, oeri ta peyä fahew akewong ontu teya längu his alien smell fills my nose.
6.15.1.1. If a statement inherently encodes very positive or negative emotion the infix is likely to be omitted, as in nga yawne lu oer I love you. wiki $(1 / 2 / 2010)$
6.15.2. Evidence. The second position infix 〈ats〉 is used to mark a suppositional statement from evidence, ${ }^{14}$ 'uol ikranit txopu sleykolatsu, taluna po tsìk yawo something must have fright- $\mathcal{F}$ ened the banshee, because it suddenly took to the air. Wiki (19/2/2010)

### 6.16. Negation

6.16.1. Simple Negation. The adverb ke is used to negate a sentence, fitxon na ton alahe $\mathcal{F}$ nìwotx pelun ke lu teng? why is this night not like all other nights?
6.16.1.1. With si-construction verbs, the ke comes before si, as in po pamrel ke si he doesn't write. The phrase accent shifts from the noun or adjective part of the si-verb to ke, pamrel ke si (see also §6.13.3).
6.16.1.2. Imperatives are negated with the adverb rä’ä. See §6.13.3.
6.16.2. Pleonastic Negation. When a negative adverb or pronoun (§3.4) is used ke is still required with the verb, ke'u ke lu ngay nothing is true, slä ke stä'nì kawkrr but (he) never catches $\mathcal{F}$ (her). wiki (2/5/2010)
6.16.2.1. When the prenoun fra- is negated the verb is also negated, ke frapo ke tslolam not $\mathcal{F}$ everyone understood. Ultxa (3/10/2010)
6.16.3. Kaw'it. A word or phrase may be singled out for negation with ke... kaw'it not... at all, as in fo ke lu 'ewan kaw'it they are not young at all. wiki ( $6 / 4 / 2010$ )

### 6.17. Complex Sentences

### 6.17.1. Tense and Aspect in Dependent Subjunctives. Do dependent verbs have TAM-solidarity with their controlling verb?

6.17.2. Purpose. Purpose clauses take the conjunction fte (negative fteke) with the subjunctive, sawtute zera'u fte fol Kelutralti skiva'a the sky people are coming to destroy Hometree.
6.17.2.1. In $N a$ 'vi purpose clauses are used in several situations where English would simply use an infinitive, pxiset ke lu oeru krr fte tìeyngit tivìng right now I don't have time to give an answer. $\mathcal{F}$

[^19]6.17.3. Asyndeton. Short, parallel phrases ${ }^{15}$ may be joined without a conjunction connecting them. Yola krr, txana krr, ke tsranten it doesn't matter how long it takes, literally short time, long $\mathcal{F}$ time, doesn't matter; 'uo a fpi rey'eng Eywa'evengmì 'Rrtamì tsranten nìtxan awngaru nìwotx $\mathcal{F}$ something that matters a lot to all of us for the sake of The Balance of Life on both Pandora and Earth; lora $\mathcal{F}$ aylì'u, lora aysäfpìl beautiful words and beautiful ideas.
6.17.3.1. Two verbs in sequence without a conjunction are sequential, za'u kaltxì si ko! come $\mathcal{F}$ (and then) say hello!

### 6.18. Relative Clauses and Phrase Attribution

6.18.1. Particle "A". Na'vi relative clauses are created with the attributive particle $\mathbf{a}$. As with adjective attribution, a relative clause may either precede or follow the word it modifies, po $\mathcal{F}$ tsane karmä a tsengit ke tsìme'a oel I didn't see the place he was going to, palulukan a teraron $\mathcal{F}$ lu lehrrap a thanator that's hunting is dangerous.
6.18.1.1. Note that the attributive $\mathbf{a}$ is a particle, not a pronoun, and will not take case marking.
6.18.2. Referential Hierarchy. When the head ${ }^{16}$ of a relative clause is the subject or direct object in that relative clause, it is omitted,

Ngal tse'a a tute lu eyktan. The man whom you see is leader.
Ngati tse'a a tute lu eyktan. The man who sees you is leader.
For other cases or adpositional phrases, a resumptive pronoun must be used - po for animate heads and tsaw for inanimates.
poru mesyal lu a ikran an ikran with two wings
Po tsane karmä a tsengit ke tsìme'a oel.
I didn't see the place which she was going (to it).
Fìpo lu tute a oe pohu perängkxo.
This is the person who I'm talking with (him).
6.18.2.1. When the head of the relative clause is a direct object in it, the subject of the verb must still take the agentive marking, as in ngal tse'a a tute the man whom you see from above, not *nga tse'a a tute and teylu a oel yerom lu ftxilor the teylu I'm eating is delicious. nt (28/3/2012) $\mathcal{F}$
6.18.3. Other Attributive Phrases. Though English can modify nouns directly with prepositional phrases ("the man on the moon"), Na'vi attaches such phrases to nouns with a, as in fipo $\mathcal{A}$ lu vrrtep a mì sokx atsleng this is a demon in a false body, ngeyä teri faytele a aysänumeri your instructions about these matters.

[^20]6.18.3.1. The shades of colors can be made more precise with the adposition na like (§6.5.25). To use such a phrase attributively the entire phrase is hyphenated and treated like a normal adjective. So, from ean na ta'leng (Na'vi-)skin-blue:

Fìsyulang aean-na-ta'leng lor lu nìtxan.
Fìsyulang ata'lengna-ean lor lu nìtxan.
Ean-na-ta'lenga fisyulang lor lu nìtxan.
Ta'lengna-eana fisyulang lor lu nìtxan.
6.18.3.2. Single adverbs may also be used attributively, ke zasyup lì'Ona ne kxutu a mìfa fu a $\mathcal{F}$ wrrpa The l'Ona will not perish to the enemy within or the enemy without.
6.18.4. Clause Nominalization. Entire clauses can be turned into nouns and brought into the syntax of another sentence using the attributive particle, with either fi'u or tsa'u to anchor the phrase in the main clause. This is common enough that certain combinations of pronoun and attributive particle contract (see §3.4.2).
6.18.4.1. Just as in a relative clause, the anchor pronoun is inflected to match its role in the main clause. For example, in the subjective (fwa) as the intransitive subject of lu:

## Law lu oeru fwa nga mì reltseo nolume nìtxan.

It is clear to me that you have learned much in art.
In the topical (a fi'uri) with irayo si:
Ngal oeyä 'upxaret aysuteru fpole' a fi'uri, ngaru irayo seiyi oe nìtxan.
I thank you very much for sending my message to people.
As the direct object (futa) of the verb omum:
Ulte omum oel futa tìfyawìntxuri oeyä perey aynga nìwotx.
And I know that you all are waiting for my guidance.
6.18.4.2. Very often particular verbs and idioms will require a particular clause nominalization. For example, subclauses with omum know will generally take an accusative clause (usually futa or a fi'ut).
6.18.4.3. Clauses may also be nominalized with forms of tsa'u. The difference between fi'u and tsa'u is that the tsa'u form can be used when the clause it anchors refers to something old in the discourse, something which has been previously discussed. This subtlety is not required, however, and forms in fi'u are never wrong. Example conversation using both? wiki (18/6/2010)
6.18.4.4. The noun tìkin need is used with an attributive clause for the idiom "need to," awngaru $\mathcal{F}$ lu tìkin a nume nì'ul we need to learn more (literally, "we have the need to learn more"). It can also be used impersonally, lu tìkin a ... there is a need to/for ...

6．18．5．Nominalized Clauses with Adpositions．Nominalized clauses may be used with some adpositions，giving sense that match certain English conjunctions and gerund clauses．Oe ke tsun stivawm fayfneli＇ut luke fwa sngä＇i tsngivawvìk I cannot hear such words without starting to cry．

6．18．5．1．A list of legal ones might be nice．Will sre and maw attach to fwa or krr？Other likely candidates：fpi，mìkam，mungwrr，pxel／na，vay？

6．18．6．Nominalizations as Conjunctions．There are a few Na’vi constructions involving nouns and the attributive particle that do what English uses conjunctions for．Because of this，what ap－ pear to be identical conjunctions have two forms－one for when the conjunction comes at the end of a clause，and one for when it comes at the start．Often these phrases have contracted into one word，sometimes with sound changes．

|  | At the start | At the end |  |
| ---: | :--- | :--- | :--- |
| after | mawkrra | akrrmaw | from maw krr a |
| because | talun（a） | alunta | from ta lun a |
| because | taweyk（a） | aweykta | from ta oeyk a |
| when | krra | a krr |  |
| that（as a result） | kuma | akum |  |
| since（from the time） | takrra | akrrta | from ta krr a |

NT（31／3／2012）NT（19／6／2012）
Ti＇eyngit oel tolel a krr，ayngaru payeng when I receive an answer，I will let you know could also $\mathcal{F}$ be krra tì＇eyngit oel tolel，．．．wiki $(1 / 2 / 2010)$ wiki $(1 / 2 / 2010)$ NT $(15 / 8 / 2011)$

## 6．19．Conditional Sentences

Na＇vi conditional sentences are introduced with the conjunction txo if．The consequent is op－ tionally introduced by tsakrr then．

6．19．1．General．General conditions describe situations that are commonly or generally true， such as＂if it doesn＇t rain，plants and animals suffer．＂In Na＇vi，a general condition takes txo with the subjunctive in the condition and a non－future indicative in the consequent，txo fkol ke fyivel $\mathcal{F}$ uranit paywä，zene fko slivele if one does not seal a boat against water，one must swim． $\mathrm{NT}(19 / 6 / 2012)$

6．19．2．Future Conditional．In English future conditionals have the present tense in the condi－ tion and the future in the consequent，＂If you do this，I will do that．＂In Na＇vi，the condition takes the subjunctive and the consequent takes the future，pxan liv＞u txo ni＇aw oe ngari／Tsakrr $\mathcal{F}$ nga Na＇viru yomtìỳìng Only if I am worthy of you／Will you feed the People．
6．19．3．Hypothetical．No examples yet．
6．19．4．Contrafactual．Contrafactual questions use a separate set of conjunctions，zun if and zel then．The subjunctive is used in both clauses，with the following tense senses：

| Past | Present | Future |
| :--- | :--- | :--- |
| 〈iv〉， （irv〉 | $\langle\mathbf{i m v}\rangle$, ＜ilv〉 | 〈iyev〉 |

So, for present situations the bare subjunctive or the imperfective subjunctive is used, for past situations the past or perfective subjunctive is used, and finally for future situations the future subjunctive is used (see §3.6.3 for the infix forms).

$$
\begin{array}{ll}
\text { Zun oe yawne livu ngar, zel 'ivefu oe nitram nì'aw. } & \mathcal{F} \\
\quad \text { If you loved me, I would be so happy. } & \mathcal{F} \\
\text { Zun oe yawne limvu ngar, zel 'imvefu oe nitram nı̀'aw. } & \\
\quad \text { If you had loved me, I would have been so happy. } \\
\text { Zun tompa zìyevup trray, zel fo srìyevew. } & \mathcal{F} \\
\quad \text { If it rained tomorrow, they'd do a dance. } & \mathcal{F} \\
\begin{array}{l}
\text { Zun ayoe livu tsamsiyu, zel tsakem ke simvi. } \\
\text { If we were warriors, we wouldn't have done that. }
\end{array} &
\end{array}
$$

When the time of both clauses is the same, and only then, the verb in the zel clause may take the bare verb, without the subjunctive,

Zun oe yawne livu ngar, zel 'efu oe nitram nì'aw.
If you loved me, I would be so happy.
Zun oe yawne limvu ngar, zel 'efu oe nitram nì'aw.
If you had loved me, I would have been so happy.
Zun tompa zìyevup trray, zel fo srew.
If it rained tomorrow, they'd do a dance.

NT (4/30/2013)
6.19.5. Imperatives in Conditions. When imperatives are used as the consequent of a condition, imperative mood and syntax rules override the normal conditional patterns. For example, a future conditional with imperative consequent, txo tsive'a ayngal keyeyt, rutxe oeru piveng $\mathcal{F}$ if you see errors, please tell me.

### 6.20. Conjunctions

This section list conjunctions that have not been discussed elsewhere, but which still deserve mention in some way. I omit conjunctions that require no special comment.
6.20.1. Alu. The primary use of alu is for nouns in apposition, tskalepit oel tolìng oeyä tsmu- $\mathcal{F}$ kanur alu Ìstaw I gave the crossbow to my brother Istaw. Note that the noun after alu is in the subjective case. NT (16/7/2010)
6.20.1.1. Alu may also be used conversationally to mark a restatement, like "that is to say," or "in other words." Txoa livu, yawne lu oer Sorewn... alu... ke tsun oeng muntxa slivu Sorry, $\mathcal{F}$ but I love Sorewn... in other words, you and I cannot marry.
6.20.1.2. In discussions of grammar and language, alu can clarify the word or construction you're speaking about, tsalsungay tsalì'u alu zeykuso lu eyawr nonetheless, that word, namely $\mathcal{F}$ zeykuso, is correct, li'uri alu tskxe pamrel fyape? how do you spell the word 'tskxe'? $\mathcal{F}$
6.20.2. Ftxey. In addition to forming yes-no questions (§6.14.2), ftxey can be used to enumerate whether... or... options, silpey oe, ... frapo - ftxey sngä'iyu ftxey tsulfätu - tsìyevun fitsenge rivun 'uot lesar I hope ... everyone - whether beginner or expert - will be able to find something useful here.
6.20.3. Fu. The conjunction fu, or, may be used to combine either noun phrases or verb phrases. Ke zasyup li'Ona ne kxutu a mìfa fu a wrrpa The l'Ona will not perish to the enemy within or the $\mathcal{F}$ enemy without. But no examples of the verb phrase yet...
6.20.4. Ki. The conjunction ki, but rather, but instead, is paired with the negative adverb ke. Take care to distinguish this from slä but. Nga plltxe ke nìfyeyntu ki nìeveng you speak not like an $\mathcal{F}$ adult but a child. NT (16/7/2010)
6.20.5. Sì. The conjuction sì and is used for making lists and combining elements of the same idea. It is not used to join clauses, which is the job of ulte ( $(\mathbf{6} 6.20 .8$ ). Lu pilokur pxesìkan sì $\mathcal{F}$ pxefne'upxare the blog has three needs and three sorts of message, ma smukan sì smuke brothers $\mathcal{F}$ and sisters.
6.20.5.1. Though sì is most often found joining noun phrases, pronouns and adjectives, it can join verbs that are closely related, sänume sivi poru fte pivlltxe sì tivìran nìayoeng teach him $\mathcal{A}$ to speak and walk like us.
6.20.5.2. Sì can also be enclitic (\$2.1.5.3). In that situation it follows the word or phrase it is joining to the list, ta 'eylan karyusì ayngeyä, Pawl from your friend and teacher, Paul, tsakrr paye'un $\mathcal{F}$ sweya fya'ot a zamivunge oel ayngar aylì'ut horentisì li'fyayä leNa'vi and I will then decide the $\mathcal{F}$ best way to bring you the words and rules of Na'vi.
6.20.6. Tengkrr. The sense of tengkrr, while, the same time as requires it to be used with the imperfective, fitxon yom tengkrr teruvon on this night (we) eat while leaning. Wiki (14/3/2010)
6.20.7. Tsnì. The conjunction tsnì that introduces some kinds of report clause which cause the verb to take the subjunctive, ätxäle si tsnì livu oheru Uniltaron I respectfully request the Dream Hunt, silpey oe tsnì fitioeyktìng law livu ngaru set $I$ hope that this explanation is clear to you now. $\mathcal{F}$ The verb determines the subjunctive, or the construction?
6.20.7.1. Tsnì seems most often used when intransitive constructions are in the main clause.
6.20.8. Ulte. This conjunction connects clauses, oel ngati kameie, ma tsmu-kan, ulte ngaru seiyi irayo I see you, brother, and thank you. Do not confuse with sì (§6.20.5).

### 6.21. Direct Quotation

6.21.1. San... sìk. Na'vi does not have indirect quotes (He said that they were gone), but instead uses direct quotation, with the quoted words put between the particles san and sìk, as in slä nì'i'a $\mathcal{F}$ tsun oe pivlltxe san Zola'u nìprrte' ne pilok Na'viteri sìk! but now I can finally say "welcome to the blog Na'viteri." $n T$ (31/8/2011)
6.21.1.1. If the beginning or end of a quotation coincides with the beginning or end of an utterance, one or the other of the san... sìk pair can be dropped.

1. Poltxe Eytukan san oe kayä sìk, slä oel pot ke spaw.

Eytukan said he would go, but I don't believe him.
2. Poltxe Eytukan san oe kayä.

Eytukan said he would go.
In (2), since nothing is said after the quote, there is no need to close the quotation with sìk. wiki (21/1/2010)
6.21.2. Questions. Reported questions are also quoted directly, polawm po san srake Säli $\mathcal{F}$ holum sìk he asked whether Sally left, literally he asked, "did Sally leave?" wiki (24/3/2010)
6.21.2.1. With pawm, but not other verbs of speaking, san... sìk may be dropped, Polawm po, $\mathcal{F}$ Neytiri kä pesengne? he asked where Neytiri was going. NT (31/8/2011)
6.21.3. Transitivity. When a verb of speaking uses san... sìk it follows intransitive syntax, po poltxe san srane she said "yes." Ultxa (2/10/2010)
6.21.3.1. When the speaking verb has a direct object, it follows transitive syntax, ke poltxe pol $\mathcal{F}$ tsayli'ut she didn't say that, oel poru pasyawn tsat I will ask him that. $\mathrm{NT}(31 / 8 / 2011)$
6.21.4. Quotation Nominalization. In addition to the san... sìk pair, reported speech may be anchored to the nouns fmawn news, tì'eyng answer and fayli'u these words with the attributive a (see §3.4.3 for contractions). nt (31/8/2011)

| Verb | Quotation |
| :--- | :--- |
| plltxe say | san... sìk, fayli'u |
| stawm hear, peng tell | fmawn |
| pawm ask | san... sìk, tì'eyng, nothing |
| vin ask (for) | tì'eyng |

The quotations attached to these are still in the direct form,
Poltxe pol fayluta oe new kivä. She said she wanted to go.
Lit., "she said, 'I want to go."'
Ngal poleng oer fmawnta po tolerkup. You told me that he died.
Volin pol tì'eyngit a Neytiri kä pesengne.
He asked where Neytiri was going.
6.21.4.1. Other verbs introducing indirect questions may use ti'eyng nominalizations,

Ke omum oel teyngta fo kä pesengne. $\mathcal{F}$
I don't know where they're going.
Teynga lumpe fo holum ke lu law. $\mathcal{F}$
It's not clear why they left.

### 6.22. Particles

6.22.1. Ko. The sentence-final particle ko is used to solicit agreement of various sorts, including such senses as "let's," "don't you think?," "why don't you? why don't I?" Often heard in the film, makto ko let's ride.
6.22.2. Nang. This particle marks surprise, exclamation or encouragement. It is always sentencefinal and appears with adverbs of degree or approbation, such as nìngay, nìtxan, fitxan, etc. Txantsana sìpawm apxay fitxan lu ngaru nang! you have so many excellent questions! Ngari $\mathcal{F}$ tswintsyìp sevin nìtxan lu nang! what a pretty little queue you have!
6.22.3. Pak. This particle follows the word it goes with and marks disparagement, tsamsiyu pak! a warrior? yeah, right!.
6.22.4. Tut. This is a particle of continuation, so far only seen in pick-up questions in dialogs,

A: Ngaru lu fpom srak? How are you?
B: Oeru lu fpom. Ngaru tut? I'm well. You?
6.22.5. Tse. This particle is a marker of conversational hesitation, well. In English "well" relates to felicity conditions in divergent ways.

### 6.23. Other Notable Words

6.23.1. Sweylu. The syntax of this verb meaning "should" (from swey lu it's best) changes depending on whether the obligation refers to something that has not yet happened or if it refers to an event that has already taken place.
6.23.1.1. To refer to the future, txo with the subjunctive is used, sweylu txo nga kivä or nga $\mathcal{F}$ sweylu txo kivä for you should go. Note that the negative is in the txo clause, sweylu txo nga ke $\mathcal{F}$ kivä or nga sweylu txo ke kivä you shouldn't go.
6.23.1.2. For something that has already happened, use fwa or tsawa with a past or perfective indicative,

Tsenu: Spaw oe, fwa po kolä längu kxeyey.
I believe it was a mistake for him to go/have gone.
Kamun: Kehe, kehe! Sweylu fwa po kolä!
No, no! He should have gone!
Note that this refers to a past event that did happen and was the right thing to do, not an unfulfilled past action (which is another use of "should" in English). nt (5/4/2011)

## 7. Pragmatics and Discourse

In previous chapters I have discussed sounds, words and sentences in Na'vi. Much of that discussion took the form of rules. This chapter is devoted to language one step higher than even the sentence - conversation, narrative and the contexts in which language takes place, what linguists group together under the name pragmatics. Simple rules are harder to come by here, so the discussion necessarily takes a slightly different structure.

### 7.1. Constituent Order

7.1.1. Free Word Order. Na'vi has been described has having free word order. This is a little misleading since that phrase means something quite specific to linguists. Rather, Na'vi has free constituent order. ${ }^{1}$ Within constituents, word order may be quite constrained. You cannot stick part of one constituent into the middle of another. For example, in ayoel tarmaron tsawla yerikit we were hunting a large hexapede, I cannot break apart the direct object constituent tsawla yerikit and produce things like *tarmaron tsawla ayoel yerikit or *ayoel tsawla tarmaron yerikit.
7.1.1.1. In complex constituents it is possible for a genitive to be separated from its noun by a relative clause, ngeyä teri faytele a aysänumeri your instructions about these matters.
7.1.2. SOV, SVO, VSO. Many human languages can conveniently be categorized based on their default word order for subject, verb and direct object, usually shortened to just S, V and O. English is mostly an SVO language, Japanese is SOV. Free word order languages are not easily categorized into this system, though some do have tendencies worth noting. Looking at Frommer's Na'vi, and only counting sentences with all three constituents, we can say that the three main word orders are SVO, SOV and VSO, with a very slight preference for VSO. Other orders, such as OVS and OSV, are much rarer. ${ }^{2}$

[^21]7.1.3. Word Order Effects. Changes in word order can sometimes motivate changes in grammar.
7.1.3.1. If a sentence is ordered such that a modal and its controlled, transitive verb are contiguous, and the subject and direct object are contiguous, the modal and verb combination may be reanalyzed as a single transitive verb. For example, oe teylut new yivom I want to eat teylu has the expected, correct case use, with the subject of the modal in the subjective case, the direct object in the patientive case (§6.8.3). However, in a few word orders the subject may be put in the patientive case. In decreasing order of acceptability:

Oel teylut new yivom. widely acceptable ${ }^{3}$ Teylut oel new yivom. about $50 \%$ acceptable
New yivom teylut oel. about $30 \%$ acceptable
*New yivom oel teylut. completely unacceptable
7.1.4. Punch. Since free word order languages do not use word order for syntax, they are free to use it to indicate other things, such as style, emphasis and focus. The only thing Frommer has told us for certain about Na'vi word order is, "the end of the sentence is where the 'punch' comes." We can take this to mean that if you wish to emphasize a constituent, put it at the end of the clause. Notice in particular how Frommer translated this sentence:

Fkxilet a tsawfa poe ioi säpalmi ngolop Va'rul.
Va'ru is the one who created the necklace she was wearing.
7.1.5. The English Passive. Although generations of English teachers have convinced many people that the passive voice is weak and flimsy, it is in fact simply one tool English uses to organize information clearly for listeners. The passive lets us bring the patient of some action to prominence by moving it to the head of the sentence. If we say, "the nun was run over by a car" we're communicating to our listeners that the nun is the most salient part of the sentence, and that the exact vehicle is less a concern. ${ }^{4}$ Na'vi does not have a passive voice, but Frommer has suggested the word order OSV as one way to communicate the same effect (but see also fko, §6.3.3.2).

| Order | Blog | Ma Sempul | Total |  |
| :--- | :--- | :--- | :--- | :--- |
|  | SVO | 2 | 3 | 5 |
| SOV | 4 | 1 | 5 |  |
| VSO | 5 | 2 | 7 |  |
| OVS | 0 | 1 | 1 |  |
| OSV | 0 | 2 | 2 |  |

${ }^{3}$ According to Frommer's blog, "...in all but the most formal situations."
${ }^{4}$ In English, we can even omit the agent of a passive altogether, "the nun was run over."

### 7.2. Topic-Comment

The topic-comment construction is conceptually straightforward: the "topic" announces what the rest of the sentence relates to, and the comment makes some statement relating to that topic. While plenty of Human languages organize discourse heavily around topic-comment structure, English is not one of them. This can make it difficult to present decent translations of topiccomment structures that are both true to the meaning of the original but which also make clear the structure under discussion. In this section I'll often use prepositional phrases with "as for" and "concerning" for all examples, but this is a clunky work-around, used only for clarity.
7.2.1. Topical Case. In Na'vi only nouns, noun phrases and pronouns can be topics. These are marked with the topical case (-ri, -ìri). More complex topics can be created with nominalized clauses (§6.18.4).
7.2.2. Topical Role. The topic can be especially confusing for those unfamiliar with it because almost any syntactic role in a sentence may be pulled out of the sentence to be the topic. One idiomatic use is marking inalienable possession (§6.4.6.3). But you can use the topical where English would use a direct object:

Fayupxare layu aysngä'iyufpi, fte lì'fyari awngeyä fo tsìyevun nìftue nìltsansì nivume.

These messages will be for beginners so that they can learn our language easily and well.
But the relationship between the topic may not match a strict syntactic role, too:
Ma oeyä eylan, faysänumviri rutxe fi'ut tslivam: ...
My friends, concerning these lessons, please understand this: ...
Ayngeyä sìpawmìri kop fmayi fitsenge tivìng sì'eyngit.
Asfor your questions, (I) will also try to give answers (for them) here.
7.2.2.1. A topic may introduce a complex sentence, coming before even a leading conjunction,

Fori mawkrra fa renten ioi säpoli holum.
After they put on their goggles, they left.
7.2.2.2. Similarly, a topic may apply for multiple comments,

Poeri uniltìrantokxit tarmok a krr, lam stum nìayfo, slä lu 'a'awa tìketeng natkenong, tsyokxìri ke lu zekwä atsìng ki amrr.

As for her, when she inhabited an avatar, she was almost like them, but there were a few differences - for example, as for her hand there were not four fingers but five.
7.2.3. Using the Topical. Each human language has its own rules and tendencies about when the topical should be used. At this stage it is a little difficult to set rules for this, but a few tendencies can be drawn from what we have seen so far. First, so far Frommer has not used topiccomment constructions nearly as often as it is used in Chinese or Japanese (both topic-prominent languages, though each in their own way). Second, Frommer does not use the topical to introduce new matters for discussion, rather topics refer to current matters, or matters which are readily inferable from the conversation.

English uses the definite article, the, to mark information that has already been introduced into discourse, as well as information that can be assumed or deduced from the conversation. For example, if I say, "I wanted to see Avatar, but the line was too long," I can use the definite article with line not because we've been talking about lines, but because standing in line is something we're used to when seeing a popular film. In comments on a recent blog post ${ }^{5}$ Frommer says,

But if the message is indefinite, the topical case doesn't work as well, since topics are usually definite. So 'Upxareri ngaru pamrel soli trram can certainly mean I wrote you THE message yesterday. Can it also mean I wrote you A message yesterday? Since there are no articles per se in Na 'vi and nouns can be either definite or indefinite, I guess it could. But something about it rubs me the wrong way.

It seems best to avoid indefinite topicals for now.

### 7.3. Register

7.3.1. Formal Register. Na'vi has two main ways to mark ceremonial or formal speech: with special pronouns (§3.2.3) and with the verb affect infix 〈uy〉 (§3.6.4).
7.3.1.1. The formal pronouns may be used in close succession, Sìmetokit emzola'u ohel. Ätxäle si tsnì livu oheru Uniltaron I have passed the tests. I respectfully request the Dream Hunt.
7.3.1.2. Like the tense and aspect markers, it is not necessary to repeat the infix uy once a formality context has been established.
7.3.1.3. Solemnity or sincerity of a statement may be shown by using both pronoun and verb formality marking, faysulfätuä tìkangkem oheru meuia luyu nìngay the work of these experts is truly an honor for me.
7.3.2. Colloquial Register. The colloquial register presents itself mostly in simplified grammar or abbreviated expression.
7.3.2.1. Verbs of cognition may introduce a subclause without any conjunction.

I believe it was a mistake for him to have gone.
Spängaw oel futa fwa po kolä lu kxeyey.

[^22]7.3.2.2. In casual conversation the reflexive perfective of si-construction verbs, säpoli, is often pronounced spoli. NT (3/8/2011)
7.3.3. Clipped Register. In military settings certain features of grammar are modified or omitted.
7.3.3.1. In noun phrase utterances, participles may go with their noun without using the attributive affix -a- (§6.9.1), tikan tawnatep target lost (from the video game). wiki (21/5/2010)
7.3.3.2. Some pronoun genitives lose the final -̈̈, see $\S 3.2$.2.6. This may be used casually, in non-military situations, among friends or close acquaintances. wiki $(21 / 5 / 2010)$

### 7.3.4. Poetic Register.

7.3.4.1. In prose the topical will come first in its clause or immediately after a conjunction (§6.4.6.1). In verse, it may move deeper into the clause structure, pxan livu txo nìaw oe ngari $\mathcal{F}$ / tsakrr nga Na'viru yomtìyìng only if I am worthy of you will you feed the people.
7.3.4.2. In normal prose, when an adposition comes before the noun or noun phrase, any genitive must also come after the adposition, as in fa oeyä tsyokx or fa tsyokx oeyä with my hand. In poetry, the genitive may also come before the adposition, oeyä fa tsyokx. wiki (17/3/2012)

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## B. Changelog

Recent and notable updates:

- 1.0 (Aug 13 2010): Initial release.
- 1.08 (October 15 2010): Everything from the Language Workshop ${ }^{1}$
- 1.17 (November 3 2011): widened margins a bit and added a toc; reciprocal w/ fitsap; conjectural questions; kam, kay, nuä; more citations.
- 1.18 (March 4 2012): fitsap with intransitives; intransitive reflexives; a bunch of typo fixes from LN.org member Blue Elf; contrastive demonstratives; new info on sä-; correlative comparisons; clean up reduplication section, with help from nìul'ul example.
- 1.19 (April 7 2012): note temporal use of mì; added a section on poetic register; new adp. sko; sna- and tswo compound elements; clarify infix position in V-V compounds; krra not krr a; some detail on relative clauses and transitivity; rename "antipassive" section to "ambitransitivity," and add some more details from blog post; as always, some more citations.
-1.20 (Nov 29 2012): new meaning of ìä; akum/kuma with nìftxan and fitxan; general condition; clearer explanation of srake; note pronunciation of säpoli in casual conversation; "Affect and Evidence" section; say more about pronoun genitives.
-1.21 (June 2 2013): note modal syntax of sto; kxamlä example; clarification on diphthong declension; $\mathrm{ADJ}_{i}$-a Na - $\mathrm{ADJ}_{i}$ construction; -nay derivation; frafya; free choice indefinites with ketsran; contrafactuals, zun and zel.

[^23]
[^0]:    ${ }^{1}$ This work is licensed under the Creative Commons Attribution-ShareAlike License, version 3.0. To view a copy of this license, visit http://creativecommons.org/licenses/by-sa/3.0/.

[^1]:    ${ }^{1}$ July 2010
    ${ }^{2}$ In late June 2010, http: / / naviteri. org
    ${ }^{3} \mathrm{http}$ ://kcbluesman.websitetoolbox.com/post?id=4013403 requires login
    ${ }^{4}$ Wilhelm, Maria; Mathison, Dirk (2009). James Cameron's Avatar: A Confidential Report on the Biological and Social History of Pandora (An Activist Survival Guide), It Books (HarperCollins).
    ${ }^{5}$ http://www.suburbandestiny.com/?p=611
    ${ }^{6}$ http://www.ugo.com/movies/paul-frommer-interview

[^2]:    ${ }^{7}$ http://languagelog.ldc.upenn.edu/nll/?p=1977

[^3]:    ${ }^{1}$ The glottal stop is a consonant, so fi'iheyu from fi- + 'ìheyu.
    ${ }^{2}$ Though Na'vi does not technically have long vowels, the effect of long vowels occurs in this situation. Take care to pronounce both ä in a word such as zekwä-äo.

[^4]:    ${ }^{1}$ The case names Frommer uses reflect the terminology used by Bernard Comrie in his writings on ergative languages. In most linguistic writing Frommer's "subjective" is called the intransitive, the "agentive" is the ergative and the "patientive" the accusative.

[^5]:    ${ }^{2}$ Exception: 'u thing does not take the short plural, always occuring as ayu.

[^6]:    ${ }^{3}$ May be accented on either syllable.

[^7]:    ${ }^{4}$ Exception: the verb omum shifts the accent to the $\mathbf{o}$ for any inflected or derived forms, ivomum, nìawnonum. The verb inan follows the same pattern, olinan.

[^8]:    ${ }^{1}$ Apparently a result of counting not the fingers but the spaces between them.

[^9]:    ${ }^{1}$ The reduplication is partial, since consonants cannot be doubled.
    ${ }^{2}$ Many human languages are more strict. English compounds, for example, generally have the dominant element, or "head," last, as in blueberry, night-light, blackboard. On the other hand, Vietnamese uses head-initial order for native compounds and head-final order for compounds using the substantial Chinese vocabulary it has borrowed.

[^10]:    ${ }^{1}$ Since formal grammar isn't taught as much as it used to be, some English speakers have trouble identifying transitive vs. intransitive verbs. This is further complicated by English grammar, where very often it's not the verb that is transitive or intransitive, but the entire phrase. For example, "I move" is intransitive while "I move the car" is transitive, and only the presence of a direct object triggers the transitive interpretation of the verb. In Na'vi, too, it is usually best to think about transitivity as a clausal, rather than purely verbal, phenomenon.

    Here are two quick ways to test for transitivity in English. First, if the word immediately after the verb is a person or thing. So, in "I see the moon" the verb is transitive, but in "he complains constantly" the verb is not. The second test, in case you're uncertain about what's coming after the verb, is to see if you can turn the thing after the verb into a passive sensibly. So, "The moon is seen" is a well-formed passive, while "constantly is complained" is gibberish.

[^11]:    ${ }^{2}$ Nouns are described as in apposition when they occur immediately next to each other, with one describing or defining the other. In English, we usually set off the second noun phrase with commas, as in I told my best friend, Bob, that he should learn Na'vi, too.
    ${ }^{3}$ The bare apposition is Early Na'vi. Using alu may be better for future use.
    ${ }^{4}$ Frommer calls it a "dummy noun," but it can be reasonably thought of as a kind of pronoun, too.

[^12]:    ${ }^{5}$ Frommer's translation of this is I hear you like Txilte and vice versa.
    ${ }^{6}$ The agent of a passive verb is the person or thing you put with the preposition "by" in English, as in I was hit by a car.

[^13]:    ${ }^{7}$ Or pum.

[^14]:    ${ }^{8}$ Inalienable possession is possession of those things which are intrinsically yours, and which in theory cannot be given away or taken. In most languages that have this, blood relatives are the most likely to have special grammar for inalienable possession. Na'vi includes body parts, which is also quite common in Human languages.

[^15]:    ${ }^{9}$ Verb aspect can be difficult for speakers of English and most European languages, since these mix tense and aspect together in their verbs, making it difficult to distinguish the ideas. The dangerous confusion for beginners is this idea that verb aspect is about the completion or non-completion of an act. This is not the case. Rather, verb aspect is about how the speaker wishes to present a scene. For example,

    1. I went to the store. (perfective)
    2. While I was going to the store (imperfective), I saw the most amazing thing. (perfective)

    In both sentence (1) and (2) the act of going to the store is done and over, but I use the imperfective in sentence (2) because it's background to the next, perfective, statement.

    In complex sentences aspects might take on senses related to completion or non-completion with respect to other clauses in the full sentence, but these are special uses.

[^16]:    ${ }^{10}$ The controlled verb will keep its reflexive or causative infix.

[^17]:    ${ }^{11}$ Other candidates: sto refuse, flä succeed, hawl prepare.
    ${ }^{12}$ See also §6.8.4.

[^18]:    ${ }^{13}$ Students of Romance languages will find this familiar, je me lave vs. je lave ma voiture.

[^19]:    ${ }^{14}$ This roughly corresponds to English "must" in such statements as "it must have rained" or "he must be having trouble with his homework."

[^20]:    ${ }^{15}$ That is, phrases following the same pattern of grammar.
    ${ }^{16}$ The "head" of the relative clause is the noun to which the relative clause is attached. It has a syntactic role in both the main clause and the relative clause. For example, in the sentence I see the man who is running, the word "man" is the direct object of the main clause "I see the man" but is the subject of the relative clause "the man is running." This element common to both clauses is sometimes also called a "pivot."

[^21]:    ${ }^{1}$ A constituent is a slightly bigger building block than the word, but smaller than a sentence. A constituent is a group of words that function as a single grammatical unit. For example, in the sentence, "the big bad wolf ate Little Red Riding Hood's grandmother," the phrase "the big bad wolf" is one consituent acting as the subject, the verb "ate" stands on its own and "Little Red Riding Hood's grandmother" is the direct object constituent. Sometimes a constituent can be a single word ("he ate her" - each word a constituent) and sometimes they can be quite a lot more complex.
    ${ }^{2}$ This is based off two of the larger pieces of connected Na’vi text Frommer has produced, his first blog post and his message on the MaSempul.org web site.

[^22]:    ${ }^{5}$ A Na'vi Alphabet, August 20, 2010

[^23]:    ${ }^{1}$ http://wiki.learnnavi.org/index.php/Canon/2010/UltxaAyharyuä

