

## NEW ITHKUIL: GRAMMAR DESIGN (Version 1.2.1, January 18, 2023)

This document updates and replaces previous version 1.0.2 from November 29, 2022; changes since version 1.0.2 are written in blue and are summarized below. This document assumes the reader is familiar with Ithkuil 2011 (i.e., Ithkuil III) grammar.

### Version 1.1

- Various typos have been corrected throughout the document and several vestigial references to obsolete categories have been eliminated or updated.
- Values in **Sec. 3.6.1, Paragraph No. 8** have been modified.
- **Sec. 3.8, Slot VIII Pattern 1 Table:** Due to irreconcilable ambiguities when using Slot VIII to convey Absolute Levels, Slot VIII will now be used to indicate Relative Levels only. To convey Absolute Levels, use the **LVL V<sub>X</sub>C<sub>S</sub>** affix in Formative Slots V or VII or as an affixal adjunct.
- **Sec. 3.9.1:** The description of the INTERPRETATIVE case-accessor has been corrected.
- **Sec. 4.1.2:** The **C<sub>Z</sub>** values listed in the description of the adjunct, as well as the examples, have been corrected/updated.
- **Sec. 4.3:** Old Slot 4 of the Modular Adjunct has been eliminated and old Slot 5 has moved to Slot 4 -- allowing three different **V<sub>N</sub>** slots was too unwieldy phonologically-speaking. If necessary to add a third **V<sub>N</sub>** value, the speaker can instead use an affixal adjunct. Additionally, it has been pointed out that the **C<sub>N</sub>** value in Slot 3 of the modular adjunct is redundant and can be replaced by a placeholder consonant **-ñ-**.
- **Sec. 4.6:** Alternate forms of the **Obv** and **PVS** referentials are now provided in order to avoid potential ambiguities between Referential affixes from Sec. 4.6.5 and geminated **C<sub>A</sub>** values. The phonological values of the POLYADIC INANIMATE referential and the AGGLOMERATIVE referential affix have been modified as well to avoid ambiguities.
- **Sec. 4.6.5:** It has been pointed out that certain Referential affixes give rise to ambiguities with Type-3 case-accessors. Therefore a rule has been added that Referential affixes cannot add the ABSTRACT Perspective increments **-w** or **-y**.
- Various New Ithkuil example words/phrases/sentences which contained obsolete phonological values from previous versions of the grammar have been corrected and updated.

### Version 1.2

- Various vestigial (and now erroneous) wording from previous versions of the document has been corrected and updated.
- **Sec. 2.0:** The scoping chart has been corrected to remove Expectation.
- **Sec. 3.6:** The allomorphic substitutions for [C]bm and [C]bn have been modified to correct a potential ambiguity.
- **Sec. 4.3:** The consonantal value in Slot 3 of a Modular adjunct has been renamed **C<sub>M</sub>** and now distinguishes whether the Slot 3 **V<sub>N</sub>** value represents Aspect versus Valence/Phase/Level/Effect. The pattern of parentheses has been modified to show the presence of Slot 3 requires the presence of Slot 2.
- **Sec. 4.6:** The value of the PVS/DET Referential has been corrected to **ññ**.
- **Sec. 5.3:** The examples have been corrected/updated to current morpho-phonological values.
- **Sec. 5.8:** Degrees 2 through 5 of the CHC Aspect have been corrected/updated to conform to the pattern of the IMP affix.

**Version 1.2.1:** The Mood/Case-Scope Adjuncts are replaced by the new **MCS** affix (see Affixes document). The **MTH** Register Adjunct has been eliminated and the **CGT** Register adjunct value changed. The phonological value of the **CHC** affix has been corrected. The meaning of the **PAR** inverse case-accessor has been augmented.

## 1.0 PHONOLOGY

### 1.1 Phonemic Inventory

	LABIAL	LABIO-DENTAL	LABIO-VELAR	APICO-DENTAL	INTER-DENTAL	APICO-ALVEOLAR	ALVEOLAR RETROFLEX	ALVEOLO-PALATAL	PALATAL	VELAR	UVULAR	GLOTTAL	LATERAL
STOP	p b			t d						k ɣg		'	
FRICATIVE		f v			ʈ ɖ	s z		š ž	ç	x		h	l̥
AFFRICATE						c ʒ		č j					
NASAL	m			n						ŋ			
LIQUID	FLAP / TRILL						r						
	NON-FLAP												l
APPROXIMANT			w					y			ř		

	FRONT		CENTRAL		BACK	
	unrounded	rounded	unrounded	rounded	unrounded	rounded
HIGH	i			ü		u
MID	e	ö			ë	o
LOW	ä				a	

### 1.2 Pronunciation Notes and Allophonic Distinctions

**1.2.1 Vowels:** **-a-** is pronounced [a] or [ɑ] but only as [ɑ] when it is the second member of a disyllabic conjunct such as **-ia-**, **-ea-**, **-oa-**, etc. **-ä-** is pronounced [æ], **-e-** is pronounced [ɛ] or [e] but only as [e] at the beginning of a vocalic conjunct such as **-ea-**, **-eo-**, etc.; **-ë-** is pronounced [ɤ] or [ʌ] or [ə]; **-i-** is pronounced [i] or [ɪ] but only as [i] at the beginning of a vocalic conjunct and only as [ɪ] when preceded or followed by **-y-**; **-o-** is pronounced [ɔ] or [o] but only as [o] at the beginning of a vocalic conjunct such as **-oa-**, **-oe-**, etc.; **-ö-** is [œ] or [ø] but only [ø] at the beginning of a vocalic conjunct such as **-öa-**, **-öe-**, etc.; **-u-** is [ʊ] or [u] but only [u] at the beginning of a vocalic conjunct such as **-ua-**, **-ur-**, **-uo-**, etc., and only as [ʊ] when preceded or followed by **-w-**; **-ü-** is pronounced as [ʊ] or [y] but only as [ʊ] when preceded by **-y-** or **-w-**). The permissible diphthongs (all are “falling”) are: **ai**, **ei**, **ëi**, **oi**, **ui**, **au**, **eu**, **ëu**, **ou**, and **iu**. The two vowels of these diphthongs may be pronounced as separate syllables in the following circumstances: (1) when followed by **-l**, **-r** or **-ř** occurring in the same syllable for ease-of-pronunciation; (2) in song or poetry. Care should be taken not to accidentally introduce a glottal-stop between the two vowels when pronouncing a diphthong disyllabically.

**1.2.2 Consonants:** The dental **-n-** assimilates to velar [ŋ] before **-k-**, **-g-**, and **-x-** (but not before **-ř-**); therefore, phonemic **-ñ-** is not permitted before **-k-**, **-g-**, or **-x-**; The fricative **-x-** may be pronounced with either velar or uvular articulation [x ~ χ]; The apico-alveolar-retroflex rhotic **-r-** is a single tap/flap [ɾ], which becomes a trill [r] when geminated; when followed by a consonant in the same word, it may be pronounced as an apico-alveolar-retroflex approximant [ɹ], similar to (but further forward in the mouth than) the postalveolar [ɹ] of standard English; The uvular **-ř-** is an approximant [ʁ] as in colloquial French or German; when geminated it is either [ʁ:] or can be strengthened to a uvular trill [R]. Care should be taken to ensure the pronunciations of **-př-** and **-tř-** are differentiated from **-px-** and **-tx-**. Syllable-initial or word-final **-ph-**, **-th-**, **-kh-**, **-ch-**, **-čh-** are pronounced as aspirated stops/affricates [p<sup>h</sup>, t<sup>h</sup>, k<sup>h</sup>, ts<sup>h</sup>, tʃ<sup>h</sup>]. Between two vowels, they are disyllabic and pronounced as in English *haphazard*, *at-hand*, *backhanded*, *it's here*, and *church hall*. The various specialized Slot I or Slot VIII conjuncts beginning with **-h-** are pronounced as follows: **hl** = [ɬ] or [hl], **hr** = [ɮ] or [hr], **hm** = [m̥] or [hm], **hn** = [ŋ] or [hn].

### 1.3 Orthographic Conventions

The tables on the previous page indicate the romanization system. The following alternatives are available for writing the language in romanized script: The character **ṭ** may be written as **ṭ** or **ṭ**, the character **ḍ** may be written as **ḍ** or **ḍ**, the character **ṇ** may be written as **ṇ** or **ṇ**, the character **ṙ** may be written as **ṙ** or **ṙ**, and the character **ḷ** may be written as **ḷ** or **ḷ**.

**1.3.1 Indicating Syllabic Stress:** Penultimate stress is unmarked; non-penultimate stress is marked by a diacritic on the vowel carrying the stress, as follows: a vowel with no diacritic takes the acute accent; a vowel with dieresis changes it to a circumflex accent (e.g., **ö** → **ô**). The grave accent is used over the vowel **-î-** when it is unstressed as the initial member of a vocalic conjunct following a consonant (e.g., **-Cîa-**, **-Cîo**, etc.) — this is to remind the speaker/reader that this **-î-** is to be pronounced long /i:/ in order to distinguish such syllables from syllables of the form **Cy+V** (e.g., *karesya* vs. *karésîa*, *velkyo* vs. *vélkîo*). A grave accent may similarly be used over the vowel **-u-** to remind the speaker/reader not to collapse the /u/-sound into /w/ in words like *ehùá*.

**1.3.2 Written juncture affixes/adjuncts:** In regard to parsing adjuncts (see Sec. 2.3, No. 5) and the **ç(ë)**- sentence-juncture affix (see Sec. 5.8, No. 8), these are normally never written in either the romanization scheme or the native New Ithkuil script, given that their occurrence is entirely dependent on the specific way any given individual utters a sentence or group of sentences on any particular occasion. The exception would be in the narrow context of a scripted utterance (e.g., a script for a play or screenplay), in poetry, in a rhetorical recital, or in singing instructions, where explicit direction of the exact vocalization is crucial.

### 1.4 Phonotactics

Version 0.5.4 of a phonotaxis document for the language has been released.

### 1.5 External Juncture

When a word ending in a consonant-form (i.e., either a single consonant or a multiple consonant conjunct) is followed in the same breath-group by another word beginning with a consonant-form, it is usually necessary to append a vowel either to the end of the first word or the beginning of the second word, so as to avoid confusion as to which word the word-final and/or word-initial consonants belong to. This is accomplished by ensuring that appropriate word-initial and/or word-final vocalic Slots (e.g., Slot II, Slot IX) are filled.

See new Section 5.8 regarding how to indicate juncture between sentences.

### 1.6 The Standard Vowel-Form Sequence

Slots II, IV, V, VII, VIII, and IX of the language's main word-form, the formative, carry vocalic affixes. Most of these Slots either hold nine distinct values, or are a matrix of multiple values where one axis of the matrix carries nine values. As a result, it is convenient as an aid in the memorization of so many vocalic affixes, to have a standard generalized pattern of nine vocalic forms in multiple series, which can then be utilized to populate each of these various Slots. This

generalized standard pattern of vocalic forms is shown on the next page. Despite the number of vowel-forms, the sequence structure is fairly systematic if one analyzes it closely.

### The Standard Vowel-Form Sequence

	Series 1	Series 2	Series 3*	Series 4
<b>Form 1</b>	a	ai	ia / uä	ao
<b>Form 2</b>	ä	au	ie / uë	aö
<b>Form 3</b>	e	ei	io / üä	eo
<b>Form 4</b>	i	eu	iö / üë	eö
<b>Form 5</b>	ëi	ëu	eë	oë
<b>Form 6</b>	ö	ou	uö / öë	öe
<b>Form 7</b>	o	oi	uo / öä	oe
<b>Form 8</b>	ü	iu	ue / ië	öa
<b>Form 9</b>	u	ui	ua / iä	oa

\* When preceded by **y-**, Series 3 forms beginning with **-i** use their alternate forms instead (e.g., **yuä**, not **yia**), while Series 3 forms beginning with **-u** use their alternate forms if preceded by **w-** (e.g., **wiä**, not **wua**).

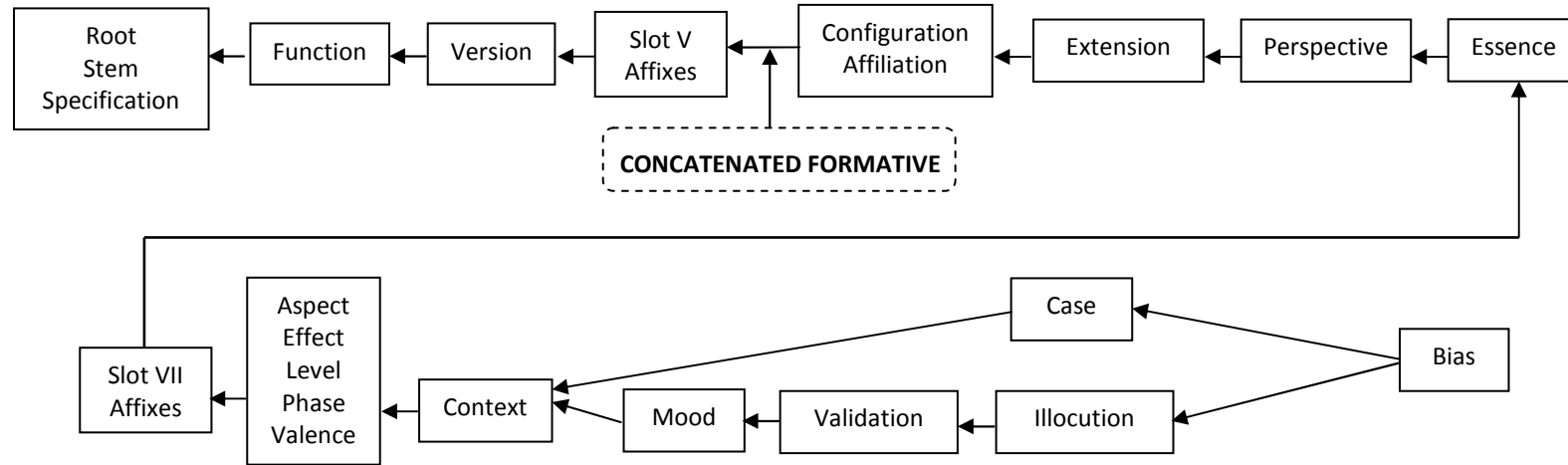
### 1.7 Rules for Inserting a Glottal-Stop Into a Vowel-Form

Some of the morpho-phonological slots which constitute the structure of a formative in the language call for the infixing of a glottal-stop into a vowel-form **V**. To do so, follow the rules below:

1. If **V** is a single vowel or diphthong, the glottal-stop is placed after **V**, e.g., **-a** becomes **-a'**, **-ai** becomes **-ai'**.
2. If **V** is a disyllabic conjunct, place the infix between the two syllables of **V**, e.g., **-ua** becomes **-u'a**.
3. When applying Rule 1 above, if the infix results in a phonotactically impermissible or euphonicly undesirable conjunct, or results in a glottal-stop being in word-final position, then an epenthetic vowel must be added as follows:
  - If **V** is a single vowel, reduplicate this vowel following the glottal-stop; e.g., **-a** becomes **-a'a**.
  - If **V** is a diphthong, then place the glottal-stop between the two vowels of the diphthong (as an exception to Rule 1 above); e.g., **-ai** becomes **-a'i** instead of the usual **-ai'**.

## 2.0 MORPHO-PHONOLOGICAL STRUCTURE OF A FORMATIVE

The Slot structure of formatives more or less reflects the hierarchy of morphemes within a formative, i.e., the order in which each morpheme's semantic information has scope over the preceding morphology as the word sequentially unfolds in speech or writing. This scoping order is shown below:



### 2.1 Slot Structure of a Formative where Slot I $C_C$ Indicates No Slot IV/VI Shortcut is Present

I	II	III	IV	V	VI	VII	VIII	IX*	X
$(C_C)$	$(V_V)$	$C_R$	$V_R$	$(C_S V_X \dots)$	$C_A$	$(V_X C_S \dots)$	$(V_N C_N)$	$V_C / V_F^* / V_K$	[stress]
Concatenation status indicator and no Slot IV/VI shortcut present	Version + Stem (+ affix shortcut)	Main Root	Function + Specification + Context	$V_X C_S$ affix(es) apply to stem but not to $C_A$ Form is $-C_S V_X$ (i.e., reversed from standard $V_X C_S$ form)	Configuration + Extension + Affiliation + Perspective + Essence	$V_X C_S$ affixes apply to stem + $C_A$	Valence + Mood/Case-Scope or Aspect + Mood/Case-Scope or Phase + Mood/Case-Scope or Level + Mood/Case-Scope or Effect + Mood/Case-Scope	Case or Format or Illocution + Validation as determined by Slot X syllabic stress	penultimate stress = UNFRAMED Relation + $V_C$ ultimate stress = UNFRAMED Relation + $V_K$ antepenultimate stress = FRAMED Relation + $V_C$
' / h / hw	vocalic affix	cons. form	vocalic affix		if Slot V is filled, $C_A$ is geminated		Modular Slot containing a vowel-form + consonant-form	vocalic affix	

\* Concatenated formatives (see Secs. 3.1 and 3.2 below) label the  $V_C$  Case marker as  $V_F$  Format.

**NOTE:** A monosyllabic formative other than a concatenated formative is considered to have the equivalent of ultimate stress (i.e., it is an UNFRAMED verbal formative).

## 2.2 Slot Structure of a Formative where Slot I C<sub>C</sub> Indicates a Slot IV/VI Shortcut is Present

I	II	III	IV	V	VI	VII	VIII	IX*	X
C <sub>C</sub>	V <sub>V</sub>	C <sub>R</sub>	—	(V <sub>X</sub> C <sub>S</sub> ...?)	—	(same as in Sec. 2.1 above)			
Concatenation status indicator plus V <sub>R</sub> +C <sub>A</sub> shortcut indicator	Version + Stem + Slot IV/VI V <sub>R</sub> +C <sub>A</sub> shortcut	Main Root	This slot is empty/unfilled	V <sub>X</sub> C <sub>S</sub> affix(es) apply to stem but not to C <sub>A</sub> (form of affix is <b>not</b> reversed)	This slot is empty/unfilled				
<b>w / y / hl / hr / hm / hn</b>		cons. form		last V <sub>X</sub> in the series requires a glottal stop to indicate end of Slot (applied as per Sec. 1.7)					

\* Concatenated formatives (see Secs. 3.1 and 3.2 below) label the Slot IX V<sub>C</sub> Case marker as V<sub>F</sub> Format.

**NOTE:** A monosyllabic formative other than a concatenated formative is considered to have the equivalent of ultimate stress (i.e., it is an UNFRAMED verbal formative).

## 2.3 A Self-Segregating Morphology

The language employs a pitch accent system as the means by which word boundaries may be parsed. The details of this pitch accent system are given below:

1. All unstressed syllables of a word prior to the stressed syllable carry neutral (MID-toned) pitch. Beginning with the stressed syllable, the remainder of the word must carry a single non-MID pitch contour, as described in Rule 2 below.
2. Beginning with the stressed syllable of the word, a word may carry ANY of the following pitch contours at the speaker's discretion: FALLING, HIGH, RISING-FALLING, FALLING-RISING. Additional pitch contours may be used in the following circumstances:
  - If the sentence carries VERIFICATIVE Illocution (equivalent to a yes/no question), the speaker may optionally utilize RISING pitch on the last word of the interrogative clause.
  - For clauses with non-NARRATIVE Register, the first and last word of the register clause may optionally be marked by LOW tone (in which case it is not necessary to utilize the end-register adjunct).

In general, the choice of pitch may match what the speaker is naturally comfortable with using from their own native language, subject to these rules.

3. Once a pitch has been chosen for the stressed syllable, it must be pronounced continuously through to the end of the word without change to a different contour (i.e., each word will have only one non-MID pitch contour).

4. If a word carries word-initial stress (i.e., it does not begin with neutral MID pitch) or is monosyllabic, and is not at the beginning of a breath group, then it must carry a pitch whose initial tone is different than the final tone of the previous word, so that two identical tones are not juxtaposed at the boundary between two words. In practice, this means the following rules apply between two adjacent words within the same breath group (i.e., they are not separated from each other by a pause in speech), where the second word carries word-initial stress or is monosyllabic:
- When preceded by a word with either FALLING, RISING-FALLING, or LOW pitch, a monosyllabic word or word with word-initial stress must have either FALLING, FALLING-RISING, or HIGH pitch.
  - When preceded by a word with either HIGH, RISING, or FALLING-RISING pitch, a monosyllabic word or word with word-initial stress must have either RISING, RISING-FALLING, or LOW pitch.
5. In unusual situations (e.g., singing a song) when pitch-accent is unavailable or undesirable as a means of parsing word boundaries and the placement of pauses between words is unrealistic, then a special parsing adjunct of the form 'V' may be placed before any word to be parsed, where 'V' represents a single vowel between two glottal stops, the particular vowel indicating the syllabic stress of the following word, as follows:
- 'a' indicates the following word is monosyllabic
  - 'e' indicates the following word bears ultimate stress
  - 'o' indicates the following word bears penultimate stress
  - 'u' indicates the following word bears antepenultimate stress

See Section 5.8, Paragraph 8, regarding how to indicate juncture between sentences.

## 2.4 Notational Conventions for Intralinear Analysis

As with the Ithkuil 2011 website and the Ithkuil Grammar book, each value of a category is indicated by a three-letter abbreviation, with  $V_xC_s$  affixes also showing a subscript and following slash plus number to indicate Type and Degree, and Level affixes taking a following "r" or "a" to indicate relative or absolute level-type. In addition to these conventions, New Ithkuil notation will also indicate default/zero values in either of two ways as appropriate: by not listing any default/zero values at all, or by indicating such via "Ø". The use of a single Ø symbol may cover and several categories within a Slot or even an entire Slot, e.g., the entirety of the  $C_A$  complex or the entirety of the Slot VIII  $V_N C_N$  complex.

### 3.0 ANALYSIS OF FORMATIVE SLOTS

#### 3.1 SLOT I: $C_C$ — Concatenation-Type plus Alternate $V_F$ of Preceding Concatenated Formative, plus $V_R+C_A$ Short-Cut Type

Slot I carries a new prefix,  $C_C$ , that serves two functions: (1) to indicate whether the formative is a concatenated formative (the new replacement for stem incorporation from previous versions of this document), and (2) to indicate whether certain  $V_R+C_A$  forms from Slots IV and VI have been elided (thus being instead indicated by the Slot I  $C_C$  value).

**3.1.1 Concatenation:** The incorporated stems of previous versions of the language have now been eliminated. Instead, any formative may be immediately preceded by another formative which serves the same purpose as the previous incorporated stem. The first formative of this pair of formatives shall be known as a *concatenated* formative. The second formative of the pair shall be known as a *parent* formative. The pair of formatives together shall be termed a *concatenated pair*. (NOTE: a formative that is not part of a concatenated pair may be termed a *standalone formative*.)

The first formative of the pair, the concatenated formative, is structured as a regular formative, able to take any and all morphology as appropriate and semantically permissible for the concatenated pair as a whole. The concatenated formative also shows one of the following eight  $C_C$  values in Slot I to indicate that it and the following formative constitute a concatenated pair. The meaning of the different  $C_C$  values is explained below the table.

	Slot IX = $V_F$	plus w-form of $C_A$ shortcut*	plus y-form of $C_A$ shortcut*
<b>No Concatenation Present</b>	( ' )	w	y
<b>Type-1 Concatenation</b>	h	hl	hm
<b>Type-2 Concatenation</b>	hw	hr	hn

\* See Sec. 3.2 below for an explanation of the **w-** and **y-**  $C_A$  shortcuts

Concatenated formatives do not use a glottal-stop in the Slot IX  $V_F$  form. Instead, the concatenated formative takes ultimate syllabic stress to indicate that the Slot IX  $V_F$  Format vowel is actually a Format 37-through-68 form but without the glottal stop.

**3.1.2 Concatenation Type:** Type-1 concatenation implies a circumstantial relationship between the concatenated formative and the parent (equivalent to placing the concatenated formative into a case-frame). Type-2 concatenation is derivational (i.e., lexicalizing), creating a new lexico-semantic gestalt usually requiring a different English translation. This is analogous to English forms like *polar bear* naming a new animal rather than stating a location. Likewise, English *elephant seal* establishes a new lexico-semantic gestalt rather than describing some sort of metaphorical relationship between elephants and seals.



**3.1.3 Alternate  $V_F$  Indicator:** Concatenated formatives do not use a glottal-stop in the Slot IX  $V_F$  form. Instead, the concatenated formative takes ultimate syllabic stress to indicate that the Slot IX  $V_F$  Format vowel is actually a Format 37-through-68 form but without the glottal stop. Both Case No. 1 (THM) and Case No. 37 (PRN) can elide their **-a-** phonological marker; the latter only as long as the resulting word is not mono-syllabic and bears ultimate syllabic stress. Before eliding the **-a-**, External Juncture requirements of Sec. 1.5 must be taken into account. A monosyllabic concatenated formative is to be interpreted as an unframed nominal formative bearing THM case (whereas a monosyllabic parent or standalone formative is interpreted as a verbal formative per the notes in Secs. 2.1 and 2.2).

**3.1.4  $C_A$  Shortcut Indicator for Concatenated Formative:** Columns 2 and 3 of the above table are used if the Slot IV  $V_R$  value is default **-a-** (STA/BSC/EXS) and the Slot VI  $C_A$  affix is one of eight specific  $C_A$  values shown for Slot II on the next page.

**3.1.5  $C_A$  Shortcut Indicator for Parent or Standalone Formatives:** If a formative is not a concatenated formative (i.e., it is a parent or standalone), then the same Slots IV/VI **a+** $C_A$  shortcuts are shown by a  $C_C$  value of either **w-** or **y-**, depending on the particular  $C_A$  value being elided, as shown on the next page.

**3.1.6 Morpho-phonological Restrictions on a Concatenated Formative:** Concatenated formatives do not utilize a glottal-stop in the Slot IX  $V_F$  value; instead they utilize the  $V_F$  values 1 through 36 (identical to values 37 through 68 except for the glottal-stop) and the formative takes ultimate syllabic stress.

**3.1.7 Concatenation Chain:** More than two formatives may be concatenated to form the equivalent of phrasal concatenation or a concatenation chain. The initial concatenated formative of the chain indicates the Concatenation Type (1 or 2) for the entire chain; all subsequent concatenated formatives of the chain take one of the Type-1  $C_C$  values from the table above. The final parent formative of the chain has either empty Slot I or takes **w-** or **y-** in Slot I if a  $C_A$  shortcut is present (see Slot II on next page).

**3.1.8 Orthography:** In addition to the presence of a  $C_C$  affix in Slot I of a concatenated formative, the two (or more) formatives will be joined by a hyphen in the language's romanization scheme as a simple mnemonic indicator that they are a concatenated pair or concatenated chain.

## 3.2 SLOT II: $V_V$ — Stem and Version (plus optional Slot IV+VI **a+** $C_A$ Short-Cut)

Slot II contains a vocalic affix,  $V_V$ , showing the formative's Stem and Version. Additionally, if Slot I contains a **w-** or **y-**, or contains the values **hl-**, **hr-**, **hm-** or **hn-** from the  $C_C$  table on the previous page, then the  $V_V$  value also indicates a Slot IV  $V_R$  value of default **-a-** plus one of eight Slot VI  $C_A$  values. Additionally, the actual Slot IV/VI **a+** $C_A$  forms will be elided (i.e., missing), thus shortening the formative by one syllable.

The eight specific Slot IV/VI **a+** $C_A$  forms for which there are  $V_V$  shortcuts are as follows: **-al-** (CSL/UPX/DEL/M/NRM), **-ad-** (CSL/UPX/PRX/M/NRM), **-ar-** (CSL/UPX/DEL/G/NRM), **-at|-** (CSL/UPX/DEL/M/RPV), **-av-** (CSL/UPX/DEL/N/NRM), **-aj-** (CSL/UPX/DEL/A/NRM), **-ař-** (CSL/UPX/DEL/G/RPV), and **-adl-** (CSL/UPX/PRX/M/RPV).

**Slot II  $V_V$  Values if Slot I is [zero], h-, or hw-** (i.e., the formative does not contain a Slot IV/VI  $a+C_A$  shortcut)

Stem	Version	$V_V$	$V_V$ + Optional Affix Shortcuts		
		—	NEG/4	DCD/4	DCD/5
Stem 1	PRC	(a)	ai	ia / uä	ao
	CPT	ä	au	ie / uë	aö
Stem 2	PRC	e	ei	io / üä	eo
	CPT	i	eu	iö / üë	eö
Stem 3	PRC	u	ui	ua / iä	oa
	CPT	ü	iu	ue / ië	öa
Stem 0 *	PRC	o	oi	uo / öä	oe
	CPT	ö	ou	uö / öë	öe

**NOTE:** If one of the three optional Affix Shortcuts is used, this affix has scope over the stem, its  $C_A$  complex, and any other  $V_X C_S$  affixes within the formative (i.e., it operates as if it were the last affix in Slot VII).

\* **Stem Zero:** Refers to the “stemless” overall conceptual meaning of the raw root, irrespective of a particular stem.

**Slot II  $V_V$  if Slot I  $C_C$  is w- / hl- / hr- or y- / hm- / hn-** (i.e., the formative contains a Slot IV/VI  $a+C_A$  shortcut)

Stem	Version	if $C_C = w/hl/hr$ then $C_A = [\text{default}]$	if $C_C = y/hm/hn$ then $C_A = PRX$	if $C_C = w/hl/hr$ then $C_A = G$	if $C_C = y/hm/hn$ then $C_A = RPV$	if $C_C = w/hl/hr$ then $C_A = N$	if $C_C = y/hm/hn$ then $C_A = A$	if $C_C = w/hl/hr$ then $C_A = G/RPV$	if $C_C = y/hm/hn$ then $C_A = PRX/RPV$
		Stem 1	PRC	a		ai		ia / uä	
CPT	ä			au		ie / uë		aö	
Stem 2	PRC	e		ei		io / üä		eo	
	CPT	i		eu		iö / üë		eö	
Stem 3	PRC	u		ui		ua / iä		oa	
	CPT	ü		iu		ue / ië		öa	
Stem 0	PRC	o		oi		uo / öä		oe	
	CPT	ö		ou		uö / öë		öe	

**SPECIAL NOTE:** If formative Slot V contains two or more affixes, Slot II  $V_V$  must take a glottal-stop (applied as per the rules of Sec. 1.7). This is further explained in Sec. 3.5.1 below.

### 3.3 SLOT III: $C_R$ — The Main Root

The root is one to five consonants in length and must be phonotactically permissible (e.g., none of the following could be roots: \*-**kg**-, \*-**nč**-, \*-**zrb**-, \*-**tpk**-, \*-**fmst**-). No root may contain a glottal-stop nor begin with **-h**-, nor can the forms **-l̥**-, **-l̥w**-, **-l̥y**-, **-ç**-, **-çç**-, **-çw**-, **-w**- or **-y**- be roots (however, multi-consonant roots ending in **-h**-, **-w**- or **-y**- are permissible (e.g., **-vh**-, **-gw**-, **-mpy**-), as are other conjuncts containing **-l̥**- and **-ç**- (e.g., **-pl̥**-, **-ltr̥**-, **-çt**-, **-kç**-, etc.).

### 3.4 SLOT IV: $V_R$ — Function, Specification, and Context

Slot IV contains a vocalic affix indicating Function, Specification and Context.

#### Slot IV $V_R$ values

Function*	Specification	Context			
		EXS	FNC	RPS	AMG
STA	BSC	a	ai	ia / uä	ao
	CTE	ä	au	ie / uë	aö
	CSV	e	ei	io / üä	eo
	OBJ	i	eu	iö / üë	eö
DYN	BSC	u	ui	ua / iä	oa
	CTE	ü	iu	ue / ië	öa
	CSV	o	oi	uo / öä	oe
	OBJ	ö	ou	uö / öë	öe

\* see Sec. 5.3 for details on the use of STATIC vs. DYNAMIC Function.

### 3.4.1 The Four Specifications:

<b>BSC</b>	<b>BASIC:</b> A holistic instantiation of a root, prior to the application of one of the other three Specifications, essentially encompassing the meanings of the CTE, and CSV specifications below. For roots representing naturally “activized”, “time-unstable”, dynamic, or psychologically verb-like notions, the BASIC nominal formative would mean “an instance/occurrence of X”, while the BASIC verbal formative would mean “(an instance/occurrence of) X(-ing) happens”. For roots representing naturally “reified”, “time-stable”, stative, or psychologically noun-like notions, the BASIC nominal formative would mean “an X (being present)” or for “non-count” entities, “an (unspecified/certain) amount/volume of X”, whereas the BASIC verbal formative would carry a STATIVE interpretation meaning “(an) X be present” / “[there] be (an) X”; the expansion of this meaning verbally would be accomplished using other Specifications and/or DYN Function.
<b>CTE</b>	<b>CONTENTIAL:</b> This specification complements the CSV specification below. The physical or non-physical “content” or essence or purposeful function or idealized/abstract/platonic form thereof, as opposed to its mere physical form/shape, e.g., <i>the content of a piece of art</i> [what it represents or is an image/statue of]; <i>the water within a river</i> [regardless of its channel or course]; <i>the communicative content of a message</i> [regardless of the means/medium by which it is conveyed]; <i>something (made of/in) iron</i> [its form/shape as opposed to merely being an example of the substance]; <i>a room as a functional/habitable space, established by its socially communicated purpose or discernible by its design, furnishings, decor, etc.</i>
<b>CSV</b>	<b>CONSTITUTIVE:</b> The form (physical or non-physical) in which an entity/state/act actually expresses itself, is shaped, or is realized, as opposed to its functional/purposeful content, i.e., "what constitutes X", e.g., <i>a work of art</i> [as constituted by it being a painted canvas, sculpted marble, etc., irrespective of what the image is or what/who the statue is of]; <i>the course of a river</i> ; <i>the form/medium (written, spoken, recorded, etc.) of a message</i> [irrespective of what it communicates], <i>something iron (focus on it being of a particular material/substance regardless of its form/shape)</i> , <i>a room as a contained volume of space established by conjoined walls and ceiling</i> [regardless of its purpose, dimensions, layout, design, furnishings, or decor].
<b>OBJ</b>	<b>OBJECTIVE:</b> Whichever of the following is most salient to the semantics of the particular stem: (1) tangible tool/instrument/means by which a state act/state/event occurs, or if inapplicable, then (2) the third-party object/entity associated with the interaction between two parties (e.g., the object being given in a dative interaction), or if inapplicable then (3) the resulting tangible object/product/situation, or if inapplicable, then (4) the semantic patient or experiencer of the state/act/event. E.g., <i>the musical instrument being played during a live musical performance</i> , <i>the book containing a story being read</i> , <i>an object being given to someone</i> , <i>what an artist creates (i.e., a work of art)</i> , <i>the entity/person/institution that forms the object/source of one’s belief</i> , <i>the resulting measurement from an act of measuring</i> .

### 3.5 SLOT V: $C_S V_X / V_X C_S$ Affixes Applied to Stem without Scope Over the Slot VI $C_A$ complex

This optional slot holds one or more standard  $-V_X C_S$  affixes which apply to the stem only and do not have scope over the following Slot VI  $C_A$  complex.

**NOTE:** If a Slot VI  $C_A$  complex is present, any Slot V affixes are shown in reversed form:  $-C_S V_X-$ ; however, if the Slot IV  $V_R$  and Slot VI  $C_A$  complex have been elided as indicated in Slot I (see Secs. 3.1 and 3.2 above), then any Slot V affixes are shown **in standard form**  $-V_X C_S-$ .

degree	Type-1	Type-2	Type-3
1	a	ai	ia / uä
2	ä	au	ie / uë
3	e	ei	io / üä
4	i	eu	iö / üë
5	ëi	ëu	eë
6	ö	ou	uö / öë
7	o	oi	uo / öä
8	ü	iu	ue / ië
9	u	ui	ua / iä
0	ae	ea	üo

**Type 1:** circumstantial                      **Type 2:** derivational  
**Type 3:** applies to previous  $C_S V_X / V_X C_S$  affix only (or the following affix if it is the first in the slot).  
**Degree 0:** unspecified degree; refers to the affix's general semantic concept as a whole.  
 **$C_A$  stacking:** The specialized  $-V_X$  value,  $-üö$ , is used to indicate that the subsequent  $-C_S$  consonant-form is to be interpreted as a  $C_A$  complex having scope over (i.e., stacked upon) the Slot VI  $C_A$  complex of the stem.

No  $C_S$  form can contain a glottal-stop or begin with **h-**, nor can the following forms occur as  $C_S$ : **-w-**, **-y-**, **-ç-**, **-ļ-**, **-ļw-**, or **-ļy-**. Additionally, no geminated consonant can be a  $C_S$  form.

**3.5.1 Glottal Stop Required in Slot II  $V_V$  To Indicate Slot V Is Filled:** When Slot V of a formative contains more than one  $C_S V_X-$  or  $-V_X C_S-$  affix, it becomes a problem whether to interpret the consonant forms as  $C_S$  forms or a  $C_A$  form until the eventual “arrival” of the end-of-Slot-V marker. Therefore, it is necessary to signal early on whether Slot V of a formative will contain more than one  $C_S V_X-$  or  $-V_X C_S-$  affix. To do so, insert a glottal-stop into the  $V_V$ -form of Slot II per the rules in Sec. 1.7.

### 3.6 SLOT VI: The C<sub>A</sub> complex — Configuration + Extension + Affiliation + Perspective + Essence

The nine Configuration categories of Ithkuil 2011 have been revised/expanded into a matrix of three sub-categories: Plexity (UNIPLEX, DUPLEX, MULTIPLEX), Similarity (SIMILAR, DISSIMILAR, FUZZY), and Separability (SEPARATE, CONNECTED, FUSED), the latter two sub-categories being inapplicable to uniplex plexity.

#### C<sub>A</sub> complex — Affiliation + Configuration + Extension + Perspective + Essence

AFFILIATION			CONFIGURATION				EXTENSION			PERSPECTIVE + ESSENCE				
CSL	CONSOLIDATIVE	—			-DPX	+DPX	DEL	DELIMITIVE	—			NRM	RPV	
ASO	ASSOCIATIVE	l (n̄)	<b>(U/D)PX</b>	UNIPLEX/DUPLEX	—	s	<b>PRX</b>	PROXIMAL	t / d <sup>1</sup>	<b>M</b>	MONADIC	— (l)	l (t̄)	
COA	COALESCENT	r (r̄)	<b>M/D</b> MULTIPLEX/ DUPLEX SIMILAR	<b>SS</b> SEPARATE	t	c	<b>ICP</b>	INCEPTIVE	k / g <sup>1</sup>	<b>G</b>	AGGLOMERATIVE	r	ř	
VAR	VARIATIVE	ř (ň)		<b>SC</b> CONNECTED	k	ks	<b>ATV</b>	ATTENUATIVE	p / b <sup>1</sup>	<b>N</b>	NOMIC	w (v)	m / h <sup>2</sup>	
				<b>SF</b> FUSED	p	ps	<b>GRA</b>	GRADUATIVE	g / gz <sup>1</sup>	<b>A</b>	ABSTRACT	y (j)	n / ě <sup>2</sup>	
			<b>DS</b> SEPARATE	ʈ	ʈs	<b>DPL</b>	DEPLETIVE	b / bz <sup>1</sup>	<b>Allomorphic Substitutions:</b>  pp → mp    pb → mb    rr → ns    [C]gm → [C]x    [C]bm → [C]v tt → nt    kg → ng    rř → nš    [C]gn → [C]ň    [C]bn → [C]đ kk → nk    ċy → nd    řr → ŋs    ngn → ŋn    ff → vw ll → p̄                                       řř → ŋš    [C]ċx → [C]xw    ʈʈ → đy					
			<b>DC</b> CONNECTED	f	fs									
<b>DF</b> FUSED	ç	š												
<b>FS</b> SEPARATE	z	č												
<b>Forms in parentheses are standalone forms</b>	<b>M/D</b> MULTIPLEX/ DUPLEX DISSIMILAR		<b>FC</b> CONNECTED	ž	kš									
			<b>FF</b> FUSED	z̄	pš									

<sup>1</sup> Use the alternate form if the Configuration of the word is **UPX**

<sup>2</sup> Use the alternate form when preceded by [C]t-, [C]k-, or [C]p-

**NOTE:** The new **AGGLOMERATIVE** Perspective (**G**) replaces the **POLYADIC** of previous versions of the language. The **AGGLOMERATIVE** indicates a neutral or fuzzy meaning in terms of number: ‘at least one X / one or more X / any number of X’; it is used when the specific number of an entity is irrelevant or the context of the utterance applies to either one or more than one of an entity. It also is used to create mass nouns from count nouns, in that **MONADIC** formatives previously referring to ‘an amount of [English mass noun]’ will now function as a “singulative”, referring to a single element/member of a mass noun, e.g., ‘a single grain of rice’, ‘a single hair’, ‘a drop of water’, while its **AGGLOMERATIVE** counterpart will carry the meaning of ‘some rice / an amount of rice’, ‘(some) hair’, ‘(some / an amount of) water’.

For verbs, the **AGGLOMERATIVE** distinguishes the same fuzzy “non-count” distinction as for nouns: ‘some X-ing occurs/manifests / there’s some X-ing going on’ versus **MONADIC** ‘a single instance of X occurs/manifests’.

The plural ‘two or more’ meaning of the old **POLYADIC**, if needed, can be conveyed by newly-modified Degrees 5 or 6 of the **XX2** affix.

**3.6.1 Gemination of C<sub>A</sub> when Slot V C<sub>S</sub>V<sub>X</sub> affixes are present:** If Slot V contains any affixes, it becomes necessary to show where Slot V ends and Slot VI begins. This is accomplished by gemination of the C<sub>A</sub> form as per the rules below. (Consequently, no Slot V/VII C<sub>S</sub> affix increment contains a geminate any longer.)

**NOTE:** First apply all required allomorphic substitutions to the C<sub>A</sub> form before applying the following rules:

1. For C<sub>A</sub> forms consisting of a single consonant, geminate it, e.g., **p** → **pp**, **t** → **tt**, **m** → **mm**, **c** → **cc**, **z** → **zz**, **r** → **rr**, **s** → **ss**.
2. The standalone form **tʃ** becomes **ttʃ**.
3. For forms beginning with a stop (**t**, **k**, **p**, **d**, **g**, **b**) followed by a liquid or an approximant (**l**, **r**, **ř**, **w**, **y**), geminate the stop, e.g., **pl** → **ppl**, **gw** → **ggw**.
4. For forms containing a sibilant fricative or affricate (**s**, **š**, **z**, **ž**, **ç**, **c**, **č**) in any position, geminate it, e.g., **kst** → **ksst**, **gz** → **gzz**, **çkl** → **ççkl**, **čtw** → **ččtw**.
5. For forms beginning with either a non-sibilant fricative (**f**, **ɸ**, **v**, **ɸ**) or a nasal (**n**, **m**, **ň**), geminate it unless previous rule No. 4 pertaining to sibilant fricatives (**s**, **š**, **z**, **ž**, **ç**) applies, e.g., **fk** → **ffk**, **mpw** → **mmpw**.
6. For forms beginning with a voiceless stop (**t**, **k**, **p**) followed by a fricative (**s**, **š**, **f**, **ɸ**, **ç**), geminate the fricative, e.g., **pf** → **pff**, **tçkl** → **tççkl**, **kst** → **ksst**.
7. For C<sub>A</sub> forms ending in two stops, for which the previous six rules are inapplicable, use the following substitutions:
 

a. <b>pt</b> → <b>bbɸ</b>	<b>pk</b> → <b>bbv</b>	<b>kt</b> → <b>ggɸ</b>	<b>kp</b> → <b>ggv</b>	<b>tk</b> → <b>ɸvv</b>	<b>tp</b> → <b>ddv</b>
---------------------------	------------------------	------------------------	------------------------	------------------------	------------------------
8. For C<sub>A</sub> forms ending in a stop (**t**, **k**, **p**, **d**, **g**, **b**) plus nasal (**n**, **m**, **ň**) for which the previous seven rules are inapplicable, use the following substitutions:
 

a. <b>pm</b> → <b>vvm</b>	<b>pn</b> → <b>vvn</b>	<b>km</b> → <b>xxm</b>	<b>kn</b> → <b>xxn</b>	<b>tm</b> → <b>ɸɸm</b>	<b>tn</b> → <b>ɸɸn</b>
b. <b>bm</b> → <b>mmw</b>	<b>bn</b> → <b>mml</b>	<b>gm</b> → <b>ňňw</b>	<b>gn</b> → <b>ňňl</b>	<b>dm</b> → <b>nnw</b>	<b>dn</b> → <b>nnl</b>
9. For forms beginning with **l-**, **r-** or **ř-**, apply one of the above eight rules as if the **l-**, **r-** or **ř-** were not present; if the resulting form including the initial **l-**, **r-** or **ř-** is not phonotactically permissible or is euphonically awkward, geminate the **l-**, **r-** or **ř-** instead.

**3.6.2 Showing the end of Slot V in the absence of a C<sub>A</sub> form:** For formatives containing any Slot V V<sub>X</sub>C<sub>S</sub> affix(es) where the Slot VI C<sub>A</sub> form has been elided (as per Sec. 3.1 and 3.2), the end of Slot V is shown by inserting a glottal-stop into the V<sub>X</sub> form of the final Slot V V<sub>X</sub>C<sub>S</sub> affix. This affix is inserted per the rules in Sec. 1.7. (**NOTE:** if such a Slot V glottal-stop is present and Slot I shows the word has a Slot IV/VI Shortcut, then the V<sub>C</sub> shortening rule from the Special Note in Sec. 3.9.1 cannot be used.)

**3.6.3 Combination Referentials** (see Sec. 4.6.2) have a structure that looks like a formative, except what would appear to be their C<sub>A</sub> Slot is filled with either **-x-**, **-xt-**, **-xp-**, or **-xx-**, none of which are possible C<sub>A</sub> forms. Thus, these four consonant conjuncts distinguish combination referentials from formatives.

### 3.7 SLOT VII: $V_X C_S$ Affixes

This optional slot holds one or more standard  $-V_X C_S$  affixes with the same  $V_X$  values as for Slot V. The affix is not reversed as in Slot V where  $C_A$  is present. Unlike Slot V affixes, Slot VII  $-V_X C_S$  affixes have scope over the  $C_A$  information in Slot VI.

degree	Type-1	Type-2	Type-3	
1	a	ai	ia / uä	<p><b>Type 1:</b> circumstantial                      <b>Type 2:</b> derivational</p> <p><b>Type 3:</b> applies to previous <math>V_X C_S</math> affix only (or the following affix if it is the first in the slot).</p> <p><b>Degree 0:</b> unspecified degree; refers to the affix's general semantic concept as a whole.</p> <p><b><math>C_A</math> stacking:</b> The specialized <math>-V_X</math> value, <math>-üö</math>, is used to indicate that the subsequent <math>-C_S</math> consonant-form is to be interpreted as a <math>C_A</math> complex having scope over (i.e., stacked upon) the Slot VI <math>C_A</math> complex of the stem.</p>
2	ä	au	ie / uë	
3	e	ei	io / üä	
4	i	eu	iö / üë	
5	ëi	ëu	eë	
6	ö	ou	uö / öë	
7	o	oi	uo / öä	
8	ü	iu	ue / ië	
9	u	ui	ua / iä	
0	ae	ea	üo	

### 3.8 SLOT VIII: $V_N C_N$ — Mood/Case-Scope plus either Valence, Phase, Effect, Level, or Aspect

Slot VIII contains two different patterns of a vocalic form  $V_N$  followed by a consonant form  $C_N$ . The first of these patterns uses the first four vowel-form series of the Standard Vowel Sequence to respectively indicate Valence, Phase, Level and Effect while the consonant indicates either Mood or Case-Scope (depending on the  $V_C/V_K$  syllabic stress distinction from Slot X). The second pattern uses the same four vowel-form series to show Aspect, differentiated from the first pattern by the  $C_N$  consonant.

**Valence:** Note that Ithkuil 2011's IMITATIVE, MUTUAL, and INDICATIVE Valences have been eliminated. For IMITATIVE use DUPLICATIVE valence plus the SCS affix. For MUTUAL, use PARTICIPATORY valence plus the SQP affix. For INDICATIVE use Stem 1 of the root  $-ÇD-$  with CTE Specification, meaning 'to subjectively perceive; to gain an impression.'

**Effect:** The category of Effect conveys an utterance to be beneficial, neutral or detrimental to some party. Effect may also be indicated using a  $-V_X C_S-$  affix, an affixual adjunct, or via a Referential. Absence of Effect is equivalent to Neutral Effect, i.e., no statement about the Effect is being made (e.g., because Effect is shown elsewhere in the sentence on a different formative or via a Referential or modular adjunct).



**Level:** Note that the meanings of the INFERIOR and SUPERLATIVE Levels have now been changed compared to Ithkuil 2011, as follows:

<b>MIN</b>	MINIMAL	X M 's at its least possible / X is at its least M possible
<b>SBE</b>	SUBEQUATIVE	X M 's less than or = to Y ( or than or equal to before) / X is less M than or = to Y / before
<b>IFR</b>	INFERIOR	X M 's the least (or is the least M) within/among Y (or ever)
<b>DFT</b>	DEFICIENT	X M 's less than Y ( or than before) / X is less M than Y ( or than before)
<b>EQU</b>	EQUATIVE	X M 's the same as Y ( or as before) / X is as M as Y ( or as before)
<b>SUR</b>	SURPASSIVE	X M 's more than Y ( or than before) / X is more M than Y ( or than before)
<b>SPL</b>	SUPERLATIVE	X M 's the most (or is the most M) within/among Y (or ever)
<b>SPQ</b>	SUPEREQUATIVE	X M 's more than or = to Y ( or than or equal to before) / X is more M than or = to Y / before
<b>MAX</b>	MAXIMAL	X M 's at its most possible / X is at its most M possible

### External Standard of Comparison Affix

The following affix is now available to specify an external standard of comparison for a verbal clause utilizing a Level. This is essentially an expanded equivalent to the “Q” external comparison component of the 24 Comparison cases from Ithkuil 2011.

<b>-cx</b>	<b>XCL External Standard for Comparison for Use with Levels</b> Applied to either the “X” noun bearing a LEVEL Comparison Operator or the “Y” noun to which something is compared (the “than Y”). The “Y” noun is declined into the COMPARATIVE Case.
<b>1</b>	...although X (still) isn't very M compared to some external standard or expectation of M-ness
<b>2</b>	...and where X now meets some external standard or expectation of M-ness
<b>3</b>	...and where X now exceeds some external standard or expectation of M-ness
<b>4</b>	...although neither X nor why are very M compared to some external standard or expectation of M-ness
<b>5</b>	...and where both X and Y meet some external standard or expectation of M-ness, where previously only Y met/exceeded it
<b>6</b>	...and where both X and Y exceed some external standard or expectation of M-ness, where previously only Y exceeded it
<b>7</b>	...and where X's degree of M-ness exceeds that of Y, but neither is (still) very M compared to some external standard or expectation of M-ness
<b>8</b>	...and where X now meets some external standard or expectation of M-ness and Y does not
<b>9</b>	...and where X now exceeds some external standard or expectation of M-ness and Y does not

**Slot VIII – Pattern 1: Valence or Phase or Level or Effect + Mood/Case-Scope**

V <sub>N</sub>										
VALENCE			PHASE		EFFECT		LEVEL***			
1	MNO	(a)	PCT	ai	1:BEN	ia / uä	MIN	ao		
2	PRL	ä	ITR	au	2:BEN	ie / uë	SBE	aö		
3	CRO	e	REP	ei	3:BEN	io / üä	IFR	eo		
4	RCP	i	ITM	eu	SLF:BEN **	iö / üë	DFT	eö		
5	CPL	ëi	RCT	ëu	UNK [unknown]	eë	EQU	oë		
6	DUP	ö	FRE	ou	SLF:DET **	uö / öë	SUR	öe		
7	DEM	o	FRG	oi	3:DET	uo / öä	SPL	oe		
8	CNG	ü	VAC*	iu	2:DET	ue / ië	SPQ	öa		
9	PTI	u	FLC	ui	1:DET	ua / iä	MAX	oa		

+

MOOD	C <sub>N</sub>	Case-Scope *	
FAC	(h)	CCN	NATURAL
SUB	hl	CCA	ANTECEDENT
ASM	hr	CCS	SUBALTERN
SPC	hm	CCQ	QUALIFIER
COU	hn	CCP	PRECEDENT
HYP	hñ	CCV	SUCCESSIVE

\* see Sec. 3.8.1 below

\* The new **VACILLATIVE** Phase functions as a non-punctual counterpart to the **FRAGMENTATIVE**, i.e., with a pattern such as --- -- - - -

\*\* SLF:BEN and SLF:DET indicate that the Beneficial or Detrimental Effect applies to the formative itself, rather than another argument or personal referent.

\*\*\* Series 4 vowel-forms show relative Level **only**; for absolute Level, **instead use the LVL V<sub>x</sub>C<sub>s</sub> affix in Formative Slots V or VII or as an affixial adjunct.**

### Slot VIII – Pattern 2: Aspect + Mood/Case-Scope

ASPECT V <sub>N</sub>															
RTR	RETROSPECTIVE	a	RSM	RESUMPTIVE	ai	PMP	PREEMPTIVE	ia / uä	DCL	DISCLUSIVE	ao	+	MOOD	C <sub>N</sub>	Case-Scope*
PRS	PROSPECTIVE	ä	CSS	CESSATIVE	au	CLM	CLIMACTIC	ie / uë	CCL	CONCLUSIVE	aö		FAC	w/y	CCN
HAB	HABITUAL	e	PAU	PAUSAL	ei	DLT	DILATORY	io / üä	CUL	CULMINATIVE	eo		SUB	hw	CCA
PRG	PROGRESSIVE	i	RGR	REGRESSIVE	eu	TMP	TEMPORARY	iö / üë	IMD	INTERMEDIATIVE	eö		ASM	hrw	CCS
IMM	IMMINENT	ëi	PCL	PRECLUSIVE	ëu	XPD	EXPENDITIVE	eë	TRD	TARDATIVE	oë		SPC	hmw	CCQ
PCS	PRECESSIVE	ö	CNT	CONTINUATIVE	ou	LIM	LIMITATIVE	uö / öë	TNS	TRANSITIONAL	öe		COU	hnw	CCP
REG	REGULATIVE	o	ICS	INCESSATIVE	oi	EPD	EXPEDITIVE	uo / öä	ITC	INTERCOMMUTATIVE	oe		HYP	hñw	CCV
SMM	SUMMATIVE	ü	EXP	EXPERIENTIAL	iu	PTC	PROTRACTIVE	ue / ië	MTV	MOTIVE	öa				
ATP	ANTICIPATORY	u	IRP	INTERRUPTIVE	ui	PPR	PREPARATORY	ua / iä	SQN	SEQUENTIAL	oa				

\* see Sec. 3.8.1 below

Column 1 denotes aspects which place an event/state at some point or duration along a past-to-future linear timeline. Column 2 denotes aspects which describe the “shape” or structure of a durational event. Column 3 denotes aspects which associate an effect or “consequence” to the temporal aspect of a state/event on a past-to-future linear timeline. Column 4 denotes six aspects which associate non-temporal adverbial notions to the start or end of a state/event, plus three miscellaneous aspects.

The aspects are as in Ithkuil 2011 with the following exceptions:

- SUMMATIVE: meaning ‘...(have) already X’d’ (NOTE: The ‘already’ meaning of Ithkuil 2011’s RTR aspect is no longer valid due to the elimination of “boundedness”)
- ANTICIPATORY: meaning ‘have yet to (begin) X-ing’ (NOTE: This ‘have yet to’ meaning has been reassigned from Ithkuil’s CONTINUATIVE aspect)
- INTERRUPTIVE: meaning ‘to get interrupted while X-ing’ or ‘to X only so far or so much before having to stop’
- DILATORY: meaning ‘(be) long-delay(ed) in being/doing X’
- EXPENDITIVE: renamed from Ithkuil 2011’s CONSUMPTIVE aspect
- PROTRACTIVE: ‘take one’s time X-ing’
- PREPARATORY: meaning ‘to be/do X in advance’, ‘to be/do X in preparation for a future situation’
- LIMITATIVE: meaning ‘to be/do X (just) in time’; indicates an act/event that culminates an anticipatory context
- Ithkuil 2011’s CONSEQUENTIAL and RECESSATIVE aspects are eliminated; use the DLB/8 suffix for the former and CSS aspect + ITN/2 suffix for the latter

**3.8.1 Case-Scope:** For UNFRAMED verbal formatives the Slot VIII C<sub>N</sub> affix shows Mood, whereas for nominal and FRAMED verbal formatives, it shows Case-Scope. Formatives showing Case use the Case-Scope C<sub>N</sub> to indicate the scope of a case-marked formative over adjacent formatives. This is useful when there is a string of cases modifying another “head” formative; C<sub>N</sub> specifies which has scope over which other formative.

## C<sub>N</sub> Case-Scope values

Case-Scope		Pattern 1	Pattern 2	Meaning
CCN	NATURAL	(h)	w/y	X's case is governed by the noun-case of the formative marked C <sub>N</sub> = <b>-hl/-hw-</b> ; in the absence of such, X's case is associated with the main verb (or framed verb if within a case-frame). [See the SPECIAL NOTE below for an exception.]
CCA	ANTECEDENT	hl	hw	X is the "head" whose case governs all C <sub>N</sub> -unmarked nouns in the clause (or nouns marked with C <sub>N</sub> = <b>-h-</b> or <b>-w-/y-</b> )
CCS	SUBALTERN	hr	hrw	X is the formative to which formatives in the clause marked with C <sub>N</sub> = <b>-hm-/hmw-</b> are associated
CCQ	QUALIFIER	hm	hmw	X is associated by noun-case to the formative marked by C <sub>N</sub> = <b>-hr-/hrw-</b>
CCP	PRECEDENT	hn	hnw	X's noun-case associates only with the immediately following formative
CCV	SUCCESSIVE	hñ	hñw	X's noun-case associates only with the immediately preceding formative

**SPECIAL NOTE:** A noun in one of the Appositive or Relational Cases adjacent to another noun operates as an exception to the above rules. Because such Appositive or Relational nouns naturally associate with an adjacent noun, default zero-marking on such a noun will be assumed to convey **CCP** status if the Appositive/Associative/Relational noun is the first of a pair of nouns, or **CCV** if it is the second of the pair.

**3.8.1.1 Showing both Mood and Case-Scope on a FRAMED formative:** FRAMED formatives do not normally show Mood, deferring any mood information to the main verb, so that Slot VIII C<sub>N</sub>-Pattern 1 or 2 affix should be interpreted as showing Case-Scope rather than Mood. However, in certain circumstances, it may be advantageous to show both Mood and Case-Scope on a framed formative. To do so, [use the MCS affix](#).

**3.8.1.2 Moving the C<sub>N</sub>-Pattern 1 Mood/Case-Scope affix to the Slot VI C<sub>A</sub> Slot:** If the V<sub>N</sub> in Slot VIII shows default MNO Valence (**-a-**), and the Slot VIII C<sub>N</sub> value indicates a Mood/Case-Scope other than FAC or CCN **-h-**, then the C<sub>N</sub> affix may instead be shown in Slot VI (the C<sub>A</sub> Slot) under the following circumstance: if C<sub>A</sub> in Slot VI is default **-l-** (CSL-UPX-DEL- M-NRM), then the C<sub>A</sub> in Slot VI may be replaced by the Mood/Case-Scope C<sub>N</sub> affix, thus shortening the word by one syllable. Note that the C<sub>N</sub>-Pattern 1 affix FAC/CCN **-h-** never moves to Slot VI because it instead elides whenever Slot VIII is zero-marked.

## 3.9 SLOT IX: V<sub>C</sub> or V<sub>K</sub>— Case or Illocution +Validation

In this slot, nouns and FRAMED verbs take Case (see Sec. 3.9.1 below), while UNFRAMED verbs take Illocution+Validation instead (see Sec. 3.9.3 below).

**3.9.1 Case:** The following are the 68 noun cases with their V<sub>C</sub> case marker. The meanings of case-accessor and inverse-accessor V<sub>X</sub>C<sub>S</sub> affixes are also shown. The phonological structure of case-accessor affixes is shown in Sec. 3.9.3. Note that the last four groups of cases (Cases 37 through 68) each contain only eight rather than nine cases. As a result, vowel-tier No. 8 of the standard vowel-sequence is not used.

**SPECIAL NOTE:**  $V_C$  values for cases 37 through 68 are the same as for Cases 1 through 36 (minus vowel-tier No. 8) with the addition of a glottal-stop; **note** that a glottal-stop cannot appear in word-final position (use the rules of Sec. 1.7. when adding a glottal-stop to  $V_C$ ). To shorten  $V_C$  for cases 37 through 52, the glottal-stop may instead be added to any other vocalic form in the formative after Slot II (i.e., to  $V_R$  in Slot IV,  $V_X$  in Slots V or VII, or  $V_N$  in Slot VIII) **as long as the formative does not have a Slot IV/VI a+C<sub>A</sub> shortcut per Sec. 3.2, and as long as the Sec. 3.8.1.2 rule on moving the C<sub>N</sub> Mood/Case-Scope affix to Slot VI has not been applied.**

TRANSRELATIVE CASES			$V_C$	DESCRIPTION	case-accessor affix see Sec. 3.9.2 below	inverse accessor affix see Sec. 3.9.2 below
1	THM	THEMATIC	(a) <sup>1</sup>	The (usually inanimate) party which is a participant to the verbal predicate which does not undergo any tangible change of state. Semantic role: CONTENT.	party acting as the THEME/CONTENT of X	that of/for which X functions as the THEME/CONTENT
		$V_X$ form	ao			
2	INS	INSTRUMENTAL	ä	The entity acting as means utilized by an explicit or implicit agent to implement/carry out the effect/impact of an act/event. Semantic role: INSTRUMENT.	the INSTRUMENT/MEANS by/via which X occurs	that by/via which X is the INSTRUMENT/MEANS
		$V_X$ form	aö			
3	ABS	ABSOLUTE	e	The party that/who is the target of, and/or undergoes, the effect/impact or change of state as a result of a tangible act/event. Semantic role: PATIENT.	the PATIENT to which/whom X happens	that which happens/is done to the PATIENT X
		$V_X$ form	eo			
4	AFF	AFFECTIVE	i	The party who undergoes an unwilling, affective experience, e.g., coughing, sneezing, feeling hot/cold, trembling, experiencing sensory input (tactile, olfactory, visual, aural, gustatory), proprioceptive states, psychological/emotional states, reflex reactions such as cringing, yawning, ducking, screaming in fright, etc. Semantic role: EXPERIENCER.	the EXPERIENCER or undergoer of X (as an affective experience)	that which the X undergoes as an affective experience
		$V_X$ form	eö			
5	STM	STIMULATIVE <sup>2</sup>	ëi	The party/entity/idea/thought/situation or mental state which triggers an unwilling, affective response or is the trigger for an existential state such as possession. <sup>2</sup> Semantic role: STIMULUS.	that which is the affective STIMULUS of X	that of/for which X is the affective STIMULUS
		$V_X$ form	oë			
6	EFF	EFFECTUATIVE	ö	The party/force that initiates a chain of causal events or who induces another party to act as an agent (specifiable via the ENB affix). Role: ENABLER	the ENABLER initiating an event chain leading to X	the event (chain) that the ENABLER X initiates
		$V_X$ form	öe			
7	ERG	ERGATIVE	o	The animate party or inanimate force which initiates/causes an act/event which creates a tangible effect or change of state in a patient. Semantic role: AGENT or FORCE.	the AGENT who/that X's	that which the AGENT or FORCE X does/initiates
		$V_X$ form	oe			
8	DAT	DATIVE	ü	The party which is the (intended) recipient of a verb of transference, transmission, or communication; the party at/to which a physically transferred entity, transmitted information, or a communicable entity is directed. Semantic role: RECIPIENT.	the RECIPIENT of X or of the act of X	that which the RECIPIENT X receives
		$V_X$ form	öa			
9	IND	INDUCIVE	u	The patient who undergoes the tangible effect, impact, or change of state of an act/event initiated/caused by that self-same party. Semantic role: AGENT+PATIENT.	the AGENT who/that X's him-/her-/itself	that which the AGENT X does to him-/her-/itself
		$V_X$ form	oa			

<sup>1</sup> See Sec. 3.1.3 and the notes in Secs. 2.1 and 2.2 before eliding the THEMATIC -a affix.

<sup>2</sup> STIMULATIVE indicates (1) the STIMULUS of an affective response, or (2) the trigger for existential states with no tangibly affected patient, e.g., *The hammer exemplifies toolship*, *The man possesses a cat*, *That book contains poems*.

APPOSITIVE CASES			V <sub>c</sub>	DESCRIPTION	case-accessor affix see Sec. 3.9.2 below	inverse accessor affix see Sec. 3.9.2 below
10	POS	POSSESSIVE	ai	The party which has alienable (i.e., removable or severable) possession of another noun in the sense of having physical control or oversight of that noun, whether by chance circumstance or deliberate manipulation.	the alienable/circumstantial possessor of X	that which X alienably or circumstantially possesses
		V <sub>x</sub> form	ia/uää			
11	PRP	PROPRIETIVE	au	The party having alienable possession of another noun in the sense of quasi-permanent contextual control, ownership or oversight, whether by societal recognition, social convention, law, purchase or decree, which mere physical separation does not sever.	the owner of X; that to which/whom X belongs	that to whom/which X belongs; that which X owns
		V <sub>x</sub> form	ie/uë			
12	GEN	GENITIVE	ei	The party which has inalienable (i.e., irremovable, non-severable) possession of, or association with another noun in the sense of having that noun as an inherent or intrinsic attribute, characteristic, physical part, or genetic (i.e., familial) bond.	the inalienable possessor of X	that which X inalienably possesses
		V <sub>x</sub> form	io/üä			
13	ATT	ATTRIBUTIVE	eu	The party which inalienably experiences the effects of, or otherwise has an affective (see the affective case above) relationship with another noun, either as a temporary or permanent attribute, characteristic, or experience, whether physical or psychological, objective or subjective in nature.	that to which/whom X is an attribute/characteristic	that which X has as an attribute/characteristic
		V <sub>x</sub> form	iö/üë			
14	PDC	PRODUCTIVE	ëu	The party which is the creator, author or originator of another noun.	the originator/author/creator of X	that which X authored / created or originated
		V <sub>x</sub> form	eë			
15	ITP	INTERPRETATIVE	ou	The party acting as the subjective interpretational context of another noun, that is the noun by or through which another noun is subjectively considered, interpreted or described, e.g., <i>Monet's Paris</i> , <i>my baseball team</i> (as spoken by a fan).	the party by / thru which / whom X is subjectively interpreted / considered / described	that which is subjectively considered, described or interpreted by/thru X
		V <sub>x</sub> form	uö/öë			
16	OGN	ORIGINATIVE	oi	The party which is the literal or figurative source of another, or which is the native location, origin, or usual locative context for another.	the original or inherent location/source of X	that of which X is the original or inherent source/location
		V <sub>x</sub> form	uo/öä			
17	IDP	INTERDEPENDENT	iu	The party which has a coordinated, tandem, complementary or mutually dependent relationship with another. The relationship between the two nouns can be thought of as reciprocal in nature, i.e., each noun implies the other or needs the other to exist within its natural context	that with which, or to which, X has a complementary relationship	that which is the complementary relationship shared with X
		V <sub>x</sub> form	ue/ië			
18	PAR	PARTITIVE *	ui	Indicates a quantitative or content-to-container relationship between the two nouns, e.g., <i>a cup of coffee</i> , <i>a box(ful) of books</i> , <i>a train(load) of refugees</i> , <i>twelve chairs</i> .	that of which X is its apportioned or enumerated contents	that which is X's apportioned or enumerated contents; <b>an</b> "X-ful" [of]
		V <sub>x</sub> form	ua/iä			

\* The PARTITIVE will now only appear in apposition to another noun; it will no longer operate independently to mean "some/a portion of X". For this latter meaning, one must utilize the DGR, PTW, PTT, EXN, SUF, EXD, CNM, FEA/3 or similar affix, or incorporate X in PARTITIVE Format into a noun referring to the container, amount, or degree of X.

ASSOCIATIVE CASES			V <sub>c</sub>	DESCRIPTION	case-accessor affix see Sec. 3.9.2 below	inverse accessor affix see Sec. 3.9.2 below
19	APL	APPLICATIVE	ia / uä	The entity/act/event which constitutes the circumstantial, potentially one-time, temporary purpose of another entity/act/event. 'for the (circumstantial/temporary/one-time) purpose of X', 'being used (temporarily/circumstantially) as X'	the purpose/function/use to which X is circumstantially put	that which has X as its circumstantial, temporary use/function/purpose
20	PUR	PURPOSIVE	ie / üë	The entity/act/event which constitutes the inherent/innate/intrinsic purpose of another entity/act/event. 'for the (dedicated) purpose/function of X'	the intrinsic/inherent/innate purpose of X	that which has X as its intrinsic, inherent, innate purpose
21	TRA	TRANSMISSIVE	io / üä	Renamed from the BENEFACTIVE in Ithkuil 2011, this case indicates the party for which/whom an entity/act/event occurs or is transmitted, with the intention that the entity/act/event be beneficial/detrimental to the named party. 'for (the benefit/detriment of) X'	that which/whom the intended benefit/detriment from X is for	that which is the intended benefit or detriment of (receiving/being impacted by) X
22	DFR	DEFERENTIAL	iö / üë	The entity for whose sake, or out of deference/respect to whom, an act/event occurs. 'for X's sake', 'out of deference for X', 'out of respect for X'	the one for whose sake, or out of deference/respect to whom, X occurs	that which occurs or is done out of respect/deference, or for the sake of, X
23	CRS	CONTRASTIVE	eë	The party for which something is substituted, or of which another party/entity takes its place; 'instead of X', 'as a substitute for X', 'in place of X'	that which substitutes for X or takes X's place	that for which X is substituted or whose place X takes
24	TSP	TRANSPOSITIVE	uö / öë	The party on whose behalf something is/occurs.	that on whose behalf X occurs/is	that which is (done) on X's behalf
25	CMM	COMMUTATIVE	uo / öä	The party in exchange for which, a reciprocal or complementary act/event occurs; e.g., <i>He paid 100 dollars <b>in exchange for the tickets.</b></i>	that which is received in an act of exchange	that which is relinquished in an act of exchange
26	CMP	COMPARATIVE	ue / ië	The party being compared to another, translatable as 'as compared to', 'as opposed to,' 'versus'; with verbs it translates as 'whereas' or 'while' (in its synonymous usage to 'whereas'). Examples: <i>She chose the red one <b>as opposed to the others.</b> Sam drives a van <b>versus Joe,</b> who prefers a truck, <i>At the party, she danced <b>while/whereas I ate.</b></i></i>	that which is according to or pursuant to X; that which occurs as per, or in conformance to X	that, according to or pursuant to which, or as per or in conformance to which, X is/occurs
27	CSD	CONSIDERATIVE	ua / iä	The entity according to which, another entity is, or an act/event occurs.	that which is according to X	that which X is according to

ADVERBIAL CASES			V <sub>c</sub>	DESCRIPTION	case-accessor affix see Sec. 3.9.2 below	inverse accessor affix see Sec. 3.9.2 below
28	FUN	FUNCTIVE	aō	Identifies a noun used to describe/characterize the manner in which an act/event/state occurs or exists, e.g., <i>She dances <b>gracefully</b>; The boys ate <b>with gusto</b>; That clown is speaking <b>nonsense</b>; Father speaks <b>with such fortitude</b>.</i>	the manner in which X is/occurs	that which is/occurs in a manner described or characterized by X
29	TFM	TRANSFORMATIVE	aö	Identifies the outcome or final state of a process, often translatable by 'to,' 'until,' or 'into' in the sense of reaching a final state after undergoing some transformation. Examples: <i>The house burned <b>to ashes</b>, Mother reached a state <b>of tranquility</b>, The clowns will turn our children <b>into slaves</b>, Her father drank himself <b>to death</b>.</i>	that into which, X transforms/changes	that which is/occurs as a result of the transformation of X
30	CLA	CLASSIFICATIVE	eō	identifies a noun as a basis for arranging, sorting, classifying, or counting, e.g., <i>Place them <b>in groups of three</b>, The workers arranged the tables <b>in rows</b>, He lay down <b>lengthwise</b>, Can you count <b>by fives</b>?, I will sort them <b>by color</b>.</i> Also identifies the basis for recurring increments, e.g., <i>month by month; day in, day out; box upon box, clown after clown.</i>	the basis by which X is arranged, sorted, patterned or counted	that which is arranged, sorted, patterned, or counted by/via X
31	RSL	RESULTATIVE	eö	Identifies a result/consequence, translatable as 'resulting in X', 'with X as a consequence', etc.	the result/consequence of which, X occurs/is	that which results from or is a consequence of X
32	CSM	CONSUMPTIVE	oë	Identifies the entity consumed or used as a resource as a result of, or as a concurrent part of a process, e.g., <i>She cooks <b>with tomatoes</b>, The clown fed her <b>an apple</b>, He reads <b>by candle(light)</b>.</i>	that by which X is consumed or used up	that which is consumed in the process of X
33	CON	CONCESSIVE	öe	identifies a noun or phrase which gives rise to an implicitly expected result which does not occur. This translates in many ways such as 'despite,' 'in spite of,' 'notwithstanding,' 'although,' 'regardless of,' 'no matter what,' etc. Examples: <i><b>In spite of his stupidity</b>, he passed the test; <b>The law notwithstanding</b>, I will stand my ground; <b>No matter how ignorant</b> (they may be), they are welcome, <b>Although a foreigner</b>, we will let him in.</i>	that, in spite of or regardless of which, X occurs/is	that which is/occurs in spite of or regardless of X
34	AVR	AVERSIVE	oe	Identifies a source or object of fear and/or avoidance. With nouns, it translates expressions such as 'for fear of,' 'in order to avoid,' or 'in avoidance of.' With verbs, it would translate English 'lest.' Examples: <i>She finished her plate <b>for fear of my wrath</b>, I traveled by night <b>to avoid the sun</b>. Hide the children, <b>lest the clowns find them</b>.</i>	that, in aversion to which, X occurs/is	that which is/occurs in avoidance or fear of X
35	CVS	CONVERSIVE	öa	Identifies an exception. When the exception is to a hypothetical situation, it translates as 'unless' in verbal phrases, and 'without' for nouns, e.g., <i><b>Without peace</b>, this society is doomed; We'll be safe <b>unless the clowns find us</b>.</i> If applied to a real or actual situation, it translates as 'except (for),' 'but for,' 'but (not),' 'excluding,' 'if not for,' 'if it wasn't for,' 'if it wasn't on account of.' <i><b>If not for the rain</b>, we would have had a good time; She loves everybody <b>except clowns</b>; All pets are vermin, <b>excluding dogs</b>; He eats almost anything <b>but (not) spinach</b>.</i>	that, if not for which, or but for which, or except for which, X (would) occur(s)	that which would be/occur but for, or if not for, or except for X
36	SIT	SITUATIVE	oa	Identifies a noun as the background context for a clause without implying any direct causative relationship between the background context and the associated or consequent act/state/event. It translates in many ways, e.g., <i><b>Because of war</b>, our planet will never be able to join the Federation; <b>Given the presence of clowns</b>, we must accept the corruption of our children; <b>With my plan</b>, we will defeat the enemy.</i> Other translations include: 'inasmuch as / insofar as / to the extent that / taking X into account / in view of the fact that / given that / considering'.	that, because of which, or given which, X occurs/is	that which is/occurs because of, on account of, or given, X



RELATIONAL CASES			V <sub>c</sub> <sup>1</sup>	DESCRIPTION	case-accessor affix see Sec. 3.9.2 below	inverse accessor affix see Sec. 3.9.2 below
37	PRN	PERTINENTIAL	(a+) <sup>2</sup>	Identifies the general referent of another formative, translating such English terms as ‘about,’ ‘regarding,’ ‘concerning,’ ‘in regard to,’ ‘in reference to,’ ‘pertaining to,’ or ‘as for.’	that which X is about or to which X pertains or is in regard to	that which pertains to X or which is about or in regard to X
38	DSP	DESCRIPTIVE	ä+ <sup>2</sup>	Identifies a formative as describing another formative in an adjectival manner, translatable as ‘characterized/describable as being like X; characterized/describable as having the quality/qualities of X’	that which is characterized or describable by/as X	that which characterizes or functions as a description for X
39	COR	CORRELATIVE	e+ <sup>2</sup>	Indicates an abstract general relationship, association, or conjunction between one formative and another, including subjective, contextual, metaphorical, or symbolic associations. It translates general phrases such as ‘relative to,’ ‘in relation to,’ ‘in correlation with,’ ‘in association with,’ e.g., <i>career goals</i> , <i>the soup of the day</i> , <i>the direction of that road</i> , <i>The elapsed time relative to the distance determines the winner</i> , <i>Our next topic is sex and/in art</i> (i.e., the relationship between art and sex).	that which X is associated/relative to or in relation to	that which is associated with or relative to X
40	CPS	COMPOSITIVE	i+ <sup>2</sup>	identifies a noun as being the literal or figurative substance or component(s) of which another is made, composed, formed, built or comprised. Example of usage would be <i>That statue was carved out of marble</i> , <i>She owns three gold(en) coins</i> , <i>We were caught in a web of lies</i> , <i>I use a wooden ladder</i> , <i>It was a house of cards</i> , <i>Three suits comprise his wardrobe</i> , <i>Joe detests styrofoam cups</i> .	that of which X is made/composed or consists of	that which consists of, is made of, or is composed of X
41	COM	COMITATIVE <sup>3</sup>	ëi+ <sup>2</sup>	Identifies a formative that accompanies another, translatable as ‘(along) with’. When used with PARALLEL or COMPLEMENTARY valence, signifies that the formative is being used in the same (or a complementary) way or is undergoing the same (or a complementary) activity as the other formative it is associated with (i.e., the meaning of the CONJUNCTIVE case in Ithkuil 2011).	that which accompanies X	that which X accompanies
42	UTL	UTILITATIVE	ö+ <sup>2</sup>	Identifies a formative in the process of being used while some other activity or state is in progress. It does not imply the INSTRUMENT of an act as does the instrumental case. Examples: <i>the gun-wielding man</i> , <i>the umbrella-toting pedestrian</i> , <i>a girl with backpack (on)</i> .	that which circumstantially uses/utilizes X	that which is used or utilized circumstantially by X
43	PRD	PREDICATIVE	o+ <sup>2</sup>	Identifies the non-causal basis, foundation, sustenance (literally or figuratively), or required existential condition for another noun or clause, translatable by the phrases ‘based (up)on,’ ‘dependent (up)on’ or ‘relying on.’ Examples of use are <i>a book dependent on a publisher</i> , <i>a man relying on charity</i> , <i>laws based in reason</i> , <i>success supported by corruption</i> .	that upon which X relies or is based upon	that which relies on or is based upon X
44	RLT	RELATIVE	u+ <sup>2</sup>	Identifies a formative (or case-frame) as constituting a relative clause associated with the preceding formative (or whatever formative is indicated by the DCD affix as being the head of the relative clause). <b>NOTE:</b> a lone formative in RELATIVE case not functioning as an external head of a relative clause need not be in FRAMED Relation (See Sec.5.4 of this document).	that which identifies or distinguishes X from other parties	the party identified by or distinguishable by X

<sup>1</sup> See Special Note in Sec. 3.9.1.<sup>2</sup> See Sec. 3.1.3 and the notes in Secs. 2.1 and 2.2 before eliding the PRN -a+’ affix.<sup>3</sup> Ithkuil 2011’s CONJUNCTIVE case is eliminated. Use the COMITATIVE case + PARALLEL OR COMPLEMENTARY valence instead.

AFFINITIVE CASES			V <sub>c</sub> *	DESCRIPTION	case-accessor affix see Sec. 3.9.2 below	inverse accessor affix see Sec. 3.9.2 below
45	ACT	ACTIVATIVE	ai+ <sup>7</sup>	Identifies the EXPERIENCER of a modal state, such as obligation, necessity, desire, hope, expectation, wishing, being able to, etc. functioning as the “subject” of a modal(ized) verb governing a hypothetical state (i.e., what is wanted, needed, expected, able to be done, etc.)	the one who experiences a modal state of X	The modal state which X experiences
46	ASI	ASSIMILATIVE	au+ <sup>7</sup>	Identifies a formative used as a context for analogy or metaphorical comparison to another formative; translatable as ‘as/like’ meaning ‘as if (it were) X’ in the sense of comparison or analogy between one thing and another that it is not, e.g., <i>She sings like a bird</i> , ; <i>Treat her as/like a princess</i> (= as if she were a princess), <i>He talks like a child</i> (even though he’s an adult).	that which/who is/does like or as (it were) X	that, as if it were which, X is/ occurs
47	ESS	ESSIVE	ei+ <sup>7</sup>	Identifies the role or name by which an entity is known or contextually identified. It translates English ‘as/like’ in the sense of naming or reference to the an entity’s functional identity, e.g., <i>They called him a clown</i> , <i>The woman entered the club as an equal of any man</i> , <i>We consider you our only hope</i> , <i>Treat her as/like a princess</i> (because she is one), <i>He talks like a child</i> (because he is a child)..	that whose role is X, or what/who is named (as) X	that, in whose role/name, X is/occurs
48	TRM	TERMINATIVE	eu+ <sup>7</sup>	Identifies a noun as being the goal of an act/event, e.g., <i>We seek a new planet</i> ; <i>a desire to see his homeland</i> ; <i>an academy for (making) champions</i>	X’s goal; what X pursues as a goal	the goal X
49	SEL	SELECTIVE	ëu+ <sup>7</sup>	Identifies a contextually recurring time-period, as well as a string of recurring entities, e.g., <i>I visit him every three days</i> ; <i>Each year, I travel to the Clown Planet</i> ; <i>He works nights</i> ; <i>By day, she is an artisan</i> ; <i>The clowns visit us on Sundays</i> ; <i>...every third book</i> ; <i>...every green one</i> .	the recurring entity/period on/for/with which X occurs	that which is/occurs on a recurrent schedule or iteration X
50	CFM	CONFORMATIVE	ou+ <sup>7</sup>	The entity pursuant to which, as per which, or in conformance with which, another entity is, or an act/event occurs.	that which is pursuant to, as per, or in conformance with X	that which X is pursuant to or in conformance with
51	DEP	DEPENDENT	oi+ <sup>7</sup>	identifies as formative as being the basis of a dependency phrase on which another formative or phrase acts as the contingency, translatable as ‘...if the circumstances regarding X are such to allow/warrant it’ where the final “it” refers to the original contingency noun/phrase whose existence/occurrence is (at least in part) determined by or contingent upon the dependency phrase. The exact nature of the dependency can be specified using the DPC affix.	that upon which the existence/occurrence of X depends	that whose existence or occurrence depends on X
52	VOC	VOCATIVE	ui+ <sup>7</sup>	Signifies a noun being used in direct address.	—	—

\* See Special Note in Sec. 3.9.1 .

SPATIO-TEMPORAL I			V <sub>c</sub> *	DESCRIPTION	case-accessor affix see Sec. 3.9.2 below	inverse accessor affix see Sec. 3.9.2 below
53	LOC	LOCATIVE	i'a	entity identified as the location where something is situated or occurs; 'at / in / on / by X'	where X occurs/is (situated); X's location	that which is located, situated, or occurring at X
54	ATD	ATTENDANT	i'e	entity in whose presence something is/occurs and which/who is thereby involved in some peripheral manner (e.g., as a witness, as a party affected or stimulated to action, etc.)	that in whose presence which, X is/occurs	that which is situated or occurring in X's presence
55	ALL	ALLATIVE	i'o	entity toward which another entity is moving/approaching	where X is headed/going toward	that which is headed toward X
56	ABL	ABLATIVE	i'ö	entity away from which another entity is moving/receding	where X is coming from or moving away from	that which is coming from or moving away from X
57	ORI	ORIENTATIVE	e'ë	entity (often a body part or sub-component) which serves as the "face" or surface or "front" or "head" of an entity in terms of external communication or interaction, or which serves as the forward "end" of a spatially orientated axis aligned to a vector of motion in terms of directional movement.	that which serves as X's orientational interface	that which is oriented, facing in the direction designated by X
58	IRL	INTERRELATIVE	u'ö	signifies the directional/temporal orientation or position of an entity relative to another, i.e., a noun relative to whose position in space or time another noun is being described for purposes of spatial/temporal orientation, e.g., <i>He turned his back <b>on me</b>, It lies just west <b>of the house</b>, Tell me when the parade starts <b>relative to my arrival</b>.</i>	the place/time relative to which, X is/occurs	that which occurs relative to the place/time designated by X
59	INV	INTRATIVE	u'o	Identifies a noun as being the spatio-temporal boundary point of a span or volume of space or a period of time, i.e, either the starting point or the ending point of a span of time or space. English translations include: 'as of X' / 'since X' / 'until X'; for spatial contexts, translates as "between there and here" / "between here and there")	the place/time since/until/between which, X is/occurs	that which occurs since, until, or between the place(s)/time(s) designated by X
60	NAV	NAVIGATIVE	u'a	entity whose literal or metaphorically inferred long axis serves as the direction of another entity's path, course, arc, or trajectory of translative motion	that which serves as X's directional trajectory, path or way	that which is traveling along the directional trajectory, path or way designated by X

\* See Special Note in Sec. 3.9.1 .

SPATIO-TEMPORAL II			V <sub>c</sub> *	DESCRIPTION	case-accessor affix see Sec. 3.9.2 below	inverse accessor affix see Sec. 3.9.2 below
61	CNR	CONCURSIVE	a'ō	indicates a "temporal locative" meaning 'at or during the time of X', i.e., the point or stretch in time at or during which an entity or an act/event exists or occurs.	when X is/occurs	that which is/occurs at a certain time X
62	ASS	ASSESSIVE	a'ö	Specifies the increment of space or time or unit by which a contextual ratio of measurement is created, e.g., <i>He charges <b>by the minute</b>. It travels at 90 kilometers <b>per hour</b>. He earns \$25 <b>per book</b>.</i>	the spatial, temporal, or unit basis for the ratio by which X is measured, allotted, etc.	that which is measured via a ratio based on a spatial, temporal, or unit increment X.
63	PER	PERIODIC	e'ō	identifies the span of time / time frame at some point(s) during which, separate events, repetitions, or durationally segmented acts or states take place. Examples would be <i>He wrote the novel <b>in/over six months</b>, These clowns can corrupt your child <b>within a few days</b>, The woman has been ill a lot <b>this year</b>, <b>For the last several concerts</b>, my voice has been deteriorating.</i>	the time period or event during which X occurs	that which is/occurs during or within a time period X
64	PRO	PROLAPSIVE	e'ö	signifies the duration of an act, condition, or event, i.e., how long it takes or lasts, e.g., <i>He prayed <b>through lunch</b>, It rained <b>all night</b>, It took <b>three days</b> for the fever to break, She sang <b>for an hour</b>.</i>	(the time period or event constituting) the duration of X	that which lasts, endures, or takes up an amount of time X
65	PCV	PRECURSIVE	o'ë	Identifies an entity acting as a point in time prior to which an act, condition, or event occurs, e.g., <i>'this city <b>before the war</b>', 'a presentation <b>preceding the banquet</b>'.</i>	the act/event or point in time, prior to which, X occurs	the act/event or point in time which is/occurs prior to X
66	PCR	POSTCURSIVE	ö'e	Identifies an entity acting as a point in time after which, following which, subsequent to which, an act, state, or event occurs, e.g., <i>'this city <b>after the war</b>', 'a presentation <b>following the banquet</b>', 'It's been a long time <b>since I danced</b>'.</i>	the act/event or time, after/following which or subsequent to which, X occurs	the act/event or time which is/occurs after or following or subsequent to X
67	ELP	ELAPSIVE	o'e	identifies the amount of time that has passed or is expected to pass between the contextual present and the time of the act, condition, or event being spoken of. It corresponds to English '...ago' or '...from now'. Examples would be <i><b>Four years ago</b> I was a student; <b>Going back three generations</b>, women could not even vote; <b>Four years from now</b>, I will be a student; <b>Looking ahead three generations</b>, clowns will rule the world; I will be home <b>in three days</b>; Little did he know that <b>two months later</b> he'd be a rich man. The past vs. future distinction is determined from context, any aspectual morphology, or may be specified with the new TPL affix.</i>	the amount of elapsed time between X and a past or future act/event/time	the act/event/state which occurs X amount of elapsed time between then and the contextual present.
68	PLM	PROLIMITIVE	o'a	Signifies the spatio-temporal boundary point of a span of time or space during which or within which something is expected to or must occur or be situated. Equivalent to English phrases: by the end of X / within the period ending in X / within the period ending with X / before X is over / before X is up / inside of (the period signified by) X	the time/event by which time X is/occurs	the act/event or point in time which is/occurs by the time of X

\* See Special Note in Sec. 3.9.1 .

### 3.9.2 Case-Accessor and Case-Stacking Affixes

The phonological structure of case-accessor, inverse-case accessor, and case-stacking affixes is as follows: The  $V_x$  portion of the affix is the standard four vowel-form series of regular  $V_x C_S$  affixes. There are two separate  $C_S$  increments for each of the seven types of affix (Types-1, -2, and -3 Case-Accessor, Types-1, -2, and -3 Inverse Case-Accessor, and Case-Stacking Affix), the first  $C_S$  increment being used for Cases 1 through 36, while the second  $C_S$  increment is used for Cases 37 through 68.

$V_x$  for the first 36 cases is the first four standard-vowel form series (i.e., the same as their corresponding  $V_C$  case-affixes). Cases 37-68 utilize the same four vowel-form series (i.e., no glottal-stop is added to the  $V_x$  increment), the distinction from the first 36 cases being indicated by their different  $C_S$  increment. This structure allows case-accessor and case-stacking affixes to appear in formative Slots V or VII or in affixial adjuncts. See Sec. 5.7 as to how using the case-stacking affix on UNFRAMED verbal formatives can function as a substitute for case-frames.

	Case-Accessor Affix						Inverse Case-Accessor Affix						Case-Stacking Affix **			
	Type-1		Type-2		Type-3		Type-1		Type-2		Type-3					
	$V_x =$ Series No.	$C_S =$	$V_x =$ Series No.	$C_S =$	$V_x =$ Series No.	$C_S =$	$V_x =$ Series No.	$C_S =$	$V_x =$ Series No.	$C_S =$	$V_x =$ Series No.	$C_S =$	$V_x =$ Series No.	$C_S =$		
<b>Cases 1 thru 9</b>	1	<b>sw</b>	1	<b>zw</b>	1	<b>čw</b>	1	<b>šw</b>	1	<b>žw</b>	1	<b>jw</b>	1	<b>lw</b>		
<b>Cases 10 thru 18</b>	2		2		2		2		2		2		2		2	2
<b>Cases 19 thru 27</b>	3		3		3		3		3		3		3		3	3
<b>Cases 28 thru 36</b>	4		4		4		4		4		4		4		4	4
<b>Cases 37 thru 44 *</b>	1	<b>sy</b>	1	<b>zy</b>	1	<b>čy</b>	1	<b>šy</b>	1	<b>žy</b>	1	<b>jy</b>	1	<b>ly</b>		
<b>Cases 45 thru 52 *</b>	2		2		2		2		2		2		2		2	2
<b>Cases 53 thru 60 *</b>	3		3		3		3		3		3		3		3	3
<b>Cases 61 thru 68 *</b>	4		4		4		4		4		4		4		4	4

\* For Cases 37 through 68: since these four case-groups each contain only eight cases rather than nine and Vowel-Form No. 8 (the ü-tier) for each group is not used, similarly the eighth tier of vowel-forms are not used for these case-accessor or case-stacking affixes.

\*\* The case-stacking adjunct of previous versions of this document has been eliminated. If necessary, the case-stacking affixes shown here can be used in affixial adjuncts.

**New Type-3 Case-Accessor & Inverse Case-Accessor Affixes:** Use these to modify an adjacent  $V_X C_S$ ; the Type-3 accessor modifies the adjacent affix so that it refers to an appropriate participant to the formative where the nature of participation is indicated by the particular case of the accessor affix. The following are examples comparing a Type-3 case-accessor with its inverse counterpart:

- ‘event’-PLE/7-INS<sub>3</sub> *‘that by which a pleasant event occurs’*  
‘event’-PLE/7-Inverse:INS<sub>3</sub> *‘what a pleasant event is used for’*
- ‘upward.motion’-‘DNG<sub>1</sub>/7-ERG<sub>3</sub> *‘the one who dangerously pushes (it) upward’*  
‘upward.motion’-‘DNG/7-Inverse:ERG<sub>3</sub> *‘that which one dangerously pushes upward’*
- ‘interfere’-AUT<sub>1</sub>/7-PUR<sub>3</sub> *‘the purpose for using one’s authority to interfere’*  
‘interfere’-AUT<sub>1</sub>/7-Inverse:PUR<sub>3</sub> *‘what using one’s authority to interfere is for’*
- ‘child’-CNC<sub>2</sub>/2-TRM<sub>3</sub> *‘the selfish child’s goal’ / ‘what the selfish child is after’*  
‘child’-CNC<sub>2</sub>/2-Inverse:TRM<sub>3</sub> *‘the goal being (to have/produce/become) a selfish child’ / ‘in pursuit/hope of (having/becoming/there being) a selfish child’*

### 3.9.3 $V_K$ — Illocution and Validation

Illocution and Validation appear on UNFRAMED verbal formatives, shown by a  $V_K$  ultimate stress pattern in Slot X. Nominal formatives or FRAMED verbal formatives take a  $V_C$  Case affix in this slot instead. Concatenated formatives take a  $V_F$  Format affix in this slot. The  $V_K$  affix for verbs uses the same vowel-forms as affixes as the  $V_C$  case affix — the distinction as to whether an affix in Slot IX is  $V_C$  or  $V_K$  is determined by the syllabic stress of the word. If the word has ultimate stress (i.e., stress on the final syllable), the Slot IX value is  $V_K$ ; otherwise, it is a  $V_C$  case marker. Sections 3.9.3.1 through 3.9.3.3 below, explain the categories of Illocution and Validation, while Sec. 3.9.3.4 below provides the Slot IX  $V_K$  affix values denoting these categories.

#### 3.9.3.1 Illocution

Illocution refers to the type of “speech act” being made by a speaker, i.e., the purpose of the statement in terms of how the addressee is to interpret either its truth-value, or its requirements/demands upon the speaker in terms of a physical and/or psychological response. There are nine illocutions. Additionally, the first Illocution, ASSERTIVE, has eight sub-types relating to the evidentiary basis for the assertion (analyzed in Sec. 3.9.3.2 below under Validation).

## Illocutions

<b>ASR</b>	ASSERTIVE	the statement is an assertion/proposition about the world which constitutes a truth claim
<b>DIR</b>	DIRECTIVE	the statement is either an imperative command to another party to do/be something, or a “commissive” statement committing the speaker to a specific state or course of action (i.e., a vow, promise, guarantee, etc.)
<b>DEC</b>	DECLARATIVE	a “performative” statement which, by its utterance/publication, creates a change of state (at least psychologically) for the addressees (i.e., a declaration, announcement, edict, pronouncement, etc.)
<b>IRG</b>	INTERROGATIVE	a statement whose purpose is to inquire or seek information from the addressee (i.e., equivalent to an English WH-question) -- see Sec. 5.6 below for further explanation on the use of IRG Illocution
<b>VRF</b>	VERIFICATIVE	a statement whose purpose is to seek/obtain corroboration, confirmation, or verification (i.e., equivalent to a Yes/No question)
<b>ADM</b>	ADMONITIVE	a statement whose purpose is to provide advisory/admonitive information to the addressee (i.e., a warning)
<b>POT</b>	POTENTIATIVE	a statement of wishing, hoping, or other unreal(ized) provenance
<b>HOR</b>	HORTATIVE	a counterfactual statement indicating a desired but impossible state of affairs that cannot be realized (equivalent to English hortative constructions such as <i>If only...</i> , <i>Were that...</i> , <i>If only it were so that...</i> )
<b>CNJ</b>	CONJECTURAL	Equivalent to an English-language “if”-clause, indicating that the statement is offered as a conjectured hypothetical, ostensibly to be followed by a “then...” implicational clause. Translatable as “If (it were the case that)...”

### 3.9.3.2 Validation

Validation refers to the evidential basis for a statement in ASSERTIVE illocution. Note that Validation applies only to formatives with ASSERTIVE illocution; it does not apply to the other eight illocutions, as they are not making a truth claim about the world. There are nine Validations: **OBSERVATIONAL**, **RECOLLECTIVE**, **PURPORTIVE**, **REPORTIVE**, **UNSPECIFIED**, **IMAGINARY**, **CONVENTIONAL**, **INTUITIVE**, and **INFERENCE**, explained below:

<b>Validations</b>	<b>OBS</b>	OBSERVATIONAL	present sensory knowledge or present sensory experience: “I perceive... / I know...”
	<b>REC</b>	RECOLLECTIVE	past sensory knowledge or past sensory experience – “I remember... / I know (from memory)...”
	<b>PUP</b>	PURPORTIVE	knowledge from a definitive/(quasi-)verifiable 3rd party source: “I’ve read... / (an expert) has said...”
	<b>RPR</b>	REPORTIVE	knowledge from a 3rd party: “I heard (from someone)... / someone has said...”
	<b>USP</b>	UNSPECIFIED	[Validation deliberately unspecified]
	<b>IMA</b>	IMAGINARY	unreal statement, not intended as true, based on whim, imagination, dream, altered mental state, etc.
	<b>CVN</b>	CONVENTIONAL	cultural/conventional (i.e., collectively agreed-upon) knowledge: “They say... / It is said...”
	<b>ITU</b>	INTUITIVE	intuition, hunch, subjective feeling, past experiences, etc. – “I feel... / I have a hunch... / something tells me...”
	<b>INF</b>	INFERENCE	inference from evidence (or absence of alternatives), induction, extrapolation, etc. “I infer... / I reason...”

### 3.9.3.3 Slot IX V<sub>K</sub> Affix Values Denoting Illocution and Validation

Illocution	Validation		Meaning of Validation	V <sub>K</sub>
ASR ASSERTIVE Illocution	<b>OBS</b>	OBSERVATIONAL	present sensory knowledge or present sensory experience: “I perceive... / I know...”	(á)
	<b>REC</b>	RECOLLECTIVE	past sensory knowledge or past sensory experience – “I remember... / I know (from memory)...”	â
	<b>PUP</b>	PURPORTIVE	knowledge from a definitive/(quasi-)verifiable 3rd party source: “I’ve read... / (an expert) has said...”	é
	<b>RPR</b>	REPORTIVE	knowledge from a 3rd party: “I heard (from someone)... / someone has said...”	í
	<b>USP</b>	UNSPECIFIED	[Validation deliberately unspecified]	êi
	<b>IMA</b>	IMAGINARY	unreal statement, not intended as true, based on whim, imagination, dream, altered mental state, etc.	ô
	<b>CVN</b>	CONVENTIONAL	cultural/conventional (i.e., collectively agreed-upon) knowledge: “They say... / It is said...”	ó
	<b>ITU</b>	INTUITIVE	intuition, hunch, subjective feeling, past experiences, etc. – “I feel... / I have a hunch... / something tells me...”	û
	<b>INF</b>	INFERENCE	inference from evidence (or absence of alternatives), induction, extrapolation, etc. “I infer... / I reason...”	ú
<b>DIR</b>	DIRECTIVE Illocution			ái
<b>DEC</b>	DECLARATIVE Illocution			áu
<b>IRG</b>	INTERROGATIVE Illocution			éi
<b>VRF</b>	VERIFICATIVE Illocution			éu
<b>ADM</b>	ADMONITIVE Illocution			óu
<b>POT</b>	POTENTIATIVE Illocution			ói
<b>HOR</b>	HORTATIVE Illocution			íu
<b>CNJ</b>	CONJECTURAL Illocution			úi



**3.9.3.4 If desired to show  $V_K$  information on a FRAMED formative or a concatenated formative:** Since Slot IX of a FRAMED formative is already taken up by the  $V_C$  case affix, and by  $V_F$  Format on a concatenated formative, the equivalent to  $V_K$  information can be shown by the  $V_X C_S$  affix shown below:

-n	IVL Illocution + Validation		
	Type-1	Type-2	
degree	Illocution	Validation	
1	ASR ASSERTIVE	ASR Assertive	OBS Observational
2	DIR DIRECTIVE		REC Recollective
3	DEC DECLARATIVE		PUP Purportive
4	IRG INTERROGATIVE		RPR Reportive
5	VRF VERIFICATIVE		USP Unspecified
6	ADM ADMONITIVE		IMA Imaginary
7	POT POTENTIATIVE		CVN Conventional
8	HOR HORTATIVE		ITU Intuitive
9	CNJ CONJECTURAL		INF Inferential

### 3.10 Slot X: Syllabic Stress — Relation plus $V_C/V_K$ Distinction

Penultimate Stress = UNFRAMED Relation + $V_C$	Ultimate Stress = UNFRAMED Relation + $V_K$	Antepenultimate Stress = FRAMED Relation + $V_C$
--	---	--

If a word does not have sufficient syllables to take antepenultimate stress, add syllables by filling Slots II and/or Slots VIII and IX with their default values.

**NOTE:** A monosyllabic formative other than a concatenated formative is considered morphologically to have ultimate stress (i.e., it is an UNFRAMED verbal formative). Monosyllabic adjuncts are considered morphologically to have penultimate stress unless specified otherwise.

## 4.0 ADJUNCTS

### 4.1 Affixual Adjuncts

**4.1.1 Single-Affix Adjunct:** This adjunct associates a single  $V_X C_S$  affix to the following formative and provides scoping information over the formative's other  $V_X C_S$  affixes. The tell-tale sign of this adjunct is the **V-C-(V)** form containing only one full consonant-form. Examples: *ač, iakse, etra, usmú, aull*.

$'V_X C_S$	$V_S$	Stress
single standard $V_X C_S$ affix	<p><b>(a)</b> = affix applies to stem only (not to its <math>C_A</math>) and has scope over all Slot V affixes (i.e., as if it were the last affix in Slot V)</p> <p><b>u</b> = affix applies to stem only (not to its <math>C_A</math>) and is subordinate to all Slot V affixes (i.e., as if it were the first affix in Slot V)</p> <p><b>e</b> = affix applies to both Stem and <math>C_A</math> and has scope over all Slot VII affixes (i.e., as if it were the last affix in Slot VII)</p> <p><b>i</b> = affix applies to both Stem and <math>C_A</math> and is subordinate to all Slot VII affixes (i.e., as if it were the first affix in Slot VII)</p> <p><b>o</b> = affix has scope over the entire formative as a whole, including Valence, Mood or Case, Illocution/Validation, etc.</p> <p><b>ö</b> = affix has scope over the entire formative as a whole as well as other adjacent adjuncts including a modular adjunct</p>	<p>Penultimate stress = default</p> <p>Ultimate stress = affix applies to concatenated stem only</p>

**4.1.2 Multiple-Affix Adjunct:** This adjunct associates two or more affixes to a formative. The tell-tale sign is that the second consonant-form will consist either of **-h-** or a non-root consonant preceded by a glottal-stop (**'h, 'hw, 'hl, or 'hr**). Examples: *dohast, stei'haikra, ějgi'hroftôm, viahwobrigli*.

$(\ddot{e}-)C_S V_X$	$C_Z$	$V_X C_S \dots$	$V_Z$	Stress
<p>single reversed <math>V_X C_S</math> affix.</p> <p>Initial <math>C_S</math> may be preceded by <math>\ddot{e}</math>- if phonotactically necessary</p>	<p><b>h</b> = preceding affix applies to the stem only (not to its <math>C_A</math>) and has scope over all Slot V affixes (i.e., as if it were the last affix in Slot V)</p> <p><b>'h</b> = preceding affix applies to the stem only (not to its <math>C_A</math>) and is subordinate to all Slot V affixes (i.e., as if it were the first affix in Slot V)</p> <p><b>'hl</b> = preceding affixes applies to both Stem and <math>C_A</math> and has scope over all Slot VII affixes (i.e., as if it were the last affix in Slot VII)</p> <p><b>'hr</b> = preceding affix applies to both Stem and <math>C_A</math> and is subordinate to all Slot VII affixes (i.e., as if they were the first affix in Slot VII)</p> <p><b>hw</b> = preceding affix has scope over the entire formative as a whole, including Valence, Mood or Case, Illocution/Validation, etc.</p> <p><b>'hw</b> = preceding affix has scope over the entire formative as a whole as well as other adjacent adjuncts including a modular adjunct</p>	<p>standard <math>V_X C_S</math> affix(es)</p>	<p><b>a</b> = 2nd and subsequent affixes apply to stem only (not to its <math>C_A</math>) and have scope over all Slot V affixes (i.e., as if they were the last affix in Slot V)</p> <p><b>u</b> = 2nd and subsequent affixes apply to stem only (not to its <math>C_A</math>) and are subordinate to all Slot V affixes (i.e., as if they were the first affix in Slot V)</p> <p><b>e</b> = 2nd and subsequent affixes apply to both Stem and <math>C_A</math> and have scope over all Slot VII affixes (i.e., as if they were the last affix in Slot VII)</p> <p><b>i</b> = 2nd and subsequent affixes apply to both Stem and <math>C_A</math> and are subordinate to all Slot VII affixes (i.e., as if they were the first affix in Slot VII)</p> <p><b>o</b> = 2nd and subsequent affixes have scope over the entire formative as a whole, including Valence, Mood or Case, Illocution/Validation, etc.</p> <p><b>ö</b> = 2nd and subsequent affixes have scope over the entire formative as a whole as well as other adjacent adjuncts including a modular adjunct</p> <p><b>(ai)</b> = 2nd and subsequent affixes have the same scope as shown by <math>C_Z</math></p>	<p>Penultimate stress = default</p> <p>Ultimate stress = affixes apply to concatenated stem only</p>

A Type-3  $V_X C_S$  affix used in an affixual adjunct associates to the  $V_X C_S$  affix named by  $V_S, C_Z$  or  $V_Z$ , e.g., if  $V_Z = a$ , it associates to the last affix in Slot V.

## 4.2 Specialized C<sub>S</sub>-Roots in Lieu of Affix-Scoping Adjuncts

As an alternative to using Affixal Adjuncts, a new formative structure, the **Specialized C<sub>S</sub>-Root**, has been created to raise a V<sub>X</sub>C<sub>S</sub> affix to the level of a root, replacing old Stem Zero of the carrier-root. This formative structure operates like a standard formative except that Slots II and IV take specialized V<sub>V</sub> and V<sub>R</sub> forms and the Slot III C<sub>R</sub> form is replaced by the C<sub>S</sub>-form of a V<sub>X</sub>C<sub>S</sub> affix. The specifics are as follows:

### Slot II V<sub>V</sub> Values Indicating a Specialized C<sub>S</sub>-Root (i.e., that Slots III + IV constitute a C<sub>S</sub>V<sub>X</sub> affix)

Version	V <sub>V</sub>	
	STA Function	DYN Function
PRC	ëi	eë
CPT	ëu	oë

These four specialized V<sub>V</sub> values signal that the following consonantal form in Slot III is not a C<sub>R</sub> form from the Lexicon, but rather the C<sub>S</sub>-form of a V<sub>X</sub>C<sub>S</sub> affix. This functions to convert the meaning of the V<sub>X</sub>C<sub>S</sub> affix to the status of a lexical root. Due to this conversion into a root, no Type-1 vs. Type-2 affixal distinction is made.

Note that such specialized C<sub>S</sub>-roots do not take Slot I C<sub>C</sub> values indicating Slot IV/VI a+C<sub>A</sub> shortcuts but can take the four Slot I C<sub>C</sub> values that indicate concatenation only: **h-**, **hw-**, plus these two forms with ultimate stress.

The Affix-Degree and Specification of the Specialized C<sub>S</sub>-root is shown by the V<sub>R</sub> value in Slot IV:

### Slot IV V<sub>R</sub> Values for the Specialized C<sub>S</sub>-Root (showing Affix-degree for the Slot III C<sub>S</sub>-form plus Specification)

Affix Degree	Specification			
	BSC	CTE	CSV	OBJ
1	a	ai	ia / uä	ao
2	ä	au	ie / uë	aö
3	e	ei	io / üä	eo
4	i	eu	iö / üë	eö
5	ëi	ëu	eë	oë
6	ö	ou	uö / öë	öe
7	o	oi	uo / öä	oe
8	ü	iu	ue / ië	öa
9	u	ui	ua / iä	oa
0	ae	ea	üo	üö

Note that, unlike Slot IV of standard formatives, all nine tiers of the Standard Vowel Sequence are utilized in these Specialized C<sub>S</sub>-roots.

Also: If a Specialized C<sub>S</sub>-root has non-default (i.e., non-EXS) Context, this must be shown via the **NCE** affix.

### 4.3 Modular Adjunct

This adjunct has **two** slots corresponding to formative Slot VIII (showing Valence, Phase, Level, or Effect, in combination with Mood/Case-Scope, or showing Aspect plus Mood/Case-Scope); it can also show a single lone Aspect. When used with concatenated formatives, it normally applies to both the concatenated and parent stems but can be marked to apply to either one separately. The tell-tale sign of this adjunct is the absence of any full consonant forms **other than possibly a single -n- or -ň-**; the only otherwise permissible consonants are -w-, -y-, or a form consisting of or beginning with -h-.

The structure of the adjunct is shown below. **Slots 2 and 3** can be “mixed and matched” to show any combination of the Slot VIII categories, including differing iterations of the same category (e.g., to show multiple aspects). **Slots 1 and 4** are mandatory; the other slots are optional. Default **MNO-FAC/CCN** Valence+Mood/Case-Scope is zero-marked in Slot 2. Information in each successive slot scopes over the previous slot, but the adjunct as a whole does not have scope beyond its default formative Slot VIII, unless the  $V_H$  value in Slot 4 of the adjunct indicates a different and specialized pattern of scoping.

**Structure of a Modular Adjunct** (Examples: *o*, *yu*, *iüha*, *ihwe*, *yewia*, *uhlaini*, *uya*, *öhwöňó*)

1	2	3	4
' or w- or y-	<b>Valence/Phase/Level/Effect + Mood/Case-Scope</b> OR <b>Aspect + Mood/Case-Scope</b>	[same as Column 2]	<b>Aspect or Valence/Phase/Level/Effect</b> or <b>Specialized Scope of the Adjunct</b>
w = adjunct applies to the parent formative only	$(V_N C_N)$	$(V_N C_M)$	$V_N$ or $V_H$
y = adjunct applies to the concatenated formative only	$C_N = h / hl / hr / hm / hn / hñ$ For Aspect: $C_N = w\sim y / hw / hrw / hmw / hnw / hñw$	$C_M = n$ if $V_N$ represents an Aspect, otherwise $C_M = ñ$	<ul style="list-style-type: none"> <li>If only Slots 1 and 4 are filled, then Slot 4 = <b>Aspect</b>;</li> <li>If Slot 2 or Slots 2 and 3 are filled and stress is penultimate, then Slot 4 = <b>Valence</b> or <b>Phase</b> or <b>Level</b> or <b>Effect</b>;</li> <li>If Slot 2 or Slots 2 and 3 are filled and stress is ultimate, then Slot 4 = <math>V_H</math> whose values are shown below.</li> </ul>

**Slot 4  $V_H$  values** (if the adjunct has ultimate stress):

- a** = affixes in Slots 2 and 3 have successive right-to-left scope order over each other (Slot 2 < Slot 3) and have scope over Case/Mood and Validation + Illocution
- e** = affixes in Slots 2 and 3 have successive right-to-left scope order over each other (Slot 2 < Slot 3) and have scope over Case/Mood
- i/u** = affixes in Slots 2 and 3 have successive right-to-left scope order over each other (Slot 2 < Slot 3) and have scope over the formative as a whole but not any adjacent affixal adjuncts (do not use if adjacent affixal adjunct's  $V_S$ ,  $C_Z$ , or  $V_Z$  values show scope over a modular adjunct)
- o** = affixes in Slots 2 and 3 have successive right-to-left scope order over each other (Slot 2 < Slot 3) and have scope over the formative as a whole including any adjacent affixal adjuncts (do not use if adjacent affixal adjunct's  $V_S$ ,  $C_Z$ , or  $V_Z$  values show scope over a modular adjunct)

**NOTE:** If formative Slot VIII shows default Valence + Mood/Case-Scope (and no Aspect, Phase, Level, or Effect values are shown), then any  $V_N C_N$  values in a modular adjunct apply as if they were the Slot VIII values. If the formative shows a non-default Slot VIII value for a certain category, and a modular adjunct shows a different value for the same category (assuming it even makes semantic sense to do so), the modular adjunct value scopes over the Slot VIII value.

## 4.4 Register Adjunct

These adjuncts are marked by a single vowel-form preceded by **h-**. A non-NARRATIVE register clause may be pronounced with low pitch on the last word of the clause, in which case the register clause does not require the end-register final adjunct listed below. If the word/phrase within the register is a proper name or foreign word/phrase, indicate this by ending the register clause using the CAR end-register adjunct *hii*.

Register Adjunct	Register		Initial Adjunct	Final Adjunct
	NRR	NARRATIVE (default register)	—	—
	DSV	DISCURSIVE (direct speech)	ha	(hai)
	PNT	PARENTHETICAL (parenthetical aside)	he	(hei)
	SPF	SPECIFICATIVE (proper name of preceding referent) <sup>1</sup>	hi	(hiu)
	EXM	EXEMPLIFICATIVE ('for example, ...')	ho	(hoi)
	CGT	COGITANT (silent/subjective thoughts)	hu	(hui)
	CAR	CARRIER-END end of term/phrase governed by carrier stem/adjunct <sup>2</sup>	—	(hü)

<sup>1</sup> If the identification of the preceding referent is not a proper name, use PNT register instead.

<sup>2</sup> Use the CAR end-adjunct marker for any register where the referent within the register clause is a proper name or a foreign word/phrase.

**Note:** Since Sec. 1.5 external juncture rules do not apply to foreign names/words, insert a pause after uttering the name/words prior to the CAR adjunct *hii* or the SPF final adjunct *hiu*, or pronounce the last word of the proper name/phrase with low tone.

## 4.5 Suppletive Adjuncts

These are a series of adjuncts of the form  $C_P + V_C$  where  $C_P$  is a bi-consonantal form beginning with **h-** specifying the nature of the adjunct, while  $V_C$  is the case-marker from Formative Slot IX. The tell-tale sign of these adjuncts is the initial **h+**consonant with no subsequent consonant forms. The last word of the word, phrase or name identified by the adjunct can be indicated by the adjunct form **hü** if necessary, or by pronouncing that word/phrase/name with low tone.

Use of these adjuncts implies CCN Case-scope; if the case-framed word/phrase/name has non-default Case-scope, use either a full carrier-stem or a preceding adjunct to show the case-scope.

The  $C_P$  affix of these adjuncts may be used in the  $C_1$  Slot of a Single--, Dual-, or Combination Referential (see Sec. 4.6.3). When so used, the  $C_P$  affix must be preceded by a word-initial epenthetic vowel to avoid the adjunct being mistaken for a modular adjunct or a concatenated formative. See Sec. 4.6.3 for the specific rules involved.

**4.5.1 Carrier Adjunct:** This is a “shortcut” for a full carrier stem, providing Case information only. It is used when the identity/nature of the foreign word(s) or proper name following the adjunct is already known to the addressee.

<b>C<sub>P</sub></b>	<b>V<sub>C</sub></b>
<b>hl</b>	Same as Formative Slot IX

Examples: *hla, hlei, hloa, hle'e, hla'u, hli'a*

Note that the last three examples above illustrate that Sec. 1.7, Rule 3, requires Cases 37-40 and 42-44 add an epenthetic vowel after the glottal-stop and that Cases 41 and 45-52 become disyllabic by placing the glottal-stop intervocalically.

**4.5.2 Quotative Adjunct:** This adjunct combines the Carrier Adjunct with the DISCURSIVE Register Adjunct to allow direct quotes to be placed within a case-frame, useful for translating imbedded quotes within sentences such as *He told me “get out of the house!”*

<b>C<sub>P</sub></b>	<b>V<sub>C</sub></b>
<b>hm</b>	Same as Formative Slot IX

Examples: *hma, hmei, hmoa, hme'e, hma'u, hmi'a*

Note that the last three examples above illustrate that Sec. 1.7, Rule 3, requires Cases 37-40 and 42-44 add an epenthetic vowel after the glottal-stop and that Cases 41 and 45-52 become disyllabic by placing the glottal-stop intervocalically.

**4.5.3 Naming Adjunct:** This adjunct indicates that the following word is a name being referred to as such, rather than referring to the entity that bears the name, i.e., it would be used before the name Emily in the sentence *‘He said “Emily”*’ as opposed to the sentence *‘He said “tell Emily”*’ which would use the Quotative adjunct, or *‘He said to tell Emily’* which would use the Carrier adjunct.

<b>C<sub>P</sub></b>	<b>V<sub>C</sub></b>
<b>hn</b>	Same as Formative Slot IX

Examples: *hna, hmei, hnoa, hne'e, hna'u, hni'a*

Note that the last three examples above illustrate that Sec. 1.7, Rule 3, requires Cases 37-40 and 42-44 add an epenthetic vowel after the glottal-stop and that Cases 41 and 45-52 become disyllabic by placing the glottal-stop intervocalically.

**4.5.4 Phrasal Adjunct:** This adjunct is essentially a specialized form of the carrier adjunct above to apply meta-level grammatical information to an entire subsequent phrase as a whole. This is similar to a case-frame, except that where case-frames function solely as an equivalent to subordinate clauses in Western languages, this adjunct causes the subsequent phrase to become a conventionalized, (quasi-)lexicalized gestalt. It thus serves as an equivalent to English phrasal gestalts (often hyphenated), as in the following examples:

*Hey, **shit-for-brains!** Stop your **stumbling-around-in-the-dark** behavior and watch how the **know-how-to-get-things-done** guy gets it done!*

*“Let the kid try, he’s from the neighborhood.” “O-oh! **‘He’s from the neighborhood!’** ” [said sarcastically with a “big deal/so what?” tone of voice]*

*Is that the actor who starred in that **aliens-invade-but-die-after-discovering-chocolate** movie?*

<b>C<sub>p</sub></b>	<b>V<sub>c</sub></b>
<b>hñ</b>	Same as Formative Slot IX

Examples: *hña, hñei, hño, hñe'e, hña'u, hñi'a*

Note that the last three examples above illustrate that Sec. 1.7, Rule 3, requires Cases 37-40 and 42-44 add an epenthetic vowel after the glottal-stop and that Cases 41 and 45-52 become disyllabic by placing the glottal-stop intervocalically.

## 4.6 Referentials

There are ten Referentials (previously known as Personal-Reference Adjuncts), each distinguishing three Effects (see Sec. 3.8 for an explanation of Effect).

		EFFECT			
		NEUTRAL	BENEFICIAL	DETRIMENTAL	
<b>1m</b>	monadic speaker	<b>l</b>	<b>r</b>	<b>ř</b>	“I”
<b>2m</b>	monadic addressee	<b>s</b>	<b>š</b>	<b>ž</b>	“you (sg.)”
<b>2p</b>	polyadic addressee	<b>n</b>	<b>t</b>	<b>d</b>	“you (pl.)”
<b>ma</b>	monadic animate 3 <sup>rd</sup> party	<b>m</b>	<b>p</b>	<b>b</b>	“he” / “she” / “they (sg.)”
<b>pa</b>	polyadic animate 3 <sup>rd</sup> party	<b>ñ</b>	<b>k</b>	<b>g</b>	“they (pl.)”
<b>mi</b>	monadic inanimate 3 <sup>rd</sup> party	<b>z</b>	<b>ʧ</b>	<b>ɖ</b>	“it”
<b>pi</b>	polyadic inanimate 3 <sup>rd</sup> party	<b>ʒ</b>	<b>f</b>	<b>v</b>	“these things / those things”
<b>Mx</b>	mixed animate/inanimate 3 <sup>rd</sup> party	<b>c</b>	<b>č</b>	<b>j</b>	mixed animate+inanimate, e.g., “s/he+it”, “they+those”, “it+they”, “those+s/he”, etc.
<b>Rdp</b>	Reduplicative (i.e., resumptive)	<b>th</b>	<b>ph</b>	<b>kh</b>	referring back to the antecedent/previously named party (often used with SWR affix)
<b>Obv</b>	Obviative	<b>ll / lç*</b>	<b>rr / rç*</b>	<b>řř / řç*</b>	3 <sup>rd</sup> -party other than one previously referenced
<b>PVS</b>	Provisional	<b>mm / mç*</b>	<b>nn / nç*</b>	<b>ññ / ñç*</b>	“whatever” [see explanation on next page]

\* the alternate forms of the Obv and PVS categories are used in Referential Affixes (see Sec. 4.6.5 below) to avoid ambiguity with geminated C<sub>A</sub> forms

To show AGGLOMERATIVE or NOMIC or ABSTRACT categories as a Referential, add the following affixes immediately preceding or following one of the affixes above (as phonotactically permissible): AGGLOMERATIVE: **-l-** / **-tɭ-** NOMIC: **-ç-** / **-x-** ABSTRACT: **-w-** / **-y-**

The **IPa** and **IPi** Impersonal categories of previous versions of this document (i.e., “one”, “someone”, “something”, “a thing”, “things”, etc.) will instead be shown by adding the NOMIC affix above to the **ma** or **mi** affixes above, depending on the intended meaning. Applying the ABSTRACT affix to a tangible Referential form gives a word meaning “*all that X is*” or “*everything about X*” as in “*all about me*”, “*everything having to do with you*” or “*everything about it*”. When applied to the Mx Referential, the ABSTRACT affix gives the meaning “*everything and everyone*” or “*all that there is.*”

**Provisional Referential:** The **PVS** Provisional Referential refers to a vague, unspecified, potential, uncertain or unknown party/entity which can be marked for case. Ostensibly, the closest English translation would be “whatever.” However, since the identity of the entity is provisional/potential/uncertain, the focus of the personal reference is on the case-relationship being expressed, so that the meaning of the case often determines the proper English translation. For example, in phrases/sentences using IRG Illocution, the Referential would correspond most closely to an English WH-interrogative pronoun such as PVS-LOC *where?* (“whatever location”), PVS-PUR *why?* (“whatever purpose”), PVS-PRP *whose?* (“whatever owner”), etc.

**NOTE:** For more information on New Ithkuil equivalents to English WH-interrogatives, see Sec. 5.6.

#### 4.6.1 Single- or Dual- Referential

1	2	3	4	5
( <b>ë</b> ) <b>C</b> <sub>1</sub> (( <b>ë</b> ) <b>C</b> <sub>1</sub> (( <b>ë</b> ) <b>C</b> <sub>1</sub> ))	<b>V</b> <sub>C1</sub>	( <b>w/y</b> + <b>V</b> <sub>C2</sub>	( <b>C</b> <sub>2</sub> ( <b>ë</b> ))	<b>Stress</b>
Referential A	Case of Referential A Same affixes as formative Slot IX	Case of Referential B, or in absence of Referential B, to add (i.e.,stack) a 2nd Case on to Referential A. Same affixes as formative Slot IX	Referential B	<b>monosyllabic</b> or <b>penultimate</b> = default <b>ultimate</b> = adjunct carries <b>RPV</b> Essence *

\* In previous versions of this document, ultimate stress operated as a shortcut “verbal” form with slot 2 showing **V<sub>v</sub>** information instead of **V<sub>c</sub>** information. This shortcut verbal form is now eliminated. To express a Referential as a verb, use the new Specialized Personal-Reference Roots from Sec. 4.6.4 below.

Examples: *to, zua, laiwe, ëpgóí, ëztewim, zëmse, smoyút, triwejvë, sme'e, ka'u, fo'we'is*

(Note that the last three of these examples illustrate that Sec. 1.7, Rule 3, applies to Slot 2 **V<sub>C1</sub>** and Slot 3 **V<sub>C2</sub>** for Cases 37 through 52.)

The tell-tale sign of this adjunct is its (**ë**)**C(C)-V** or (**ë**)**C(C)-V-w/y-V-C** structure (Formative Slot II has no **V<sub>v</sub>** value **-ë-** nor any Slot IV **V<sub>R</sub>** value containing **-w-** or **-y-**). If there is only one referent, it is the A referent and uses Slot 1 and 2. Combinations are permissible in both Slot 1 **C<sub>1</sub>** and Slot 4 **C<sub>2</sub>** (e.g., **smlo** ‘you (sg.) and (s)he and I’-ERGATIVE) as long as the combination is phonotactically permissible. The epenthetic **-ë-** vowel appears before or within **C<sub>1</sub>** combinations if necessary due to phonotactic rules (e.g., **zëmse** ‘it and s/he and you(sg.)-ABS’, and may also be suffixed to Slot 4 if necessary for phonotactic purposes. A second case may be stacked on Referent A by filling in Slot 3 but leaving Slot 4 empty.

For personal referents other than the MONADIC speaker ‘I’, if represented by a single consonant, one may show two separate (i.e., different) instances of that referent in one category by placing one instance of the consonant in Slot 1, and another in Slot 4, e.g., *püwüp* [ma/BEN/DAT - ma/BEN/DAT] ‘to him/her and to (a different) him/her’, *züwiesz* [mi/INS - mi/TRA] ‘with it and for (a different) it’.



### 4.6.2 Combination Referential with Case-Stacking

This adjunct is used to add Case, Specification,  $V_xC_S$  affix information or a second case (case-stacking) to one of the Referential forms. For non-combination single-referent forms it may be preferable to use the new Personal-Reference roots explained in Sec. 4.6.4.

The tell-tale signs of this adjunct are the Slot 4 consonant-forms containing **-x-**, **-xt-**, **-xp-**, or **-xx-** in what looks like the  $C_A$  slot of a formative (these four consonant conjuncts are not possible  $C_A$  forms). Examples: *slex*, *poxtanž*, *ėtkexpa*, *ėlsuoxxed*.

1	2	3	4	5	6
( $\ddot{e}$ -) $C_1$ (+ $C_2$ (+ $C_3$ ))	$V_C$	$x / xt / xp / xx$	( $V_xC_S \dots$ )	( $V_{C2}$ or epenthetic <b>-a</b> )	<b>Stress</b>
Combination Referential	Case of Combination Referential	Specification of Combination Referential		2nd (stacked) case of Combination Referential	Penultimate stress = default
	from formative Slot IX	$x$ = BSC $xt$ = CTE $xp$ = CSV $xx$ = OBJ	$V_xC_S$ suffix 1 (2, 3, ...)	same affixes as formative Slot IX except for THM case = <b>-üa</b>	Ultimate stress = adjunct has <b>RPV</b> Essence.

### 4.6.3 Applying Carrier, Quotative, Naming, and Phrasal Adjunct Forms to Referentials

In addition to the Referential affixes shown in Sec. 4.6, the  $C_1$  slot of the Combination Referential above as well as the  $C_1$  slot of the the Single- or Dual-Referent Referential in Sec. 4.6.1 may also take any of the  $C_P$  Suppletive Adjunct affixes (**hl-**, **hm-**, **hn-**, **-hñ-**), thus allowing these adjuncts the same scope and flexibility as Referentials in terms of showing Specification,  $V_xC_S$  affixes, and case-stacking for a following proper noun, foreign word/phrase, or quote.

**NOTE:** When using a  $C_P$  Suppletive Adjunct form in Slot 1 of a Referential it is necessary to prefix the  $C_P$  form by an epenthetic vowel, as follows:

- If using a  $C_P$  Suppletive Adjunct form in Slot 1 of a Combination Referential from Sec. 4.6.2 above, the  $C_P$  value must be preceded by **a-** to avoid the adjunct being mistaken for a Concatenated Formative.
- If using a  $C_P$  Suppletive Adjunct form in Slot 1 of a Single- or Dual-Referential from Sec. 4.6.1 above, the  $C_P$  value must be preceded by the word-initial diphthong **üo-** to avoid the adjunct being mistaken for a Modular Adjunct.

#### 4.6.4 New “Specialized Personal-Reference” Roots

The personal-reference roots from previous versions of this document, **-N-** and **-D-**, have been eliminated and are replaced by a new kind of formative structure, the “Specialized Personal-Reference Root.” This new formative structure operates like a standard formative except that Slot II takes specialized **V<sub>V</sub>** values which indicate that the immediately following Slot III **C<sub>R</sub>** form has been replaced by a combination Referential affix. This affix may be a single- or dual-Referential form, or even a combination Referential “cluster” as described in Sec. 4.6.1 (e.g., **-sml-** ‘*you(sg.), s/he and I*’). The specifics are as follows:

**Slot II V<sub>V</sub> Values Indicating a Specialized Personal-Reference Root** (i.e., Slot III constitutes a Combination Personal-Reference Affix)

Version	V <sub>V</sub>	
PRC	ae	Slot IV values for these Specialized Personal-Reference roots are the same as for standard formatives, showing Function, Specification, and Context for the combination personal-referent.
CPT	ea	Combination Referential clusters requiring an epenthetic <b>-ë-</b> vowel cannot be used in these Specialized Personal-Reference roots.

**NOTE:** Specialized Personal-Reference roots can take Slot I **C<sub>C</sub>** values indicating Slot IV/VI **a+C<sub>A</sub>** shortcuts; however, because **-ae-** and **-ea-** are the only two values allowed in Slot II, the only **a+C<sub>A</sub>** shortcuts available are **C<sub>A</sub>** = [default] and **C<sub>A</sub>** = **PRX**.

**Also:** because the Referential affixes themselves (from the table in Sec. 4.6 above) refer to personal referents irrespective of number, the meaning of each stem of the Specialized Personal-Reference Root changes depending on its Perspective, as previously discussed in Sec. 4.6. Therefore, one should not attach the usual **NOMIC** affix **-ç-** / **-x-** or the **ABSTRACT** affix **-w-** / **-y-** to the Referential affix itself (as when using a Referential); instead, show **NOMIC** or **ABSTRACT** personal-reference forms using the appropriate **C<sub>A</sub>** Perspective value in Slot VI of the formative.

**Specifications and Verbal Meaning:** Because they are full roots, these Specialized Personal-Reference root require a meaning be assigned to the four Specifications, as well as meanings assigned to verbal forms. These are illustrated below for the **1m** **MONADIC** speaker category:

	STEM 1 Nominal meaning	STEM 1 Verbal meaning
<b>BASIC</b>	‘I (myself)’	‘to be me/to be myself’, ‘to do/act what/how I do [because it’s me]’
<b>CONTENTIAL</b>	‘I (myself)’ (as being my personality, mind, psyche, sentient thoughts, psychological sense of individuality, or “essence”; irrespective of my physical body)’	[same as above applied to <b>CONTENTIAL</b> meaning at left]
<b>CONSTITUTIVE</b>	‘I (myself)’ (as my physical body/embodiment/person, irrespective of personality, mind, psyche, sentient thoughts, psychological sense of individuality, or “essence”)	[same as above applied to <b>CONSTITUTIVE</b> meaning at left]
<b>OBJECTIVE</b>	‘entity with/on which I act or with which I associate (i.e., place, thing, person, etc. with/in/on which/whom I [inter-]acts)’; ‘something/someone from/in my life/niche/environment’	‘to be an entity in my life/niche/environment; to be something/someone that/who is in my life/niche/environment’

#### 4.6.5 Use of Type-3 $V_X C_S$ Affix Format and Standard Vowel-Sequence Column 4 Vowels as Shortcut for Referentials

Similar to Ithkuil 2011, if either of the  $V_X C_S$  affix slots, Slots V or VII, are empty, then that empty slot may be used to show a specialized short-cut “Referential affix.” The affix consists of a  $C_S$  consonant that is any one of the 33 Referential consonant-forms from the table in Sec. 4.6 above, combined with is a standard Type-3  $V_X$  vowel-form corresponding to the nine  $V_X$  affix-degrees shown below. It is the appearance of a lone Type-3  $V_X C_S$  affix without any adjacent Type-1 or Type-2 affix for it to apply to, that triggers its interpretation as this specialized personal reference affix. Additionally, Column 4 vowel-forms from the Standard Vowel-Sequence may be employed as shortcuts for the Transrelative cases regardless of other  $V_X C_S$  affixes being present in the same Slot. **Note that for purposes of avoiding ambiguities with Type-3 case-accessors, a Referential affix cannot add the ABSTRACT Perspective increments -w or -y.**

##### Slot V or VII $V_X$ Values Indicating a Referential Shortcut

can only be used if no other $V_X C_S$ affix in the same Slot		
Degree 1	ia / uä	POSSESSIVE case
Degree 2	ie / uë	PROPRIETIVE case
Degree 3	io / üä	GENITIVE case
Degree 4	iö / üë	ATTRIBUTIVE case
Degree 5	eë	PRODUCTIVE case
Degree 6	uö / öë	INTERPRETATIVE case
Degree 7	uo / öä	ORIGINATIVE case
Degree 8	ue / ië	INTERDEPENDENT case
Degree 9	ua / iä	PARTITIVE case

can be used regardless of other $V_X C_S$ affix present		
1	ao	THEMATIC case
2	aö	INSTRUMENTAL case
3	eo	ABSOLUTE case
4	eö	AFFECTIVE case
5	oë	STIMULATIVE case
6	öe	EFFECTUATIVE case
7	oe	ERGATIVE case
8	öa	DATIVE case
9	oa	INDUCIVE case

#### 4.7 Bias Adjuncts

Each Bias adjunct has the same consonant-form as an associated lexico-semantic root phonologically structured to contain continuant and sonorant consonants so that when used as autonomous adjuncts, they may be pronounced in an exaggerated, prolonged fashion. Additionally, those ending in a voiceless stop or voiceless affricate may aspirate or even ejectivize the consonant.. Bias adjuncts function much like English “supra-segmental” interjections such as “Phew!”, “Damn!”, “tsk-tsk”, “Pssshhh”, “huh?”, “meh”, “hmmm”, etc. Sentence-initial Bias adjuncts scope over the entire sentence. Otherwise, they scope over the preceding formative. They should be pronounced with a preceding and following pause.

ACC	ACCIDENTAL	lf	<i>‘As luck would have it...’ ‘Fate has decided that...’ ‘What luck!’</i>
ACH	ARCHETYPAL	mçt	<i>what (a) ...!; how . . . !; Boy! Did (does) X ever ...</i>
ADM	ADMISSIVE	l	<i>‘Mm-hm’ ‘Uh-huh’ (said as mere acknowledgement of a statement without any implied agreement with or assent to the statement)</i>

<b>ANN</b>	<b>ANNUNCIATIVE</b>	drr	<i>'Guess what!' or 'Wait till you hear this!'</i>
<b>ANP</b>	<b>ANTICIPATIVE</b>	lst	<i>'I'm looking forward to this!'</i>
<b>APB</b>	<b>APPROBATIVE</b>	řs	<i>'(That's) OK' '(That's) alright' '(That's) good' '(That's) fine' 'Very well' 'Sure'</i>
<b>APH</b>	<b>APPREHENSIVE</b>	vvz	<i>'I'm worried...' 'I've got a bad feeling about this...'</i>
<b>ARB</b>	<b>ARBITRARY</b>	xtł	<i>'..Yeah, whatever...' , '...Ah, what the hell, I'm going ahead and...'</i>
<b>ATE</b>	<b>ATTENTIVE</b>	ňj	<i>'Well, whaddya know...' 'Well, will you look at that...!' 'Well, go figure...' 'Who would've thought...?' 'Well I'll be!'</i>
<b>CMD</b>	<b>COMEDIC</b>	plł	<i>'Funny!' 'LOL'</i>
<b>CNV</b>	<b>CONTENSIVE</b>	rrj	<i>'I'm telling you...' , 'I told you so!' , 'You see?!'</i>
<b>COI</b>	<b>COINCIDENTAL</b>	ššč	<i>'What a coincidence!'</i>
<b>CRP</b>	<b>CORRUPTIVE</b>	gžž	<i>'How corrupt!' 'What corruption!'</i>
<b>CRR</b>	<b>CORRECTIVE</b>	ňt	<i>'that is to say...' , 'What I mean(t) to say is...' 'I mean....'</i>
<b>CTP</b>	<b>CONTEMPTIVE</b>	kšš	<i>'What nonsense!' or 'What bullshit!'</i>
<b>CTV</b>	<b>CONTEMPLATIVE</b>	gvv	<i>'I wonder how...' , 'that's odd...' , 'I don't get it...' , or a quizzical 'hmmmm.'</i>
<b>DCC</b>	<b>DISCONCERTIVE</b>	gzj	<i>'I'm not sure about this.' 'I don't feel comfortable about this.' 'I'm feeling out of my element here.'</i>
<b>DEJ</b>	<b>DEJECTIVE</b>	žžg	<i>'(sigh)' [of dejection/disillusionment]</i>
<b>DES</b>	<b>DESPERATIVE</b>	mřř	<i>'I don't know how to say this, but...' 'I'm afraid that....' 'I'm sorry to have to tell you, but...'</i>
<b>DFD</b>	<b>DIFFIDENT</b>	cč	<i>'sorry, but...' 'It's nothing. It's just...'</i>
<b>DIS</b>	<b>DISMISSIVE</b>	kff	<i>'Is that it?' 'Big deal!' 'So what!?''</i>
<b>DLC</b>	<b>DELECTATIVE</b>	zmm	<i>'Whee!'</i>
<b>DOL</b>	<b>DOLOROUS</b>	řřx	<i>'Ow!' 'Ouch!'</i>
<b>DPB</b>	<b>DISAPPROBATIVE</b>	ffx	<i>'I don't like the fact that...' 'It bothers me that....' 'Unacceptable!' 'I hate it!'</i>
<b>DRS</b>	<b>DERISIVE</b>	pfc	<i>'How foolish!' 'How silly!' 'Look at how foolish/silly/ridiculous this is!'</i>
<b>DUB</b>	<b>DUBITATIVE</b>	mmf	<i>'Hmm, not likely.' 'I doubt it.' 'Sounds fishy to me' 'I don't trust this/it/him/her/them...'</i>
<b>EUH</b>	<b>EUPHORIC</b>	gzz	<i>'(Sigh) What bliss!'</i>
<b>EUP</b>	<b>EUPHEMISTIC</b>	vvt	<i>'Let's just say that...' or 'Well, let me put it this way....'</i>
<b>EXA</b>	<b>EXASPERATIVE</b>	kçç	<i>'Dammit!' 'Look, don't you get it?...' 'Look, I'm trying to tell you....'</i>
<b>EXG</b>	<b>EXIGENT</b>	rrs	<i>'It's now or never!'</i>
<b>EXP</b>	<b>EXPERIENTIAL</b>	pss	<i>'Ah!' , 'Well, now!' 'So!' [Italian 'Allora!']</i>
<b>FOR</b>	<b>FORTUITOUS</b>	lzp	<i>'It's just as well that...' or 'All's well that ends well...'</i>
<b>FSC</b>	<b>FASCINATIVE</b>	žžj	<i>'Cool!' 'Wow!' 'Awesome!'</i>

<b>GRT</b>	<b>GRATIFICATIVE</b>	mmh	<i>'Ah! What bliss...!' 'Oh, there's nothing like....' [physical pleasure only]</i>
<b>IDG</b>	<b>INDIGNATIVE</b>	pšš	<i>'The nerve!' or 'How dare...!?'</i>
<b>IFT</b>	<b>INFATUATIVE</b>	vvr	<i>'Praise be to...!' 'Oh, thank God for...!' 'There's nothing more sacred/holy/important than...!'</i>
<b>IPL</b>	<b>IMPLICATIVE</b>	vll	<i>'of course,' 'after all,' 'needless to say.'</i>
<b>IPT</b>	<b>IMPATIENT</b>	žžv	<i>'C'mon!, 'What're you waiting for?' 'so...already!' as in the sentence 'So dance already!'</i>
<b>IRO</b>	<b>IRONIC</b>	mmž	<i>'Oh, nice!' 'Just great!' 'Well, now, isn't this lovely!'</i>
<b>ISP</b>	<b>INSIPID</b>	lçp	<i>'Meh... (said due to lack of interest)' 'How boring/tedious/dull!'</i>
<b>IVD</b>	<b>INVIDIOUS</b>	řřn	<i>'Why does he/she/they get to... and I don't?!' 'How unfair (that I don't get to...)!'</i>
<b>MAN</b>	<b>MANDATORY</b>	msk	<i>'take it or leave it,' 'this is your last chance,'</i>
<b>OPT</b>	<b>OPTIMAL</b>	ççk	<i>prolonged 'so' or 'totally' as in 'I so don't care!' or 'That is totally not what I meant.'</i>
<b>PES</b>	<b>PESSIMISTIC</b>	ksp	<i>'Yeah, like it really matters that...' 'Pfft! What's it to me?'</i>
<b>PPT</b>	<b>PROPTIOUS</b>	mll	<i>'it's a wonder that' as in 'It's a wonder he didn't break a bone in that fall.'</i>
<b>PPX</b>	<b>PERPLEXIVE</b>	llh	<i>'Huh? What do you mean...? What the hell? 'WTF!?' 'You gotta be kidding me!'</i>
<b>PPV</b>	<b>PROPOSITIVE</b>	sl	<i>'what if...' 'It could be that....' 'Consider this: ...' 'Posit the following: ...' 'Assume for the sake of argument that....'</i>
<b>PSC</b>	<b>PROSAIC</b>	žžt	<i>'Meh... (said in disappointment)' 'How ordinary!'</i>
<b>PSM</b>	<b>PRESUMPTIVE</b>	nnṭ	<i>'It can only mean one thing..., 'and that's that!' 'and that's all there is to it!' or 'There's no two ways about it,....'</i>
<b>RAC</b>	<b>REACTIVE</b>	kll	<i>'My goodness! 'Wow!' 'Amazing!'</i>
<b>RFL</b>	<b>REFLECTIVE</b>	llm	<i>'Look at it this way...' 'As I see it,...' 'In my opinion...' 'From my point of view...'</i>
<b>RNC</b>	<b>RENUNCIATIVE</b>	msf	<i>'So much for...!' 'There goes...!'</i>
<b>RPU</b>	<b>REPULSIVE</b>	ššt	<i>'Yuck! Ew! How gross!'</i>
<b>RVL</b>	<b>REVELATIVE</b>	mm	<i>'No wonder...!' or 'So that's why...!' 'A-ha!....' 'Well, well, well!....'</i>
<b>SAT</b>	<b>SATIATIVE</b>	lṭ	<i>'How satisfying...!' 'At last, the pleasure of knowing/being/seeing/doing...' [psychological/emotional pleasure/satiety only]</i>
<b>SGS</b>	<b>SUGGESTIVE</b>	ltç	<i>'How about...' 'We could...' 'Might I suggest...'</i>
<b>SKP</b>	<b>SKEPTICAL</b>	rnž	<i>'Yeah, right!' 'Oh, sure! Like anyone's supposed to believe that!'</i>
<b>SOL</b>	<b>SOLICITATIVE</b>	ňňs	<i>'please'</i>
<b>STU</b>	<b>STUPEFACTIVE</b>	l č	<i>'Woah!' 'Holy, bejeezus!' 'What the...!' 'Jeez, Louise...!'</i>
<b>TRP</b>	<b>TREPIDATIVE</b>	llč	<i>'Oh, God...' 'Oh, no!....' 'Oh, dear!'" [fear-based]</i>
<b>VEX</b>	<b>VEXATIVE</b>	ksk	<i>'How annoying!' 'What a bother!' 'What a pain!'</i>

**NOTES:** Ithkuil 2011's LITERAL Bias has been eliminated: use HG1/1 or HG1/4 affixes instead. Ithkuil 2011's CYNICAL Bias is also eliminated: use IRO or SKP Bias instead. To express '*in a manner of speaking,*' '*so to speak,*' or '*for all intents and purposes*' see the HG1 and HG2 affixes. The non-intensive use of Ithkuil 2011's INDIGNATIVE Bias is also eliminated; instead use SOLICITIVE Bias on a request that the addressee repeat themselves.

#### **4.8 The Parsing Adjunct**

See Section 2.3, paragraph No. 5 for a description of this specialized adjunct.

#### **4.9 Recommendation on the Pronunciation of Adjuncts and Referentials**

Certain short monosyllabic or two-syllable adjuncts and Referentials are likely to be identical in form to the initial syllables of many formatives. Typically these would be words such as single- or dual- Referentials, the carrier adjunct, and a short monosyllabic modular adjunct. While adherence to the parsing rules in Sec. 2.1 is theoretically sufficient to distinguish these short words from the initial syllables of a subsequent formative, the author nevertheless recommends that such adjuncts be pronounced either with high, falling-rising or rising-falling tone, to maximally distinguish them phonetically from the initial tone (likely to be mid-tone) of a following formative.

## 5.0 MISCELLANEOUS DESIGN NOTES

### 5.1 Rethinking the use of RECIPROCAL Valence

The translation of sentences where the two parties in the reciprocal relationship are named by one referent, will now require use of the SBS suffix on the referent to indicate that separate parties within the named referent are participating in the reciprocal relationship, otherwise, the party named will be assumed as a whole to constitute one “side” of the reciprocal activity. The following examples illustrate how this use of RCP valence and the SBS suffix will function:

Write-RCP they-IND.

TRANSLATION: *‘They write (to an unnamed party and that other party presumably writes back).’*

Write-RCP they-IND-SBS/1.

TRANSLATION: *‘They write to each other.’* [i.e. , one member of the ‘they’-referent writes to another member of the ‘they’-referent and vice-versa]

If it is necessary to specify a specific case-relationship for one or both parties in the reciprocal relationship, it will be necessary to name the parties separately so that appropriate cases can be assigned. For example:

write-RCP (S)he-IND you(sg.)-TSP

TRANSLATION: *You (two) write on behalf of each other. (LITERALLY: (S)he writes on behalf of you and vice-versa.)*

talk-RCP man-IND child-DAT clown-REF

TRANSLATION: *The man and the child talk to each other about the clown. OR The man and the child discuss the clown.*

talk-RCP they-IND clown-REF

TRANSLATION: *They talk about the clown (with somebody else). OR They discuss the clown( with somebody).*

talk-RCP they-IND-SBS/1 clown-REF

TRANSLATION: *They talk to each other about the clown. OR They discuss the clown.*

If necessary to specify that the reciprocity is of a “back (and forth)” nature, where first one party initiates an action which is subsequently paralleled back to the first party, one should utilize ITC aspect. Furthermore, one can use the ITN affix and/or Phase to provide additional detail if necessary. Additionally, the SWR affix can be utilized to specify that a referenced formative is the same as one of the reciprocal parties, e.g.,

talk-RCP man-IND child-DAT man-REF-SWR/5

TRANSLATION: *The man and the child talk to each other about the man* [i.e., the man being talked about is the same man who is talking with the child].

## 5.2 “Tense”-Like Connotations of Various Aspect/Extension Combinations

The following Aspect + Extension or Aspect 1 + Aspect 2 combinations have been formalized to indicate “tense”-like information on a verb:

**RTR Aspect + DEL Extension** = ‘has been / has done’

**RTR Aspect + PRX Extension** = ‘has been (doing) [and may still be (doing)]’

**RTR Aspect + ICP Extension** = ‘began to be’ / ‘began doing’

**RTR Aspect + ATV Extension** = ‘finished being / finished doing’

**RTR Aspect + GRA Extension** = ‘gradually developed into being/doing’

**RTR Aspect + DPL Extension** = ‘gradually stopped being/doing & is/does no longer’

**RTR Aspect + PCS Aspect** = ‘just now finished being/doing’

**RTR + HAB Aspects + DEL Extension** = ‘used to be/do but no longer’

**RTR + HAB Aspects + PRX Extension** = ‘used to be/do and may still be (doing)’

**PRS Aspect + DEL Extension** = simple future tense

**PRS Aspect + PRX Extension** = ‘will be/do & may already be (doing)’

**PRS Aspect + ICP Extension** = ‘will begin to be’ / ‘will start doing’

**PRS Aspect + ATV Extension** = ‘will finish being/doing’

**PRS Aspect + GRA Extension** = ‘will develop into being/doing’

**PRS Aspect + DPL Extension** = ‘will gradually stop being/doing’

**PRS Aspect + PCS Aspect** = ‘just about to be/do’

**PRS + RTR Aspects** = ‘will have’ (e.g., *By then he will have done it.*)

**PRS + HAB Aspects + DEL Extension** = ‘will now be (doing) but not yet’

Additionally, the **RTI** suffix specifies when an event occurs relative to another event or relative to the contextual “present” of an utterance. This affix may be used on its own or in conjunction with the existing **TPP** affix to provide specific tense-like information.

-It	<b>RTI — Relative Timeline Indicator</b>
1	<p>X is/occurs after the relative/contextual present of a statement (as may be defined by TPP affix) but is considered completed or no longer applicable after-the-fact from the speaker’s present viewpoint. Note in the examples below how English translations of this affix may require use of a negative not present in the original:</p> <ul style="list-style-type: none"> <li>• <i>Flowering plants <b>had not yet developed</b> / <b>were yet to develop</b> during the Cambrian geological period</i> (but they have developed since).</li> <li>• <i>The enemy’s code <b>will still be unbroken</b> / <b>will have yet to be broken</b> by the time they attack us</i> (but it will be eventually broken)</li> <li>• <i>The boy <b>later realized</b> / <b>had not yet realized</b> the clown was lying about the Clown Planet</i> (but he realizes it now). (TPP/3)</li> </ul>
2	<p>X is/occurs after the relative/contextual present of a statement (as may be defined by TPP affix) and its occurrence is still outstanding/impacting the speaker’s present viewpoint. Note in the examples below how English translations of this affix may require use of a negative not present in the original:</p> <ol style="list-style-type: none"> <li>1. <i>Hurry! The bus <b>is yet to depart</b> / <b>has not yet departed</b>.</i> (lack of TPP affix implies present context)</li> </ol> <ul style="list-style-type: none"> <li>• <i>By leaving your seat just now to get a soda, you’ve <b>missed (seeing)</b> / <b>have not seen</b> the magician do his disappearing act.</i> (TPP/4)</li> <li>• <i>The boy <b>hasn’t (yet) realized</b> the clown was lying about the Clown Planet.</i> (TPP/3)</li> </ul>
3	<p>X continues to occur or have an effect in the relative/contextual present or has begun during or prior to the relative/contextual present and will continue into the future of that same relative/contextual present, e.g.,</p> <ul style="list-style-type: none"> <li>• <i>She <b>was (still) sleeping</b> when I left the apartment.</i> (TPP/3 or TPP/4)</li> <li>• <i>She’ll <b>(still) be sleeping</b> when I arrive.</i> (TPP/6 or TPP/7)</li> <li>• <i>Civilizations rise and fall but the Euphrates River <b>keeps rolling along</b>.</i> (NOMIC or TPP/5)</li> <li>• <i>I’ve <b>been watching</b> TV all day.</i> (lack of TPP affix implies present context)</li> <li>• <i>We’ll <b>be watching</b> the apartment all night.</i> (TPP/7)</li> </ul>



4	<p>X continues to occur or have an effect in the relative/contextual present or has begun during or prior to the relative/contextual present and will continue into the future of that same relative/contextual present, but does not continue into, or have a retrograde effect/impact on the speaker's contextual present, e.g.,</p> <ul style="list-style-type: none"> <li>• <i>She <b>was (still) sleeping</b> when I left the apartment.</i> (TPP/3 or TPP/4) (but she's no longer sleeping now)</li> <li>• <i>She'll <b>(still) be sleeping</b> when I arrive.</i> (TPP/6 or TPP/7) (but she's not sleeping yet)</li> <li>• <i>I've <b>been watching</b> TV all day.</i> (lack of TPP affix implies present context) (but I'm not doing so now)</li> <li>• <i>We'll <b>be watching</b> the apartment all night.</i> (TPP/7) (but we're not doing so yet)</li> </ul>
5	<p>X has been/done so in the past and will again in the future, but not being/doing so at present, e.g.,</p> <ul style="list-style-type: none"> <li>• <i>the <b>once-and-future</b> king</i></li> <li>• <i>I <b>did it before</b> and I <b>will do it again</b>.</i></li> </ul>
6	<p>X begins to be/occur before the relative/contextual present of a statement (as may be defined by TPP affix) and continues to be/occur during that same relative/contextual present but does not impact the speaker's contextual present, e.g.,</p> <ul style="list-style-type: none"> <li>• <i>The band <b>had started playing</b> / The band <b>was now playing</b> (then, but no longer).</i></li> <li>• <i>The war <b>will have begun</b>.</i> (TPP/6 or TPP/7) (then, but not now).</li> <li>• <i>Dody the (one-and-only) sentient dinosaur (due to a freak mutation), <b>had watched</b> the giant meteor approach her home, whose name 65 million years later would be Chicxulub, with a sense of dread.</i> (TPP/1)</li> </ul>
7	<p>X begins to be/occur before the relative/contextual present of a statement (as may be defined by TPP affix) and continues to be/occur during that same relative/contextual present, e.g.,</p> <ul style="list-style-type: none"> <li>• <i>The band <b>has started playing</b> / The band <b>is now playing</b>.</i></li> <li>• <i>The war <b>will have begun</b>.</i> (TPP/6 or TPP/7)</li> <li>• <i>Dody the (one-and-only) sentient dinosaur (due to a freak mutation), <b>watched</b> the giant meteor approach her home, whose name 65 million years later would be Chicxulub, with a sense of dread.</i> (TPP/1)</li> </ul>
8	<p>X is/occurs before the relative/contextual present of a statement (as may be defined by TPP affix) and the consequences of its occurrence are still outstanding/impacting the speaker's present viewpoint, e.g.,</p> <ul style="list-style-type: none"> <li>• <i>The bus <b>had (already) departed</b> when/by the time I arrived.</i> (TPP/3)</li> <li>• <i>The bus <b>will have (already) departed</b> by the time I arrive.</i> (TPP/7)</li> </ul>
9	<p>X is/occurs before the relative/contextual present of a statement (as may be defined by TPP affix) but is considered completed or no longer applicable after-the-fact from the speaker's present viewpoint, e.g.,</p> <ul style="list-style-type: none"> <li>• <i>The river <b>had (already) dried up</b> when/by the time the settlers arrived.</i> (TPP/2 or TPP/3)</li> <li>• <i>The Sun <b>will have (already) gone nova</b> when/by the time we develop interstellar ships.</i> (TPP/8)</li> </ul>

### 5.3 Using STATIVE vs. DYNAMIC Function

The distinction between STATIVE vs. DYNAMIC function is both objective and subjective. Certain contextual situations require one or the other, while for other contextual situations, either STATIVE or DYNAMIC Function can be used with each having a different meaning/interpretation.

**STATIVE FUNCTION:** As a general rule, STATIVE function indicates that the formative refers to a static unchanging entity (at least within the duration of the contextual situation being referred to). The following would be marked for STATIVE function:

- Nouns (i.e., formatives having unframed  $V_C$  case-marking) denoting physically tangible objects/entities being referred to only as a means of identifying them (i.e., any motion or change or usage being undergone by the object/entity is irrelevant to the speaker's intent), e.g., *a ball, a tree, a rock, a person, a cloud*, etc.
- Nouns referring to collective, affective, intangible or abstract entities being referred to only as a means of identifying them (i.e., any change, motion or usage associated with the object/entity is irrelevant to the speaker's intent), e.g., *a crowd, a thought, an emotional state, a situation, a monarchical form of government, beauty as a concept, an aesthetic experience, an affective sensation*, etc.
- Nouns referring to tangible actions/movements/motions/changes that the speaker is only referencing as a gestalt-like bounded entity (having an implied duration or spatial boundary) where the fact that the entity involves change/motion/movement/action/growth is irrelevant, e.g., *(an instance/state of) laughter, (a pattern of) ocean waves, a conversation, (being out) fishing, (being out for) a walk, (an instance of) reading, (an instance/state of) hammering (going on), a meal [as an event, not a process]*, etc.
- Verbs (i.e., unframed formatives marked for  $V_K$  Illocution/Validation or framed formatives) which naturally refer to a non-dynamic unchanging state (at least within the duration/scope of the speaker's intended context), including states of identification, denotation, description. Examples:
  - *She is a dancer; The sky is/appears orange; The sunset is beautiful; My name is Joe/I am called Joe; The box contains nails; You look terrible; I am reading; Money symbolizes evil; Unhappiness indicates failure; Disease is rampant in that city; Proper nutrition goes hand in hand with healthy children.*

**DYNAMIC FUNCTION:** As a general rule, DYNAMIC function indicates that the formative refers to an action/movement/motion/change or a state involving change/motion/movement/action in which the change/motion/movement/action is relevant to the speaker's intended meaning. For contexts in which a grammatical patient is involved (marked by INDUCIVE, AFFECTIVE, or ABSOLUTE case), the DYNAMIC Function implies a tangible effect/impact/change undergone by the patient as a result. The following would be marked for DYNAMIC Function:

- Nouns referring to states involving change/motion/movement/action in which the change/motion/movement/action is relevant to the speaker's intended meaning. Translations of such DYNAMIC-marked nouns into English will often involve a gerund form or a paraphrastic form emphasizing the verbal derivation (in English) of such a noun. Examples: *the (raging of the) storm; dancing; problem-solving; a meal [as a process]*, etc.
- Verbs involving change/motion/movement/action in which the change/motion/movement/action is relevant to the speaker's intended meaning, especially those involving an agent/enabler and a patient.

In many cases, a particular formative may take either STATIVE or DYNAMIC Function, resulting in subtly different meanings/translations. Examples:

STATIVE	DYNAMIC
<p><b>Byalá pa.</b> <i>'He has/shows/is showing common sense.'</i></p>	<p><b>Byulá pa. (Byulá pu.*)</b> <i>'He uses/exercises/is demonstrating common sense.'</i> [*if emphasizing the resulting beneficial change in state]</p>
<p><b>Vvralá mi wurçpëi.</b> <i>'Her passion is dance / She feels passionate about dance.'</i></p>	<p><b>Vvralá mi urçpulëi.</b> <i>'Her passion is dancing / She feels passionate about dancing.'</i></p>
<p><b>Tladatřá çkava.</b> <i>Disease is rampant there.</i></p>	<p><b>Tludatřá çkava.</b> <i>Disease runs rampant there.</i></p>
<p><b>Txadá ku.</b> <i>They are having a meal.</i></p>	<p><b>Txudá ku.</b> <i>They are eating a meal.</i></p>
<p><b>Waltlá wele lo.</b> <i>I make the child wear a jacket.</i></p>	<p><b>Altlúl wele lo.</b> <i>I put a jacket on the child / I dress the child in a jacket.</i></p>
<p><b>Malá welu wiosaçcä espanya.</b> <i>The child is speaking (in) Spanish.</i></p>	<p><b>Mulá welu wiosaçcä espanya.</b> <i>The child is saying something in Spanish.*</i> [*This meaning can also be conveyed by using CTE Specification: <b>mülá</b>]</p>

## Sec. 5.4 Relative Clause Formation

Because of the existence of the RELATIVE case and the DESCRIPTIVE case, relative clauses sometimes work differently in New Ithkuil than in Ithkuil 2011. Usage is shown via the examples below.

### 1a. Weñayá kšilo äpçólöwa lu eñtyarkena.

'compose.in.writing'-RTR 'clown'-STA/OBJ-ERG FRAMED:CPT-'read'-DYN/CSV-PCS-THM 1m-IND 'written.page'-MSC/COA-TPF/3-THM

*A clown wrote the book I just finished reading.*

[More literally: *A clown wrote what I just finished reading -- a book.*]

The above sentence could also be structured using a RELATIVE case-frame, however it would require a Reduplicative specialized personal-reference root (see Sec. 4.6.4) with a switch-reference affix:

1b. **Weñayá kšilo eñtyarkena äpçölö'yu lu thaxač.**

'compose.in.writing'-RTR 'clown'-STA/OBJ-ERG 'written.page'-MSC/COA-TPF/3-THM FRAMED:CPT-'read'-DYN/CSV-PCS-RLT 1m-IND  
Rdp-SWR/1-THM

*A clown wrote the book I just finished reading.*

The following two sentences utilize a RELATIVE case-frame:

2a. **Žalá li kšileněi máli'hu welu.**

'see' 1m/NEU-AFF 'clown'-STA/OBJ-TPF/3-STM FRAMED:'talk'-RCP-FAC-RLT 'child'-IND

*I see a clown (who is) talking with a child.'*

2b. **Erčádókh elavöte žžjádú'u kšivěi.**

'state.of.being.corrupted'-STA/CTE-PRX-SBT/7 'child'-N-DCD/6-ABS FRAMED:'feel.fascination'-STA/BSC-PRX-RLT 'clown'-STA/OBJ-N-STM

*'Children who like clowns have obviously been corrupted.'*

The following sentence utilizes a noun in the DESCRIPTIVE case, which operates like RELATIVE case for adjectival clauses:

3. **Erčuláfs elatwe ainšai'dä kšivöto hlarněi-yúrku'u.**

'corrupt'-DYN/BSC-ATI/1 'child'-MDS/N-ABS NEG/4-FNC-'be.well-behaved'-PRX-DSP 'clown'-STA/OBJ-N-DCD/6-ERG concat.stem:'ocelot'-STM-FRAMED:parent.stem:'own'-PRX-RLT

*'Ocelot-owning clowns tend to corrupt children who are naughty.'*

The following sentence utilizes a carrier adjunct marked for RELATIVE case:

4. **Yuřká warrneněi kšila hlu'u Bubu.**

'own'-PRX 'ocelot'-TPF/3-STM 'clown'-STA/OBJ-THM CARRIER-RLT 'Bubu'

*'The clown owns an ocelot named Boo-boo.'*

Determining the semantic role of the "head" of a relative clause depends on the structure of the sentence. In sentences such as 5a below (as well as Sentence 1a above) where the head of the clause is contained within the subordinated case-frame, the semantic role of the head of the relative clause is shown by the case of the case-frame (i.e., the case shown on the framed verb beginning the relative clause).

5a. **Umňälörďá zúlikti lo kšilěi welene.**

'scream'-STA/CTE-SQC/6 FRAMED: 'see'-DYN-TPP/4-AFF 1m-ERG 'clown'-STM 'child'-TPF/3-ABS

*'The child whom I made look at a clown is now screaming.'* [more literally: *'Now screaming is whom I made look at a clown -- the child.'*]

However, in sentence 5b below, the head of the relative clause is not contained within the case-frame, therefore its semantic role within the case-frame remains implied only, since the case-frame must be marked for RELATIVE case.

5b. **Umñälá lo welene máli’hu kšivu.**

‘scream’-STA/CTE 1m-ERG ‘child’-TPF/3-ABS FRAMED:‘talk’-RCP-FAC-RLT ‘clown’-N-IND  
*‘I made the child who talks with clowns scream.’*

If necessary for disambiguation, the semantic role of the head in such a sentence can be marked using a Reduplicative Referential as shown in Sentence 5c below (as well as Sentence 1b above).

5c. **Umñälá lo welene máli’hu **thu** kšivu.**

‘scream’-STA/CTE 1m-ERG ‘child’-TPF/3-ABS FRAMED:‘talk’-RCP-FAC-RLT **Rdp-IND** ‘clown’-N-IND  
*‘I made the child who talks with clowns scream.’*

Note that in cases such as Sentences 1b and 5c above where the Reduplicative Referential appears without an accompanying SWR switch-reference affix while inside a case-frame functioning as a relative clause, the Reduplicative Referential refers to the head of the relative clause.

Unrestricted relative clauses are shown either by attaching a coordinative clause (as in Ithkuil 2011) or by inserting the clause using PARENTHETICAL register.

## Sec. 5.5 Use of the ATTENDANT Case

The ATTENDANT case superficially acts as a variant of the LOCATIVE case, to indicate in whose presence something occurs/takes place/is situated. However, such a function has implications allowing the ATTENDANT case to identify a vague or externally determined non-causal (and potentially causal) relationship to the event/state/act/occurrence/situation in question. The party marked by ATTENDANT case becomes relevant to or involved in a situation, however, the manner of this involvement/relevancy is vague, undefined, or left to the imagination/speculation of the addressee.

The rationale behind such an interpretation of the ATTENDANT case is that the party in whose presence something occurs, if animate, implicitly becomes a witness to the occurrence. Being a witness furthermore implies that the party experiences some effect or consequence of what has taken place in their presence. Such an effect/consequence may be nothing more than maintaining a visual memory of what has occurred, but on the other hand, may result in initiating a responsive action by the witnessing party (i.e., a consequent causal act). Even inanimate entities marked for ATTENDANT case can potentially become involved in the state/act/event/situation to the point of causal consequences. For example, if a fire takes place “in the presence of” a box of fireworks, the implied consequence is obvious.

The following examples illustrate how the ATTENDANT is used to imply contexts of involvement and consequence:

[with second party in DATIVE case:] <b>Muliųtmá mu hli Jon hma ažxíp.</b> <i>'She shouted "fire!" to John'</i>	[with second party in ATTENDANT case:] <b>Muliųtmá mu hli'e Jon hma ažxíp.</b> <i>'She shouted "fire!" in John's presence' / 'She shouted "fire!" with John nearby'</i> (thus causing John to do something, e.g., run for a fire extinguisher, run out of the building, etc.)
--	--

[with second party in COMITATIVE case:] <b>Wanzvihá mu welë'i.</b> <i>'She is playing a game with the child.'</i>	[with second party in ATTENDANT case:] <b>Wanzvihá mu weli'e.</b> <i>'She is playing a game [with someone] while the child watches/while the child sits nearby/in the child's presence.'</i>
---	--

Also, for sentences where the semantic role of the external head of a relative clause is left unstated (as in the left-hand sentence below or in Sentence 5b in the previous section), the implied case would be ATTENDANT. Thus, the two sentences below are semantically equivalent.

[with semantic role of the head of a relative clause implied:] <b>Zalá li welenëi máli'hu kšivu.</b> <i>'I see the child who talks with clowns.'</i>	[with the head of a relative clause marked by ATTENDANT case:] <b>Zalá li welenëi máli'hu thi'e kšivu.</b> <i>'I see the child who talks with clowns.'</i>
--	--

## 5.6 Equivalents to English WH-Interrogatives

Although WH-questions can be handled as in Ithkuil 2011 using a verb such as 'state' or 'say/tell' in DIRECTIVE Illocution to express a command to provide the information being sought, one can also form the equivalent of WH-questions using the PVS Referential in conjunction with the IVL<sub>1</sub>/4 affix **-in!** indicating INTERROGATIVE Illocution so that the PVS Referential functions much like an English interrogative pronoun. Examples: **Mmiexin!** 'Why? [i.e., For what purpose?]', **Mma'oxin!** 'When?', **Nnioxin!** 'To/for whose benefit? / To the benefit of what?', **Ññëöxin!** 'Resulting (detrimentally) in what? / With what undesirable result?', **Mmauxin!** 'Whose? / Belonging to what?'

Finally, one can form the equivalent of WH-questions using INTERROGATIVE Illocution in conjunction with a formative affixed with Degrees 1, 2, 3, 8 or 9 of the PTN affix shown below. When used this way, the formative carrying the PTN affix must be marked as the semantic focus of the sentence (i.e., it must either immediately precede the verb in terms of word-order or it must carry the TPF/9 affix).

**PTN Affix**

<b>-sv</b>	<b>PTN Potential</b>
1	whatever X is / whatever X may be
2	whatever X was or may have been (but is no more)
3	whatever X will be or may become (but is not yet)
4	...or something like/similar to X in function, purpose, or consequence
5	...or something like/similar to X in appearance/description
6	and whatever else X may be(come)
7	and whatever else X entails or carries with it as a consequence
8	which(ever) X (it is or may be) [i.e., of a known/limited number of possible identifications available to assign to X, the one identification that actually is (chosen as) X]
9	what(ever) X (it is or may be) [i.e., of an unknown number of possible identifications one might/could assign to X, the one identification that actually is (chosen as) X]

Examples:

**Weilüsve erčuléi kšilo.** ‘Which of the children did the clown corrupt?’

**Laluḡkusvu utxoléi akftyäloë.** ‘What kind of person drinks ammonia?’

**5.7 Using Case on UNFRAMED Verbal Formatives**

Using the case-stacking affix (see Sec. 3.9.2), a noun-case can be placed on an UNFRAMED verbal formative to give a meaning of “to be (something that is) X” where X is the formative modified by the case’s function. Such constructions can often substitute for case-frames. Examples:

DEPENDENT case: **Hre willyothoilyá utplaliör.** ‘My self-esteem is dependent upon (my) singing this song well.’

POSTCURSIVE case: **A hrelu-azčojhaillöelyá.** ‘It was after the child pulled a tantrum.’

Intrilinear analysis: RTR Type2.concatenated.root:‘person’-Stem2-IND - parent.root:Stem1-‘self-centered.behavior’-DYN/CSV-CRL<sub>2</sub>/1-default.CA-PCR-ASR/OBS

TRANSFORMATIVE case: **Kšölaölwáu wele.** ‘The child is hereby transformed into a clown!’ (more literally: ‘It is transformation into a clown that is declared to happen to the child!’)

## 5.8 The CHC Affix

This affix is used to specify the exact semantic relationships between the participants to verbs such as “eat” and “sing” where case-marking alone is insufficient to describe the exact nature of the the participants’ enablement of an action.

<b>-rz</b>	<b>CHC: Degree of Choice by Externally-Induced Agent</b> (operates like the existing IMP affix except that the party is the Agent of an externally-induced or externally-enabled (i.e., EFFECTUATIVE) act, rather than the Patient of an agential act)
1	party made/induced to initiate the state/act/event by another party/force/situation - can do nothing to stop it, initiation is inevitable
2	party made/induced to initiate the state/act/event by another party/force/situation - chooses to acquiesce due to being okay with, or indifferent as to outcome
3	party made/induced to initiate the state/act/event by another party/force/situation - tries to prevent/avoid but fails
4	party made/induced to initiate the state/act/event by another party/force/situation - tries to avoid and partially succeeds/mitigates impact
5	party made/induced to initiate the state/act/event by another party/force/situation - tries to prevent/avoid and succeeds
6	party made/induced to initiate the state/act/event by another party/force/situation - inadvertently helps/enables outcome
7	party made/induced to initiate the state/act/event by another party/force/situation - acquiesces/helps/enables outcome against own interest w/o thinking
8	party made/induced to initiate the state/act/event by another party/force/situation - intentionally acquiesces/helps/enables outcome consciously against own interest
9	party made/induced to initiate the state/act/event by another party/force/situation - intentionally acquiesces/helps/enables outcome for own benefit

**Example:** The following chart of sentences illustrates the use of the CHC affix as a means of distinguishing various semantic relationships between EFF, ERG, IND, DAT, and CSM participants to the act of eating.

English Sentence	Structure of Translation into New Ithkuil	Translation Notes
The girl eats.	‘eat’-DYN ‘girl’-IND	
The girl eats an apple.	‘eat’-DYN ‘girl’-IND ‘apple’-CSM	
An apple gets eaten. / Someone eats an apple.	‘eat’-DYN ‘apple’-CSM	LITERALLY: [someone] eats the apple.
The man feeds the girl an apple.	‘give’-DYN ‘man’-ERG ‘girl’-DAT/IND ‘apple’-CSM ‘eat’-BSC-PUR	LITERALLY: The man gives the girl an apple to eat
The man gets the girl to eat an apple.	‘eat’-DYN ‘man’-EFF ‘girl’-IND- <b>CHC/9</b> ‘apple’-CSM	LITERALLY: The man convinces the girl to eat an apple.
The girl is given an apple to eat.	‘give’-DYN ‘girl’-DAT/IND ‘apple’-CSM ‘eat’-BSC-PUR	LITERALLY: [someone] gives the girl an apple to eat
The girl is/gets fed an apple.	‘eat’-DYN ‘girl’-IND- <b>CHC/9</b> ‘apple’-CSM	LITERALLY: The girl gets convinced to eat an apple.
An apple gets fed to the girl.	‘apple’-CSM ‘give’-DYN ‘girl’-DAT/IND- <b>CHC/2</b> ‘eat’-BSC-PUR	LITERALLY: An apple is given to the girl to eat.
The girl gets fed.	‘eat’-DYN ‘girl’-IND- <b>CHC/5</b>	LITERALLY: The girl does nothing to stop being made to eat.
The girl gets eaten.	‘eat’- DYN ‘girl’-CSM- <b>CHC/2</b>	LITERALLY: [s.o./something] eats the girl (who tries but fails to stop it).



The girl eats herself.	'eat'-DYN 'girl'-IND/CSM	
The girl gets herself eaten.	'eat'- DYN 'girl'-CSM- <b>CHC/7</b>	LITERALLY: [s.o./s.t.] eats the girl (who doesn't think to try to avoid it).
Feeding is taking place (i.e., someone is feeding someone/something else).	'eat'-DYN- <b>CHC/5</b>	LITERALLY: Being made to eat is taking place.
Feeding is taking place (i.e., someone is giving someone else food to eat).	'give'-DYN Inc.Stem:'eat'/Format:PUR-'food'-CSM	LITERALLY: Giving of food to eat is taking place.

Here is an additional example using the verb 'jump.' (NOTE: in the following examples, several of the sentences should take a Phase affix, given that a state of jumping implies repetitive action. For simplicity's sake Phase is not shown.)

The boy jumps.	jump-DYN boy-IND
Mother makes the boy jump.	jump-DYN mother-EFF boy-IND
The boy is made to jump.	jump-DYN boy-IND- <b>CHC/2</b>
Jumping takes place. / There's jumping going on.	jump-STA
Someone's jumping. / There's someone jumping.	jump-DYN
Someone's being made to jump.	jump-DYN- <b>CHC/5</b>

Another example using the verb 'sing':

The woman sings.	sing-DYN woman-IND
The woman sings a song.	sing-DYN woman-IND song-THM
A song is sung.	sing-DYN song-THM
There's singing going on. / Someone is singing.	sing-STA
He makes the woman sing.	sing-DYN he-EFF woman-IND
He gets the woman to sing.	sing- <b>CHC/5</b> he-EFF woman-IND
He gets singing to happen.	sing- <b>CHC/5</b> he-EFF
He makes singing occur.	sing-STA he-EFF ( or: sing-DYN he-EFF )

## 5.9 Syntax

1. **Main Clauses** (i.e., containing an UNFRAMED verbal formative): Default order is verb-initial. A formative with semantic focus is placed immediately preceding the main verb, while a semantic topic is placed in sentence-initial position.
2. **Subordinate clauses** (i.e., case-framed) are mandatorily verb-initial. Formatives with semantic focus or topicalization must utilize the TPF affix.
3. **Arguments to a Verb:** While the author tends to favor higher-order transrelative arguments to be closer to the main verb, such ordering is not mandatory and any ordering of arguments to a verb is acceptable as long as their case-marking causes no ambiguity.
4. **Formatives in Apposition:** formatives modifying another formative (e.g., marked in one of the Appositive or Relational Cases) must be immediately juxtaposed unless a Case-Scoping affix makes their relationship clear. Default apposition order is that the modifying formative follows the formative being modified. However, this default order is only mandatory if the relationships between a series of successive formatives would otherwise be ambiguous. If not, then the two formatives may be in either order: modified-modifier or modifier-modified.
5. **Referentials:** Referentials follow the main verb to which they are arguments; however, if the Referential is topicalized or has semantic focus, then it may precede the main verb as per the first rule above. If associated with formatives other than the main verb, the Referential normally follows the formative or other Referential with which it is associated; however, if case-marking makes clear the association between the Referential and the formative (or other adjunct), then the Referential may precede its associated formative or adjunct.
6. **Modular and Affixal Adjuncts:** A modular adjunct normally immediately precedes a formative and is considered semantically part of it. An affixal adjunct likewise precedes its formative (or that formative's modular adjunct). For formatives otherwise in sentence-final position, a modular adjunct or an affixal adjunct can be placed after the formative in sentence-final position.
7. **Register, Carrier, Quotative, Naming, and Phrasal Adjuncts:** Given that these adjuncts signal the beginning (and/or ending) of various specialized types of words/phrases, their position in a sentence is obviously determined by the beginning (or ending) of the word/phrase in question.
8. **Juncture between sentences:** The ultimate stress on a non-monosyllabic main verbal formative in sentence-initial position (including concatenated verbal formatives but NOT including any preceding adjuncts) shall be sufficient to indicate the beginning of a new sentence. Additionally, any sentence at the beginning of a breath group (i.e., an initial utterance or an utterance preceded by a pause for breath) shall require no further indication that a new sentence has begun. Otherwise, the first word of a new sentence shall take a word-initial prefix **ç(ë)-** to indicate the beginning of a new sentence. The form of the prefix before vowels is **ç-** (replacing the initial glottal-stop), while the form before consonants besides **w-** and **y-** is **çë-**. For words with initial **w-**, the **ç-** plus **w-** become **çw-**; for **ç-** plus **y-**, these combine to become **çç-**. All formatives and adjuncts have now been redesigned/modified where necessary to accommodate this without creating any ambiguities. When used before consonants besides **w-** and **y-**, the word-initial **çë-** prefix never takes syllabic stress (if necessary, add additional default syllables via Slots VIII and/or IX instead or by avoiding the use of a **C<sub>A</sub>** shortcut).
9. **Bias Adjuncts:** A Bias Adjunct should be pronounced with both a preceding and following pause, just as in English we tend to pause for breath before uttering a supra-segmental expression, e.g., 'Phew!...', 'Ugh!...', 'Hmm...', etc., and pause afterward.

## 6.0 DATES AND TIMES OF DAY

The new SPT Affix is now available for use in expressing the hour of day, day of the week, week of the month, month of the year, the year and the century. It is used with the number roots (usually Stem 3) to render, e.g., ‘the eighth hour of the day’, ‘the third day of the week (i.e., Wednesday)’ or ‘20th of May’, etc. Furthermore, each use of this affix can in turn be modified by a following Type-3 number affix (e.g., XX2, XX3, etc.) to enumerate the higher-ordered time-period named by the affix. For example, for the word *wuksärsëirwa* ‘22nd day of the month’, the **SPT/5** affix *-ëirw-* can in turn be modified by a following Type-3 number affix, e.g., *wuksärsëirwiasta* ‘22nd of May’. Other Type-3 affixes may also be used in the same fashion, as per the third example below.

-rw/-ry	SPT Specified Points in Calendrical Time
1	second(s) of a/the minute
2	minute(s) of an/the hour
3	hour [and minutes] of the day, i.e., time of day
4	day of the week [1st day of week = Monday]
5	day of the month
6	week of the month
7	month of the year
8	year
9	century

### Examples:

- ‘the 15<sup>th</sup> of March, 1969’ *wustarsëirwiazä walzarsa’o walzörsürwë’i*
- ‘on Saturday’ *wucpirwa’o*
- ‘on Saturday of next week’ *wucpirwölta’o*
- ‘the 21st century’ *wüllärsurya*
- ‘by the 34-second mark’ *wupšersaryo’a*

### Time of Day Using Degree 3 of the affix:

- ‘8:52 a.m.’ *wučkerwa ksalëirson* [Note the use of the COO/7 affix on the 2nd word; the phrase is literally ‘eighth hour of the day and fifty-two (minutes)’ with the SPT/3 affix on the first word implying the possibility of a following number of minutes]
- ‘8:52 p.m. and 33 seconds’ *wuvrärserwa ksalëirson wazersarwë’i* [literally: ‘twentieth hour of the day and fifty-two (minutes) with thirty-three seconds of a minute’]

### 6.1 Alternate Names of the Months

Name the first 4 months is via Degrees 1 through 4 of the Type-2 **SEQ** affix (-nt) attached to Stem No. 3 of **-RD-** (meaning ‘calendrical month’) to render words meaning ‘first month’, ‘second month’, ‘third month’, ‘fourth month’. Likewise, the last four months may utilize Degrees 6 through 9 of the same affix.

For the remaining months (and as alternates for the first four and last four months), use Degree 2 of the Type-2 **XX(#)** affixes. (Use non-decimal number base roots **-CG-** and **-JD-** for ‘11’ and ‘12’.) Thus:

**January:** *wurđainta / wurđauzca*

**February:** *wurđaunta / wurđauks*

**March:** *wurđeinta / wurđauz*

**April:** *wurđeunta / wurđaupš*

**May:** *wurđaušt*

**June:** *wurđaucpa*

**July:** *wurđaušns*

**August:** *wurđaučka*

**September:** *wurđounta / wurđaulza*

**October:** *wurđointa / wurđauj*

**November:** *wurđiunta / wurđaucga*

**December:** *wurđuinta / wurđaujda*

## 7.0 PROPER NAMES OF GEOGRAPHIC AND DEMOGRAPHIC ENTITIES

Toponyms, demonyms and other proper names are a phonetic rendering of the native name, to the extent Ithkuil's phoneme inventory allows. Ithkuil phonotactic restraints do not apply as long as the name is pronounceable. The two new affixes below are available for use as appropriate.

<b>-ɖc</b>	<b>CLG CULTURAL or GEO-DEMOGRAPHIC ASSOCIATION *</b>
1	the spoken/written language associated with X
2	a historical event associated with X
3	the people/culture/society associated with X
4	the sense of socio-cultural identity/solidarity associated with X
5	a behavioral/personality trait or aesthetic style or physical characteristic associated with X
6	a practice/ritual associated with X
7	a belief associated with X
8	an item/artifact/object/costume/artwork or tangible accomplishment associated with X
9	the physical country/land/geographical domain associated with X

<b>-dn</b>	<b>OGC Orientation Relative to a Geographic Central Point</b>
1	northern
2	northwestern
3	western
4	northeastern
5	geographically central
6	southwestern
7	eastern
8	southeastern
9	southern

\* CLG Degree Zero refers to all aspects of a particular group of people: their language, culture, history, art, behavioral traits, physical traits, country/land, beliefs, practices and rituals, etc.

### 7.1 Names of Continents (to be preceded by the carrier stem form *usarç* or *usarça*)

**Africa:** *usarça áfrika*

**Antarctica:** *usarça antártika*

**Asia:** *usarça asya*

**Europe:** *usarça europa*

**Oceania:** *usarça oseanya*

**North America:** *usarçaidna amérika*

**South America:** *usarçuidna amérika*

**7.2 Names of Oceans:** Preceded by the word *hluséi-bwala* [Carrier Stem 3 concatenated to Stem 1 of **-BW-** 'ocean'] meaning 'ocean named...'. The Southern Ocean (a.k.a. Antarctic) does not use the carrier stem, instead simply utilizing the Type-2 OCG/9 affix 'southern' with stem 1 of **-BW-** 'ocean'. As an alternative to incorporating the carrier stem, a carrier adjunct with ESS case *hle'i* may be used or the SPF register adjunct *hi*.

**Pacific Ocean:** *hluséi-bwala pasífika* OR *bwala hi pasífika*

**Atlantic Ocean:** *hluséi-bwala atlantis* OR *bwala hi atlantis*

**Indian Ocean:** *hluséi-bwala indus* OR *bwala hi indus*

**Arctic Ocean:** *hluséi-bwala arktos* OR *bwala hi arktos*

**Southern/Antarctic Ocean:** *bwaluidna*

**7.3 Names of Seas and Lakes:** Preceded by the word *hlušéi-bwaleuxa* ('smaller ocean named...') if referring to a large mostly landlocked salt-water sea (e.g., Mediterranean, Black, Azov), or *hlušé-bwalafta* ('section of an ocean named...' utilizing the **POR – Portion or Section** affix **-ft-**) if referring to a section or sub-section of a larger sea or ocean (e.g., Baltic, South China, North).

<b>-ft</b>	<b>POR Portion or Section</b>
1	smallest possible portion/section/amount of a larger whole
2	extremely small portion/section/amount of a larger whole
3	small portion/section/amount of a larger whole
4	somewhat small portion/section/amount of a larger whole
5	a portion/section or amount of a larger whole
6	a significantly-sized portion/section/amount of a larger whole
7	(approximately) half of X in terms of portion/amount or the size of a section
8	a majority-sized portion/section/amount of a whole
9	almost the entire portion/amount of a whole

**Mediterranean Sea:** *hlušéi-bwaloufta mediterrera*

**Baltic Sea:** *hlušéi-bwalëufta balt*

**Black Sea:** *hraxmé-bwaleufta*

**Sea of Azov:** *hlušéi-bwaleifta azof*

**Caribbean Sea:** *hlušéi-bwalëufta karíb*

**North Sea:** *bwalaidneufta*

**Bering Sea:** *hlušéi-bwalëufta bering*

**Arabian Sea:** *hlušéi-bwalëufta arab*

Those examples above utilizing an incorporated carrier stem may alternately be expressed using the carrier adjunct *hle'i* or the SPF register adjunct *hi*, i.e., *bwaloufta hi mediterrera*, *bwalëufta hi balt*, *bwaleifta hi azof*, *bwalëufta hi karíb*, etc.

Large saltwater lakes not connected to the world ocean (e.g., Caspian Sea, Aral Sea) use Stem 3 of **-BW-** 'saltwater lake' rather than Stem 1 in conjunction with the appropriate **SIZ** affix **-x-**. Freshwater lakes use Stem 1 of **-LZ-** while freshwater inland seas use Stem 3 of **-LZ-**.

**Caspian Sea:** *hlušéi-wubwiuxa kaspi*

**Aral Sea:** *hlušéi-wubwoixäkta aral*

**Lake Baikal:** *hlušéi-wubwoixa baikál*

**Lake Geneva:** *hlušéi-wubwoixa ženév*

**Lake Erie:** *hlušéi-walziuxa ériè*

**Sea of Galilee:** *hlušéi-wulza kínnret*

Progressively smaller sub-sections of oceans such as gulfs, bays, bights, and sounds attach various degrees of the POR affix to *hlušé-bwala* or *bwala hle'i / hi*.

**Bay of Biscay:** *hlušéi-bwaleufta biskaya*

**Bight of Benin:** *hlušéi-bwalaufta benín*

**Gulf of Mexico:** *hlušéi-bwaleufta méxiko*

**San Francisco Bay:** *hlušéi-bwalaifta sanfransisko*

**Hudson Bay:** *hlušéi-bwaleufta hëdsën*

**James Bay:** *hlušéi-bwaleifta jeimz*

**7.4 Names of Terrestrial Landmarks:** The roots **-JL-** 'MOUNTAINOUS TOPOGRAPHY', **-ZH-** 'DESERT/STEPPE/TUNDRA', **-VŇ-** 'VALLEY/CANYON/ GORGE' and **-LZW-** 'ESTUARY / RIVER DELTA' are likewise used with the carrier stem or carrier adjunct.

**Gobi Desert:** *hlušéi-wazha gob*

**Andes Mountains:** *hlušéi-ejlamska andes*

**Central Asian Steppe:** *hlušéi-wezhoixidna asya*

**Grand Canyon:** *wevňiuxa*

**Himalaya Mountains:** *hlušéi-ejlamska himálaya*

**Tibetan Plateau:** *hlušéi-wujliuxa phö*

**Siberian Tundra:** *hlušéi-wuzha sibír*

**Niagara Falls:** *hlušéi-urřraňska nayagra*

**Amazon River Delta:** *hlušéi-welzwa amazonas*

**7.5 Names of Large Rivers:** The native names of rivers often vary depending on the various ethnographic domains they pass through. In some instances, I have chosen the dominant ethonym (e.g., *dijla* for the Tigris), in other instances I have combined names (e.g., *cañpobrahmaputra* for the Brahmaputra), while in others I have used a form derived from an underlying proto-language (e.g., *purát* for the Euphrates, *danu* for the Danube). The following names are preceded by *hluséi-welza* OR *welza hle'i/hi* 'river named...' (Carrier Stem 3 incorporated into Stem 2 of the root **-LZ-**).

Nile	<i>nil</i>
Amazon	<i>amazonas</i>
Yangtze	<i>cañ</i>
Mississippi	<i>misisipi</i>
Missouri	<i>misuri</i>
Yenisei	<i>yeniséi</i>
Yellow	<i>hwañ</i>

Ob	<i>ob</i>
Irtysh	<i>irtiř</i>
Volga	<i>volga</i>
Amur	<i>amur</i>
Mekong	<i>mekoñ</i>
Brahmaputra	<i>cañpobrahmaputra</i>
Indus	<i>indus</i>

Tigris	<i>dijla</i>
Euphrates	<i>purát</i>
Danube	<i>danu</i>
Ganges	<i>gënga</i>
Don	<i>don</i>
Rio Grande	<i>riogrande</i>
Irrawaddy	<i>eyawëdi</i>

**7.6 Names of World's Largest Cities:** The following names are preceded by *hluséi-phwär(a)* or *phwära hle'i/hi* 'city named...'

Tokyo	<i>tokyo</i>
Delhi	<i>dilli</i>
Shanghai	<i>zañhe</i>
São Paulo	<i>saupaulu</i>
Mexico City	<i>méxiko</i>
Cairo	<i>alkáhira</i>
Mumbai	<i>mumbëi</i>
Beijing	<i>peičičin</i>
Dhaka	<i>dhaka</i>
Osaka	<i>osaka</i>
New York City	<i>nuyórk</i>
Karachi	<i>kërači</i>
Buenos Aires	<i>bwenosaires</i>
Chongqing	<i>choñčhin</i>
Istanbul	<i>istanbul</i>
Kolkata	<i>kolkata</i>

Manila	<i>manila</i>
Lagos	<i>eko</i>
Rio de Janeiro	<i>uhuijižëneiru</i>
Tianjin	<i>tčenčín</i>
Kinshasa	<i>kinšasa</i>
Guangzhou	<i>kwoñcëu</i>
Los Angeles	<i>losânjeles</i>
Moscow	<i>mëskvá</i>
Shenzhen	<i>šëncčën</i>
Lahore	<i>lahór</i>
Bangalore	<i>bengëluru</i>
Paris	<i>paří</i>
Bogotá	<i>bogotá</i>
Jakarta	<i>jakarta</i>
Chennai	<i>čënnái</i>
Lima	<i>lima</i>

Bangkok	<i>kruñthép</i>
Seoul	<i>sëúl</i>
Nagoya	<i>nagoya</i>
Hyderabad	<i>háidërëbad</i>
London	<i>lëndën</i>
Tehran	<i>tehrán</i>
Chicago	<i>šikago</i>
Chengdu	<i>chëñtu</i>
Nanjing	<i>nančín</i>
Wuhan	<i>uxán</i>
Ho Chi Minh City	<i>hotčimín</i>
Luanda	<i>luanda</i>
Ahmendabad	<i>ámдавad</i>
Kuala Lumpur	<i>kúalëlumpor</i>
Xi'an	<i>šián</i>
Hong Kong	<i>höñkoñ</i>

Dongguan	<i>tuñkwan</i>
Hangzhou	<i>hañce</i>
Foshan	<i>faččën</i>
Shenyang	<i>šënyañ</i>
Riyadh	<i>erriyáđ</i>
Baghdad	<i>bařdád</i>
Santiago	<i>santýago</i>
Surat	<i>surat</i>
Madrid	<i>mađríđ</i>
Suzhou	<i>sëucöü</i>
Pune	<i>pune</i>
Harbin	<i>háërbin</i>
Houston	<i>čustën</i>
Dallas	<i>dälës</i>
Toronto	<i>tërantou</i>
Dar Es Salaam	<i>daressalám</i>

**7.7 Names of Countries** (to be preceded by the carrier stem form *wusuḍca* (meaning approximately ‘land/country of [the] ...’), or if the context makes clear that a country is being spoken of, or if the speaker knows the audience is familiar with the name as being a country, then simply *wusa*).

For countries with multiple names due to multiple official languages (e.g., Switzerland, Belgium, Ethiopia, Mauritania), one name has been arbitrarily selected. Names consisting of words denoting a governance structure (e.g., United States of, Republic, Democratic Republic, etc.) or directional words (e.g., South) are shown in notes following the tables.

Afghanistan	<i>afgan</i>
Albania	<i>škyǵpǵeri</i>
Algeria	<i>jaza’ír</i>
Andorra	<i>andorra</i>
Angola	<i>angola</i>
Antigua & Barbuda	<i>antigwabarbuda</i>
Argentina	<i>arxentina</i>
Armenia	<i>haik</i>
Australia	<i>ostralya</i>
Austria	<i>ǵstǵraicǵ</i>
Azerbaijan	<i>azǵrbaiǵán</i>
Bahamas	<i>bahama</i>
Bahrain	<i>bahráin</i>
Bangladesh	<i>baǵla</i>
Barbados	<i>barbeidos</i>
Belarus	<i>byelarús</i>
Belgium	<i>belǵ</i>
Belize	<i>belíz</i>
Benin	<i>benín</i>
Bhutan	<i>trukǵl</i>
Bolivia	<i>bolivya</i>
Bosnia & Herzegovina	<i>bosnaxercegovina</i>
Botswana	<i>bocwana</i>
Brazil	<i>brǵzǵu</i>
Brunei	<i>brunai</i>
Bulgaria	<i>bǵlgárya</i>
Burkina Faso	<i>burkinafaso</i>
Burundi	<i>burundi</i>
Côte d’Ivoire	<i>kotǵdivwáǵ</i>
Cabo Verde	<i>kabuverdi</i>
Cambodia	<i>kampuǵǵǵ</i>

Cameroon	<i>kamerún</i>
Canada	<i>kánada</i>
Central African Republic	[see Note following the table]
Chad	<i>ǵad</i>
Chile	<i>ǵile</i>
China	<i>ǵuǵkwo</i>
Colombia	<i>kolombya</i>
Comoros	<i>komori</i>
Congo	<i>kongo</i>
Costa Rica	<i>kostarrika</i>
Croatia	<i>xrvacka</i>
Cuba	<i>kuba</i>
Cyprus	<i>kipros</i>
Czechia	<i>ǵesko</i>
Democratic Republic of Congo	[see Note following the table]
Denmark	<i>tǵnmak</i>
Djibouti	<i>jibuti</i>
Dominica	<i>domínika</i>
Dominican Republic	[see Note following the table]
Ecuador	<i>ekwadór</i>
Egypt	<i>misr</i>
El Salvador	<i>elsalbadór</i>
Equatorial Guinea	[see Note following the table]
Eritrea	<i>ertra</i>
Estonia	<i>esti</i>
Eswatini	<i>eswatini</i>
Ethiopia	<i>ityopyya</i>
Fiji	<i>viǵi</i>
Finland	<i>súomi</i>
France	<i>ǵrans</i>
Gabon	<i>gabón</i>

Gambia	<i>kambi</i>
Georgia	<i>kartvel</i>
Germany	<i>doiǵ</i>
Ghana	<i>gana</i>
Greece	<i>elaǵa / helás</i>
Grenada	<i>greneida</i>
Guatemala	<i>gwatemala</i>
Guinea	<i>giné</i>
Guinea-Bissau	<i>ginebisó</i>
Guyana	<i>gayana</i>
Haiti	<i>aití</i>
Honduras	<i>onduras</i>
Hungary	<i>madyar</i>
Iceland	<i>is</i>
India	<i>bharǵt</i>
Indonesia	<i>indonésia</i>
Iran	<i>irán</i>
Iraq	<i>irák</i>
Ireland	<i>eryǵ</i>
Israel	<i>yisra’él</i>
Italy	<i>italya</i>
Jamaica	<i>jameka</i>
Japan	<i>nihon</i>
Jordan	<i>urdún</i>
Kazakhstan	<i>kazak</i>
Kenya	<i>kenya</i>
Kiribati	<i>kíribas</i>
Kuwait	<i>kuwet</i>
Kyrgyzstan	<i>kǵrǵǵz</i>
Laos	<i>lau</i>
Latvia	<i>látviya</i>

Lebanon	<i>libnén</i>
Lesotho	<i>sutu</i>
Liberia	<i>laibirya</i>
Libya	<i>líbiya</i>
Liechtenstein	<i>líçtenštáin</i>
Lithuania	<i>lyetuvá</i>
Luxembourg	<i>lécěbuřš</i>
Madagascar	<i>madagaskyarě</i>
Malawi	<i>malavi</i>
Malaysia	<i>měleisya</i>
Maldives	<i>divehi</i>
Mali	<i>mali</i>
Malta	<i>malta</i>
Marshall Islands	<i>mřazyel</i>
Mauritania	<i>muritániya</i>
Mauritius	<i>mořís</i>
Mexico	<i>měxiko</i>
Micronesia	<i>mikronesya</i>
Moldova	<i>moldova</i>
Monaco	<i>monakó</i>
Mongolia	<i>mongol</i>
Montenegro	<i>cěrnagora</i>
Morocco	<i>magrib</i>
Mozambique	<i>musambiki</i>
Myanmar	<i>myěmá</i>
Namibia	<i>namibya</i>
Nauru	<i>naoero</i>
Nepal	<i>nepál</i>
Netherlands	<i>néderland</i>
New Zealand	<i>nyuziland</i>
Nicaragua	<i>nikaragwa</i>
Niger	<i>nižěř</i>
Nigeria	<i>naijéria</i>

North Korea	<i>čosěn</i>
North Macedonia	[see Note below]
Norway	<i>noryě</i>
Oman	<i>omán</i>
Pakistan	<i>pak</i>
Palau	<i>belau</i>
Palestine	<i>falaštín</i>
Panama	<i>panamá</i>
Papua New Guinea	<i>papuanýugini</i>
Paraguay	<i>paragwái</i>
Peru	<i>perú</i>
Philippines	<i>pílipinas</i>
Poland	<i>polska</i>
Portugal	<i>portugál</i>
Qatar	<i>gatar</i>
Romania	<i>roměnia</i>
Russia	<i>rasiya</i>
Rwanda	<i>rwanda</i>
Saint Kitts & Nevis	<i>seintkicannevis</i>
Saint Lucia	<i>seintlusya</i>
St. Vincent & the Grenadines	<i>seintvinsentangrénadinz</i>
San Marino	<i>sanmarino</i>
São Tomé & Príncipe	<i>sautume'eprínsipě</i>
Saudi Arabia	<i>arabiya'assu'udiya</i>
Senegal	<i>sénegal</i>
Serbia	<i>sěrp</i>
Seychelles	<i>sešél</i>
Sierra Leone	<i>sieraleón</i>
Somalia	<i>somáliya</i>
South Africa	[see Note below]
South Korea	<i>hanguk</i>
South Sudan	[see Note below]
Spain	<i>espanya</i>

Sri Lanka	<i>srilanka</i>
Sudan	<i>sudán</i>
Suriname	<i>sürinamě</i>
Sweden	<i>svériyě</i>
Switzerland	<i>švaic</i>
Syria	<i>suriya</i>
Tajikistan	<i>tojikí</i>
Tanzania	<i>tanzania</i>
Thailand	<i>thai</i>
Tibet	<i>phö</i>
Timor-Leste	<i>timorlešte</i>
Togo	<i>togo</i>
Tonga	<i>toňa</i>
Trinidad & Tobago	<i>trinidadantobago</i>
Tunisia	<i>tunisiya</i>
Turkey	<i>túrkiye</i>
Turkmenistan	<i>türkmen</i>
Tuvalu	<i>tuvalu</i>
Uganda	<i>uganda</i>
Ukraine	<i>ukrayina</i>
United Arab Emirates	[see Note below]
United Kingdom	[see Note below]
United States of America	[see Note below]
Uruguay	<i>urugwái</i>
Uzbekistan	<i>ozbek</i>
Vanuatu	<i>vanuatu</i>
Vatican City	<i>vatikano</i>
Venezuela	<i>beneswela</i>
Vietnam	<i>vietnám</i>
Yemen	<i>yaman</i>
Zambia	<i>zámibia</i>
Zimbabwe	<i>zimbabwe</i>

**NOTE:** For countries whose names contain governance structures (e.g., the Democratic Republic of Congo), such words are translated directly into New Ithkuil, with the carrier stem then being incorporated to reference the part of the name which is a proper noun. For countries whose name contains a directional or orientational word (e.g., South Sudan), the new **OGC** affix is employed on the carrier stem. The full names (including carrier-stem) of such countries are listed below:



**Central African Republic:** *hlusëudnéi-eđtëila áfrika*

**Democratic Republic of Congo:** *hlađtáu-eđtila hi kongo*

**Dominican Republic:** *hluséi-eđtëila domínika*

**Equatorial Guinea:** *hlantnú-wusa giné*

**North Macedonia:** *wusaidna makedóniya*

**South Africa:** *wusuidna áfrika*

**South Sudan:** *wusuidna sudán*

**United Arab Emirates:** *hrellú-ellkina hi arab*

**United States of America:** *hluséi-eksmaça amérika*

**United Kingdom (of Great Britain and North Ireland):** *hrellú-allkila (hi britanya hiu wusadnuň eryë)*

The ten specialized names listed immediately above utilize stems from the following four roots:

<b>-ĐT- REPRESENTATIVE GOVERNANCE</b>		
<b>BSC</b>	<b>Stem 1:</b> (to be) a democratic form of government, i.e., direct governance by the people as a shared responsibility; to govern democratically	<b>Stem 2:</b> (to be) a republican/representative form of governance, i.e., governance by the people through elected representatives to a central debating/decision-making body  <b>Stem 3:</b> (to be) a federalist form of governance, i.e., where an elected body of representatives (essentially a republican governing body) in turn appoints/establishes a non-elected, bureaucracy for centralized administration purposes at a national level, while permitting local governance to remain in charge of local law and governance.
<b>CTE</b>	(to be) a state of democratic governance	
<b>CSV</b>	(to be) a practice associated with democratic governance; to perform/carry out an act associated with, or demonstrating democratic governance	
<b>OBJ</b>	(to be) a society/group/party governed by means of democracy	

<b>-LLK- MONARCHAL GOVERNANCE / AUTOCRATIC GOVERNANCE / OLIGARCHICAL GOVERNANCE</b>		
<b>BSC</b>	<b>Stem 1:</b> (to be) a monarchical form of government, i.e., governance by a (hereditary) monarch; to govern monarchically	<b>Stem 2:</b> (to be) a autocratic or dictatorial form of governance, i.e., governance by a single ruler [non-monarchical] with (quasi-)absolute power, e.g., emir, sultan, general, president-for-life, head-man, etc.  <b>Stem 3:</b> (to be) an oligarchical form of governance, i.e., governance by a select group of rulers comprised of some elite membership, e.g., a plutocracy, a meritocracy, a kleptocracy, a theocracy, a technocracy, etc.
<b>CTE</b>	(to be) a state of monarchic governance	
<b>CSV</b>	(to be) a practice associated with monarchic governance; to perform/carry out an act associated with, or demonstrating monarchic governance, to reign	
<b>OBJ</b>	(to be) a society/group/party governed by means of monarchism/monarchy.	

<b>-NTŇ- ‘LATITUDINAL BASES [LATITUDINAL POLE / EQUATOR]’</b>		
<b>BSC</b>	<b>Stem 1:</b> (to be) a state/act of being situated or occurring on/at the equatorial line of latitude; be/occur on/at/along the equator	<b>Stem 2:</b> (to be) a state/act of being situated or occurring on/at the [geographic, not magnetic] north pole  <b>Stem 3:</b> (to be) a state/act of being situated or occurring on/at the [geographic, not magnetic] south pole
<b>CTE</b>	(to be) the equator	
<b>CSV</b>	(to be) an act of situating something or being situated at/on/along the equator; to happen or make happen at/on/along the equator	
<b>OBJ</b>	(to be) what is situated or takes place on/at the equator	

<b>-KSM- GEOPOLITICAL COUNTRY/LAND/ TERRITORY/REGION</b>	
<b>BSC</b>	<p><b>Stem 1:</b> (to be) a geopolitical country/land/territory, i.e., the tangible area of land, bodies of water, and airspace subject to control/rule by a governmental entity, often associated or (quasi-)contiguous with a specific ethno-cultural society of people.</p> <p><b>Stem 2:</b> (to be) a state or province or subdivision of Stem 1, subject to some degree of regional autonomous governmental administration</p> <p><b>Stem 3:</b> (to be) a geopolitical or cultural region delineated by a distinct culture, ethnicity, language, history, etc. which does not necessarily align with or have its own separate sovereignty or quasi-autonomous governmental administration.</p>
<b>CTE</b>	(to be) the state of being a geopolitical country/land/territory
<b>CSV</b>	(to be) the particular location and/or geographic/terrestrial features/terrain associated with a geopolitical country/land/territory
<b>OBJ</b>	(to be) a particular (i.e., named) geopolitical country/land/territory