

Na'vi

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1 Na'vi/Print version



This is the print version¹ of Na'vi²

You won't see this message or any elements not part of the book's content when you print or preview³ this page.

Na'vi is a constructed language, created for the fictional Na'vi⁴, the humanoid inhabitants of the moon Pandora in the 2009 film *Avatar*⁵. It was designed by Paul Frommer⁶, a professor at the Marshall School of Business with a doctorate in linguistics⁷, to fit film director James Cameron⁸'s conception of what the language should sound like in the film, to be realistically learnable by the fictional human characters of the film, and to be pronounceable by the real actors, but to not closely resemble any human language. When the film was released in 2009, Na'vi had a growing vocabulary of about a thousand words, but understanding of its grammar was limited to Frommer.^[1] The goal of this book is to make what is known of Na'vi grammar available to fans who are attempting to learn the language.

1 http://en.wikibooks.org/wiki/Help:Print_versions
2 <http://en.wikibooks.org/wiki/Na%27vi>
3 [http://en.wikibooks.org//en.wikibooks.org/w/index.php?title=Na%27vi/Print_ version&action=purge&printable=yes](http://en.wikibooks.org//en.wikibooks.org/w/index.php?title=Na%27vi/Print_version&action=purge&printable=yes)
4 http://en.wikibooks.org//en.wikipedia.org/wiki/Fictional_universe_in_Avatar#Na.27vi
5 [http://en.wikibooks.org//en.wikipedia.org/wiki/Avatar_\(2009_film\)](http://en.wikibooks.org//en.wikipedia.org/wiki/Avatar_(2009_film))
6 http://en.wikibooks.org//en.wikipedia.org/wiki/Paul_Frommer
7 <http://en.wikibooks.org/wiki/Linguistics>
8 http://en.wikibooks.org//en.wikipedia.org/wiki/James_Cameron

2 Contents

- History¹
- Phonology²
- Nouns³
- Pronouns⁴
- Adpositions⁵
- Adjectives⁶
- Numbers⁷
- Questions⁸
- Verbs⁹
- Syntax¹⁰
- Discourse¹¹
- Lexicon¹²
- Texts¹³
- Appendix: Glossing conventions¹⁴
- Glossary of linguistic terms¹⁵
- Bibliography¹⁶

1	#History
2	#Phonology
3	#Nouns
4	#Pronouns
5	#Adpositions
6	#Adjectives
7	#Numbers
8	#Questions
9	#Verbs
10	#Syntax
11	#Discourse
12	#Lexicon
13	#Texts
14	#Appendix
15	#Glossary
16	#Bibliography

3 History

The basis of the Na'vi language is James Cameron's 2005 scriptment for *Avatar*.^[2] Cameron felt the need for a complete, consistent language for the alien characters of the film, so that their speech would feel realistic for the audience. His production company, Lightstorm Entertainment, contacted the linguistics department at the University of Southern California; Edward Finegan, a professor of linguistics at USC, thought that the project would appeal to Paul Frommer, with whom he had co-authored a linguistics textbook, and so forwarded Lightstorm's inquiry to him at the Marshall School of Business at USC. Frommer and Cameron met to discuss the director's vision for the language and its use in the film, and Cameron took Frommer aboard.

3.1 Cameron's Na'vi words

Cameron created some three dozen cultural words and personal, plant, and animal names in his scriptment. He had been to New Zealand a few years before, and says that he had the sound of the Māori language¹ in mind when he came up with the names;^[3] Frommer also noticed a "Polynesian flavor".^[4] Cameron's words are:^[note 1]

¹ http://en.wikibooks.org/en.wikipedia.org/wiki/M%C4%81ori_language

- Na'vi "the People"
- Omaticaya (*Omatikaya*) (clan name)
- Neytiri (heir to Mo'at)
- atokirina' "seed of the Great Tree"
- Tsu'téy (heir to Ey-tukan)
- tsahik (*tsáhik*) "shaman"
- Éytukan (clan leader)
- Eywa "Gaia"
- Mó'at (clan shaman)
- Neytiri te Ckaha Mo'at'ite, Neytiri Mo'at'ite "Neytiri of the Tskaha, daughter of Mo'at"^[note 2]
- teylu "grubs"
- Silwanin (sister of Neytiri)
- shahaylu (*tsaheylyu*) "neural bond"
- ikran "banshee"
- taronyu "hunter"
- seyri "lip"
- ontu "nose"
- mikyun "ear"
- nari "eye"
- ireiyo "thank you",^[note 3]
- Iknimaya (approx. "stairway to heaven")
- sa'atenuk (*sa'nok*) "mother"
- toruk "last shadow"
- Vitraya Ramunong ("well of souls") (*≈ ayvitrayä ramunong*)
- Toruk Macto (*toruk makto*) "rider of last shadow"
- uniltaron "dream hunt" (initiation)
- utraya mokri (*utral aymokriyä*) "tree of voices"
- Ninat (female name)
- Beyral (*Peyral*) (female name)
- olo'eyctan (*olo'eyktan*) "clan leader"
- Tsu'tey te Rongloa Ateyitan "Tsu'tey of the Rongloa, son of Ateyo"^[note 4]

3.2 Frommer's Na'vi language

The language project was subject to three significant constraints. First, Cameron wanted the language to sound alien but, unlike Klingon², to sound pleasant and appeal to the audience. Second, since the storyline included humans who had learned to speak the language, it had to be a language that humans could plausibly learn to speak. Last, the actors would have to be able to pronounce their Na'vi dialogue without unreasonable difficulty. Following the model of Cameron's existing vocabulary, Frommer developed three sets of meaningless test words and phrases that conveyed a sense of what the language might sound like: one using contrasting tones³, one using varying vowel length⁴, and one using ejective consonants⁵. Cameron didn't care for the first two, but liked the sound of the ejectives. This choice, along with names like *Ckaha* that Cameron had created, laid the foundation for the phonology⁶ that Frommer would use in developing the rest of the Na'vi language, its morphology⁷, syntax⁸, and an initial vocabulary; a task that took six months. He also translated into Na'vi four songs Cameron had written in English. The language in its final

² http://en.wikibooks.org/en.wikipedia.org/wiki/Klingon_language

³ #tone

⁴ #vowel_length

⁵ #ejective

⁶ #phonology

⁷ #morphology

⁸ #syntax

form contained several elements which were uncommon in human languages, such as verbal inflection⁹ using infixes¹⁰, but all elements are found in one human language or another, even if the combination is unique to Na'vi.

3.3 Filming

By the time casting for *Avatar* began, the language was sufficiently developed that actors were required to present Na'vi dialogue during their auditions. During shooting Frommer worked with the cast on their pronunciation and intonation¹¹, both for film dialogue and during the recording of James Horner's¹² *Avatar* score¹³. The bulk of the vocabulary was created by Frommer at this time, as needed for the evolving script. Cameron also coined a few additional words, such as *atán* "light" and *Eywa'éveng* "Pandora" (the Na'vi world; lit. "child of Eywa"). Actors would occasionally make mistakes in speaking Na'vi; in some cases, these were accepted as natural learner's errors made by their human characters; in others, they were incorporated into the language. The latter include *páte* "to arrive" from Zoe Saldaña, who played Neytiri; *latsí* "to keep up" from Laz Alonso, who played Tsu'tey; and *snumìna* "dim-witted" from CCH Pounder, who played Mo'at.

3.4 The game

Frommer expanded the vocabulary further in May 2009 when he worked on the *Avatar* video game¹⁴, which required words that had not been needed for the film. A few grammatical elements such as the intentional mood¹⁵ were added at this time, and so do not occur in the film. At the time of the film's release on December 18, 2009, the Na'vi vocabulary consisted of approximately 1000 words.

3.5 Public reception

The language acquired a public following, including an internet forum dedicated to learning it, within weeks of release.^[5] Frommer expressed hopes that the language would "have a life of its own".^[6] He accepted several new words suggested by members of the forum, such as *prrrull* "moss", and phrases coined for non-Na'vi concepts such as *eltu lefngap* "metallic brain" for "computer". In March 2010 he asked the forum for a list of needed vocabulary as the basis for doubling the size of the language.

9 #inflection

10 #infix

11 #intonation

12 http://en.wikibooks.org/en.wikipedia.org/wiki/James_Horner

13 http://en.wikibooks.org/en.wikipedia.org/wiki/Avatar:_Music_from_the_Motion_Picture

14 http://en.wikibooks.org/en.wikipedia.org/wiki/James_Cameron%27s_Avatar:_The_Game

15 #mood

4 Phonology

All of the sounds of Na'vi occur in human languages. However, there are some peculiarities in their combination. Na'vi lacks voiced stops¹ like [b d g] even though it has the voiced fricatives² [v z]; more prominent than such intentional gaps though are its ejective stops³ [p' t' k'], spelled *px tx kx*, which are novel to most English speakers. Na'vi also has the syllabic consonants⁴ *ll* and *rr* in addition to its seven simple vowels. Although the sounds were designed to be pronounceable by the human actors of the film, there are unusual consonant clusters⁵ which can be difficult, as in *fngap* [fŋap] "metal" and *tskxe* [tsk'ɛ] "rock". The fictional Na'vi language of Pandora is unwritten. However, the actual (constructed) language is written in the Latin alphabet. The movie scripts were written in a slightly anglicized orthography for the actors of *Avatar*, with *ng*, *ts* for Frommer's preferred *g*, *c*. Typical Na'vi words include *zìsìt* "year", *fpeio* "ceremonial challenge", *nì'awve* "first", *muiä* "be fair", *tireaioang* "spirit animal", *klpxiltu* "territory", *uniltirantokx* "avatar".^[7]

4.1 Vowels

Altogether, Na'vi has thirteen vowel-like sounds. These include seven simple vowels:

	front	back
high ⁶	<i>i</i> [i]	<i>u</i> [u] ~ [ʊ]
<i>ì</i> [ɪ]		
mid		<i>o</i> [o]
<i>e</i> [ɛ]		
low	<i>ä</i> [æ]	
<i>a</i> [a]		

as well as four diphthongs: *aw* [aʊ], *ew* [ɛʊ], *ay* [aɪ], *ey* [ɛɪ], and two syllabic consonants: *ll* [l̩] and *rr* [r̩], which mostly behave as vowels.^[note 5] The *u* varies between [u] and [ʊ]; it's the former in open syllables⁷ such as *tute* 'person' and *unil* 'dream'; it may be either in closed syllables such as *tsun* 'be able to' and *tsmuk* 'sibling'. Na'vi vowels may occur in

1 #voiced
2 #fricative
3 #ejective
4 #syllabic_consonant
5 #consonant_cluster
7 #syllable

sequences, as in the Polynesian languages⁸, Bantu⁹, and Japanese¹⁰.^[note 6] Each vowel counts as a syllable, so that *'eoioa* "ceremonious" has five syllables, /'ʔe.o.i.o.a/. The syllabic consonants may also occur in sequence with a simple vowel or diphthong, as in *hrrap* /'hr.ap/ "dangerous".

4.1.1 Comparison with the vowels of English

Most of the vowels occur in English. The *ä e ì i ey ay aw* are pronounced as General American¹¹ and RP¹² *bat, bet, bit, marine, obey, kayak*, and *cow*. The *u* varies between *put* and *flute*. The *a, o*, and *ew* sounds do not occur in these dialects. *A* is the central vowel of Australian¹³, Scottish¹⁴, and Welsh¹⁵ *father*, or of New York¹⁶ *lock*, and like a French¹⁷ or Spanish¹⁸ *a*. For RP and GA speakers, it's closest to the *a* of *father*; speakers in southern England and eastern New England who do not rhyme *father* with *bother* have the Na'vi *a* in *father*. *O* is the pure vowel of Scottish and Irish¹⁹ English *no* or Australian and South African²⁰ English *bought*, like a Spanish *o* or, even closer, French *eau* and Italian²¹ *come*.^[note 7] The *ew* is equivalent to the *eu* in Spanish *Europa* and the *el* in Brazilian²² *mel* "honey". An English approximation is "oh!" in exaggerations of the Queen's English by American comedians such as Carol Burnett²³. The syllabic consonants behave as vowels, as in *plltxe* [pl.t'ɛ] "to speak" and *prrte'* [pr.tɛʔ] "pleasure". The *rr* is strongly trilled²⁴, like Spanish *rr*, but forming a syllable of its own, like an imitation of a cat's purr. The *ll* is similar to the syllabic *le* of *bottle*, but is "light", as in *leap* or as in Irish English, not "dark"²⁵ as GA and RP syllabic *l* is.^[note 8] Which English word you associate with which vowel will depend on your dialect. For example, if you're Canadian, Na'vi *e* will be like the vowel in *bet*. However, if you're a New Zealander, it will be closer to your pronunciation of *bat*. If you're from London, the *u* varies between the vowels of *flute* and *put*. However, if you're Australian, *flute* will not be a good approximation, and it may be best to stick with *put*.

8 http://en.wikibooks.org/en.wikipedia.org/wiki/Polynesian_languages

9 http://en.wikibooks.org/en.wikipedia.org/wiki/Bantu_languages

10 <http://en.wikibooks.org/wiki/Japanese>

11 #GA

12 #RP

13 http://en.wikibooks.org/en.wikipedia.org/wiki/Australian_English

14 http://en.wikibooks.org/en.wikipedia.org/wiki/Scottish_English

15 http://en.wikibooks.org/en.wikipedia.org/wiki/Welsh_English

16 http://en.wikibooks.org/en.wikipedia.org/wiki/New_York_dialect

17 <http://en.wikibooks.org/wiki/French>

18 <http://en.wikibooks.org/wiki/Spanish>

19 http://en.wikibooks.org/en.wikipedia.org/wiki/Irish_English

20 http://en.wikibooks.org/en.wikipedia.org/wiki/South_African_English

21 <http://en.wikibooks.org/wiki/Italian>

22 http://en.wikibooks.org/wiki/Brazilian_Portuguese

23 http://en.wikibooks.org/en.wikipedia.org/wiki/Carol_Burnett

24 #trill

25 #dark_l

Na'vi vowels compared with the standard pronunciation of nine English-speaking countries. ^[note 9]								
Na'vi	Na'vi (IPA)	England, Canada, USA	Australia	New Zealand	South Africa	Ireland	Scotland	Wales
i	[i]	marine (in all major English dialects)						
u	[u] or [ʊ]	flute <i>or</i> put	put	put	put	flute <i>or</i> put	—	flute <i>or</i> put
ɪ	[ɪ]	bit	bit	—	kit	bit	bit	bit
o	[o]	—	law	law	law	no	no	no
e	[ɛ]	bet	bet	bat	—	bet	bet	bet
ä	[æ]	bat	bat	—	bat	?	~bat	~bat
a	[a]	~father	father	—	wise	~father	cat	cat
aw	[aw]	cow	~cow	~cow	—	?	cow	cow
ew	[ɛw]	— (like <i>eww!</i> , but starting with an [ɛ] sound)						
ay	[aj]	kayak	~kayak	~kayak	—	—	kayak	kayak
ey	[ɛj]	obey	~obey	~obey	obey	—	—	obey

Na'vi vowels compared with the standard pronunciation of nine English-speaking countries. <small>[note 9]</small>						
ll	[l]	— (syllabic as in <i>bottle</i> , but 'light' as in <i>leap</i> or as in Irish English)				
rr	[r]	— (syllabic as in US <i>church</i> , but trilled as in Welsh English)				

A tilde (~) indicates that the word is only an approximation of the Na'vi pronunciation. A dash (—) indicates that there is no good approximation in this dialect. A question mark (?) indicates that available sources did not supply a good approximation, but one might exist.

4.2 Stress

Na'vi does not have vowel length²⁶ or tone²⁷, but it does have contrastive stress²⁸: *tute* [ˈtutɛ] "person", *tute* [tuˈtɛ] "female person", or *täftxuyu* [tæ.ˈftˈu.ju] "weaver", *täftxuyu* [tæ.ftˈu.ˈju] weaves (formal), like the difference between English *billow* and *below*. Although stress may move with derivation²⁹, as here, it is not affected by inflection³⁰ (case on nouns, tense on verbs, etc). So, for example, the verb *lu* "to be" has stress on its only vowel, the *u*, and no matter what else happens to it, the stress stays on that vowel: *lamu* [laˈmu] "was", *lamängu* [lamæˈŋu] "was (negative speaker attitude)", etc. Although case affects the pronouns that are based on *oe* "I", most affixes do not affect the stress of other nouns or pronouns. For example, from *nga* "you", there is *niaynga* [ni.ai.ˈŋa] "like you all"; from *li'u* [li.ˈʔu] "word" there is *ayli'ufa* [ai.ˈli.ʔu.fa] "with the words".

4.3 Consonants

There are twenty consonants. There are two Latin transcriptions: one that more closely approaches the ideal of one letter per phoneme³¹, with the letters *c* and *g* for [ts] and [ŋ] (the values they have in much of Eastern Europe and Polynesia, respectively), and a modified transcription used for the actors, with the digraphs *ts* and *ng* used for those sounds. In both transcriptions, the ejective consonants³² are written with digraphs in *x*, a convention that may be unique to Na'vi, though Nambikwara³³ uses *tx*, *kx* for similar if not identical sounds.

26 #vowel_length
 27 #tone
 28 #stress
 29 #derivation
 30 #inflection
 31 #phoneme
 32 #ejective
 33 http://en.wikibooks.org/en.wikipedia.org/wiki/Nambikwara_language

Ejective ³⁹	Labial ³⁴	Alveolar ³⁵	Palatal ³⁶	Velar ³⁷	Glottal ³⁸
Plosive ⁴⁰	<i>px</i> [pʰ] <i>p</i> [p]	<i>tx</i> [tʰ] <i>t</i> [t] <i>ts</i> (c) [ts]		<i>kx</i> [kʰ] <i>k</i> [k]	ʔ [ʔ] <i>h</i> [h]
Affricate ⁴¹	<i>f</i> [f]	<i>s</i> [s] <i>z</i> [z]		<i>ng</i> (g) [ŋ] <i>w</i> [w]	
Fricative ⁴²	<i>v</i> [v] <i>m</i> [m]	<i>n</i> [n] <i>r</i> [r] <i>l</i> [l]	<i>y</i> [j]		
Nasal ⁴³					
Liquid / glide ⁴⁴					

-
- 34 #labial
 - 35 #alveolar
 - 36 #palatal
 - 37 #velar
 - 38 #glottal
 - 39 #ejective
 - 40 #plosive
 - 41 #affricate
 - 42 #fricative
 - 43 #nasal
 - 44 #liquid

The combination of ejective plosives and voiced fricatives, but no voiced or aspirated plosives, is unusual in human language, but does occur in the Kamchatkan language Itelmen⁴⁵. In syllable-final and word-final position, *p*, *t*, *k* have no audible release⁴⁶, [p̚ t̚ k̚], as in Malay⁴⁷, Cantonese⁴⁸, and other languages of Southeast Asia. Thus a *t* followed by an *s* in the next syllable is not equivalent to *ts*, and so remains *ts* rather than *c* in Frommer's preferred orthography: *fizìsitsre* [fr.'zi.sit̚ .sre] (not *fizìsìcre [fr.'zi.sr̩.tsre]) "before this year".^[note 10]

4.3.1 Comparison with the consonants of English

The plosives *p t k* and the affricate *ts* are tenuis⁴⁹, as in Spanish or French. Most English dialects have aspirated⁵⁰ consonants in words like *pie*, *tie*, *kite*, which if imitated would result in a strong foreign accent. Na'vi *p*, *t*, *k* are instead like the sounds in English *spy*, *sty*, *sky*.^[note 11] Stops without audible release, such as Na'vi final *p*, *t*, *k*, occur in English in words such as *aptly*, *atleast*, *actor*. However, some English dialects also have such sounds in word-final position, as Na'vi does, especially in casual speech.^[note 12] The glottal stop⁵¹, written with an apostrophe, is the catch in the middle of the word *uh-oh!*; some people also use it for the apostrophe in *Hawai'i*. Cockney English⁵² is well known for using a glottal stop for *t* in words like *bottle*. This is the effect that the name *Na'vi* should have: two syllables, not three. What makes the glottal stop difficult is that it may begin words: *'eveng* is "a child", *eveng* "children". In languages which have this distinction, such as Arabic⁵³, a glottal stop in initial position is much more forceful than it is in *uh-oh*, and may sound like a tiny cough. The *r* is flapped⁵⁴, as in much of Irish and Scottish English, as well as in Malay and in Spanish *pero* "but". It sounds a bit like the *tt* or *dd* in the American pronunciation of the words *latter*, *ladder*. Na'vi *ng* and *ts* (*g* and *c*) are common in English in words such as *cats* and *sing* (not *finger!*). However, in Na'vi they may occur at the beginning of a word, as in *tsa* "that" and *nga* "you".^[note 13] The ejectives are not inherently difficult, but few English speakers have a model to imitate. You may want to review the Wikipedia article⁵⁵.^[note 14]

4.4 Syllable structure

Na'vi syllables may be as simple as a single vowel, or as complex as *skxawng* "moron" or *fngap* "metal", both double-consonant–vowel–consonant (CCVC). The fricatives and the affricate, *f v ts s z h*, are restricted to the onset of a syllable; the other consonants may

45 http://en.wikibooks.org/en.wikipedia.org/wiki/Itelmen_language

46 #unreleased

47 http://en.wikibooks.org/en.wikipedia.org/wiki/Malay_language

48 <http://en.wikibooks.org/en.wikipedia.org/wiki/Cantonese>

49 #tenuis_consonant

50 #aspirated

51 #glottal_stop

52 http://en.wikibooks.org/en.wikipedia.org/wiki/Cockney_English

53 http://en.wikibooks.org/en.wikipedia.org/wiki/Arabic_language

54 #flap

55 http://en.wikibooks.org/en.wikipedia.org/wiki/ejective_consonant

occur at either the beginning or at the end.^[note 15] However, in addition to appearing before vowels, *f t s* may form consonant clusters⁵⁶ with any of the unrestricted consonants (the stops⁵⁷ and liquids/glides⁵⁸) apart from *ʔ*, making for 39 possible clusters at the beginning of a syllable, as in *ayskxawng* /aj.'sk'auŋ/ "morons" or *lefngap* /lɛ.'fŋap/ "metallic". Other sequences occur across syllable boundaries, such as *na'vi* /'naʔ.vi/ "person", *ikran* /'ik.ran/ "banshee", and *atxkxe* /at'.k'ɛ/ "land".^[note 16] When a consonant that could form either an onset on a coda appears between vowels, it is normally the onset of the following syllable. *Atokirina'*, for example, is *a-to-ki-ri-na'*. However, there are exceptions: mimetic⁵⁹ *kxangangang* "boom!" (crack of thunder) is *kxang-ang-ang*, as the second and third syllables are echoes of the first. In careful enunciation, syllable divisions sometimes follow the morphology⁶⁰ of a word. For example, *ayoe* "we" is formed from the plural prefix *ay-* and the pronoun *oe* "I"; and in careful speech it may be syllabified *ay-o-e* [aj'oe]. However, in rapid speech the default consonant-vowel pattern takes over and it is pronounced *a-yo-e* [a'joɛ], and in most words the default C⁶¹ V⁶².CV pattern takes over even in careful speech: Verbal VC infixes are apparently always divided between syllables, as V.C, for example in *so-li* and *sā-pi*, from *si* "do". There are a few root roots with a distinction between a diphthong followed by a vowel (VC.V) and a simple vowel followed by *y* or *w* plus the vowel (V.CV); for instance, *tswayon* "fly" contains the diphthong *ay*, *tsway-on*, whereas *layon* "black" and *irayo* "thank you" do not: *la-yon*, *i-ra-yo*. The distinction is perhaps not very robust, but it is noted in the dictionary⁶³. Not all vowels are created equal. Whereas the seven simple vowels and four diphthongs occur in any type of syllable, the syllabic consonants only occur in consonant-vowel syllables, as in *vrrtep* (vrr-tep) "demon". Nouns ending in a diphthong or a syllabic consonant also take the case endings⁶⁴ used after consonants, not those used after the simple vowels. In addition, two identical simple vowels may not occur in a row. That is, *me-e-vi and *a-a-pxa are not found; they reduce to *mevi* and *apxa*.

4.5 Sound change

The most notable form of sound change in Na'vi is a kind called lenition⁶⁵. This is a weakening that the plosive consonants undergo after certain prefixes⁶⁶ and prepositions⁶⁷, as in Irish⁶⁸. In this environment, the ejective plosives *px tx kx* become the corresponding plain plosives *p t k*; the plain plosives and affricate *p t ts k* become the corresponding fricatives *f s h*; and the glottal stop *ʔ* disappears entirely. This is basically equivalent to dropping down a row in the consonant chart above.

56 #consonant_cluster
 57 #stop
 58 #liquid
 59 #mimesis
 60 #morphology
 61 #consonant
 62 #consonant
 63 #dictionary
 64 #Case
 65 #lenition
 66 #prefix
 67 #preposition
 68 <http://en.wikibooks.org/wiki/Irish>

Consonant lenition	
Underlying	Weakened
<i>px</i>	<i>p</i>
<i>tx</i>	<i>t</i>
<i>kx</i>	<i>k</i>
<i>p</i>	<i>f</i>
<i>ts</i>	<i>s</i>
<i>t</i>	<i>s</i>
<i>k</i>	<i>h</i>
,	—

Because of lenition, the singular and plural forms of nouns can appear rather different. For example, the plural form of *po* "s/he" is *ayfo* "they", with the *p* weakening into an *f* after the plural prefix *ay-*, and after the preposition *ro* "at", *tsa* "that" takes the form *sa*. Lenition is also salient in interrogative⁶⁹ words, as they each come in two forms based on the interrogative element *pe*: *tupe*, *pesu* "who?", *kempe*, *pehem* "do what?", *krrpe*, *pehrr* "when?", *tsengpe*, *peseng* "where?".^[note 17] The nasal consonants *m*, *n*, *ng* tend to assimilate⁷⁰ to a following stop⁷¹, so that *tìng mikyun* "to listen" (lit. "give an ear") is generally pronounced as if it were *tìm mikyun*, *tìng nari* "to look" (lit. "give an eye") as if it were *tìn nari*, *zenke* "mustn't" as *zengke*, and *lunpe* "why?" as *lumpe*. Vowel sequences consist of dissimilar vowels only. Na'vi does not have vowel length⁷², and this means that derived sequences of similar vowels contract into one. For example, when feminine *-e* is added to *túte* "person", the result contracts to *tuté* "female person", with the only difference being stress placement. Similarly, the dual number⁷³ *me-* of *eveng* "children" contracts to *meveng* "two children". On the other hand, when two *i*'s come together in the approbative⁷⁴ inflection of *si* "to do" in *ngaru irayo s<ei>i oe* "I thank you"⁷⁵

)⁷⁶", a *y* is inserted to separate them: *Ngáru iráyo seiyí oe*. Double consonants may occur at syllable boundaries; however, while the plural (*ay-*) of *yerik* "hexapede" is transcribed *ayyerik* for ease of reading, in pronunciation it is little different from **ayerik*.

With the informal pronoun *oe* "I" and its derivatives, the *o* reduces to a /w/ sound whenever the stress shifts to the *e*: *Óel* /'o.ɛl/ "I",^[note 18] but *oéru* /'wɛru/ "to me" and *ayoéng* /aj'wɛŋ/ "all of us".^[note 19] There are other instances of sound change to avoid sequences that don't occur in Na'vi, though the details are not known. For example, the syllabic consonants cannot follow their non-syllabic homologs: though /lɾ/ occurs in *lrrtok* "a smile", **ull* and **rrr* are not found. Thus the perfective infix affects the root of *plltxe* "to say, to speak": *plltxe* becomes *poltxe* "spoke". The vowels of short grammatical words⁷⁷

69 #wh-question
70 #assimilation
71 #stop
72 #vowel_length
73 #dual
74 #approbative
75 #approbative
76 #approbative
77 #grammatical_word

are sometimes elided before a lexical word⁷⁸ or phrase that begins with a vowel, at least in song, for instance *sì* "and" in 's-ayzìsità kato' "and the rhythm of the years" and *lu* "to be" in 'a l-ayngakip' "who is among you"; the same may happen of unstressed vowels of grammatical prefixes, as the *i* of *nì-'aw* "only" in 'han'aw txo' "so (*ha*) only (*nì'aw*) if (*txo*)". These examples fit the meter of a song, but similar things occur in fluent speech, for example 'rà'si!' for *rä'ä si!* "don't do it!" and 'nayweng' for *nàyoeng* "like us".

4.6 Spoken samples

There are three online recordings of Frommer speaking extended amounts of Na'vi, which give a good indication of its pronunciation. They can be found in the texts⁷⁹. After reading this Wikibook, you should be able to understand all three.

⁷⁸ #lexical_word

⁷⁹ #Spoken_texts

5 Nouns

Na'vi nouns are inflected according to the following template: NUMBER¹⁺ STEM²⁻(GENDER³)- CASE⁴ Gender is optional and uncommon, even for pronouns 'he' and 'she', but number and case are required. There are no articles⁵ like "a" or "the", though there is a suffix for "some" that appears before the case ending.

5.1 Number

In Na'vi, plurals are only used if there are at least *four* objects.

Number	Prefix	
1	Singular ⁶	(none)
2	Dual ⁷	<i>me+</i>
3	Trial ⁸	<i>pre+</i>
4+	" Plural ⁹ "	<i>ay+</i> or <i>+</i> (<i>ay-</i> plus lenition, or just lenition)

Nouns show greater number¹⁰ distinctions than human languages do: besides singular¹¹ and plural¹², they not only have special dual¹³ forms for two of an item (eyes, hands, lovers, etc.), which are not uncommon in human language (English has a remnant in "both"), but also trial¹⁴ forms for three of an item, which in human languages are only found with pronouns. A plural is more than dual or trial; that is, four or more. For example, in "the wings of a banshee", *tsyal* "wing" is plural (*ikranä syal*), because banshees (*ikran*) have four wings, but in "the wings of a bird", *tsyal* cannot be plural *syal*, but only dual *mesyal*, because birds have only two wings. When number is unknown, for example when asking

1 #number
2 #stem
3 #gender
4 #case
5 #article
6 #singular
7 #dual
8 #trial
9 #plural
10 #number
11 #singular
12 #plural
13 #dual
14 #trial

how many of something there are, the plural is used, as in English: Q: "How many children do you have?" A: "One." When quantity is specified with a number, then the singular form is used. (See Numbers¹⁵.) And when number is established, it need not be repeated: *Menga lu skxawng* "you two are idiots"; *aynga lu karyu* "y'all are teachers" (plural *haryu*). The prefixes trigger lenition, which is indicated in the table above by the "+" signs rather than the hyphens that usually mark prefix boundaries. Trials are not common, but occur for example in *pxehilvan* "the three rivers" (*kilvan* "river"). In nouns which undergo lenition, the plural prefix may be dropped, so the plural of *tokx* "body" may be either *aysokx* (the "full plural") or *sokx* (the "short plural"). In the dual and trial, lenition of a glottal stop may result in a sequence of two e's, in which case they contract: *'eveng* "a child", *pxeveng* "three children".

5.2 Gender

Na'vi does not have grammatical gender¹⁶. However, where desired, masculine individuals may be distinguished by the suffix *-an*, and feminine ones by *-e* :

Masculine	<i>-an</i>
Feminine	<i>-e</i>

For example, *tsmuk* or *tsmúktu* is "sibling", *tsmukán* "brother", and *tsmuké* "sister". However, gender is not generally used unless there is some reason for distinguishing it.

5.3 'Some'

The suffix *-o*, which has the role of "some" in the pronouns *tuteo* "somebody" and *'uo* "something", may be used with other nouns too, as with *ketuwong* "alien" in,

Lu ketuwongoni'aw.

"It's just some alien."

15 #Numbers

16 #gender

5.4 Case

Nouns are declined for case¹⁷ depending on their function in the sentence: subject (intr¹⁸ and erg¹⁹), object (acc²⁰), recipient (dat²¹), possessor (gen²²), and topic (top²³), like the English pronoun "I, me, my, mine". The case markers each have two to three forms (allomorphs²⁴), the distribution of which is somewhat variable:

Case forms	full	reduced
Intransitive ²⁵ (intr ²⁶)	(unmarked)	
Ergative ²⁷ (erg ²⁸)	<i>-il</i>	<i>-l</i>
Accusative ²⁹ (acc ³⁰)	<i>-it</i>	<i>-ti</i> <i>-t</i>
Genitive ³¹ (gen ³²)	<i>-ä, -yä</i>	
Dative ³³ (dat ³⁴)	<i>-ur</i>	<i>-ru</i> <i>-r</i>
Topical ³⁵ (top ³⁶)	<i>-iri</i>	<i>-ri</i>

Apart from the genitive, which does not follow the pattern of the other cases, the case suffixes have full (vowel-initial) forms after orthographic consonants (consonants, syllabic consonants, and diphthongs), and reduced (consonant-initial) forms after simple vowels. In addition, the accusative and dative cases have short forms in which their final vowel is dropped; this would appear to depend on the rhythm of speech and perhaps formality rather than anything grammatical. Nouns are not double-marked for case. Attributives³⁷ do not agree, in case or number, with the nouns they modify, and this holds for possessive pronouns³⁸ and genitive nouns as much as it does for adjectives. So while "my spear" in

-
- 17 #case
 - 18 #intr
 - 19 #erg
 - 20 #acc
 - 21 #dat
 - 22 #gen
 - 23 #topic
 - 24 #allomorph
 - 25 #intransitive
 - 26 #intr
 - 27 #ergative
 - 28 #erg
 - 29 #accusative
 - 30 #acc
 - 31 #genitive
 - 32 #gen
 - 33 #dative
 - 34 #dat
 - 35 #topic
 - 36 #topic
 - 37 #attributive
 - 38 #pronouns

citation form is *oeyätukru*, in the ergative case it is *oeyätukrul*, with only *tukru* "spear" marked for the ergative.

5.4.1 Subject and object

Core³⁹ nouns are declined in a tripartite⁴⁰ case system, which is quite rare among human languages, though found in Nez Perce⁴¹. In a tripartite system, there are distinct forms for the object of a clause, as in "Neytiri hunted a hexapede"; the agent of a transitive⁴² clause which has such an object, as in "Neytiri hunted a hexapede"; and the argument⁴³ ("subject") of an intransitive clause, which does not have an object, as in "Neytiri is sleeping".^[8] An object is marked with the accusative⁴⁴ suffix *-it/-t/-ti*, and an agent with the ergative⁴⁵ suffix *-il/-l*, while an intransitive argument⁴⁶ has no case suffix. That is, the ergative and accusative tend to occur as a pair, whereas a single argument has no case inflection. Translating our English examples:

"Neytiri is sleeping" *Neytiri herahaw*

<i>Neytiri</i>	<i>h<er>ahaw</i>
(name).	sleep< ipfv ⁴⁸ >
intr ⁴⁷	[note 20]

"Neytiri hunted a hexapede" *Neytirilyerikittolaron*

<i>Neytiri-l</i>	<i>yerik-it</i>	<i>taron</i>
(name)-	hexapede-	hunt<
erg ⁴⁹	acc ⁵⁰	pfv ⁵¹ >

The use of such case forms leaves the word order⁵² of Na'vi largely free, for example, agent-object-verb (AOV) or object-verb-agent (OVA):

Oeyä tukrultxe'lanittivakuk"Let my spear strike the heart"

<i>Oeyä</i>	<i>tukru-l</i>	<i>txe'lan-</i>	<i>t<iv>akuk</i>
my	spear-	heart-	strike<
	erg ⁵³	acc ⁵⁴	sjv ⁵⁵ >
	(A)	(O)	(V)

Katottäftxu oel"I weave the rhythm"

<i>kato-t</i>	<i>täftxu</i>	<i>oe-l</i>
rhythm-	weave	I- erg ⁵⁷
acc ⁵⁶ (O)	(V)	(A)

When evident from context, the subject need not be stated: "*Oe trram na'ring-mì tarmok. Tsole'a syetute-t.*"Yesterday I was in the forest, saw a Trapper".

39 #argument
 40 #tripartite
 41 http://en.wikibooks.org/en.wikipedia.org/wiki/Nez_Perce_language
 42 #transitive
 43 #argument
 44 #accusative
 45 #ergative
 46 #intransitive
 52 #word_order

Oe
 I. intr.⁵⁸ *trr-am*
 day- past⁵⁹ *na'ring-mi*
 forest-in
 tarmok
 was
 tsole'a
 saw
 syetute-t
 Trapper- acc⁶⁰

58 #intr
 59 #past
 60 #acc

5.4.2 The genitive

A genitive case⁶¹ in *-ä/-yä* can be seen in *oeyä tukru* "my spear" above. English expresses the genitive with either *'s* (the pianist's hands) or with *of* (the hands of the clock). Unlike the other cases, the genitive shows the relationship of nouns to each other, rather than between a noun and a verb. Although sometimes called a "possessive", the genitive has a broader range of use than actual possession:

<i>Na'viyä luyu hapxi</i>			<i>kifkeyit Eywa'evengä</i>	
"You are part of the People"			"the world of Pandora"	
<i>na'vi-yä</i>	<i>l<uy>u</i>	<i>hapxi</i>	<i>kifkey-it</i>	<i>eywa-'eveng+yä</i>
people- gen ⁶²	be< form ⁶³ >	part	world- acc ⁶⁴	Gaia-child- gen ⁶⁵

Multiple genitives may occur, one after the other, as in

holpxay ayzekwäyä feyä

"the number of their fingers"

<i>hol-pxay</i>	<i>ay-zekwä-yä</i>	<i>ff[e]-yä</i>
few-many	pl ⁶⁶ -finger- gen ⁶⁷	they- gen ⁶⁸

and

Ayli'ufa awngeyä 'eylanä a'ewan

"In the words of our young friend"

<i>ay-li'-'u-fa</i>	<i>awng[e]-yä</i>	<i>'eylan-ä</i>	<i>a-'ewan</i>
pl ⁶⁹ -say-thing-per	we- gen ⁷⁰	friend- gen ⁷¹	attr ⁷² -young

Note that they do not occur in any particular order.

61 #genitive

66 #pl

67 #gen

68 #gen

69 #pl

70 #gen

71 #gen

72 #attr

5.4.3 The dative

The dative⁷³ is prototypically used for giving something **to** someone, marking a recipient, or doing something **for** someone, marking a benefactor: *Nga Na'viruyomtiying* "You will feed the people"

<i>nga</i>	<i>na'vi-ru</i>	<i>yom+t<iy>ing</i>
you. intr ⁷⁴ [note 21]	the.people- dat ⁷⁵	will.feed (to.eat+give< imm ⁷⁶ >)

More generally, it is used for the direction or end point of an action, as in *poruting-nari* "look **at** him". However, it is also used in situations, so-called dative constructions⁷⁷, where an English speaker might not expect it:

Oerutxoā livu. "Forgive me"

<i>oe-ru</i>	<i>txoa</i>	<i>l<iv>u</i>
I- dat ⁷⁸	forgiveness	be< sjv ⁷⁹ >

(Literally, "May there be forgiveness for me"
= "May I have forgiveness")

Ngarulu fpom srak? "Hello, how are you?"

<i>nga-ru</i>	<i>lu</i>	<i>fpom</i>	<i>srak?</i>
You- dat ⁸⁰	be	well.being	ques ⁸¹ TION

(Literally, "Is there well-being for you?"
= "Do you have well-being?")

Such constructions contain verbs such as *lu* "be" that involve little overt action, including more concrete concepts of having. When one *has* something *for* someone, a double dative is used:

Lu oeruayli'u frapor.

"I have something (= words) to say, to everyone."

<i>lu</i>	<i>oe-ru</i>	<i>ay-li'u</i>	<i>fra-po-r</i>
be	I- dat ⁸²	pl ⁸³ -word	every-one- dat ⁸⁴

Note that word order and context help clarify who has something to say to whom: *lu oeru* "I have" is the default word order for a possessive dative, in contrast to the recipient dative

73 #dative
74 #intr
75 #dat
76 #imm
77 #dative_construction
82 #dat
83 #pl
84 #dat

frapor. (See Word order⁸⁵ in the chapter on Syntax⁸⁶.) The dative is also used with objects/recipients of 'do' + noun constructions and causative verbs, which will be covered in the chapter on Verbs⁸⁷. That is, whereas in English one assists someone (accusative), in Na'vi *fko si srung tuteoru* one does assistance to someone (dative).

5.4.4 The topic and the topical case

A topic⁸⁸ indicates the background context of a clause, and the topic marker *-ri/-iri* is somewhat equivalent to (though much more common than) English "as for", "concerning", "regarding", etc. Topics are not grammatically required, but are used to structure the presentation of what one has to say. The topic marker preempts the case of the noun: that is, when a noun is made topical, it takes the *-ri/-iri* suffix rather than the case suffix one would expect from its grammatical role. For example, in,

Oeriontu teya längu

<i>Oe-ri</i>	<i>ontu</i>	<i>teya</i>	<i>l<äng>u</i>
I- top ⁸⁹	nose	full	be< pej ⁹⁰ >

"My nose is full [of his distasteful smell]",

since the topic is "I", the subject "nose" is associated with "me": That is, it's understood to be "my nose" without stating that explicitly.^[note 22] Note that "nose" itself is unmarked for case, as it's the subject of the intransitive verb "to be". Such a topic-comment⁹¹ structure sets up the background of the sentence, what the speaker intends to speak about with the rest. (Thus the term 'topic-comment': what the speaker intends to talk about, followed by what s/he has to say about it.) This construction takes some of the pressure off of the case system, with the result that not too many nouns need to be marked with the same case:

Sipawmirioe ngaru seiya irayo

<i>sì-pawm-iri</i>	<i>oe</i>	<i>nga-ru</i>	<i>s<ei>i</i>	<i>irayo</i>
pl+ nomz ⁹² -ask- top ⁹³	I	you- dat ⁹⁴	do< approb ⁹⁵ >	thank

"Thank you for the questions" (*lit.* "As for the questions, I thank you")

85 #Word_order
 86 #Syntax
 87 #Verbs
 88 #topic
 89 #topic
 90 #pej
 91 #topic
 92 #nomz
 93 #topic
 94 #dat
 95 #approb

As with other cases, *-iri* is restricted to the noun at the base of the noun phrase⁹⁶, regardless of the word order of that phrase:

Lì'fyari leNa'vi 'Rrtamì, vay set 'almong a fra'u zera'u ta ngrrrpongu.

96 #noun_phrase

<i>li'fyá-ìri</i>	language- top ⁹⁷	<i>le-na'vi</i>	'Rrta-mì	<i>vay</i>	<i>set</i>	' <i>alm>ong</i>	<i>a</i>	<i>fra-'u</i>	<i>z<er>a'u</i>	<i>ta</i>	<i>ngrrr- pongu</i>
	people	adj ⁹⁸ -	Earth-in	until	now	unfold< past ⁹⁹ . pfv ¹⁰⁰ >	sbrd ¹⁰¹	every- thing	come< ipfv ¹⁰² >	from	root- group

97 #topic
98 #adj
99 #past
100 #pfv
101 #sbrd
102 #ipfv

"Everything that has gone on with Na'vi until now on Earth has come from a grassroots movement."

(*lit.* "As for the Na'vi language on Earth, everything that until now has unfolded comes from a base group")

Here the word *li'fya* "language" is modified by *leNa'vi* "Na'vi" and *'Rrtami* "on Earth", yet the suffix appears on that first word.^[note 23] This *-iri* can also behave as a more typical case, linking the noun phrase to the verb, rather than setting up a topic as an introduction for the rest of clause to comment on:

Pxan livu txo ni'aw oe ngari

nga-ri
you- top¹⁰⁵

ae
I

ni-'aw
adv¹⁰⁴-one

txo
if

l<iw>u
be< sjv¹⁰³>

paan
worthy

103 #sjv
104 #adv
105 #topic

"Only if I am worthy of you" (*lit.* "Only if I be worthy in regard to you")

Ngaru seiyi oe irayo ngeyã pxesipawmìri

nga-ru *s<ei>i* *oe* *irayo* *ng[e]/-yä* *pre+ti-pawm-iri*
 you- dat¹⁰⁶ do< approb¹⁰⁷> I thank you- gen¹⁰⁸ tri¹⁰⁹ + nomz¹¹⁰ -question- top¹¹¹

106 #dat
 107 #approb
 108 #gen
 109 #tri
 110 #nomz
 111 #topic

"I thank you for (in regards to) your three questions"

5.4.5 The absolutive

The absolutive form of a noun is an unmarked case form. In Na'vi, both the intransitive subject and the citation (dictionary) form are unmarked. However, the absolutive is also used after a preposition, as after *ne* "to" in *kä ne kelku* (also *kä kelkune*) "go home";^[note 24] and it occurs when a noun stands in parallel (in apposition) to another, regardless of the case of the other noun. For example, in *'eylanur awngeyä Peyral* "to our friend Beyral", *'eylan* "friend" but not *Peyral* takes the dative case; compare *awngeyä Peyralur* "to our Beyral".

5.4.6 Case allomorphs

Except for the genitive, which is discussed below, and the "long" accusative, which is invariable, all case suffixes have a full form which begins with a vowel, and a reduced form in which that vowel is dropped. The full form is found after consonants and syllabic consonants, and the reduced form is found after simple vowels. Diphthongs take the shortest form that is syllabic; in the case of the dative, that means either the full or reduced form, *-ur* or *-ru*.^[note 25]

Case form distribution (apart from gen ¹¹²)						
	erg ¹¹³	short acc ¹¹⁴	long acc ¹¹⁵	dat ¹¹⁶	top ¹¹⁷	
Case forms						
full form after consonant	hetuwongil	yerikit txe'lanit	ketuwongti Kelutralti	'eylanur	skxawngiri kemiri	
after syllabic consonant	trril 'ewllil	trrit 'ewllit	trrti 'ewlliti	trrur 'ewllur	trriri 'ewlliri	
syllabic form after diphthong	tingayil	kifkeyit	payti	payur payru	payri	
reduced form after pure vowel	tukrul Neytiril	ayli'ut katot 'upxaret	swiräti	na'viru	li'fyari fyawintxuri	

113 #erg

114 #acc

115 #acc

116 #dat

117 #topic

The difference between the long and short forms of the accusative would appear to be one of register¹¹⁸ rather than of grammar. For instance, a quick response to the greeting *oel ngatikameie* "I See you", with the long form of the accusative, is *kame ngat*,^[9] with the short form.^[note 26] However, it may also provide for euphony, for example in *ayli'uthorentisi* "the words and rules (ACC)", from *li'u* "word" and *koren* "rule". The dative also has a long and short form, though apparently only on pronouns. For instance "to me" may be either *oeru* or *oer*, and "to them" *foru* or *for*. There are a few exceptions to this pattern. *Kemri* "rule. top¹¹⁹" is given as an alternate of *kemiri* in a proverb, where meter may play a role, just as *si* "and" and *lu* "be" may be reduced to *s* and *l* before a vowel in song, without that being a general rule of the grammar. A colloquial contraction of *tsa'u* "that", *tsaw*, has case forms acc¹²⁰ *tsawt* and top¹²¹ *tsawri*, but these may just be retentions of the forms of the full words, *tsa'ut* and *tsa'uri*, where they are regular. The forms of the genitive pattern somewhat differently, and here it is an initial *consonant* of the suffix which drops. Nouns which end in a simple front¹²² or central vowel, *i*, *ì*, *e*, *ä*, *a*, take the suffix *-yä*, as in

- *aymokriyä* of voices, *tsawkeyä* of the sun, *ayzekwäyä* of fingers, *tompayä* of the rain,

but the suffix *-ä* appears after consonants, syllabic consonants, diphthongs, and the back/rounded vowels *u*, *o*:

- *ayzisitä* of the years, *txonä* of the night, *trrä* of the day, *kifkeyä* of the world, *fili'uä* of this word.

Changes in the noun stem¹²³ occur in some nouns; in addition, the final *a* or *o* vowel of pronouns changes to *e* when genitive *-yä* is added:

- *ngeyä* your (from *nga*), *feyä* their (from *fo*).

5.5 The vocative

Na'vi does not have a case suffix for nouns used to address someone, a function called the vocative¹²⁴, but instead use a particle¹²⁵ *ma*, which occurs before the name or term of address: *Ma Neytiri*, *herahaw srak?* "Neytiri, are you sleeping?", rather like archaic or poetic "O!" in English. It occurs before the noun phrase, and is never suffixed: *Ma oeyä 'eylan!* "My friend!"; *ma smukan si smuke* "O brothers and sisters", *ftu oe neto rikx, ma skxawng!* "Get away from me, moron!". *Ma* is obligatory with people and *Eywa* (God), but optional with animals. For example, it is used ceremonially with animals one has killed in a hunt,^[note 27] but may be omitted when talking to one's *pa'li* (horse). It may thus indicate a degree of politeness vs. intimacy. With collective nouns, such *Na'vi* "the People" and *tsampongu* "war party", in which the singular form is used for multiple people, a collective

118 #register
 119 #topic
 120 #acc
 121 #topic
 122 #front_vowel
 123 #stem
 124 #vocative
 125 #particle

vocative suffix *-ya* is found as an alternative for *ma*: *Mawey, na'viya, mawey!* "Calm, people, calm!"; *frapoya!* "(hey) everybody!".

5.6 Diminutives

It is not clear if Na'vi has a regular system of diminutives¹²⁶, but there are some compounds with *hì'i* "little, small" that have this function. For example, *tanhì* "star" appears to derive from *atan* "light" and *hì'i*, and *hì'ang* "bug" appears to be similarly derived from *ioang* "animal". The words for "son" and "daughter", *'itan* and *'ite*, are based on a different root: they are the masculine and feminine derivations of *'it* "a little, a bit". Affectionate terms would appear to not be related. "Mommy" and "daddy" are *sa'nu* and *sempu*, short for *sa'nok* "mother" and *sempul* "father".

126 #diminutive

6 Pronouns

Na'vi pronouns include *personal pronouns*, used for persons and other animate nouns, and *demonstrative pronouns*, used for inanimate nouns and to distinguish "this" from "that".

6.1 Personal pronouns

Na'vi personal pronouns encode *clusivity*¹. That is, there are different words for "we" depending on whether the speaker is including the person spoken to or not. There are also special forms for "the two of us" (*oeng* "you & me", *moe* "s/he & me"), "the three of us", etc. Pronouns do not inflect for gender; although it's possible to distinguish "he" from "she", the distinction is optional.

1 `#clusivity`

Pronouns	sing. ²	dual ³	trial ⁴	plural ⁵ (4+)	generic
Exclusive ⁶	óe	móe	pxóe	ayóe	fko
Inclusive ⁷	—	oéng	pxóeng	ayoéng, awngá	
2nd person ⁸	ngá	mengá	pxengá	ayngá	
3rd person ⁹ animate ¹⁰	pó	mefó	pxefó	ayfó, fò	
3rd person ¹¹ inanimate ¹²	(use demonstratives)				

-
- 2 #singular
 - 3 #dual
 - 4 #trial
 - 5 #plural
 - 6 #clusivity
 - 7 #clusivity
 - 8 #person
 - 9 #person
 - 10 #animate
 - 11 #person
 - 12 #inanimate

Fo is the "short plural" form of *po*; *ayfo* is the explicit plural. *Ayoeng* (pronounced *aywéng*) and *awnga* are both contractions of the historical plural **ay-oe-nga*. "One" as a pronoun is *fko*:

<i>Zéne</i>	<i>fko</i>	<i>n<iv>úme</i>	<i>nì-txán</i>
must	one	learn< sjv ¹³ >	adv ¹⁴ -much

"There is much to learn" (*lit.* "One must learn much")

Po can mean he, she, or it, but only if animate; for inanimate and abstract nouns, a demonstrative pronoun such as *tša* (or *tša'u*, *tsaw*) "that" must be used. "He" and "she" can optionally be differentiated as *poan* and *poe*; this may be done to distinguish two referents in the same context, as normally both are translated simply as *po*. It is not known if the other pronouns can also do this. The formal forms of "I" and "you" are *óhe* and *ngengá*, which likewise take the *me-* and *ay-* prefixes. The inclusive forms are derived from these with *sì* "and":

Formal	sing.	dual	trial	plural
Exclusive	óhe	móhe	pxóhe	ayóhe
Inclusive	—	óhe ngengásì	móhe ngengásì, óhe mengengásì	(various ^[note 28] combinations)
2nd person	ngengá	mengengá	pxengengá	ayngengá

Generally when formal pronouns are used, the verb¹⁵ is inflected for formality as well.

6.2 Demonstrative pronouns

For demonstrative¹⁶ pronouns and their compounds, such as *fì'u* "this", *tša'u* ~ *tsaw* "that", and *sa'u* ~ *saw* "those", see the chapter on questions¹⁷. Of the simple pronouns, **tša* can be used as an independent pronoun "that, it (inanimate)", but it does not occur in the intransitive case, and may be restricted in the grammatical roles it plays. Note that when demonstrative pronouns modify a noun, they may do so directly as "pre-nouns", in which case they indicate relative location: *tsatute* "that person", *fitute* "this person".

13 #sjv
 14 #adv
 15 #Infixes_pre-I
 16 #demonstrative
 17 #Questions

6.3 Case

Pronouns inflect for case¹⁸ as nouns do:

Oél ngáti kámeie

Oe-ìl
I- erg¹⁹

nga-ti
you- acc²⁰

kam<ei>e
See< approb²¹>

"I (am glad to) See you" (a greeting)^[note 29]

There are some changes in pronouns when case endings are added. The final vowel becomes *e* before the genitive *-yã*: *oéyã* "my", *ayoéyã* "our", *ngéyã* "thy", *ayngéyã* "your", *péyã* "her/his", *féyã* "their", *awngeyã* "our" (inclusive plural), *ohengeyã* "our" (formal inclusive dual; note that the *sì* is lost with inflection), etc. The exclusive pronouns based on *oe* are generally contracted to /'wɛ/ when inflected for case, though they may remain /'o.ɛ/ with careful enunciation. The inclusive pronouns based on *oeng* revert to their historical form **oe-nga* when inflected, so that the ergative is *oéngal*, not ^x*oengìl*. Although not all forms are attested, it appears that otherwise the inflections are the same as those on nouns.

18 #case

19 #erg

20 #acc

21 #approb

	intr ²²	erg ²³	short acc ²⁴	long acc ²⁵	gen ²⁶	short dat ²⁷	long dat ²⁸	top ²⁹
Exclusive	oe	oel	?	oeti	oeyä	oer	oeru	oeri
Inclusive	oeng	oengal	oengat	oengati	oengeyä? ^[note 30]	awhgar	awngaru	?
2nd person	nga	ngal	ngat	ngati	ngeyä	ngar	ngaru	ngari
3rd anim- mate	po	pol	pot	?	peyä	por	poru	fi'uri
3rd inani- mate	tsaw ^[note 31]	tsal	tsat	tsati	tseyä	tsar	tsaru	tsari

22 #intr

23 #erg

24 #acc

25 #acc

26 #gen

27 #dat

28 #dat

29 #topic

Of the two forms of the inclusive plural, *ayoeng* and *awnga*, the latter is shorter when inflected: ergative *ayoengal* /aᵛ.ˈwɛ.ŋal/ vs. *awngal* /aᵛ.ˈŋal/. Pronouns also take adpositions, as in *oehu*, *ngahu*, *pohu* "with me, you, him/her", *tsane* "to it". *Tsaw* has the irregular form *sat* after the (non-leniting) preposition *ftu*: *ftu sat* "(away) from that".

7 Adpositions

Besides case, the role of a noun in a clause may be indicated with an adposition¹. This may occur either as a preposition² before the noun, as in English, or as an suffix³ at the end of the noun, as in Chinese⁴, Japanese⁵, and Korean⁶, a greater degree of freedom than human languages allow. For example, "with you" may be either *hu nga* or *ngahu*. When used as suffixes, they are much like the numerous cases found in Hungarian⁷ and Finnish⁸.

7.1 Attested adpositions

Adpositions may be stressed when they occur as prepositions, but not as suffixes, where they have no effect on the stress of the noun.

Adp.	Len.	English	Example	Translation
<i>äo</i>	—	"under"	<i>äoUtral</i> <i>Aymokriyã</i>	under the Tree of Voices
<i>eo</i>	—	"before (place), in front of"	<i>eoayoeng</i>	before us
<i>io</i>	—	"above"		
<i>uo</i>	—	"behind"		
<i>fa</i>	—	"with", "by means of" (instrument)	<i>ayli'ufa'eylanã</i>	in the words of a friend
<i>fkip</i>	—	"up among"		
<i>fpi</i>	+	"for the sake of"		
<i>ftu</i>	—	"from" (direction)	Note irregular <i>ftu sat</i> "from that"	
<i>hu</i>	—	"with, together with" (accompaniment)	<i>Eywa ngahu</i> <i>huEywa</i>	Gaia (be) with you with Eywa
<i>ilã</i>	+	"via, along, by"		

1 #adp
2 #preposition
3 #suffix
4 <http://en.wikibooks.org/wiki/Chinese>
5 <http://en.wikibooks.org/wiki/Japanese>
6 <http://en.wikibooks.org/wiki/Korean>
7 <http://en.wikibooks.org/wiki/Hungarian>
8 <http://en.wikibooks.org/wiki/Finnish>

Adp.	Len.	English	Example	Translation
<i>ka</i>	–	"across"		
<i>kip</i>	–	"among"	<i>ayngakip</i>	among you
<i>kxamlä</i>	–	"through (the middle of)"		(<i>kxam</i> "the middle" <i>ilä</i> "via") ^[note 32]
<i>lok</i>	–	"close to"	<i>lok'awkx,</i> <i>'awkxlok</i>	near the cliff (also a verb, "to approach")
<i>luke</i>	–	"without"	<i>lu lukekxu</i>	be without harm
<i>maw</i>	–	"after" (in time)	<i>mawhikrr</i>	in a moment
<i>mì</i>	+	"in", "on"	<i>mìte'lan</i> <i>'Rrtamì</i> <i>fìtrrmì</i>	in the heart(s) on Earth on this day
<i>mikam</i>	–	"between"		(<i>mì</i> "in" <i>kxam</i> "the middle")
<i>mungwrr</i>	–	"except"	<i>éyktanmungwrr</i>	except the leader
<i>na</i>	–	"like", "as"	<i>naayskxe mì</i> <i>te'lan</i> <i>rel nauniltiranyu</i>	like stones in my heart (simile) a picture as an avatar (form)
<i>ne</i>	–	"to" (direction)	<i>terìran ayoe</i> <i>ayngane</i> <i>tsenge a tsanepo</i> <i>karmä</i>	we are walking your way the place to which she was going
<i>nemfa</i>	–	"into"		(from <i>ne mì+fa</i>)
<i>pxaw</i>	–	"around"		
<i>pxel</i>	–	"like", "such as"	<i>sute pxelnga</i>	people such as you
<i>ro</i>	+	"at" (location)	<i>rofäpa, rohelku</i>	at the top, at home
<i>sì</i>	–	"and" (phrases) ^[note 33]	<i>trrä sitxonä,</i> <i>ayli'ut horentisi</i>	of day and night, words and rules
<i>sìn</i>	–	"on", "onto" (?)		
<i>sre</i>	+	"before" (time)	<i>srese'a</i>	prophesize
<i>ta</i>	–	"from" (generic)	<i>aungia taEywa</i>	a sign from Eywa
<i>takip</i>	–	"from among"		
<i>tafkip</i>	–	"from up among"		
<i>teri</i>	–	"about, concerning"	<i>terili'fya leNa'vi</i> <i>plltxe</i>	talk about the Na'vi language
<i>vay</i>	–	"up to" (space or time)	<i>vayset</i> <i>vaykrr</i>	up to now, still, (with a negative verb) not yet until

Adp.	Len.	English	Example	Translation
<i>wä</i>	+	"against"		(as in "fight against")

Various locative and temporal adverbs are derived from these: *ne'im* "toward the back", *nefä* "upwards", *nekl* "downwards"; *ta'em* "from above";^[note 34] *mawkrr* "after, afterwards"; *srekrr* "before, beforehand". Note also *kä neto* "go away (toward the distance)" and *tok miso* "be there in the distance", both perhaps based on the particle *to* "than". *Srese'a* "to prophesize" is literally "to foresee", *sre+tse'a*. There are words besides traditional adpositions that have the same dual preposition/suffix use, such as *sì* "and" and *pe+*, *-pe* "which?", though the latter case is a dual prefix/suffix (*peu*, *'upe* "what?"—see Questions⁹), never a preposition. Though a prefix, the adverbial *nì-* "-ly" functions as a generic adposition: *nìfya'o alaw* "in a clear manner". It may be used where no specific adposition is correct; *mì fya'o*, for example, would mean literally "in the way, on the path", not "in the manner".

7.2 Lenition and the ambiguity of short plurals

When used as prepositions, certain of these trigger lenition¹⁰, marked "+" in the table above. One of the leniting prepositions is *mì* "in", as in *mì sokx* "in the body", from *tokx* "the body". This may cause some ambiguity with short plurals: *mì sokx* could also be short for *mì aysokx* "in the bodies". When *mì* is used as a suffix, however, the noun is not lenited.

9 #Questions

10 #lenition

	noun	preposition + noun	noun-suffix			
Singular	<i>tokx</i>	"body"	<i>mì sokx</i>	"in the body"	<i>tokxmi</i>	"in the body"
Short plural	<i>sokx</i>	"bodies"	"in the bod- ies"	<i>sokxmi</i>	"in the bodies"	
Long plural	<i>aysokx</i>	<i>mì aysokx</i>	<i>aysokxmi</i>			

8 Adjectives

Na'vi adjectives¹ may modify a noun directly, in an attributive² role, such as "the blue cat", or indirectly, linked to the noun with a verb like "to be" in a predicative³ role, as in "the cat is blue" or "the cat became blue".

8.1 Predicative adjectives

Predicative adjectives are not marked in any special way, except that they occur with a copula⁴ like the verbs *lu* "be" or *slu* "become":

kilvan
river

ngim
long

lu
be

"The river is long"

Other word orders also work: *kilvan lu ngim*, *lu ngim kilvan*, *ngim lu kilvan*, etc. This bare form is also used with the verb *'efu* "feel" for internal states, such as

Oe 'efu som "I am hot"

Oe 'efu nitram "I am happy"

8.2 Attributive adjectives

In their attributive role, adjectives may occur either before or after the noun they modify. Such adjectives are marked by a particle *a*, which only occurs when an adjective modifies a noun directly in this way, and which appears on the side closest to the noun,^[note 35] another feature that is unusual by the standards of human languages. For example, "a long river" can be expressed either as *ngima kilvan*,

ngim-a
long- attr⁵

kilvan
river

1 #adjective
2 #attributive
3 #predicate
4 #copula
5 #attr

or as *kilvan angim*,

<i>kilvan</i>	<i>a-ngim</i>
river	attr ⁶ -long

When more than one adjective modifies a noun, they may appear on either side, as in,

<i>oeyä</i>	<i>ean-a</i>	<i>txim</i>	<i>a-tsawl</i>
my	blue- attr ⁷	butt	attr ⁸ -big

"my big blue butt"^[10]

The *a* affix is optional for derived *le-* adjectives after a noun: *trr lefpom* or optionally *trr alefpom* "a peaceful day", but *lefpomatrr*. When an adjective begins or ends with the vowel *a*, the attributive *a* blends into it. So, for example, *snúmìna* "stupid" only changes when it follows a noun: *snumìna*, *asnumìna*, and *apxá* "great" does not change at all: *skxawng apxa*, *apxa skxawng* "a big moron". Adjectives are not inflected. That is, they do not agree with the noun they modify, as in

Sì 'ekong te'lanä le-Na'vi

"and the beat of the hearts of the People",

<i>sì</i>	<i>'ekong</i>	<i>ay+txe'lan+yä</i>	<i>le-na'vi</i>
and	beat	pl ⁹ +beat+ gen ¹⁰	adj ¹¹ -people

where only the noun *te'lan* "hearts", not the adjective *le-Na'vi* "Na'vi", takes the genitive suffix *-yä* or the plural prefix *ay+*. Similarly, in the topic *lì'fyarìleNa'vi* "as for the Na'vi language", only *lì'fya* "language" takes the topical case *-ìri*. Adjectives may remain as such when their noun is made into an adverb:

fya'o letrrtrr "an everyday manner"

nìfya'o letrrtrr "in an everyday manner"

This is common with the noun *fya'o*, and helps clarify the multiple readings of a simple adverb. For example, the adverb *nìlaw*, from from the adjective *law* "clear, understandable", is ambiguous; *Po poltxe nìlaw* may mean either "She spoke clearly" or "Clearly, she spoke."

6 #attr
 7 #attr
 8 #attr
 9 #pl
 10 #gen
 11 #adj

However, *po poltʃe nifya'o alaw* (she spoke in a clear manner) can only mean "She spoke clearly."

8.3 Comparison

Comparative constructions are marked by the grammatical particle¹² *to*; where this occurs, there is no need for the word *nì'ul* "more". Thus *siltsan* means "good", but when it appears with *to* it should be translated "better":

"S/he is better than me"

Po to oe lu siltsan or

Lu po siltsan to oe or

Siltsan lu po oeto or

Oeto po lu siltsan or

Oeto siltsan lu po etc.

Nì'ul "more" is used when there is no direct comparison with *to*, as in *txur nì'ul* "(be) stronger!". The superlative ("-est") is conveyed with the compound particle *frato* "than everything":

Tsole'a syeptutet atsawl frato mì sirey.

12 #grammatical_particle

ti-rey
nomz¹⁶ -live

mi+
in+

fra-to
every-*than*

a-tsawl
attr¹⁵ -big

syep-tute-it
trap-person- acc¹⁴

tse'a
see< pfv¹³>

13 #pfv
14 #acc
15 #attr
16 #nomz

"(and we) saw the biggest Trapper I've ever seen" (*lit.* 'than all in (my) life')

Two adjectives are inherently superlative, *swey* "best" and *'e'al* "worst".

8.4 Other attributives

Adjectives are not the only things which can modify a noun. Numbers, for example, also require the attributive *a* in such situations:

'awatipawmìri "regarding one (particular) question" (*'aw* "one").

Nouns may also modify nouns; for this they do not take *a* but rather the genitive case *-yä*. The genitive is used for possession, but also for more general association. The syntactically free (discourse-determined) word order of adjectives in a noun phrase holds for these other attributives as well:

<i>tompayäkato</i>	"the rain's rhythm"	(<i>tompa</i> 'rain', <i>kato</i> 'rhythm')
<i>Utral Aymokriyä</i>	"the Tree of Voices"	(<i>utral</i> 'a tree', <i>mokri</i> 'a voice')

However, in the case of a prepositional phrase¹⁷, a genitive suffix on the noun may be ambiguous. The attributive *a* can clarify, though it is written as a separate word, as it governs a multi-word phrase rather than a single numeral or adjective:

Ngeyä teri faytele a aysänumeri ngar irayo seiya ayoe nìwotx

17 #phrase

<i>nga+yä</i>	<i>teri</i>	<i>fi- ay+tzele</i>	a	<i>ay- sänume- iri</i>	<i>nga-ru</i>	<i>inayo</i>	<i>s<ei>i</i>	<i>ay-oe</i>	<i>ni-wota</i>
you- gen ¹⁸	about	this- pl ¹⁹ +matter	sbrd ²⁰	pl ²¹ - instructiondat ²³ top ²²	you- instructiondat ²³	thank	do< ap- prob ²⁴ >	pl ²⁵ -I	adv ²⁶ - all

18 #gen
19 #pl
20 #sbrd
21 #pl
22 #topic
23 #dat
24 #approb
25 #pl
26 #adv

"We all thank you for your teachings concerning these matters"

Here *teri faytele* "concerning these matters" is an attributive, marked by *a*, of *ngeyä aysänu-meri* "your teachings", for effectively "your about-these-matters teachings". Relative clauses²⁷ are clauses that modify a noun; the same attributive *a* is used:

Ftxey 'awpot aNa'viru yomtiyìng

"Choose one (*'awpo*) **who** will feed the People (*Na'vi*)"

That is, "choose a will-feed-the-people individual". See the section on relative clauses²⁸ in the chapter on syntax²⁹ for further explanation.

27 #relative_clause
28 #Relative_clauses
29 #Syntax

9 Numbers

As the Na'vi have four digits per hand, they have a base-eight¹ ("octal") number system. Until recently, they only counted up to sixteen, their number of fingers and toes, any number greater than that being simply *pxay* "many".^[11] There are numerals² for the numbers one through eight. Above that, one counts *eight-one* for nine, *eight-two* for ten, etc., until sixteen, which is *two eights*. At sixty-four (eight eights), a new numeral comes in, *zam*, which is the octal equivalent of decimal 'hundred'.

9.1 Cardinal numbers

1 #octal
2 #numeral

'hundreds'	decimal	octal
<i>zam</i>	64	100 <i>zam</i>
<i>mézam</i>	128	200 <i>two zam</i>
<i>prézam</i>	192	300 <i>three zam</i>
<i>tsizam</i>	256	400 <i>four zam</i>
<i>mírrzam</i>	320	500 <i>five zam</i>
<i>púzam</i>	384	600 <i>six zam</i>
<i>kízam</i>	448	700 <i>seven zam</i>
<i>vózam</i>	512	1000 <i>eight zam</i>

vol	évol	prévol	tsivol	mírrvol	púvol	kívol	zam
eight	sixteen	twenty-four	thirty-two	forty	forty-eight	fifty-six	sixty-four
10 <i>eight</i>	20 <i>two eights</i>	30 <i>three eights</i>	40 <i>four eights</i>	50 <i>five eights</i>	60 <i>six eights</i>	70 <i>seven eights</i>	100 <i>zam</i>

voláw	vomún	vopéy	vosíng	vomírr	vofú	vo-hín	mévol
nine	ten	eleven	twelve	thirteen	fourteen	fifteen	sixteen
11 <i>eight-one</i>	12 <i>eight-two</i>	13 <i>eight-three</i>	14 <i>eight-four</i>	15 <i>eight-five</i>	16 <i>eight-six</i>	17 <i>eight-seven</i>	20 <i>two eights</i>

units	decimal	octal
<i>'aw</i>	one	1
<i>múne</i>	two	2
<i>prey</i>	three	3
<i>tsíng</i>	four	4
<i>mírr</i>	five	5
<i>púkap</i>	six	6
<i>kínā</i>	seven	7
<i>vol</i>	eight	10

The second series above continues with *mevoláw* 'two-eights-one', *mevomún* 'two-eights-two', etc.; the units are similarly suffixed to the other multiples of eight. Thus all numbers up to at least *kivohín* "sixty-three" (octal 77) are single words. Numbers between *zam* and *mezam* (one-hundred twenty-eight, octal 200) are not attested. The 'hundreds' continue with *pxezam* etc. Higher orders are *vozam* 512 (octal 1000: thus *mevozam* for octal 2000 etc.) and *zazam* 4096 (octal 10,000: thus *mezazam* for octal 20,000 etc.). When a number modifies a noun, the singular form is used for the noun. In addition, as an attributive, the number itself requires the attributive affix *a*:

zìsìt amrr "five years",

'awa tìpawmìri "regarding one (particular) question",

munea 'eveng "two children"

(compare *meveng* "children" when there are two of them).

9.2 Ordinal numbers

Ordinal numbers take the (unstressed) suffix *-ve*. However, the forms are somewhat irregular; they are generally based on the short/combining forms of the numerals, but "third" and "eighth" are based on the long/final forms.

units	decimal	octal	'teens'	decimal	octal
<i>'áwve</i>	first	1st	<i>voláwve</i>	ninth	11th
<i>múve</i>	second	2nd	<i>vomúve</i>	tenth	12th
<i>pxéyve</i>	third	3rd	<i>vopéyve</i>	eleventh	13th
<i>tsìve</i>	fourth	4th	<i>vosìve</i>	twelfth	14th
<i>mírve</i>	fifth	5th	<i>vomírve</i>	thirteenth	15th
<i>púve</i>	sixth	6th	<i>vofúve</i>	fourteenth	16th
<i>kíve</i>	seventh	7th	<i>vohíve</i>	fifteenth	17th
<i>vólve</i>	eighth	10th	<i>mévolve</i>	sixteenth	20th

The series continues with *mevoláwve* "seventeenth (21st)", etc. **Zamve* (**zave*?) is not attested. As these are adjectives, they take *a* when modifying nouns directly: *a'áwve* / *'áwvea*, etc.

9.3 Converting between octal and decimal

Conversion from English decimal to Na'vi octal numbers can be tedious. It may be easier to count on your fingers by tucking in your pinkies so that you have the same eight fingers as a Na'vi has: English "ten" is therefore 1 set of hands plus 2 extra fingers, or Na'vi 12 *vomun*. Converting from Na'vi back to English is more straightforward, if you think of the Na'vi number as so-many eights plus so-many: Na'vi "72", for example, would be "seven eights (7×8=56) and two", or English 58. Because eight is a power in binary arithmetic, many of the Na'vi numbers are also binary units which may be familiar from computing; *vozam* (octal 1000), for example, is decimal 512.

9.4 Derivations of numbers

Numerals form various derivatives, such as *'awpo* "an individual", *ni'awve* "first(ly)" (as in, "I was here first"), *'awsiténg* "together" (one-make-same), *kawtu* "no-one" (not-one-person), *kawkrr* "never" (not-one-time), *ni'aw* "only" (one-ly), and *ni'awtu* "alone" (one-person-ly), all from *'aw* "one"; also *nimun* "again" (second-ly) and perhaps *muntxa* "mated" from *mune* "two". There are two words for "once", *'awlie* and *'awlo*, the difference of which is not clear. "Twice" is *melo*.

10 Questions

Na'vi, like English, has two ways of asking questions: "yes-no" questions for simple affirmation or denial, as in "Are you going?", and "wh-" questions¹ asking for elaboration, such as "Where are you going?".^[note 36] There are also numerous series of words that answer wh-questions: "Here", "There", "Nowhere", "Everywhere", "Elsewhere", "The same place", etc.

10.1 Yes-no questions

Yes-no questions may be asked with the question marker² *srake?*, *srak?*,^[note 37] though sometimes intonation³ alone is used.

Ngaru lu fpom srak?

"Are you well?" (lit. "Do you have peace?")

or, when repeating a question to oneself after being asked,

Srake tsun oe fayupxaret tslivam niftue?

"Whether I can easily understand these messages?"

Such questions may be answered simply *srane* "yes" or *kehe* "no". *Srake* is not equivalent to English question tags like "isn't that right?", which aim to elicit agreement more than information. The Na'vi question tags are *ke fifya srak?* "(is it) not this way?", *kefya srak?* "isn't it?", or *kefyák?* for short. Yes-no questions can also be worded with the verb *ftxey* "choose", here functioning as a conjunction⁴ "whether", with *fuke* "or not". Thus instead of *srake nga za'u?* "Are you coming/will you come?", one may ask,

Ftxey nga za'u fuke?

"Are you coming or not?"

<i>ftxey</i>	<i>nga</i>	<i>za'u</i>	<i>fu-ke</i>
whether	you	come	or-not

1 #wh-question
2 #question
3 #intonation
4 #conjunction

10.2 Wh-questions

Information questions are asked with question words based on the leniting interrogative morpheme *pe+*, *-pe* "which?". These need not occur at the beginning of a clause:

Oeru pelun? (or *oeru lumpe?*)

"Why me?"

to which an actual explanation is expected (unless the question is rhetorical). *Pe*-words such as *pelun* / *lumpe* are only used for questions, not as relative pronouns⁵ as in "I don't know why it was me". (For that, see the chapter on syntax⁶.) *Pe+*, *-pe* may be used with any noun, but it generally occurs with one of half a dozen common generic nouns, such as *tute* "person" for *pesu* / *tupe* "who?" and *'u* "thing" for *peu* / *'upe* "what?". Many of these nouns act also as adverbs, and the resulting question words are adverbial, as in

peseng, *tsengpe* "where?", from *tsenge* "(at a) place"

pehrr, *krrpe* "when?", from *krr* "(at a) time"

pefya, *fyape* "how?", from *fya'o* "(in a) manner"

Peu / *'upe* is generally used for concrete objects, a more restricted range than "what?" in English. For actions and ideas, more specific words are used, such as

Kempe si nga? (also *Pehem si nga?*)

"What are you doing?"

based on *kem* "deed", or

Peli'u poltxe nga? (also *Li'upe poltxe nga?*)

"What did you say?"

based on *li'u* "word".

10.3 Answer words

Paralleling the *pe+* and *-pe* question words, and potentially answering them, are words based on "pre-nouns". These are morphemes that have concrete independent meaning, like "this" or "that", but which are found prefixed to nouns, such as the demonstratives⁷ *fi-* "this" and *tsa-* "that":

pelun (or *lumpe*) "why? which reason?"

filun "this reason", *foyulun* "these reasons"

tsalun "thus, that reason", *tsayulun* "those reasons"

5 #relative_pronoun

6 #Syntax

7 #demonstrative

Other pre-nouns are *kaw-* "no" ("not one"), *fra-* "every", *fne-* "kind", *la-* "other", and *teng-* "same". There is also a suffix *-o* "some" that combines with many of these same answer words. Not all combinations are attested.

	Thing	One	Person	Place	Time	Action	Kind	Manner	Reason	Word
Inter-rogative	'u ^{pe}		<i>tupe</i>	<i>tsengpe</i>	<i>krrpe</i>	<i>kempe</i>	<i>fnepe</i>	<i>fyape</i>	<i>lumpe</i>	<i>li'u^{pe}</i>
<i>peu</i>		<i>pesu</i>	<i>peseng</i>	<i>pehrr</i>	<i>pehem</i>	<i>pefnel</i>	<i>pefya</i>	<i>pelun</i>	<i>peit'u</i>	
what?	which?	who?	where?	when?	what?	what kind of?	how?	why?	what?	
Distal	<i>t^{sa}'u</i> <i>t^{saw}</i> <i>sa'u</i> ~ <i>saw</i>		<i>tsatu</i>	<i>tsatseng</i>	<i>tsakrr</i>	<i>tsakem</i>	<i>tsafnel</i> <i>tsayfnel</i>	<i>tsafya</i>	<i>tsalum(?)</i>	<i>tsali'u(?)</i>
that, those	that one	there	then	that, those	such a	thus	that reason	that		
Proximal	<i>fi'u</i>	<i>fipo</i>		<i>fitseng</i>	<i>set¹²</i>	<i>fikem</i>	<i>fifnel</i> <i>fayfnel</i>	<i>fiya</i>	<i>filum(?)</i>	<i>fi^{li}'u</i>
this	this one	here	now	this	such a	thus	this reason	this		
Indefinite	'uo		<i>tuteo</i>	<i>tsengo</i>	<i>krrro(?)</i>					
something	someone	some-where	some time							
Negative	<i>ke'u</i>		<i>kawtu</i>	<i>kawtseng(?)</i>	<i>kawkrr</i>					
nothing	no-one	nowhere	never							
Exclusive	<i>fra'u</i>	<i>frapo</i>		<i>fratseng</i>	<i>frakrr</i>					
everything	every-one	every-where	always							
Other		<i>lapo</i>								

	Thing	One	Person	Place	Time	Action	Kind	Man- ner	Reason	Word
Inter- roga- tive	'upe		tupe	tsengepe	krrpe	kempe	fnepe	fyape	lumpe	li'upe
	someone else	else- where								
Same	teng'u				tengkrr			tengfya		
same thing	same one		while			as				

Po might be the third-person animate pronoun *po*, and thus contrast with *tu* for people only. The table merely shows the more common forms; *fî-* (and its plural *fîay-* "these", commonly shortened to *fay-*) and *tsa-*, along with its plural *tsay-*, may combine as a prefix to any noun: *fayvrrtep* "these demons", *tsayhetuwong* "those aliens".^[note 38] (*Tsa'u*, however, is pluralized as other pronouns, *aysa'u* or *sa'u*.) *Pe* combines with other nouns as well, either as a prefix or a suffix. As usual for affixes, they are unstressed, and they do not need the attributive *a*: compare *fayvrrtep* with *kea txep / txep ake* "no fire" and *ke txep* "not a fire". Nouns combined with pre-nouns still behave as nouns, for example with case: *fîli'uä ral* "the meaning of this word". An exception to the stress pattern is *Fitrri lu trrpeve?* "Which day (of the week, etc.) is it today?", where a suffix *-pe* is stressed before the ordinal suffix *-ve*. The such/kind series based on *fnel* governs the genitive of a noun: *tsafnel syulangä* "such a flower, that kind of flower". Such phrases may be reduced, with the prenoun+*fnel* becoming a compound prenoun: *pefnesyulang?* "which (type of) flower?" – *fifnesyulang*, *tsafnesyulang* "such a flower"; plural *fayfnesyulang*, *tsayfnesyulang*.

11 Verbs

Na'vi verbs are conjugated for tense¹ but not for person². That is, they record distinctions like "I am, I was, I would", but not like "I am, we are, s/he is". Conjugation relies exclusively on infixes³, which are like suffixes but go inside the verb. "Hunt", for example, is *táron*, but "hunted" is *toláron*, with the infix **.^[note 39]

11.1 Infixes

There are two positions for infixes: between the consonant and vowel of the first syllable, and between the consonant and vowel of the final syllable.^[note 40] For example, the phonetically simple verb *káme* "see into, understand", and the more complicated *stefxaw* "examine", take the first and second position infixes ** and *<uy>* as follows:^[note 41]

	Root	position 1	position 2	positions 1 and 2
Form	<i>káme</i>	<i>koláme</i>	<i>kámuye</i>	<i>kolámuye</i>
Parsed	<i>kame</i>	<i>kam<uy>e</i>	<i>kam<uy>e</i>	
Form	<i>stefxáw</i>	<i>stolefxáw</i>	<i>stefxuyáw</i>	<i>stolefxuyáw</i>
Parsed	<i>steftxaw</i>	<i>stefx<uy>aw</i>	<i>steftx<uy>aw</i>	

Note that the infix comes directly before the vowel, and so after any consonant cluster like the *st* and *ftx* in *ste-ftxaw*. The infix also occurs before whatever functions as the vowel, including *ll* and *rr*. For example, the ** inflection of *frrfen* "visit" is *folrrfen*. In monosyllabic words like *lu* "be", *si* "do", *new* "want", and *tspang* "kill", however, all infixes appear in that one syllable, retaining their relative order:

	Root	position 1	position 2	positions 1 and 2
Form	<i>néw</i>	<i>noléw</i>	<i>nuyéw</i>	<i>noluyéw</i>
Parsed	<i>new</i>	<i>n<uy>ew</i>	<i>n<uy>ew</i>	
Form	<i>tspáng</i>	<i>tspoláng</i>	<i>tspuyáng</i>	<i>tspoluyáng</i>
Parsed	<i>tspang</i>	<i>tsp<uy>ang</i>	<i>tsp<uy>ang</i>	

1 #tense
 2 #person
 3 #infix

Moreover, when the vowel of the infix matches the vowel of such a verb, it may look like a suffix: *luyu* "be" (l<uy>u, not *lu-yu), *sivi* "do" (s<iv>i, not *si-vi). This is clearer in speech than in writing, because the stress stays on the root vowel: *luyú* (not *lúyu), *siví* (not *sívi). Similarly when a penultimate syllable mirrors an infix: *lónu* "release", *lolónu* "released" (lonu, not *lo-lonu). If there is no initial consonant, the infix still comes before the vowel:

Tsampongut Tsu'teyl iveyk.

tsam-pongu-t
war-party- acc⁴

Tsu'tey-l
(name)- erg⁵

<iv>eyk
lead< sjv⁶ > [note 42]

"Tsu'tey will lead the war party."

In first position more than one infix may occur. When both convey temporal information, they fuse together (see below); however, when one infix has a more concrete function, such as a reflexive (acting on oneself), then it precedes the temporal infix(es). Adding such a "pre-first" infix <us> to the words above, and filling all three slots, we get:

4 #acc
5 #erg
6 #sjv

Root	<i>káme</i>	<i>steftaáw</i>	<i>néw</i>	<i>tspáng</i>	<i>éyk</i>
Form	<i>kusolámuye</i>	<i>stusoleftxuyáw</i>	<i>nusoluyéw</i>	<i>tspusoluyáng</i>	<i>usoluyéyk</i>
Parsed	<i>k</i> <us> <i>am</i> <uy> <i>e</i>	<i>st</i> <us> <i>eftx</i> <uy> <i>awm</i> <us> 	<i>n</i> <us> 	<i>tsp</i> <us> 	<i>u</i> <us>

However, it is rare to encounter forms this complex.

11.2 Pre-first position: Valency

The "pre-first" infix position is taken by infixes for non-temporal distinctions such as valence⁷ (changing the number of arguments of the verb).

Active participle ⁸ (actv ⁹)	<i>us</i>
Passive participle ¹⁰ (pass ¹¹)	<i>awn</i>
Reflexive ¹² (refl ¹³)	<i>äp</i>
Causative ¹⁴ (caus ¹⁵)	<i>eyk</i>

The participles are active, as in *ikran atusaron* "a hunting banshee" and *ioang apuslltxe* "a talking animal", and passive, as in *yerik atawnaron* "a hunted hexapede" and *ayli'u apawnlltxe* "spoken words", from *taron* "hunt" and *plltxe* "speak".^[note 43] The active participial infix *us* is found in forms such as *kérusey* "dead", from *ke* "not" and *rey* "live" (that is, "not-living"), and *txántslusam* "wise", from *txan* "much" and *tslam* "understand" (that is, "much-understanding"). The passive *awn* is found in *niawnomum* "as is known", from *omun* "know" and the adverbial prefix *nì-*. Like their English translations in *-ing* and *-en*, Na'vi participles have characteristics of both verb and adjective, and may modify a noun: *ruséya túte* "a living person", *túte atslusám* "an understanding person".^[note 44]

Hetuwongil awngeyä swotut ska'a, fte kllkivulat keruseya tskxet.

7 #valence
 8 #participle
 9 #actv
 10 #passive
 11 #pass
 12 #reflexive
 13 #refl
 14 #causative
 15 #caus

<i>ay+ke-tute-</i>	<i>awnga+yä</i>	<i>swotu-it</i>	<i>ska'a</i>	<i>fte</i>	<i>klite+k<iv>ulakke-r<us>ey-</i>	<i>tskre-it</i>
<i>wong-ül</i>					<i>a</i>	
pl ¹⁶ +not-	we. incl ¹⁸ + gen ¹⁹	sacred.place- acc ²⁰	destroy	so.that	earth+dig< sjv ²¹ >	rock- acc ²⁴
person-					not-live< actv ²² >- attr ²³	
alien- erg ¹⁷						

16	#pl
17	#erg
18	#incl
19	#gen
20	#acc
21	#sjv
22	#actv
23	#attr
24	#acc

"The aliens destroy our sacred place to dig up dead rock."

Na'vi participles only work as adjectives, not as nouns. That is, *rusey* translates "living" in "the living earth", but not in "the living is good here". For this latter nominal (noun) meaning, add the nominalizing²⁵ prefix *tì-*:

Korén a'áwve tiruséyã 'awsiténg

"The first rule of living together" (the Golden Rule)

<i>koren</i>	<i>a-'awve</i>	<i>tì-r<us>ey+yã</i>	<i>'awsiténg</i>
rule	attr ²⁶ -first	nomz ²⁷ -live< actv ²⁸ >+ gen ²⁹	together

Tiruséy "living" is distinct from *tirey* "life", as in *mì sirey* "in (my) life". While the existence and exact meaning of *tì-* derivatives is unpredictable, *tì-* <us> gerunds are regular, and may be used with any verb. Likewise, the participle is not used for adverbs. Whereas in English one may say "she ran away laughing", in Na'vi that would be "she ran away *while* (she was) laughing", with *tengkrr* "while" and the imperfective *h<er>angham* for "(she was) laughing". A reflexive³⁰ indicates that the subject performs the action on his or her self. For example, *oe yur* is "I wash (something)", and *oel yur kì'ongit* is "I wash the (sp.) fruit", whereas "I wash myself" is reflexive *óe yãpúr* (*y<ãp>ur*), not transitive **oel yur oeti*. *Win* is "fast", *win si* is to make fast (that is, to rush or hurry something), and *win säpi* is to make oneself fast (that is, to rush or hurry along). A causative³¹ makes an intransitive verb transitive³². For example, *latem* means "change" in the sense that 'something changes!'; but to actively change *something* is *leykatem*. "To begin" is similar:

Sngolä'i (*sngä'i*) *tikangkem* "the work began"

Oel sngeykolä'i (*sng<eyk>ä'i*) *tikangkemit* "I began the work"

In some cases, the causative requires a different English translation, such as *sleyku* "produce" from *shu* "become". However, there are other strategies for while "feed" is a causative translation of *yom* "eat", if the meaning of feeding is providing food, the Na'vi word is not *yeykom* "make eat" but *yomting* "give (*ting*) "eat". The use of the causative depends on the meaning and transitivity of the verb; see the section on transitivity³³ for details.

25 #nominalizer
 26 #attr
 27 #nomz
 28 #actv
 29 #gen
 30 #reflexive
 31 #causative
 32 #transitive
 33 #Transitivity

11.3 First position: Tense, aspect, and mood

Following these, but still in the penultimate syllable, are infixes for tense, aspect, and mood. With one exception (the subjunctive after a modal verb, see below), these are optional. That is, they are used to clarify things such as tense, but tend to be dropped when they can be understood from context.

Na'vi aspect		Na'vi tense		Na'vi mood	
Perfective ³⁴ (pfv ³⁵)	<i>ol</i>	Future ³⁸ (fut ³⁹)	<i>ay</i>	Subjunctive ⁴⁸ (sjv ⁴⁹)	<i>iv</i>
Imperfective ³⁶ (ipfv ³⁷)	<i>er</i>	Immediate future ⁴⁰ (imm ⁴¹)	<i>iy</i>	Intentional ⁵⁰ (intent ⁵¹)	<i>s</i>
		Present ⁴² (pres ⁴³)	(unmarked)	Imperative ⁵² (imp ⁵³)	(intonation)
		Recent past ⁴⁴ (rec ⁴⁵)	<i>im</i>		
		Past ⁴⁶ (past ⁴⁷)	<i>am</i>		

These appear after the previous set of infixes. So with the future infix <ay>, "they will wash themselves" is *fo yäpayúr* (*y*<äp><ay>*ur*).

11.3.1 Tense

Tense⁵⁴ is the easiest of these concepts for an English speaker. However, whereas English has three tenses, past present and future,^[note 45] Na'vi has five, with the addition of a recent past ("just did") and an immediate future ("about to do"):

taron [hunt] "hunts"

t<am>aron [hunt< past⁵⁵>] "hunted"

t<im>aron [hunt< rec⁵⁶>] "just hunted"

t<iy>aron [hunt< imm⁵⁷>] "is about to hunt"

t<ay>aron [hunt< fut⁵⁸>] "will hunt"

Na'vi past and future are used for general statements about events in the past or future, as in English; they are not necessarily remote in time. There is no absolute timeframe involved; whether something is considered recent or immediate depends on the judgement

54 #tense

55 #past

56 #rec

57 #imm

58 #fut

of the speaker. An example of the immediate future *iy* is *nì-Ìnglìsì p<ìy>lltxe oe* "I'll speak in English now", at which point the speaker switches to English, or *tìyetxaw oe* "I'll be right back". More than one tense may be used in a verb. For instance, the recent past and immediate future double up in,

Oel pot tspimiyang.

<i>Oe-l</i>	<i>po-t</i>	<i>tsp<ìm><ìy>ang</i>
I- erg ⁵⁹	s/he- acc ⁶⁰	kill< rec ⁶¹ >< imm ⁶² >

"I was just about to kill him."

11.3.2 Aspect

unmarked *taron* "hunts"

imperfective *t<er>aron* "hunts, hunting"

perfective *taron* "hunts, hunted"

Aspect⁶³ is a more difficult concept. There are two in Na'vi, a perfective⁶⁴, used when one views the action as a simple event, as if one were on the outside of the action looking in; and an imperfective⁶⁵, used when one views the action as having some component structure or flow, as if one were inside with the action. This distinction is not easily found in English, but there are parallels. For instance, if I were to say, "I went to the bookstore," your response is likely to be something like, "so? what did you get?". This is because I presented the event as a simple whole—perfective—and the implication is that we've now moved on to the next thing that happened. However, if I were to say, "I was going to the bookstore," your response is more likely to be, "and? what happened on your way?". This is because I presented the event as open ended—imperfective—and the implication is that we are still dealing with what happened during that event, even though it's the same event in both cases. Even closer are constructions based on verbs of perception, such as "I saw him sit for an hour", with "sit" in the perfective (he sat for an hour, and I witnessed the whole event), and "I saw him sitting for an hour", with "sit" in a kind of imperfective (he sat for some time, of which I witnessed an hour—an internal portion of the event). Or more vividly, if more violently, "I saw the accused stab the victim" (I saw the crime in its entirety; I'm presenting it as a point in time) and "I saw the accused stabbing the victim" (I saw a part of the action as I passed by). In Na'vi, however, aspect may occur on the main verb, and may take place in the past, present, or future. An example of the Na'vi perfective is *tslam* "got it" or "understood", from *tslam* "understand"—the (unmarked) tense is

59 #erg
 60 #acc
 61 #rec
 62 #imm
 63 #aspect
 64 #perfective
 65 #imperfective

either present tense or irrelevant; the point being communicated is that the understanding is a complete event, a point in time.^[note 46] An example of the imperfective is *t<er>ìran ayoe ayngane* "we are walking your way"; here the action is in process, a current in time. Although the English translation suggests present tense, the Na'vi could actually be past or future: "we were walking your way (past imperfective) when we (suddenly) got it (past perfective)". Tense and aspect need not be marked when they have been established, or if they can be understood by context. For example, in

Oel hu Txewì trram na'ringit tarmok. Tsole'a ...

Oe-l
I-erg⁶⁶ hu *Txe-wi* *trr-am* *na'ring-it* *t<a<r>m>ok.* *Tse'a...*
with (name) day- past⁶⁷ forest- acc⁶⁸ occupy < past⁶⁹ < ipfv⁷⁰ > > see < pfv⁷¹ >

66 #erg
67 #past
68 #acc
69 #past
70 #ipfv
71 #pfv

"Yesterday I was with Txewì in the forest, (and we) saw ...",

the first clause sets up the context of the past tense, so the verb 'saw' can be marked as simply perfective, not as past perfective. However, both may be made explicit, and in such cases aspect is combined with the tense infixes:

recent-past imperfective *oe t<i<r>m>aron* "I was just hunting"

past imperfective *oe t<a<r>m>aron* "I was hunting"

recent-past perfective *oe tsl<i<l>m>am* "I just got it"

immediate-future perfective *oe tsl<i<l>y>am* "I'm about to get it"

As noted in the chapter on Phonology⁷², verbs with syllabic consonants may be irregular when inflected for aspect. If the aspectual infix ends in the analogous simple consonant (*ol* for *ll* or *er* for *rr*), and the syllable is not stressed, then the illegal sequence **lll* or **rrr* reduces to a simple *l* or *r*, as in *plltxé* "speak", perfective **plltxe* → *poltxé*. However, if the syllable is stressed, then the infix, which cannot be stressed, drops out, resulting in a homonym with the uninflected form, as in *fírrfen* "visit", imperfective **f<er>rrfen* → *fírrfen*.

11.3.3 Mood

There are four moods⁷³ in Na'vi: an unmarked mood (the indicative) used when making an ordinary assertion, an imperative mood⁷⁴ used for making commands, a subjunctive⁷⁵ used when one is stating something that is not certain, and an intentional⁷⁶ to show that an action is purposeful. The imperative, as in English, has no affix: *Kä!* "go!" The subjunctive is little used in English, but is found in a few set expressions such as "if I were you" (not **am* you), "God bless you" (not **blesses*), "I move that the meeting be adjourned" (not **is* adjourned), etc. The Na'vi subjunctive is formed with the infix *iv*, but is much more common than in English, used whenever one wishes, fears, or suspects that something might or must be so, but cannot say that it is so. It is found for example in

Oeri tingayil txe'lanit tivakuk

<i>oe-ri</i>	<i>tì-ngay-ìl</i>	<i>txe'lan-it</i>	<i>t<iv>akuk</i>
I- top ⁷⁷	nomz ⁷⁸ -true- erg ⁷⁹	heart- acc ⁸⁰	strike< sjv ⁸¹ >

"Let the truth strike my heart," literally "that the truth strike my heart."

72 #Phonology
 73 #mood
 74 #imperative
 75 #subjunctive
 76 #intentional
 77 #topic
 78 #nomz
 79 #erg
 80 #acc
 81 #sjv

It is equivalent to the infinitive in English to show that something is done for a purpose, as in

Sawtute zera'u fte fol Kelutrali skiva'a

ay+taw-tute *z<er>a'u* *fte* *ay+po-il* *kelku-utral-ti* *sk<iv>a'a*
 pl⁸²+sky-person come< ipfv⁸³> so.that pl⁸⁴+s/he-erg⁸⁵ home-tree- acc⁸⁶ destroy< sjv⁸⁷>

82 #p1
 83 #ipfv
 84 #p1
 85 #erg
 86 #acc
 87 #sjv

"The humans are coming to destroy Hometree"

The subjunctive is obligatory after modal verbs⁸⁸ of obligation, ability, or desire, such as *zene* "must", *tsun* "can", and *new* "want". (See section *Modal verbs*⁸⁹ below.) This is the only time that a tense, aspect, or mood marker is grammatically required. For example, in

Trram kä na'ringur fte tsun tivaron yerikit.

88 #modal

89 #Modal_verbs

ttram day- past⁹⁰ *kä* go *na ring-ur* forest- dat⁹¹ *fte* so.that *tsun* be.able *t <iv> aron* hunt < sjv⁹² > *yerik-it.* hexapede- acc⁹³

90 #past
 91 #dat
 92 #sjv
 93 #acc

"Yesterday (we) went to the forest so we could hunt a hexapede",
the past tense on *kamä* "went" and subjunctive on *tsivun* "be able" have been omitted, but
the subjunctive on *tivaron* cannot be. There is some overlap between the Na'vi subjunctive
and the English conditional mood⁹⁴, in that the if-clause may take the subjunctive:

Pxan livu tzo ni'aw oe ngari, tsakrr nga Na'viru yomtiying

94 #conditional_mood

<i>pxan</i>	<i>l<iv>u</i>	<i>txo</i>	<i>ni-'aw</i>	<i>oe</i>	<i>nga-iri</i>	<i>tso-krr</i>	<i>nga</i>	<i>na'vi- uru</i>	<i>yom- t<iy>ing</i>
worthy	be< sjv ⁹⁵ >	if	adv ⁹⁶ - one	I	you- top ⁹⁷	that-time	you	people- dat ⁹⁸	eat- give< imm ⁹⁹ >

95 #sjv
 96 #adv
 97 #topic
 98 #dat
 99 #imm

"Only if I be worth of you, will you then feed the people."

The subjunctive is also used as an optative¹⁰⁰ to request that someone do or be allowed to do something, by expressing one's wish that they do it, as in,

Tiviran po ayoekip

<i>t<iv>iran</i>	<i>po</i>	<i>ay-oe-kip</i>
walk< sjv ¹⁰¹ >	s/he	pl-I-among

"Let her walk among us[excl¹⁰²],"

and it is used to give permission, for instance in responding with *p<iv>lltxe* "speak!" ("may you speak!") when someone announces they have something to say, or *sp<iv>aw oeti rutxe* "please believe me". This is similar to the imperative. There is no infix for a true imperative:

Kä! Kä! "Go! Go!"

Pot lonu! "Release him!"

Ikranti makto. 'Eko ta'em "Take the banshee. Attack from above."

The pronoun may be stated overtly:

'Awpot set ftzey ayngal

<i>'awpo-t</i>	<i>set</i>	<i>ftzey</i>	<i>ay-nga-l</i>
one- acc ¹⁰³	now	choose	pl-you- erg ¹⁰⁴

"Now you choose one"

Negative imperatives (prohibitives¹⁰⁵) are conveyed with *rä'ä* "don't!":^[note 47]

Txopu rä'ä si! "Don't be afraid!"^[note 48]

Tsakem rä'ä si! "Don't do that!"

Instead of the bare root of the imperative, the subjunctive may be used in its optative role to make what was historically a request or polite command, though the distinction is no longer maintained:^[note 49]

Aynga neto rivikx!

<i>ay-nga</i>	<i>ne-to</i>	<i>r<iv>ikx</i>
---------------	--------------	-----------------------

100 #optative

101 #sjv

102 #excl

103 #acc

104 #erg

105 #prohibitive

pl¹⁰⁶-you

to-away

move< sjv¹⁰⁷>

"(May you all) step back!"

Similarly with the prohibitive:

Neto rä'ä kivä "Don't go away!"

The intentional mood is used for planned actions, contrasting with the (indicative) for things that one has no control over. It is only attested in the future tenses.

11.3.4 Other

Other reported temporal and aspectual forms include *tovaron*, *tevaron*, *telaron*, *tairon*. Their meaning is not known, and *tairon* at least would appear to be spurious, as the infix does not occur in its normal position. Two of the infixes are known elsewhere: they are suffixes in *trram* "yesterday" and *trray* "tomorrow", from *trr* "day", and in *txonam* "last night" and *txonay* "tomorrow night" from *txon* "night".

11.3.5 Fused T.A.M. infixes

When tense, aspect, and mood infixes occur together, they fuse: The consonant of the aspect infixes within the tense, as recent past-imperfective <irm> in *tirmaron* "(I) was just hunting", from <ì<er>m>; or the consonant of the tense or aspect infixes within the subjunctive mood:

106 #pl

107 #sjv

Aspect × tense in the indicative		
ind ¹⁰⁸	—	pfv ¹⁰⁹ ipfv ¹¹⁰
fut ¹¹¹	ay	ary
imm ¹¹²	iy	iry
—	—	er
rec ¹¹³	im	irm
past ¹¹⁴	am	arm

Aspect and tense in the subjunctive		
sjv ¹¹⁵	—	pfv ¹¹⁶ ipfv ¹¹⁷
fut ¹¹⁸	iyev*	—
—	iv	iv
past ¹¹⁹	imv	—

Intentional mood		
in- tent ¹²⁰	—	pfv ¹²¹ ipfv ¹²² sjv ¹²³
fut ¹²⁴	asy	—
imm ¹²⁵	isy	—
—	?	?osl ?esr ?
rec ¹²⁶	?ism	—
past ¹²⁷	?asm	—

The expected future subjunctive *iyv, however, is a problem, as *iy is not a possible syllable coda in Na'vi. This is solved by inserting an epenthetic¹²⁸ vowel *e*: <iyev>; moreover, in the common expression *kìyevame* "see (you) soon", there is a degree of vowel assimilation¹²⁹, and both <iyev> and <iyev> are acceptable forms of this inflection. Note that because the vowel distinctions of the future and past tenses are lost, there are only three tenses rather than five in the subjunctive mood. Three-way combinations of tense, aspect, and mood (the dashes in the right-hand table) do not occur. Although the intentional mood is only attested in the future, it is possible that it may be used for the past or present, perfective or imperfective, or even in the subjunctive, though this would require an epenthetic vowel the way the future subjunctive does, or a compound as in compound tense.

Ayngati hasyawnu ayoel

<i>ay-nga-ti</i>	<i>h<asy>awnu</i>	<i>ay-oe-il</i>
pl ¹³⁰ -you- acc ¹³¹	protect< fut ¹³² . intent ¹³³ >	pl ¹³⁴ -I- erg ¹³⁵

"We will protect you."

With the negative, it indicates an intention that something not happen:

Tafral ke lìsyek oel ngeyä keye'ungit.

128 #epenthesis
 129 #assimilation
 130 #pl
 131 #acc
 132 #fut
 133 #intent
 134 #pl
 135 #erg

ta-fi-ral from-this-reason
ke not
l<isy>ek obey< imm¹³⁶ . intent¹³⁷ >
oe-il I- erg¹³⁸
nga-ya you- gen¹³⁹
ke-ye'ung-it in-sanity- acc¹⁴⁰

136 #imm
 137 #intent
 138 #erg
 139 #gen
 140 #acc

"Therefore I will not heed your insanity."

The intention is that of the speaker, regardless of the subject of the verb:

Nga kasyä

nga
you

k<asy>ä
go< fut¹⁴¹. intent¹⁴²>

"You shall go."

Ke zasyup li'Ona ne kxutu a mifa fu a wrrpa.

141 #fut

142 #intent

ke not
z<asy>up fall< fut¹⁴³.
 intent¹⁴⁴>
li'Ona (name)
ne to
kzutu enemy
a sbrd¹⁴⁵
mi+pa in+side
fu or
a sbrd¹⁴⁶
wrr-pa out-side

143 #fut
 144 #intent
 145 #sbrd
 146 #sbrd

"The l'Ona will not perish to the enemy within nor to the enemy without."

11.4 Second position: Affect

The second (final) infix position is taken by infixes for affect¹⁴⁷: Speaker attitude, whether positive or negative; formality; and evidentiality¹⁴⁸ to mark for uncertainty or indirect knowledge.

Na'vi affect	
Positive attitude ¹⁴⁹ (approb ¹⁵⁰)	<i>ei</i>
Negative attitude ¹⁵¹ (pej ¹⁵²)	<i>äng (äg)</i>
Formal ceremonial ¹⁵³ (form ¹⁵⁴)	<i>uy</i>
Evidential ¹⁵⁵ (evid ¹⁵⁶)	<i>ats (ac)</i>

For example, in the greeting in the section on nouns, *Oel ngati kameie* "I See you", the verb *kame* "See" is inflected positively as *kam<ei>e* to indicate the pleasure the speaker feels in the meeting. In the subsequent sentence, *Oeri ontu teya längu* "My nose is full [of his smell]", however, the phrase *teya lu* "is full" is inflected negatively as *teya l<äng>u* to indicate the speaker's distaste at the experience. The affect can also be more indirect, as in,

Ngaytxoa, fipänuti oeyä tswolänga' oel.

"Sorry, I forgot this promise of mine."

<i>ngay-txoa</i>	<i>fî-pänu-ti</i>	<i>oe-yä</i>	<i>tsw<äng>a'</i>	<i>oe-il</i>
true-forgiveness	this-promise-	I- gen ¹⁵⁸	forget< pfv ¹⁵⁹ ><	I- erg ¹⁶¹
	acc ¹⁵⁷		pej ¹⁶⁰ >	

147 #affect
 148 #evidential
 149 #approbative
 150 #approb
 151 #pejorative
 152 #pej
 153 #formal
 154 #form
 155 #evidential
 156 #evid
 157 #acc
 158 #gen
 159 #pfv
 160 #pej
 161 #erg

The formal infix, which is used in ceremonial contexts, goes with the formal pronouns, though the reverse does not always hold: *Ngenga ... l<uy>u set* "You are now ...". Only one affect inflection may be used per verb, so the choice depends on the speaker's priorities. For example, once formality is established, the ceremonial infix can be dropped, clearing the way for other affectual inflections even if the formal pronouns continue to be used. Although only one affect infix may appear, they may co-occur with first- or second-position infixes in the penultimate syllable:

oe t<irm>ar<ei>on [hunt< rec¹⁶². ipfv¹⁶³>< approb¹⁶⁴>] "I was just hunting": The speaker is happy about the experience, whether due to success or just the pleasure of the hunt.

po t<ay>ar<äng>on [hunt< fut¹⁶⁵>< pej¹⁶⁶>] "he will hunt": The speaker is anxious about or annoyed by the prospect.

The evidential indicates uncertainty or indirect knowledge, as in,

Fpirmil oel futa aynga natsew tsive'a fi'ut.

"I was just thinking that you might want to see this."

162 #rec
163 #ipfv
164 #approb
165 #fut
166 #pej

fp < *irm* > *il* *oe-il* *fi'u-it-a* *n* < *ats* > *ew* *ts* < *iv* > *e'a* *fi'u-it*
 think < rec¹⁶⁷ I- erg¹⁶⁹ this- acc¹⁷⁰ want < evid¹⁷³ > see < sjv¹⁷⁴ > this- acc¹⁷⁵
*ipfv*¹⁶⁸ > sbrd¹⁷¹

167 #rec
 168 #ipfv
 169 #erg
 170 #acc
 171 #sbrd
 172 #pl
 173 #evid
 174 #sjv
 175 #acc

To reinforce the uncertainty, *kxawm* "perhaps" may be added.

11.5 Special verbs

A few verbs have grammatical in addition to lexical uses.

11.5.1 Be, have, and copulas

The verb *lu* is a copula¹⁷⁶, meaning that it links two concepts together (like an equal sign), as in

fo lu kxanì "they are forbidden (here)",

where it links a noun phrase and adjective;

Na'viyä, l<uy>u hapxi "(you) are< form¹⁷⁷AL> part of the People",

where it links two noun phrases ("you" being understood); and

tsahik-u txele lu "the matter is for the *Tsahik*".

It is the copula *lu* that makes a predicate out of an adjective:

kilvan angim "a long river",

kilvan ngim lu "the river is long".

Other verbs with this behavior include the copulas *shu* "become" and *lam* "seem". *Lu* also functions as a verb of existence, equivalent to "there is" or "there are":

aungia lu

"there was a sign"

ke fparamìl oel futa lu tute a tsun ...

"I didn't think there was anyone who could ...".

When used with—and generally preceding—a noun in the dative, it has the more specialized sense of "have", as in

Lu oeru ikran

"I have a banshee" (lit. "there is a banshee to me").

When used with a locative adposition, it shows existence in a place:

Pa'li lu uo utral.

"The horse is behind a tree; there is a horse behind the tree."

'Angtsik lu lok 'awkx.

176 #copula

177 #form

"The hammerhead is close to the cliff."

However, there is a separate idiom for being within a location: the transitive verb *tok* "to occupy, to be in a place", as above in

Oel hu Txewi trram na'ringit t<arm>ok

"Yesterday I was with Txewi in the forest",

where the location takes the accusative case rather than an adposition.

11.5.2 Do

Na'vi has a basic verb *si* which means "do" or "make". Besides its basic use, as in *kempe si nga?* "what are you doing?", it is used in numerous expressions, and is the primary way of turning a noun into a verb:

<i>tsam</i> "war"	<i>tsám si</i> "make war"
<i>kélku</i> "home"	<i>kélku si</i> "dwell" (lit., "make (one's) home")
<i>tsap'áalute</i> "an apology"	<i>tsap'áalute si</i> "apologize" ("make an apology")
<i>iráyo</i> "thanks"	<i>iráyo si / si irayo</i> "thank"
<i>l'rtok</i> "a smile"	<i>l'rtok si</i> "smile"
<i>txópu</i> "fear"	<i>txópu si</i> "be afraid"
<i>Si</i> forms idiomatic expressions with the organs of the senses:	
<i>nári</i> "eye"	<i>nári si</i> "watch out, be careful"
<i>éltu</i> "brain"	<i>éltu si</i> "pay attention, quit goofing off"

Si follows the noun, and though it may be separated from it (*txopu rä'ä si* "Do not fear!"), the two words behave as an intransitive compound: The noun never takes the accusative suffix, and the subject of *si* never takes the ergative.^[note 50] When there is an object to the noun+*si* construction, it takes the dative, as in *ngaru irayo si* "thank you". *Si* can also be used with adjectives, such as *teya* "full" in *kato oeru teya si* "the rhythm fills me (with joy)". In citation form, the *si* in these set phrases is unstressed. However, it may acquire stress when inflected. For example, from *tisraw* "pain", there are intransitive *tisraw si* /tɪ'sraʊsi/ "be painful" and causative *tisraw seyki* /tɪ'sraʊ seɪ.ki/ "cause pain". The noun or adjective may be dropped when context makes it clear:

Nga tsap'áalute soli srak?

"Have you apologized?"

Soli.

"I have."

11.5.3 Give

The verb "give", *tìng*, has a smaller number of idiomatic usages. It is combined with organs of the senses to indicate an attentive action of that sense. So from *nari* "eye" there is *tìng nari* ("tìnnari") "look at" (cf. *tse'a* "see"), and from *mikyun* "ear" there is *tìng mikyun* ("tìmmikyun") "listen" (cf. *stawm* "hear"). Somewhat less idiomatic are *tìng tseng* "back down" (lit. "give place"), *pānutìng* "promise" (lit. "give a promise"), *oeyktìng* "explain why" (lit. "give the cause"), *yomtìng* "feed" (lit. "give to eat"), and *teswotìng* "grant" (based on an unattested root).

11.5.4 Directional verbs

Na'vi has two verbs that indicate direction: *kā* "go" and *zá'u* "come". These may combine with other verbs to give them a sense of direction, what in linguistics is called 'andative' and 'venitive'. For example, *'ärìp* is "move" (move something, as with the hand); from it are *kā'ärìp* "push" (move something away) and *za'ärìp* "pull" (move something closer). Similarly, *múnge* "convey" may be used as either "bring" or "take"; for "bring" specifically, it is combined with *za'u* to indicate direction toward the speaker: *zamúnge*. Similarly, *kā* combines with *máкто* "ride" for *kāmáкто* "ride out". These directional verbs are not restricted to combining with other verbs; *kā* is also attested with *tsatseng* "there" in *kāsatseng* "out there".

11.5.5 Modal verbs

As in English, Na'vi has modal verbs¹⁷⁸ ('helping verbs') which have a distinct syntax from other verbs. These are basic verbs of obligation, ability, or desire, such as *zene* "must", *tsun* "can", *fmi* "try", and *new* "want". They are followed by a regular verb, which must take the subjunctive mood, whereas English would use the infinitive, as above in *zene fko n<iv>ume nìtxan* "there is much to learn" and *tsun tutet tsp<iv>ang ko* "they can kill a person, you know". Likewise *oe new k<iv>ä* "I want to go" and *fmayi oe '<iv>eyng* "I will try to answer / try and answer". The subject is not repeated if it's the same for the two verbs, but is required otherwise: *Oe new nga k<iv>ä* "I want you to go" (lit. "I want (that) you should go").^[note 51] Note that the subject of the modal is intransitive regardless of the lexical verb:^[13]

Oe new yivom teylu.

"I want to eat teylu."

<i>oe</i>	<i>new</i>	<i>y<iv>om</i>	<i>teylu-t</i>
I. intr ¹⁷⁹	want	eat< sjv ¹⁸⁰ >	grubs- acc ¹⁸¹

178 #modal

179 #intr

180 #sjv

181 #acc

Also,

Fmawnit menariyã ke tsun oe spivaw.

"I can't believe what my eyes are telling me."

*fnaawm-it*¹⁸²
news- acc¹⁸²

me+nari-yä
du¹⁸³+eye- gen¹⁸⁴

ke
not

tsun
able

oe
I

sp<iv>aw
believe< sjv¹⁸⁵>

182 #acc
183 #du
184 #gen
185 #sjv

If there is an overt subject to the lexical verb, then it would be inflected for case as it would without the modal: *Oe new ngalyivom teylut* "I want you to eat teylu".

11.5.6 Compound verbs

In compound verbs, only the verbal root inflects. For example, *zenke* "mustn't" is an abbreviation of *zene ke* "must not", and so both first- and second-position infixes appear in the *zen-*. [needs confirmation] On the other hand, in *pänutìng* "promise", the verbal root is *tìng* "give", so all infixes appear in that syllable. In the case of a two-verb compound, such as *yomtìng* "feed" ("eat" plus "give"), all infixes appear in the final verb root, in this case *tìng*.^[note 52]

12 Syntax

From the preceding chapters, you should be able to read and perhaps produce sentences like the following: *Eytukanil tskot alor Neytiri-ru toleiing*. "Eytukan gave the beautiful bow to Neytiri, I'm happy to say."^[14]

<i>Eytukan-il</i>	<i>tsko-it</i>	<i>a-lor</i>	<i>Neytiri-ru</i>	<i>t<ei>ing</i>
(name)- erg ¹	bow- acc ²	attr ³ -pretty	(name)- dat ⁴	give< pfv ⁵ >< ap- prob ⁶ >

The word order may change depending on the relative relevance of the participants, deference on the part of the speaker, and the like, as will be covered in the chapter on Discourse⁷; if the adjective moves, it may of course become *lor**a*. However, much more complex sentences than this are possible in Na'vi, and that is the subject of this chapter.

12.1 The negative

Negation, both of noun phrases and of clauses⁸, is made with the negating particle *ke*, which appears before the negated element. Na'vi utilizes multiple negation⁹, like *kelu kawtu* "there isn't no-one" (= there isn't anyone / there is no-one):

<i>fì-ketuwong</i>	<i>ke</i>	<i>n<ay>ume</i>	<i>ke-'u</i>
this-alien	not	learn< fut ¹⁰ >	no-thing

"This alien will learn nothing."^[note 53]

-
- 1 #erg
 - 2 #acc
 - 3 #attr
 - 4 #dat
 - 5 #pfv
 - 6 #approb
 - 7 #Discourse
 - 8 #clause
 - 9 #double_negative
 - 10 #fut

The vowel *e* elides in certain lexicalized expressions, such as *kawtu* "no-one" above and *kawkrr* "never". A longer form, *kehe*, is used as an interjection¹¹ when answering "no" rather than negating a noun or verb. Whereas *ke* only occurs before the word or phrase it modifies, the adjectival forms *kea* and *ake* may occur before or after a noun: *kea säfpil* or *säfpil ake* "no idea". In the case of *zene* "must", there are two negative constructions. "Mustn't (be obliged not to)" is *zenke*, whereas the opposite order, *ke zene* "don't have to" merely indicates a lack of obligation. Both take the subjunctive:

Nga zenke kivä! "You must not go!"

Nga ke zene kivä. "You don't have to go."

Double negation does not (necessarily) hold across multiple clauses. In a following section¹², for example, the sentence

Ke fparmil oel futa lu tute a tsun ni-Na'vi set fifya pivlltze!

"I didn't think that there was anyone who could speak Na'vi like this!"

is only negated in its independent clause, "I didn't think".

12.2 Conjunction

Various other particles such as conjunctions¹³ join phrases and clauses. Examples are *sì* and *ulte* "and", *fu* "or", *slä* "but", *na* "like, as" (*na ayoeng* "as we (do), like us"),^[note 54] *san* (quote), *sik* (unquote), *fte* "so that, in order to", *fteke* "lest". *A* is used for relative clauses¹⁴, as in *tute a tsun* "a person who can",^[note 55] *futa* means "that" after a transitive verb, as in *ke fparmil futa ...* "(I) didn't think that ...", *fwa* means "that" after an intransitive verb, as in *law lu oeru fwa ...* "It's clear to me that ...", and *tsnì* means "that" in *ätxäle si tsnì ...* "(I) request that ...". The difference between *sì* "and" and *ulte* "and" is that *sì* joins phrases within a clause, while *ulte* joins clauses. Attested examples include *trrä sì txonä* "of day and night", *win sì txur* "fast and strong", and *plltxe sì tiran* "to speak and walk", but *kìyevame ulte Eywa ngahu* "See you again, and may Eywa be with you". *Sì* may also cliticize to the second noun phrase, as in the formal inclusive pronouns, or in

ayli'ut horentisìli'fyayä leNa'vi

"(describe) the words **and** rules of the Na'vi language"

<i>ay-lì'-u-it</i>	<i>ay+koren-ti-sì</i>	<i>lì'-fya-yä</i>	<i>le-Na'vi</i>
pl ¹⁵ -say-thing- acc ¹⁶	pl ¹⁷ +rule- acc ¹⁸ -and	say-way- gen ¹⁹	adj ²⁰ -People

11 #interjection
 12 #Relative_clauses_with_empty_nouns
 13 #conjunction
 14 #relative_clause
 15 #pl
 16 #acc
 17 #pl
 18 #acc
 19 #gen
 20 #adj

Note that the accusative suffix *-it/ti* is attached to both conjoined nouns *ayli'u* and *horen*, and that the genitive *li'fyayä* "the language's (words and rules)" governs both. The simple conjunction for "or" is *fu*. However, when the meaning is that either of two choices is equally acceptable or unacceptable, or that the speaker doesn't care which it is, the construction *A, B, ke tsranten* "(either) A (or) B, it doesn't matter" is used:

Yola krr, txana krr, ke tsranten.

"It doesn't matter how long it takes."

tsranten
be.important

ke
not

krr
time

txan-a
great-attr²²

krr
time

yol-a
short-attr²¹

21 #attr
22 #attr

The conjunction *slä* "but" joins two clauses,

Zisit((o)) amrr ftolia ohe, släzene fko niyevume nitzan.

"I studied for five years **but** there is much still to learn."

<i>zīsīt-((o))</i> year-?	<i>a-mrr</i> attr ²³ -five	<i>ftia</i> study< pfv ²⁴ >	<i>ohe</i> I. form ²⁵	<i>slä</i> but	<i>zene</i> must	<i>fko</i> one	<i>n<iyev>ume</i> learn< fut ²⁶ . sjv ²⁷ >	<i>nī-tzan</i> adv ²⁸ - much
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23 #attr
24 #pfv
25 #form
26 #fut
27 #sjv
28 #adv

whereas the adverb *ngián* "however" does not:

Aylì'u ngiannì'it skepek lu.

"**But** you sound rather formal." (lit. "[your] words, however, are a bit formal.")

<i>ay-lì'u</i>	<i>ngian</i>	<i>nì-'it</i>	<i>skepek</i>	<i>lu</i>
pl ²⁹ -word	however	adv ³⁰ -bit	formal	be

Na'vi does not have a special infinitive form of the verb, like "to speak" in "teach him to speak". Instead, *fte* "so that" is used with the subjunctive. There are several examples below.

12.3 Reported speech

Quoted speech is introduced with the quotative³¹ particle *san* and the unquotative particle *sik*. Na'vi only allows direct speech³², not indirect (reported) speech; that is, "He said, 'I will go'," but not "He said he would go." If the quotation occurs at either end of the sentence, then only one of the particles need be used:

Poltxe oe, san zene ke uniltiranyu ke 'uziva'u fìtseng.

29 #pl

30 #adv

31 #quotative

32 #direct_speech

plltʁe *oe* *san* *zene* *ke* *unil-tiran-yu* *ke-'u* *z<i>v>a'u* *fi-tseng.*
 say< pfv³³> I quot³⁴ must not dream-walk-er no-one come< sjv³⁵> this-place

33 #pfv
 34 #quot
 35 #sjv

"I have said, [quote] 'No avatar may come here!'"

Here the end of the quotation is obvious, as the speaker finished speaking. However, if it occurs in the middle, so that there is non-reported material on either side, then both particles occur together as correlatives³⁶:

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

36 #correlatives

plt;re *Eytukan* *san* *oe* *k<ay>ä* *sik* *slä* *oe-l* *po-t* *ke* *spaw*
 say< (name) quot³⁸ I go< fut³⁹> unquot⁴⁰ but I- erg⁴¹ s/he- acc⁴² not believe
 pfv³⁷>

37 #pfv
 38 #quot
 39 #fut
 40 #unquot
 41 #erg
 42 #acc

"Eytukan said he would go (*lit.* 'I will go'), but I don't believe him."

Practically speaking, however, an initial quote may still need *san*, as otherwise the audience might not realize that it's reported speech; it would require a context that makes that obvious before the first particle could be dropped. These particles can also be used for the words that make up thoughts. Because the quotation is retained verbatim, speakers may end up referring to themselves in the second or third person. For instance, if someone named Ateyo had been unable to respond to someone's questions, he might say,

Rä'ä fpivil san oeyä sipawmìri Ateyo ke new oeru 'iveyng sik.

<i>rä'ä</i>	<i>fp<iv>il</i>	<i>san</i>	<i>oe-yä</i>	<i>ay+ti-</i> <i>paum-iri</i>	<i>Ateyo</i>	<i>ke</i>	<i>new</i>	<i>oe-ru</i>	<i>'(iv>eyng</i>	<i>sik</i>
don't	think< sjv ⁴³ >	quote ⁴⁴	I- gen ⁴⁵	pl ⁴⁶ + nomz ⁴⁷ - ask- top ⁴⁸	(name)	not	want	I- dat ⁴⁹	respond< sjv ⁵⁰ >	unquote ⁵¹

43 #sjv

44 #quote

45 #gen

46 #pl

47 #nomz

48 #topic

49 #dat

50 #sjv

51 #unquote

"Don't think that I don't want to respond to your questions." (*Lit.* 'Don't think, "Ateyo doesn't want to respond to me about my questions".')

The word "whether" is used for indirect questions, and so like other wh- words is not translated directly; since it's used for yes-no questions, the Na'vi equivalent is *san srake ... sik*. That is, for "he asked whether they went", say *polawm po san srake fo holum sik* (or whatever the actual wording was) "he asked, 'Did they go?'" . One construction in Na'vi is equivalent to an indirect question in English, "tell me whether (or not)",

Piveng oer ftzey nga new rivey fuke.

"Tell me if you want to live."

fu-ke
or-not

r<iv>ey
live< sjv⁵⁴>

new
want

nga
you

ftrey
choose

oe-ur
I-dat⁵³

p<iv>eng
tell< sjv⁵²>

52 #sjv
53 #dat
54 #sjv

12.4 Subordinate clauses

Some of the subordinating conjunctions, such as those indicating purpose, trigger the subjunctive in a dependent clause⁵⁵:

Nari soli ayoe fteke nìhawng livok. [15]

"We_{excl}⁵⁶ were careful not to get too close."

<i>nari-si</i>	<i>ayoe</i>	<i>fte-ke</i>	<i>nì-hawng</i>	<i>l<iv>ok</i>
eye-make< pfv ⁵⁷ >	we	so.that-not	adv ⁵⁸ -excessive	close< sjv ⁵⁹ >

Sáwtute zerá'u fte fol Kélutralti skiva'á.

"The humans are coming to (that they may) destroy Hometree."

55 #dependent_clause

57 #pfv

58 #adv

59 #sjv

saw-tute
 pl⁶⁰+sky-person

z<er>a'u
 come< ipfv⁶¹>

fo-l
 pl⁶²+s/he-erg⁶³

kel-utral-ti
 home-tree-acc⁶⁴

sk<iv>a'a
 destroy< sjv⁶⁵>

60 #pl
 61 #ipfv
 62 #pl
 63 #erg
 64 #acc
 65 #sjv

However, the independent clause⁶⁶ is not always made explicit:

Txo new nga rivey, oehu!^[16]

"(Come) with me if you want to live."

<i>txo</i>	<i>new</i>	<i>nga</i>	<i>r<iv>ey</i>	<i>oe-hu</i>
if	want	you	to.live< sjv ⁶⁷ >	me-with

This can result in strings of subjunctive clauses:

Nga sänume sivi poru fte tsivun pilvlltze sì tivìran na ayoeng.

"You will teach him so that he may speak and walk as we do."

66 #independent_clause

67 #sjv

<i>nga</i>	<i>sâ-nume</i>	<i>s<i>i>i</i>	<i>po-ru</i>	<i>fte</i>	<i>ts<i>i>um</i>	<i>p<i>ol>v>lltse</i>	<i>t<i>i>iran</i>	<i>na</i>	<i>ay-oe-nga</i>
you	nomz ⁶⁸ - learn	do- sjv ⁶⁹	him- dat ⁷⁰	so.that	be.able< sjv ⁷¹ >	con- verse< sjv ⁷² < pfv ⁷³ >>	walk< sjv ⁷⁴ >	like	pl ⁷⁵ -I- you

68 #nomz
69 #sjv
70 #dat
71 #sjv
72 #sjv
73 #pfv
74 #sjv
75 #pl

Here the first verb, *sivi*, is subjunctive as a polite command, the second, *tsivun*, as the intended consequence of that command after *fte* ("teach him so that he *may* be able to), and the other two as dependents of the modal *tsun*.

12.5 Relative clauses

Na'vi does not have relative pronouns⁷⁶ such as English *who*, *which*, *what*;^[note 56] instead, the attributive particle *a* is employed:

<i>tute</i>	<u><i>a</i></u>	<i>tsun</i>	<i>nì-Na'vi</i>	<i>plltxe</i>
person	sbrd ⁷⁷	be.able	adv ⁷⁸ -Na'vi	speak

"a person who can speak Na'vi"

It wouldn't matter if the phrase were "a thing which" (or "that"), "a time when", "a reason why", or "a place where"; all would use the same particle *a* to translate the English *wh*-word:

76 #relative_pronoun

77 #sbrd

78 #adv

po
s/he

(*tša-ne*)
it-to

ke
not

tsenge-t
place-acc⁸²

a
sbrd⁸¹

k<arm>ä
go< past⁷⁹. ipfv⁸⁰>

ts<im>e'a
see< rec⁸³>

ae-l
I-erg⁸⁴

79 #past
80 #ipfv
81 #sbrd
82 #acc
83 #rec
84 #erg

"I didn't see where she was going" (lit. "I didn't see the place *to which* she was going")^[note 57]

This *a* is the same morpheme as the *a* in attributive adjectives; indeed, relative clauses can be thought of as multi-word adjectives: The examples above might be more literally translated as "an able-to-speak-Na'vi person" and "a she-was-going-to-it place", with "able to speak Na'vi" and "she was going to it" being attributives (\approx adjectives). Indeed, attributive adjectives are simply reduced, one-word relative clauses;

siltsana tipawm "a good question"

is just a reduced form of

lu siltsan a tipawm "a question which is good".

Relative clauses are also similar in meaning to the participle⁸⁵:

Palulukan atusaron lu lehrrap.

<i>palulukan</i>	<i>a-t<us>aron</i>	<i>lu</i>	<i>le-hrrap</i>
thanator	attr ⁸⁶ -hunt< actv ⁸⁷ >	be	adj ⁸⁸ -danger

"A hunting thanator is dangerous."

Palulukan a teraron lu lehrrap.

<i>palulukan</i>	<i>a</i>	<i>t<er>aron</i>	<i>lu</i>	<i>le-hrrap</i>
thanator	sbrd ⁸⁹	hunt< ipfv ⁹⁰ >	be	adj ⁹¹ -danger

"A thanator that's hunting is dangerous."

A slightly more complex example of a relative clause is,

'Awpot set ftzey ayngal a l-ayngakip, 'awpot a Na'viru yomtiying.

"Choose one among you (that is, 'one who is among you'), one who will feed the People."

85 #Infixes_pre-I

86 #attr

87 #actv

88 #adj

89 #sbrd

90 #ipfv

91 #adj

<i>'awpo-t</i>	<i>set</i>	<i>fixey</i>	<i>ay-nga-l</i>	<i>a</i>	<i>lu</i>	<i>ay-nga- kip,</i>	<i>'awpo-t</i>	<i>a</i>	<i>Na 'vi-ru</i>	<i>yom+t<iy>ing</i>
one-acc ⁹²	now	choose	pl ⁹³ - you- erg ⁹⁴	sbrd ⁹⁵	be	pl ⁹⁶ - you- among	one-acc ⁹⁷	sbrd ⁹⁸	People- dat ⁹⁹	eat+give< imm ¹⁰⁰ >

92 #acc
 93 #pl
 94 #erg
 95 #sbrd
 96 #pl
 97 #acc
 98 #sbrd
 99 #dat
 100 #imm

(*Lit*, "you-all choose an is-among-you individual, a will-feed-the-People individual")

Here, in *'awpot a Na'viru yomtiyìng* "one who will feed the People", the attributive *a* is not adjacent to the verb, and so cannot be attached to it in writing the way it is attached to adjectives. The attributive *a* is also used when a prepositional phrase¹⁰¹ modifies a noun. In English, "the cat in the hat" can be thought of as "the cat which is in the hat", with the verb 'to be' dropped. In Na'vi, though the 'be' need not be said, the *a* 'which' must be:

Fìpo lu vrrtep a mìsokx atsleng

"It is a demon in a false body"

101 #phrase

a-tsleng
attr¹⁰⁴-false

mi+tokx
in+body

a
attr¹⁰³

vrretp
demon

lu
be¹⁰²

fi-po
this-one

102 #be
103 #attr
104 #attr

Similarly, *mesyalhu a ikran* "a banshee with (-*hu*) two wings". In cases where English uses a stranded preposition¹⁰⁵, as in "someone to talk with", Na'vi needs to repeat the noun or a pronoun:

Ke lu kawtu a nulnivew oe pohu tireapivängkxo äo Utral Aymokriyä.^[17]

"There's nobody I'd rather commune with under the Tree of Voices"

105 #stranding

<i>ke</i>	not	<i>lu</i>	be	<i>ke-ʼaw-tu</i>	not-a-one	<i>a</i>	sbrd ¹⁰⁶	<i>ni-ul-</i> <i>n <iv> ew</i>	<i>oe</i>	I	<i>po-hu</i>	him/her-with	<i>tirea-</i> <i>p <iv> ängkxo</i>	spirit- converse< sjv ¹⁰⁹ >	<i>äo</i>	under	<i>utral</i>	tree	<i>ag-mokri-</i> <i>yä</i>	pl ¹¹⁰ - voice- gen ¹¹¹
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106 #sbrd
107 #adv
108 #sjv
109 #sjv
110 #pl
111 #gen

Or literally, "There isn't nobody that I'd more like to commune with them under the Tree of Voices." Similarly,

Po tsane karmä a tsengit ke tsime'a oel.

po she
tʃa-ne it-to
k<arm>ä go< past¹¹²,
 ipfv¹¹³>
a sbrd¹¹⁴
tʃenge-it place- acc¹¹⁵
ke not
tʃ<im>e'a see< rec¹¹⁶>
oe-il I- erg¹¹⁷

112 #past
 113 #ipfv
 114 #sbrd
 115 #acc
 116 #rec
 117 #erg

"I didn't see where she was going."

Or literally, "I didn't see the place that she went to it." The *tsane* could be dropped, though with a bit of ambiguity, as it would no longer be completely clear that the place was her destination. When a subject or object in the relative clause refers to the noun that it modifies, then it can be dropped:

tsayerikit tolaron a tute "the person who hunted that hexapede" (it's not required to say in full *pol tsayerikit tolaron a tute* "the person who he hunted that hexapede")

fitutel tolaron a yerik "the hexapede which this person hunted" (rather than *fitutel pot tolaron a yerik* "the hexapede which this person hunted it")

However, a noun in the dative or other case may *not* be dropped, though normally converted to a pronoun:

lu poru mesyal a ikran "a banshee that has two wings" (lit. 'a banshee which to it there are two wings'), not **mesyal lu a ikran* or **mesyal a ikran*.

12.5.1 Relative clauses with empty nouns

In the previous examples, the relative clause modified a pronoun, *fi'u* "this", which did little except to anchor the relative clause. By inflecting the pronoun for case, this allows the relative clause to play various roles in the sentence. For example, the pronoun may be in the accusative, *fi'ut*, which when followed by *a* plays the role of "that" in "I think that [X]":

Ke fparmil oel futa lu tute a tsun ni-Na'vi set fifya pivlltæ!

"I didn't think that there was anyone who could speak Na'vi like that at this point!"

<i>ke</i>	<i>fp<arm>il</i>	<i>oe-l</i>	<i>fi-'u-</i> <i>t=a</i>	<i>lu</i>	<i>tute</i>	<i>a</i>	<i>tsum</i>	<i>ni-Na'vi</i>	<i>set</i>	<i>fi-fya</i>	<i>p<iw>lltæ</i>
not	think<	I-erg ¹²⁰	this-	be	person	sbrd ¹²³	be.able	adv ¹²⁴ -	now	this-way	speak<
	past ¹¹⁸ .		thing-					Na'vi			sjv ¹²⁵ >
	ipfv ¹¹⁹ >		acc ¹²¹ =								
			sbrd ¹²²								

118 #past
 119 #ipfv
 120 #erg
 121 #acc
 122 #sbrd
 123 #sbrd
 124 #adv
 125 #sjv

(*Lit.* "I didn't think this [X] thing", where [X] is "there is a can-now-thus-speak-Na'vi person".)

As an accusative form, *futa* is used with an ergative agent when the main verb is transitive. With an intransitive clause, the form would be *fwa*, a contraction of *fi'u-a*.

Law lu oeru fwa nga mi reltseo nolume nitxan!

"It's clear to me that you've learned a lot in art."

law clear
lu be
oe-ru I-dat¹²⁶
fi-'u-a this-thing-attr¹²⁷
nga you
mi in
rel-tseo image-art
nume learn<pfv¹²⁸>
ni-tzan adv¹²⁹ -
 great

126 #dat
 127 #attr
 128 #pfv
 129 #adv

Tsnì is also used with an intransitive main verb such as *silpey* "to hope" or noun + *si* :

Ätxäle si tsnì livu oheru Uniltaron.

"I (respectfully) request (that I have) the Initiation."

umil-taron
dream-hunt

ohe-ru
I. form¹³¹ - dat¹³²

l<iv>u
be< sjv¹³⁰>

tsni
that

si
make

äträle
request

(If the "I" were spoken here, it would be of the form *oe*.) Both the *tsnì* and the subjunctive may be dropped, in which case a clause like "I hope" functions as a discourse particle¹³³, coordinate to the adjacent clause:

Silpey oe, layu oeru ye'rìn siltsana fmawn a tsun oe ayngaru tivìng.

"I hope I will soon have good news to give you."

133 #discourse_particle

<i>silpey</i>	<i>oe</i>	<i>siltsan-a</i>	<i>fmaawn</i>	<i>a</i>	<i>tsun</i>	<i>oe</i>	<i>ay-nga-</i>	<i>t<iv>ing</i>
hope	I		news		can	I	<i>ru</i>	
<i>l<ay>u</i>	<i>oe-ru</i>	<i>ye'rin</i>	good-	<i>sbrd</i> ¹³⁷			pl ¹³⁸ -	give<
be<	I-	soon	attr ¹³⁶				you-	sjv ¹⁴⁰ >
fut ¹³⁴ >	dat ¹³⁵						dat ¹³⁹	

134 #fut
 135 #dat
 136 #attr
 137 #sbrd
 138 #pl
 139 #dat
 140 #sjv

Other small grammatical words than pronouns may head the relative clause. One of them, *krr* "time", behaves as an adverb in that it does not take case endings to show its relationship to the main verb:

Tieyngit oel toel a krr, ayngaru payeng.

"When I get an answer, I'll tell you."

Note that the verb 'get' is perfective, even though it is not in the past, as I do not plan on telling you until the event of getting the answer is complete. Such subordinating words may also appear at the beginning of a sentence:

Fwa sute pxel nga tsun oeyä hì'ia tìngopit sivar fte pivlltxe nilor fitxan oeru teya si.

<i>fi'u-a</i>	<i>ay+tute prel</i>	<i>nga</i>	<i>tsun</i>	<i>oe-yü</i>	<i>hà'i-a</i>	<i>ti-</i> <i>ngop-</i> <i>it</i>	<i>s<iv>ar fte</i>	<i>p<iv>llixxi-lor fi-</i> <i>txan</i>	<i>oe-ru</i>	<i>teya</i>	<i>si</i>
this- sbrd ¹⁴⁹	pl ¹⁵⁰ like person	you	can	I- gen ¹⁵¹	little- attr ¹⁵²	nomz ¹⁵³ create- acc ¹⁵⁴	so.that sjv ¹⁵⁵	speak< sjv ¹⁵⁶ >	I- dat ¹⁵⁸	full	make
								adv ¹⁵⁷ - this-			
								beautifulmuch			

149 #sbrd
150 #pl
151 #gen
152 #attr
153 #nomz
154 #acc
155 #sjv
156 #sjv
157 #adv
158 #dat

"I'm glad that people like you can use my little creation to speak so beautifully."

Here the independent clause is *fî'u oeru teya si* "this fills me (with joy)". Combined with the adposition *hu* "(together) with", this *fwa* translates the English conjunction "although", and similar expressions based on *tsafya* "that way" the conjunction "however (whichever way)". However, "however" in the sense "but" (as in this sentence) is a separate word, *ngian*, as noted above.

13 Discourse

Beyond the level of syntax is discourse¹. This is the influence that the practical requirements of speech have on grammar. Such influences include the relative frequency of words and phrases; context, mutual knowledge, and the flow of information in a conversation; and the intentions and feelings of the speakers. For example, the choice between long and short case forms and long and short plural forms may depend on such factors; other areas of grammar influenced by discourse factors include the choice between preposition and suffix; "free" word order; the choice between referring to something with a noun or with a pronoun; the omission of pronouns, tense, aspect, and mood when these are assumed to be understood; the choice between using the topic or a grammatically determined case for a noun phrase; the use of second-position (affect) infixes in a verb; and the transitivity of the verb.

13.1 Discourse particles

Various particles² in Na'vi are used for addressing people, expressing emotion, and organizing a conversation. For example, *tse* is used to introduce an utterance, a mild announcement that one has something to say, like "now" or "well" in English. *Tut* is a particle of continuation; if someone asks for your name, or how you are, after answering you can add *ngaru tut?* "and you?"^[note 58] The vocative particle *ma* was covered in the chapter on nouns³, and the question-tag particle *srake* in the chapter on questions⁴. Also considered particles are interjections⁵ such as *tewti!* "wow!", though other parts of speech may be used in this fashion, such as *tam* "to suffice" or "okay".

13.2 Affect

The second-position infixes⁶, covered in the chapter on verbs,⁷ are determined primarily by discourse phenomena: The emotional connection the speaker has with the event, how likely the statement is to be accurate, and how much respect the social situation calls for. There are also emotive particles⁸ that appear at the end of a clause and reflect the emotional connection the speaker feels about the topic of discussion or with the audience:

1 #discourse
2 #particle
3 #nouns
4 #questions
5 #interjection
6 #Infixes_II
7 #chapter_on_verbs.2C
8 #particle

- Disparaging *pak*, as in *Tsamsiyu pak?* "Hah! A warrior! (you call that a warrior?)"
- A particle for surprise, exclamation, and encouragement, *nang* "oh my!", which typically occurs with *nìtxan* "so much", as in *sevin nìtxan nang!* "my aren't you pretty!" or "look how pretty you are!"
- A particle *ko* which elicits agreement, like the *eh*⁹ of Canadian English¹⁰ (in other English dialects, *ko* can be translated "let's", "okay?", "why don't you", "wouldn't you agree?", etc.), as in *makto ko!* "Let's ride!" and,

Tsun tutet tspivang ko

<i>tsun</i>	<i>tute-t</i>	<i>tsp<iv>ang</i>	<i>ko</i>
be.able	person- acc ¹¹	kill< sjv ¹² >	eh ¹³

"They can kill a person, you know."^[15]

13.3 Omission of pronouns

Pronouns allow one to refer to something multiple times without repeating its name. However, Na'vi goes a step further: Pronouns tend to be used when switching from one referent to another, but otherwise dropped. That is, once the identity of a referent is established, pronouns aren't necessary, even for the subject of a clause. This is familiar from English texting, but is not as common in conversation.^[note 59] In Na'vi, it is good conversational style as well. The identity of subjects may also be recovered from situational expectations. If a simple statement of a feeling is made, such as *'efu ngeyn* "feel(s) tired", it can be assumed that the subject is the speaker, *oe*, as one can only be sure of one's own feelings; and if a question, *'efu ngeyn srak?*, it can be assumed that the speaker is inquiring about *(ay)nga* "you", as you're the only one whose feelings you would know directly. For third persons, one would normally expect the evidential in <ats>, as one can have no direct knowledge of the feelings of another person: *'efatsu ngeyn* "(s/he) seems tired"; *'efatsu ngeyn srak?* "do (they) seem tired (to you)?".

13.4 Register

Two language registers¹⁴ are attested in Na'vi. The formal ceremonial register has already been introduced; it's characterized by formal pronouns and an infix to the verb. There is also a military register. This is characterized by clipped speech—clipped even by Na'vi standards—and abbreviated pronouns. For example,

9 #eh
 10 http://en.wikibooks.org//en.wikipedia.org/wiki/Canadian_English
 11 #acc
 12 #sjv
 13 #eh
 14 #register

Tìkan tawnatep!

"Target lost!"

T<awn>atep cannot function as an English passive; the closest in the normal register would be *tìkan atawnatep* "a lost target". In addition, the *ä* is dropped from genitive pronouns: *oey* (pronounced [wey]) "my", *ngey* "your", *pey* "her/his", etc.

13.5 Topic–comment

As was discussed in the section on case¹⁵, Na'vi frequently uses a topic–comment¹⁶ structure, where a phrase is placed at the beginning of the sentence as the topic (background) for the comment which follows:

Sìpawmìrioe ngaru seiyi irayo

<i>sì-pawm-ìri</i>	<i>oe</i>	<i>nga-ru</i>	<i>s<ei>i</i>	<i>irayo</i>
pl+ nomz ¹⁷ -ask- top ¹⁸	I	you- dat ¹⁹	do< approb ²⁰ >	thank

"Thank you for the questions" (*lit.* "As for the questions, I thank you")

However, a noun phrase is sometimes moved to the front of a clause without it taking the topic case:

Fìswiräti, ngal pelun molunge fìtseng?

"This creature, why do you bring him here?"

<i>fì-swirä-ti</i>	<i>nga-ìl</i>	<i>pe-lun</i>	<i>munge</i>	<i>fì-tsege</i>
this-creature- acc ²¹	you- erg ²²	what-reason	bring< pfv ²³ >	this-place

Since the topical case can only be used with nouns, in order to topicalize a clause, it must be relativized to a dummy noun:

Furia nì'Ìnglìsì pamrel sivi, oeru txoa livu.

"Excuse me for writing in English."

15 #The_topic_and_the_topical_case
 16 #topic
 17 #nomz
 18 #topic
 19 #dat
 20 #approb
 21 #acc
 22 #erg
 23 #pfv

fi- 'u-ri-a this-thing- top²⁴- at-
 trib²⁵

ni- 'inglasi adv²⁶-English

pam-rel sound-image

s<iv>i make< sjv²⁷>

oe-ru I- dat²⁸

txoa pardon

l<iv>u be< sjv²⁹>

24 #topic
 25 #attrib
 26 #adv
 27 #sjv
 28 #dat
 29 #sjv

(*Lit.* "as for writing in English, may I be forgiven".)

13.6 Word order

expand 'focus'

Na'vi constituent order³⁰ (subject–object–verb order) is syntactically free—that is, it is determined by discourse³¹ factors rather than by syntax³². The word order within a noun phrase³³ (demonstrative-numeral-adjective-noun etc.) is similarly free. One of the few cases where a set word order is common is that *lu* tends to come at the beginning of a clause when it is used without a subject to mean "there is", a construction used for "to have": *Lu oeru ikran* "I have a banshee". The basic (least marked) order is perhaps subject before object. Moving an argument to the front of a clause can be used to focus³⁴ on it. For example,

Na'vil ayyerikit yom "The People eat hexapedes"

Ayyerikit Na'vil yom "Hexapedes (not direhorses) are eaten by the People"

That is, "hexapedes" are the point of the statement. (Na'vi does not have a passive voice³⁵, which may perform a somewhat similar function in English.) This is the opposite of the topic, which would set the hexapedes up as the background for a following point:

Ayyerikiri, Na'vil yom "As for hexapedes, the People eat them."

Likewise, moving an argument from where it would be expected at the front of a clause to the end may give it more "punch":

Lu oeru kzetse "I have a tail" (neutral statement)

Ngeyä kzetse lu oeru "Your tail is mine!" (emphasis on *mine*)

As noted under dative case³⁶ in the chapter on nouns³⁷, the default word order of possession is *lu* "be" followed by the possessor in the dative, as in *lu oeru* "I have". Along with context, this helps distinguish who is who in a multiple dative construction:

Lu oeruayli'u frapor.

"I have something (= words) to say, to everyone."

<i>lu</i>	<i>oe-ru</i>	<i>ay-li'u</i>	<i>fra-po-r</i>
be	I- dat ³⁸	pl ³⁹ -word	every-one- dat ⁴⁰

30 #constituent_order
 31 #discourse
 32 #syntax
 33 #phrase
 34 #focus
 35 #passive
 36 #Dative
 37 #Nouns
 38 #dat
 39 #pl
 40 #dat

where *frapor* "everyone" can be understood to be the recipient because it is not adjacent to the verb.^[18] Another factor in Na'vi word order is aesthetic. For example, *nga yáwne lu oér* "I love you" (lit. "you are beloved to me") has the order it does because it is considered the most euphonic. In proverbs and songs, meter is also a consideration. For example, in the *korén a'áwve tiruséyä 'awsiténg* ("the first rule of living together", AKA the Golden Rule):

*Hém ngeyä zénke fkóru livú,
tsáhem a ngáru prrte' ke lú* ^[note 60]

13.7 Clause order

This kind of subordinating strategy is common among human fixed-order verb-final languages⁴¹ such as Japanese⁴², Korean⁴³, and Turkish⁴⁴. Indeed, though these examples followed the English word order of subordinate clause following the noun it modifies, the human verb-final order of subordinate clause preceding the noun is also possible in Na'vi:

Tsun oe ngahu nì-Na'vi pivängkxo a fì'u oeru prrte' lu.

"It's a pleasure to be able to chat with you in Na'vi."

41 #verb_final

42 <http://en.wikibooks.org/wiki/Japanese>

43 <http://en.wikibooks.org/wiki/Korean>

44 <http://en.wikibooks.org/wiki/Turkish>

tsun be.able *oe* I.intr⁴⁵ *nga-hu* you-with *nì-Na'vi* adv⁴⁶-Na'vi *p<iv>ängkxæ* chat<sjv⁴⁷> sbrd⁴⁸ *fi-'u* this-thing *oe-ru* I-dat⁴⁹ *prte'* plea-sure? *lu* be

45 #intr
 46 #adv
 47 #sjv
 48 #sbrd
 49 #dat

(*Lit.* "this being-able-to-chat-with-you-in-Na'vi thing is a pleasure to me")

For example, "I didn't see where she was going", *po tsane karmä a tsengitke tsime'a oel* above, could also be worded *oel tsime'a ke tsengit apo karmä tsane*, where *po karmä tsane* "she was going there" occurs on either side of the object *tsengit* "place". This contrast can be further seen in the following, where a relative clause is used to nominalize a clause in order for it to form a topic:

Ngal oeyä 'upxaret aysuteru fpole' a fi'uri, ngaru irayo seiyi oe nitxan!

"Thank you very much for sending my message to people!"

nga-l *oc-eyä* *'uprare-* *ay+tute-* *fpe'* *a* *fñ-'u-ri* *nga-ru* *irayo* *s<ei>i* *oe* *nì-txan*
 you- I- message- pl⁵³+pers read< sbrd⁵⁶ this- you- thank do< ap- I. intr⁶⁰ adv⁶¹-
 erg⁵⁰ gen⁵¹ acc⁵² dat⁵⁴ pfv⁵⁵> pfv⁵⁵> thing- dat⁵⁸ top⁵⁷ prob⁵⁹> much

-
- 50 #erg
 - 51 #gen
 - 52 #acc
 - 53 #pl
 - 54 #dat
 - 55 #pfv
 - 56 #sbrd
 - 57 #topic
 - 58 #dat
 - 59 #approb
 - 60 #intr
 - 61 #adv

or conversely,

***Furiangal** oeyä 'upxaret aysuteru fpole', ngaru irayo seiyi oe nìtxan!*

fī-’u-r-i-
a this-
 thing-
 top⁶²⁻
 sbrd⁶³

n-ga-l you-
 erg⁶⁴

oe-eyä I- gen⁶⁵

’upaare-
t message-
 acc⁶⁶

ay+sute-
ru pl⁶⁷+person
 dat⁶⁸

fpe’ and<
 pfv⁶⁹>

n-ga-ru you-
 dat⁷⁰

irayo thank

s<ei>i do< ap-
 prob⁷¹>

oe I. intr⁷²

ni-tzan adv⁷³-
 much

-
- 62 #topic
 - 63 #sbrd
 - 64 #erg
 - 65 #gen
 - 66 #acc
 - 67 #pl
 - 68 #dat
 - 69 #pfv
 - 70 #dat
 - 71 #approb
 - 72 #intr
 - 73 #adv

"Because" for the English clause order (verb-X because verb-Y) is either *taweyk(a)* (from *oeyk* "cause") or *talun(a)* (from *lun* "reason"). With the opposite clause order, the forms switch to *aweykta* and *alunta*.

13.8 Transitivity

Verbs in which transitive and intransitive forms imply different agents are made transitive with the causative⁷⁴ infix <eyk>. For example, *latem* means "change", as an object changes by itself, as say the seasons change; if an external agent causes the change, however, the form is *l<eyk>atem*. Similarly *sngä'i* is "begin" in the sense that something happens on its own, as the rain begins; with an external agent, as in "I began work", the form is *sng<eyk>ä'i*. However, with many verbs, transitivity does not imply a change in the acting agent. For example, *pey* may be either "wait" (intransitive) or "await" (transitive):

Niaynga oe perey niteng.

"Like you, I too am waiting."

<i>nì-ay-nga</i>	<i>oe</i>	<i>p<er>ey</i>	<i>nì-teng</i>
adv ⁷⁵ -pl ⁷⁶ -you	I	wait<ipfv ⁷⁷ >	adv ⁷⁸ -same

Oe tsun pivey trrit a nga tayìng ayoer(u) nì'ul.

"I can await the day when you will give us more."

74 #causative

75 #adv

76 #pl

77 #ipfv

78 #adv

oe I
tsun can
p<iv>ey wait < sjv⁷⁹ >
trr-it day- acc⁸⁰
a sbrd⁸¹
nga you
t<ay>ing give < fut⁸² >
ay-oe-ru pl⁸³-I-
dat⁸⁴
ni-'ul adv⁸⁵-more

79 #sjv
80 #acc
81 #sbrd
82 #fut
83 #pl
84 #dat
85 #adv

Here the person waiting is the same, regardless of the transitivity of the verb, so the causative infix is not used. General action, without any specific object, as in English "I ate too much", is intransitive, whereas an implied but unstated object, as in "he ate some (of it)", is transitive.^[note 61] Thus,

Oe taron

"I hunt"

oe
I. intr⁸⁶

taron
hunt

Here the speaker is merely saying that hunting is an activity that they engage in; this equivalent to such intransitive clauses as "I walk". An overt object, on the other hand, requires that the agent be in the ergative case:

Oel tolaron pa'lit

"I hunted a direhorse"

oe-l
I- erg⁸⁷

taron
hunt< pfv⁸⁸>

pa'li-t
direhorse- acc⁸⁹

If, however, the agent is in the ergative case, but there is no expressed object, then an omitted object is understood. So if asked about *yerik*, the speaker might say,

Taron oel kop.

"I hunt them too"

taron
hunt

oe-l
I- erg⁹⁰

kop
as.well

In the case a relative clause removed either the subject or object of a dependent clause, the case of the other, and the transitivity of the dependent verb, are unaffected:

Ikran a tolaron oel tsawl lu nitxan.

"The banshee I hunted was very big."

86 #intr
87 #erg
88 #pfv
89 #acc
90 #erg

ik:ran
banshee. intr.⁹¹

a
sbrd⁹²

taron
hunt< pfv.⁹³>

oe-l
I- erg⁹⁴

tsawł
big

lu
be

ni-taan
adv⁹⁵-great

91 #intr
92 #sbrd
93 #pfv
94 #erg
95 #adv

Here *ikran* is in the intransitive case because it is the subject of *lu* "to be"; however, *oel* remains in the ergative, since the object is understood from the context: *Ikran a tolaron pot oel tsawl lu nìtxan* "the banshee which I hunted it was very big". The ergative case can also be dropped if the object is retain in a non-accusative case, as in a topic:

Tifyawìntxuri oeyä perey aynga nìwotx.

"You are all waiting for my guidance."

<i>tì-fya-wìntxu-ri</i>	<i>oe-yä</i>	<i>p<er>ey</i>	<i>ay-nga</i>	<i>nì-wotx</i>
nomz ⁹⁶ -way-show- top ⁹⁷	I- gen ⁹⁸	wait< ipfv ⁹⁹ >	pl ¹⁰⁰ -you	adv ¹⁰¹ -all

With an intransitive verb, the causative¹⁰² simply makes the verb transitive. For example, from *po holahaw* "he.INTR slept" we get *oel h<eyk>olahaw poti* "I.ERG put him.ACC to bed (made him sleep)". However, if the verb is already transitive, its subject (now the 'causee') becomes dative rather than accusative. That is, there may be up to three arguments, in the ergative, dative, and accusative cases. So, from *Neytiril yerikit tolaron* "Neytiri.ERG hunted a hexapede.ACC, we get:

Eytukanìl Neytiriru yerikit teykolaron.

"Eytukan had Neytiri hunt a hexapede."

<i>eytukan-ìl</i>	<i>neytiri-ru</i>	<i>yerik-it</i>	<i>t<eyk>aron</i>
(name)- erg ¹⁰³	(name)- dat ¹⁰⁴	hexapede- acc ¹⁰⁵	hunt< caus ¹⁰⁶ >< pfv ¹⁰⁷ >

Not all arguments are required; also, the causee can be included but made more peripheral by putting it in an adpositional phrase:

Eytukanìl yerikit teykolaron.

"Eytukan had a hexapede hunted."

Also: *Eytukanìl fa Neytiri yerikit teykolaron.*

"Eytukan had a hexapede hunted by Neytiri."

96 #nomz
 97 #topic
 98 #gen
 99 #ipfv
 100 #pl
 101 #adv
 102 #causative
 103 #erg
 104 #dat
 105 #acc
 106 #caus
 107 #pfv

<i>eytukan-</i> <i>il</i>	<i>yerik-it</i>	<i>t<eyk>aron</i>	<i>eytukan-fa</i> <i>il</i>	<i>neytiriyerik-</i> <i>it</i>	<i>t<eyk>aron</i>
(name)- erg ¹⁰⁸	hexapede- acc ¹⁰⁹	hunt< caus ¹¹⁰ >< pfv ¹¹¹ >	(name)- by erg ¹¹²	(name)hexapede acc ¹¹³	hunt< caus ¹¹⁴ >< pfv ¹¹⁵ >

In English, the opposite of a causative is a passive¹¹⁶. Na'vi does not have passives; something like "hexapedes are eaten" would be worded *fkol yom ayyerikit* "one eats hexapedes", with the pronoun *fkol* "one". The difference between "hexapedes are eaten by the People" and "the People eat hexapedes" is essentially one of word order; since Na'vi word order is free, it can be changed without having to change the verb or the subject, as noted above.

116 #passive

14 Lexicon

Frommer had created a thousand words for Na'vi by the time *Avatar* was released. Although that number is relatively small, Frommer has stated that with further development the language could be used for everyday conversation.^[19]

14.1 Common phrases

A few conversational items are

káme "to See" (to see into and understand a person)

oél ngáti kámeie "I See you" (a greeting)

káme ngát "See you" (a shortened response)

kìyeváme "good-bye; See you soon"

kaltxi "hello"

ngaru lu fpom srak? "how are you?"

rutxé "please"

iráyo "thank you"

óe ngáru seiyí iráyo "I thank you"

Fyape fko syaw ngar? "What's your name?" (lit., "How does one call you?")

Oeru syaw (fko) Atayo. Ngaru tut? "(They) call me Atayo. And you?"

maw hìkrr ayoe tiyätxaw. "we'll be right back."

yawne "beloved"

nga yáwne lu oér "I love you"

oéru txóa livú "forgive me"

Éywa ngáhu "God (Gaia) be with you"

yola krr, txana krr, ke tsranten "It doesn't matter how long it takes"

ngári Náwma Sá'nok lrrtok soleiyí "the Great Mother has smiled upon you"

ftxozäri aylrrtok ngaru "smiles to you on you celebration" (happy holidays, happy birthday, etc.)

lrrtok ngar "good luck!"

skxáwng! "moron!"

pxasìk "screw that!; no way!"

óe omám "I know"

tam "okay"

tslolám "got it; understood."

tsún tivám "not bad/pretty good" (that should do / good enough)

sìlpey oe pxengarú srung solì "I hope I helped you"

X nìNá'vi slú 'úpe? "how do you say X in Na'vi?"

Ayfizayú plltxuyé san... or *Plltxuyé ayfizayú san...* "Once upon a time..." (*lit.* "the ancestors tell (us)...")

Fìfya plltxuyé ayfizayú. "This is what the ancestors tell." (closing to a story)

Oe tìyawn ngenga. "I love you"

Na'vi has insults, such as *skxawng*, and rude words, such as *pxasìk*, but no words considered obscene.

14.2 Compounds

Many words are created by compounding¹, which is effected by simply joining the elements together: *kámákto* "to ride out", from *kä* "to go" and *makto* "to ride"; *éltungawng* (a species of hallucinogenic worm), from *eltu* "a brain" and *ngawng* "a worm"; *ftéke* "lest", from *fte* "so that" and *ke* "not". In compounds with a monosyllabic verb, it may be the second element which inflects, even when the inflection would be expected before that, as in *yomting* "to feed" (*lit.* "to give to eat"), where the first-position infix *iy* appears instead in the final syllable: *yom-t<iy>ing*. Compounds are often truncated, for example *prrnesyul* "bud" from *prrnen* "infant" + *syulang* "flower". Similarly, *tute* "person" is frequently compounded in an abbreviated form *-tu*, as in *pamtseotu* "musician" (*lit.* 'sound-art-person').

14.3 Ideophones

Na'vi has a few attested ideophones², words which mimic the sound or sensation of the thing they describe, such as *kxángangang* "boom!", which appears to capture the initial explosion with the first syllable, and the reverberating effect of it with the subsequent syllables.

¹ #compound

² #ideophone

14.4 Idioms

Some Na'vi expressions are idiomatic or have been shortened to the point they are no longer directly understandable. For instance, *oeru teya si* means "I'm glad"; it's short for *fpom oeru teya si* "joy fills me".

14.5 Loan words

The Na'vi vocabulary includes a few English loan words³, such as *'Rrta* "Earth". Na'vi lacks the English sounds *b*, *d*, *g*, *ch*, *j*, *oy*, *qu*, *sh*, *th*, and the *s* sound in *fusion*. Therefore, when English words or names are adopted, these need to be replaced with Na'vi sounds. *B*, *d*, and hard *g* are replaced with *p*, *t*, *k*, as in *pätsi* "badge", *toktor* "doctor" (title), and *kunsip* "gunship"; *sh* and the *fusion* sound are replaced with *s* and *z*, as in *kunsip*, while *ch*, *j*, and soft *g* are replaced with *ts* or *tsy*, as in *pätsi* and *Tseyk* "Jake".

14.6 Changing parts of speech

In English, word order is fixed subject-verb-object, number-adjective-noun, etc, but a word may be used as any of several parts of speech. For example, "dance" may be a noun or a verb (to dance a dance), "yellow" may be an adjective or a noun (a yellow apple, a deep yellow), "fast" may be an adjective or an adverb (we walked fast, we are fast), etc. Na'vi is the opposite: Word order is largely free, but with a few exceptions, words are restricted to a specific part of speech. For instance, *srew* can only be a verb "to dance"; the noun is *tisrew*. Likewise *rim* is "yellow" and *tirim* "the color yellow"; *win* "fast" and *nìwin* "quickly". In general:

- Adjectives may be derived from nouns and verbs with *le-*: *hrrap* "danger" → *lehrrap* "dangerous"; *fngap* "metal" → *lefngap* "metallic"; *sar* "use" → *lesar* "useful". Note also *leNa'vi* "of the Na'vi, Na'vish". (The attributive *a-* is generally dropped before this *le-*.)
- Adverbs are formed from all parts of speech with *nì-*: *ftúe* "easy" → *nìftúe* "easily"; *ayoeng* "us" → *nìayoeng* "like us"; *rim* "yellow" → *nìrim* "in yellow"; *silpey* "to hope" → *nìsilpey* "hopefully", *awnomun* "known" (*omun* "to know" → *nìawnomun* "as is known").
- Abstract nouns may be derived from verbs and adjectives, and even from concrete nouns, with the prefix *tì-*: *rey* "to live" → *tìrey* "life"; *ngay* "true" → *tìngay*, "truth".
- An agent of a verb (English *-er*) is indicated with *-yu*: *táron* "to hunt" → *táronyu* "a hunter".^[note 62]

Affixation is common in Na'vi. Another strategy, reduplication⁴, is only attested in one word, the adjective *letrtrtr* "everyday, ordinary", from *trr* "day", though *'engeng* "even, level" shows evidence of reduplication in the past. Not all apparent affixes necessarily are. Some are coincidence. For example, the word *tiran* "to walk" is a verb; the *tì* is part of the root, not the nominal prefix. The noun "a walk" would be *titìran*. Likewise

³ #loan

⁴ #reduplication

meuia "honor" is singular, not dual⁵, which would be *memeuia*, and *tswayon* "to fly" is not future, which would be *tswayayon*. Note that some states described with adjectives in English are stative verbs⁶ in Na'vi, such as *sim* "be near", *lim* "be far", and *fnu* "be quiet". The first two have irregular adverbial forms, *asim* "nearby" and *alim* "far away", which presumably originated from an adverbial phrase *nì*-[noun] *a sim* etc. A few words belong to more than one part of speech. Most notable of these are words of time, such as *krr* "time" and *trr* "day", the derivatives of which function as both noun and adverb. *Tsakrr*, for example, doesn't mean just "that time" but more commonly "then" (*at* that time), and *fitrr* isn't just "this day" but also "today" (*on* this day).

14.7 Cognates

Numerous Na'vi words appear to be cognate⁷, though without any known method of derivation. For example, *eyk* is "to lead", *oeyk* "a cause", and <eyk> caus⁸; other words possibly related to each other are *'ewan* "young" and *'eveng* "child", or *ke yey* "not straight" (crooked) and *kreyey* "mistake".

5 #dual
6 #stative
7 #cognate
8 #caus

15 Texts

The publicly available texts in Na'vi include short snippets and phrases released in interviews, a couple spoken samples of the language provided with transcriptions, two poems, and a page from the Na'vi script of the film.

15.1 Phrases

Following are publicly released samples of Na'vi that were not used in the text of this Wikibook.

Fiskxawngiri tsap'alute sāngi oe. "I apologise for this moron."^[20]

<i>fi-skxawng-ìri</i>	<i>tsap'alute</i>	<i>s<āng>i</i>	<i>oe</i>
this-moron- top ¹	apology	make< pej ^{2?} >	I

Fayvrrtep fitsenge lu kxanì. "These demons are forbidden here."^[20]

<i>fi-ay-vrrtep</i>	<i>fi-tsenge</i>	<i>lu</i>	<i>kxanì</i>
this- pl ³ -demon	this-place	be	forbidden

Oeri ta peyä fahew akewong ontu teya lāngu. "(Ugh,) my nose is full of his alien smell."^[21]

1 #topic
2 #pej
3 #pl

l<äng>u
be< pej⁷>

teya
full

ontu
nose

a-kewong
attr⁶-alien

fahew
smell

po-yü
s/he- gen⁵

ta
from

oe-ri
me- top⁴

4 #topic
5 #gen
6 #attr
7 #pej

Tawsip ngeyä lu sngeltseng. "Your ship is a garbage scow." [translation from Klingon]^[16]

<i>taw-sip</i>	<i>ngeyä</i>	<i>lu</i>	<i>sngel-tseng</i>
sky-ship	your	be	garbage+place

Ayftxozä lefpom ayngaru nìwotx! "Happy Holidays to you all!"^[22]

<i>ay-ftxozä</i>	<i>le-fpom</i>	<i>ay-nga-ru</i>	<i>nì-wotx</i>
pl ⁸ -holiday	adj ⁹ -well.being	pl ¹⁰ -you- dat ¹¹	adv ¹² -all

Mipa zìsìt lefpom ngaru! "Happy New Year!"^[22]

<i>mip-a</i>	<i>zìsìt</i>	<i>le-fpom</i>	<i>nga-ru</i>
new- attr ¹³	year	adj ¹⁴ -well.being	you. sg ¹⁵ - dat ¹⁶

Lì'fya ngeyä sìltsan leiu nìtxan. "Your (use of) language is very good!"^[22]

<i>lì'-fya</i>	<i>ngeyä</i>	<i>sìltsan</i>	<i>l<ei>u</i>	<i>nì-txan</i>
speak?-way	your	good	be< approb ¹⁷ >	adv ¹⁸ -great

'Awvea ultxari ohengeyä, Nawma Sa'nok lrrtok siveiyi. "May the Great Mother smile upon our first meeting."^[23]

-
- 8 #pl
 - 9 #adj
 - 10 #pl
 - 11 #dat
 - 12 #adv
 - 13 #attr
 - 14 #adj
 - 15 #sg
 - 16 #dat
 - 17 #approb
 - 18 #adv

<p>'aawnea first</p>	<p><i>ultra-ri</i> meeting- top¹⁹</p>	<p><i>ohe-nga-yä</i> I. form²⁰+you- gen²¹</p>	<p><i>nawm-a</i> great- attr²²</p>	<p><i>sa'nok</i> mother</p>	<p><i>lrrtok</i> smile</p>	<p><i>s'eiv>ei>i</i> make< sjv²³>< ap- prob²⁴></p>
--------------------------	--	---	---	---------------------------------	--------------------------------	--

19 #topic
 20 #form
 21 #gen
 22 #attr
 23 #sjv
 24 #approb

Lu awngar aytele apxay a teri sa'u pivlltze. "We have a lot to talk about."^[note 63]

lu be
awnga-ru we. incl²⁵-
 dat²⁶
ay+txele pl²⁷+matter
a-prax attr²⁸-many
a sbrd²⁹
teri about
ay+tsa-'u pl³⁰+that-
 thing³¹
p<iw>lltæ speak<
 sjv³²>

25 #incl
 26 #dat
 27 #pl
 28 #attr
 29 #sbrd
 30 #pl
 31 #thing
 32 #sjv

Oeyä ikran slivu nga, tsakrr oeng 'awsiteng mivakto. "Be my banshee and let's ride together."^[24]

m<iv>akto
ride< sjv³⁵>

'aaw-si-teng
one-make-same

oe+nga
I+you

tša-krr
that-time

nga
you

sl<iv>u
become< sjv³⁴>

ikran
banshee

*oe-yä*³³
I-gen³³

33 #gen

34 #sjv

35 #sjv

Tengkrr palulkan moene kxll sarmi, poltze Neytiril aylì'ut a frakrr 'ok seyä layu oer.^[citation needed³⁶] "As the thanator charged towards us, Neytiri said something I will always remember."

<i>teng-krr</i>	<i>palulkan</i>	<i>me-oe-ne</i>	<i>kxll</i>	<i>s<arm>i</i>
same-time	(name)	du ³⁷ -I-to	charge	make< past ³⁸ . ipfv ³⁹ >

37 #du

38 #past

39 #ipfv

<i>plltze</i>	<i>Neytiri-il</i>	<i>ay-lì'u-it</i>	<i>a</i>	<i>fra-krr</i>	<i>'ok</i>	<i>ay+ts[e]- yä</i>	<i>l<ay>u</i>	<i>oe-ru</i>
say< pfv ⁴⁰ >	(name)- erg ⁴¹	pl ⁴² - word- acc ⁴³	sbrd ⁴⁴	all-time	memory	pl ⁴⁵ +it- gen ⁴⁶	be< fut ⁴⁷ >	I- dat ⁴⁸

40 #pfv
41 #erg
42 #pl
43 #acc
44 #sbrd
45 #pl
46 #gen
47 #fut
48 #dat

15.2 Film script

A portion of the script of Jake, the human protagonist in the film *Avatar*, is visible in a short documentary on the making of the film.^[25] Three minutes in, there's a close-up⁴⁹ of a page of Jake's Na'vi dialog, "Na'vi Dialog for Jake—3-13-2007", reproduced here. Stress is marked by underlining. Since the dialog is Jake's, it is likely that some of the Na'vi may be ungrammatical.^[note 64]

Oel ngati kameie, ma Tsmukan, ulte ngaru seiyi ireiyo.

I See you Brother, and thank you.

49 <http://i46.tinypic.com/29ekdqr.png>

oe-il I-erg⁵⁰ *nga-ti* you-acc⁵¹ *kam<ei>e* See< ap-
 prob^{52>} *ma* voc⁵³ *tsumuk-an* sibling-
 masc⁵⁴ *ulte* and *nga-ru* you-dat⁵⁵ *ireiyo* thanks
 s<ei>i make< approb^{56>}

50 #erg
 51 #acc
 52 #approb
 53 #voc
 54 #masc
 55 #dat
 56 #approb

Ngari hu Eywa saleu tirea, tokx 'i'awn slu Na'viyã hapxi.

Your spirit goes with Eywa, your body stays behind to become part of the People.

nga-ri *hu* *eywa* *salew*^{note 65} *tokx* *i'aum* *stu* *na'vi-yä* *hapxi*
 you- with Gaia proceed body remain become people- part
 top⁵⁷

57 #topic
58 #gen

Sifmetokit emzola'u ohel.

I have passed the tests.

+tì-fmetok-it

pl⁵⁹+ nomz⁶⁰-test- acc⁶¹

em-za'u

over-come< pfv⁶²>

ohē-ìl

I. form⁶³- erg⁶⁴

Ätxäle si tsnì livu oheru Uniltaron.

I respectfully request the Dream Hunt.

59 #pl

60 #nomz

61 #acc

62 #pfv

63 #form

64 #erg

äträle request
si make
tsni that
l<i>v>u be< sjv⁶⁵>
ohe-ru I. form⁶⁶ - dat⁶⁷
unil-taron dream-hunt

65 #sjv
 66 #form
 67 #dat

Ma Eytukan, lu oeru ayli'u frapor.

Eytukan, I have something to say, to everyone.

ma
 voc⁶⁸

eytukan
 (name)

lu
 be

oe-ru
 I- dat⁶⁹

ay-lì-'u
 pl⁷⁰ -say-thing

fra-po-ru
 every-one- dat⁷¹

Ayli'u na ayskxe mi te'lan.

The words are like stones in my heart.

ay-li'-u	na	ay+tskxe	mì+txe'lan
pl ⁷² -say-thing	like	pl ⁷³ +stone	in+heart

Eo ayoeng lu txana tikawng.

A great evil is upon us.

eo	ay-oe-nga	lu	txan-a	ti-kawng
before	pl ⁷⁴ -I-you	be	great- attr ⁷⁵	nomz ⁷⁶ -bad

Sawtute zera'u fte fol Kelutralti skiva'a.

The Sky People [humans] are coming to destroy Hometree.

72 #pl
 73 #pl
 74 #pl
 75 #attr
 76 #nomz

+taw-tute *z<er>a'u* *fte* *fo-il* *kelku+utral-ti* *sk<iw>a'a*
 pl⁷⁷ +sky-people come< ipfv⁷⁸> so.that they- erg⁷⁹ home+tree- acc⁸⁰ destroy< sjv⁸¹>

77 #pl
 78 #ipfv
 79 #erg
 80 #acc
 81 #sjv

Piyähem fitseng ye'rìn.

They will be here soon.

<i>p<iy>ähem</i>	<i>fi-tseŋe</i>	<i>ye'rìn</i>
arrive< imm ⁸² >	this-place	soon

Ayngari zene hivum, tx[...] (rest of line obscured)

You have to leave, or you will die.

<i>ay-nga-ri</i>	<i>zene</i>	<i>h<iv>um</i>
pl ⁸³ -you- top ⁸⁴	must	leave< sjv ⁸⁵ >

Ma Tsu'tey te Ro[...]

Tsu'tey of the Rongloa, son of [...]

<i>ma</i>	<i>tsu'tey</i>	<i>te</i>
voc ⁸⁶	(name)	of [in names]

Na'viru [...]

to the people [...] (handwritten)

na'vi-ru
people- dat⁸⁷

Jake's speech near the end of the movie, which Tsu'tey translated, is as follows. It was cut in places for the timing of the film, so it does not completely follow the English:

Fpole' sawtutel 'upxaret

The sky people have sent us a message

[san] Ayoeri tsat new

tsun mivunge [sik].

82 #imm
83 #pl
84 #topic
85 #sjv
86 #voc
87 #dat

that they can take whatever they want [and no-one can stop them].

Slä awngal 'upxaret fpiye' for.

But we will send them a message.

Kämakto nìwin, ayngati spivule hufwel.

You ride out [as] fast [as] the wind can carry you.

Ayolo'ru alahe peng ziva'u.

You tell the other clans to come.

For peng syeraw Toruk Makto.

You tell them toruk-makto calls [to them].

Tswayon set oehu,

You fly now, with me,

ma smukan, ma smuke!

brothers, sisters!

sawtuter wiyintxu ayoeng

and we will show the sky people

ke tsun fo fikem sivi

[that] they cannot take whatever they want [cannot do this]

fitsenge

[and that] this

l(u) awngeyä!

[this] is our [land]!

A few other lines of the film have been confirmed, including some which did not make it into the final cut:

Grace: *Tsun tivam. Aylì'u ngian nì'it skepek lu.*

"Not bad. You sound a little formal."

Tsu'tey: *Fayvrrtep fitsenge lu kxani.*

"These demons are forbidden here."

child: *Txopu rä'ä si, lu ketuwongo nì'aw.*

"Don't be afraid, it's just some alien."

'I'awn alim!

"Stay back!"

Mo'at: *Fiketuwingti oel stiyeftxaw.*

"I will look at this alien." (*stìsyeftxaw* would also be appropriate here)

Yola krr, txana krr, ke tsranten.

"It doesn't matter how long it takes."

Pori zene kllfrivo' nga.

"He is your responsibility."

Eytukan: *Tsampongut Tsu'teyil iveyk.*

"Tsu'tey will lead the war party."

chant: *Srung si poeru, ma Eywa!*

"Help her, Gaea!"

Mo'at: *Tiviran po ayoekip.*

"Let her walk among us."

Lu hasey.

"It is finished."

There have been several attempts at working out the rest of the script. Some of these are summarized at LeanNavi.org here⁸⁸. They likely include numerous errors.

15.3 Songs

Frommer translated four of Cameron's songs into Na'vi. The *Hunting Song* is in the next section; here are the other three.

15.3.1 Weaving Song

Note that several words occur in their short-plural form.

The rhythm of rain and sun,	Tompayä kato, tsawkeyä kato,	<i>tompa</i> 'rain', <i>kato</i> 'rhythm' <i>tsawke</i> 'sun'
Of night and day,	Trrä sì txonä	<i>trr day</i> , <i>txon</i> <i>night</i>
The rhythm of the years, And the beat of the hearts, Hearts of the People	S(i) ayzisitä kato, Sì 'ekong te'lanä Te'lanä le- Na'vi	<i>zìsìt year</i> <i>'ekong a beat</i> , <i>txe'lan heart</i>

⁸⁸ http://wiki.learnnavi.org/index.php?title=Na%27vi_from_Avatar_Movie

Fills me, Fills me.	Oeru teya si, Oeru teya si.	teya <i>full</i>
I weave the rhythm In yellow and blue, The rhythm of the years, The spiral of the lives, Lives of the people, Fills me, Fills me.	Katot täftxu oel Niean nirim Ayzisitã kato, 'Iheyu sìreyä Sìreyä le- Na'vi, Oeru teya si, Oeru teya si.	täftxu <i>to</i> <i>weave</i> ean <i>blue</i> , rim <i>yellow</i> <i>'iheyu a spi-</i> <i>ral, tirey life</i>

15.3.2 Tree Song (Funeral Song)

This song appears in the movie. A fair amount of elision occurs, marked in parentheses.

We are all seeds / Of the Great Tree Whose strength is in our legs Like the mighty trunks, In our arms As sheltering branches, In our eyes The blue- flower Which un- folds to the sun. We are all seeds / Of the Great Tree Whose song is within us.	Utralä (a)Nawm / ayrina' l(u) ayoeng, A peyã tìtxur mì hinam awngeyã N(a) aysangek afkeu, Mì pun N(a) ayvul ahusawnu, M(i) aynar Na seze A 'ong ne tsawke. Utralä (a)Nawm / ayrina' l(u) ayoeng, A peyã tìrol m(i) awnga.
---	---

15.3.3 Spiral Song

Music creates
patterns
In the silence
of the mind
As weavers
do
In the physi-
cal world.

Chorus:

We sing to
See
We See to
sing
We sing our
way
Down the
eight paths
To the center.

The songs
bind the thir-
teen spirals
Of the solid
world
To the eight
spirit paths
Like the
threads of
a Songcord.

Chorus

Pamtseol
ngop ayrenut
Mì ronsemä
tìfnu
Tengfya ngop
säftxuyul
Mì hifkey.

Awnga rol fte
kivame
Kame fte
rivol
Rerol tengkrr
kerä
Ïlä fya'ò avol

Ne kxamt-
seng.

Aywayl yìm
kifkeyä

'Theyut
avomrr
Sin tireafya'ò
avol
Na waytelemä
hìng.

15.4 Spoken texts

There are four online recordings of Frommer speaking extended amounts of Na'vi.

15.4.1 Short dialog

- Zimmer, Benjamin (December 4, 2009). "Skxawng!"⁸⁹. *The New York Times*.⁹⁰. Retrieved January 9, 2010.

Half-way down the article is a sound recording of a short conversation, with English subtitles. The Na'vi is not documented; what follows likely contains some errors. Unintelligible segments are marked with ((double parentheses)).

Oel hu Txewì ttram na'ringit tarmok.

Yesterday I was with Txewì in the forest

Tsole'a syeptutet atsawl frato mì sìrey.

and we saw the biggest Trapper I've ever seen.

((L))u fo l((e))hrrap

Those things are dangerous.

Tsun tutet tspivang ko

They can kill a person, you know.

Oe ((o))mum.

I know.

Nari soli ayoe [moe] fteke nihawng livok.

We were careful not to get too close.

Glossary: *Ttram* yesterday, *na'ring* a forest, *tok* to occupy (a place) *Tse'a* to see, *syep* to trap, *tute* a person, *tsawl* big, *tirey* life *Hrrap* danger, *tspang* to kill, *omum* to know *Nari si* to pay attention, *fteke* lest, *hawng* excessive, *lok* approach

15.4.2 Hunt Song

- BBC interview⁹¹

In the 0818 broadcast, at time 3'30", Frommer recites the second verse and chorus of the *Hunt Song* he translated for Cameron. The Na'vi text is as follows:^[26]

We are walk-	Terìran ayoe	tìran <i>to walk</i>
ing your way	ayngane	
We are com-	Zera'u	za'u <i>to come</i>
ing		
We are	Rerol ayoe	rol <i>to sing</i>
singing your	ayngane	
way		

89 <http://www.nytimes.com/2009/12/06/magazine/06F0B-onlanguage-t.html>

90 <http://www.nytimes.com/2009/12/06/magazine/06F0B-onlanguage-t.html>

91 http://news.bbc.co.uk/today/hi/today/newsid_8409000/8409319.stm

So Choose	Ha ftkey	ftkey <i>to choose</i>
Choose one among you	'Awpot set ftkey ayngal a l(u) ayn- gakup	'awpo <i>an individual</i>
Who will feed the People.	'Awpot a Na'viru yomtiyìng.	yom <i>to eat,</i> tìng <i>to give</i>
<i>Chorus</i>		
Let my arrow strike true	Oeyä swizaw ningay tivakuk	swizaw <i>an arrow,</i> ngay <i>true,</i> takuk <i>to strike</i>
Let my spear strike the heart Let the truth strike my heart Let my heart be true.	Oeyä tukrul txe'lanit tivakuk Oeri tìn- gayìl txe'lanit tivakuk Oeyä txe'lan livu ngay.	tukru <i>a spear,</i> txe'lan <i>a heart</i>
You are fast and strong You are wise	Lu nga win sì txur Lu nga tx- antslusam	win <i>fast,</i> txur <i>strong</i> txan <i>much,</i> tslam <i>to understand</i>
I must be fast and strong	Livu win sì txur / oe zene	
So only Only if I am worth of you Will you feed the People	Ha n(i)'aw Pxaan livu txo nì'aw oe ngari Tsakrr nga Na'viru yomtiyìng	nì'aw <i>only,</i> pxan <i>worthy</i>

15.4.3 Public letter

- A public letter in Na'vi⁹² (2010 Jan 20) using basic vocabulary, read aloud by Frommer and with English subtitles.

The Na'vi is as follows. Stressed syllables are underlined.

Aeylanur oeyä sï eylanur li'fyayä leNa'vi nìwotx:	<i>To all my friends and friends of the Na'vi language: 'eylan a friend, li'fya a language (lit. 'way of speaking'), nìwotx all of</i>
Oel ayngati kameie, ma oeyä eylan, ulte ayngaru seiya irayo.	<i>I See you, my friends, and I thank you. kame to "See", to look into and under- stand, irayo thanks</i>
Fpole' ayngal oer fitxan nìftxavang a 'upxaret stolawm oel.	<i>I have heard the message you have sent me so passionately. fpe' to send, fitxan so much (lit. 'this much'), nìftxavang passionately, 'upxare a message, stawm to hear</i>
Li'fyari leNa'vi oel 'efu ayngeyä tìyawnit.	<i>I feel your love for the Na'vi language. 'efu to feel, tìyawne love (lit. 'beloved- ness')</i>
Ulte omum oel futa tifyawìntxuri oeyä perey aynga nìwotx.	<i>And I know you are all waiting for my guidance. omum to know, tifyawìntxu guidance, pey to wait</i>
Spivaw oeti rutxe, ma oeyä eylan:	<i>Please believe me, my friends. spaw believe, rutxe please</i>
oe new nìtxan ayngaru fyawivìntxu.	<i>I want very much to guide you. new to want, nìtxan much, fyawìntxu to guide</i>
Slä niawnomum,	<i>But as you know, (ni?-omum, not currently parsable)</i>
zene oe 'awsiteng tìkangkem sivi fohu	<i>I must work together with those 'awsiteng together, tìkangkem si to work</i>

92 <http://masempul.org/upxare-niinglisi/>

a Uniltìrantokxit sì kifkeyit Eywa'evengä zamolunge awngar.	<i>who have brought us "Avatar" and the world of Pandora.</i> unil-tiran-tokx <i>an Avatar</i> (lit. 'dream-walker body'), kifkey <i>a world</i> , Eywa-'eveng <i>Pandora</i> (lit. 'child of Eywa'), za-munge <i>bring hither</i>
Foru 'upxaret oel fpole',	<i>I have sent them a message,</i>
slä vay set ke pamähängem kea ti'eyng.	<i>but up to now no answer has arrived.</i> set now, pähem <i>to arrive</i> , ti'eyng <i>an answer</i>
Niaynga oe perey niteng.	<i>Like you, I too am waiting.</i> niteng <i>similarly</i>
Ti'eyngit oel tolel a krr,	<i>When I receive an answer,</i> tel <i>to receive</i>
ayngaru payeng,	<i>I will let you know,</i> peng <i>to tell</i>
tsakrr paye'un sweya fya'ot	<i>and I will then decide the best way</i> pe'un <i>to decide</i> , swey <i>best</i> , optimal, fya'o <i>a way</i>
a zamivunge oel ayngar ayli'ut horentisi li'fyayä leNa'vi.	<i>to bring you the words and rules of Na'vi.</i> li'u <i>a word</i> , koren <i>a rule</i> ,
Silpey oe, layu oeru ye'rìn siltsana fmawn a tsun oe ayngaru tivìng.	<i>I hope I will soon have good news to give you.</i> silpey <i>to hope</i> , ye'rìn <i>soon</i> , siltsan <i>good</i> , fmawn <i>news</i> , ting <i>to give</i>
Ayli'ufa awngeyä 'eylanä a'ewan Markusi ta Ngalwey . . .	<i>In the words of our young friend Markus from Galway . . .</i> 'ewan <i>young</i>
'Ivong Na'vi!	<i>Let Na'vi bloom!</i> 'ong <i>to bloom</i>
Kiyevame ulte Eywa ngahu.	<i>Goodbye for now, and may Eywa be with you.</i>

Ta 'eylan karyusì ayngeyä, Pawl.

Your friend and teacher, Paul.
karyu a teacher

15.4.4 On this Night

- Eliyahu Ha-Na 'v⁹³ (2010 Mar 21)

Traditional questions for Passover Seder.

Fìtxon na ton alahe nìwotx pelun ke lu teng?

"Why is this night unlike all other nights?"

93 <http://whyisthisnight.com/na%27vi.mp3>

<i>fi-txon</i>	<i>na</i>	<i>ay+txon</i>	<i>a-lahe</i>	<i>ni-wotx</i>	<i>pe-lun</i>	<i>ke</i>	<i>lu</i>	<i>teng</i>
this-night	like	pl ⁹⁴ - night	attr ⁹⁵ - other	adv ⁹⁶ -all	which- reason	not	be	same

94 #pl

95 #attr

96 #adv

Toniri alahe, awngal yom hametsi-t, yom matsa-t, ke tsranten; fitxon yom matsa-t ni'aw.

"Other nights, we may eat either leavened or unleavened bread; this night we eat only unleavened bread."

<i>ay+txon-</i>	<i>a-lahe</i>	<i>awnga-il</i>	<i>yom</i>	<i>hametsi-</i>	<i>yom</i>	<i>matsa-t</i>	<i>ke</i>	<i>tsranten</i>
<i>iri</i>				<i>it</i>				
<i>pl</i> ⁹⁷ -	<i>attr</i> ⁹⁹ -	<i>we-</i>	<i>eat</i>	<i>hametz-</i>	<i>eat</i>	<i>matzah-</i>	<i>not</i>	<i>matter</i>
<i>night-</i>	<i>other</i>	<i>erg</i> ¹⁰⁰		<i>acc</i> ¹⁰¹		<i>acc</i> ¹⁰²		
<i>top</i> ⁹⁸								

97 #pl

98 #topic

99 #attr

100 #erg

101 #acc

102 #acc

fi-txon
this-night

yom
eat

matsa-t
matzah

nì-'aw
adv¹⁰³-one

Tonìri alahe, awngal yom fkxenti lerik niwotx; fitxon yom sat a lu syä'ä nì'aw.

"Other nights, we eat all manner of greens; this night we eat only those which are bitter."

<i>ton-iri</i>	<i>aldhe</i>	<i>yom</i>	<i>fkxen-ti</i>	<i>le-rik</i>	<i>niwotx</i>
nights-as.for	other	eat	vegetable.food- acc ¹⁰⁵	adj ¹⁰⁶ -leaf	all

awnga-il
we-erg¹⁰⁴

104 #erg
105 #acc
106 #adj

ni'aw
only

syä'ä
bitter

lu
be

a
that

ay+tsa-it
pl¹⁰⁷-that-
acc¹⁰⁸

yom
eat

fitxon
tonight

107 #p1

108 #acc

Toniri alahe, awnga ke yemfpay si keng 'awlo; fitxon yemfpay si melo.

"Other nights, we do not dip even once; this night we dip twice."

<i>ton-iri</i> nights- as.for	<i>alaha</i> other	<i>awiga</i> we. intr. ¹⁰⁹	<i>ke</i> not	<i>yem-f?-pay</i> put-?- liquid	<i>si</i> do	<i>keng</i> even	<i>'aw-lo</i> one-time
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fitxon
tonight

yemfpay
dip

si
do

me-lo
two-time

*Toniri alahe, awngal yom wutsot tengkrr hereyn nìpxim, tengkrr teruvon, ke tsranten;
fitxon yom tengkrr teruvon.*

"Other nights, we dine either sitting upright or reclining; this night we eat reclining."

<i>ton-iri</i> nights- as.for	<i>alaha</i> other	<i>awinga-il</i> we- erg ¹¹⁰	<i>yom</i> eat	<i>wutso-it</i> meal- acc ¹¹¹	<i>teng-krr</i> same-time	<i>h<er>eyn</i> sit< ipfv ¹¹² >	<i>ni-pxim</i> adv ¹¹³ - erect
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110 #erg
111 #acc
112 #ipfv
113 #adv

teng-krr
same-time

t<er>uwon
lean< ipfv¹¹⁴>

ke
not

tsranten
matter

fitxon
tonight

yom
eat

teng-krr
while

t<er>uwon
lean< ipfv¹¹⁵>

Toniri alahe, awngal yom wutsot nifya'o letrrrrr; fitxon yom ni'eoio.

"Other nights, we dine normally; this night we dine with special rites."

114 #ipfv

115 #ipfv

tomiri
 nights
aldhe
 other
awnga-l
 we- erg¹¹⁶
yom
 eat
wutso-it
 meal- acc¹¹⁷
ni-fya'o
 adv¹¹⁸-way
le-trr~trr
 adj¹¹⁹-day~
 redup¹²⁰

116 #erg
 117 #acc
 118 #adv
 119 #adj
 120 #redup

fitxon
tonight

yom
eat

nì-'eoio
adv¹²¹-ceremony

15.4.5 Earth Day

- Mipa 'Upxare fpi Frapo mì Srr 'Rrtayä¹²² (2010, Aprin 22)

Ma oeyä eylan, Fitrri mì letsranten—Trr 'Rrtayä—new oe pivlltxe ayngaru san kaltxi sik ulte tivng ayngar li'ut a ti'efumì oeyä lu lor frato mì li'fya leNa'vi: meoauoniaea. Fìli'uä ral lu tìme'em sì tìrusey mì hifkey na Nawma Sa'nokä hapxi, 'uo a fpi rey'eng Eywa'evengmì 'Rrtamì tsranten nìtxan awngaru nìwotx. Ngaytxoa, nìawnomum ke lolu oer nìkeftxo mì soka srr ayskxom letam fte li'fyari awngeyä tikangkem sivi. Slä lu oeru fmawno asìltsan: ye'rìn 'iyi'a sänume a tsari kllfro' oe; mawkrr layeiu oer krr nì'ul fte ngivop ayli'ut sì tsayfnesänumvit a tsun frapor srung sivi fte nivume sì ziverok nìswey. Tsakrrvay, ayngeyä tìmweypeyri irayo seiye oe, ulte fitrrä ftxozäri, sılpey oe, ayngaru prrte' livu. Kiyevame ulte Eywa ayngahu. Ta Pawl *My friends, On this important day—Earth Day—I want to say hello to you and present to you the word that, in my opinion, is the most beautiful in the Na'vi language: meoauoniaea. The meaning of this word is “harmony, living in the world as part of the Great Mother,” something that matters a lot to all of us for the sake of The Balance of Life on both Pandora and Earth. My apologies: As you know, in recent days I have not had sufficient opportunity to work on our language. But I have some good news. My teaching responsibilities will soon end; after that I will have more time to create words and the kinds of lessons that can help everyone best learn and remember. In the meantime, I thank you for your patience, and I hope you enjoy today’s celebration. Goodbye and Eywa be with you. From Paul*

¹²¹ #adv

¹²² <http://masempul.org/wp-content/uploads/2010/04/Upxare-fpi-Srr-Rrtaya.mp3>

16 Appendix: Glossing conventions

The samples of Na'vi in this book are parsed with interlinear glosses¹, following the conventions of the Leipzig Glossing Rules,^[27] an international consensus on glossing texts for grammatical analysis. The *gloss* is the line or lines added below the text being analyzed, or between the text and its translation. The conventions cover two areas, the layout and punctuation of the parsed text, and the abbreviations using in parsing it.

16.1 Glossing layout

A glossed text will typically consist of:

1. the original Na'vi text in the first line, followed by
2. the same words, with each broken up into its constituent parts, called morphemes², then—underneath and aligned with this—
3. a translation of each of those morphemes (the actual gloss), and finally
4. a running translation of the text in English.

The fundamental point of interlinear glossing is that each word be aligned with its gloss for legibility, and that each word be parsed into the same number of units in the second and third lines for unambiguous analysis. For example, the phrase *for poltxe oe* "I spoke with them" may be glossed as follows:

For poltxe oe.

<i>ay+po-ru</i>	<i>plltxe</i>	<i>oe</i>
PL ³ +he/she- DAT ⁴	to.speak< PFV ⁵ >	I. INTR ⁶

"I spoke with them."

The first word, *for*, consists of three morphemes: a plural *ay+* (which here has been dropped, though its effects remain), the third-person pronoun *po* "he/she", and the dative case suffix *-ru*, here shortened to *-r*. In the second line, where the word is broken down, these are presented in their full forms, *ay+po-ru*. The hyphen in *po-ru* shows that the *-ru* is a suffix. The plus sign in *ay+* shows that, although a prefix, *ay-* changes the following

1 #gloss
2 #morpheme
3 #pl
4 #dat
5 #pfv
6 #intr

root, in this case from *po* to *fo*.^[note 66] In the third line, each of these bits is glossed, retaining the punctuation of the second line: *ay+* as "PL+", an abbreviation for 'plural', *po* as "he/she", and *-ru* as "-DAT", an abbreviation for 'dative case'. Similarly in the second word, *poltxe*. Here the root form *plltxe* appears in the gloss. The angle brackets around ** shows that it's an infix. The gloss for the infix, "*<PFV>*" (an abbreviation of 'perfective aspect'), appears at the end of the gloss "to.speak" because, in Na'vi, the position of an infix is determined by counting from the end of the verb.^[note 67] Note the gloss of *plltxe*: Because glossing is supposed to be a one-to-one conversion, the two words "to speak" are linked together with a period to show they correspond to a single word in Na'vi. The third word, *oe* "I", plays the role of an intransitive subject. Because that does not have a morpheme in Na'vi, there is no way to parse it in the second line. Therefore, in keeping with the one-to-one glossing principle, the gloss for intransitive case, INTR, is connected to the translation "I" with a period.^[note 68] Not all of these details will always be necessary, depending on the point of the gloss. So, for example, if the only point is to illustrate the perfective aspect, or which grammatical case the verb requires, the gloss may be reduced to:

For *poltxe oe*.

<i>fo-r</i>	<i>plltxe</i>	<i>oe</i>
they-to	speak< PFV ⁷ >	I

"I spoke with them."

16.2 Glossing abbreviations

Morphemes which can be readily translated into English may be done so. However, this is not always possible: English has no good translation for the dative suffix, for example. Rather than writing "dative" each time, an abbreviation is used; these typically have three letters: DAT. They are generally written in small capitals, as here, to more easily distinguish abbreviations from actual translations. The following abbreviations may be found in this book:

7 #pfv

Gloss	Stands for	Na'vi morpheme
ACC	accusative case ⁸	<i>-it, -ti</i>
ACTV	active participle ⁹	<i><us></i>
ADJ	adjective ¹⁰	<i>le-</i>
ADV	adverbial ¹¹	<i>ni-</i>
AP-PROB	approbative affect ¹²	<i><ei></i>
ATTR	attributive ¹³	<i>a-, -a</i>
CAUS	causative ¹⁴	<i><eyk></i>
DAT	dative case ¹⁵	<i>-ur, -ru</i>
DEM	demonstrative ¹⁶	<i>-’u</i>
DIM	diminutive ¹⁷	<i>-tsyip</i>
DIST	distal ¹⁸ demonstrative	<i>tsa-</i>
DU	dual number ¹⁹	<i>me+</i>
E	epenthetic ²⁰ morpheme	
ERG	ergative case ²¹	<i>-il</i>
EVID	evidential ²²	<i><ats></i>
EXCL	exclusive person ²³	(various)
FAM	familiar register ²⁴	
FEM	feminine gender ²⁵	<i>-e</i>
FORM	formal register	<i><uy></i>

17 Glossary of linguistic terms

A¹ C² D³ E⁴ F⁵ G⁶ I⁷ L⁸ M⁹ N¹⁰ O¹¹ P¹² Q¹³ R¹⁴ S¹⁵ T¹⁶ U¹⁷ V¹⁸ W¹⁹

- The **accusative case** is a grammatical case²⁰ that marks the direct object of a verb. For example, in English the pronoun "I" becomes "me" when it's the object, as in "see me" (compare "I see"). In English, "me" is also used for the recipient, as in "give me" (that is, "give it *to me*"), as well as after a preposition ("with me, for me"). In Na'vi, these require different cases: unmarked *oe tse'a* "I see", accusative *oetitse'a* "see me", dative *oeruting* "give me", and *oehu* "with me".
- **Adjectives** are a class of words which modify nouns, like "blue", "lazy", and "funny". In Na'vi, adjectives have two forms: an attributive²¹ form marked by *a* for modifying a noun directly, and a predicate²² form without *a* that is used with verbs like *lu* "to be" and *slu* "to become" to modify a noun indirectly: *soma tsawke* or *tsawke asom* "a hot sun", vs. *tsawke lu som* "the sun is hot".
- **Adposition** is a generic term for either a preposition²³, which comes before a noun, or the equivalent after a noun, a postposition. In describing Na'vi, the term is used for those small grammatical words²⁴ which may be either a preposition or a suffix²⁵, such as *hu* "together with" in *hu oe* or *oehu* "with me".

1	#aa
2	#cc
3	#dd
4	#ee
5	#ff
6	#gg
7	#ii
8	#ll
9	#mm
10	#nn
11	#oo
12	#pp
13	#qq
14	#rr
15	#ss
16	#tt
17	#uu
18	#vv
19	#ww
20	#case
21	#attributive
22	#predicate
23	#preposition
24	#grammatical_word
25	#suffix

- **Adverbs** are a class of words which modify things other than nouns, such as verbs or even entire clauses²⁶. Many Na'vi adverbs are marked with the prefix *nì-*, like *nìftue* "easily" from *ftue* "easy" (the English equivalent, for those who use it, is -ly), but there are also little adverbs without *nì-* such as *set* "now".
- **Affect** is an inflection of a verb which conveys how the speaker feels about an event or state. It may be a pleasant emotion, as in "thank you so much!! (smiley face)", here called *approbative*²⁷ affect; an unpleasant emotion, as in "that's really messed up", here called *pejorative*²⁸ affect; a degree of deference or ceremonial solemnity, called *formal*²⁹ affect; or a degree of certainty or uncertainty about the truth of what is being said, conveyed by *evidential*³⁰ affect.
- An **affricate** is a consonant that changes its quality in the middle, starting off as a plosive³¹ but finishing as a fricative³². English affricates are *ch* (starts off as a *t*, finishes as an *sh*) and *j* (starts off as a *d*, finishes with the sound of *z* in *azure*). The Na'vi affricate is *c* (*ts*), which starts off as a *t* and finishes as an *s*. See *diphthong*³³, a similarly transitioning vowel.
- **Allomorphs** are different forms of a word or morpheme³⁴ determined by the context in which it's found. For example, the English article³⁵ "a" has that form (that allomorph) before a consonant; before a vowel, a different allomorph is used, "an": That is, the "an" in "an apple" and the "a" in "a pear" are considered different forms of a single word.
- **Allophones** are different forms of a sound of a language that are not meaningful for speakers of the language. In English, for example, there are two L sounds³⁶, a "light L" in *leaf* and a "dark L" in *wool*, but if they were exchanged, the result would be a bad accent, not new English words. Na'vi likewise has two U sounds, one like English *food* (in many dialects, at least) and another like English *foot*; however, while this distinction is important in English (these are different English phonemes³⁷), in Na'vi they are mere details of pronunciation. Likewise, the Na'vi consonants *p t k* have allophones with no audible release³⁸ at the end of a syllable or word.
- An **alveolar** consonant is one where the tip of the tongue contacts the *alveolar ridge*, the part of the roof of the mouth just behind the gums. Alveolar consonants include [t, d, n, s, z, l, r].
- **Approbative** affect is a verb form, <ei>, that marks positive speaker affect³⁹. That is, if you feel good about the event you are describing, you might put <ei> inside the verb; this is the spoken equivalent of a smiley-face emoticon.

26 #clause
27 #approbative
28 #pejorative
29 #formal
30 #evidential
31 #plosive
32 #fricative
33 #diphthong
34 #morpheme
35 #article
36 #dark_l
37 #phoneme
38 #unreleased
39 #affect

- A **grammatical argument** of a verb is a noun phrase⁴⁰ that tells who or what performed the action, the action was performed on, etc.: subject, object, recipient, beneficiary, location, time, etc. A **core argument** is an argument that is required for a clause⁴¹ (sentence) to be complete. If a core argument is left out, the listener might wonder who/what did the action, or who/what it was done to. For example, if I were to say "shattered yesterday", you would wonder *what* shattered yesterday; the subject "the window" in "the window shattered yesterday" is thus not just an argument but a core argument. If I were to say "I shattered yesterday", providing one core argument, "I", it is clear that I shattered *something*; thus "the window" in "I shattered the window" is also a core argument. However, where or when the window shattered, as in "I shattered the window in the bedroom on Wednesday", are not considered central to the sentence. In Na'vi, core arguments generally take the intransitive⁴², ergative⁴³, accusative⁴⁴, and dative⁴⁵ cases; non-core arguments may also take the dative, and well as numerous adpositions⁴⁶, as in English "**in** the bedroom", "**on** Wednesday".
- An **article** is a word such as "a" or "the" in English. Articles do not exist in Na'vi: *tute* may be "person", "a person", or "the person", depending on the context.
- **Aspect** is a way that verbs represent time. Rather than locating an event or state **in** time, the way tense⁴⁷ does, aspect describes "the internal temporal constituency of a situation", or in different words, is a way "of conceiving the flow of the process itself".^[28] Aspects in English include "I went, I used to go, I was going, I had gone" (all past tense⁴⁸); "I lose, I am losing, I have lost, I have been losing, I am going to lose" (all present tense⁴⁹); and "I will see, I will be seeing, I will have seen" (all future⁵⁰). What distinguishes these aspects within each tense is not (necessarily) when the event occurs, but how the time in which it occurs is viewed: as complete, ongoing, consequential, planned, etc. There are two verbal aspects in Na'vi, perfective⁵¹ and imperfective⁵², each of which is independent of the tense of the verb. That is, without context or a tense infix to disambiguate, it is not possible to say whether they occur in the past, present, or future.
- An **aspirated consonant** is one pronounced with a puff of air, as *pie*, *tie*, *chi* in English, but not equivalent sounds in French or Spanish, nor in English *spy*, *sty*, *sky*. For discussion, see the footnote in the section on consonants⁵³ in the chapter on phonology⁵⁴.

40	#phrase
41	#clause
42	#intransitive
43	#ergative
44	#accusative
45	#dative
46	#adp
47	#tense
48	#past
49	#present
50	#future
51	#perfective
52	#imperfective
53	#Comparison_with_the_consonants_of_English
54	#Phonology

- **Assimilation** is a change in one sound to make it more similar to a neighboring sound. For example, the plural suffix *-s* in English *cats* is unvoiced [s], as it's adjacent to unvoiced⁵⁵ [t], whereas the *-s* in *dogs* is voiced [z], as it's adjacent to voiced⁵⁶ [g].
- An **attributive** is a word that modifies a noun. Adjectives⁵⁷ are frequently attributive, as *blue* in *blue sky* ('a sky that is blue'); however, other parts of speech may be as well. In *spot remover*, for example, *spot* is an attributive noun, as it modifies the noun *remover* ('a remover of spots').^[note 69] In English, verbs are typically made attributive through their *-ing* or *-ed* forms, as in *washing machine* ('a machine that washes'). However, in Na'vi, verbs can be made attributive with the same particle *a* that adjectives use: *tute a tsun kivä* or *tsun kivä a tute* "a person who can go" (that is, 'a can-go person'). Na'vi uses this strategy rather than the relative pronouns⁵⁸ such as "who" that English uses.
- Grammatical **case** is an inflection⁵⁹ (form) of a noun or pronoun that reflects its role in a sentence. In English, this is most easily seen in the pronouns: for the first-person⁶⁰ pronoun, the case forms are "I", "me", and "my". "I" is used when the pronoun is the subject of the sentence, corresponding to the Na'vi intransitive⁶¹ and ergative⁶² case forms *oe* and *oel*; "my" to show possession or association with a noun, corresponding to the Na'vi genitive⁶³ case form *oeyä*; and "me" for other roles, corresponding to the Na'vi accusative⁶⁴ and dative⁶⁵ case forms *oeti* and *oeru*, as well as adpositional⁶⁶ forms such as *hu oe / oehu* "together with me".
- A **causative** is a grammatical device that shows the action of the verb is caused by an external agent. English does not have a causative as such. Sometimes different phrasing is used: "I had a table made" vs. "I made a table (myself)"; sometimes simple transitivity⁶⁷ is used: "I walked the dog" (caused the dog to walk) or "I boiled the water" (caused the water to boil); or a different verb may be used: "I killed a fly" (caused a fly to die).
- A **clause** is a simple sentence: A verb together with its associated phrases⁶⁸. "I pet my cat" is both a sentence and a clause (a verb with two noun phrases, its subject "I" and its object "my cat"). However, complex sentences may consist of several clauses, typically joined by conjunctions⁶⁹: "I really hope that you get to go and have a good time", for example, is three clauses: "I really hope that", "you get to go", [and] "(you) have a good time". It could be reworded as three simple sentences: "I really hope this: You get to go. You will have a good time."
- **Clusivity** is a nonce term for a distinction in words for "we", depending on whether they include the person spoken to ('you and I': **inclusive**) or exclude the person spoken

55 #voiced
56 #voiced
57 #adjective
58 #relative_pronoun
59 #inflection
60 #person
61 #intransitive
62 #ergative
63 #genitive
64 #accusative
65 #dative
66 #adp
67 #transitive
68 #phrase
69 #conjunction

to ('they and I': **exclusive**). That is, exclusive "we" is purely first person⁷⁰, whereas inclusive "we" is a combination of first and second person.

- Words are said to be **cognate** when they can be traced back to the same historical form and so are related as cousins. For example, *who* (formerly *hwa*) and *what* are cognate in English, as are *he* and *it* (formerly *hit*); in both cases, the final *-t* was once the inflection for neuter gender⁷¹. Likewise, words like *twin*, *twine*, *twenty*, *twelve*, and *two* are cognate.
- A **compound word** is a word formed by joining two or more other words, like "pancake".
- The **conditional mood** is a grammatical mood⁷² used to express that something *would* or *could* be the case *if* some condition were met, such as "I *would* go *if* I were you", or "you *could* do it *if* you tried". In Na'vi, the subjunctive mood⁷³ may be used for the *if* clause.
- A **conjunction** is a grammatical word⁷⁴ that joins phrases⁷⁵ or clauses⁷⁶, such as *and*, *or*, *but*, *if*, *than*, *because*, etc. Na'vi has two conjunctions meaning "and", one, *sì*, for joining phrases, and another, *ulte*, for joining clauses.
- A **consonant cluster** is a sequence of consonants in a word or syllable. In English, the word and syllable *strengths* has two consonant clusters, one at each end, /str/ and /ŋθs/ (or for some people, /ŋkθs/). In Na'vi, consonant clusters can only come at the beginning of a syllable, and then only if they start with a *f*, *s*, or *ts*. Other clusters can occur in the middle of a word where two syllables meet, as the /ʔv/ in *Na'vi*.
- **Constituent order** is the word order⁷⁷ of the primary elements of a clause⁷⁸, that is, the order of the verb and its subject and objects. English is fairly strongly constrained to have a subject-verb-object ("SVO") order; Japanese, on the other hand, is a **verb-final language**, with a subject-object-verb ("SOV") order. Na'vi can readily accommodate either pattern.
- A **copula** is a verb that equates one noun to another. The most common of these is "be", as in "the cat is a mammal"/"cats are mammals". Some languages, such as Japanese, have dedicated words for the copula. Na'vi however, like English, uses the same 'be' verb (*lu*) for the copula as it does for existence ("the cat is in the kitchen"). Another copula in Na'vi is *slu* "to become". In English, copulas require that the two pronouns take different cases ("I am me"; "I became me"), but in Na'vi, neither noun takes a case ending.
- **Correlatives** are grammatical words⁷⁹ that work together to perform a single function. Examples from English are *either ... or*, *both ... and*, *so ... as*, *more ... than*. Na'vi has correlatives that English doesn't, such as *san ... sik* "quote ... unquote", but also lacks correlatives that English has. For example, instead of saying both "more ... than", in

70 #person
 71 #gender
 72 #mood
 73 #subjunctive
 74 #grammatical_word
 75 #phrase
 76 #clause
 77 #word_order
 78 #clause
 79 #grammatical_word

Na'vi one would typically say just "than": *po lu tsawl to oe* "he is big (= bigger) than me".

- The **dative case** is a grammatical case⁸⁰ that marks the indirect object (recipient) of a verb. For example, in English the pronoun "I" becomes "me" when it's the recipient, as in "give me" (that is, "give it *to me*"; compare "I give"). In English, "me" is also used for the direct object, as in "see me", as well as after a preposition ("with me, for me"). In Na'vi, these require different cases: unmarked *oe tse'a* "I see", dative *oeruting* "give me", accusative *oetitse'a* "see me", and *oehu* "with me".

In Na'vi, the dative is used for (1) the recipient or beneficiary of an action (to say, to give, to apologize, to thank, to call, etc.) and (2) the experiencer of a state (to be cold, to have, etc.)

- A **dative construction** is a clause (sentence) in which the subject takes the dative case⁸¹. An example in English is archaic "me thinks" (= "it seems to me"). Na'vi uses dative constructions to express ideas such as "to have": *lu oeru* "I have" = "there is to me".
- A **demonstrative** is a grammatical word used to point out which of several things, times, or places one is referring to. A **distal demonstrative** is one, such as *that*, *there*, or *then*, that indicates that the referent is appreciably distant, whereas a **proximal demonstrative** is one, such as *this*, *here*, or *now*, that indicates that the referent is appreciably close. Of these, *this* and *that* (as well as their plurals, *these* and *those*) are pronouns⁸², as they can stand in for nouns, whereas *here* and *there*, *now* and *then* are adverbs⁸³, as they place the action of the verb in space or time.
- A **dependent clause** is a clause⁸⁴ that is dependent on (subordinate to) another clause or phrase⁸⁵ for its meaning. In "I hope that you can make it", the clause *you can make it* is dependent on the **independent clause** "I hope that"; similarly, in "all my friends who could make it", the clause *who could make it* is dependent on the noun phrase *all my friends* (see also relative clause⁸⁶). The process of making a clause dependent (subordinate) is called **subordination**, and a word such as "that" that performs this function is called a **subordinator**.
- **Derivation** is the process of using the resources of a language to create new words. For example, from English *walk* people have derived *walker*, *walk-about*, *walkathon*, *walkway*, *walkie-talkie*, *walk over*, *walk through*, etc. Compare inflection⁸⁷.
- A **diminutive** is a form of a word that indicates smallness of size, slightness of degree, or endearment. In English, *cigarette* is a diminutive of *cigar*.
- A **diphthong** is a vowel which changes quality as it's being pronounced. This may be a drastic change, as the *ow* in *cow*, the *y* in *sky*, or the *oy* in *coy*, or it may be a more subtle one, such as the *a* in *snake* or the *ow* in *crow*. See affricate⁸⁸, a similarly transitioning consonant.

80 #case
81 #dative
82 #pronoun
83 #adverb
84 #clause
85 #phrase
86 #relative_clause
87 #inflection
88 #affricate

- **Direct speech**, AKA **reported speech**, is a literal quotation of what someone said: "He said, 'I will go'" is direct speech, whereas "He said that he would go" is indirect speech. Na'vi has only direct speech.
- **Discourse** is the use of living language, as in conversation. Some of the more subtle aspects of grammar cannot be understood by looking just at sentences, but only by looking at how those sentences are used in the larger context of discourse. For instance, most people would say that *turn the lights out* and *turn out the lights* mean the "same thing", but they tend to be used in different situations. An effect discourse has in Na'vi is in its word order⁸⁹, especially in its constituent word order⁹⁰.
- A **discourse particle** is a particle⁹¹ whose role is in discourse⁹² rather than in syntax⁹³. Examples are *um*, *like*, *y'know*, *sorta*, none of which have a grammatical function in the traditional sense of the word.
- A **double** (or **multiple**) **negative** is the use of more than one negative word in a clause with a simple negative meaning, as in "I don't have none" or "I didn't never go". In English this has been considered substandard since the Victorian era⁹⁴, but it is normal in many languages, such as French and Spanish, and including Na'vi.
- **Dual number** is a grammatical number⁹⁵ used for just two of something. For example, *menga* is "the two of you", and . Old English⁹⁶ had the dual pronouns *wit* "we two" / "the two of us" and *yit* "you two" / "the two of you". Na'vi has these (*moe* or *oeng* "we two", *menga* "you two"), but also dual nouns, as in *oeyä menari* "my eyes".
- **Eh** is a Canadian English discourse particle⁹⁷ used for "ascertaining the comprehension, continued interest, agreement, etc., of the person or persons addressed" as in, "It's four kilometres away, eh, so I have to go by bike."^[29] In its role for eliciting agreement, it is similar to the Na'vi particle *ko*.
- **Ejectives** are consonants made with a popping sound caused by the Adam's apple moving up in the throat like a piston. In Na'vi they are written *px*, *tx*, *kx*.
- **Epenthesis** is the insertion of a sound into a word to make it easier to say, for example to conform to a language's phonotactics⁹⁸. For example, many of the actors in *Avatar* pronounce *nga* "you" with an epenthetic *g* sound in it, as if it were "ngga" (that is, with the 'ng' sound of *finger* rather than of *singer*), because in English we can't put *ng* at the beginning of a word.
- The **ergative case** is a grammatical case⁹⁹ that marks the subject of a verb that also has direct object of a verb (that is, a transitive¹⁰⁰ verb). In English the pronoun form "I" (called the *nominative* case) is used for both "I leave" and "I see it", but in Na'vi these require different cases: unmarked intransitive¹⁰¹ *oe hum* "I leave" and ergative

89 #word_order
90 #constituent_order
91 #particle
92 #discourse
93 #syntax
94 http://en.wikibooks.org/en.wikipedia.org/wiki/Victorian_era
95 #number
96 http://en.wikibooks.org/wiki/Old_English
97 #discourse_particle
98 #phonotactics
99 #case
100 #transitive
101 #intransitive

oeltse'a pot "I see it". However, "I see" as a generic statement without an object would be intransitive *oe tse'a*.

- An **evidential** is a grammatical device that shows why a speaker believes that a reported event occurred. For instance, an evidential affix on a verb may indicate that the speaker personally witnessed the event, heard about it from someone else, inferred it from evidence left on the scene, saw it in a dream, etc.
- A **flap** consonant is one where the tongue briefly strikes the roof of the mouth, but isn't held there the way it is for [t] or [d]. A flapped ar [ɾ] is found in Irish and Scottish English, and in Spanish in words like *pero* "but". US and Canadian English approximate a flap with the *tt* of "latter" and the *dd* of "ladder", so Na'vi /r/, really an [ɾ], may sound like a [d] to American ears.
- Grammatical **focus** is the placement of an element in the foreground of the discourse¹⁰², either as a way of introducing a new subject of discussion, or to contrast that with another. In English, focus may be accomplished by intonation¹⁰³ ("No, he went to *the store*") or by changing the word order ("The store is where he went"). This is the opposite of a **topic**¹⁰⁴, which is a backgrounded element of the discourse.
- A **fricative** consonant is a sound where the air coming out of the mouth is never stopped, but is quite noisy, like [f], [v], [s], [z], [h]. In Na'vi, such sounds can only come at the beginning of a word or syllable, never at the end.
- The **future tense** of a verb conveys that the event or state will happen or is yet to happen. Na'vi has two future tenses, <ay> for a generic future, and <iy> for the immediate future¹⁰⁵. Na'vi uses its future tenses for such things whether or not English does; for instance, "when I leave" is *oe h<ay>um a krr* in Na'vi, and "if he does" is *txo po s<ay>i*, assuming tense is used at all, even though "will" is not allowed in English.
- **General American**, or **GA**, is the *de facto* standard of English in the United States, used for example in television news broadcasting.
- Grammatical **gender** is a grammatical division of nouns into groups, often based loosely on physical gender (male-female-inanimate). English only has grammatical gender in its pronouns *he*, *she*, *it* ('masculine', 'feminine', 'neuter') and *who*, *what* ('common', 'neuter'). Na'vi does not have grammatical gender. However, when needed, a noun or pronoun can be made lexically **masculine** or **feminine** with the suffixes *-an* and *-e*.
- The **genitive** case¹⁰⁶ is used to show association between two nouns. This includes possession ("the dog's bone"), but also more generic association ("the dog's ears", "the legs of the table"). The Na'vi genitive loosely translates English "'s" and "of". However, it is somewhat broader in usage, being how Na'vi forms attributive¹⁰⁷ nouns. With pronouns, the final vowel changes to *e*: *fo* "they", *feyä* "their".
- A **glottal** consonant is one, such as [h], that is pronounced in the throat. The **glottal stop** is the catch in your throat when you say "uh-oh!". In Na'vi it is a typical consonant sound, as it is in Polynesian languages such as Hawaiian and Maori.
- A **grammatical word**, also known as a **function word**, is one that is used for a grammatical function rather than for a dictionary meaning. Examples are pronouns¹⁰⁸,

102 #discourse
103 #intonation
104 #topic
105 #immediate_future
106 #case
107 #attributive
108 #pronoun

conjunctions¹⁰⁹, adpositions¹¹⁰, particles¹¹¹, and many of the words vaguely called "adverbs¹¹²". Compare lexical word¹¹³.

- An **ideophone**, AKA **mimesis**, is a word that suggests its meaning by its very sound. *Buzz*, *shush*, *bling*, and *hippetyhop* (of a rabbit) are examples in English.
- Grammatical **inflections** are forms of a word that occur automatically as part of the grammar. For example, the inflections of the verb *to walk* are *walk*, *walks*, *walking*, and *walked*; the inflections of the pronoun *I* are *I*, *me*, *my*, *mine*. Compare derivation¹¹⁴.
- The **immediate future** is a tense¹¹⁵ used to say that something *is about to happen* or *is about to be*. It is somewhat different than English "going to", which means that things are presently in motion for a future event.
- The **imperative mood** expresses a command that someone do something: *Kä!* "go!" See mood¹¹⁶.
- **Imperfective aspect**: See perfective¹¹⁷.
- The **intransitive case** is a case¹¹⁸ used in Na'vi for verbs which do not have a direct object (accusative case¹¹⁹). There is no case suffix: *oe new kivä* "I want to go". Compare the ergative case¹²⁰ in *oel new tsa'ut* "I want that".
- An **infix** is a meaningful bit put in the middle of a word. Infixes are rare in English, but they sometimes occur in informal speech. For instance, the infix <ma> gives a word an ironic pseudo-sophistication, as in *sophistimacated*, *saxomaphone*, and *edumacation*.
- An **interjection** is a word that expresses the speaker's emotion, but is not part of the grammar of the sentence, such as "hey!", "wow!", or "ouch!"
- An **interlinear gloss** is a translation aid that lies between a text and its translation, and lays out the structure of the text. See the appendix¹²¹ for details.
- **Intonation** is the variation of speaking tone that conveys emotional affect¹²², hesitation, questions, commands, etc. In writing, we use punctuation to capture some of the intonation in speech.
- A **labial** consonant is one which involves the lips. They include [p, b, f, v, m]. ([f] and [v] also involve the teeth, but the lip is what moves.) [w] also involves the lips, but in addition the tongue approaches the soft palate, so it is also a velar consonant¹²³.
- **Lenition** is the "weakening" of speech sounds in some environments. For example, in US and Canadian English, /t/ and /d/ become a flap¹²⁴ [ɾ] after a stressed¹²⁵ vowel, so that *latter* and *ladder* are pronounced the same.

109	#conjunction
110	#adp
111	#particle
112	#adverb
113	#lexical_word
114	#derivation
115	#tense
116	#mood
117	#perfective
118	#case
119	#accusative
120	#ergative
121	#Appendix
122	#affect
123	#velar
124	#flap
125	#stress

- A **lexical word**, also known as a **content word**, is a word that is used for its basic dictionary ("lexical") meaning, such as nouns, verbs, and adjectives. Compare grammatical word¹²⁶.
- **Light and dark L** describes the difference between the /l/ in English *leaf*, where only the front of the tongue is raised, and the /l/ of *all*, where the back of the tongue is also raised. In Na'vi, only light L is used.
- **Liquids** and **glides** are vowel-like consonants. In Na'vi, as in English, they are *l*, *r* (the liquids) and *w*, *y* (the glides).
- A **loan word** is a word that was taken from another language. "Pork", for example, is a loan into English from French, where it is simply the word for 'pig'. Na'vi has some English loans, such as *kunsip* "gun ship".
- **Modal verbs** are special verbs with modal (mood-like¹²⁷) functions. That is, they indicate that a second verb does not describe an actual event, like "can go", "must go", "want to go", etc. In Na'vi, the second verb takes the subjunctive¹²⁸ mood.
- **Mood** is a non-temporal inflection of verbs. Rather than identifying time, as tense¹²⁹ does, or describing the flow of an event, as aspect¹³⁰ does, mood encodes the degree of reality of an event. The normal, unmarked mood (called the **indicative**) is used for actual events, and events portrayed as or predicted to be real. There are two other primary moods in Na'vi, the subjunctive and imperative¹³¹, used for hypothetical events. The **imperative** is a command: If one says "sit down!", however, it does not follow that the person will actually sit down, so the sitting is not an actual event, only a desired one. Similarly, the **subjunctive** is used in English for things such as "if I were you" (I am not you) and "God bless you" (not *blesses: it is only a wish on my part, not a description of an actual event). In Na'vi, the subjunctive is used for expressions such as "I can go"; the verb "can" is in the normal indicative, because it describes reality, whereas "go" is in the subjunctive, because there is no implication that I actually *will* go just because I can. In the future tenses, Na'vi distinguishes an **intentional** mood for planned events from the indicative, which is preferentially used for predicted events which the speaker has no control over.
- A **morpheme** is a meaningful piece of a word. For example, the word "meaningful" is built up from three morphemes, "mean", "-ing", and "-ful". However, the word "word" is a single morpheme; there are no meaningful units within it apart from the sounds (phonemes¹³²) which make it up. In the glossed¹³³ examples in this book, morphemes are separated by hyphens and other punctuation: *aylaru* = *ay-la-ru* "to the others".
- **Morphology** is how morphemes¹³⁴ are put together to form words.

126 #grammatical_word

127 #mood

128 #subjunctive

129 #tense

130 #aspect

131 #imperative

132 #phoneme

133 #gloss

134 #morpheme

- A **nasal stop** is a stop consonant¹³⁵, such as /m/, /n/, or /ŋ/ where air escapes through the nose. The latter, the sound in English *song*, is called the **velar**¹³⁶**nasal** because the tongue touches the soft palate (the 'velum').
- A **negative** is a grammatical element that negates or denies another element of a sentence. English negatives begin with *n-*: "no", "not", "none", "never", etc.
- A consonant with **no audible release** is a plosive¹³⁷ such as [p], [t], [k] that, to an English hear, sounds like it stops halfway through. The lips (for [p]) or the tongue (for [t], [k]) seal off the airstream, and during that closure a glottal stop¹³⁸ is made, so that when they release again there is no audible sound. In English, this may occur for some speakers at the end of a word, like the *t* in "Don't ever do that!", where there is no puff of air between the *t* and the *d*; for others, it may be clearer in a word like *apt*, where there is no puff of air between the *p* and the *t*. Note that there *is* a puff of air after the *t* in *apt*: that is an audible release.

Ejectives¹³⁹ must be released.

- A **nominalizer** is a grammatical element which turns a word into a noun, such as the *-ness* in *vagueness* or the *-tion* in *pronunciation*.
- **Noun incorporation** is the moving of a noun into a verb. For example, in English one could say "I picked some berries", or one could say "I went berry-picking". In the former case, the verb "picked" has an object, "berries", and so cannot take another. However, in the latter case, the object has been moved out of the way, tucked into the verb, so now a new object can be added: "I berry-picked some raspberries". This sounds a bit strange in English, but some languages use this strategy quite often. The focus is different: In "I picked some berries", the focus is on the berries, whereas in "I berry-picked" or "I went berry-picking", the focus is on the activity, and one could say that even if no berries were actually picked.
- A **numeral** is a simple number word. For example, *twenty* and *three* are both numbers and numerals in English; *twenty-three* is a number made from the numerals *twenty* and *three*. Na'vi has nine numerals for its base-eight¹⁴⁰ numbering system: lower numerals for 'one' through 'eight', and a higher numeral for 'sixty-four' that corresponds to English *hundred*.
- Grammatical **number** indicates the countable quantity that a word represents. English has two numbers, singular¹⁴¹ for one and plural¹⁴² for not-one, on its nouns, pronouns, and verbs; Na'vi distinguishes four numbers, singular, dual¹⁴³, trial¹⁴⁴, and plural (four or more), on its nouns and pronouns, but not on its verbs.
- An **octal**, or **base-eight**, numbering system is one that uses eight as its primary unit, as opposed to a decimal system such as the one in English, which is base ten (decimal). The Na'vi have four fingers on each hand, for eight total, and so only have basic words

135 #stop
 136 #velar
 137 #plosive
 138 #glottal
 139 #ejective
 140 #octal
 141 #singular
 142 #plural
 143 #dual
 144 #trial

for one through eight. Nine is thus "eight and one", and seventeen is "two eights and one", the way in English we say "twenty-one", originally "two tens and one".

- The **optative** is a grammatical mood¹⁴⁵ used to express wishes and desires, as in "long live the king!" and "bless you". In Na'vi, as (marginally) in English, the optative role is performed by the more general subjunctive¹⁴⁶ mood.
- A **palatal** consonant is one in which the middle of the tongue touches or approaches the hard *palate*. The only palatal consonant in Na'vi is *y*.
- A **participle** is a form of a verb that can be used as a noun or adjective, but which retains tense¹⁴⁷ or aspect¹⁴⁸ inflections like a verb. English has two participles, an **active** *-ing* participle used for *progressive aspect*¹⁴⁹ (similar in some ways to the imperfective¹⁵⁰ aspect), as in *he is doing, singing, eating* (when used for aspect), *the singing canary, the eating hour* (used as an attributive¹⁵¹), *it's his doing, singing, eating* (used as a noun, called a "gerund"); and a **passive** *-en/-ed* participle used for both the *passive voice*¹⁵² and the *perfect aspect*¹⁵³ (similar in some ways to the perfective¹⁵⁴ aspect, though not as close as the name might suggest), as in *it has done, sung, eaten it* (aspect), *it is done, sung, eaten* (passive), *it's a done deal, sung song, eaten food* (passive attributive).

The Na'vi participles, <us> and <awn>, are active and passive but do not imply any tense or aspect; the explicit equivalent of English *-ing* and *-en* would be <us><er> and <awn>.

- A grammatical **particle** is a little immutable word that performs a grammatical function but isn't in a particular word class like *adverb*¹⁵⁵.
- The **passive voice** is used to show that the subject of the verb undergoes the action, as in *the food was eaten, the song was sung*. (The opposite, *they ate the food, they sang the song*, is called the *active voice*.) Na'vi has a passive participle¹⁵⁶, as in *eaten food, a sung song*, but does not have passive clauses like "the song was sung by me". The functions of the English passive clauses are covered by changing the agent to *fko* "one" or by changing the word order¹⁵⁷ of the clause.
- The **past tense** of a verb conveys that the event or state did happen. The past tense form of English verbs is *-ed*, corresponding to Na'vi <am> (generic past tense) and <im> (recent past¹⁵⁸). However, English *-ed* may also be used to translate the Na'vi perfective aspect¹⁵⁹, which isn't a tense at all.
- **Pejorative** relates to the formation "of a less favourable meaning or of unpleasant connotations of a word."^[30] In this book it is used for a Na'vi infix <äng> that expresses

145 #mood
146 #subjunctive
147 #tense
148 #aspect
149 http://en.wikibooks.org/en.wikipedia.org/wiki/progressive_aspect
150 #imperfective
151 #attributive
152 #passive
153 <http://en.wikibooks.org/en.wikipedia.org/wiki/perfect>
154 #perfective_aspect
155 #adverb
156 #participle
157 #word_order
158 #recent_past
159 #perfective

negative speaker affect¹⁶⁰, not restricted to contempt, but including boredom, misery, or any negative emotion. The disparaging particle¹⁶¹ *pak* more explicitly capture a feeling of contempt.

- **Penultimate** means "next to last". The **penultimate syllable** in a word is the next-to-last (second-to-last) syllable; in "penultimate" that would be the "-ti-". **Penultimate stress** is stress¹⁶² on the penultimate syllable; examples from English are "examples" (the "-amp-") and "English" (the "Eng-").
- **perfective** and **imperfective** are the two verbal aspects of Na'vi. The perfective presents an event as an unanalyzed whole, while the imperfective does the opposite, placing one within the event. Or, metaphorically, the perfective is a snapshot, whereas the imperfective is a movie.

Aspect is independent of the tense of the verb. That is, without context or a tense infix to disambiguate, it is not possible to say whether a verb in the (im)perfective occurs in the past, present, or future. (See aspect¹⁶³ for background.)

English does not have these aspects. However, in languages which do, one of the uses of the imperfective is to set a background scene, with the perfective describing actions within that scene, and this provides a decent approximation in English:

"John was reading when I entered."

Here 'entered' presents *the totality of the situation referred to [...]: the whole of the situation is presented as a single unanalysable whole, with beginning, middle, and end all rolled into one; no attempt is made to divide this situation up into the various individual phases that make up the action of entry.*^[28] This is the essence of the perfective aspect: An event presented as an unanalyzed whole.

'Was reading', however, is different. Besides being the background to 'entered', the form 'reading' presents *an internal portion of John's reading, [with] no explicit reference to the beginning or to the end of his reading.*^[28] This is the essence of the imperfective aspect. Or, to continue the citation, *the perfective looks at the situation from the outside, without necessarily distinguishing any of the internal structure of the situation, whereas the imperfective looks at the situation from inside, and as such is crucially concerned with the internal structure of the situation, since it can both look backwards towards the start of the situation, and look forwards to the end of the situation, and indeed it is equally appropriate if the situation is one that lasts through all time, without any beginning and without any end.* This is why, within the past tense, perfective verbs are typically translated into English as simple past, like 'entered', whereas imperfective verbs are typically translated as 'was reading', 'used to read', and the like. (In English, it is easiest to illustrate aspect in the past tense. However, any tense is possible: Present "John is reading as I enter", future "John will be reading when I enter", etc.: In each tense, the aspectual distinction is the same.)

160 #affect
 161 #particle
 162 #stress
 163 #aspect

This aspectual distinction is not decided by the events themselves, but in how the speaker views them or wishes to present them. The very same event may be described as perfective in one clause, and then imperfective in the next. For example,

"John read that book yesterday; while he was reading it, the postman came,"

where the two forms of 'to read' refer to the same thing. In 'John read that book yesterday', however, *John's reading is presented as a complete event, without further subdivision into successive temporal phases*; while in 'while he was reading it', *this event is opened up, so that the speaker is now in the middle of the situation of John's reading, as it is in the middle of this reading that the postman arrives.*^[28]

The perfective and imperfective need not occur together; indeed they more often do not. However, it is difficult to describe them in English without an explicit contrast like "John was reading when I entered."

- Grammatical **person** distinguishes the person speaking ("first person"), the person spoken to ("second person"), and others ("third person"). In Na'vi, person is only indicated in pronouns, not in verbs. See also *clusivity*¹⁶⁴.
- A **phoneme** is a *meaningful sound* in a language. For example, in English there are two "oo" sounds, the /u/ found in "food", and the /ʊ/ found in "foot". We can tell this is a meaningful difference, because if you change one for the other, you change the word. In Na'vi, however, this is not a meaningful distinction: [u] and [ʊ] are both variants (called "allophones"¹⁶⁵) of the Na'vi vowel written "u". In transcription, distinct phonemes, such as English /u/ and /ʊ/, are written in slashes, as here; whereas allophones (sub-phonemes) are written in brackets. Thus we would say that [u] and [ʊ] are allophones of the Na'vi vowel /u/.
- **Phonology** is how sounds are used in a language: what they are, where they occur, and how they change.
- **Phonotactics** is the arrangement of phonemes¹⁶⁶ (sounds) found in a language. In English, for example, /h/ never occurs at the end of a word, whereas it does in Arabic; similarly, /ŋ/ does occur at the beginning of a word in English, whereas it does in Na'vi. On the other hand, fricatives¹⁶⁷ such as /f v s z/ do occur at the ends of words in English, as in the word *fricative* itself, but do not do this in Na'vi. And while both /f/ and /m/ occur at the beginning of words in English, as in *fee* and *me*, they do not occur there together, whereas they do in Na'vi *fmi* "to try".
- A grammatical **phrase** is a word together with the words that modify it. A **noun phrase** is a noun and any adjectives, numerals, or relative clauses¹⁶⁸ associated with it, such as *the clear blue sky I saw yesterday*. Introduce a noun phrase with a preposition¹⁶⁹, as *into the clear blue sky*, and the result is called a **prepositional phrase**. A clause¹⁷⁰ is made up of a verb and various phrases connected to it.
- A **plosive** consonant is a sound such as [p], [t], [k], [ʔ] where the air flow is completely blocked.

164 #clusivity

165 #allophone

166 #phoneme

167 #fricative

168 #relative_clause

169 #preposition

170 #clause

- The **plural** is a grammatical number¹⁷¹ for quantities larger than, or other than, the dedicated number. In English, we have a bare singular¹⁷² for one of an object, like *cat*; the plural *cats* is thus used for numbers larger than one. Na'vi also has grammatical dual¹⁷³ and trial¹⁷⁴ numbers for two or three of an object; the Na'vi plural is thus used for quantities larger than three.
- A **predicate** is the part of a clause¹⁷⁵ other than the subject; it includes the verb. (This subject-predicate structure of a clause is somewhat similar to a topic-comment¹⁷⁶ structure.) In Na'vi, the form of an adjective¹⁷⁷ depends on whether it is connected to the verb directly, a **predicative adjective** without any marking, or is found within a noun phrase¹⁷⁸, an **attributive**¹⁷⁹ **adjective** marked with the particle¹⁸⁰ *a*.
- A **prefix** is a meaningful bit put at the beginning of a word. For example, the *un-* in *unlikely* is a prefix.
- A **preposition** is a little grammatical word¹⁸¹ that links a noun phrase¹⁸² to a verb or another noun phrase. For instance, in "I walked *by* the park *on* my way *to* the store *for* some bread", the prepositions *by*, *on*, *to*, *for* tie the noun phrases together with the verb "walked" into a clause¹⁸³, with *by*, *on*, and *to* linking "the park", "my way", and "the store" to *where* I walked, and *for* linking "some bread" to *why* I walked.

Prepositions come before the noun. The generic term is adposition¹⁸⁴; this word is used for Na'vi words which may be used as either prepositions or suffixes¹⁸⁵.

- The **present tense** is the tense¹⁸⁶ used for an action or state in the present moment. In English, verbs in the present tense are often used for future events ("I'm going to town tomorrow"), but in Na'vi, the future¹⁸⁷ or immediate future¹⁸⁸ tense would be used.
- **Prohibitive mood** is a negative imperative mood¹⁸⁹. In Na'vi, prohibitives are indicated with the particle¹⁹⁰ *rä'ä* "don't".
- A **pronoun** is a grammatical word¹⁹¹ that can stand in for a noun, a lexical word¹⁹². In English, there are two classes of pronouns, the so-called personal pronouns "I, we,

171 #number
 172 #singular
 173 #dual
 174 #trial
 175 #clause
 176 #topic
 177 #adjective
 178 #phrase
 179 #attributive
 180 #particle
 181 #grammatical_word
 182 #noun_phrase
 183 #clause
 184 #adp
 185 #suffix
 186 #tense
 187 #future
 188 #immediate_future
 189 #imperative
 190 #particle
 191 #grammatical_word
 192 #lexical_word

you, he, she, it, one, they", and the demonstrative¹⁹³ pronouns "this, that, these, those". These behave differently when they modify another noun: compare "my book" (possession) vs. "this book" (location).

- **Received Pronunciation**, or **RP**, is the national standard of English in England, used to varying degrees in education and the media. It is based on the dialect of London.
- A **question marker** is a grammatical particle¹⁹⁴ that marks a yes-no question. The Na'vi question marker is *srak*.
- A **quotative marker** is a grammatical particle¹⁹⁵ or other device that signals the start of a quotation. It is like saying "quote" in English, but is used as a normal part of the language.
- The **recent past** is a tense¹⁹⁶ used to say that something *has just happened*.
- **Reduplication** is the doubling of a phrase, a word, or an element of a word for grammatical effect. English makes little use of reduplication, but traces can be found in clauses like *he cried and cried*, *they ran and ran*, where it conveys an exhaustive affect.
- **Register** is a form of discourse¹⁹⁷ specific to a social setting. At the "high" end there is **formal**, polite, and ceremonial language; at the "low" end, there is casual speech and slang. In English, the difference tends to be one of vocabulary: you may use different words, and discuss different things, when talking to your boss than talking with your friends. In Na'vi, very formal speech has an effect on the grammar as well.
- The **reflexive voice** is a form of the verb used to show that the subject acts on itself, as in the beloved command of older brothers, "Quit hitting yourself!"
- A **relative clause** is a dependent clause¹⁹⁸ that modifies a noun. In English it will be introduced with a **relative pronoun**, as in "my friend *whosaw a mouse*", "the day *whenI saw a mouse*", "the room *whereI saw a mouse*", "the reason *whyI saw a mouse*", "the mouse *thatI saw*", etc. Na'vi relative clauses are introduced with the particle¹⁹⁹ *a* rather than with a relative pronoun.
- **Relative tense** is tense²⁰⁰ that is past, present, or future relative to the moment under discussion, rather than relative to the moment of speaking. For example, in English we use **absolute tense** when we say, "I went to the store because I knew that my order would be in", with all the verbs (*went*, *knew*, *would*) in the past tense because they all occurred prior to the time we said that. If English had relative tense, that sentence would instead be *"I went to the store because I know that my order will be in"; once we say "went", the point of reference switches to the time I went, and "know" is therefore in the present tense, because it is simultaneous with when I went.
- The **singular** is a special form of the noun that shows there is just one of the thing. In Na'vi, as in English, the singular is shown by the *lack* of an affix for one of the other grammatical numbers²⁰¹.

193 #demonstrative
194 #particle
195 #particle
196 #tense
197 #discourse
198 #dependent_clause
199 #particle
200 #tense
201 #number

- A **stative verb** is one, such as "be", which does not indicate an action or process, but a state of being. In some languages, states such as "red" or "sad" are verbs rather than adjectives as they are in English.
- The **stem** of a word is the form an affix²⁰² is attached to. It will be different from the root²⁰³ if it already contains affixes. For example, in "hopefully", "hope" is both the root and the stem of "hopeful", and "hopeful" in turn is the stem of "hopefully".
- A **stop consonant** is one in which the tongue or lips block the mouth, *stopping* the air from passing through. If the air is stopped completely, as in /p, t, k/. the consonant is a plosive²⁰⁴; if it is stopped in the mouth but escapes through the nose, as in /m, n, ŋ/, the consonant is a nasal²⁰⁵.
- A **stranded preposition** is a preposition²⁰⁶ that is not immediately followed by a noun phrase²⁰⁷. In English this is found in verb phrases such as "to put up with", where "this is something I will not put up with" has two stranded prepositions, "up" and "with".
- **Stress** is the amount of force required to pronounce a syllable²⁰⁸ correctly in a word. For example, in *desert* the first syllable is stressed, whereas in *dessert* it is the second that is stressed. If you tap out the syllables of a word, the stronger taps correspond to stress.
- The **subjunctive mood** is used for hypothetical or desired actions or states, like "long live the king" and "bless you". See mood²⁰⁹
- **Subordination**: See dependent clause²¹⁰.
- A **suffix** is a meaningful bit put at the end of a word. For example, the *-ful* in *meaningful* is a suffix.
- A **syllable** is a rhythmic unit of a word. "Pentasyllabic", which means 'having five syllables', has five syllables: *PENT-a-syl-LAB-ic*. The first and fourth are pronounced more strongly than the others; they are said to be stressed²¹¹. An **open syllable** is one that ends in a vowel, as in English *kudu*; a **closed syllable** ends in a consonant, as in English *dumdum*.
- A **syllabic consonant** is a consonant that forms the core of a syllable²¹², or is a syllable by itself. Examples of the latter are English *bottle*, *button*, and *rhythm*; for most people in the US and Canada, the former is found in *church*. In Na'vi, there are two syllabic consonants, *ll* and *rr*, which can only occur at the end of a syllable, not in the middle as in *church*.
- **Syntax** is how words are put together in speech: how words form phrases²¹³, how phrases form clauses²¹⁴, and how clauses form sentences.

202 #affix
 203 #root
 204 #plosive
 205 #nasal
 206 #preposition
 207 #noun_phrase
 208 #syllable
 209 #mood
 210 #dependent_clause
 211 #stress
 212 #syllable
 213 #phrase
 214 #clause

- **Tense** is the grammatical encoding of a point of time in a sentence, as in a verb. This contrasts with *aspect*²¹⁵, which is the grammatical encoding of the flow of time in a sentence. The five Na'vi tenses are the *present*²¹⁶, *past*²¹⁷, *future*²¹⁸, *recent past*²¹⁹, and *immediate future*²²⁰. In the *subjunctive mood*²²¹, these reduce to three: present, past, and future.

See also *relative tense*²²².

- A **tenuis consonant** is a consonant, generally a *plosive*²²³, that is not *voiced*²²⁴, not *aspirated*²²⁵, and not *ejective*²²⁶. That is, it is a "plain" [p], [t], [ts], or [k].
- **Tone**, as used here, means the use of pitch to distinguish words, as *Chinese*²²⁷ does. Na'vi does not have tone, only *intonation*²²⁸.
- A grammatical **topic** is an element of *discourse*²²⁹ that is set up as the background for the material which follows. Setting up a sentence with a topic and then elaborating on it is called a **topic-comment** structure. In English, this may be done with phrases such as "as for", or simply with *intonation*²³⁰, as in "In English, this may be done ...", or as in "That dog, I can't hunt (with) him no more". Such structures are very common in Na'vi. This is the opposite of *focus*²³¹, which is a foregrounded element of the discourse.
- A **transitive** clause, or verb, is one with an overt object. For instance, "I ate today" is **intransitive**, as there is no particular object that can be associated with the verb, whereas "I eat *teylu*" is transitive. Some verbs, such as "run", can only be intransitive, as they can never take an object. A clause like "I ran a mile" may feel transitive in English, but I didn't actually do anything to that mile, and in Na'vi it would be treated as intransitive. Some verbs, such as *ting* "give", take two objects, including a recipient in the *dative*²³² case; these are called **ditransitive**.
- **Trial number** is a *grammatical number*²³³ specifically for three of something: *pxoe* "the three of us", *pxenga* "the three of you", *pxeveng* "three children", etc.
- A **trill** is a rolled R, as in Spanish *¡Arriba!*

215	#aspect
216	#present
217	#past
218	#future
219	#recent_past
220	#immediate_future
221	#subjunctive
222	#relative_tense
223	#plosive
224	#voice
225	#aspiration
226	#ejective
227	http://en.wikibooks.org/wiki/Chinese
228	#intonation
229	#discourse
230	#intonation
231	#focus
232	#dative
233	#number

- A **tripartite** case²³⁴ system is one that uses three different cases for the 'subject' (argument²³⁵) of an intransitive verb, the 'subject' of a transitive²³⁶ verb, and the object of a transitive verb. They are, respectively, the intransitive²³⁷ case, the ergative²³⁸ ("working") case, and the accusative²³⁹ case.
- An **unquotative marker** is a grammatical particle²⁴⁰ or other device that signals the end of a quotation. It is like saying "unquote" in English, but is used as a normal part of the language.
- **Valence** is the number of core arguments²⁴¹ a verb takes. An intransitive²⁴² verb has a valence of 1 (the subject: 'they eat'), a transitive²⁴³ verb a valence of 2 (agent and object: 'they see you'), and a ditransitive verb a valence of 3 (agent, recipient, and object: 'we give you them'). Some derivations of a verb change its valence. A passive²⁴⁴ or reflexive²⁴⁵, for example, decreases its valence ('they see you' → 'you are seen'), while a causative²⁴⁶ increases its valence ('they eat' → 'you feed them'). By changing a verb to an adjective, a active participle²⁴⁷ effectively reduces a verb's valence to zero.
- A **velar** consonant is one where the back of the tongue contacts the *velum*, the soft palate at the back of the mouth. Velar consonants include [k, g, ŋ] and the [x] at the end of *Bach*. [ŋ] (the "eng" sound) is thus called a **velar nasal**²⁴⁸. For [w], the tongue approaches the velum, but the lips also approach each other, so it is considered to be both velar and labial²⁴⁹.
- A **verbalizer** is an element that changes a word into a verb. Na'vi uses the verb *si* for this purpose.
- A **vocative** is a special form of a noun used when addressing a person. Poetic English has a preposition "O" for the vocative; Na'vi uses *ma*. Note this *ma* is *not* used when talking *about* a person, only when talking *to* them.
- A **voiced** sound is one, such as a vowel, in which the vocal chords vibrate. Say "fffff" or "sssss" with your fingers on your Adam's apple, and you will feel nothing; do the same with "vvvvv" or "zzzzz" and you will feel a buzzing in your throat. Therefore [v] and [z] and *voiced sounds*, while [f] and [s] and *unvoiced*. Though harder to feel, plosives²⁵⁰ such as [b], [d], [g] are also voiced. Voiced plosives do not occur in Na'vi.

234 #case
 235 #argument
 236 #transitive
 237 #intransitive
 238 #ergative
 239 #accusative
 240 #particle
 241 #argument
 242 #intransitive
 243 #transitive
 244 #passive
 245 #reflexive
 246 #causative
 247 #participle
 248 #nasal
 249 #labial
 250 #plosive

This phonetic use of the word "voice" is not to be confused with the grammatical concept of voice, as in passive voice²⁵¹ and reflexive voice²⁵².

- **Vowel height** is the distance between the tongue and the roof of the mouth when pronouncing a vowel. *Cat* and *dog* have 'open' vowels, as the jaw is open when they are pronounced. (This is why a doctor asks you to say "ah!" when looking at your throat, to get your tongue out of the way.) *Bee* and *zoo*, on the other hand, have 'close' vowels, as the tongue is close to the roof of the mouth. In between there are open-mid vowels in *neck* and *craw*, and close-mid vowels in *snake* and *crow*. (In English, the latter are actually diphthongs²⁵³, but they approximate close-mid vowels.)
- **Vowel length** is a distinction between long and short vowels. Latin and Hawaiian, for example, each distinguish words depending on whether the vowels within them are pronounced long or short. Na'vi does not have this feature, so two identical vowels may not occur next to each other.
- A **wh-question word** is a word such as *who*, *what*, *where*, *when*, *why*, *how* that asks for information. Na'vi might be said to have "pe-question words", as the equivalent words in Na'vi all contain the morpheme²⁵⁴ *pe*.
- **Word order** is the order of words in a phrase²⁵⁵, such as adjectives before or after a noun, or in a clause²⁵⁶, such as subjects before or after a verb. Na'vi word order is largely "free", meaning that it can change depending on how the speaker wishes to express or emphasize something. The order of the verb and its core arguments²⁵⁷ is called constituent order²⁵⁸.

251 #passive

252 #reflexive

253 #diphthong

254 #morpheme

255 #phrase

256 #clause

257 #argument

258 #constituent_order

18 Bibliography

An early basic description of Na'vi by Paul Frommer is a short grammatical sketch,

- Frommer, Paul; Benjamin Zimmer (December 19, 2009). "Some highlights of Na'vi"¹. *Language Log*.² Retrieved 2010-01-09.

Discussion on points of grammar and basic language lessons are presented on Frommer's blog,

- Frommer, Paul (from June 24, 2010). "Na'viteri.org"³.⁴ Retrieved 2010-07-01.

The appendix of the so-called "Survival Guide" is the best published source of vocabulary:

- Wilhelm, Maria; Dirk Mathison (2009). *James Cameron's Avatar: A Confidential Report on the Biological and Social History of Pandora*⁵. New York City: HarperCollins. ISBN 0061896756⁶.⁷

Although most of the purported Na'vi in the main text is spurious (though it does include two of the four songs that Frommer translated into Na'vi for Cameron, the *Hunting Song* and the *Weaving Song*), the appendix is reasonably accurate, though significantly less reliable and complete than the dictionaries here at Wikibooks. That appendix is a copy of an early draught of Frommer's glossary that he has since modified. *Neu* "to want", for example, is now *new*. Some of the words for Na'vi foods which did not make it into the final cut of the film have been reassigned to new meanings, such as *kxener* "smoke". The *LearnNa'vi* community keeps a list of vocabulary with attested usage online here⁸. *LearnNa'vi* also has a dictionary⁹ which may sometimes be more up to date than the one here.

1 <http://languagelog.ldc.upenn.edu/nll/?p=1977>

2 <http://languagelog.ldc.upenn.edu/nll/?p=1977>

3 <http://naviteri.org/>

4 <http://naviteri.org/>

5 <http://browseinside.harpercollins.com/index.aspx?isbn13=9780061896750>

6 <http://en.wikibooks.org/wiki/Special:BookSources/0061896756>

7 <http://browseinside.harpercollins.com/index.aspx?isbn13=9780061896750>

8 <http://wiki.learnnavi.org/index.php?title=Vocabulary>

9 <http://eanaeltu.learnnavi.org/dicts/NaviDictionary.pdf>

19 Notes

1. Words are listed in the order in which they appear in the scriptment; followed in italics by Frommer's adaptations. Acute accents indicate where Cameron had indicated stress.
2. *Mo'at-'ite* is the source of *'ite* "daughter", and *Ckaha* (*Tskaha*) is apparently the impetus for consonant clusters such as *tsk*.
3. Potentially the source of the positive affect infix <ei>
4. source of *'itan* "son"
5. It seems that no Terran language has quite these vowels. However, Czech¹ has six of the simple vowel qualities (apart from /æ/), the diphthongs /aɪ/ and /eɪ/ (plus /oɪ/), and the syllabic consonants /ɺ/ and /ɽ/, though the latter two allow for following consonant codas, as in *vlk* "wolf" and *krk* "neck", which are not possible in Na'vi.
6. For example, Swahili *eua*² "to purify", Japanese *aoi*³ "blue/green", Hawaiian *aeāea* (sp. small green fish) or—with a glottal stop—*uauo'oa* "distant voices".
7. Note that the *e* is open-mid⁴ while the *o* is close-mid⁵, and that there is no **oy*.
8. In the film, syllabic *ll* is generally pronounced darkly by the actors. That makes it difficult to distinguish *ll* from *u* or *ul*.
9. For other countries, such as Jamaica, India, and Malaysia, either the details of English pronunciation were not available to the author, or there was too much variability to make normative statements.
10. There do not appear to be any words that are distinguished by this rather subtle contrast, so it will make no effective difference if you do not master it.
11. Hold a lit candle or lighter below your lips when you pronounce these words. The flame should flicker or even blow out when you say *pie*, *tie*, or *kite*, but not when you say *spy*, *sty*, *sky*. When speaking Na'vi, the flame should not flicker for *pay*, *tay*, *kay* any more than it does for *spay*, *stay*, *skay*, or for that matter for *vay*, *may*, *nay*.
12. These sounds are easy to pronounce. When you say *ap*, *at*, or *ak*, you will cut off the air flowing through your mouth with your lips or tongue. In Na'vi, you simply keep your lips or tongue in that position and turn it into a glottal stop before letting the air flow again.
13. This was one of the most difficult aspects of the pronunciation for the actors of *Avatar*. For *tsa*, try repeating "cats are" over and over, then drop the "ca" to extract the "tsar." For *nga*, try repeating "sung all", then drop the "su" to extract the "ngall".
14. The gist of the sounds is this: They are pronounced with air pressure from the throat rather than from the lungs. While the tongue or lips seal the mouth so that no air

1 <http://en.wikibooks.org/wiki/Czech>

2 <http://en.wikibooks.org/en.wiktionary.org/wiki/eua>

3 <http://en.wikibooks.org/en.wiktionary.org/wiki/aoi>

4 #vowel_height

5 #vowel_height

- can escape, the Adam's apple⁶ is pushed upward, so that when the tongue or lips are released, the air escapes with a pop. Ejective *px* is more difficult for most people to pronounce than *tx* or *kx*.
15. Though *w y* in syllable-final position are considered parts of a diphthong, as they only occur as *ay ey aw ew* and may be followed by another final consonant, as in *skxawng* "moron".
 16. This differs from most European languages, which would syllabify *ikran* as "i-kran", with a released [k], whereas in Na'vi it is *ik-ran* and the *k* is unreleased [k̚].
 17. An exception is glottal stop when it is required before *rr* or *ll*, as in *ro* 'Rrta "on Earth", where glottal stop would normally drop after *ro*, but can't here because *rr* cannot begin a syllable. In the case of consonant clusters, it is only the first consonant that undergoes lenition. For instance, the plural of *tskxe* "stone" is *skxe*, not **ske*, and in the case of *tsko* "bow", double lenition (**sho*) would not be possible, as */*sh*/ is not a permitted consonant cluster.
 18. Though in the common greeting *oel ngati kameie*, the shift occurs in the *oel* form (now /'wɛl/) as well.
 19. This shift from /o/ to /w/ is blocked in the case of trial inclusive and dual and trial exclusive, because the resulting consonant clusters **mw* **pxw* would violate Na'vi phonotactics. So "for the two of us_[INCL]" is *oengaru* /wɛ.'ŋa.ru/ with three syllables, but "for the three of us" is *pxoengaru* /p'o.ɛ.'ŋa.ru/ with four.
 20. See the appendix⁷ for an explanation of the glossing conventions used in these examples.
 21. *Nga* is in the intransitive case because there is no object to the verb—or rather, because the semantic object is incorporated⁸ into the verb, which thus becomes intransitive. With a simple verb *tìng* "to give", *nga* would become ergative: *Ngalna'viru syuvettìyìng* "you will give food to the People".
 22. Compare *oeyä tukru* "my spear" above.
 23. The rest of the sentence will be explained in the remainder of this book.
 24. Note that this is not the case in English, where the pronoun in "by/from/for me" is in the accusative/dative case.
 25. The demonstrative pronoun *tsaw* is an exception, with *tsawl*, *tsawt*, and *tsawr*, possibly because it is a contraction of *tsa'u*, where these would be the expected case forms after *u*.
 26. Indeed, in the film, when the elders Eytukan and Mo'at speak to a public audience, they use the long *-ti* form of the accusative.
 27. *Ma tsmukan, oeru txoa livu* "my brother, forgive me"
 28. These aren't actually dual, trial, and plural pronouns, but rather combinations of two pronouns, *ohe* and *ngenga*, either of which may be in any of the four numbers, for sixteen possible permutations from *ohe ngengasì* for just two people to *ayohe aynngengasì* for at least eight (the 4+ of us and the 4+ of you).
 29. The "See" is capitalized in the script, as *kame* means to see into & understand a person, not simply "to see", which is *tse'a*.
"How to Speak Na'vi"⁹, *UGO Movie Blog*, 2009 Dec 14

6 http://en.wikibooks.org//en.wikipedia.org/wiki/Adam%27s_apple
7 #Appendix
8 #noun_incorporation
9 <http://movieblog.ugo.com/movies/paul-frommer-interview>

30. Assumed from the formal plural form *ayohengeyä*. The alternate informal plural is *awngeyä*.
31. *Tsa'u* inflects as a regular noun. Its shortened form *tsaw*, however, drops the *w* when inflected.
32. *Kxamlä* does not cause lenition, though its component *ilä* does.
33. Syntactically, *sì* is a conjunction¹⁰, and is used regardless of the presence of true adpositions or case, but it is included here because it may be either preposed or suffixed as the adpositions are.
34. Perhaps related to the *em* in *emza'u* "to pass a test, overcome a challenge".
35. Attached orthographically, but the fictional Na'vi is not a written language. Therefore it may be more accurate to say that the *a* appears between the adjective and the noun, but always adjacent to the adjective. Other than orthography, this is identical to its use in relative clauses below.
36. So named from the form of such questions in English: *who?*, *which?*, *what?*, *when?*, *why?*, *where?*, *how?*, etc.
37. A contraction of *srane* "yes" and *ke* "no" with similarities to archaic English "whether?".
38. These may reduce to *tsa+* in verse, as in *tsayhem* ~ *tsahem* "those (actions)", but the plural *y* is normally retained, as dropping it does not shorten the word significantly.
39. Infixes will be marked off with <angle brackets> when parsing words: *taron*.
40. Technically, the first infix position is in the penultimate¹¹ (next-to-last) syllable. However, because all existing Na'vi verb roots have only one or two syllables, and because only the verbal root is inflected within compounds¹², this *is* the first syllable for all practical purposes. If three- or four-syllable verb roots are introduced in the future, the description will need to be worded more precisely.
41. The meanings of these infixes, which do not translate well into English, will be explained later.
42. Note that, despite the fact that the infix appears at the front of the verb, its gloss appears at the end. The glosses of Na'vi infixes always come at the end of the verb, because this informs the reader that, in order to determine the position of the infix, one counts syllables from the end of the verb, not from the front.
43. These may also be called subject and object participles, as the nouns they modify are respectively the subject and the object of the clause. "Subject" in this case means both ergative and intransitive, and so aligns with English rather than with the tripartite alignment of Na'vi noun cases.
44. However, it will be seen in the chapter on syntax¹³ that all Na'vi verbs may behave in this fashion, not just participles.
45. Actually, the future "tense"¹⁴ in English doesn't behave like the past or present, but more like a modal, so linguists consider English to have only two tenses, past and non-past. Na'vi, however, has true future tenses; it's the present that is poorly defined in Na'vi.

10 #conjunction

11 #penultimate

12 #compound

13 #Syntax

14 http://en.wikibooks.org/en.wikipedia.org/wiki/future_tense#English

46. With stative verbs such as "understand" (as opposed to more active verbs such as "hunt"), the perfective often has the meaning of acquiring that state; in this case, of achieving understanding. A similar idea is expressed in English by substituting the verb "get" for the verb "understand".
47. *rä'ä* : the stress on the second syllable
48. In the film, *rä'ä si* is pronounced *rä'si*.
49. In the film, the subjunctive imperative tended to be used in more formal situations, such as addressing the assembled tribe.
50. It is not known if one can say *po-l kelku-t si* "he made a home" with the case suffixes, in contrast with *po kelku si* "he dwelled" without.

Note that English verb-preposition phrases have similar behavior: they behave as single words in that they have fixed, often idiomatic meanings, yet they can be separated from each other: "I looked up an old friend" vs. "I looked him up".

There is an exception to the noun-*si* word order, *irayo si* "thank". *Irayo* "thanks" is perhaps not a noun, and the reverse order, *si irayo*, is also found: *ngaru s<ei>yi oe irayo* "I thank you".

51. Because *new* can be transitive, a more explicitly spelled out subordinate construction (see below) with a subject in the ergative can also be used, but is not common: *Oe-l new fu-t-a (oe) k<iv>ä* "I want that I should go". However, this option is not available with intransitive *tsun* and *zene*.
52. In longer compounds like *zamunge* "bring" (*za* + *munge*), the infixes appear in the final two syllables, but that would happen regardless since the first infix position is actually in the penultimate syllable.
53. The lack of case marking is yet to be explained.
54. Also *ayli'u na ayskxé mi te'lán* "the words (are) like stones in my heart"
55. This *a* is just the attributive *a* used for adjectives, used with *tsun* "be able" to form an attributive verb.
56. Na'vi *pe* forms are only used to ask questions
57. The word *tsane* "to that" may be dropped out, for a more colloquial *po karmä a tsenget ke tsime'a oel*.
58. In both questions, the dative case is used.
59. For example, "Saw you online and wanted to say hi. Hope everything is fine. Will try to call this week. BTW, Carol finally got in touch with me. Said she's been very busy. Didn't go to India after all. Went to Vegas instead. I can't figure her out. Guess she decided on gambling rather than the guru." Note that "I" and "she" are required when changing from Carol to the speaker and then back to Carol, but otherwise not much bothered with.
60. Lit., "Your actions must not be to one (= another), those which are not a pleasure to you"
61. A clause in which an erstwhile transitive verb behaves intransitively, with no argument in the ergative or accusative case, is called an *anti-passive*.
62. An exception in the film is *toruk-makto* "Great Leonopteryx rider" (*makto* is "to ride"), as this phrase was coined by Cameron before Frommer had designed the grammar.
63. Lit., "There are to us many matters that about them (we) may speak."

64. Not all the lines made it into the film; the "words are like stones" line, for example, was spoken in English.
65. Jake would seem to be mispronouncing this.
66. Traditionally, the plus sign marks compound words. However, this book follows Frommer in using them to show lenition¹⁵ and other sound changes.
67. In languages such as Filipino, infixes come at the beginning of a verb, so the gloss for the infix would appear in front of the gloss for the verb.
68. There actually is a way to mark this in the second line, with a hyphenated zero: *oe-0*, corresponding to a hyphenated gloss: "I-INTR. However, that convention has not been used in this book.
69. Note that even though it removes *spots* (plural), we call it a "spot (singular) remover". This is a feature of attributive nouns in English: a "question and answer section", even though there may be many *questions* and *answers*; a "thousand-foot cliff", even though it's a thousand *feet* high. Na'vi, however, allows plurals as normal.

15 #lenition

20 References

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2. *Avatar* script³, ca. 2007
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⁸ Chapter 22 on page 253

1	The people from the Tango! project ⁹	
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