

## DESIGN FOR THE NEW REVISION OF ITHKUIL (Version 0.18.2, December 11, 2020) by John Q.

This document updates previous versions 0.17.2, 0.18 and 0.18.1. Changes since version 0.17.2 are written in blue.

- **Secs. 2.1 and 2.2:** Slot X from previous versions of this document, showing the  $C_B$  Bias or  $C_Y$  Alternate Mood/Case-Scope forms, has been eliminated. This is necessary because words containing these affixes cannot take a following vowel, which makes it impossible to apply the Sec. 1.5 external-juncture rules when followed by Suppletive Adjuncts or formatives containing a Slot I consonant other than a glottal-stop. As a result, Bias will now be shown only by Bias adjuncts, which should be preceded and followed by pauses when pronounced.
- **Sec. 3.5:**  $C_A$ -stacking affixes can no longer be shown in Slot V, they must be shown in Slot VII. (It was counter-intuitive for the stacked  $C_A$ -form to be shown before the “base”  $C_A$ -form, and since it doesn’t save or add any syllables to put it in Slot VII, better to do it in Slot VII only.) Additionally, due to the changes described below for Secs. 3.6.1 and 3.6.2, a geminated consonant can no longer be the  $C_S$ -form within a  $C_S V_X$ - or  $-V_X C_S$ - affix; consequently, the phonological values for a number of affixes and several roots will be changed.
- **Sec. 3.5.1:** This new section has been added (at uakci’s suggestion) because, when Slot V of a formative contains more than one  $C_S V_X$ - or  $-V_X C_S$ - affix, it becomes a problem whether to interpret the consonant forms as  $C_S$  forms or as a  $C_A$  form until the eventual “arrival” of the end-of-Slot-V marker. Therefore, a glottal-stop will now be introduced into the  $V_V$ -form of Slot II per the rules in Sec. 1.7 to signal early on that Slot V of the formative contains more than one  $C_S V_X$ - or  $-V_X C_S$ - affix.
- **Sec. 3.6.1, Sec. 3.6.2:** Because so many Slot V glottal-stop +  $C_A$  forms utilized geminated substitutions, I have decided to simplify the mess and use  $C_A$  gemination exclusively to show the end of Slot V. The Slot V glottal-stop has therefore been eliminated whenever a Slot VI  $C_A$  form is present. New rules for  $C_A$  gemination have been created. As a result of this change, the case-accessor and case-stacking affixes in **Sec. 3.9.2** have been changed/shifted.
- **Sec. 3.8:** I discovered that use of the  $\text{ç}(\text{ë})$ - sentence-juncture prefix (from Sec. 5.8) gave rise to ambiguities between Suppletive Adjuncts and Modular Adjuncts where Slot 2 of a Modular Adjunct showed **RCP** Valence value  $\text{-ë-}$ . Consequently, I have changed the  $C_N$  value of **RCP** Valence to resolve this ambiguity. A new footnote under the Slot VIII – Pattern 1 Table provides the details on this.
- **Sec. 3.8.1:** The exception to **CCN** NATURAL Case-Scope marking, specified in the Special Note under the  $C_N$  Case-Scope Table, has been changed. The exception will now apply only to the Appositive and the Relational (formerly Relational I – see next bullet) cases. The exception no longer applies to the Associative cases or the Relational II (now renamed Affinitive – see next bullet) cases. (Thanks to uakci for this suggestion.)
- **Sec. 3.8.1.2:** The previous wording of this paragraph regarding moving the Slot VIII  $C_N$  affix to  $C_A$  Slot VI was somewhat confusing and potentially ambiguous. It has been reworded for clarification.
- **Sec. 3.9.1:** Cases 45 through 52, previously known as the Relational II Cases, will now be known as the Affinitive Cases. Cases 37 through 44, previously known as the Relational I Cases, will now be simply the Relational Cases.
- **Sec. 4.1.1:** Single-affix adjuncts where  $V_X = \text{ë}$  must now add initial **h-** to avoid ambiguities with C+V personal-reference adjuncts when prefixed with epenthetic  $\text{ë-}$ . (Thanks to uakci for bringing the ambiguity to my attention.)
- **Sec. 4.1.2:** A rule has been added regarding the use of Type-3  $V_X C_S$  affixes used within affixual adjuncts.
- **Sec. 4.2:** Degree-Zero forms have been added to the Slot IV values of Specialized  $C_S$ -Roots. (Thanks to Behemoth for the suggestion.)
- **Sec. 4.3:** A note has been added clarifying scoping of modular adjunct  $V_N C_N$  values over the Slot VIII  $V_N C_N$  values of an adjacent formative.

- **Sec. 4.6.5:** Since Column 4 of the Standard Vowel-Sequence forms is no longer used in  $V_X C_S$  affixes, those vowel-forms can now be used to create personal-reference Slot V/VII short-cuts in conjunction with the Transrelative cases plus four additional cases.
- **Sec. 4.7:** Because the old Slot X  $C_Y$  forms from previous versions of this document have now been eliminated, and because there are no  $V_X C_S$  affixes pertaining to Mood or Case-Scope, new monosyllabic adjunct forms have been created to express Mood or Case-Scope. The form of the Phrasal Adjunct in **Sec. 4.5.3** has been changed as a result.
- **Sec. 4.8:** This new section is devoted to Bias Adjuncts, now that Bias is no longer shown in the formative itself. The phonological value of the SATIATIVE bias has been changed to match its new root.
- **Sec. 7:** The various references to the Carrier adjunct in ESSIVE case have been corrected from *çe'e* to *hle'e*.
- Additional minor typos/errors corrected.

#### Changes to Version 0.18.1:

- **Sec. 1.6:** The Standard Vowel-Series has been reduced from eight series down to four. Previous series 5 through 8 only appear in noun-cases and therefore can instead be described as Series 1 through 4 plus a glottal-stop applied as per the rules in Sec. 1.7.
- **Sec. 2.1:** The formative Slot Structure chart has been corrected to show the elimination of the Slot V glottal-stop and the gemination of Slot VI  $C_A$ .
- **Sec. 3.9.1:** A Special Note has been added to this section describing  $V_C$  optional marking for Cases 37 through 52. Because addition of a glottal-stop to the  $V_C$  form for these cases adds a syllable to the word, an alternative means of placing the glottal-stop is provided.
- **Sec. 3.9.2:** I realized that the distribution of the phonological values for Case-Assessor and Case-Stacking affixes was not logical. The eight values consisting of a **sibilant+w/y** should align with the eight case-assessor affixes, while the two **l+w/y** affix outliers should align with the two Case-stacking affixes. This change has now been made.
- **Sec. 4.5:** Errors in the examples have now been corrected.
- **Sec. 4.6.5:** Behemoth pointed out that the four Degree-Zero  $V_X$  affixes cannot be used as Slot V/VII shortcuts for Personal Reference Adjuncts, since they are already used with  $V_X C_S$  affixes in the same slot. (Duh! Obvious in hindsight.) They have been removed and the case distribution adjusted.
- **Sec. 5.7:** The example sentences have been updated to use the correct Case-Stacking affixes. (Thanks to uakci for noticing this.)

#### Changes to Version 0.18.2:

- **Sec. 1.3.2:** This paragraph has been added to clarify when/whether the parsing adjuncts or the  $\zeta(\ddot{e})$ - sentence-juncture affix is actually written.
- **Sec. 3.9.1:** The Sec. 4.6.5  $V_X$  forms of the Transrelative and Appositive Cases are now listed in the case tables (uakci's suggestion). COM and COR Cases have been switched out for the IDP and PAR cases for the sake of regularity (at the suggestion of melopee).
- **Sec. 4.1.2:** uagle noticed that the  $C_Z$  forms **-hl-** and **-hr-** give rise to ambiguities. They have now been changed to **-hw-** and **-hw-** to avoid such.
- **Sec. 4.7:** uakci pointed out that CCN case-scope is not really a default category and would need to be overtly marked in a Case-Scope adjunct in some situations. Consequently, the Mood/Case-Scope adjunct values have been revised.
- **Secs. 5.4, 5.5, 5.7:** The example sentences in these sections have been updated/corrected to reflect the new  $C_A$  gemination rule from Sec. 3.6.1, the new glottal-stop placement shortcut from the Special Note in Sec. 3.9.1, and the elimination of old Slot X Bias/Mood affixes.
- **Sec. 7.7:** The Ithkuil name of Montenegro has been modified for phonotactic reasons.

## 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 ɡ		ʔ	
FRICATIVE		f v		ʧ ʤ		s z		ʃ ʒ	ç	x		h	ɬ
AFFRICATE						c ʒ		č j					
NASAL	m			n						ŋ			
LIQUID	FLAP / TRILL						r						
	NON-FLAP												l
APPROXIMANT			w					y			ʁ		

	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 [ɤ] or [ə] when stressed but [u] 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 (all “falling”) diphthongs are: **ai, ei, ëi, oi, ui, au, eu, ëu, ou,** and **iu**. The two vowels of these diphthongs may be pronounced as separate syllables in the following circumstances: (1) when followed by **-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 [ɹ], similar to (but further forward in the mouth than) the postalveolar [ɹ] of standard English; The uvular **-ř-** is an approximant [ʁ] as in colloquial French or German; when geminated it is either [ʁ:] or can be strengthened to a uvular trill [R]. Care should be taken to ensure the pronunciations of **-př-** and **-tř-** are differentiated from **-px-** and **-tx-**. Syllable-initial or word-final **-ph-**, **-th-**, **-kh-**, **-ch-**, **-čh-** are pronounced as aspirated stops/affricates [p<sup>h</sup>, t<sup>h</sup>, k<sup>h</sup>, ts<sup>h</sup>, tʃ<sup>h</sup>]. Between two vowels, they are disyllabic and pronounced as in English *haphazard*, *at-hand*, *backhanded*, *it's here*, and *church hall*. The various specialized Slot I or Slot VIII conjuncts beginning with **-h-** are pronounced as follows: **hl** = [ɬ] or [hl], **hr** = [ɣ] or [hr], **hm** = [m̥] or [hm], **hn** = [ŋ] or [hn].

### 1.3 Orthographic Conventions

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

**1.3.1 Indicating Syllabic Stress:** Penultimate stress is unmarked; non-penultimate stress is marked by a diacritic on the vowel carrying the stress, as follows: a vowel with no diacritic takes the acute accent; a vowel with dieresis changes it to a circumflex accent (e.g., **ö** → **ô**). The grave accent is used over the vowel **-î** when it is unstressed as the initial member of a vocalic conjunct following a consonant (e.g., **-Cîa-**, **-Cîo**, etc.) — this is to remind the speaker/reader that this **-î** is to be pronounced long /i:/ in order to distinguish such syllables from syllables of the form **Cy+V** (e.g., *karesya* vs. *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*.

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

### 1.4 Phonotactics

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 usually necessary to append a vowel either to the end of the first word or the beginning of the second word, so as to avoid confusion as to which word the word-final and/or word-initial consonants belong to. This is accomplished by ensuring that appropriate word-initial and/or word-final vocalic Slots (e.g., Slot II, Slot IX) are filled.

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

### 1.6 The Standard Vowel-Form Sequence

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

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

### The Standard Vowel-Form Sequence

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

\* 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**).

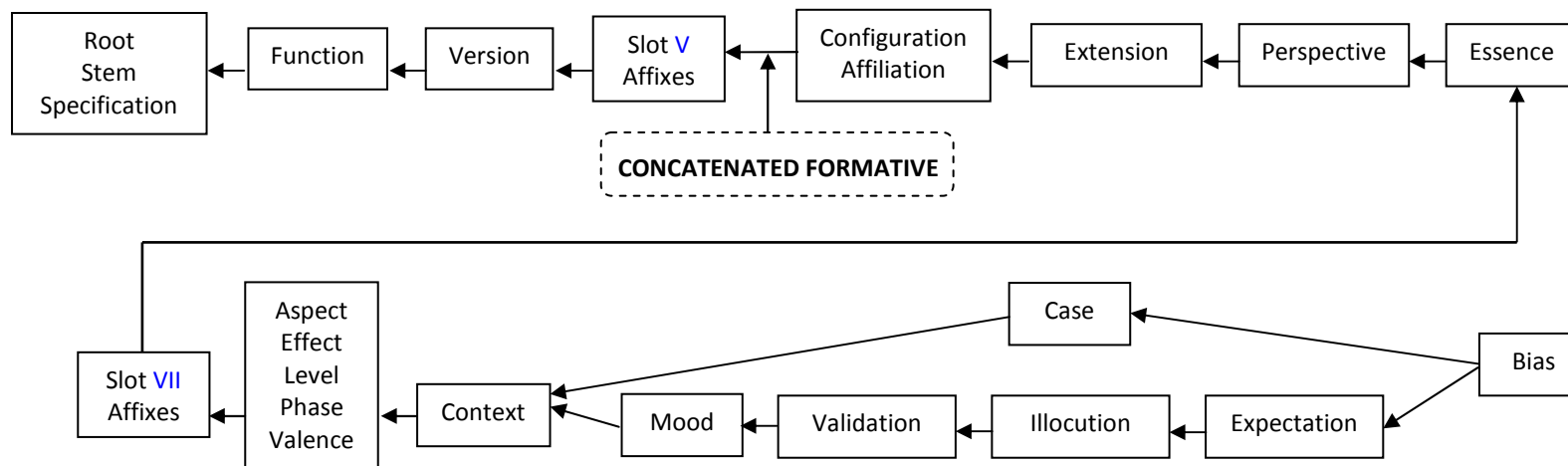
### 1.7 Rules for Inserting a Glottal-Stop Into a Vowel-Form

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

## 2.0 MORPHO-PHONOLOGICAL STRUCTURE OF A FORMATIVE

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



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

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

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

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

## 2.2 Slot Structure of a Formative where Slot I $C_C$ Indicates a Slot IV/VI Shortcut is Present

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

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

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

## 2.3 A Self-Segregating Morphology

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

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

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

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



### 3.0 ANALYSIS OF FORMATIVE SLOTS

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

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

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

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

	$V_F =$ Formats 1 thru 36	$V_F =$ Formats 37 thru 68	$V_F =$ Formats 1 - 36 + [w-] $C_A$ shortcut*	$V_F =$ Formats 37 - 68 + [w-] $C_A$ shortcut*	$V_F =$ Formats 1 - 36 + [y-] $C_A$ shortcut*	$V_F =$ Formats 37 - 68 + [y-] $C_A$ shortcut*
<b>Type-1 Concatenation</b>	h	h + ult. stress	hl	hl + ult. stress	hm	hm + ult. stress
<b>Type-2 Concatenation</b>	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-**  $C_A$  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  $V_F$  Indicator:** Concatenated formatives do not use a glottal-stop in the Slot IX  $V_F$  form. Instead, the concatenated formative takes ultimate syllabic stress to indicate that the Slot IX  $V_F$  Format vowel is actually a Format 37-through-68 form but without the glottal stop.

**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.

**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> values from the table above. The final parent formative of the chain has either empty Slot I or takes **w-** or **y-** in Slot I if a C<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 a concatenated formative, the two (or more) formatives will be joined by a hyphen in the language’s romanization scheme as a simple mnemonic indicator that they are a concatenated pair or concatenated chain.

## 3.2 SLOT II: V<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), **-ař-** (UPX/DEL/CSL/M/RPV), **-av-** (UPX/DEL/CSL/N/NRM), **-az-** (UPX/PRX/CSL/A/NRM), **-asř-** (UPX/PRX/CSL/M/RPV), **-atļ-** (UPX/DEL/CSL/P/RPV).

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

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

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

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

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

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

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

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

### 3.3 SLOT III: C<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 forms **-ł-**, **-łw-**, **-ly-**, **-ç-**, **-çç-**, **-çw-**, **-w-** or **-y-** be roots (however, multi-consonant roots ending in **-h-**, **-w-** or **-y-** are permissible (e.g., **-vh-**, **-gw-**, **-mpy-**), as are other conjuncts containing **-ł-** and **-ç-** (e.g., **-pl-**, **-łtr-**, **-çt-**, **-kç-**, etc.).

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

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

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

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

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

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

### 3.4.1 The Four Specifications:

<b>BSC</b>	<b>BASIC:</b> A holistic instantiation of a root, prior to the application of one of the other three Specifications, essentially encompassing the meanings of the CTE, and CSV specifications below. For roots representing naturally “activized”, “time-unstable”, dynamic, or psychologically verb-like notions, the BASIC nominal formative would mean “an instance/occurrence of X”, while the BASIC verbal formative would mean “(an instance/occurrence of) X(-ing) happens”. For roots representing naturally “reified”, “time-stable”, stative, or psychologically noun-like notions, the BASIC nominal formative would mean “an X (being present)” or for “non-count” entities, “an (unspecified/certain) amount/volume of X”, whereas the BASIC verbal formative would carry a STATIVE interpretation meaning “(an) X be present” / “[there] be (an) X”; the expansion of this meaning verbally would be accomplished using other Specifications and/or DYN Function.
<b>CTE</b>	<b>CONTENTIAL:</b> This specification complements the CSV specification below. The physical or non-physical “content” or essence or purposeful function or idealized/abstract/platonic form thereof, as opposed to its mere physical form/shape, e.g., <i>the content of a piece of art</i> [what it represents or is an image/statue of]; <i>the water within a river</i> [regardless of its channel or course]; <i>the communicative content of a message</i> [regardless of the means/medium by which it is conveyed]; <i>something (made of/in) iron</i> [its form/shape as opposed to merely being an example of the substance]; <i>a room as a functional/habitable space, established by its socially communicated purpose or discernible by its design, furnishings, decor, etc.</i>
<b>CSV</b>	<b>CONSTITUTIVE:</b> The form (physical or non-physical) in which an entity/state/act actually expresses itself, is shaped, or is realized, as opposed to its functional/purposeful content, i.e., “what constitutes X”, e.g., <i>a work of art</i> [as constituted by it being a painted canvas, sculpted marble, etc., irrespective of what the image is or what/who the statue is of]; <i>the course of a river</i> ; <i>the form/medium (written, spoken, recorded, etc.) of a message</i> [irrespective of what it communicates], <i>something iron (focus on it being of a particular material/substance regardless of its form/shape)</i> , <i>a room as a contained volume of space established by conjoined walls and ceiling</i> [regardless of its purpose, dimensions, layout, design, furnishings, or decor].
<b>OBJ</b>	<b>OBJECTIVE:</b> Whichever of the following is most salient to the semantics of the particular stem: (1) tangible tool/instrument/means by which a state act/state/event occurs, or if inapplicable, then (2) the third-party object/entity associated with the interaction between two parties (e.g., the object being given in a dative interaction), or if inapplicable then (3) the resulting tangible object/product/situation, or if inapplicable, then (4) the semantic patient or experiencer of the state/act/event. E.g., <i>the musical instrument being played during a live musical performance, 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 / oä	<b>Type 1:</b> circumstantial <b>Type 2:</b> derivational <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). <b>Degree 0:</b> unspecified degree; refers to the affix's general semantic concept as a whole. <b><math>C_A</math> stacking:</b> This is no longer allowed in Slot V. Place a “stacked” $C_A$ -form in Slot VII instead.
2	ä	au	iä / uä	
3	e	ei	ie / oë	
4	ë	eu	ië / uë	
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	üa	üe	üo	

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

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

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

CONFIGURATION		EXTENSION		AFFILIATION			PERSPECTIVE + ESSENCE					
UNI UNIPLEX	[zero]	DEL Delimitive	[zero]		standalone form *	combining form		NRM		RPV		
								standalone form *	combining form	standalone form *	combining form	
MULTIPLY - SIMILAR	<b>MSS</b> <sup>1</sup> Separate	t	<b>PRX</b> Proximal	s	<b>CSL</b> Consolidative	[zero]	[zero]					
	<b>MSC</b> <sup>1</sup> Connected	k	<b>ICP</b> Incipient	š	<b>ASO</b> Associative	d	t	<b>M</b> Monadic	l	[zero]	ř	ř
	<b>MSF</b> <sup>1</sup> Fused	p	<b>ATV</b> Attenuative	f	<b>COA</b> Coalescent	g	k	<b>P</b> Polyadic	r	r / v <sup>2</sup>	t↓	l
MULTIPLY - DISSIMILAR	<b>MDS</b> <sup>1</sup> Separate	n	<b>GRA</b> Graduative	ṭ	<b>VAR</b> Variative	b	p	<b>N</b> Nomic	v	w	lm	m / h <sup>3</sup>
	<b>MDC</b> <sup>1</sup> Connected	ň	<b>DPL</b> Depletive	ç	<b>* Standalone form means all preceding C<sub>A</sub> parameters are zero-marked/empty.</b>			<b>A</b> Abstract	z	y	ln	n / ç <sup>3</sup>
	<b>MDF</b> <sup>1</sup> Fused	m	<b>Allomorphic Substitutions:</b>									
MULTIPLY - FUZZY	<b>MFS</b> <sup>1</sup> Separate	lt	ts → c	np → mv	ňy → ňž	[V]tt → [V]nd	lth → ld	rth → rd	řth → řd			
	<b>MFC</b> <sup>1</sup> Connected	lk	tš → č	ňk → ňz	çy → ž	[V]kk → [V]ng	lkh → lg	rkh → rg	řkh → řg			
	<b>MFf</b> <sup>1</sup> Fused	lp	tṭ → ḍ	nf[C] → v[C]	cy → ç	[V]pp → [V]mb	lpp → lb	rpp → rb	řpp → řb			
			tf → fs	čy → j	nn → nz	nm → nž	rnm → rñ	rñm → rñv				
			kf → fš		mm → mz	rm → mž	rñm → mž	rñm → nḍ				

<sup>1</sup> For **DUPLEX** 3-letter abbreviations, change **M-** to **D-**. **DUPLEX** forms add prefix **r-** to the **MULTIPLY** forms. For **DF( ) forms**, the **r-** prefix plus **lt/lk/lp** becomes **řt/ řk/ řp**.

<sup>2</sup> **-v-** is used with **DF( ) 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>3</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, pfm → pfh, tçpn → tçpç**.

**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 **Duplex** or **Multiplex** configurations, and (2) it was arbitrary to assign the **UNIPLEX**’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 **Type-3** of the **IPC/4** affix (or **Type-3** of the **DGR/8** affix) to modify a number affix in Degree 5.

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

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

- For C<sub>A</sub> forms consisting of a single consonant, geminate it, e.g., **p → pp, t → tt, m → mm, c → cc, z → zz, r → rr, s → ss.**
- The standalone form **t̩** becomes **tt̩**.
- For forms beginning with a stop (**t, k, p, d, g, b**) followed by a liquid or an approximant (**l, r, ř, w, y**), geminate the stop, e.g., **.pl → ppl, gw → ggw.**
- For forms containing a sibilant fricative (**s, š, z, ž, ʃ**) in any position, geminate it, e.g., **kst → ksst, mz → mzz, ʃkl → ʃʃkl.**
- For forms beginning with either a non-sibilant fricative (**f, ʃ, v, ɸ**), a liquid/approximant (**l, r, ř**), or a nasal (**n, m, ŋ**), geminate it unless the previous bullet pertaining to sibilant fricatives (**s, š, z, ž, ʃ**) applies, e.g., **fk → ffk, lkt → llkt, mtw → mmtw.**
- For forms beginning with a voiceless stop (**t, k, p**) followed by a fricative (**s, š, f, ʃ, ɸ**), geminate the fricative, e.g., **pf → pff, tʃkl → tʃʃkl, kst → ksst.**
- The optional alternate forms **dv, gv, bv** revert to their standard forms **dr, gr, br** before geminating (for which the third bullet above applies).
- For forms beginning with a voiceless affricate (**c, č**) followed by another consonant, instead of geminating, change the **c** to **z** and the **č** to **j**, e.g., **cw → zw\***, **čtw → jtw\***.
- For C<sub>A</sub> forms beginning with two stops, use the following substitutions instead of geminating:

**pt → bd      pk → bg                      kt → gd      kp → gb                      tk → dg      tp → db**

- For forms consisting of a stop (**t, k, p, d, g, b**) plus a nasal, use the following substitutions instead of geminating:

**pm → bzm      pn → bzn                      km → gzm      kn → gzn                      tm → zm\*      tn → zn\***  
**bm → bžm      bn → bžn                      gm → gžm      gn → gžn                      dm → jm\*      dn → jn\***

\* **z** and **j** in these multi-consonantal forms bear no relation to the mono-consonantal forms **z** and **j** (i.e., the allomorphic substitutes for **cy** and **čy**).

**3.6.2 Showing the end of Slot V in the absence of a C<sub>A</sub> form:** For formatives containing any Slot V V<sub>X</sub>C<sub>S</sub> affix(es) where the Slot VI C<sub>A</sub> form has been elided (as per Sec. 3.1 and 3.2), the end of Slot V is shown by inserting a glottal-stop into the V<sub>X</sub> form of the final Slot V V<sub>X</sub>C<sub>S</sub> affix. This affix is inserted per the rules in Sec. 1.7.

**3.6.3 Combination Personal-Reference Adjuncts** (see Sec. 4.6.2) have a structure that looks like a formative, except what would appear to be their C<sub>A</sub> Slot is filled with either **-x-**, **-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. 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 / oä	<p><b>Type 1:</b> circumstantial                      <b>Type 2:</b> derivational</p> <p><b>Type 3:</b> applies to previous <math>V_X C_S</math> affix only (or the following affix if it is the first in the slot).</p> <p><b>Degree 0:</b> unspecified degree; refers to the affix's general semantic concept as a whole.</p> <p><b><math>C_A</math> stacking:</b> The specialized <math>-V_X</math> value, <math>-üä</math>, is used to indicate that the subsequent <math>-C_S</math> consonant-form is to be interpreted as a <math>C_A</math> complex having scope over (i.e., "stacked" upon) the Slot VI <math>C_A</math> complex of the stem.</p>
2	ä	au	iä / uä	
3	e	ei	ie / oe	
4	ë	eu	ië / uë	
5	i	ei	ëu	
6	ö	ou	uö / iö	
7	o	oi	uo / io	
8	ü	iu	ue / eö	
9	u	ui	ua / aö	
0	üa	üe	üo	

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

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

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

**Effect:** The category of Effect conveys an utterance to be beneficial, neutral or detrimental to some party. Effect may also be indicated using a  $-V_X C_S-$  affix, an affixal 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:

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

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

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

+

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

\* see Sec. 3.8.1 below

\* Expected CTX Phase value -ai- will never appear (since the default Slot VIII value is MNO Valence -a-). Therefore, -ai- is instead substituted for the expected RCP Valence value -ë-, which resolves certain ambiguities between Modular Adjuncts and Suppletive Adjuncts when preceded by the ç(ë)- sentence-juncture prefix.

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

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

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

ASPECT V <sub>N</sub>											
RTR	RETROSPECTIVE	a	RSM	RESUMPTIVE	ai	PMP	PREEMPTIVE	ia / oä	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 / oe	CUL	CULMINATIVE	ea
PRG	PROGRESSIVE	ë	RGR	REGRESSIVE	eu	TMP	TEMPORARY	ië / uë	IMD	INTERMEDIATIVE	eo
IMM	IMMINENT	i	PCL	PRECLUSIVE	ëi	XPD	EXPENDITIVE	ëu	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	EXP	EXPERIENTIAL	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	CCN
SUB	hw	CCA
ASM	hlw	CCS
SPC	hly	CCQ
COU	hnw	CCP
HYP	hny	CCV

+

\* see Sec. 3.8.1 below

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

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

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

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

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

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

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

**3.8.1.1 Showing both Mood and Case-Scope on a FRAMED formative:** FRAMED formatives do not normally show Mood, deferring any mood information to the main verb, so that Slot VIII C<sub>N</sub>-Pattern 1 or 2 affix should be interpreted as showing Case-Scope rather than Mood. However, in certain circumstances, it may be advantageous to show both Mood and Case-Scope on a framed formative. To do so, show Mood via **V<sub>X</sub>C<sub>S</sub>** affix or an adjunct (see Sec. 4.3 or 4.7).

**3.8.1.2 Moving the C<sub>N</sub>-Pattern 1 Mood/Case-Scope affix to the Slot VI C<sub>A</sub> Slot:** If the **V<sub>N</sub>** in Slot VIII shows default MNO Valence (-a-), and the Slot VIII C<sub>N</sub> value indicates a Mood/Case-Scope other than FAC or CCN -h-, then the C<sub>N</sub> affix may instead be shown in Slot VI (the C<sub>A</sub> Slot) under the following circumstance: if C<sub>A</sub> in Slot VI is default -I- (UNI-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/CCN -h- never moves to Slot VI because it instead elides whenever Slot VIII is zero-marked.

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

In this slot, nouns and FRAMED verbs take Case (see Sec. 3.9.1 below), 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 (Cases 37 through 68) each contain only eight rather than nine cases. As a result, vowel-tier No. 8 of the standard vowel-sequence is not used.

**SPECIAL NOTE:**  $V_C$  values for cases 37 through 68 are the same as for Cases 1 through 36 (minus vowel-tier No. 8) plus the addition of a glottal-stop applied per the rules of Sec. 1.7. However, because adding a glottal stop to  $V_C$  for cases 37 through 52 adds a syllable to the word, the glottal-stop may instead be added to any other vocalic form in the formative after Slot II (i.e., to  $V_R$  in Slot IV,  $V_X$  in Slots V or VII, or  $V_N$  in Slot VIII). This option is also available for Cases 53 through 68 if desired for rhetorical or euphonic purposes, poetry, singing, etc., even though it does not save a syllable.

TRANSRELATIVE CASES			$V_C$	DESCRIPTION	case-accessor affix see Sec. 3.9.2 below	inverse accessor affix see Sec. 3.9.2 below
1	THM	THEMATIC	(a) <sup>1</sup>	The (usually inanimate) party which is a participant to the verbal predicate which does not undergo any tangible change of state. Semantic role: CONTENT.	party acting as the THEME/CONTENT of X	that of/for which X functions as the THEME/CONTENT
		$V_X$ form	ao			
2	INS	INSTRUMENTAL	ä	The entity acting as means utilized by an explicit or implicit agent to implement/carry out the effect/impact of an act/event. Semantic role: INSTRUMENT.	the INSTRUMENT/MEANS by/via which X occurs	that by/via which X is the INSTRUMENT/MEANS
		$V_X$ form	ae			
3	ABS	ABSOLUTIVE	e	The party that/who is the target of, and/or undergoes, the effect/impact or change of state as a result of a tangible act/event. Semantic role: PATIENT.	the PATIENT to which/whom X happens	that which happens/is done to the PATIENT X
		$V_X$ form	ea			
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
		$V_X$ form	eo			
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
		$V_X$ form	eë			
6	EFF	EFFECTUATIVE	ö	The party/force that initiates a chain of causal events or who induces another party to act as an agent (specifiable via the ENB affix). Role: ENABLER	the ENABLER initiating an event chain leading to X	the event (chain) that the ENABLER X initiates
		$V_X$ form	öe			
7	ERG	ERGATIVE	o	The animate party or inanimate force which initiates/causes an act/event which creates a tangible effect or change of state in a patient. Semantic role: AGENT or FORCE.	the AGENT who/that X's	that which the AGENT or FORCE X does/initiates
		$V_X$ form	oe			
8	DAT	DATIVE	ü	The party which is the (intended) recipient of a verb of transference, transmission, or communication; the party at/to which a physically transferred entity, transmitted information, or a communicable entity is directed. Semantic role: RECIPIENT.	the RECIPIENT of X or of the act of X	that which the RECIPIENT X receives
		$V_X$ form	öa			
9	IND	INDUCIVE	u	The patient who undergoes the tangible effect, impact, or change of state of an act/event initiated/caused by that self-same party. Semantic role: AGENT+PATIENT.	the AGENT who/that X's him-/her-/itself	that which the AGENT X does to him-/her-/itself
		$V_X$ form	oa			

<sup>1</sup> The THEMATIC -a affix is elidable if the resulting word is not monosyllabic. The External Juncture rules of Sec. 1.5 must be taken into account before eliding the -a affix.

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

APPOSITIVE CASES			V <sub>c</sub>	DESCRIPTION	case-accessor affix see Sec. 3.9.2 below	inverse accessor affix see Sec. 3.9.2 below
10	POS	POSSESSIVE	ai	The party which has alienable (i.e., removable or severable) possession of another noun in the sense of having physical control or oversight of that noun, whether by chance circumstance or deliberate manipulation.	the alienable/circumstantial possessor of X	that which X alienably or circumstantially possesses
		V <sub>x</sub> form	ia/oä			
11	PRP	PROPRIETIVE	au	The party having alienable possession of another noun in the sense of quasi-permanent contextual control, ownership or oversight, whether by societal recognition, social convention, law, purchase or decree, which mere physical separation does not sever.	the owner of X; that to which/whom X belongs	that to whom/which X belongs; that which X owns
		V <sub>x</sub> form	iä/uä			
12	GEN	GENITIVE	ei	The party which has inalienable (i.e., irremovable, non-severable) possession of or association with another noun in the sense of having that noun as an inherent or intrinsic attribute, characteristic, physical part, or genetic (i.e., familial) bond.	the inalienable possessor of X	that which X inalienably possesses
		V <sub>x</sub> form	ie/oë			
13	ATT	ATTRIBUTIVE	eu	The party which inalienably experiences the effects of, or otherwise has an affective (see the affective case above) relationship with another noun, either as a temporary or permanent attribute, characteristic, or experience, whether physical or psychological, objective or subjective in nature.	that to which/whom X is an attribute/characteristic	that which X has as an attribute/characteristic
		V <sub>x</sub> form	ië/uë			
14	PDC	PRODUCTIVE	ëi	The party which is the creator, author or originator of another noun.	the originator/author/creator of X	that which X authored / created or originated
		V <sub>x</sub> form	ëu			
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 / described	that which is subjectively considered, described or interpreted by/thru X
		V <sub>x</sub> form	uö/iö			
16	OGN	ORIGINATIVE	oi	The party which is the literal or figurative source of another, or which is the native location, origin, or usual locative context for another.	the original or inherent location/source of X	that of which X is the original or inherent source/location
		V <sub>x</sub> form	uo/io			
17	IDP	INTERDEPENDENT	iu	The party which has a coordinated, tandem, complementary or mutually dependent relationship with another. The relationship between the two nouns can be thought of as reciprocal in nature, i.e., each noun implies the other or needs the other to exist within its natural context	that with which, or to which, X has a complementary relationship	that which is the complementary relationship shared with X
		V <sub>x</sub> form	ue/eö			
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
		V <sub>x</sub> form	ua/aö			

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

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



RELATIONAL CASES			V <sub>c</sub> *	DESCRIPTION	case-accessor affix see Sec. 3.9.2 below	inverse accessor affix see Sec. 3.9.2 below
37	REF	REFERENTIAL	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+	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+	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+	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
		V <sub>x</sub> form	ue/e			
41	CPS	COMPOSITIVE	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+	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
		V <sub>x</sub> form	ua/aö			
43	UTL	UTILITATIVE	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+	Identifies a formative (or case-frame) as constituting a relative clause associated with the preceding formative (or whatever formative is indicated by the DCD affix as being the head of the relative clause). <b>NOTE:</b> a lone formative in RELATIVE case not functioning as an external head of a relative clause need not be in FRAMED Relation (See Sec.5.4 of this document).	that which identifies or distinguishes X from other parties	the party identified by or distinguishable by X

\* See Special Note in Sec. 3.9.1 .

\*\* Ithkuil 2011's CONJUNCTIVE case is eliminated. Use the COMITATIVE case + PARALLEL or COMPLEMENTARY valence instead.

AFFINITIVE CASES			V <sub>c</sub> *	DESCRIPTION	case-accessor affix see Sec. 3.9.2 below	inverse accessor affix see Sec. 3.9.2 below
45	ACT	ACTIVATIVE	ai+’	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	DSP	DESCRIPTIVE	au+’	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	ei+’	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	eu+’	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	ëi+’	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	ou+’	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	oi+’	Identifies the non-causal basis, foundation, sustenance (literally or figuratively), or required existential condition for another noun or clause, translatable by the phrases ‘based (up)on,’ ‘dependent (up)on’ or ‘relying on.’ Examples of use are <i>a book dependent on a publisher, a man relying on charity, laws based in reason, success supported by corruption.</i>	that upon which X relies or is based upon	that which relies on or is based upon X
52	VOC	VOCATIVE	ui+’	Signifies a noun being used in direct address.	—	—

\* See Special Note in Sec. 3.9.1 .

SPATIO-TEMPORAL I			V <sub>c</sub> *	DESCRIPTION	case-accessor affix see Sec. 3.9.2 below	inverse accessor affix see Sec. 3.9.2 below
53	LOC	LOCATIVE	i'a	entity identified as the location <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 <b>on me</b>, It lies just west <b>of the house</b>, Tell me when the parade starts <b>relative to my arrival</b>.</i>	the place/time relative to which, X is/occurs	that which occurs relative to the place/time designated by X
59	INV	INTRATIVE	u'o	Identifies a noun as being the spatio-temporal boundary point of a span or volume of space or a period of time, i.e, either the starting point or the ending point of a span of time or space. English translations include: 'as of X' / 'since X' / 'until X'; for spatial contexts, translates as "between there and here" / "between here and there")	the place/time since/until/between which, X is/occurs	that which occurs since, until, or between the place(s)/time(s) designated by X
60	NAV	NAVIGATIVE	u'a	entity whose literal or metaphorically inferred long axis serves as the direction of another entity's path, course, arc, or trajectory of translative motion	that which serves as X's directional trajectory, path or way	that which is traveling along the directional trajectory, path or way designated by X

\* See Special Note in Sec. 3.9.1 .

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

\* See Special Note in Sec. 3.9.1 .

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

The phonological structure of case-accessor, inverse-case accessor, and case-stacking affixes is as follows: The  $V_X$  portion of the affix is the standard four vowel-form series of regular  $V_X C_S$  affixes. There are two separate  $C_S$  increments for each of the 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.	$C_S =$			
<b>Cases 1 thru 9</b>	1	<b>sw</b>	1	<b>zw</b>	1	<b>šw</b>	1	<b>žw</b>	1	<b>lw</b>	
<b>Cases 10 thru 18</b>	2		2		2		2		2		2
<b>Cases 19 thru 27</b>	3		3		3		3		3		3
<b>Cases 28 thru 36</b>	4		4		4		4		4		4
<b>Cases 37 thru 44 *</b>	1	<b>sy</b>	1	<b>zy</b>	1	<b>šy</b>	1	<b>žy</b>	1	<b>ly</b>	
<b>Cases 45 thru 52 *</b>	2		2		2		2		2		2
<b>Cases 53 thru 60 *</b>	3		3		3		3		3		3
<b>Cases 61 thru 68 *</b>	4		4		4		4		4		4

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

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

This structure allows case-accessor and case-stacking affixes to appear in Slot V or Slot VII or in affixal adjuncts. 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. [See Sec. 5.7 as to how using the case-stacking affix on UNFRAMED verbal formatives can function as a substitute for case-frames.](#)

### 3.9.3 $V_K$ — Illocution, Expectation, and Validation

Illocution, Expectation, and Validation appear on UNFRAMED verbal formatives, shown by a  $V_K$  ultimate stress pattern in Slot X. Nominal formatives or FRAMED verbal formatives take a  $V_C$  case affix in this slot instead.

**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  $V_X C_S$  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 “commissive” (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>ILLOCUTION</b>	<b>EXPECTATION</b> (i.e., what kind of response the speaker desires from the addressee)		
	<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 expressible 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.

ASR ASSERTIVE Illocution			COG	RSP	EXE
<b>OBS</b>	<b>OBSERVATIONAL</b>	present sensory knowledge or present sensory experience: “I perceive... / I know...”	(á)	ái	íá / oâ
<b>REC</b>	<b>RECOLLECTIVE</b>	past sensory knowledge or past sensory experience – “I remember... / I know (from memory)...”	â	áu	îâ / 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	îê / uê

PFM PERFORMATIVE Illocution			í	êi	êu
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ASR ASSERTIVE Illocution					
<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 / íó
<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>INFERENCE</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  $V_K$  information on a FRAMED formative:** Since Slot IX of a FRAMED formative is already taken up by the  $V_C$  case affix, the equivalent to  $V_K$  information can be shown by a new specialized  $V_X C_S$  affix, as shown below:

-n]	IVE Illocution + Validation + Expectation				
degree	Illocution	Validation	Type-1 = COG Expectation	Type-2 = RSP Expectation	Type-3 = EXE Expectation
1	ASR Assertive	<b>OBS</b> Observational	a	ai	ia / oä
2		<b>REC</b> Recollective	ä	au	îä / uä
3		<b>PUP</b> Purportive	e	ei	ie / oë
4		<b>RPR</b> Reportive	ë	eu	îë / uë
5	PFM Performative		i	ëi	ëu
6	ASR Assertive	<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: 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 Affixual Adjuncts

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

' / h	$V_X C_S$	$V_S$	Stress
[initial glottal-stop is pronounced but not written]; if $V_X$ in the 2nd column = $\ddot{e}$ , then first add <b>h-</b> *	single standard $V_X C_S$ affix  if $V_X = \ddot{e}$ , add word-initial <b>h-</b> *	<b>(a)</b> = 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) <b>u</b> = 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) <b>e</b> = 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) <b>i</b> = 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) <b>o</b> = affix has scope over the entire formative as a whole, including Valence, Mood or Case, Illocution/Validation, etc. <b>ö</b> = 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

\* This is necessary to avoid ambiguities with simple C+V personal-reference adjuncts forms prefixed with epenthetic  $\ddot{e}$ -.

**4.1.2 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 either of **-h-** or a non-root consonant preceded by a glottal-stop (**'h**, **'w**, **'y**, **'hw**, **'hl**, or **'hr**). Examples: *dohast*, *stei'yaikra*, *äjgi'woftôm*, *via'hlobrigli*.

(ë-)C <sub>S</sub> V <sub>X</sub>	C <sub>Z</sub>	V <sub>X</sub> C <sub>S</sub> ...	V <sub>Z</sub>	Stress
single reversed V <sub>X</sub> C <sub>S</sub> affix.  Initial C <sub>S</sub> may be preceded by ë- if phonotactically necessary	<b>h</b> = preceding affix applies to the stem only (not to its C <sub>A</sub> ) and has scope over all Slot V affixes (i.e., as if it were the last affix in Slot V) <b>'h</b> = preceding affix applies to the stem only (not to its C <sub>A</sub> ) and is subordinate to all Slot V affixes (i.e., as if it were the first affix in Slot V) <b>'w</b> = preceding affixes applies to both Stem and C <sub>A</sub> and has scope over all Slot VII affixes (i.e., as if it were the last affix in Slot VII) <b>'y</b> = preceding affix applies to both Stem and C <sub>A</sub> and is subordinate to all Slot VII affixes (i.e., as if they were the first affixes in Slot VII) <b>hw</b> = preceding affix has scope over the entire formative as a whole, including Valence, Mood or Case, Illocution/Validation, etc. <b>'hw</b> = preceding affix has scope over the entire formative as a whole as well as other adjacent adjuncts including a modular adjunct	standard V <sub>X</sub> C <sub>S</sub> affix(es)	<b>(a)</b> = 2nd and subsequent affixes apply to stem only (not to its C <sub>A</sub> ) and have scope over all Slot V affixes (i.e., as if they were the last affix in Slot V) <b>u</b> = 2nd and subsequent affixes apply to stem only (not to its C <sub>A</sub> ) and are subordinate to all Slot V affixes (i.e., as if they were the first affix in Slot V) <b>e</b> = 2nd and subsequent affixes apply to both Stem and C <sub>A</sub> and have scope over all Slot VII affixes (i.e., as if they were the last affix in Slot VII) <b>i</b> = 2nd and subsequent affixes apply to both Stem and C <sub>A</sub> and are subordinate to all Slot VII affixes (i.e., as if they were the first affix in Slot VII) <b>o</b> = 2nd and subsequent affixes have scope over the entire formative as a whole, including Valence, Mood or Case, Illocution/Validation, etc. <b>ö</b> = 2nd and subsequent affixes have scope over the entire formative as a whole as well as other adjacent adjuncts including a modular adjunct <b>(ë)</b> = 2nd and subsequent affixes have the same scope as shown by C <sub>Z</sub>	Penultimate stress = default  Ultimate stress = affixes apply to concatenated stem only

A Type-3 V<sub>X</sub>C<sub>S</sub> affix used in an affixual adjunct associates to the V<sub>X</sub>C<sub>S</sub> affix named by V<sub>S</sub>, C<sub>Z</sub> or V<sub>Z</sub>, e.g., if V<sub>Z</sub> = **a**, it associates to the last affix in Slot V.

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

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

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

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

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

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

The Affix-Degree and Specification of the Specialized  $C_S$ -root is shown by the  $V_R$  value in Slot IV:

**Slot IV  $V_R$  Values for the Specialized  $C_S$ -Root** (showing Affix-degree for the Slot III  $C_S$ -form plus Specification)

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

Note that, unlike standard formatives, all nine tiers of the Standard Vowel Sequence are utilized in these Specialized  $C_S$ -roots.

Also: If a Specialized  $C_S$ -roots has non-default (i.e., non-EXS) Context, this must be shown via the **NCE** affix.

### 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*, *üha*, *ihwe*, *yewia*, *uhlaihlwi*, *uya*, *öhwoyó*, *wahnyuá*.

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/CCN** Valence+Mood/Case-Scope is zero-marked in Slot 2. Information in each successive slot scopes over the previous slot, but the adjunct as a whole does not have scope beyond its default formative Slot VIII, unless the new  $V_H$  value in Slot 5 of the adjunct indicates a different and specialized pattern of scoping.

### Structure of a Modular Adjunct

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

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

- a** = affixes in Slots 2, 3, and 4 have successive right-to-left scope order over each other (Slot 2 < Slot 3 < Slot 4) and have scope over Case/Mood and Validation + Illocution + Expectation
- e** = affixes in Slots 2, 3, and 4 have successive right-to-left scope order over each other (Slot 2 < Slot 3 < Slot 4) and have scope over Case/Mood
- i/u** = affixes in Slots 2, 3, and 4 have successive right-to-left scope order over each other (Slot 2 < Slot 3 < Slot 4) and have scope over the formative as a whole but not any adjacent affixal adjuncts (do not use if adjacent affixal adjunct's V<sub>s</sub>, C<sub>z</sub>, or V<sub>z</sub> values show scope over a modular adjunct)
- o** = affixes in Slots 2, 3, and 4 have successive right-to-left scope order over each other (Slot 2 < Slot 3 < Slot 4) and have scope over the formative as a whole including any adjacent affixal adjuncts (do not use if adjacent affixal adjunct's V<sub>s</sub>, C<sub>z</sub>, or V<sub>z</sub> values show scope over a modular adjunct)

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

#### 4.4 Register Adjunct

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

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

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

The  $C_P$  affix of these adjuncts may be used in the  $C_1$  Slot of a Single-Referent-, Dual-Referent-, or Combination Personal-Reference Ajunct (see Sec. 4.6.3). When so used, the  $C_P$  affix must be preceded by a word-initial **ë**- to avoid the adjunct being mistaken for a concatenated formative.

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

$C_P$	$V_C$
<b>hl</b>	Same as Formative Slot IX

Examples: *hla*, *hle*, *hloa*

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

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

Examples: *hma, hmei, hmoa*

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

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

Examples: *hna, hnei, hnoa*

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

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

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

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

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

Examples: *hña, hñei, hñoa*

## 4.6 Personal Reference Adjuncts

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

		EFFECT			
		NEUTRAL	BENEFICIAL	DETRIMENTAL	
<b>1m</b>	monadic speaker	<b>l</b>	<b>r</b>	<b>ř</b>	“I”
<b>2m</b>	monadic addressee	<b>s</b>	<b>š</b>	<b>ž</b>	“you (sg.)”
<b>2p</b>	polyadic addressee	<b>n</b>	<b>t</b>	<b>d</b>	“you (pl.)”
<b>ma</b>	monadic animate 3 <sup>rd</sup> party	<b>m</b>	<b>p</b>	<b>b</b>	“he” / “she” / “they (sg.)”
<b>pa</b>	polyadic animate 3 <sup>rd</sup> party	<b>ň</b>	<b>k</b>	<b>g</b>	“they (pl.)”
<b>mi</b>	monadic inanimate 3 <sup>rd</sup> party	<b>z</b>	<b>ʃ</b>	<b>ɖ</b>	“it”
<b>pi</b>	polyadic inanimate 3 <sup>rd</sup> party	<b>z / ʃ</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 **-ʃ**- form is optionally available when combined with another consonant, e.g., **pʃ** = 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: **-ʃ** / **-x** ABSTRACT: **-w** / **-y**

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

**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.

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

1	2	3	4	5
( <b>ë</b> ) <b>C</b> <sub>1</sub> (( <b>ë</b> ) <b>C</b> <sub>1</sub> (( <b>ë</b> ) <b>C</b> <sub>1</sub> ))	<b>V</b> <sub>C1</sub>	( <b>w/y</b> + <b>V</b> <sub>C2</sub>	( <b>C</b> <sub>2</sub> ( <b>ë</b> ))	<b>Stress</b>
Personal Referent A	Case of Personal Referent A Same affixes as formative Slot IX	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 IX	Personal Referent B	<b>monosyllabic</b> or <b>penultimate</b> = default <b>ultimate</b> = adjunct carries <b>RPV</b> Essence *

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

Examples: *to, zua, laiwe, ëpgóí, ëztewim, zëmse, smoyúx, triwejvë.*

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

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

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

This adjunct is used to add Case, Specification, **V<sub>X</sub>C<sub>S</sub>** affix information or a second case (case-stacking) to one of the Personal Reference forms. For non-combination single-referent forms it may be preferable to use the new Personal-Reference roots explained in Sec. 4.6.4.

The tell-tale signs of this adjunct are the Slot 4 consonant-forms containing **-x-**, **-xx-**, **-lx-**, or **-rx-** in what looks like the **C<sub>A</sub>** slot of a formative (these four consonant conjuncts are not possible **C<sub>A</sub>** forms). Examples: *slex, poxanz, ëtkexx, ëlsuolxéd, ëbneirxamzüü.*

1	2	3	4	5	6
( <b>ë-</b> ) <b>C</b> <sub>1</sub> (+ <b>C</b> <sub>2</sub> (+ <b>C</b> <sub>3</sub> ))	<b>V</b> <sub>C</sub>	<b>x / xx / lx / rx</b>	( <b>V<sub>X</sub>C<sub>S</sub> ...</b> )	( <b>V</b> <sub>C2</sub> or epenthetic <b>-a</b> )	<b>Stress</b>
Combination Personal Referent	Case of Combination Personal Referent	Specification of Combination Personal Referent		2nd (stacked) case of Combination Personal Referent	Penultimate stress = default
	from formative Slot IX	<b>x</b> = BSC <b>xx</b> = CTE <b>lx</b> = CSV <b>rx</b> = OBJ	<b>V<sub>X</sub>C<sub>S</sub></b> suffix 1 (2, 3, ...)	same affixes as formative Slot IX except for THM case = <b>-üa</b>	Ultimate stress = adjunct has <b>RPV</b> Essence.



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

In addition to the personal-reference affixes shown in Sec. 4.6, the  $C_1$  slot of the Combination Personal-Reference Adjunct above as well as the Single- or Dual-Referent Personal-Reference Adjunct in Sec. 4.6.1 may also take any of the  $C_P$  Suppletive Adjunct affixes (**hl-**, **hm-**, **hn-**, **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 using a  $C_P$  Suppletive Adjunct affix in Slot 1, the  $C_P$  value must be preceded by epenthetic **ë-** to avoid the adjunct being mistaken for a Concatenated Formative.

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

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

**Slot II  $V_V$  Values Indicating a Specialized Personal-Reference Root** (i.e., Slots III constitutes a Combination Personal-Reference Affix)

Version	$V_V$
PRC	eä
CPT	öä

Slot IV values for these Specialized Personal-Reference roots are the same as for standard formatives, showing Function, Specification, and Context for the combination personal-referent.

Combination personal-referent clusters requiring an epenthetic **-ë-** vowel cannot be used in these Specialized pers.-reference roots.

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

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

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

	STEM 1 Nominal meaning	STEM 1 Verbal meaning
<b>BASIC</b>	'I (myself)'	'to be me/to be myself', 'to do/act what/how I do [because it's me]'
<b>CONTENTIAL</b>	'I (myself)' (as being my personality, mind, psyche, sentient thoughts, psychological sense of individuality, or "essence"; irrespective of my physical body)'	[same as above applied to 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'

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

Similar to Ithkuil 2011, if either of the  $V_X C_S$  affix slots, Slots **V** or **VII**, are empty, then that empty slot may be used to show a specialized short-cut "personal reference affix." The affix consists of a  $C_S$  consonant that is any one of the 30 Personal Reference Adjunct consonant-forms from the table in Sec. 4.6 above, combined with is a standard Type-3  $V_X$  vowel-form corresponding to the nine  $V_X$  affix-degrees shown below. It is the appearance of a lone Type-3  $V_X C_S$  affix without any adjacent Type-1 or Type-2 affix for it to apply to, that triggers its interpretation as this specialized personal reference affix.

##### Slot V or VII $V_X$ Values Indicating a Personal-Referent + Case Shortcut

can only be used if no other $V_X C_S$ affix in the same Slot		
<b>Degree 1</b>	ia / oä	POSSESSIVE case
<b>Degree 2</b>	iä / uä	PROPRIETIVE case
<b>Degree 3</b>	ie / oë	GENITIVE case
<b>Degree 4</b>	ië / uë	ATTRIBUTIVE case
<b>Degree 5</b>	ëu	PRODUCTIVE case
<b>Degree 6</b>	uö / iö	INTERPRETATIVE case
<b>Degree 7</b>	uo / io	ORIGINATIVE case
<b>Degree 8</b>	ue / eö	INTERDEPENDENT case
<b>Degree 9</b>	ua / aö	PARTITIVE case

can be used regardless of other $V_X C_S$ affix present		
<b>1</b>	ao	THEMATIC case
<b>2</b>	ae	INSTRUMENTAL case
<b>3</b>	ea	ABSOLUTE case
<b>4</b>	eo	STIMULATIVE case
<b>5</b>	eë	AFFECTIVE case
<b>6</b>	öe	EFFECTUATIVE case
<b>7</b>	oe	ERGATIVE case
<b>8</b>	öa	DATIVE case
<b>9</b>	oa	INDUCIVE case

## 4.7 Mood/Case-Scope Adjuncts

Because old Slot X C<sub>Y</sub> forms from previous versions of this document have now been eliminated, and because there are no V<sub>X</sub>C<sub>S</sub> affixes pertaining to Mood or Case-Scope (since the six values do not map to the nine degrees), new monosyllabic adjunct forms have been created to express Mood or Case-Scope.

<b>FAC</b>	FACTUAL	(hra)
<b>SUB</b>	SUBJUNCTIVE	hre
<b>ASM</b>	ASSUMPTIVE	hri
<b>SPC</b>	SPECULATIVE	hrö
<b>COU</b>	COUNTERFACTUAL	hro
<b>HYP</b>	HYPOTHETICAL	hru

<b>CCN</b>	NATURAL	hrai
<b>CCA</b>	ANTECEDENT	hrei
<b>CCS</b>	SUBALTERN	hriu
<b>CCQ</b>	QUALIFIER	hrëi
<b>CCP</b>	PRECEDENT	hroi
<b>CCV</b>	SUCCESSIVE	hrui

## 4.8 Bias Adjuncts

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

<b>DOL</b>	<b>DOLOROUS</b>	řřx	<i>‘Ow!’ ‘Ouch!’</i>
<b>SKP</b>	<b>SKEPTICAL</b>	rnž	<i>‘Yeah, right!’ ‘Oh, sure! Like anyone’s supposed to believe that!’</i>
<b>IPT</b>	<b>IMPATIENT</b>	žžv	<i>‘C’mon!,’ ‘What’re you waiting for?’ ‘so...already!’ as in the sentence ‘So dance already!’</i>
<b>RVL</b>	<b>REVELATIVE</b>	mmǀ	<i>‘No wonder...!’ or ‘So that’s why...!’ ‘A-ha!....’ ‘Well, well, well!....’</i>
<b>TRP</b>	<b>TREPIDATIVE</b>	llč	<i>‘Oh, God...’ ‘Oh, no!....’ ‘Oh, dear!’ [fear-based]</i>
<b>RPU</b>	<b>REPULSIVE</b>	šštǀ	<i>‘Yuck! Ew! How gross!’</i>

<b>PSC</b>	<b>PROSAIC</b>	žžt	<i>‘Meh... (said in disappointment)’ ‘How ordinary!’</i>
<b>CMD</b>	<b>COMEDIC</b>	pǀǀ	<i>‘Funny!’ ‘LOL’</i>
<b>PPV</b>	<b>PROPOSITIVE</b>	sl	<i>‘what if...’ ‘It could be that....’ ‘Consider this: ...’ ‘Posit the following: ...’ ‘Assume for the sake of argument that....’</i>
<b>SGS</b>	<b>SUGGESTIVE</b>	ltç	<i>‘How about...’ ‘We could...’ ‘Might I suggest...’</i>
<b>DFD</b>	<b>DIFFIDENT</b>	cč	<i>‘sorry, but...’ ‘It’s nothing. It’s just...’</i>
<b>RFL</b>	<b>REFLECTIVE</b>	llm	<i>‘Look at it this way...’ ‘As I see it,...’ ‘In my opinion...’ ‘From my point of view...’</i>

<b>DES</b>	<b>DESPERATIVE</b>	mřř	<i>'I don't know how to say this, but...' 'I'm afraid that....' 'I'm sorry to have to tell you, but...'</i>
<b>DPB</b>	<b>DISAPPROBATIVE</b>	ffx	<i>'I don't like the fact that...' 'It bothers me that....' 'Unacceptable!' 'I hate it!'</i>
<b>CTP</b>	<b>CONTEMPTIVE</b>	kšš	<i>'What nonsense!' or 'What bullshit!'</i>
<b>EXA</b>	<b>EXASPERATIVE</b>	kçç	<i>'Dammit!' 'Look, don't you get it?...' 'Look, I'm trying to tell you....'</i>
<b>IDG</b>	<b>INDIGNATIVE</b>	pšš	<i>'The nerve!' or 'How dare...!?'</i>
<b>DIS</b>	<b>DISMISSIVE</b>	kff	<i>'Is that it?' 'Big deal!' 'So what!?'</i>
<b>DRS</b>	<b>DERISIVE</b>	pfç	<i>'How foolish!' 'How silly!' 'Look at how foolish/silly/ridiculous this is!'</i>
<b>PES</b>	<b>PESSIMISTIC</b>	ksp	<i>'Yeah, like it really matters that...' 'Pfft! What's it to me?'</i>
<b>DUB</b>	<b>DUBITATIVE</b>	mmf	<i>'Hmm, not likely.' 'I doubt it.' 'Sounds fishy to me' 'I don't trust this/it/him/her/them...'</i>
<b>IVD</b>	<b>INVIDIOUS</b>	řřn	<i>'Why does he/she/they get to... and I don't?!' 'How unfair (that I don't get to...)!'</i>
<b>DCC</b>	<b>DISCONCERTIVE</b>	gzj	<i>'I'm not sure about this.' 'I don't feel comfortable about this.' 'I'm feeling out of my element here.'</i>
<b>STU</b>	<b>STUPEFACTIVE</b>	ļļč	<i>'Woah!' 'Holy, bejeezus!' 'What the...!' 'Jeez, Louise...!'</i>
<b>FSC</b>	<b>FASCINATIVE</b>	žžj	<i>'Cool!' 'Wow!' 'Awesome!'</i>
<b>IFT</b>	<b>INFATUATIVE</b>	vvr	<i>'Praise be to...!' 'Oh, thank God for...!' 'There's nothing more sacred/holy/important than...!'</i>
<b>EUH</b>	<b>EUPHORIC</b>	gzz	<i>'(Sigh) What bliss!'</i>

<b>EUP</b>	<b>EUPHEMISTIC</b>	vvt	<i>'Let's just say that....' or 'Well, let me put it this way....'</i>
<b>CRR</b>	<b>CORRECTIVE</b>	ňņ	<i>'that is to say....,' 'What I mean(t) to say is....' 'I mean....'</i>
<b>APB</b>	<b>APPROBATIVE</b>	řs	<i>'(That's) OK' '(That's) alright' '(That's) good' '(That's) fine' 'Very well' 'Sure'</i>
<b>IRO</b>	<b>IRONIC</b>	mmž	<i>'Oh, nice!' 'Just great!' 'Well, now, isn't this lovely!'</i>
<b>PSM</b>	<b>PRESUMPTIVE</b>	nnņ	<i>'It can only mean one thing....,' 'and that's that!' 'and that's all there is to it!' or 'There's no two ways about it,....'</i>
<b>GRT</b>	<b>GRATIFICATIVE</b>	mmh	<i>'Ah! What bliss...!' 'Oh, there's nothing like....' [physical pleasure only]</i>
<b>SAT</b>	<b>SATIATIVE</b>	ļļ	<i>'How satisfying...!' 'At last, the pleasue of knowing/being/seeing/doing....' [psychological/emotional pleasure/satiety only]</i>
<b>PPX</b>	<b>PERPLEXIVE</b>	llh	<i>'Huh? What do you mean...? What the hell? 'WTF!?' 'You gotta be kidding me!'</i>
<b>CTV</b>	<b>CONTEMPLATIVE</b>	gvv	<i>'I wonder how....,' 'that's odd....,' 'I don't get it....,' or a quizzical 'hmmmm.'</i>
<b>PPT</b>	<b>PROPITIOUS</b>	mll	<i>'it's a wonder that' as in 'It's a wonder he didn't break a bone in that fall.'</i>
<b>SOL</b>	<b>SOLICITATIVE</b>	ňňs	<i>'please'</i>
<b>RAC</b>	<b>REACTIVE</b>	kll	<i>'My goodness! 'Wow!' 'Amazing!'</i>
<b>COI</b>	<b>COINCIDENTAL</b>	ššč	<i>'What a coincidence!'</i>
<b>FOR</b>	<b>FORTUITOUS</b>	lzp	<i>'It's just as well that...' or 'All's well that ends well...'</i>
<b>ANN</b>	<b>ANNUNCIATIVE</b>	drr	<i>'Guess what!' or 'Wait till you hear this!'</i>

<b>DLC</b>	<b>DELECTATIVE</b>	zmm	'Whee!'
<b>ATE</b>	<b>ATTENTIVE</b>	ňj	'Well, whaddya know...' 'Well, will you look at that...!' 'Well, go figure...' 'Who would've thought...?' 'Well I'll be!'
<b>RNC</b>	<b>RENUNCIATIVE</b>	mzt	'So much for...!' 'There goes...!'
<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>	l̥	'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>OPT</b>	<b>OPTIMAL</b>	ççk	prolonged 'so' or 'totally' as in 'I so don't care!' or 'That is totally not what I meant.'
<b>CNV</b>	<b>CONTENSIVE</b>	rrj	'I'm telling you...', 'I told you so!', 'You see?!'
<b>IPL</b>	<b>IMPLICATIVE</b>	vll	'of course,' 'after all,' 'needless to say.'
<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.

#### 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’

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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



### 5.3 Using STATIVE vs. DYNAMIC Function

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

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

- Nouns (i.e., formatives having unframed  $V_C$  case-marking) denoting physically tangible objects/entities being referred to only as a means of identifying them (i.e., any motion or change or usage being undergone by the object/entity is irrelevant to the speaker's intent), e.g., *a ball, a tree, a rock, a person, a cloud*, etc.
- Nouns referring to collective, affective, intangible or abstract entities being referred to only as a means of identifying them (i.e., any change, motion or usage associated with the object/entity is irrelevant to the speaker's intent), e.g., *a crowd, a thought, an emotional state, a situation, a monarchical form of government, beauty as a concept, an aesthetic experience, an affective sensation*, etc.
- Nouns referring to tangible actions/movements/motions/changes that the speaker is only referencing as a gestalt-like bounded entity (having an implied duration or spatial boundary) where the fact that the entity involves change/motion/movement/action/growth is irrelevant, e.g., *(an instance/state of) laughter, (a pattern of) ocean waves, a conversation, (being out) fishing, (being out for) a walk, (an instance of) reading, (an instance/state of) hammering (going on), a meal [as an event, not a process]*, etc.
- Verbs (i.e., unframed formatives marked for  $V_K$  Illocution/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
<p><b>Byalá pa.</b> <i>'He has/shows/is showing common sense.'</i></p>	<p><b>Byulá pa. (Byulá pu.*)</b> <i>'He uses/exercises/is demonstrating common sense.'</i> [*if emphasizing the resulting beneficial change in state]</p>
<p><b>Vvralá mi wurçpë.</b> <i>'Her passion is dance / She feels passionate about dance.'</i></p>	<p><b>Vvralá mi urçpulë.</b> <i>'Her passion is dancing / She feels passionate about dancing.'</i></p>
<p><b>Tlasatřá çkava.</b> <i>Disease is rampant there.</i></p>	<p><b>Tlusatřá çkava.</b> <i>Disease runs rampant there.</i></p>
<p><b>Txasá ku.</b> <i>They are having a meal.</i></p>	<p><b>Txusá ku.</b> <i>They are eating a meal.</i></p>
<p><b>Waltlá wele lo.</b> <i>I make the child wear a jacket.</i></p>	<p><b>Altúl wele lo.</b> <i>I put a jacket on the child / I dress the child in a jacket.</i></p>
<p><b>Malá welu wiesaçďä espanya.</b> <i>The child is speaking (in) Spanish.</i></p>	<p><b>Mulá welu wiesaçďä espanya.</b> <i>The child is saying something in Spanish.*</i> [*This meaning can also be conveyed by using CTE Specification: <b>mülá</b>]</p>

## Sec. 5.4 Relative Clause Formation

Because of the existence of the RELATIVE case and the DESCRIPTIVE case, relative clauses sometimes work differently in 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. Weñayá kšilo äpçólöwa lu eñtyangena.

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

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

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

The above sentence could also be structured using a RELATIVE case-frame, however it would require an Obviative personal-reference root with a switch-reference affix:

1b. **Weñayá kšilo eñyangena äpçolô'yu lu tha.**

'compose.in.writing'-RTR 'clown'-STA/OBJ-ERG 'written.page'-MSC/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. **Žalá li kšilenë malê'hu welu.**

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

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

2b. **Erčäsókh elavöte žžjá'su 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 ainšai'sau kšivöto hlarrnë-yúřku'u.**

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

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

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

4. **Yuřká warrnenë kšila çu'u Bubü.**

'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. **Umñälördá žúlëkti 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 malê’hu kšivu.**

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

If necessary for disambiguation, the semantic role of the head in such a sentence can be marked using an Obviative personal-reference adjunct as shown in Sentence 5c below (as well as Sentence 1b above).

5c. **Umňälá lo welene malê’hu **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 PARENTHETICAL register.

## Sec. 5.5 Use of the ATTENDANT Case

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

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

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

[with second party in DATIVE case:] <b>Muliųtmá mu çü Jon hma ažxíp.</b> <i>'She shouted "fire!" to John'</i>	[with second party in ATTENDANT case:] <b>Muliųtmá mu çí'ä Jon hma ažxíp.</b> <i>'She shouted "fire!" in John's presence' / 'She shouted "fire!" with John nearby'</i> (thus causing John to do something, e.g., run for a fire extinguisher, run out of the building, etc.)
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[with second party in COMITATIVE case:] <b>Wanzvėhá mu weló'ö.</b> <i>'She is playing a game with the child.'</i>	[with second party in ATTENDANT case:] <b>Wanzvėhá mu weli'ä.</b> <i>'She is playing a game [with someone] while the child watches/while the child sits nearby/in the child's presence.'</i>
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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>Żalá li welenė malê'hu kšivu.</b> <i>'I see the child who talks with clowns.'</i>	[with the head of a relative clause marked by ATTENDANT case:] <b>Żalá li welenė malê'hu thi'ä kšivu.</b> <i>'I see the child who talks with clowns.'</i>
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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., **Málái muyüs** 'What did s/he tell you?', **Ūnhalái ürçpáló'e su** 'How long (is it / has it been) since you danced?', **Špálái 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 **-ain!** indicating ASSERTIVE-RESPONSIVE Illocution+ Expectation so that the PVS Personal Referent functions much like an English interrogative pronoun. Examples: **Lliäxain!** 'Why? [i.e., For what purpose?]', **Lla'oxain!** 'When?', **Rriexain!** 'To/for whose benefit? / To the benefit of what?', **Řřeoxain!** 'Resulting (detrimentally) in what? / With what undesirable result?', **Llauxain!** '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

-sv	PTN Potential
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 weilūsve.** ‘Which children did the clown corrupt?’

**Utxolái akftyäleë laluṭkusvu.** ‘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: **Hre willyothoulyá utplaliër.** ‘My self-esteem is dependent upon (my) singing this song well.’

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

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

TRANSFORMATIVE case: **Kšölaelwí 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 follows the formative being modified. However, this default order is only mandatory if the relationships between a series of successive formatives would otherwise be ambiguous. If not, then the two formatives may be in either order: modified-modifier or modifier-modified.
5. **Personal-Reference Adjuncts:** Personal-reference adjuncts follow the main verb to which they are arguments; however, if the adjunct is topicalized or has semantic focus, then it may precede the main verb as per the first rule above. If associated with formatives other than the main verb, the adjunct normally follows the formative or other personal-reference adjunct with which it is associated; however, if case-marking makes clear the association between the adjunct and the formative (or other adjunct), then the adjunct may precede its associated formative or adjunct.
6. **Modular and Affixal Adjuncts:** A modular adjunct normally immediately precedes a formative and is considered semantically part of it. An affixal adjunct likewise precedes its formative (or that formative's modular adjunct). For formatives otherwise in sentence-final position, a modular adjunct or an affixal adjunct can be placed after the formative in sentence-final position.
7. **Register, Carrier, Quotative, Naming, and Phrasal Adjuncts:** Given that these adjuncts signal the beginning (and/or ending) of various specialized types of words/phrases, their position in a sentence is obviously determined by the beginning (or ending) of the word/phrase in question.
8. **Juncture between sentences:** The ultimate stress on a non-monosyllabic main verbal formative in sentence-initial position (including concatenated verbal formatives but NOT including any preceding adjuncts) shall be sufficient to indicate the beginning of a new sentence. Additionally, any sentence at the beginning of a breath group (i.e., an initial utterance or an utterance preceded by a pause for breath) shall require no further indication that a new sentence has begun. Otherwise, the first word of a new sentence shall take a word-initial prefix  $\text{ç}(\text{ë})$ - to indicate the beginning of a new sentence. The form of the prefix before vowels is  $\text{ç}$ - (replacing the initial glottal-stop), while the form before consonants besides **w**- and **y**- is  $\text{çë}$ -. For words with initial **w**-, the  $\text{ç}$ - plus **w**- become  $\text{çw}$ -; for  $\text{ç}$ - plus **y**-, these combine to become  $\text{çç}$ -. All formatives and adjuncts have now been redesigned/modified where necessary to accommodate this without creating any ambiguities. When used before consonants besides **w**- and **y**-, the word-initial  $\text{çë}$ - prefix never takes syllabic stress (if necessary, add additional default syllables via Slots VIII and/or IX instead or by avoiding the use of a  $\text{C}_A$  shortcut).
9. **Bias Adjuncts:** A Bias Adjunct should be pronounced with both a preceding and following pause, just as in English we tend to pause for breath before uttering a supra-segmental expression, e.g., 'Phew!...', 'Ugh!...', 'Hmm...', etc., and pause afterward.

## 6.0 DATES AND TIMES OF DAY

The new SPT Affix is now available for use in expressing the hour of day, day of the week, week of the month, month of the year, the year and the century. It is used with the number roots (usually Stem 3) to render, e.g., ‘the eighth hour of the day’, ‘the third day of the week (i.e., Wednesday)’ or ‘20th of May’, etc. Furthermore, each use of this affix can in turn be modified by a following Type-3 number affix (e.g., 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.

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

### Examples:

- ‘the 15<sup>th</sup> of March, 1969’ *wustarsirwiazā walzarsa’o walzörsürwö’ö*
- ‘on Saturday’ *wucpërwa’o*
- ‘on Saturday of next week’ *wucpërwöłta’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 ksalirsoñ* [Note the use of the COO/7 affix on the 2nd word; the phrase is literally ‘eighth hour of the day and fifty-two (minutes)’ with the SPT/3 affix on the first word implying the possibility of a following number of minutes]
- ‘8:52 p.m. and 33 seconds’ *wuvrärserwa ksalirsoñ 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

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

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

**January:** *wurđainta / wurđauzca*

**February:** *wurđaunta / wurđauks*

**March:** *wurđeinta / wurđauz*

**April:** *wurđeunta / wurđaupš*

**May:** *wurđaušt*

**June:** *wurđaucpa*

**July:** *wurđaušns*

**August:** *wurđaučka*

**September:** *wurđounta / wurđaulza*

**October:** *wurđointa / wurđaušš*

**November:** *wurđiunta / wurđaucga*

**December:** *wurđuinta / wurđaujda*



## 7.0 PROPER NAMES OF GEOGRAPHIC AND DEMOGRAPHIC ENTITIES

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

<b>-ꞑc</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*

**Asia:** *usamka asya*

**Europe:** *usamka europa*

**Oceania:** *usamka oseanya*

**North America:** *usamkaidna amérika*

**South America:** *usamkuidna amérika*

**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 *hle'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 arktos*

**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-bwalafta* (‘section of an ocean named...’ utilizing the **POR – Portion or Section** affix **-ft-**) if referring to a section or sub-section of a larger sea or ocean (e.g., Baltic, South China, North).

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

**Mediterranean Sea:** *hlusé-bwaloufta mediterrā*

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

**Black Sea:** *hraxmé-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 *hle’e* or the SPF register adjunct *hi*, i.e., *bwaloufta hi mediterrā*, *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*

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

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

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

**Lake Erie:** *hlusé-walziuxa ériè*

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

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 hle’e / hi*.

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

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

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

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

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

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

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

**Gobi Desert:** *hlusé-wazha gob*

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

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

**Grand Canyon:** *wevñiuxa*

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

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

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

**Niagara Falls:** *hlusé-urtraňska nayagra*

**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 ethonym (e.g., *dijla* for the Tigris), in other instances I have combined names (e.g., *cañpobrahmaputra* for the Brahmaputra), while in others I have used a form derived from an underlying proto-language (e.g., *purát* for the Euphrates, *danu* for the Danube). The following names are preceded by *hlusé-welza* OR *welza hle'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>cañčyañ</i>
Mississippi	<i>misisipi</i>
Missouri	<i>misuri</i>
Yenisei	<i>yeniséi</i>
Yellow	<i>hwañ</i>

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

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

**7.6 Names of World's Largest Cities:** The following names are preceded by *hlusé-arhwañza* or *arhwañza hle'e / hi* 'city named...'

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

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

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

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

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

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

Afghanistan	<i>afgan</i>
Albania	<i>škypëri</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>östëraiç</i>
Azerbaijan	<i>azärbaiján</i>
Bahamas	<i>bahama</i>
Bahrain	<i>bahráin</i>
Bangladesh	<i>bañla</i>
Barbados	<i>barbeidos</i>
Belarus	<i>byelarús</i>
Belgium	<i>belž</i>
Belize	<i>belíz</i>
Benin	<i>benín</i>
Bhutan	<i>trukül</i>
Bolivia	<i>bolivya</i>
Bosnia & Herzegovina	<i>bosnaxercegovina</i>
Botswana	<i>bocwana</i>
Brazil	<i>brëžú</i>
Brunei	<i>brunai</i>
Bulgaria	<i>bëlgáriya</i>
Burkina Faso	<i>burkinafaso</i>
Burundi	<i>burundi</i>
Côte d’Ivoire	<i>kotëdivwář</i>
Cabo Verde	<i>kabuverdi</i>
Cambodia	<i>kampučičë</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>ityopyya</i>
Fiji	<i>viči</i>
Finland	<i>súomi</i>
France	<i>řrans</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>greneida</i>
Guatemala	<i>gwatemala</i>
Guinea	<i>giné</i>
Guinea-Bissau	<i>ginebisó</i>
Guyana	<i>gayana</i>
Haiti	<i>aití</i>
Honduras	<i>onduras</i>
Hungary	<i>madyar</i>
Iceland	<i>is</i>
India	<i>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>kíribas</i>
Kuwait	<i>kuwet</i>
Kyrgyzstan	<i>këřřëž</i>
Laos	<i>lau</i>
Latvia	<i>látviya</i>

Lebanon	<i>libnén</i>
Lesotho	<i>sutu</i>
Liberia	<i>laibirya</i>
Libya	<i>líbiya</i>
Liechtenstein	<i>líçtenštáin</i>
Lithuania	<i>lyetuvá</i>
Luxembourg	<i>lêcěbuřš</i>
Madagascar	<i>madagaskyarě</i>
Malawi	<i>malavi</i>
Malaysia	<i>měleisya</i>
Maldives	<i>divehi</i>
Mali	<i>mali</i>
Malta	<i>malta</i>
Marshall Islands	<i>mřazyel</i>
Mauritania	<i>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>čěrnagora</i>
Morocco	<i>magrib</i>
Mozambique	<i>musambiki</i>
Myanmar	<i>myěmá</i>
Namibia	<i>namibya</i>
Nauru	<i>naoero</i>
Nepal	<i>nepál</i>
Netherlands	<i>néderland</i>
New Zealand	<i>nyuziland</i>
Nicaragua	<i>nikaragwa</i>
Niger	<i>nižěř</i>
Nigeria	<i>naijéria</i>

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

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

**NOTE:** For countries whose names contain governance structures (e.g., the Democratic Republic of Congo), such words are translated directly into Ithkuil IV, 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:** *hlusëidné-eđtila áfrika*

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

**Dominican Republic:** *hlusé-eđtila domínika*

**Equatorial Guinea:** *hlantńú-wusa giné*

**North Macedonia:** *wusaidna makedóniya*

**South Africa:** *wusuidna áfrika*

**South Sudan:** *wusuidna sudán*

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

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

**United Kingdom (of Great Britain and North Ireland):** *hlléllú-allkila (hi britanya hiu wusadnuń eryě)*

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

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

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

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

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