

# Nahuatl Grammar Notes

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This material is assembled from notes I have taken while trying to learn a little about Nahuatl. If you find it useful in learning or teaching Nahuatl, please feel free to reproduce or distribute it as frequently or broadly as you like. I don't guarantee the accuracy of any of it. As I refine it, I will try to make updated versions available by ftp from my web site: <http://anthro.ucsd.edu/~dkjordan>

## Notation Conventions

# = shows a word boundary when compulsory (e.g., a final i is shown as i#).

- = sign that shows where an affix attaches to another element. (e.g., a suffix may be shown as -lo.)

: = Two dots over a vowel (huān) show that it is long. (In standard orthography a macron is used.) Two dots on the front of a suffix (-:an) show that it lengthens the previous vowel. (A convenient alternative orthography could use a doubled vowel to indicate vowel length.<sup>1</sup>)

< = what follows is a plural form. (E.g. pilli < R-tin means that the plural of pilli is pīpiltin. See below for meaning of R.)

> = what follows is a preterit (past) form. (E.g., pāca > pāc means that pāca has the preterit form pāc.)

≈ = alternates with

<< = derived from

>> = produces, goes to, gives

C = consonant

DO = Direct object

IO = Indirect object

k = the sound k, whether spelt c or qu. (This is used here only when spelling will vary by context.)

kw = the sound kw, whether spelt cu or uc. (This is used here only when spelling will vary by context.)

Launey = Tags usage from Launey's *Introduction à la Langue et à la Littérature Aztèques*.

R = first syllable is reduplicated (and the vowel lengthened) in the plural. (Used only in abbreviating plural formations, e.g. pilli < R-tin means the plural of pilli is pīpiltin.)

s = the sound s, whether spelt z or c. (This is used here only when spelling will vary by context.)

V = vowel

V1, V2, V3, V4 = verb of class 1, 2, 3, or 4. (I have normally tried to indicate the transitivity of the verb, e.g. Vt2.)

Vb = verb

Vi = intransitive verb (usually followed by a class number: Vi3)

Vr = reflexive verb (sometimes followed by a class number: Vr3)

Vt = transitive verb (sometimes followed by a class number: Vt3)

Vtt = bitransitive verb (always takes two objects)

w = the sound w, whether spelt hu or uh. (This is used here only when spelling will vary by context.)

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<sup>1</sup>-It is extremely rare for a vowel to be doubled in fully transcribed Nahuatl. (So far I know of no instances.) In the unlikely event that this might happen, the two vowels could be separated with an apostrophe, thus allowing the double-vowel convention to indicate length unambiguously. However, double vowels are common in the incomplete "Franciscan" transcriptions when an unwritten glottal stop comes between them. That is another whole issue.

## Aide-Mémoire to Verbal Subject & Object Affixes

### Subject Prefixes

Singular	Plural
1. ni- (n-)	ti (t-)
2. ti- (t-)	am- (an-)
3. —	—

### Object Prefixes

Singular	Plural
1. nëch-	tëch-
2. mitz-	amëch-
3. c-/qui-	quim- (quin-)
somebody:	të
something:	tla

### Reflexive Prefixes

Singular	Plural
1. no- (n-)	to- (t-)
2. mo- (m-)	mo- (m-)
3. mo- (m-)	mo- (m-)

## Aide-Mémoire to Pronominal & Noun Affixes

### Possessive Prefixes<sup>2</sup>

Singular	Plural
1. no- (n-)	to- (t-)
2. mo- (m-)	amo- (am-)
3. ï-	im- (in-)

### Possessive Suffixes (added to possessed nouns)

Singular	Plural
C-hui	-huän
V-uh	

### Absolutive Suffixes

Singular	Plural
C-tli	-tin/meh
V-tl	-(me)h
l-li	-tin
-in	-meh, -tin <sup>3</sup>

### Agentive Suffixes (nouns derived from verbs)

Singular	Plural
C-qui	-queh
C-co	
V-c	

The plural is normal in Nahuatl only for animate things or inanimate things granted metaphorical animate status.

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<sup>2</sup>-The -o- is dropped before a, e, or “strong” i.

<sup>3</sup>-The absolutive suffix -in is largely used in a small number of words related to bugs, worms, and other very small animals.

## Summary of Nahuatl Noun Morphology

Plural is marked for animate items only, although this is compromised in the creation of animatizing and inanimatizing metaphors. All nouns are either possessed (composed of items 1-2-3 in the following list) or absolutive (composed 2-4). Addition of item 0 creates a clause.

0. Prefixed subject pronoun (only if the remainder is a predicate complement to the subject pronoun)

1 **ni** / **ti**

2. **ti** / **an**

3 -

The prefixed subject pronouns render the remainder of the compound a predicate nominative on an assumed present-tense linking verb. (Ti-toltecatl = “You are a Toltec.”)

### Possessed Nouns

1. Possessive pronoun prefix (incompatible with 4; requires 3)

Specific Possessor (common):

1 **no** / **to**

2 **mo** / **amo** ≈ **mo**

3 **ï** ≈ **mo** / **im** ≈ **mo**

Non-Specific Possessor (uncommon):

**të** human possessor

**tla** non-human possessor

**ne** dummy possessor on reflexive verbs made into nouns  
(a relic pronoun)

2. Noun Stem (Sometimes involving some replacive items.)

3. Possessive suffix (incompatible with 4, required by 1)

singular: V-**uh** ≈ C-**hui** ≈ -

plural: **huän**

### Unpossessed (Absolutive) Nouns

1. Noun Stem (Sometimes involving some reduplicative plurals.)

2. Absolutive number suffix (incompatible with 1 and 3)

singular: **tli** ≈ **lli** ≈ **tl** ≈ **in** ≈ -

Assimilations: l+tli >> lli; V+li >> V-tl; C+tl >> C-tli

plural: **tin** ≈ **meh** ≈ **h**

## Summary of Nahuatl Verb Morphology

A Nahuatl verb is composed of the following elements:

0. Optative Marker (separate word)

**mä** = if, should it be that, let it be that

**tlä** = **tlē** = if, should it be that, perhaps, let it be that  
(more polite than **mä**)

**mäca[mö]** = if not; let it not be that (from **mä** + **ahmo**)

**tläca[mö]** = if not; let it not be that (more polite than **mäcamö**)

1. Negative marker

**ah** (prefix)

**ahmo** negative marker (separate word). (Incompatible with optative marker, item 0.)

2. Antecessive Prefix (Showing action is or will be finished by the time of speech or the time of the main verb. Compulsory with preterit.)

**ö**

3. Subject pronoun

1 **ni** / **ti** ( $\approx$  **xi**)

2 **ti** ( $\approx$  **xi**) / **am** ( $\approx$  **an**) ( $\approx$  **xi**) (use **xi** in optative)

3 - / -

4. Object pronoun (Specific Benefactive, IO, or DO) (incompatible with 7, below). (See “How to Choose” box after item 12.)

1. **nëch** / **tëch**

2 **mitz** / **amëch**

3 **c/qui**<sup>4</sup> / **quim** (quim >> im as extra DO pronoun if pressed)

5. Directional marker (for space or time)

**on** = thither

**huäl** = hither

6. Reflexive pronoun

1 **no** / **to**

2 & 3 **mo**

remnant **ne** (used when reflexive verb is used nonreflexively)

7. Non-specific Benefactive, IO, or DO pronoun (incompatible with 5, above). (See “How to Choose” box after item 12.)

(This is a dummy object for use with transitive verbs without a stated object.)

**të** for humans

**tla** for non-humans

(Note that **tla** in this position can also serve as a depersonalizing mock subject for use when the real subject is a place name and hence inherently locative.)

8. Verb in Appropriate Stem Form

(See below for way to figure out what verb is in which class.)

9. Tense & number suffix (See table below.)

10. Causative ending (added only to intransitive verbs)

(Caution: many irregularities in this formation!)

**tia/ltia** = to, at, on

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<sup>4</sup>-Use **c** before or after a vowel, **qui** elsewhere.

11. Passive/inactive ending

**lo** ≈ **hua** ≈ **o** ≈ **ohua** ≈ **hualo**

12. Applicative ending (to increase number of objects by one)

**(i)(l)ia** = to, at, on

**How to Choose Object Pronouns:**

(Relevant to items 4 & 7 above.)

Agree with the *rightmost* in the following sequence

Direct Object < Indirect Object < Benefactive Object

("I give it < to you < for her.")

## Verbs

A normal Nahuatl verb has nine “time/mood” forms. How they are formed depends on which of four “classes” the verb falls into. Further, the nine time/mood forms are sometimes usefully thought of as derived from three “bases,” although these may not be of much interest to a beginner. Table 1 shows the forms for regular verbs. Table two shows the four “irregular” verbs of Nahuatl. Table three explains how to assign a verb to a class.<sup>5</sup>

**Verb Table 1: Bases & Time/Mood Endings (With Examples)**

Letters in parentheses are added only in the plural

	V1	V2	V3	V4
	cry	live	bathe	eat
<b>BASE 1:</b>	<b>chöca-</b>	<b>yöli-</b>	<b>ältia-</b>	<b>cua-</b>
Present	-(h)	-(h)	-(h)	-(h)
Quotidian <sup>6</sup>	:-ni(h)	:-ni(h)	:-ni(h)	:-ni(h)
Imperfect	-ya(h)	:-ya(h)	:-ya(h)	:-ya(h)
	ti-chöca-h = we cry ti-ältia:-ni = you are in the habit of bathing am-qui-cua:-ya-h = you were eating it			
<b>BASE 2:</b>	<b>chöca-</b>	<b>yöl-</b>	<b>ältih-</b>	<b>cuah-</b>
Preterit <sup>7</sup>	-k(eh)	-(queh)	-(queh)	-(queh)
Pluperfect	-ca(h)	-ca(h)	-ca(h)	-ca(h)
Admonitive <sup>8</sup>	-h(tin)	-(tin)	-(tin)	-(tin)
	ö-ti-älti-h-queh = we bathed ti-yöl-ca = you had lived mäca qui-cuah-tin = let them not eat it, lest they eat it			
<b>BASE 3</b>	<b>chöca-</b>	<b>yöli-</b>	<b>älti-</b>	<b>cuä-</b>
Future	-z(queh)	-z(queh)	-z(queh)	-z(queh)
Optative <sup>9</sup>	-(cän)	-(cän)	-(cän)	-(cän)
Conditional	-zquiya(h)	-zquiya(h)	-zquiya(h)	-zquiya(h)
	chöca-z-queh = they will cry mä yöli-can = let them live cälti-z-queh = they will bathe him cälti-z-quiya(h) = they would bathe him ö-c-älti-z-quiya = she would have bathed him			

<sup>5</sup>-Remember: In these tables, C = consonant, V = vowel; but Vi, Vt, Vr = verb intransitive, transitive, reflexive.

<sup>6</sup>-The quotidian form stresses that an action is usual or customary. Some writers call it the “customary present.”

<sup>7</sup>-Also called the perfect, the preterit is used for single past events. Note that the use of the prefix ö is compulsory with the preterit.

<sup>8</sup>-The admonitive form is sometimes called the vetative. It is used to warn against something. My sources conflict on whether it is more usually used with mä or mäco. Apparently it contains a negative within it, and is not negated by a separate negative added to it.

<sup>9</sup>-What I have here called optative is sometimes called imperative. It is used to express the wish that something be done. Note that in the optative, 2nd person singular and plural subject prefixes become xi-.

## Verb Table 2: The Four Irregular Verbs<sup>10</sup>

Letters in parentheses are added only in the plural

<b>Dictionary:</b>	cä/ye To be	huítza To come	yä/huih To go	huällä/huälhuih To come
<b>BASE 1:</b>				
Present sing.	cah	huítz	sing: yauh	huällauh
Present pl.	cateh	huítzeh	pl: huih	huälhuih
Imperfect	yeya(h)		yäya(h)	huälhuiya(h)
<b>BASE 2:</b>				
Preterit	<b>catca-</b> -(h)	<b>huítza-</b> -(h)	<b>ya</b> -h(queh)	<b>huälla-</b> -h(queh)
<b>BASE 3</b>				
Future	<b>ye-</b> -z(queh)		<b>yä-</b> -z(queh)	<b>huälla-</b> -z(queh)

## Verb Table 3: Decision Tree to Assign a Verb to a Class<sup>11</sup>

(Examples show production of preterit from present.)

### 1. Closed List of “Exceptions”

Four irregular verbs:

cä/ye, huítza, yä/huih, huällä/huälhuih

(See Verb Table 2.)

päca (päc) = to wash (V2 not V1)

töna (tönac) = to be warm; to prosper (V1 not V2)

zöma (zömah) = to irritate (V4 not V2)

### 2. Verbs in V-hua and V-ya

-hua (Vi) >> 1

ëhua >> ëhuac = he departed

-hua (Vtr) >> 2

ëhua >> mëuh = he arose (raised himself)

-ya (Vi) >> 1 or 2 as you like

### 3. Selected Monosyllables

Monosyllables in #Ca# >> V4

Monosyllables in i# >> V1 (and i >> i)

i >> quic = he drank it

### 4. Verbs in -o, -tla, and -ca

Co >> V1 (and o >> ö)

pano >> panöqueh = they passed

temo >> temöc = he descended

<sup>10</sup>-What is irregular about these verbs is that they do not have complete paradigms based on the same root, but rather mix two different roots together, also using the preterit forms of the second root for the present. It is easiest simply to call them irregular and memorize the table.

<sup>11</sup>-This table has been remarkably robust. So far it has accurately predicted the verb class of every Nahuatl verb I have seen.



-tla >> V1

mötla >> quimötlac = he threw stones at him

-ca >> V1

chöca >> chöcaqueh = they wept

tëca >> motëcac = he lay down

## 5. Other Verbs

CCV >> V1

itta >> quittaqueh = they saw it

ahci >> ahcic = he arrived

VCV >> V2

quïza >> niquïz = I sent out

miqui >> mic = she died; miqueh = they died

tzacua >> niquitzauc = I covered it

nëci >> nëzqueh = they appeared

xima >> ninoxin = I shaved myself

chiya = nitlachix = I looked

mati = quimah = he knew it

VV >> V3

ihtoa >> ihtoh = he spoke, quihtohqueh = they said it

## Verb Table 4: “Passive” Endings<sup>12</sup>

### Classes 1 & 2

-o, -ö, i:-hua	
transitive in -i, -a	-lö
intransitive in -i	-ihua, -ohua
intransitive in a	-ohua

### Class 3:-lö

### Class 4-lö

### Irregular verbs:

cah >> yelohua      yä >> huïlohua

For some verbs -lö optionally alternates with -o.

Note that applying the passive endings always produces a Class-I verb, with past in -c/-queh and future in -z.

### Root Consonant Mutations With the Suffix -:hua

cV# >> cöhua

mV# >> möhua

huV# >> öhua

VsV# >> Vxöhua

VtzV# >> Vchöhua

CsV# >> Cxïhua

CtzV# >> Ctzïhua

### Usage examples:

The passive, better called “non-active” or “middle-voice,” cannot show an agent. When applied to an intransitive verb, it shows a general condition.

ï = Vt1 to drink

teca = Vt1 to lay down

äna Vt2 to capture

tläza = Vt2 to hurl

itta = Vt1 to see

miqui = Vi2 to die

ïhua = it is drunk

tecahua = he is laid out

änalo ≈ äno = he is captured

tläzalo ≈ tläxo = he is thrown

ittalo ≈ itto = you are seen

miquih = they are dying

mico = people are dying

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<sup>12</sup>-I find passives confusing and unpredictable. This table is helpful, but I do not guarantee that it accounts for all cases.

## Causatives & Applicatives

General Form: Vb + tia = to make sb Vb [st]

Example: quiza (Vi) = exit (Vi)

quix-tia (causative) = remove (cause to exit) (Vt)

quix-ti-lia (applicative of causative)

= remove (something) from (somebody) (Vtt)

### How to Form a Causative: -tia -ltia

#### Causatives From Intransitive Verbs:

-ti# (verb derived from noun) >> -lia

-i# >> itia

Vqui# & Vca# >> Vctia

:huV# >> :uhtia

:mV# >> :mtia

:nV# >> :nVtia

zV# >> xtia

tV# >> chtia

#### Causatives From Transitive Verbs

Passive formed in -lo# >> -ltia

Passive formed in -o# or -hua# >> tia

#### Causatives From All Verbs (optional variant)

-a# >> -altia (less common than above)

#### Causatives From Irregular Verbs:

cah >> ?

yäuh >> huïca (Vt1) = conduct, lead

#### Causatives from Non-Verbs

N+ti(y)a = to provide somebody with N

Adj+tia = to render something Adj

#### How to Form a Semi-Causative

(Converts Vi to Vt. Not a productive device(?) but many pairs of verbs conform to this.)

-a# >> -ia#

-i# >> -a#

-i# >> -ia#

-ki# >> -tza#

-ti# >> -tla#

-ihui# or -ahui# >> -oa#

## How to Form an Applicative: -lia -ia

#Ca# >> #Călia

-ca >> quia (≈ quilia)

-hua >> huia (≈ huilia)

-iya# >> -iyalia

-tlV# >> tilia ≈ chtlia

-tzV# >> chilia

-tV# >> chlia

-sV# >> xlia

-Ca# >> Cilia

## Auxiliary & Intentional Verb Suffixes

**Table of Auxiliary Suffixes  
Singular Verbs, Preterit Stem (Base 2)**

verb	present	past	future	formula
cah = be	-ticah	-ticatca	-tiez	to be Vb-ing
ēhua = rise, depart	-tēhua	-tēhuac	-tēhuaz	to depart, Vb-ing
huetzi = fall	-tihuetzi	-tihuetz	-tihuetziz	to Vb quickly
huitz = come	-tihuitz	-tihuitzza		to come Vb-ing
ihcac = stand	-tihcac	-ticaca, -ticaya	-ticaz	to stand Vb-ing
mani = be (spread out)	-timani	-timan, - timanca	-timaniz	to be Vb-ing
nemi = live	-tinemi	-tinen(ca)	-tinemiz	to go about Vb-ing
(on)oc = lie	-toc	-toca	-toz	to lie Vb-ing
quiza = emerge, pass	-tiquiza	-tiquiz	-tiquizaz	to pass, Vb-ing
yauh = go	-tiah (<<ti+yauh)	-tia (<<ti+yah)	-tiaz (<<ti+yaz)	to go/be Vb-ing

## Table of Intentional Suffixes

**“Coming & Going in order to Vb”**

**Use present stem (Base 1)**

Come (Introverse conjugations)			Go (Extroverse conjugations)			
tense	sing	plural	tense	sing	plural	Launey
<b>fu</b>	-quiuh	-quihuih	<b>pr/fu</b>	-tīuh	-tīhuih	imperf.
<b>pr/pa</b>	-co	-coh	<b>pa</b>	-to	-toh	perfect.
<b>optative</b>	-qui	-quih	<b>optative</b>	-h, -ti	-tih, tin	optative

## Verbal Nouns

Nouns are often derived from verbs to show an actor or agent (“runner”), a patient (“employee”) or an abstraction (“running”).

**Abstract Nouns.** In Nahuatl abstract nouns derived from verbs normally simply add -liztli or -iztli to the verb stem: nemi = to live, nemiztli = living; cochi = to sleep; cochiliztli = sleeping; tlazohtla = to love, tlazohtlaliztli = love; miqui = to die, miquiliztli/miquiztli = death.

Sometimes transitive verbs include të- or tla- dummy object prefixes (for people and things respectively or mo for reflexive verbs) in the abstraction: të.machtia = to instruct (people), të.machtli.liztli = instructing, education.

**Agentive Nouns.** Agentive nouns (indicating actors) are usually formed in the absolutive form in one of three ways:

1. Add the suffix -ni to verbal stem (and form the plural by adding -meh to that):  
mati = to know, tla.mati = to know (something), tla.matini = scholar, tla.mati.ni.meh = scholars, the scholarly people.
2. Add the suffix -qui (plural: -queh) to the preterit form (deleting the preceding o-):  
chöca = to cry, ö chöcac = cried, chöcacqui = the one crying  
miqui = to die, ö mic = died, micqueh = dead people  
cua = eat, ö cuah = ate, cuahqui = eater
3. In a few cases, the preterit agentive form omits the singular -qui (but not the plural -queh) and is indistinguishable from the preterit verb except that the ö is missing:  
poloa = to lay waste, të.poloa = to conquer (people), ö të.poloh = conquered, të.poloh = conqueror, të.poloh.queh = conquerors, conquistadores.

When possessed (non-absolutive), all agentive nouns take the same form: preterit + -ca- + -uh (plural: -huän):

tla.mati.ni = scholar,  
i.tla.mat.ca.uh = his scholar, i.tla.mat.ca.huän = his scholars  
chöcac.qui = the one crying, no.chöca.ca.uh = my crying one  
mic.qui = a dead person,  
to.mic.ca.uh = our dead (person) to.mic.ca.huän = our dead (people)  
tëpoloh.queh = conquerors, mo.tëpoloh.ca.uh = your conqueror

## Consonant Mutations

Vh always produces a short vowel.

All final vowels become short.

### Arranged by Input

ch + ch >> ch (optional)  
ch + tz >> tz (optional)  
h + t >> lt (?)  
kw + p >> kp  
l + tl >> ll  
l + y >> ll  
m# >> n#  
mC >> nC unless C = m or p  
n + y >> yy  
t# >> h# (usually written t  
          anyway)  
tz + ch >> ch (optional)  
tz + tz >> tz (optional)  
uc + c >> cc  
uc + o >> co  
uh + m >> mm (optional)  
uh + o >> o  
uh + p >> pp (optional)  
y# >> x#  
z + ch >> zz (usual)  
z + l >> zz (usual)  
z + t >> xt  
z + tz >> zz (usual)  
z + x >> zz (usual)  
z + y >> zz (usual)

### Arranged by Output

cc << uc + c  
ch << ch + ch (optional)  
ch << tz + ch (optional)  
co << uc + o  
h# << t# (usually written t  
          anyway)  
kp << kw + p  
ll << l + tl  
ll << l + y  
lt << h + t (?)  
mm << uh + m (optional)  
n# << m#  
nC << mC (unless C = m or p)  
o << uh + o  
pp << uh + p (optional)  
tz << ch + tz (optional)  
tz << tz + tz (optional)  
x# << y#  
xt << z + t  
yy - n + y  
zz << z + ch (usual)  
zz << z + l (usual)  
zz << z + tz (usual)  
zz << z + x (usual)  
zz << z + y (usual)

**Summary Table of Nahuatl Numbers**

0/5	1/6	2/7	3/8	4/9
<b>prefix forms:</b>	<b>cēm- ≈ cēn-</b>	<b>öm- ≈ ön-</b>	<b>(y)ë(y)(i)-</b>	<b>nāhui- ≈ nāuh-</b>
<b>mācuilli = 5</b>	<b>cē = 1</b> <b>chicua + 1 = 6</b>	<b>öme = 2</b> <b>chic + 2 = 7</b>	<b>ëyi (≈ ye) = 3</b> <b>chicu + 3 = 8</b>	<b>nāhui = 4</b> <b>chiuc + 4 = 9</b>
<b>mahtlactli = 10</b>	10	10	10	10
<b>caxtölli = 15</b>	ön 1 = <b>11</b>	öm 2 = <b>12</b>	öm 3 = <b>13</b>	ön 4 = <b>14</b>
	15	15	15	15
<b>cēm-pöhualli = 20</b>	ön 1 = <b>16</b>	öm 2 = <b>17</b>	öm 3 = <b>18</b>	ön 4 = <b>19</b>
	20	20 +	20	20
<b>öm 5 = 25</b>	ön 1 = <b>21</b>	öm 2 = <b>22</b>	öm 3 = <b>23</b>	ön 4 = <b>24</b>
	20	20	20	20
<b>öm 10 = 30</b>	ön 6 = <b>26</b>	ön 7 = <b>27</b>	ön 8 = <b>28</b>	ön 9 = <b>29</b>
	20	20 öm 10	20 öm 10	20 öm 10
<b>ön 15 = 35</b>	ön 1 = <b>31</b>	öm 2 = <b>32</b>	öm 3 = <b>33</b>	ön 4 = <b>34</b>
	20	20 ön 15	20 ön 15	20 ön 15
<b>öm-pöhualli = 40</b>	ön 1 = <b>36</b>	öm 2 = <b>37</b>	öm 3 = <b>38</b>	ön 4 = <b>39</b>
	40	40	40	40
<b>öm 5 = 45</b>	ön 1 = <b>41</b>	öm 2 = <b>42</b>	öm 3 = <b>43</b>	ön 4 = <b>44</b>
	40	40	40	40
<b>öm 10 = 50</b>	ön 6 = <b>46</b>	ön 7 = <b>47</b>	ön 8 = <b>48</b>	ön 9 = <b>49</b>
	40	40 öm 10	40 öm 10	40 öm 10
<b>ön 15 = 55</b>	ön 1 = <b>51</b>	öm 2 = <b>52</b>	öm 3 = <b>53</b>	4 = <b>54</b>
	40	40 ön 15	40 ön 15	40 ön 15
	ön 1 = <b>56</b>	öm 2 = <b>57</b>	öm 3 = <b>58</b>	ön 4 = <b>59</b>

- cēm-pöhualli = 20. or 20<sup>1</sup>
- öm-pöhualli = 40.
- yë-pöhualli = 60.
- nāuh-pöhualli (≈ nap-pöhualli) = 80.
- mācuil-pöhualli = 100.
- chicua-cem-pöhualli = 120.
- chic-öm-pöhualli = 140.
- mahtlac-pöhualli = 200.
- mahtlac-pöhualli once = 201.
- caxtöl-pöhualli = 300.
- cēn-tzontli = 400. or 20<sup>2</sup>
- cēn-xiquipilli = 8000. or 20<sup>3</sup>
- cēn pöhual-xiquipilli = 160,000. or 20<sup>4</sup>

1998 =	nāuh-tzontli	caxtölli-on-nāuh-pöhualli	caxtölli-on-ëyi
	4 four-hundreds (1600)	15 + 4 twenties (380)	15 + 3 ones (18)
2006 =	mācuilli-tzontli		chicua-cē (6)
	5 four-hundreds (2000)		six

## Reference Table of Most Affixes

The following alphabetical table is intended to include all of the affixes in the foregoing tables in a single list. It is divided into prefixes and suffixes (based on which side of the root the affix goes on).

### Prefixes

ah- = negative verb prefix  
ahmo- = negative verb prefix  
am- = 2nd person plural possessive & subject prefix  
amëch- = 2nd person plural object prefix  
amo- = 2nd person plural possessive prefix  
an- 2nd person plural subject prefix  
c- = 3rd person singular object prefix  
huäl- = directional prefix (“hither”)  
i- = 3rd person singular possessive prefix  
im- = 3rd person plural possessive prefix  
in- = 3rd person plural possessive prefix  
m- = 2nd & 3rd person singular & plural reflexive prefix  
m- = 2nd person singular possessive prefix  
mä- = optative verb marker (= if), normally written as separate word  
mäca = negative optative verb marker (“if not”), normally written as separate word  
mäcamo- = negative optative verb marker (“if not”), normally written as separate word  
mitz- = 2nd person singular object prefix  
mo- = 2nd & 3rd person singular & plural reflexive prefix  
mo- = 2nd person singular possessive prefix  
n- = 1st person singular possessive, reflexive, and subject prefix  
na- = reciprocally  
ne- = non-specific object prefix  
ne- = dummy possessive prefix on nouns derived from reflexives  
nëch- = 1st person singular object prefix  
ni- = 1st person singular subject prefix  
no- = 1st person singular possessive & reflexive prefix  
ö- = preterit prefix  
on- = directional prefix (“thither”)  
qui- = 3rd person singular object prefix  
quim- = 3rd person plural object prefix  
quin- = 3rd person plural object prefix  
Rh- (reduplication of initial syllable plus -h) = prefix stressing repetitive action  
t- = 1st person plural possessive, reflexive, and subject prefix  
t- = 2nd person singular subject prefix  
të- = non-specific human possessive prefix  
tëch- = 1st person plural object prefix  
ti- = 1st person plural subject prefix  
ti- = 2nd person singular subject prefix  
tla- = non-human object prefix



tlä- = optative verb marker (“if”), normally written as separate word  
 tläca- = negative optative verb marker (“if not”), normally written as separate word  
 tläcamo- = negative optative verb marker (“if not”), normally written as separate word  
 to- = 1st person plural possessive & reflexive prefix  
 - = 3rd person singular & plural subject prefix (null prefix)

## Suffixes

-a = non-productive transitivizing suffix for verbs ending in -i#  
 -ahui = non-productive transitivizing suffix  
 -altia = alternative causative suffix for any very ending in -a#  
 -c = agentive suffix? used after V  
 -c = in, at, among  
 -c = interparticle ligature when the second particle is negative  
 -c = preterit verb form (V1)  
 -c(a) = interparticle ligature when the second particle is negative  
 -ca = particle added to the preterit stem to form an possessed agentive noun ending in -uh or -huan  
 -ca = pluperfect verb form  
 -ca = through, by, with, for  
 -cän = optative plural marker  
 -cän = in the place/time of  
 -cäti = -ti = (added to N) to be a N, to act as N  
 -chöhua = form of impersonal ending -hua for verbs ending in VtzV# (The first vowel is retained before the ch.)  
 -co = agentive suffix? used after C  
 -co = “come”; singular present/past intentional suffix added to Base 1  
 -co/c = in, at, among  
 -cöhua = form of impersonal ending -hua for verbs ending in cV#  
 -coh = “come”; plural present/past intentional suffix added to Base 1.  
 -eh (pl. -ehqueh) = possessor of (after C; see huah.)  
 -h = “go”; singular optative intentional suffix added to Base 1.  
 -h = plural suffix, especially for nouns ending in tl  
 -h = present, quotidian, imperfect, & pluperfect verb form plural marker  
 -h = admonitive verb form (V1) (lost in plural)  
 -hua = passive suffix (added to Base 2 ending); see lö.  
 -huän = in the company of, with  
 -huän = possessed plural suffix  
 -huah = possessor of (esp. after V; see -eh)  
 -hualo = passive/inactive verb ending  
 -hui = possessive singular suffix used after C  
 -huïc = toward, against  
 -ïcampa = behind  
 -ïxpan = before, in the presence of  
 -ia = non-productive transitivizing suffix for verbs ending in -a# or -i#  
 -ia applicative formant (adds an object); see -lia. Also occurs as misspelling of -iya.  
 -icpac = on top of, on someone’s head, above

- ihtic = inside, in the belly of
- ihua = passive formant; see lö
- ihui = non-productive transitivizing suffix
- ilia = applicative verb ending (adds an object)
- itic See -ihtic
- ixco = on the surface of
- lan = next to, in the place of
- lhuia See -lia
- li = absolutive suffix for nouns ending in l
- lia = causative suffix used with denominative verbs in -ti#
- lia applicative ( $\approx$ -lhuia  $\approx$ -ia)
  - Used to introduce additional oblique object, often benefactive.
- liztli (1) entification, (2) abstraction
- lö (-loh) = passive formant.
- loh = covered with, characterized by; see -yoh
- lotl = -ship, -ness; see yötl
- ltia = causative suffix
- ltia = See -tia.
- män = locative suffix
- meh = plural suffix, especially for nouns ending in tl
- möhua = form of impersonal ending -hua for verbs ending in mV#
- nähuac = next to, close to, near, within shouting distance of
- ni = quotidian verb form singular (V1 V2)
- ni = quotidian verb form singular (V3 V4)
- o = passive/inactive suffix (added to Base 2 ending in C)
- öhua = form of impersonal ending -hua for verbs ending in huV#; also occurs as misspelling of -oa.
- oa = non-productive transitivizing suffix; also occurs as misspelling of -ohua.
- oh = covered with, characterized by; see -yoh
- ohua = passive/inactive suffix; see lö
- otl See -yotl
- pa = (1) times (with number); (2) moment relative to point in time
- pal = for, by means of, for the sake of
- pampa = account of, for, reason for, through, because of
- pan = in, on for, above, in the time of, in the presence of
- queh = future verb form plural marker
- queh = plural suffix, especially for preterit agentives
- queh = preterit verb form plural marker
- qui = agentive suffix used after C
- qui = “come”; singular optative intentional suffix added to Base 1.
- quih = “come”; plural optative intentional suffix added to Base 1.
- quihuih = “come”; plural future intentional suffix added to Base 1.
- quih = “come”; singular future intentional suffix added to Base 1.
- tēhua = to depart Vb-ing (Auxiliary added to Base 2, from ēhua “rise, depart.”)
- tēhuac = departed Vb-ing (Auxiliary added to Base 2, from ēhua “rise, depart.”)
- tēhuaz = will depart Vb-ing (Auxiliary added to Base 2, from ēhua “rise, depart.”)

- tech = joined to, upon, as far as, concerning, beside, next to (general connector in verbal idioms)
- ti = “go”; singular optative intentional suffix added to Base 1
- ti = -cäti = (added to N) to be a N, to act as N
- tia = was Vb-ing (ti+yah) (Auxiliary added to Base 2, from yuah “go.”)
- tia = causative suffix (≈-Itia)
  - N+ti(y)a = to provide sb with N
  - Adj+tia = to render st Adj
  - Vb + tia = to make sb Vb [st]
- tiaz = will be Vb-ing (ti+yaz) (Auxiliary added to Base 2, from yuah “go.”)
- tic = adjective suffix
- tica = ca = on account of (a person), by means of (a thing), at the place/time of, during.
- ticaca = stood Vb-ing (Auxiliary added to Base 2, from ihcac “stand.”)
- ticah = to be Vb-ing (Auxiliary added to Base 2, from cah “be.”)
- ticatca = was Vb-ing (Auxiliary added to Base 2, from cah “be.”)
- ticaya = stood Vb-ing (Auxiliary added to Base 2, from ihcac “stand.”)
- ticaz = will stand Vb-ing (Auxiliary added to Base 2, from ihcac “stand.”)
- tiez = will be Vb-ing (Auxiliary added to Base 2, from cah “be.”)
- tih = “go”; plural optative intentional suffix added to Base 1.
- tih = admonitive verb form plural marker
- tihcac = to stand Vb-ing (Auxiliary added to Base 2, from ihcac “stand.”)
- tihuetz = Vb-ed quickly (Auxiliary added to Base 2, from huetzi “fall.”)
- tihuetzi = to Vb quickly (Auxiliary added to Base 2, from huetzi “fall.”)
- tihuetziz = will Vb quickly (Auxiliary added to Base 2, from huetzi “fall.”)
- tihuïh = “go”; plural present & future intentional suffix added to Base 1.
- tihuïtz = to come Vb-ing (Auxiliary added to Base 2, from huïtz “come.”)
- tihuïtza = came Vb-ing (Auxiliary added to Base 2, from huïtz “come.”)
- timan = was Vb-ing (Auxiliary added to Base 2, from mani “be spread out.”)
- timanca = was Vb-ing (Auxiliary added to Base 2, from mani “be spread out.”)
- timani = to be Vb-ing (Auxiliary added to Base 2, from mani “be spread out.”)
- timaniz = will be Vb-ing (Auxiliary added to Base 2, from mani “be spread out.”)
- tin = “go”; plural optative intentional suffix added to Base 1.
- tin = plural suffix, especially for nouns ending in tli or glottal stop
- tin = admonitive verb form plural marker
- tinemi = to go about Vb-ing (Auxiliary added to Base 2, from nemi “live.”)
- tinemiz = will go about Vb-ing (Auxiliary added to Base 2, from nemi “live.”)
- tinen = went about Vb-ing (Auxiliary added to Base 2, from nemi “live.”)
- tinenca = went about Vb-ing (Auxiliary added to Base 2, from nemi “live.”)
- tiquïz = passed Vb-ing (Auxiliary added to Base 2, from quïza “emerge, pass.”)
- tiquïza = to pass Vb-ing (Auxiliary added to Base 2, from quïza “emerge, pass.”)
- tiquïzaz = will pass Vb-ing (Auxiliary added to Base 2, from quïza “emerge, pass.”)
- tiuh = to be Vb-ing (ti+yauh) (Auxiliary added to Base 2, from yuah “go.”)
- tiuh = “go”; singular present & future intentional suffix added to Base 1.
- tl = common absolutive suffix used for stems ending in V
- tla = non-productive transitivizing suffix for verbs ending in -gi#
- tlah = place of, place abundant in N.
- tlan = next to, under, between, under

- tli = absolutive suffix for nouns ending in C
- to = “go”; singular past intentional suffix added to Base 1.
- toc = to lie Vb-ing (Auxiliary added to Base 2, from on > oc “lie.”)
- toca = lay Vb-ing (Auxiliary added to Base 2, from on > oc “lie.”)
- toh = “go”; plural past intentional suffix added to Base 1.
- tön = dim. suffix; derog. suffix.
- toz = will lie Vb-ing (Auxiliary added to Base 2, from on > oc “lie.”)
- tza = non-productive transitivizing suffix for verbs ending in -ki#
- tzälan = between, amidst, in the middle of
- tzé = vocative form of -tzintli
- tzihua = form of impersonal ending -hua for verbs ending in CtzV# (The C is retained before the tz.)
- tzintli = augmentative and dim. suffix in absolutive form.
- tzintlan = below
- uh = possessive singular suffix attached after -ca- in agentive nouns formed from verbs.
- xihua = form of impersonal ending -hua for verbs ending in CsV# (The C is retained before the x.)
- xöhua = form of impersonal ending -hua for verbs ending in VsV# (The first vowel is retained before the x.)
- yän = place where something is done (suffixed to verbal stem)
- yötl (after z: -zötl, after l: -lötl) = -ship, -ness
- yoh (-oh) = covered with, characterized by
- z = future verb form (V1 V2) (lengthens prior vowel in V3 & V4)
- zquiya (-h) = conditional verb form.
- : = optative verb form (V3 V4) (lengthening of previous vowel)
- = optative verb form (V1 V2) (null suffix)
- = possessive suffix used after V or C (alternative) (null suffix)
- = present verb form singular (null suffix)
- = preterit & admonitive verb form (V2 V3 V4) (null suffix)