

## DESIGN FOR THE NEW REVISION OF ITHKUIL (Version 0.17, November 19, 2020) by John Q.

This document updates previous version 0.16. Changes to Version 0.17 are written in blue.

- **Secs. 2.1, 3.1:** The longstanding system of stem incorporation as has been eliminated and redesigned. The new system is termed **concatenation**. As part of this redesign, previous Slots II, III, and IV have been eliminated from the formative structure; the remaining Slots have consequently been renumbered. Additionally, the distinction between Simple and Complex formatives has been eliminated; there is now only one structure for formatives.
- **Secs. 3.1, 3.2, 3.4:** The new system of concatenation morpho-phonologically allows for the creation of various Slot I short-cuts to eight different combinations of the  $V_R+C_A$  values formerly found in Slots VII and IX (now Slots IV and VI), allowing the  $V_R$  and  $C_A$  Slots to be elided and reducing the formative by one syllable. As a result, -ç- and -çw- been removed as a formative Slot I forms and reinstated as a permissible  $C_R$  forms (though not as
- **Secs. 3.5:** Slot V  $V_XC_S$  affixes (those having scope over the stem but not the  $C_A$  complex) now only reverse their form to - $C_SV_X-$  if there is a  $C_A$  form present in Slot VI; if the Slot VI  $C_A$  form has been elided, then any Slot V  $V_XC_S$  affixes are not reversed and maintain their standard form.
- **Secs. 3.5, 3.7:** the fourth and fifth columns  $V_XC_S$  affix forms from previous versions of this document have been eliminated due to the elimination of incorporated stems.
- **Sec. 3.8:** In Slot VIII, Pattern 3 of the  $V_NC_N$  complex (showing Context) has been removed since Context is now shown via the  $V_R$  in Slot IV. Also, the Pattern 1 and Pattern 2  $C_N$  forms changed in order to eliminate the need for a glottal-stop prior to  $C_N$ .
- **Sec. 3.9.1:** The ordering of the two series of Spatio-Temporal cases and the two series of Relational Cases have been swapped (i.e., the former are now Cases 53 through 68, while the latter are now Cases 37 through 52). Also: the explanation/description of the LOCATIVE case has been corrected.
- **Sec. 3.9.3.4:** The IVE affix has been changed from -rl- to -nl-.
- **Sec. 4.3:** Applicability of a Modular adjunct to a concatenated vs. parent formative is now marked by  $V_H$  in Slot 5 instead of w- or y- in Slot 1.
- **Sec. 4.5:** Because word-initial -ç- has been reassigned as a new sentence-juncture marker (see new Sec. 5.8), the consonantal values of the Carrier, Quotative, Naming, and Phrasal adjuncts have been changed.
- **Sec. 4.7:** Impersonal, Nomic and Abstract categories have been removed from the Personal Reference table and will instead be shown by a separate affix added to the remaining forms. Additionally, a new personal-reference category, the Provisional, has been added (per a suggestion from uakci).
- **Sec. 4.7.2:** Because the consonant -x- has been eliminated from the Personal Reference table in Sec. 4.7, single- or dual-referent personal-reference forms may now be used in Slot 2 of a Combination Personal-Reference Adjunct.
- **Secs. 4.7.1, 4.7.2:** The changes to the formative Slots above have entailed various modifications to the two Personal-Reference Adjunct forms.
- **Sec. 5.6:** This new section has been added to address in detail how Ithkuil IV handles English WH-questions and interrogative pronouns.
- **Sec. 5.7:** This new section has been added to address the use of case-stacking affixes with UNFRAMED verbal formatives.
- **Sec. 5.8:** This new section on Syntax has been added, including details on when to use the new ç(ë)- prefix indicating the start of a new sentence.
- **Secs. 6 and 7:** Dates, Times, Geographic/Demographic names: examples have been updated/corrected to conform to the latest morpho-phonology.

## 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 g		,		
FRICATIVE		f v			ʈ ɖ	s z		š ŷ	ç	x	h	ɿ	
AFFRICATE						c ڇ		č j					
NASAL	m			n					ň				
LIQUID	FLAP / TRILL						r						
	NON-FLAP										l		
APPROXIMANT			w					y		ř			

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

### 1.2 Pronunciation Notes and Allophonic Distinctions

**1.2.1 Vowels:** -a- is pronounced [a] or [ɑ], -ä- is [æ], -e- is [ɛ] or [e] but only as [e] at the beginning of a vocalic conjunct; -ë- is [x] or [ə] when stressed but [w] when unstressed; -i- is pronounced either [ɪ] or [i] but only as [i] at the beginning of a vocalic conjunct and only as [ɪ] when preceded or followed by -y-; -o- is [ɔ] or [o] but only as [o] at the beginning of a vocalic conjunct; -ö- is [œ] or [ø] but only [ø] at the beginning of a vocalic conjunct; -u- is [ʊ] or [u] but only [u] at the beginning of a vocalic conjunct and only as [ʊ] when preceded or followed by -w-; -ü- as [u] or [y] but only [u] when preceded by -y- or -w-. The permissible diphthongs are: ai, ei, ēi, oi, ui, au, eu, ēu, ou, and iu. The two vowels of these diphthongs may be pronounced as separate syllables in the following circumstances: (1) when followed by -r or -ř occurring in the same syllable for ease-of-pronunciation; (2) in song or poetry. Be sure 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 -ň- is not permitted before -k-, -g-, and -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 [ɻ], similar to (but further forward in the mouth than) the postalveolar [ɺ] 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 [pʰ, tʰ, kʰ, tsʰ, tʃʰ]. 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 conjuncts beginning with -h- are pronounced as follows: **hl** = [ɫ] or [ɦ], **hr** = [ɬ] or [ɦr], **hm** = [m̥] or [hm̥], **hn** = [ɳ] or [hn̥].

## 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 **t** may be written as **č** or **č̄**, the character **d** may be written as **đ** or **đ̄**, the character **n** may be written as **ñ** or **ñ̄**, the character **r** may be written as **ř** or **ř̄**, and the character **l** may be written as **ł** or **ł̄**.

**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 -i- when it is unstressed as the initial member of a vocalic conjunct following a consonant (e.g., -Cia-, -Cio, etc.) — this is to remind the speaker/reader that this -i- is to be pronounced long /i:/ in order to distinguish such syllables from syllables of the form Cy+V (e.g., *karesya* vs. *karésia*, *velkyo* vs. *vélkio*). 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*.

## 1.4 Phonotactics

An updated phonotaxis document will be released when it is ready.

## 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 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, III, V, VII, VIII, X, XI, and XII 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

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

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

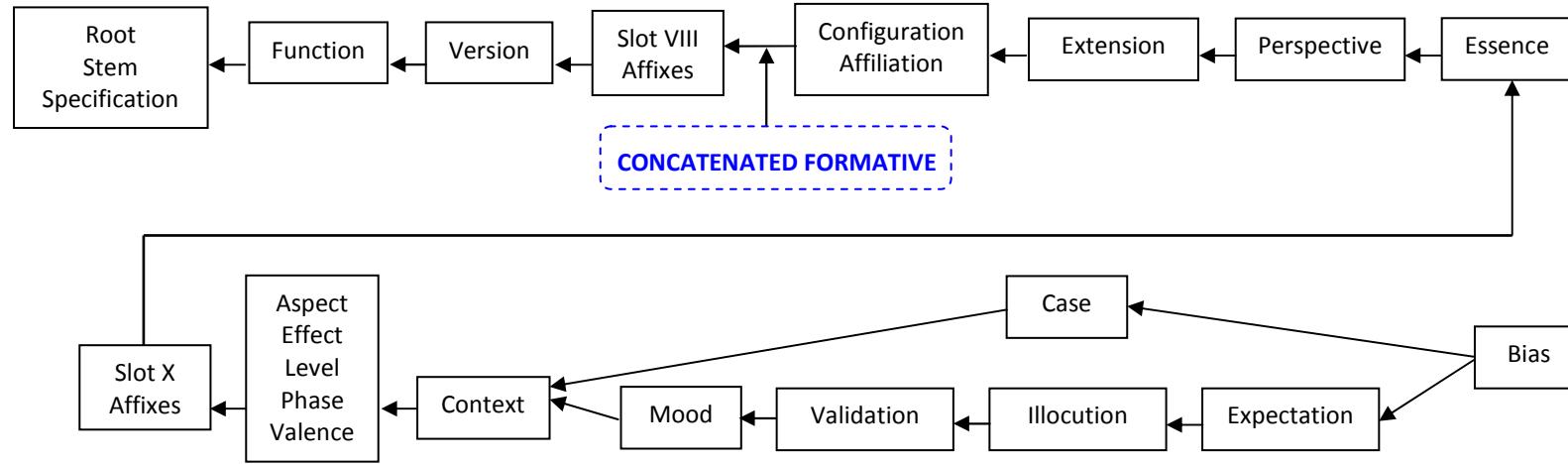
## 1.7 Rules for Inserting a Glottal-Stop Into a Vowel-Form

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 euphonically undesirable conjunct, then an epenthetic vowel must be added as follows:
  - o If **V** is a single vowel, reduplicate this vowel following the glottal-stop; e.g., **-a** becomes **-a'a**.
  - o 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

I	II	III	IV	V	VI	VII	VIII	IX	X*	XI
(C <sub>C</sub> )	(')V <sub>V</sub>	C <sub>R</sub>	(V <sub>R</sub> )	(V <sub>x</sub> C <sub>S</sub> ...*)	(C <sub>A</sub> )	(V <sub>x</sub> C <sub>S</sub> ...)	(V <sub>N</sub> C <sub>N</sub> )	V <sub>C</sub> * / V <sub>K</sub> )	(')C <sub>B</sub> or (')C <sub>Y</sub>	[stress]
Concatenation status indicator + V <sub>R</sub> +C <sub>A</sub> shortcut indicator	Version + Stem + C <sub>A</sub> short-cut	Main Root	Function + Specification	VxCs affix(es) apply to stem but not to C <sub>A</sub> If Slots IV & VI values are present then form is reversed to -CsVx-	Configuration + Extension + Affiliation + Perspective + Essence	VxCs affixes apply to stem + C <sub>A</sub>	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 Illocution + Expectation + Validation as determined by syllabic stress	Bias or Case-Scope or Mood	penultimate stress = UNFRAMED Relation + V <sub>C</sub> ultimate stress = UNFRAMED Relation + V <sub>K</sub> antepenultimate stress = FRAMED Relation + V <sub>C</sub>
consonantal prefix	preceded by ' if Slot I is empty	cons. form	vocalic affix; presence determined by C <sub>C</sub> in Slot I	last Vx in the series requires a glottal stop to indicate end of Slot	consonant form; presence determined by C <sub>C</sub> in Slot I		Modular Slot containing a vowel-form + consonant-form	vocalic affix	must be preceded by a glottal-stop unless Slot VIII C <sub>N</sub> or Slot IX V <sub>C</sub> /V <sub>K</sub> contains a glottal-stop	

\* Concatenated formatives (see Secs. 3.1 and 3.2 below) label the V<sub>C</sub> Case marker as V<sub>F</sub> Format; also, Slot X will be empty in a concatenated formative.

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

## 2.2 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 PERFORMATIVE-RESPONSIVE Illocution+Expectation (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
- 'i'** indicates the following word bears pre-antepenultimate stress

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

## 3.0 ANALYSIS OF FORMATIVE SLOTS

### 3.1 SLOT I: C<sub>C</sub> — Concatenation-Type plus Alternate V<sub>F</sub> of Preceding Concatenated Formative, plus V<sub>R</sub>+C<sub>A</sub> Short-Cut Type

Slot I carries a new prefix, C<sub>C</sub>, that serves two functions: (1) to indicate that the formative is immediately preceded by a concatenated formative (the new replacement for stem incorporation from previous versions of this document), and (2) to indicate whether certain V<sub>R</sub>+C<sub>A</sub> forms from Slots IV and VI have been elided (thus being instead indicated by the Slot I C<sub>C</sub> 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 (except for Slot X). The initial concatenated formative also shows one of the following eight C<sub>C</sub> values in Slot I to indicate that it and the following formative constitute a concatenated pair. The meaning of the different C<sub>C</sub> values is explained below the table.

	V <sub>F</sub> = Formats 1 thru 36	V <sub>F</sub> = Formats 37 thru 68	V <sub>F</sub> = Formats 1 - 36 + [w-] C <sub>A</sub> shortcut*	V <sub>F</sub> = Formats 37 - 68 + [w-] C <sub>A</sub> shortcut*	V <sub>F</sub> = Formats 1 - 36 + [y-] C <sub>A</sub> shortcut*	V <sub>F</sub> = Formats 37 - 68 + [y-] C <sub>A</sub> shortcut*
Type-1 Concatenation	h	h + ult. stress	hl	hl + ult. stress	hm	hm + ult. stress
Type-2 Concatenation	hw	hw + ult. stress	hr	hr + ult. stress	hn	hn + ult. stress

\* See Sec. 3.2 below for an explanation of the w- and y- C<sub>A</sub> shortcuts

**3.1.2 Concatenation Type:** Type-1 concatenation implies a circumstantial relationship between the concatenated formative and the parent formative (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<sub>F</sub> Indicator:** Concatenated formatives do not use a glottal-stop in the Slot IX V<sub>F</sub> form. Instead, the concatenated formative takes ultimate syllabic stress to indicate that the Slot IX V<sub>F</sub> Format vowel is actually a Format 37-through-68 form but without the glottal stop.

**3.1.4 C<sub>A</sub> Shortcut Indicator for Concatenated Formative:** Columns 3 through 6 of the above table are used if the Slot IV V<sub>R</sub> value is default -a- (STA/BSC/EXS) and the Slot VI C<sub>A</sub> affix is one of eight specific C<sub>A</sub> values shown for Slot II on the next page.

**3.1.5 C<sub>A</sub> 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<sub>A</sub> shortcuts are shown by a C<sub>C</sub> value of either w- or y-, depending on the particular C<sub>A</sub> 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<sub>F</sub> value; instead they utilize the V<sub>F</sub> values 1 through 36 (identical to values 37 through 68 except for the glottal-stop) and the formative takes ultimate syllabic stress. Additionally, Slot X must be empty in a concatenated formative.

**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<sub>C</sub> value 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<sub>A</sub> shortcut is present (see Slot II on next page).

**3.1.8 Orthography:** In addition to the presence of a C<sub>C</sub> affix in Slot I of any parent 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<sub>V</sub> — Stem and Version (plus optional Slot IV+VI a+C<sub>A</sub> Short-Cut)

Slot II contains a vocalic affix, V<sub>V</sub>, 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<sub>C</sub> table on the previous page, then the V<sub>V</sub> value also indicates a Slot IV V<sub>R</sub> value of default -a- plus one of eight Slot VI C<sub>A</sub> values. Additionally, the actual Slot IV/VI a+C<sub>A</sub> forms will be elided (i.e., missing), thus shortening the formative by one syllable.

The eight specific Slot IV/VI a+C<sub>A</sub> forms for which there are V<sub>V</sub> shortcuts are as follows: -al- (UPX/DEL/CSL/M/NRM), -as- (UPX/PRX/CSL/M/NRM), -ar- (UPX/DEL/CSL/P/NRM), -av- (UPX/DEL/CSL/N/NRM), -ař- (UPX/DEL/CSL/M/RPV), -asř- (UPX/PRX/CSL/M/RPV), -asl- (UPX/PRX/CSL/P/RPV), -az- (UPX/PRX/CSL/A/NRM).

**Slot II V<sub>V</sub> Values if Slot I is [zero] /h / hw (i.e., the formative does not contain a Slot IV/VI a+C<sub>A</sub> shortcut)**

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

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

\*\* The vowel -i- is substituted for -ë- to preserve the latter for use with adjuncts.

**Slot II V<sub>V</sub> if Slot I C<sub>C</sub> is w/hl/hr or y/hm/hn (i.e., the formative contains a Slot IV/VI a+C<sub>A</sub> shortcut)**

Stem	Version	if C <sub>C</sub> = w/hl/hr	if C <sub>C</sub> = y/hm/hn	if C <sub>C</sub> = w/hl/hr	if C <sub>C</sub> = y/hm/hn	if C <sub>C</sub> = w/hl/hr	if C <sub>C</sub> = y/hm/hn	if C <sub>C</sub> = w/hl/hr	if C <sub>C</sub> = y/hm/hn
		then C <sub>A</sub> =[default]	then C <sub>A</sub> = PRX	then C <sub>A</sub> = P	then C <sub>A</sub> = RPV	then C <sub>A</sub> = N	then C <sub>A</sub> = A	then C <sub>A</sub> = P/RPV	then C <sub>A</sub> = PRX/RPV
<b>Stem 1</b>	PRC	(a)		ai		ia / öä		ao	
	CPT	ä		au		iä / üä		ae	
<b>Stem 2</b>	PRC	e		ei		ie / oë		ea	
	CPT	i		eu		ië / uë		eo	
<b>Stem 3</b>	PRC	u		ui		ua / aö		oa	
	CPT	ü		iu		ue / eö		öa	
<b>Stem 0</b>	PRC	o		oi		uo / io		oe	
	CPT	ö		ou		uö / iö		öe	

### 3.3 SLOT III: C<sub>R</sub> — The Main Root

The root is one to six 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 lone forms -l-, -lw-, -ly-, -ç-, -çç-, -ççw-, -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 -l- and -ç- (e.g., -pl-, -ltr-, -çt-, -kç-, -çw-, etc.).

### 3.4 SLOT IV: V<sub>R</sub> — Function, Specification, and Context

Slot IV contains a vocalic affix. This Slot functions differently depending on whether the formative is a Simple formative versus a Complex formative. For Simple formatives, the slot indicates Function and Specification (plus optional shortcuts for the DCD<sub>1</sub>/4, DCD<sub>1</sub>/5, and NEG<sub>1</sub>/4 affixes). For Complex formatives, the slot indicates the following information for the main root: Stem, Function, and Specification.

#### Slot IV V<sub>R</sub> values

Function	Specification	Context			
		EXS	FNC	RPS	AMG
STA	BSC	a	ai	ia	ao
	CTE	ä	au	iä	ae
	CSV	e	ei	ie	ea
	OBJ	i *	eu	ië	eo
DYN	BSC	u	ui	ua	oa
	CTE	ü	iu	ue	öa
	CSV	o	oi	uo	oe
	OBJ	ö	ou	uö	öe

### 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., the <i>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; 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, the book containing a story being read, an object being given to someone, what an artist creates (i.e., a work of art), the entity/person/institution that forms the object/source of one's belief, 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 or any other slots.

**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 / öä	<b>Type 1:</b> circumstantial <b>Type 2:</b> derivational
2	ä	au	ää / üä	<b>Type 3:</b> 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).
3	e	ei	ie / öë	<b>Degree 0:</b> unspecified degree; refers to the affix's general semantic concept as a whole.
4	ë	eu	ië / üë	
5	i	ëi	ëu	
6	ö	ou	uö / iö	<b><math>C_A</math> stacking:</b> The specialized $-V_X$ value, $-üä$ , is used to indicate that the preceding $C_S-$ consonant-form is to be interpreted as a $C_A$ complex having scope over (i.e., “stacked” upon) the Slot VI $C_A$ complex stem of the main stem. This specialized $C_A$ stacking affix may also be placed in either Slot V or Slot VII.
7	o	oi	uo / io	
8	ü	iu	ue / eö	
9	u	ui	ua / aö	
0	üä	üe	üö	

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-**, **-ł-**, **-łw-**, or **-ły-**. Additionally, no geminated stop or affricate (**-pp-**, **-tt-**, **-kk-**, **-bb-**, **-dd-**, **-gg-**, **-cc-**, **-čč-**, **-zz-**, and **-jj-**) can be a  $C_S$  form.

**3.5.1 Glottal Stop To Indicate the End of Slot V:** The last  $-C_S V_X-$  or  $-V_X C_S-$  affix in Slot V must carry a glottal stop to show where Slot V ends and Slot VI begins. See Sec. 1.7 (page 4) on how to add this glottal stop to the affix. If Slot V affixes are in reversed  $-C_S V_X-$  form, this glottal stop will often merge with the following Slot VI  $C_A$  complex as per the rules in Sec. 3.6.1 below.

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

CONFIGURATION		EXTENSION		AFFILIATION			PERSPECTIVE + ESSENCE					
UPX UNIPLEX		[zero]	DEL Delimitive	[zero]		standalone form *	combining form		NRM		RPV	
MPS <sup>1</sup> MULTIPLEX - SIMILAR	SEP Separate	t	PRX Proximal	s	CSL Consolidative	[zero]	[zero]	M Monadic	standalone form *	combining form	standalone form *	combining form
	CND Connected	k	ICP Incipient	š	ASO Associative	d <sup>2</sup>	t		1	[zero]	ř	ř
	FSD Fused	p	ATV Attenuative	f	COA Coalescent	g <sup>2</sup>	k		P Polyadic	r / v <sup>3</sup>	tł	l
MPD <sup>1</sup> MULTIPLEX - DISSIMILAR	SEP Separate	n	GRA Graduative	ť	VAR Variative	b <sup>2</sup>	p	N Nomic	v	w	lm	m / h <sup>4</sup>
	CND Connected	ň	DPL Depletive	ç	* Standalone form means all four of the other C <sub>A</sub> parameters are zero-marked/empty.			A Abstract	z	y	ln	n / ç <sup>4</sup>
	FSD Fused	m	<b>Allomorphic Substitutions:</b>  ts → c      np → mv      ňy → ňž      [V]tt → [V]nd      ltt → ld      rtt → rd      řtt → řd tš → č      ňk → ňz      çy → ž      [V]kk → [V]ng      lkk → lg      rkk → rg      řkk → řg tť → d̄      nf[C] → v[C]      cy → z      [V]pp → [V]mb      lpp → lb      rpp → rb      řpp → řb tf → fs      kf → fš      čy → j      nn → nz      rnm → nž      rnm → nv      řn → nž tf → fs      kf → fš      cy → j      mm → mz      rmn → mž      rñn → nđ									
MPF <sup>1</sup> MULTIPLEX - FUZZY	SEP Separate	lt										
	CND Connected	lk										
	FSD Fused	lp										

<sup>1</sup> For DUPLEX (DPS, DPD, DPF) forms, add prefix **r-** to the MULTIPLEX forms. For DPF, the **r-** prefix plus **lp/lk/lp** becomes **řt/řk/řp**.

<sup>2</sup> The stand-alone Affiliation values **-d-**, **-g-**, and **-b-** are also used if Configuration and Extension are both zero but the Perspective + Essence value is non-zero (so that the Affiliation values are not mistaken for being MPS Configuration values).

<sup>3</sup> **-v-** is used with DPF forms beginning with **ř-** for ease of pronunciation, e.g., **řkr → řkv, řctr → řctv**. May also be used with preceding **-d-, -g-, or -b-**.

<sup>4</sup> N/RPV value **-h-** and A/RPV value **-ç-** are used if preceded by a fricative + stop (i.e., non-zero Extension + non-zero Affiliation), e.g., **stm → sth, pfkm → pfkh, tçpn → tçpc**. They are also used after a voiceless stop consonant (i.e., MPS forms) when immediately preceded by a Slot **V** glottal-stop, e.g., **'km → 'kh, 'pn → 'pç**.

**NOTE:** the POTENTIAL Configuration from previous C<sub>A</sub> versions has been eliminated for two reasons: (1) its notion of fuzziness (i.e., “at least one”/“approximately one”) was not the same (or compatible) with the fuzzy categories of the DPX or MPX configuration, and (2) it was arbitrary to assign the UPX’s notion of fuzziness to a single entity/set; it should be applicable to ANY number of entities/sets. Consequently, to express this notion of fuzziness with a formative in ANY configuration, instead use Degree 3 of the IPC/4 affix (or Degree 3 of the DGR/8 affix) to modify a number affix in Degree 5.

**3.6.1 Combining C<sub>A</sub> with a preceding glottal stop:** For increased euphony or to avoid requiring an epenthetic vowel, a Slot V final glottal-stop merges with the C<sub>A</sub> form as per the rules below. **NOTE:** First apply all required allomorphic substitutions to the C<sub>A</sub> form before applying the following rules:

- If C<sub>A</sub> consists of a single stop or affricate, delete the glottal-stop and geminate the stop or affricate, e.g., 'p → pp, 't → tt, 'g → gg-, 'c → cc-, 'z → zz.
- For C<sub>A</sub> forms beginning with a voiceless stop (i.e., MPS forms -p-, -t-, -k-) followed by a non-zero Extension form (i.e., fricatives -s-, -š-, -f-, -t-, -č-), delete the glottal-stop, and geminate the fricative, e.g., 'pf → pff, 'tçkl → tççkl, 'kst → ksst. [Note: this rule does NOT apply to the ABSTRACT-RPV fricative -ç-; see Footnote 3 on the preceding page.]
- For C<sub>A</sub> forms containing two stops, use the following substitutions:

'pk → rrç	'tk → llç	'kt → řřt	'pt → rrřt	'kp → řřf	'tp → llf
'lpk → llz	'rpk → rrz	'řpk → řřz		'lpt → llž	' rpt → rrž
'ltk → llš	'rtk → rrs	'řtk → řřs		'lkp → llš	'řkp → rrš
'lkt → llđ	'rkt → rrđ	'řkt → řřđ		'ltp → llv	'řtp → rrřv

- For C<sub>A</sub> forms consisting of a voiced stop plus a nasal, use the following substitutions:

'bm → vvm	'bn → vvn	dm → dđm	dn → dđn	gm → žžm	gn → žžn
-----------	-----------	----------	----------	----------	----------

- If C<sub>A</sub> consists of two or more consonants beginning with either a continuant (i.e., r-, l-, a nasal, or a fricative) or an affricate (c-, č-, z-, j-), delete the glottal-stop and geminate the continuant or affricate instead, e.g., 'rt → rrt, 'nkl → nnkl, 'st → sst, 'fsn → ffsn, 'nz → nnz, 'čpw → ččpw, etc.
- If C<sub>A</sub> is a stop (i.e., -p-, -t-, -k-, -b-, -d-, -g-) followed by -l, -r, -ř, -w, or -y, delete the glottal-stop and geminate the stop, e.g., 'py → ppy, 'dr → ddr.
- If C<sub>A</sub> is a single consonant other than a stop or affricate (i.e., a fricative, nasal, or liquid), or is a conjunct not included in the above three rules, no changes are made and Sec. 1.7 applies to the glottal-stop.

Note that although the above rules eliminate the Slot V glottal stop, the C<sub>A</sub> form is still distinguishable from a preceding Slot V C<sub>S</sub>V<sub>X</sub> affix because the resulting C<sub>A</sub> forms do not match any permissible Slot V C<sub>S</sub> form.

**3.6.2 The glottal-stop of a final Slot V V<sub>X</sub>C<sub>S</sub> affix:** 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 (See Sec. 3.1 and 3.2), the glottal-stop indicating the final V<sub>X</sub>C<sub>S</sub> affix does NOT combine with the C<sub>S</sub> portion of the affix. Use the standard rules from Sec. 1.7 instead.

**3.6.3 Combination Personal-Reference Adjuncts** (see Sec. 4.7.2) 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-, -xx-, -lx-, or -rx-, none of which are possible C<sub>A</sub> forms. Thus, these four consonant conjuncts distinguish such adjuncts 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. The last affix in Slot VII does not take any glottal stop. 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 / öä	<b>Type 1:</b> circumstantial <b>Type 2:</b> derivational
2	ä	au	iä / üä	<b>Type 3:</b> applies to previous $V_X C_S$ affix only (or the following affix if it is the first in the slot).
3	e	ei	ie / öe	<b>Degree 0:</b> unspecified degree; refers to the affix's general semantic concept as a whole.
4	ë	eu	ië / üë	<b>C<sub>A</sub> stacking:</b> The specialized $-V_X$ value, -üä, is used to indicate that the following $-C_S$ consonant-form is to be interpreted as a $C_A$ complex having scope over (i.e., “stacked” upon) the <a href="#">Slot VI <math>C_A</math> complex of the stem</a> .
5	i	ëi	ëu	
6	ö	ou	uö / iö	
7	o	oi	uo / io	
8	ü	iu	ue / eö	
9	u	ui	ua / aö	
0	üä	üe	üö	

### 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 XI). 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 -CD- 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 personal-reference adjunct. 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 personal-reference adjunct or modular adjunct).

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

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

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

VALENCE			V <sub>N</sub>			
			PHASE		EFFECT	
1	MNO	(a)	CTX	(ai)	1:BEN	ia / öä
2	PRL	ä	PCT	au	2:BEN	iä / üä
3	CRO	e	ITR	ei	3:BEN	ie / oë
4	RCP	ë	REP	eu	SLF:BEN **	ië / uë
5	CPL	i	ITM	ëi	UNK [unknown]	ëu
6	DUP	ö	RCT	ou	SLF:DET **	uö / iö
7	DEM	o	FRE	oi	3:DET	uo / io
8	CNG	ü	FRG	iu	2:DET	ue / eö
9	PTI	u	FLC	ui	1:DET	ua / aö

+

MOOD	C <sub>N</sub>	Case-Scope
FAC	(h)	CCh
SUB	hl	CCI
ASM	hr	CCr
SPC	hm	CCw
COU	hn	CCm
HYP	hñ	CCn

\* Series 4 vowel-forms show relative Level; for absolute Level, use Series 4 vowel forms with a -y- infix

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

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

ASPECT V <sub>N</sub>											
RTR	RETROSPECTIVE	a	RSM	RESUMPTIVE	ai	PMP	PREEMPTIVE	ia / öä	DCL	DISCLUSIVE	ao
PRS	PROSPECTIVE	ä	CSS	CESSATIVE	au	CLM	CLIMACTIC	iä / uä	CCL	CONCLUSIVE	ae
HAB	HABITUAL	e	PAU	PAUSAL	ei	DLT	DILATORY	ie / oë	CUL	CULMINATIVE	ea
PRG	PROGRESSIVE	ë	RGR	REGRESSIVE	eu	TMP	TEMPORARY	ië / üë	IMD	INTERMEDIATIVE	eo
IMM	IMMINENT	i	PCL	PRECLUSIVE	ëi	XPD	EXPENDITIVE	ëü	TRD	TARDATIVE	eë
PCS	PRECESSIVE	ö	CNT	CONTINUATIVE	ou	LIM	LIMITATIVE	uö / iö	TNS	TRANSITIONAL	öe
REG	REGULATIVE	o	ICS	INCESSATIVE	oi	EPD	EXPEDITIVE	uo / io	ITC	INTERCOMMUTATIVE	oe
SMM	SUMMATIVE	ü	ATC	ANTECEDENT	iu	PTC	PROTRACTIVE	ue / eö	MTV	MOTIVE	öa
ATP	ANTICIPATORY	u	IRP	INTERRUPTIVE	ui	PPR	PREPARATORY	ua / aö	SQN	SEQUENTIAL	oa

MOOD	C <sub>N</sub>	Case-Scope
FAC	w/y	CCh
SUB	hw	CCI
ASM	hlw	CCr
SPC	hly	CCw
COU	hnw	CCm
HYP	hny	CCn

+

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.

**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

	Pattern 1	Pattern 2	Meaning
CCh	(h)	w/y	X's case is governed by the noun-case of the formative marked C <sub>N</sub> = -hl-/hw-; 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 to this rule.]
CCI	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> = -h- or -w-/y-)
CCr	hr	hlw	X is the formative to which formatives in the clause marked with C <sub>N</sub> = -hm-/hly- are associated
CCw	hm	hly	X is associated by noun-case to the formative marked by C <sub>N</sub> = -hr-/hlw-
CCm	hn	hnw	X's noun-case associates only with the immediately following formative
CCn	hň	hny	X's noun-case associates only with the immediately preceding formative

**SPECIAL NOTE:** A noun in one of the Appositive, Associative, or Relational I & II Cases adjacent to another noun operates as an exception to the above rules. Because such Appositive/Associative/Relational nouns naturally associate with an adjacent noun, default zero-marking on such a noun will be assumed to convey **CCm** status if the Appositive/Associative/Relational noun is the first of a pair of nouns, or **CCn** 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, show Mood via **V<sub>X</sub>C<sub>S</sub>** affix or an adjunct (see Sec. 4) or via the **C<sub>Y</sub>** affix in Slot **X** (see Sec. 3.10.2).

**3.8.1.2 Moving the C<sub>N</sub>—Pattern 1 affix to the Slot VI C<sub>A</sub> Slot:** If the **V<sub>N</sub>—Pattern 1** Valence/Phase/Level/Effect+Mood/CaseScope value in Slot **VIII** is default MNO/FAC or MNO/CCh, Mood/Case-Scope 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 -I- (UXS-DEL-CSL-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/CCh -h- never moves to Slot **VI** because it instead elides whenever Slot **VIII** is zero-marked.

**3.8.1.3 Alternate Means of Showing Mood or Case-Scope:** If there is no **C<sub>B</sub>** Bias suffix in formative Slot **X**, and the Slot **VI C<sub>A</sub>** value is non-default, then either Mood or Case-Scope can alternately be shown in Slot **X** using the new **C<sub>Y</sub>** suffix. This is explained in Sec. 3.10.2. Note that this option is not available for a concatenated formative, as Slot **X** must be empty in a concatenated formative.

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

Nouns and FRAMED verbs take Case, while UNFRAMED verbs take Illocution+Expectation+Validation instead (see Sec. 3.9.2 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, Relational I, Relational II, Spatio-Temporal I, and Spatio-Temporal II, each contain only eight rather than nine cases. As a result, vowel-form No. 8 of the nine forms of the generalized standard vowel-sequence is not used in these four groups of cases.

**NOTE:** The Spatio-Temporal Cases and the Relational Case have swapped their positional order compared to previous versions of this document.

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
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
3	ABS	ABSOLUTIVE	e	The party/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
4	STM	STIMULATIVE <sup>2</sup>	ë	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
5	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
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
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
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
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

<sup>1</sup> The THEMATIC -a affix can be elided as long as the resulting word is not monosyllabic (which would be interpreted as a verbal formative with ASR/COG/OBS Illocution/Expectation/Validation). The External Juncture rules of Sec. 1.5 must also be taken into account before eliding the -a affix.

<sup>2</sup> The 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*.

APPOSITIONAL 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
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
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
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
14	PDC	PRODUCTIVE	éi	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
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 X by / thru which / whom something is subjectively interpreted / considered	that which is subjectively considered, described or interpreted by/thru X
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
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
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(full) 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

\* 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			$v_c$	DESCRIPTION	case-accessor affix see Sec. 3.9.2 below	inverse accessor affix see Sec. 3.9.2 below
19	APL	APPLICATIVE	ia / öä	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	iä / üä	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	ie / öë	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	ië / uë	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	ëu	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 / iö	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 / io	The party in exchange for which, a reciprocal or complementary act/event occurs; e.g., <i>He paid 100 dollars in exchange for the tickets.</i>	that which is received in an act of exchange	that which is relinquished in an act of exchange
26	CMP	COMPARATIVE	ue / eö	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 as opposed to the others</i> , Sam drives a van <b>versus Joe</b> , who prefers a truck, <i>At the party, she danced while/whereas I ate.</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 / aö	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	ao	Identifies a noun used to describe/characterize the manner in which an act/event/state occurs or exists, e.g., <i>She dances gracefully; The boys ate with gusto; That clown is speaking nonsense; Father speaks with such fortitude.</i>	the manner in which X is/occurs	that which is/occurs in a manner described or characterized by X
29	TFM	TRANSFORMATIVE	ae	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 to ashes, Mother reached a state of tranquility, The clowns will turn our children into slaves, Her father drank himself to death.</i>	that into which, X transforms/changes	that which is/occurs as a result of the transformation of X
30	CLA	CLASSIFICATIVE	ea	identifies a noun as a basis for arranging, sorting, classifying, or counting, e.g., <i>Place them in groups of three, The workers arranged the tables in rows, He lay down lengthwise, Can you count by fives?, I will sort them by color.</i> Also identifies the basis for recurring increments, e.g., month by month; day in, day out; box upon box, clown after clown.	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	eo	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	ee	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 with tomatoes, The clown fed her an apple, He reads by candle(light).</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>In spite of his stupidity, he passed the test; The law notwithstanding, I will stand my ground; No matter how ignorant (they may be), they are welcome, Although a foreigner, 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 for fear of my wrath, I traveled by night to avoid the sun. Hide the children, lest the clowns find them.</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>Without peace, this society is doomed; We'll be safe unless the clowns find us.</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>If not for the rain, we would have had a good time; She loves everybody except clowns; All pets are vermin, excluding dogs; He eats almost anything but (not) spinach.</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>Because of war, our planet will never be able to join the Federation; Given the presence of clowns, we must accept the corruption of our children; With my plan, 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 I			V <sub>c</sub>	DESCRIPTION	case-accessor affix see Sec. 3.9.2 below	inverse accessor affix see Sec. 3.9.2 below
37	REF	REFERENTIAL	a'a	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/is in regard	that which pertains to X or which is about or in regard to X
38	ASI	ASSIMILATIVE	ä'ä	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
39	ESS	ESSIVE	e'e	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
40	COR	CORRELATIVE	ë'ë	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
41	CPS	COMPOSITIVE	i'i	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
42	COM	COMITATIVE *	ö'ö	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
43	UTL	UTILITATIVE	o'o	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/utilized circumstantially by X
44	RLT	RELATIVE	u'u	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 ( <a href="#">See Sec.5.4 of this document</a> ).	that which identifies or distinguishes X from other parties	the party identified by or distinguishable by X

\* The CONJUNCTIVE case from Ithkuil 2011 has been eliminated. Use the COMITATIVE case + PARALLEL or COMPLEMENTARY valence instead.

RELATIONAL CASES II			$v_c$	DESCRIPTION	case-accessor affix see Sec. 3.9.2 below	inverse accessor affix see Sec. 3.9.2 below
45	ACT	ACTIVATIVE	a'i	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	DSC	DESCRIPTIVE	a'u	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
47	TRM	TERMINATIVE	e'i	Identifies a noun as being the goal of an act/event, e.g., <i>We seek a new planet; a desire to see his homeland; an academy for (making) champions</i>	X's goal; what X pursues as a goal	the goal X
48	SEL	SELECTIVE	e'u	Identifies a contextually recurring time-period, as well as a string of recurring entities, e.g., <i>I visit him every three days; Each year, I travel to the Clown Planet; He works nights; By day, she is an artisan; The clowns visit us on Sundays; ...every third book; ...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
49	CFM	CONFORMATIVE	ë'i	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
50	DEP	DEPENDENT	o'u	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
51	PRD	PREDICATIVE	o'i	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 a book <b>dependent on a publisher</b> , a man <b>relying on charity</b> , laws <b>based in reason</b> , success <b>supported by corruption</b> .	that upon which X relies or is based upon	that which relies on or is based upon X
52	VOC	VOCATIVE	u'i	Signifies a noun being used in direct address.	—	—

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 <b>where something is situated or occurs</b> ; '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'ä	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'e	entity toward which another entity is moving/approaching	where X is headed-going toward	that which is headed toward X
56	ABL	ABLATIVE	i'ë	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	ë'u	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 on me</i> , <i>It lies just west of the house</i> , <i>Tell me when the parade starts relative to my arrival</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

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'o	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'e	Specifies the increment of space or time or unit by which a contextual ratio of measurement is created, e.g., <i>He charges by the minute. It travels at 90 kilometers per hour. He earns \$25 per book.</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'a	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 in/over six months, These clowns can corrupt your child within a few days, The woman has been ill a lot this year, For the last several concerts, 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'o	signifies the duration of an act, condition, or event, i.e., how long it takes or lasts, e.g., <i>He prayed through lunch, It rained all night, It took three days for the fever to break, She sang for an hour.</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	e'ë	Identifies an entity acting as a point in time prior to which an act, condition, or event occurs, e.g., ' <i>this city before the war</i> ', ' <i>a presentation preceding the banquet</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 after the war</i> ', ' <i>a presentation following the banquet</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>Four years ago I was a student; Going back three generations, women could not even vote; Four years from now, I will be a student; Looking ahead three generations, clowns will rule the world; I will be home in three days; Little did he know that two months later he'd be a rich man.</i> The past vs. future distinction is determined from context, any aspectual morphology, or may be specified with the new TPL affix.	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

### 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 five types of affix (Type-1 Case-Accessor, Type-2 Case-Accessor, Type-1 Inverse Case-Accessor, Type-2 Inverse Case-Accessor, and Case-Stacking Affix), the first  $C_S$  increment being used for Cases 1 through 36, and the second  $C_S$  increment for Cases 37 through 68.

The  $V_X$  increment for the 36 Transrelative, Appositive, Associative, and Adverbial cases is the first four standard-vowel form series (i.e., they are the same as their corresponding  $V_C$  case-affixes). The Relational and Spatio-Temporal cases also utilize the first four standard-vowel form series, distinguished from the first 36 cases by their different  $C_S$  increment.

	Case Accessor Affix				Inverse Case Accessor Affix				Case-Stacking Affix **	
	Type 1		Type 2		Type 1		Type 2			
	$V_X$ = 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.	$C_S$ =
Cases 1 thru 9	1		1		1		1		1	
Cases 10 thru 18	2	ll	2	lw	2	sw	2	zw	2	šw
Cases 19 thru 27	3		3		3		3		3	
Cases 28 thru 36	4		4		4		4		4	
Cases 37 thru 44 *	1	rr	1	ly	1	sy	1	zy	1	šy
Cases 45 thru 52 *	2		2		2		2		2	
Cases 53 thru 60 *	3		3		3		3		3	
Cases 61 thru 68 *	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 affixual adjuncts.

This structure allows case-accessor and case-stacking affixes to appear in Slot V or Slot VII or in affix-scoping adjuncts without any ambiguity, and without glottal-stops piling up. The  $V_X$  values parallel the values of the actual  $V_C$  case-markers for Cases 1 through 36, and will be “simplified” forms with no glottal-stop for Cases 37 through 68.

### 3.9.3 V<sub>K</sub> — Illocution, Expectation, and Validation

Illocution, Expectation, and Validation appear on UNFRAMED verbal formatives, shown by a V<sub>K</sub> ultimate stress pattern in Slot XI. Nominal formatives or FRAMED verbal formatives take a V<sub>C</sub> case affix in this slot instead.

**3.9.3.1 Elimination of Sanction as a Mandatory Grammatical Category:** The longstanding Ithkuil category of Sanction has been reviewed and reanalyzed. The grammar of the language already requires a speaker to overtly state the evidential basis of a statement (e.g., present sensory experience, past sensory experience, learned knowledge, inference, intuition, etc.). This is sufficient to alert the addressee as to whether the ontological vs. conventional status of a statement, its refutability vs. conclusiveness, and its accuracy vs. inaccuracy should be questioned. It is not additionally productive for the grammar to overtly state these qualities. They will be analyzed by the addressee regardless of whether the grammar of the language requires the speaker to overtly assign them.

Another way to look at this is to realize that when a speaker says '*That's Mount Fuji over there*', their intention is to provide information about the name and/or location of a mountain based on their belief. Whether their belief is correct or incorrect, whether the information conveyed signifies ontological fact or conventionalized knowledge, whether it is verifiable or unverifiable, whether it is based on personal knowledge from past experience or merely inference or even a subjective hunch, none of these issues change the fact of what information it is the speaker wishes to convey — *the name and/or location of a mountain*. Thus, the issues of accuracy, verifiability, refutability, and convention vs. ontology are, in fact, up to the addressee to analyze upon hearing the spoken information, i.e., it's up to the addressee as to whether they think to, or choose to challenge, refute, correct, ignore, or accept the information.

Based on the above analysis, the morphological category of Sanction will no longer be a mandatorily required grammatical category in the language. The fact that the grammar requires a speaker to indicate the evidential basis for a statement is sufficient to imply whether an addressee should interpret a statement as an ontological fact, a statement of conventionalized knowledge, a subjective belief/assertion/proposition, or a conjecture. The resulting choice made by an addressee as to the type of statement will then entail the corollary choice as to whether to accept, disregard, or attempt to rebut/refute the statement, none of which need be mandatorily expressed by the grammar. The category of Sanction has a V<sub>X</sub>C<sub>S</sub> affix assigned to it, and this affix will remain available as a means to *optionally* indicate in detail the specific nature of a particular statement, if desired.

**3.9.3.2 Illocution and Expectation:** The category of Illocution is now completely revised based upon ideas presented by and discussed with u/aftermeasure, with slight modification by the author. The basic idea behind the new structure for Illocution is the fact that any speech act falls essentially into two types, assertive truth claims about the world, or performative statements not involving truth claims, the specific nature of which can be either explicitly stated by a verb (e.g., *request*, *ask*, *order*, *command*, *declare*) or be implied based on an overtly marked "expectation", i.e., what kind of response the speaker expects to the statement from the addressee. Therefore, there will now be only two Illocutions, ASSERTIVE and PERFORMATIVE, explained as follows:

#### Illocution

ASR	ASSERTIVE	statement is an assertion/proposition about the world which constitutes a truth claim
PFM	PERFORMATIVE	statement is other than a truth claim; e.g., a declaration, a command, question, or a "commisive" (i.e., promise, vow, oath, guarantee)

The above two illocutions will in turn be paired with the new category of Expectation, indicating the speaker's desired response from the addressee. There are three Expectations, explained below:

## Expectation

<b>COG</b>	<b>COGNITIVE</b>	addressee expected to listen and consider the statement
<b>RSP</b>	<b>RESPONSIVE</b>	addressee expected to verbally respond to the statement, whether as acknowledgment, agreement, or with a counter-statement
<b>EXE</b>	<b>EXECUTIVE</b>	addressee expected to physically (re-)act in response to the statement

These two categories of Illocution and Expectation interact semantically as follows:

	<b>EXPECTATION</b> (i.e., what kind of response the speaker desires from the addressee)		
<b>ILLOCUTION</b>	<b>COGNITIVE</b>	<b>RESPONSIVE</b>	<b>EXECUTIVE</b>
<b>ASSERTIVE</b>	expectation is that addressee merely hear and consider the statement, not to reply or act in response	equivalent to a WH-question about a state of affairs; expectation is that addressee respond verbally (i.e., reply, comment, rebuttal, explanation, answer to inquiry, etc.)	an indirect request or command; expectation is that addressee take physical action in response to the statement
<b>PERFORMATIVE</b>	equivalent to a declaration; addressee expected to hear and be aware of the newly declared state of affairs	equivalent to a yes/no question; addressee expected to verbally acknowledge and recognize (i.e., express the intention to abide by) the newly declared state of affairs	implicit advisory or command; addressee expected to take action to address the advisory or comply with an implicit or explicit imperative

The usage of the above matrix of values is illustrated below for the sentence '*There is toilet paper on your shoe.*' The English translations are not literal, of course, but the closest approximations English can provide to capture the implications and semantic interplay between the two illocutions and the three expectations.

### Semantic Implications of the Example Sentence '*There is toilet paper on your shoe.*'

	<b>COGNITIVE</b>	<b>RESPONSIVE</b>	<b>EXECUTIVE</b>
<b>ASSERTIVE</b>	' <i>There's toilet paper on your shoe.</i> ' (no acknowledgement needed)	' <i>What are you going to do about that toilet paper on your shoe?</i> ' (assertion made and response expected regarding the assertion)	' <i>You should do something about the toilet paper on your shoe.</i> '
<b>PERFORMATIVE</b>	' <i>Let there be toilet paper on your shoe!</i> '	' <i>Is that toilet paper on your shoe?</i> ' or ' <i>Do you know there's toilet paper on your shoe?</i> ' (yes/no response expected)	' <i>Do something about that toilet paper on your shoe!</i> '

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

Hortatives ("if only.../were it so that...") are expressable by the combination of PERFORMATIVE Illocution + EXECUTIVE Expectation + COUNTERFACTUAL Mood.

**3.9.3.3 Validation:** Validation refers to the evidential basis for a statement in ASSERTIVE illocution. It does not apply to statements with PERFORMATIVE illocution. **NOTE:** Previous versions of this document had an UNSPECIFIED illocution indicating an unknown/unspecified evidential basis for a statement; the author has reconsidered and decided against this option; as in natural languages with evidentiality, the speaker must indicate an evidential source.

<b>ASR ASSERTIVE Illocution</b>			<b>COG</b>	<b>RSP</b>	<b>EXE</b>
<b>OBS</b>	<b>OBSERVATIONAL</b>	present sensory knowledge or present sensory experience: "I perceive... / I know..."	(á)	ái	iá / oâ
<b>REC</b>	<b>RECOLLECTIVE</b>	past sensory knowledge or past sensory experience – "I remember... / I know (from memory)..."	â	áu	iâ / uâ
<b>RPR</b>	<b>REPORTIVE</b>	knowledge from a 3rd party: "I heard (from someone)... / someone has said..."	é	éi	ié / oê
<b>PUP</b>	<b>PURPORTIVE</b>	knowledge from a definitive/(quasi-)verifiable 3rd party source: "I've read... / (an expert) has said..."	ê	éu	iê / uê

<b>PFM PERFORMATIVE Illocution</b>		í	éi	éu
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<b>ASR ASSERTIVE Illocution</b>					
<b>IMA</b>	<b>IMAGINARY</b>	unreal statement, not intended as true, based on whim, imagination, dream, altered mental state, etc.	ô	óu	uô / iô
<b>CVN</b>	<b>CONVENTIONAL</b>	cultural/conventional (i.e., collectively agreed-upon) knowledge: "They say... / It is said..."	ó	ói	uó / ió
<b>ITU</b>	<b>INTUITIVE</b>	intuition, hunch, subjective feeling, past experiences, etc. – "I feel... / I have a hunch... / something tells me..."	û	íu	ué / eô
<b>INF</b>	<b>INFERENTIAL</b>	inference from evidence (or absence of alternatives), induction, extrapolation, etc. "I infer... / I reason..."	ú	úi	uá / aô

**3.9.3.4 If desired to show V<sub>K</sub> information on a FRAMED formative:** Since Slot IX of a FRAMED formative is already taken up by the V<sub>C</sub> case affix, the equivalent to V<sub>K</sub> information can be shown by a new specialized V<sub>X</sub>C<sub>S</sub> affix, as shown below:

<b>-nl</b>	<b>IVE Illocution + Validation + Expectation</b>				
<b>degree</b>	<b>Illocution</b>	<b>Validation</b>	<b>Type-1 = COG Expectation</b>	<b>Type-2 = RSP Expectation</b>	<b>Type-3 = EXE Expectation</b>
1	<b>ASR Assertive</b>	<b>OBS</b> Observational	a	ai	ia / oâ
2		<b>REC</b> Recollective	ä	au	iä / uâ
3		<b>PUP</b> Purportive	e	ei	ie / oë
4		<b>RPR</b> Reportive	ë	eu	ië / uë
5	<b>PFM Performative</b>		i	éi	éu
6	<b>ASR Assertive</b>	<b>IMA</b> Imaginary	ö	ou	uö / iö
7		<b>CVN</b> Conventional	o	oi	uo / io
8		<b>ITU</b> Intuitive	ü	iu	ue / eö
9		<b>INF</b> Inferential	u	ui	ua / aö

### 3.10 Slot X: C<sub>B</sub> – Bias, or C<sub>Y</sub> – alternate Mood/Case-Scope

A word-final C<sub>B</sub> or C<sub>Y</sub> consonantal suffix is optional (and cannot appear in a concatenated formative). The C<sub>B</sub> affix indicates the category of Bias, while C<sub>Y</sub> is an alternative means of indicating Mood or Case-Scope (see Secs. 3.11 and 3.11.1). To prevent the Slot IX+X vowel+consonant form from being mistaken for a V<sub>X</sub>C<sub>S</sub> affix, the C<sub>B</sub> or C<sub>Y</sub> affix must be immediately preceded a glottal stop unless the Slot IX V<sub>c</sub>/V<sub>K</sub> form contains a glottal-stop. Due to the potential for ambiguity with Slot VI C<sub>A</sub> forms, use of a C<sub>B</sub> Bias affix in Slot X requires that Slots VIII and IX be filled. C<sub>Y</sub> Mood/Case-Scope affixes do not match any C<sub>A</sub> forms and therefore do not require Slots VIII and IX to be filled.

**3.10.1 C<sub>B</sub> — Bias:** Each Bias suffix has the same consonant-form as an associated lexico-semantic root. These roots are phonologically structured to contain continuant and sonorant consonants, so that when they are used as Slot X suffixes or autonomous adjuncts, they may be pronounced in an artificially prolonged fashion. Additionally, those Bias forms that end in a voiceless stop or voiceless affricate may aspirate or even ejectivezize the consonant.. Bias adjuncts function much like English “supra-segmental” interjections such as “Phew!”, “Damn!”, “tsk-tsk”, “Psshhh”, “huh?”, “meh”, “hmmm”, etc.

DOL	DOLOROUS	řřx	‘Ow!’ ‘Ouch!’
SKP	SKEPTICAL	rnž	‘Yeah, right!’ ‘Oh, sure! Like anyone’s supposed to believe that!’
IPT	IMPATIENT	žžv	‘C’mom!’, ‘What’re you waiting for?’ ‘so...already!’ as in the sentence ‘So dance already!’
RVL	REVELATIVE	mmļ	‘No wonder...!’ or ‘So that’s why...!’ ‘A-ha!....’ ‘Well, well, well!....’
TRP	TREPIDATIVE	llč	‘Oh, God...’ ‘Oh, no!....’ ‘Oh, dear!’ [fear-based]
RPU	REPULSIVE	šštļ	‘Yuck! Ew! How gross!’
DES	DESPERATIVE	mřř	‘I don’t know how to say this, but...’ ‘I’m afraid that....’ ‘I’m sorry to have to tell you, but...’
DPB	DISAPPROBATIVE	ffx	‘I don’t like the fact that...’ ‘It bothers me that....’ ‘Unacceptable!’ ‘I hate it!’
CTP	CONTEMPTIVE	kšš	‘What nonsense!’ or ‘What bullshit!’

PSC	PROSAIC	žžt	‘Meh... (said in disappointment)’ ‘How ordinary!’
CMD	COMEDIC	pļļ	‘Funny!’ ‘LOL’
PPV	PROPOSITIONAL	sl	‘what if...’ ‘It could be that....’ ‘Consider this: ...’ ‘Posit the following: ...’ ‘Assume for the sake of argument that....’
SGS	SUGGESTIVE	ltç	‘How about...’ ‘We could...’ ‘Might I suggest...’
DFD	DIFFIDENT	cč	‘sorry, but...’ ‘It’s nothing. It’s just...’
RFL	REFLECTIVE	llm	‘Look at it this way...’ ‘As I see it,...’ ‘In my opinion,...’ or ‘From my point of view,...’
EUP	EUPHEMISTIC	vvt	‘Let’s just say that....’ or ‘Well, let me put it this way....’
CRR	CORRECTIVE	ňť	‘that is to say...,’ ‘What I mean(t) to say is...’ ‘I mean....’
APB	APPROBATIVE	řs	‘(That’s) OK’ ‘(That’s) alright’ ‘(That’s) good’ ‘(That’s) fine’ ‘Very well’ ‘Sure’

EXA	EXASPERATIVE	kçç	'Dammit!' 'Look, don't you get it?...' 'Look, I'm trying to tell you....'
IDG	INDIGNATIVE	pšš	'The nerve!' or 'How dare...!?"
DIS	DISMISSIVE	kff	'Is that it?' 'Big deal!' 'So what!?"
DRS	DERISIVE	pfc	'How foolish!' 'How silly!' 'Look at how foolish/silly/ridiculous this is!'
PES	PESSIMISTIC	ksp	'Yeah, like it really matters that...' 'Pfft! What's it to me?'
DUB	DUBITATIVE	mmf	'Hmm, not likely.' 'I doubt it.' 'Sounds fishy to me' 'I don't trust this/it/him/her/them...'
IVD	INVIDIOUS	řřn	'Why does he/she/they get to... and I don't?!' 'How unfair (that I don't get to...)!'
DCC	DISCONCERTIVE	gzj	'I'm not sure about this.' 'I don't feel comfortable about this.' 'I'm feeling out of my element here.'
STU	STUPEFACTIVE	llč	'Woah!' 'Holy, bejeezus!' 'What the...!' 'Jeez, Louise...!'
FSC	FASCINATIVE	žžj	'Cool!' 'Wow!' 'Awesome!'
IFT	INFATUATIVE	vvr	'Praise be to...!' 'Oh, thank God for...!' 'There's nothing more sacred/holy/important than...!'
EUH	EUPHORIC	gzz	'(Sigh) What bliss!'
DLC	DELECTATIVE	żmm	'Whee!'
ATE	ATTENTIVE	ňj	'Well, whaddya know...!' 'Well, will you look at that...!' 'Well, go figure...,' 'Who would've thought...?' 'Well I'll be!'
RNC	RENUNCIATIVE	mzt	'So much for...!' 'There goes...!'

IRO	IRONIC	mmž	'Oh, nice!' 'Just great!' 'Well, now, isn't this lovely!'
PSM	PRESUMPTIVE	nnť	'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,...'
GRT	GRATIFICATIVE	mmh	'Ah! What bliss...!' 'Oh, there's nothing like....' [physical pleasure only]
SAT	SATIATIVE	ff	'How satisfying...!' 'At last, the pleasure of knowing/being/seeing/doing....' [psychological/emotional pleasure/satiety only]
PPX	PERPLEXIVE	llh	'Huh? What do you mean...? What the hell? 'WTF!?' 'You gotta be kidding me!'
CTV	CONTEMPLATIVE	gvv	'I wonder how...,' 'that's odd...,' 'I don't get it...,' or a quizzical 'hmmmm.'
PPT	PROPITIOUS	mll	'it's a wonder that' as in It's a wonder he didn't break a bone in that fall.
SOL	SOLICITATIVE	ňňs	'please'
RAC	REACTIVE	kll	'My goodness!' 'Wow!' 'Amazing!'
COI	COINCIDENTAL	ššč	'What a coincidence!'
FOR	FORTUITOUS	lzp	'It's just as well that...,' or 'All's well that ends well...'
ANN	ANNUNCIATIVE	drr	'Guess what!' or 'Wait till you hear this!'
OPT	OPTIMAL	ççk	prolonged 'so' or 'totally' as in 'I so don't care!' or 'That is totally not what I meant.'
CNV	CONTENSIVE	rřj	'I'm telling you...,' 'I told you so!', 'You see?!"
IPL	IMPLICATIVE	vll	'of course,' 'after all,' 'needless to say.'

<b>MAN</b>	<b>MANDATORY</b>	msk	'take it or leave it,' 'this is your last chance,'
<b>EXG</b>	<b>EXIGENT</b>	rrs	'It's now or never!'
<b>ISP</b>	<b>INSIPID</b>	lçp	'Meh... (said due to lack of interest)' 'How boring/tedious/dull!'
<b>ADM</b>	<b>ADMISSIVE</b>	ll	'Mm-hm' 'Uh-huh' (said as mere acknowledgement of a statement without any implied agreement with or assent to the statement)
<b>APH</b>	<b>APPREHENSIVE</b>	vvz	'I'm worried...' 'I've got a bad feeling about this...'

<b>ACC</b>	<b>ACCIDENTAL</b>	lf	'As luck would have it...' 'Fate has decided that...' 'What luck!'
<b>ANP</b>	<b>ANTICIPATIVE</b>	lst	'I'm looking foward to this!'
<b>ACH</b>	<b>ARCHETYPAL</b>	mçt	what (a) ...!; how . . . ! ; Boy! Did (does) X ever ...
<b>VEX</b>	<b>VEXATIVE</b>	ksk	'How annoying!' 'What a bother!' 'What a pain!'
<b>CRP</b>	<b>CORRUPTIVE</b>	gžž	'How corrupt!' 'What corruption!'
<b>DEJ</b>	<b>DEJECTIVE</b>	žžg	('sigh)' [of dejection/disillusionment]

**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.

**3.10.2  $C_Y$  — Alternate indication of Mood/Case-Scope in Slot  $X$ :** Instead of showing Bias, Slot  $X$  may be used to indicate Mood or Case-Scope (see Secs. 3.8 and 3.8.1). This shortens a word by one syllable if Slot **VIII** would otherwise be empty and Slot **VI**  $C_A$  is not default -l-.

<b>FAC / CCh</b>	<b>SUB / CCI</b>	<b>ASM / CCr</b>	<b>SPC / CCw</b>	<b>COU / CCm</b>	<b>HYP / CCn</b>
[zero]	x	rs	rš	rz	rž

The six  $C_Y$  suffixes are distinct from any  $C_B$  Bias suffixes, and are not pronounced with prolonged gemination. They are also distinct from any possible Slot **VI**  $C_A$  form.

Like  $C_B$  Bias affixes,  $C_Y$  suffixes must be preceded by a glottal-stop unless a preceding  $V_C$  form in Slot **IX** already contains a glottal-stop. For Slot **IX**  $V_K$  forms, the glottal-stop may be placed between the two vowels of a diphthong, or if a single vowel, the vowel may be doubled and the glottal-stop placed between. Unlike  $C_B$  Bias affixes, the use of a  $C_Y$  suffix in Slot  $X$  does not require that Slots **VIII** and **IX** be filled.

**Note:** If using Slots **VIII** and **X** to show both Mood and Case-Scope on a FRAMED formative, Slot **VIII**  $C_N$  shows Case-Scope, while Slot **X**  $C_Y$  shows Mood.

### 3.11 Slot XI: 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 + $V_C$
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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 Short-Form 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 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  [initial glottal-stop is pronounced but not written]	(a) = affix applies to stem only (not to its $C_A$ ) and has scope over all Slot $V$ affixes (i.e., as if it were the last affix in Slot $V$ ) u = affix applies to stem only (not to its $C_A$ ) and is subordinate to all Slot $V$ affixes (i.e., as if it were the first affix in Slot $V$ ) e = affix applies to both Stem and $C_A$ and has scope over all Slot $VII$ affixes (i.e., as if it were the last affix in Slot $VII$ ) i = affix applies to both Stem and $C_A$ and is subordinate to all Slot $VII$ affixes (i.e., as if it were the first affix in Slot $VII$ ) o = affix has scope over the entire formative as a whole, including Valence, Mood or Case, Illocution/Validation, etc. ö = affix has scope over the entire formative as a whole as well as other adjacent adjuncts including a modular adjunct	Penultimate stress = default  Ultimate stress = affix applies to concatenated stem only

### 4.2 Affix-Scoping Adjunct

This adjunct associates two or more affixes to a formative. The tell-tale sign is that the second consonant-form will consist of -h-, or a non-root consonant (h, w, y, hw, hl, or hr) preceded by a glottal-stop. Examples: *dohast, stei'yaikra, ejgi'woftóm, via'hlobrigli*.

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

### 4.3 Modular Adjunct

This adjunct has three 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 formative, 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; the only permissible consonants are **-w-**, **-y-**, or a form consisting of or beginning with **-h-**. Examples: *o*, *yu*, *iha*, *ihwe*, *yewia*, *uhlaihlwi*, *uya*, *öhwoyó*, *wahnyá*.

The structure of the adjunct is shown below. Slots 2, 3, and 4 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 5 are mandatory; the other slots are optional. Default MNO-FAC/CCh 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 new **V<sub>H</sub>** value in Slot 5 of the adjunct indicates a different and specialized pattern of scoping.

<b>1</b>	<b>2</b>	<b>3</b>	<b>4</b>	<b>5</b>
,	<b>Valence/Phase/Level/Effect + Mood/Case-Scope OR Aspect + Mood/Case-Scope</b>	[same as Column 2]	[same as Column 2]	<b>Aspect or Valence/Phase/Level/Effect or Specialized Scope of the Adjunct</b>
	(V <sub>N</sub> C <sub>N</sub> )  C <sub>N</sub> = h / hl / hr / hm / hn / hň  For Aspect: C <sub>N</sub> = w~y / hw / hlw / hly / hnw / hny	(V <sub>N</sub> C <sub>N</sub> )	(V <sub>N</sub> C <sub>N</sub> )	V <sub>N</sub> or V <sub>H</sub>  If only Slots 1 and 5 are filled, then Slot 5 = <b>Aspect</b> ; If any of Slots 2, 3, or 4 are filled & stress is penultimate, then Slot 5 = <b>Valence or Phase or Level or Effect</b> ; If any of Slots 2, 3, or 4 are filled and stress is ultimate, then Slot 5 = new <b>V<sub>H</sub></b> whose values are shown below.

#### Slot 5 V<sub>H</sub> values (if adjunct has ultimate stress):

- a = the adjunct carries default (formative Slot **VIII**) scoping but applies to the parent formative only, not the concatenated formative.
- ä = the adjunct carries default (formative Slot **VIII**) scoping but applies to the concatenated formative only, not the parent formative.
- i = affixes in Slots 2, 3, and 4 have successive scope order over each other (Slot 2 > Slot 3 > Slot 4) and have scope over Case/Mood, and Validation + Illocution + Expectation.
- u = same as -i- except adjunct applies to the parent formative only, not the concatenated formative.
- ü = same as -i- except adjunct applies to the concatenated formative only, not the parent formative.
- e = affixes in Slots 2, 3, and 4 have successive scope order over each other (Slot 2 > Slot 3 > Slot 4) and have scope over the formative as a whole including any adjacent affixual adjuncts (unless those affixual adjuncts have V<sub>S</sub>, C<sub>Z</sub>, or V<sub>Z</sub> values indicating that they have scope over a modular adjunct)
- o = same as -e- except adjunct applies to the parent formative only, not the concatenated formative.
- ö = same as -e- except adjunct applies to the concatenated formative only, not the parent formative.

## 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 *hü*.

Register Adjunct	Register	Initial Adjunct	Final Adjunct
<b>DSV</b>	DISCURSIVE (direct speech)	ha	(hai)
<b>PNT</b>	PARENTHETICAL (parenthetical aside)	he	(hei)
<b>SPF</b>	SPECIFICATIVE (proper name of preceding referent) <sup>1</sup>	hi	(hiu)
<b>EXM</b>	EXEMPLIFICATIVE ('for example, ...')	ho	(hoi)
<b>CGT</b>	COGITANT (silent/subjective thoughts)	hö	(hëi)
<b>MTH</b>	MATHEMATICAL expression in the mathematical sub-language	hu	(hui)
<b>CAR</b>	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 *hü* or the SPF final adjunct *hiu*, or pronounce the last word of the proper name/phrase with low tone.

## 4.5 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. The tell-tale sign of the adjunct is the initial **hl-** with no subsequent consonant forms. The last word of the foreign phrase or proper name can be indicated by the adjunct form **hü** if necessary, or by pronouncing that word/name with low tone.

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

**NOTE:** Use of the Carrier Adjunct implies a noun with **CCh** Case-scope. If the name or foreign term is a verb or has non-default Case-scope, use a full carrier-stem.

Examples: *hla*, *hlei*, *hloa*

The Carrier Adjunct affix **-hl-** may be used in the **C<sub>1</sub>** Slot of a Single-Referent-, Dual-Referent-, or Combination Personal-Reference Ajunct (see Sec. 4.7.3).

#### 4.5.1 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!”* The form of this adjunct is **hm** + **V<sub>c</sub>**. The end of the quote may be marked by  **hü**.

<b>hm</b>	<b>V<sub>c</sub></b>
	Same as Formative Slot <a href="#">IX</a>

**NOTE:** Use of the this Quotative Adjunct implies **CCh** Case-scope. If the case-framed phrase has non-default Case-scope, use a preceding modular adjunct to show the case-scope.

Examples: *hma*, *hmei*, *hmoa*

The Quotative Adjunct affix **-hm-** may be used in the **C<sub>1</sub>** Slot of a Single-Referent-, Dual-Referent-, or Combination Personal-Reference Adjunct (see Sec. 4.7.3).

#### 4.5.2 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 to 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. The form of this adjunct is **hn** + **V<sub>c</sub>**. The end of the name is marked by  **hü** if not in sentence-final position.

<b>hn</b>	<b>V<sub>c</sub></b>
	Same as Formative Slot <a href="#">IX</a>

**NOTE:** Use of the this Quotative Adjunct implies **CCh** Case-scope. If the case-framed phrase has non-default Case-scope, use a preceding modular adjunct to show the case-scope.

Examples: *hna*, *hnei*, *hnoa*

#### 4.6 Phrasal Adjunct

This adjunct is essentially a specialized form of the carrier adjunct above, in that it provides Case information as a “short cut” to Formal Stem Zero of a Carrier Root. Formal Stem Zero of the Carrier Root serves a special function to apply meta-level grammatical information to the 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, Formal Stem Zero of the Carrier Root causes the 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>hr</b>	<b>V<sub>c</sub></b>
	Same as Formative Slot <b>IX</b>

**NOTE:** Use of a Concatenative Adjunct implies a noun and Case-scope is **CCh**. If the concatenated phrase is a verb or has non-default Case-scope, use a full carrier-stem in Formal Stem Zero instead. The end of the concatenated phrase may be signalled by the same adjunct form used with the carrier adjunct:  **hü**. The tell-tale sign of this adjunct is the initial **hr-** with no other consonant form. Examples: *hra*, *hrei*, *hroa*

The **Phrasal** Adjunct affix **-hr-** may be used in the **C<sub>1</sub>** Slot of a Single-, Dual-, or Combination Personal-Reference Adjunct (see Sec. 4.7.3).

## 4.7 Personal Reference Adjuncts

There are **ten** personal reference categories, each distinguishing three Effects (see Sec. 3.8 for an explanation of Effect).

		<b>EFFECT</b>			
		NEUTRAL	BENEFICIAL	DETERRIMENTAL	
<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>ň</b>	<b>k</b>	<b>g</b>	“they (pl.)”
<b>mi</b>	monadic inanimate 3 <sup>rd</sup> party	<b>z</b>	<b>ť</b>	<b>đ</b>	“it”
<b>pi</b>	Polyadic inanimate 3 <sup>rd</sup> party	<b>z / ť *</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>Obv</b>	Obviative/Resumptive	<b>th</b>	<b>ph</b>	<b>kh</b>	3 <sup>rd</sup> -party other than most recently referenced (often used with SWR affix)
<b>PVS</b>	Provisional	<b>ll</b>	<b>rr</b>	<b>řř</b>	“whatever” [see explanation on next page]

\* the **-t-** form is optionally available when combined with another consonant, e.g., **pl** = **ma/BEN + pi/NEU**

To show NOMIC or ABSTRACT categories as a personal-reference adjunct, add the following affixes immediately preceding or following one of the affixes above (as phonotactically permissible): 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. This is consistent with the distribution of meanings for the personal-reference roots **-N-** and **-D-** shown below in Sec. 4.7.4.

**Provisional Referent:** The new PVS Provisional referent 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 ASR/RSP Illocution/Expectation, the personal-reference adjunct 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 Ithkuil IV equivalents to English WH-interrogatives, see new Sec. 5.6.

#### 4.7.1 Single-referent or Dual-referent personal reference adjunct

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

\* In previous versions of this document, ultimate stress operated as a short-cut “verbal” form with slot 2 showing **V<sub>V</sub>** information instead of **V<sub>C</sub>** information. This short-cut verbal form is now eliminated. To express a personal-referent as a verb, use the full -N- or -D- personal-reference roots from Sec. 4.7.4 below.

Examples: *to, zua, laiwe, pëgói, zëtewim, smoyúx, triwejvë.*

The tell-tale sign of this adjunct is its **C(ëC)-V** or **C(ëC)-V-w/y-V-C** structure (Formative Slot **IV** has no **V<sub>R</sub>** value -ë- nor any **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 in **C<sub>1</sub>** combinations if necessary due to phonotactic rules, 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’, *zäwiez* [mi/INS - mi/TRA] ‘with it and for (a different) it’.

#### 4.7.2 Combination Personal-Reference Adjunct with Case-Stacking

This adjunct is used to add Designation, Specification,  $V_x C_s$  affix information or a second case (case-stacking) to one of the Personal Reference forms. For non-combination single-referent forms, use the new Personal-Reference roots explained in Sec. 4.7.4.

The tell-tale signs of this adjunct are the Slot 4 consonant-forms containing **-x-**, **-xl-**, **-xr-**, or **-xw-** in what looks like the  $C_A$  slot of a Simple Formative (these four consonant conjuncts are not possible  $C_A$  forms). Examples: *slex*, *ëtkexx*, *olsuolxéd*, *abneirxamzúi*.

1	2	3	4	5	6	7
( ' $V_v$ ) or ( $\ddot{e}$ - )	$C_1$ (+ $C_2$ (+ $C_3$ ))	$V_c$	x / xx / lx / rx	( $V_x C_s$ ... )	( $V_{C2}$ or epenthetic -a )	Stress
Version + optional $C_A$ shortcut	Combination Personal Referent	Case of Combination Personal Referent	Specification		2nd (stacked) case of Combination Personal Referent	Penultimate stress = default
from Formative Slot II, or epenthetic $\ddot{e}$ -		from formative Slot IX	x = BSC    xx = CTE lx = CSV    rx = OBJ	$V_x C_s$ suffix 1 ( 2, 3, ... )	same affixes as formative Slot IX except for THM case = -üa	Ultimate stress = adjunct has RPV Essence.

#### 4.7.3 Applying Carrier, Quotative, and Phrasal Adjunct Forms to Personal-Reference Adjuncts

In addition to the personal-reference affixes shown in Sec. 4.7, the  $C_1$  slot of the Combination Personal-Reference Adjunct above as well as the Single- or Dual-Referent Personal-Reference Adjunct in Sec. 4.7.1 may also take the Carrier Adjunct affix (**hl-**), the Quotative Adjunct affix (**hm-**), and the Phrasal Adjunct affix (**-hr-**), thus allowing these adjuncts the same scope and flexibility as personal-reference adjuncts in terms of showing Specification,  $V_x C_s$  affixes, and case-stacking for a following proper noun, foreign word/phrase, or quote.

**NOTE:** When applying this rule to Combination Personal-Reference Adjuncts, the ' $V_v$  value in Slot 1 must be filled (to avoid the adjunct being mistaken for a Concatenated Formative).

#### 4.7.4 The Two Personal Reference Roots: **-N-** .and **-D-**

There are two personal-reference roots, for use when it is necessary to express the concept of a particular personal referent as a full formative. The first of these roots, **-N-**, refers to animate referents, while the second root, **-D-**, refers to inanimate or mixed (animate plus inanimate) referents. Note that the stems themselves refer to personal referent categories irrespective of number, therefore the meaning of each stem changes depending on its Perspective. Consequently, I have delineated the meaning of each stem for each of the four Perspectives in the tables below.

<b>-N- ‘ANIMATE PERSONAL REFERENT’</b>			
	<b>STEM 1</b>	<b>STEM 2</b>	<b>STEM 3</b>
<b>MONADIC</b>	1m — “I” = monadic speaker	2m — “you (sg.)” = monadic addressee	ma — “he/she/‘they(sg.)’ = monadic animate 3rd party
<b>POLYADIC</b>	1p — “we” = polyadic speaker (i.e., party speaking for oneself and others -- whether inclusive or exclusive of addressee)	2p — “you (pl.)” = polyadic addressee	pa — “they(pl.)” = polyadic animate 3rd party
<b>NOMIC</b>	“I” as a timeless manifestation, i.e., speaking of oneself in a hypothetical or timeless context	“you” as a timeless manifestation, i.e., speaking of the addressee in a hypothetical or timeless context [whether monadic or polyadic]	IPa — “one” = impersonal animate (e.g., French <i>on</i> , German <i>man</i> )
<b>ABSTRACT</b>	“all that I am”, “all that makes me <i>me</i> ”, “everything about me”	“all that you are”, “all that makes you <i>you</i> ”, “everything about you” [whether monadic or polyadic]	“all that (s)he/they are”, “everything about him/her/them” [whether monadic or polyadic]

<b>-D- ‘INANIMATE or MIXED ANIMATE + INANIMATE PERSONAL REFERENT’</b>			
	<b>STEM 1</b>	<b>STEM 2</b>	<b>STEM 3</b>
<b>MONADIC</b>	mi — “it” = monadic inanimate 3rd party	mObv — Obviative/monadic, referring to a previously mentioned monadic party (use SWR affix to specify if necessary)	mMx — mixed monadic animate+ monadic inanimate , e.g., “I and it”, “you(sg.) and it”, “s/he and it”,
<b>POLYADIC</b>	pi — “them/those” = polyadic inanimate 3rd party	pObv — Obviative/polyadic, referring to a previously mentioned polyadic party (use SWR affix to specify if necessary)	pMx — mixed polyadic animate+inanimate, e.g., “we+it”, “I+those”, “you(sg.)+those”, “you(pl.)+it”, “they+those”, “it+they”, “those+s/he”, etc.
<b>NOMIC</b>	IPi — “something”, “a thing”, “things” = impersonal inanimate referent	Nai — “it” as a nomic referent, e.g., a referent as a generic concept; all examples of X throughout time	IPx — impersonal animate+inanimate “one+something”, “people and things”
<b>ABSTRACT</b>	“all that it/they are”, “everything about it/them” [inanimate, whether monadic or polyadic]	Aai — “it” as an abstract referent, e.g., an idea, a concept, a situation	“everything and everyone”, “all that is”, “everything about the world”

The Specifications of the two roots above are illustrated below for Stem 1 of -N-:

<b>-N-</b> [generic personal referent]		
	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 CONTENTIAL 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 CONSTITUTIVE 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'

#### 4.7.5 Use of Type-3 V<sub>X</sub>C<sub>S</sub> Affix Format as Short-Cut for Personal Reference Adjuncts

Similar to Ithkuil 2011, if either of the V<sub>X</sub>C<sub>S</sub> affix slots, Slots **V** or **VII**, are empty, then that empty slot may be used to show a specialized short-cut “personal reference affix.” The affix consists of a C<sub>S</sub> consonant that is any one of the **30** Personal Reference Adjunct consonant-forms from the table in Sec. 4.7 above, combined with a standard Type-3 V<sub>X</sub> vowel-form corresponding to the nine V<sub>X</sub> affix-degrees shown below. It is the appearance of a lone Type-3 V<sub>X</sub>C<sub>S</sub> 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.

<b>Degree 1</b>	POSSESSIVE case
<b>Degree 2</b>	PROPRIETIVE case
<b>Degree 3</b>	GENITIVE case
<b>Degree 4</b>	ATTRIBUTIVE case
<b>Degree 5</b>	PRODUCTIVE case
<b>Degree 6</b>	INTERPRETATIVE case
<b>Degree 7</b>	ORIGINATIVE case
<b>Degree 8</b>	COMITATIVE case
<b>Degree 9</b>	CORRELATIVE case

## 4.8 The Parsing Adjunct

See Section 2.2, paragraph No. 5 for a description of this specialized adjunct.

## 4.9 Recommendation on the Pronunciation of Adjuncts

Certain short monosyllabic or two-syllable adjuncts are likely to be identical in form to the initial syllables of many formatives. Typically these would be words such as single-referent personal reference adjuncts, 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 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’

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

**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.

-lt	RTI — Relative Timeline Indicator
1	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: <ul style="list-style-type: none"> <li>• <i>Flowering plants had not yet developed / were yet to develop during the Cambrian geological period</i> (but they have developed since).</li> <li>• <i>The enemy's code will still be unbroken / will have yet to be broken</i> by the time they attack us (but it will be eventually broken)</li> <li>• <i>The boy later realized / had not yet realized</i> the clown was lying about the Clown Planet (but he realizes it now). (TPP/3)</li> </ul>
2	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: <ol style="list-style-type: none"> <li>1. <i>Hurry! The bus is yet to depart / has not yet departed.</i> (lack of TPP affix implies present context)</li> <li>• <i>By leaving your seat just now to get a soda, you've missed (seeing) / have not seen the magician do his disappearing act.</i> (TPP/4)</li> <li>• <i>The boy hasn't (yet) realized</i> the clown was lying about the Clown Planet. (TPP/3)</li> </ol>
3	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., <ul style="list-style-type: none"> <li>• <i>She was (still) sleeping when I left the apartment.</i> (TPP/3 or TPP/4)</li> <li>• <i>She'll (still) be sleeping when I arrive.</i> (TPP/6 or TPP/7)</li> <li>• <i>Civilizations rise and fall but the Euphrates River keeps rolling along.</i> (NOMIC or TPP/5)</li> <li>• <i>I've been watching TV all day.</i> (lack of TPP affix implies present context)</li> <li>• <i>We'll be watching the apartment all night.</i> (TPP/7)</li> </ul>
4	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., <ul style="list-style-type: none"> <li>• <i>She was (still) sleeping when I left the apartment.</i> (TPP/3 or TPP/4) (but she's no longer sleeping now)</li> <li>• <i>She'll (still) be sleeping when I arrive.</i> (TPP/6 or TPP/7) (but she's not sleeping yet)</li> <li>• <i>I've been watching TV all day.</i> (lack of TPP affix implies present context) (but I'm not doing so now)</li> <li>• <i>We'll be watching the apartment all night.</i> (TPP/7) (but we're not doing so yet)</li> </ul>
5	X has been/done so in the past and will again in the future, but not being/doing so at present, e.g., <ul style="list-style-type: none"> <li>• <i>the once-and-future king</i></li> <li>• <i>I did it before and I will do it again.</i></li> </ul>
6	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., <ul style="list-style-type: none"> <li>• <i>The band had started playing / The band was now playing</i> (then, but no longer).</li> <li>• <i>The war will have begun.</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), had watched 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 has started playing / The band is now playing.</i></li> <li>• <i>The war will have begun.</i> (TPP/6 or TPP/7)</li> <li>• <i>Dody the (one-and-only) sentient dinosaur (due to a freak mutation), watched 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 had (already) departed when/by the time I arrived.</i> (TPP/3)</li> <li>• <i>The bus will have (already) departed 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 had (already) dried up when/by the time the settlers arrived.</i> (TPP/2 or TPP/3)</li> <li>• <i>The Sun will have (already) gone nova when/by the time we develop interstellar ships.</i> (TPP/8)</li> </ul>

### 5.3 Using STATIVE vs. DYNAMIC Function

The distinction in using 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<sub>C</sub> 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<sub>K</sub>** Illocution/Expectation/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 ABSOLUTIVE 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
<b>Byalá pa.</b> <i>'He has/shows/is showing common sense.'</i>	<b>Byulá pa. (Byulá pu.* )</b> <i>'He uses/exercises/is demonstrating common sense.'</i> <small>[*if emphasizing the resulting beneficial change in state]</small>
<b>Vvralá mi wurçpë.</b> <i>'Her passion is dance / She feels passionate about dance.'</i>	<b>Vvralá mi urçpulë.</b> <i>'Her passion is dancing / She feels passionate about dancing.'</i>
<b>Tlasatrá ćkava.</b> <i>Disease is rampant there.</i>	<b>Tlusatrá ćkava.</b> <i>Disease runs rampant there.</i>
<b>Txasá ku.</b> <i>They are having a meal.</i>	<b>Txusá ku.</b> <i>They are eating a meal.</i>

<b>Waltlá wele lo.</b> <i>I make the child wear a jacket.</i>	<b>Altlúl wele lo.</b> <i>I put a jacket on the child / I dress the child in a jacket.</i>
<b>Malá welu wiesadçä espanya.</b> <i>The child is speaking (in) Spanish.</i>	<b>Mulá welu wiesadçä espanya.</b> <i>The child is saying something in Spanish.*</i> [*This meaning can also be conveyed by using CTE Specification: <b>mülá</b> ]

## Sec. 5.4 Relative Clause Formation

Because of the existence of the RELATIVE case and the DESCRIPTIVE case, relative clauses sometimes work differently in Ithkuil IV than in Ithkuil 2011. Usage is shown via the examples below. (NOTE: In the examples below, default morphological values such as STA/BSC Function/Specification, PRC version, ASR/OBS/COG Illocution/Validation/Expectation, or default C<sub>A</sub> are not listed in the intralinear analyses.)

- 1a. **Weñaçá kšilo äpcólöçä lu eňtyangena.**  
 ‘compose.in.writing’-RTR    ‘clown’-STA/OBJ-ERG    FRAMED:CPT-‘read’-DYN/CSV-PCS-THM    1m-IND    ‘written.page’-MPS/CND/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 an Obviative personal-reference root with a switch-reference affix:

- 1b. **Weñaçá kšilo eňtyangena äpcólöçu’u lu tha.**  
 ‘compose.in.writing’-RTR    ‘clown’-STA/OBJ-ERG    ‘written.page’-MPS/CND/COA-TPF/3-THM    FRAMED:CPT-‘read’-DYN/CSV-PCS-RLT  
 1m-IND    Obviative-SWR/1-THM  
*A clown wrote the book I just finished reading.*

The following two sentences utilize a RELATIVE case-frame:

- 2a. **Zalá li kšilenë malêhu’u 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. **Erčäsókh elavöte žžjásu’u kširë.**  
 ‘state.of.being.corrupted’-STA/CTE-PRX-SBT/7   ‘child’-N-DCD/6-ABS    FRAMED:‘feel.fascination’-STA/BSC-PRX-RLT    ‘clown’-STA/OBJ-P-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 elanwe ainšaisa'u kšivöto hlarrnë-yúřku'u.**  
 ‘corrupt’-DYN/BSC-ATI/1 ‘child’-MPD/SEP/N-ABS FNC-NEG/4-‘be.well-behaved’-PRX-DSC ‘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. **Uřkás warrnenë kšila çu'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. **Umňälördá zúlěkti lo kšilë 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. **Umňälá lo welene malêhu'u 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 an Obviative personal-reference adjunct as shown in Sentence 5c below (as well as Sentence 1b above).

- 5c. **Umňälá lo welene malêhu'u thu kšivu.**  
 ‘scream’-STA/CTE 1m-ERG ‘child’-TPF/3-ABS FRAMED:‘talk’-RCP-FAC-RLT Obv-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 Obviative personal-reference adjunct appears without an accompanying SWR switch-reference affix while inside a case-frame functioning as a relative clause, the Obviative adjunct 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 PARENTHEICAL 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>Muliutmá mu çü Jon hma ažxíp.</b> 'She shouted "fire!" to John'	[with second party in ATTENDANT case:] <b>Muliutmá mu ci'ä Jon hma ažxíp.</b> 'She shouted "fire!" in John's presence' / 'She shouted "fire!" with John nearby' (thus causing John to do something, e.g., run for a fire extinguisher, run out of the building, etc.)
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[with second party in COMITATIVE case:] <b>Wanzvěhá mu welö'ö.</b> 'She playing a game with the child.'	[with second party in ATTENDANT case:] <b>Wanzvěhá mu weli'ä.</b> 'She playing a game [with someone] while the child watches/while the child sits nearby/in the child's presence.'
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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 elenë maléhu'u kšivu.</b> 'I see the child who talks with clowns.'	[with the head of a relative clause marked by ATTENDANT case:] <b>Zalá li elenë maléhu'u thi'ä kšivu.</b> 'I see the child who talks with clowns.'
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## 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’ to express a PERFORMATIVE-EXECUTIVE command to provide the information being sought, in many, perhaps most cases, use of such a verb will be unnecessary because the use of of ASSERTIVE-RESPONSIVE Illocution+ Expectation will be sufficient to convey that a response regarding the statement is expected, thus being equivalent to a WH-question, e.g., **Mälái tuyüs** ‘What did s/he tell you?’, **Ünhalái ürçpálö’e su** ‘How long (is it / has it been) since you danced?’, **Špälái agphäv** ‘What colour is feces?’

Additionally, one can form the equivalent of WH-questions using the new **PVS** Personal Referent in conjunction with the **IVE<sub>2/1</sub>** affix **-ainl** indicating ASSERTIVE-RESPONSIVE Illocution+ Expectation so that the **PVS** Personal Referent functions much like an English interrogative pronoun. Examples: **Lliäxainl** ‘Why? [i.e., For what purpose?]’, **Lla’ixainl** ‘When?’, **Rriexainl** ‘To/for whose benefit? / To the benefit of what?’, **Řreoxainl** ‘Resulting (detrimentally) in what? / With what undesirable result?’, **Llauxainl** ‘Whose? / Belonging to what?’

Finally, one can form the equivalent of WH-questions using ASSERTIVE-RESPONSIVE Illocution+ Expectation in conjunction with a formative affixed with Degrees 1, 2, 3, 8 or 9 of the new **PTN** affix shown below:

### New 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:

**Erčuléi kšilo weiliusve.** ‘Which children did the clown corrupt?’

**Utxoláí akftyäleë lalułkusvu.** ‘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 a formative modified by the case’s function. Such constructions can often substitute for case-frames. Examples:

DEPENDENT case: **Willyothoušyá’x utplaliér.** ‘My self-esteem is dependent upon (my) singing this song well.’

POSTCURSIVE case: **A hwelu-azčojhai’löešyá.** ‘It was after the child pulled a tantrum.’

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

TRANSFORMATIVE case: **Kšölaešwí 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 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 followed 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. **Personal-Reference Adjuncts:** Personal-reference adjuncts follow the main verb to which they are associated arguments; however, if a personal-reference adjunct in the main clause is topicalized or has semantic focus, then it may precede the main verb as per the first rule above. As for association with formatives other than the main verb, the default order is for the adjunct to follow the formative or other personal-reference adjunct with which the adjunct is associated; however, again, if case-marking makes clear the association between the adjunct and its associated formative (or other adjunct), then the adjunct may precede its associated formative or adjunct.
6. **Juncture between sentences:** The ultimate stress on a non-monosyllabic main verb in sentence-initial position (including concatenated verbal formatives) 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; this prefix replaces the word-initial Slot I glottal-stop. [All formatives and adjuncts have now been redesigned/modified where necessary to accommodate this new initial ç(ë)- prefix without creating any ambiguities.]

## 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., 2XX, 3XX, etc.) to enumerate the higher-ordered time-period named by the affix. For example, for the word *ksialärsirwa* ‘22nd day of the month’, the **SPT/5** affix *-irw-* can in turn be modified by a following Type-3 number affix, e.g., *ksialärsirwiasta* ‘22nd of May’. Other Type-3 affixes may also be used in the same fashion, as per the third example below.

<b>-rw/-ry</b>	<b>SPT Specified Points in Calendrical Time</b>
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’ *wustarsirwiaza walżarsa'o walżörsürwö'ö*
- ‘on Saturday’ *wucpérwa'o*
- ‘on Saturday of next week’ *wucpérwölfa'o*
- ‘the 21st century’ *wullärsurya*
- ‘by the 34-second mark’ *wupšersaryo'a*

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

- ‘8:52 a.m.’ *wučkerwa ksalirsoň* [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’ *wuvrärserva ksalirsoň wazersarwö'ö* [literally: ‘twentieth hour of the day and fifty-two (minutes) with thirty-three seconds of a minute’]

## 6.1 Alternate Names of the Months

Another way to name months is via the Type-2 **SEQ** affix (**-nt**) attached to Stem No. 3 of **-RD-** (meaning ‘calendrical month’) to render words meaning ‘first month’, ‘second month’, ‘tenth month’, etc. (Use non-decimal number base roots **-CG-** and **-JD-** for ‘11’ and ‘12’.)

If using the **SEQ<sub>2</sub>** affix, the first four months are formed by placing the affix in Degrees 1 through 4 on Stem No. 3 of **-RD-** ‘month’. The next four months utilize Type-2/Degree 5 of the same affix (**-ëint**) followed by the **5XX**, **6XX**, **7XX**, and **8XX** affixes in Type-3/Degree 1. The last four months are expressed using Degrees 6 through 9 of the **SEQ<sub>2</sub>** affix. Thus:

**January:** *wurđainta*

**May:** *wurděintiasta*

**September:** *wurdönta*

**February:** *wurđaunta*

**June:** *wurđěintiacpa*

**October:** *wurdonta*

**March:** *wurđeinta*

**July:** *wurđěintiansa*

**November:** *wurđiinta*

**April:** *wurđeunta*

**August:** *wurđěintiačka*

**December:** *wurđunta*

## 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>-dc</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 *usamka*)

**Africa:** *usamka áfrika*

**Antarctica:** *usamka antárktika*

**Oceania:** *usamka oseanya*

**North America:** *usamkaidna américa*

**Asia:** *usamka asya*

**Europe:** *usamka europa*

**South America:** *usamkuidna américa*

**7.2 Names of Oceans:** Preceded by the word *hlusé-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 *çe'e* may be used or the SPF register adjunct *hi*.

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

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

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

**Arctic Ocean:** *hlusé-bwala arktos* OR *bwala hi arkto*

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

**7.3 Names of Seas and Lakes:** Preceded by the word *hlusé-bwaleuxa* ('smaller ocean named...') if referring to a large mostly landlocked salt-water sea (e.g., Mediterranean, Black, Azov), or *hlusé-bwalaifta* ('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:** *hlusé-bwaloufta mediterra*

**Baltic Sea:** *hlusé-bwalëifta balt*

**Black Sea:** *hraxmë-bwaleufta*

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

**Caribbean Sea:** *hlusé-bwalëifta karíb*

**North Sea:** *bwalaidneufta*

**Bering Sea:** *hlusé-bwalëifta bering*

**Arabian Sea:** *hlusé-bwalëifta arab*

Those examples above utilizing an incorporated carrier stem may alternately be expressed using the carrier adjunct *qe'e* or the SPF register adjunct *hi*, i.e., *bwaloufta hi mediterra*, *bwalëifta hi balt*, *bwaleifta hi azof*, *bwalëifta 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:** *hlusé-wubwiuxa kaspi*

**Lake Geneva:** *hlusé-wubwoixa ženév*

**Aral Sea:** *hlusé-wubwoixäkta aral*

**Lake Erie:** *hlusé-walziuxa ériè*

**Lake Baikal:** *hlusé-wubwoixa baikal*

**Sea of Galilee:** *hlusé-wulza kínnaréet*

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

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

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

**Bight of Benin:** *hlusé-bwalaufsta benín*

**Hudson Bay:** *hlusé-bwaleufta hëdsën*

**Gulf of Mexico:** *hlusé-bwaleufta méxico*

**James Bay:** *hlusé-bwaleifta jeimz*

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

**Gobi Desert:** *hlusé-wazha gob*

**Grand Canyon:** *wevňiuxa*

**Siberian Tundra:** *hlusé-wuzha sibír*

**Andes Mountains:** *hlusé-ejlamska andes*

**Himalaya Mountains:** *hlusé-ejlamska himálaya*

**Niagara Falls:** *hlusé-urťraňska nayagra*

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

**Tibetan Plateau:** *hlusé-wujliuxa phö'*

**Amazon River Delta:** *hlusé-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 ethonymn (e.g., *dijla* for the Tigris), in other instances I have combined names (e.g., *caňpobrahmaputra* 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 *hlusé-welza* OR *welza çe'e/hi* ‘river named...’ (Carrier Stem 3 incorporated into Stem 2 of the root -LZ-).

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

Ob	<i>ob</i>
Irtysh	<i>irtiš</i>
Volga	<i>volga</i>
Amur	<i>amur</i>
Mekong	<i>mekoň</i>
Brahmaputra	<i>caňpobrahmaputra</i>
Indus	<i>indus</i>

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

**7.6 Names of World’s Largest Cities:** The following names are preceded by *hlusé-arhwaňza* or *arhwaňza hi* ‘city named...’

Tokyo	<i>tokyo</i>
Delhi	<i>dilli</i>
Shanghai	<i>zaňhe</i>
São Paulo	<i>saupaulu</i>
Mexico City	<i>méxico</i>
Cairo	<i>alkáhira</i>
Mumbai	<i>mumbëi</i>
Beijing	<i>peičiň</i>
Dhaka	<i>dhaka</i>
Osaka	<i>osaka</i>
New York City	<i>nuyórk</i>
Karachi	<i>kérači</i>
Buenos Aires	<i>bwenosaires</i>
Chongqing	<i>choňčhin</i>
Istanbul	<i>istanbul</i>
Kolkata	<i>kolkata</i>

Manila	<i>manila</i>
Lagos	<i>eko</i>
Rio de Janeiro	<i>uhiujiženeiru</i>
Tianjin	<i>tčenčin</i>
Kinshasa	<i>kinšasa</i>
Guangzhou	<i>kwoňcëu</i>
Los Angeles	<i>losânjeles</i>
Moscow	<i>mëskvá</i>
Shenzhen	<i>šenčen</i>
Lahore	<i>lahór</i>
Bangalore	<i>bengéluru</i>
Paris	<i>paří</i>
Bogotá	<i>bogotá</i>
Jakarta	<i>jakarta</i>
Chennai	<i>čennái</i>
Lima	<i>lima</i>

Bangkok	<i>kruňthép</i>
Seoul	<i>sëúl</i>
Nagoya	<i>nagoya</i>
Hyderabad	<i>háidérəbad</i>
London	<i>lëndën</i>
Tehran	<i>tehrán</i>
Chicago	<i>šíkago</i>
Chengdu	<i>chěňtu</i>
Nanjing	<i>nančin</i>
Wuhan	<i>uxán</i>
Ho Chi Minh City	<i>hotçimin</i>
Luanda	<i>luanda</i>
Ahmendabad	<i>ámdavad</i>
Kuala Lumpur	<i>kúalélumpor</i>
Xi'an	<i>šián</i>
Hong Kong	<i>hönkoň</i>

Dongguan	<i>tunkwan</i>
Hangzhou	<i>haňce</i>
Foshan	<i>faččen</i>
Shenyang	<i>šěnyaň</i>
riyadh	<i>erriyád</i>
Baghdad	<i>bařdád</i>
Santiago	<i>santyago</i>
Surat	<i>surat</i>
Madrid	<i>mađríd</i>
Suzhou	<i>sëucöü</i>
Pune	<i>pune</i>
Harbin	<i>háérbin</i>
Houston	<i>çustěn</i>
Dallas	<i>dälës</i>
Toronto	<i>těrantou</i>
Dar Es Salaam	<i>daressalám</i>

## 7.7 Names of Countries

(to be preceded by the carrier stem form *wusuđca* (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>škyípëri</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>östëřaič</i>
Azerbaijan	<i>azärbaiján</i>
Bahamas	<i>bahama</i>
Bahrain	<i>bahráin</i>
Bangladesh	<i>baňla</i>
Barbados	<i>barbeidos</i>
Belarus	<i>byelaruś</i>
Belgium	<i>belž</i>
Belize	<i>belíz</i>
Benin	<i>benín</i>
Bhutan	<i>trukiüll</i>
Bolivia	<i>bolivya</i>
Bosnia & Herzegovina	<i>bosnaxercegovina</i>
Botswana	<i>bocwana</i>
Brazil	<i>brézíu</i>
Brunei	<i>brunai</i>
Bulgaria	<i>bëlgáriya</i>
Burkina Faso	<i>burkinafaso</i>
Burundi	<i>burundi</i>
Côte d'Ivoire	<i>kotëdivář</i>
Cabo Verde	<i>kabuverdi</i>
Cambodia	<i>kampucië</i>

Cameroon	<i>kamerún</i>
Canada	<i>kánada</i>
Central African Republic	[see Note following the table]
Chad	<i>čad</i>
Chile	<i>čile</i>
China	<i>čuňkwo</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>česko</i>
Democratic Republic of Congo	[see Note following the table]
Denmark	<i>tänmak</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>ityoppya</i>
Fiji	<i>viči</i>
Finland	<i>súomi</i>
France	<i>fřans</i>
Gabon	<i>gabón</i>

Gambia	<i>kambi</i>
Georgia	<i>kartvel</i>
Germany	<i>doič</i>
Ghana	<i>gana</i>
Greece	<i>elađa / helás</i>
Grenada	<i>greneda</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>bharët</i>
Indonesia	<i>indonésia</i>
Iran	<i>irán</i>
Iraq	<i>irák</i>
Ireland	<i>eryë</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>kiribas</i>
Kuwait	<i>kuwet</i>
Kyrgyzstan	<i>kërrëz</i>
Laos	<i>lau</i>
Latvia	<i>látviya</i>

Lebanon	<i>libnén</i>
Lesotho	<i>sutu</i>
Liberia	<i>laibiryá</i>
Libya	<i>líbiya</i>
Liechtenstein	<i>líčtenštain</i>
Lithuania	<i>lyetuvá</i>
Luxembourg	<i>lécēbuřš</i>
Madagascar	<i>madagaskyarë</i>
Malawi	<i>malavi</i>
Malaysia	<i>mèleisia</i>
Maldives	<i>divehi</i>
Mali	<i>mali</i>
Malta	<i>malta</i>
Marshall Islands	<i>mřazyel</i>
Mauritania	<i>muritaniya</i>
Mauritius	<i>mořís</i>
Mexico	<i>méxico</i>
Micronesia	<i>mikronesya</i>
Moldova	<i>moldova</i>
Monaco	<i>monakó</i>
Mongolia	<i>mongol</i>
Montenegro	<i>crnagora</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>nižér</i>
Nigeria	<i>najéría</i>

North Korea	<i>čosën</i>
North Macedonia	[see Note below]
Norway	<i>noryë</i>
Oman	<i>oman</i>
Pakistan	<i>pak</i>
Palau	<i>belau</i>
Palestine	<i>falašín</i>
Panama	<i>panamá</i>
Papua New Gunea	<i>papuanyugini</i>
Paraguay	<i>paragwái</i>
Peru	<i>perú</i>
Philippines	<i>pilipinas</i>
Poland	<i>polska</i>
Portugal	<i>portugál</i>
Qatar	<i>gatar</i>
Romania	<i>roménia</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>saintvincentangrénadinz</i>
San Marino	<i>sanmarino</i>
São Tomé & Príncipe	<i>sautume'eprínsipë</i>
Saudi Arabia	<i>arabiya'assu'udiya</i>
Senegal	<i>sénégal</i>
Serbia	<i>sërp</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>sürinamë</i>
Sweden	<i>svériyë</i>
Switzerland	<i>švaic</i>
Syria	<i>suriya</i>
Tajikistan	<i>tojikí</i>
Tanzania	<i>tanzania</i>
Thailand	<i>thai</i>
Timor-Leste	<i>timorlešte</i>
Togo	<i>togo</i>
Tonga	<i>tonga</i>
Trinidad & Tobago	<i>trinidadantobago</i>
Tunisia	<i>tunisiya</i>
Turkey	<i>türkiye</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>zámbìa</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 the 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:** *hluséidnē-edtila* áfrika

**Dominican Republic:** *hlusé-edtila* domínika

**South Africa:** *wusuidna* áfrika

**United States of America:** *hlusé-eksmama* américa

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

**Equatorial Guinea:** *hlantňú-wusa* giné

**South Sudan:** *wusuidna* sudán

**North Macedonia:** *wusaidna* makedóniya

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

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

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

#### -DT- REPRESENTATIVE GOVERNANCE

<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	

#### -LLK- MONARCHAL GOVERNANCE / AUTOCRATIC GOVERNANCE / OLIGARCHICAL GOVERNANCE

<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.	

#### -NTŇ- ‘LATITUDINAL BASES [LATITUDINAL POLE / EQUATOR]’

<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>	<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.	<b>Stem 2:</b> (to be) a state or province or subdivision of Stem 1, subject to some degree of regional autonomous governmental administration
<b>CTE</b>	(to be) the state of being a geopolitical country/land/territory	<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.
<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	