

## DESIGN FOR THE NEW REVISION OF ITHKUIL (Version 0.15, October 3, 2020) by John Q.

This document updates previous version 0.14.3. New or modified material is written in blue.

- In **Sec. 3.1**, I have added alternate pronunciations for various **C<sub>D</sub>** forms.
- In **Sec. 3.5.1**, u/uacki has persuaded me to substitute the **EXN** affix in place of the previous **TPP** affix, arguing that Degree or Extent information is of greater utility as a Slot V “short-cut” than the verbal tense information of the **TPP** affix.
- In **Sec. 3.7.1**, the meaning of OBJECTIVE Specification has been revised and expanded.
- In **Sec. 3.9** (the Slot IX **C<sub>A</sub>** complex), the POTENTIAL Configuration (UPX) has been eliminated for two reasons: (1) its notion of fuzziness (i.e., “at least one”/ “approximately one”) was not the same (or compatible) with the fuzzy categories of the DPX or MPX configuration, and (2) it was arbitrary to assign the UPX’s notion of fuzziness to a single entity/set; it should be applicable to ANY number of entities/sets. Consequently, to express this notion of fuzziness with a formative in ANY configuration, instead use Degree 3 of the IPC/4 affix (or Degree 3 of the DGR/8 affix) to modify a number affix in Degree 5.
- Also in **Sec. 3.9** (the Slot IX **C<sub>A</sub>** complex), I have now added allomorphic substitutions for combinations such as **-ltt-**, **-rkk-**, **-řpp-**, etc. (They previously would give rise to undesirable double geminates (e.g., **-rrtt-**) when combining them with a glottal stop per the rules from Sec. 3.9.1.) Additional changes have been made in the table to certain previous allomorphic substitutes in order to accommodate the newly added forms.
- In **Sec. 3.9.1** (rules for combining a Slot VII/VIII glottal-stop with the **C<sub>A</sub>** complex), previously **C<sub>A</sub>** consonant forms comprised of two stops (e.g., **-pk-**, **-tp-**, **-kt-**, etc.) could not be combined with a preceding glottal stop, resulting in the application of the Rule No. 3 from Sec. 1.7 which would lead to use of an epenthetic vowel, thus adding a syllable. In order to eliminate this additional syllable, I have created new allomorphic substitutions for the various stop+stop consonant combinations, to be utilized when preceded by a glottal stop, thus allowing these new allomorphic forms to be combinable with the preceding glottal-stop per the rules of Sec. 3.9.1. Additionally, single stop and affricate consonants now geminate and absorb a preceding glottal-stop.
- Additionally in **Sec. 3.9.1**, I have created allomorphic forms for tri-consonantal **C<sub>A</sub>** conjuncts consisting of a liquid consonant plus two stops (e.g., **-lkt-**, **-rpk-**, **-řtp-**, etc.), simplifying them so that the combined form remains tri-consonantal instead of tetra-consonantal (e.g., **-rtk-** becomes **-rrs-** instead of **-rrtk-**).
- In **Sec. 3.11**, two of the Slot XI - Pattern 1 Effect values have had their meaning changed to indicate that the beneficial or detrimental Effect applies to the formative itself, rather than to an external argument or personal referent. (Thanks to u/uacki for pointing out this oversight.)
- Also in **Sec. 3.11**, at the suggestion of a fan named Lynn, I have modified the meanings of two of the Level categories compared to Ithkuil 2011.
- In **Sec. 3.12.1**, a note has been added to indicate that a FORMATIVE in relative case need not be in FRAMED Relation.

- In **Sec. 3.12.2**, the values of the case-assessor and case-stacking affixes have been changed in order to accommodate the changes to the rules in Sec. 3.9.1.
- In **Secs. 4.8.1 and 4.8.2**, the first  $V_C$  Slot in a Personal Reference Adjunct now carries Formative Slot V  $V_V$  information whenever the adjunct has ultimate stress (i.e., it is functioning as a verb). Also: in Sec. 4.8.2, the Specification values in Column 4 of the Combination Personal-Reference Adjunct have been changed from **bz/gz/bž/gž** to **x/xl/xr/xw** to be more distinctive from a  $C_A$  form (since no  $C_A$  form contains -x-).
- At uakci's suggestion, I have added new **Sec. 4.8.3** to allow the Carrier Adjunct, the Quotative Adjunct, and the Concatenative Adjunct to be used with the Single- and Dual-Referent Personal-Reference Adjunct, as well as the Combination Personal-Reference Adjunct. This allows these three adjuncts to have the same flexibility as personal-reference adjuncts in terms of showing Specification,  $V_X C_S$  affixes, and case-stacking.
- **Secs. 3.12.3.3 and 3.12.3.4**: I have decided to implement another of u/uakci's suggestions to re-order the various Illocution/Validation categories in order to make PERFORMATIVE-EXECUTIVE Illocution+Expectation vowel-form mono-syllable instead of bi-syllabic.
- In **Sec. 4.5**, the vowel-forms utilized for the various Register Adjuncts have been changed to more closely follow the Standard Vowel Sequence.
- **Sections 5.3 and 5.4** on expressing times of day, dates, and geographical place names has been re-introduced with appropriate revisions.

## 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	l̥
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-. Diphthongs followed by -r or -ř in the same syllable as the diphthong may be pronounced disyllabically for ease-of-pronunciation; when doing so, be sure not to accidentally introduce a glottal-stop between the two vowels. Additionally, any diphthong may be pronounced disyllabically for purposes of poetry or singing.

**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*.

### 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 **-i-** when it is unstressed as the initial member of a vocalic conjunct following a consonant (e.g., **-Cia-**, **-Cio**, etc.) — this is to remind the speaker/reader that this **-i-** is to be pronounced long /i:/ in order to distinguish such syllables from syllables of the form **Cy+V** (e.g., *karesya* vs. *karésia*, *ávelkyo* vs. *ávelkio*). A grave accent may similarly be used over the vowel **-u-** to remind the speaker/reader not to collapse the /u/-sound into /w/ in words like *ehùá*.

### 1.4 Phonotactics

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

### 1.5 External Juncture

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

### 1.6 The Standard Vowel-Form Sequence

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

Despite the number of vowel-forms, the sequence structure is fairly systematic if one analyzes it closely.

## The Standard Vowel-Form Sequence

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

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

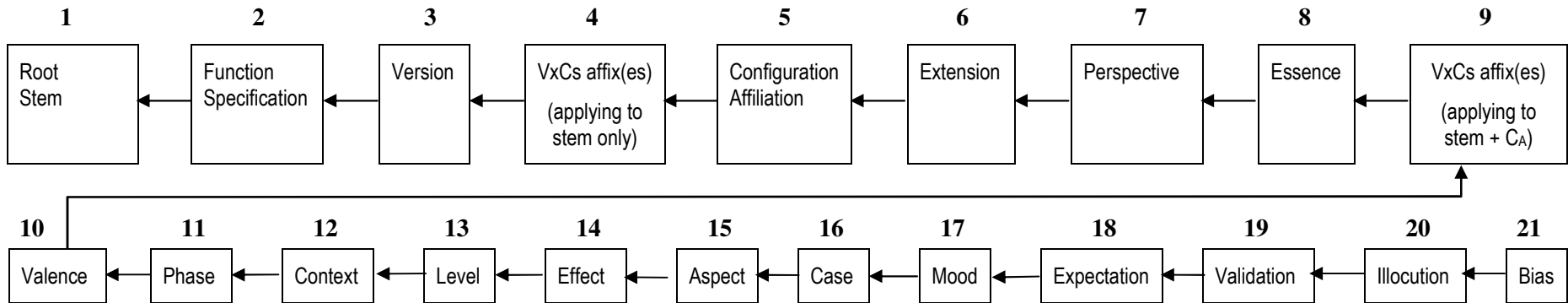
### 1.7 Rules for Inserting a Glottal-Stop Into a Vowel-Form

Several 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, 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 Simple Formative (i.e., No Incorporated Stem Is Present)

I	II	III	IV	V	VI	VII	VIII	IX	X	XI	XII	XIII	XIV
—	—	—	—	'V <sub>V</sub>	C <sub>R</sub>	V <sub>R</sub>	(C <sub>S</sub> V <sub>X</sub> ...')	C <sub>A</sub>	(V <sub>X</sub> C <sub>S</sub> ...)	(V <sub>N</sub> C <sub>N</sub> )	V <sub>C</sub> /V <sub>K</sub>	(?)C <sub>B</sub> or (?)C <sub>Y</sub>	[stress] *
Slots I thru IV are not used in Simple Formatives				Version + Context + optional TPP affix short-cut	Main Root	Function + Stem + Specification of main root	V <sub>X</sub> C <sub>S</sub> affix(es) in reversed form; affix(es) apply to stem but not to C <sub>A</sub>	Configuration + Extension + Affiliation + Perspective + Essence	V <sub>X</sub> C <sub>S</sub> affixes	Valence + Mood/Case-Scope or Aspect + Mood/Case-Scope or Phase + Mood/Case-Scope or Level + Mood/Case-Scope or Effect + Mood/Case-Scope	Case or Illocution + Expectation + Validation as determined by syllabic stress	Bias or Case-Scope or Mood	penultimate stress: UNFRAMED Relation + V <sub>C</sub>
				vocalic affix		vocalic affix	last V <sub>X</sub> in the series requires a glottal stop to indicate end of Slot	consonantal form	Apply to main stem + C <sub>A</sub>	Modular Slot containing a vowel-form + consonant-form	vocalic affix	must be preceded by a glottal-stop unless Slot XI C <sub>N</sub> or Slot XII V <sub>C</sub> /V <sub>K</sub> contains a glottal-stop	ultimate stress: UNFRAMED Relation + V <sub>K</sub> antepenultimate stress: FRAMED Relation + V <sub>C</sub>

## 2.2 “Short-Form” Slot Structure for UNFRAMED Simple Formatives (i.e., No Incorporated Stem, UNFRAMED Relation Only) and C<sub>R</sub>-Form Is Permissible in Word-Initial Position)

I	II	III	IV	V	VI	VII	VIII	IX	X	XI	XII	XIII	XIV
—	—	—	—		C <sub>R</sub>	V <sub>R</sub> (') *	Slots VIII through XIV are the same as for Simple Formatives, except that Slot XI can show non-EXS Context via the Pattern 3 C <sub>N</sub> affix instead of showing of Mood/Case-Scope. If necessary, show Mood/Case-Scope via the C <sub>V</sub> affix in Slot XIII or via a modular adjunct.						
Slots I thru V are not used in Short-Form Formatives				Root	Specification + Function + Stem Add glottal stop to show CPT Version								

\* See Sec. 1.7 for phonological details on adding a glottal-stop to Slot VII. Also: [if Slot VII in a short-form formative contains a glottal-stop and the following Slot VIII is empty, then the rules in Sec. 3.9.1 on combining a glottal-stop with the Slot IX C<sub>A</sub> complex apply.](#)

A monosyllabic short-form formative is considered to have the equivalent of ultimate stress (i.e., it is an UNFRAMED verbal formative).

**NOTE:** Be aware of the external juncture requirements of Sec. 1.5 when using the short-form formative structure. If external juncture rules require a formative to begin with a vowel, use the standard simple formative structure instead of the short-form.

## 2.3 Slot Structure of a Complex Formative (i.e., Incorporated Stem Is Present)

I	II	III	IV	V	VI	VII	VIII	IX	X	XI	XII	XIII	XIV
incorporated root				V <sub>V</sub>	Slots VI through XIV are the same as for Short-Form Formatives								
C <sub>D</sub>	V <sub>F</sub>	(C <sub>S</sub> V <sub>X</sub> ...')	C <sub>I</sub>										
Version + incorp. type of incorporated stem + alternate Slot II V <sub>F</sub> value indicator + indicator if Slot III is filled	Format of incorp. stem	V <sub>X</sub> C <sub>S</sub> affix(es) in reversed form; affix(es) apply to incorp. stem	Incorp. Root	Specification + Function + Stem of Incorp. Root									
Form beginning with h- or ç-, or w-, or y-	same forms as Slot XI V <sub>C</sub> unless alt. Slot II V <sub>F</sub> value indicated by Slot I	last V <sub>X</sub> in the series requires a -' to indicate end of Slot		vocalic affix									

## 2.4 A Self-Segregating Morphology

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

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

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

3. Once a pitch has been chosen for the stressed syllable, it must be pronounced continuously through to the end of the word without change to a different contour (i.e., each word will have only one non-MID pitch contour).
4. If a word carries word-initial stress (i.e., it does not begin with neutral MID pitch) or is monosyllabic, and is not at the beginning of a breath group, then it must carry a pitch whose initial tone is different than the final tone of the previous word, so that two identical tones are not juxtaposed at the boundary between two words. In practice, this means the following rules apply between two adjacent words within the same breath group (i.e., they are not separated from each other by a pause in speech), where the second word carries word-initial stress or is monosyllabic:
  - When preceded by a word with either FALLING, RISING-FALLING, or LOW pitch, a monosyllabic word or word with word-initial stress must have either FALLING, FALLING-RISING, or HIGH pitch.
  - When preceded by a word with either HIGH, RISING, or FALLING-RISING pitch, a monosyllabic word or word with word-initial stress must have either RISING, RISING-FALLING, or LOW pitch.
5. In unusual situations (e.g., singing a song) when pitch-accent is unavailable or undesirable as a means of parsing word boundaries and the placement of pauses between words is unrealistic, then a special parsing adjunct of the form 'V' may be placed before any word to be parsed, where 'V' represents a single vowel between two glottal stops, the particular vowel indicating the syllabic stress of the following word, as follows:

- 'a' indicates the following word is monosyllabic
- 'e' indicates the following word bears ultimate stress
- 'o' indicates the following word bears penultimate stress
- 'u' indicates the following word bears antepenultimate stress
- 'i' indicates the following word bears pre-antepenultimate stress



### 3.0 ANALYSIS OF FORMATIVE SLOTS

#### 3.1 SLOT I: $C_D$ —Version and Incorporation-Type of Incorporated Stem, plus Alternate Slot II $V_F$ and Slot III affix indicator

This slot shows the following for the incorporated stem: Version, Incorporation-Type, an indicator for alternate Slot II  $V_F$  values, and an indicator as to whether any  $C_S V_X$  affixes in Slot III are present. For formatives with no incorporated stem, this slot, plus Slots II, III, and IV will be empty.

		—	alt. $V_F$	Slot III affix(es) present	Slot III affix(es) present + alt. $V_F$
Type-1 Incorporation	PRC	h	hw	hl	hlw
	CPT	ç	hh	hr	hly
Type-2 Incorporation	PRC	w	çw	hm	hmw
	CPT	y	çç	hn	hmy

**Incorporation Type:** Type-1 incorporation implies a circumstantial relationship between the incorporated stem and the main stem (equivalent to placing the incorp. stem into a case-frame). Type-2 incorporation 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.

**Pronunciation:** hh = [h:], çç = [ç:], hl = [ɬ] or [hl], hr = [ɾ] ~ [hr], hlw = [ɬw] ~ [hlw], hly = [ɬj] ~ [hlj], hm = [m̩] ~ [hm], hn = [n̩] ~ [hn], hmw = [m̩w] ~ [hmw], hmy = [m̩j] ~ [hmj].

**Alternate  $V_F$  Indicator:** Columns 2 and 4 of the above table are used to indicate that the Slot II  $V_F$  Format vowel of the incorporated Stem (see Sec. 3.2 below) is an optional monosyllabic short-cut form.

**3.1.1 Slot III Indicator:** Columns 3 and 4 of the above table are used if new Slot III of the formative (containing any  $-C_S V_X-$  affixes applying to the incorporated stem) is not empty. This is necessary so Slots III & IV are not misinterpreted as being Slots IV thru VIII of a complex formative not containing Slot III affixes (or, to put it another way, so that the glottal-stop at the end of Slot III will not be misinterpreted as being the glottal-stop at the end of Slot VIII).

#### 3.2 SLOT II: $V_F$ — Format of Incorporated Stem

Format signifies the incorporated stem's semantic relationship to the main stem, corresponding to the 68 case relationships from Slot XII. The  $V_F$  values are by default the same as the 68  $V_C$  vocalic Case affixes from Slot XI. However, for eighteen formats whose standard  $V_F$  affix forms are disyllabic, there are optional monosyllabic shorter forms available to decrease the number of syllables. These 18 alternate  $V_F$  forms are shown below. They must be used with the [Column 2 or 4  \$C\_D\$](#)  values shown in Slot I (see Sec. 3.1 immediately above). (For ease of reference and comparison, the Slot XI  $V_C$  forms are shown as well.)

FORMAT		V <sub>F</sub>	V <sub>C</sub>
REF	REFERENTIAL	a	i'a
ASI	ASSIMILATIVE	ä	i'ä
ESS	ESSIVE	e	i'e
COR	CORRELATIVE	ë	i'ë
CPS	COMPOSITIVE	ëu	ë'u

FORMAT		V <sub>F</sub>	V <sub>C</sub>
COM	COMITATIVE	ö	u'ö
UTL	UTILITIVE	o	u'o
RLT	RELATIVE	u	u'a
LOC	LOCATIVE	i	a'a
CNR	CONCURSIVE	iu	a'i

FORMAT		V <sub>F</sub>	V <sub>C</sub>
FUN	FUNCTIONIVE	ai	ao
TFM	TRANSFORMATIVE	au	ae
CLA	CLASSIFICATIVE	ei	ea
RSL	RESULTATIVE	eu	eo
CSM	CONSUMPTIVE	ëi	eë

FORMAT		V <sub>F</sub>	V <sub>C</sub>
ACT	ACTIVATIVE	ui	a'o
DSC	DESCRIPTIVE	oi	a'e
TRM	TERMINATIVE	ou	e'a

### 3.3 SLOT III: C<sub>S</sub>V<sub>X</sub> Affixes for the Incorporated Stem

This new optional slot holds one or more standard -V<sub>X</sub>C<sub>S</sub> affixes **in reversed form**: -C<sub>S</sub>V<sub>X</sub>- applying to the incorporated stem. The affix's V<sub>X</sub> portion utilizes Series 1 vowel-forms to indicate Type-1 (circumstantial) and Series 2 vowel-forms to indicate Type-2 (derivational) affixes applying to both the Stem and its (implicit) C<sub>A</sub> complex. If there is an explicit C<sub>A</sub> complex (using the specialized -üä- V<sub>X</sub> increment described below), then the scope of any additional affixes is shown by the sequential ordering of the affixes (i.e., an affix can precede the explicit C<sub>A</sub> affix if it applies to the stem only) or via a Single Affix adjunct or an Affix-Scoping adjunct (see Secs. 4.3 and 4.4).

degree	Type-1	Type-2	Type-3
1	a	ai	ia / oä
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

**Type 1:** circumstantial                      **Type 2:** derivational

**Type 3:** applies to previous C<sub>S</sub>V<sub>X</sub> affix only (or the following affix if it is the first in the slot).

**Degree 0:** unspecified degree; refers to the affix's semantic general concept as a whole.

**C<sub>A</sub> affix:** The specialized -V<sub>X</sub> value, -üä-, is used to indicate that the preceding -C<sub>S</sub> consonant-form is to be interpreted as a C<sub>A</sub> complex applied to the incorporated stem.

**Slot I indicator:** As already stated in Sec. 3.1.1 above, if Slot III contains any affixes then C<sub>D</sub> in Slot I must indicate such; this is so that the reader/listener will not misinterpret Slots III & IV as being Slots IV through VIII.

**3.3.1 Glottal Stop To Indicate the End of Slot III:** The last -C<sub>S</sub>V<sub>X</sub>- affix in Slot III must carry a glottal-stop to show where Slot III ends and Slot IV begins. See Sec. 1.7 (page 4) on how to add this glottal-stop to the affix.

### 3.4 SLOT IV: C<sub>I</sub> — the Incorporated Root

The incorporated root, C<sub>I</sub>, is of the same format as the main root, C<sub>R</sub> (see Sec. 3.6). By default, it has no C<sub>A</sub> information defined. This is usually sufficient, given that stem-incorporation (especially Type-2) generally functions as merely a mnemonic heuristic for associating one formative with another for the purpose of identification and lexicalization of new concepts. If necessary to define a C<sub>A</sub> complex for the incorporated root, use a C<sub>A</sub>-stacking affix in Slot III (see Sec. 3.3 above) or as an affixial adjunct.

### 3.5 SLOT V: V<sub>V</sub> — Version and Context of Main Root, OR Specification, Stem & Function of Incorporated Root

Slot V contains a vocalic affix. This Slot functions differently depending on whether the formative is a Simple formative versus a Complex formative.

**3.5.1 Slot V for Simple formatives:** The slot indicates the following information: PROCESSUAL vs. COMPLETIVE Version, and four Contexts. The slot may optionally be used to show short-cuts to the EXN affix; if used, the EXN affix has full scope over the formative as a whole. These EXN short-cuts are not available for complex formatives or Short-Form formatives. (Note that EXN/1 used by itself functions as a alternate means of showing simple negation (without specifying whether the negation is absolute or relative).

#### Slot V V<sub>V</sub> Values for Simple Formatives

Context	Version		Optional Short-Cuts for TPP Affix								
			EXN/1	EXN/2	EXN/3	EXN/4	EXN/5	EXN/9	EXN/8	EXN/7	EXN/6
EXS	PRC	a	ai	ia	oä	ao	awa	awi	iwa	owä	awo
	CPT	ä	au	iä	uä	ae	äwä	awu	iwä	uwä	awe
FNC	PRC	e	ei	ie	oë	ea	ewe	ewi	iwe	owë	ewa
	CPT	i *	eu	ië	uë	eo	iwi	ewu	iwë	uwë	ewo
RPS	PRC	u	ui	ua	aö	oa	uyu	uwi	uya	awö	owa
	CPT	ü	iu	ue	eö	öa	üwü	iwu	uye	ewö	öwa
AMG	PRC	o	oi	uo	io	oe	owo	owi	uyo	iwo	owe
	CPT	ö	ou	uö	iö	öe	öwö	owu	uyö	iwö	öwe

The first column of values carries no EXN information. The remaining nine columns have been arranged so that a -w- infix (or -y- where phonotactically called-for) easily differentiates the same degree of a lesser vs. greater distinction, e.g., EXN/4 -ai- showing a somewhat small degree takes a -w- infix to become EXN/6 -awi- to indicate a somewhat large degree, and so on.

Note that in order to generate the ten columns of vowel-forms necessary for this system, the fourth and ninth columns utilize the alternate Series 3 vowel-forms (which are available here because, given that these Slot V affixes are always in word-initial position, the alternate Series 3 vowel-forms would otherwise never be utilized).

\* For FNC/CPT: the vowel -i- is substituted for -ë- to preserve the latter for use with adjuncts.

**3.5.1 Slot V for Complex formatives:** The slot specifies the following information for the incorporated root: Stem, Specification, and Function.

### Slot V V<sub>V</sub> values for Complex Formatives

Function of Incorp. Stem	Specification of Incorp. Stem	Stem of Incorporated Root			
		Stem 1	Stem 2	Stem 3	Stem 0 **
STA	BSC	a	ai	ia	ao
	CTE	ä	au	iä	ae
	CSV	e	ei	ie	ea
	OBJ	i *	eu	ië	eo
DYN	BSC	u	ui	ua	oa
	CTE	ü	iu	ue	öa
	CSV	o	oi	uo	oe
	OBJ	ö	ou	uö	öe

\* For STA/OBJ: the vowel -i- is substituted for -ë- to preserve the latter for use with adjuncts.

\*\* “**Stem Zero**”: These forms are available when necessary to refer to the “stemless” overall conceptual meaning of the raw root, irrespective of a particular stem.

**IMPORTANT NOTE:** Since Short-Form formatives do not have a Slot V, and since Slot V is now dedicated solely to the incorporated root in Complex formatives rather than the main root, see Sec. 3.7 below as to how Short-Form formatives and Complex formatives show CPT version and non-EXS Context for the main stem.

### 3.6 SLOT VI: C<sub>R</sub> — The Root

The root is one to six consonants in length and must be phonotactically permissible (e.g., none of the following could be roots: \*-kg-, \*-nč-, \*-zrb-, \*-tpk-, \*-fmst-). No root may contain a glottal-stop nor begin with -h-, nor can the lone forms -l-, -lw-, -ly-, -ç-, -çç-, -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 -l-, and -ç- (e.g., -pl-, -ltr-, -çt-, -kç-, etc.).

### 3.7 SLOT VII: V<sub>R</sub> — Function, Specification, and Stem of Main Root (plus Version for Short-Form & Complex Formatives)

Slot VII: Function, Specification, and Stem of Main Root					
Function	Specification	Stem 1	Stem 2	Stem 3	Stem 0
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

Slot VI shows the main root's Function (STATIVE vs. DYNAMIC), one of four stems, and one of four specifications, explained below the table.

#### If the formative is a Short-Form Formative or a Complex Formative:

- To show CPT Version on a Short-Form or Complex formative, add a glottal-stop to the vowel in Slot VII. **NOTE:** If adding a glottal stop to a Short-Form formative adds a syllable (as per Rule No. 3 in Sec. 1.7), consider using the standard Simple Formative structure instead.
- To show non-EXS Context on a Short-Form or Complex formative, use V<sub>N</sub>C<sub>N</sub>-**Pattern 3** in Slot XI or in a modular adjunct. If this adds a syllable to a Short-Form formative, consider using the standard Simple Formative structure instead.

The Four Specifications are explained below.

\* For STA/OBJ/Stem 1, the vowel -i- is substituted for -ë- to preserve the latter for use with adjuncts.

#### 3.7.1 The Four Specifications:

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

### 3.8 SLOT VIII: C<sub>S</sub>V<sub>X</sub> Affixes

This optional slot holds one or more standard -V<sub>X</sub>C<sub>S</sub> affixes **in reversed form**: -C<sub>S</sub>V<sub>X</sub>-. **NOTE**: Slot VIII affixes normally apply to the main stem but not to any incorporated stem; if they are meant to apply to an incorporated stem as well, see note below. Slot VIII do not have scope over the C<sub>A</sub> information in Slot IX or over any subsequent slots.

degree	Type-1	Type-2	Type-3	Type-1 (applies to both main & incorp. stems)	Type-2 (applies to both main & incorp. stems)	Type 1: circumstantial      Type 2: derivational
1	a	ai	ia / oä	ao	ayo	<b>Type 3:</b> applies to previous C <sub>S</sub> V <sub>X</sub> 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>C<sub>A</sub> stacking:</b> The specialized -V <sub>X</sub> value, -üä, is used to indicate that the preceding -C <sub>S</sub> consonant-form is to be interpreted as a C <sub>A</sub> complex having scope over (i.e., "stacked" upon) the Slot IX C <sub>A</sub> complex stem of the main stem. This specialized C <sub>A</sub> stacking affix may also be placed in Slot X instead. <b>Applicability to Incorporated Stem:</b> If a Slot VIII affix is meant to apply to both an incorporated stem as well as the main stem, use the vowel-forms from columns 4 and 5 in the table (i.e., Series 4 vowel-forms, and Series 4 vowel-forms with an infix -y-.
2	ä	au	iä / uä	ae	aye	
3	e	ei	ie / oë	ea	eya	
4	ë	eu	ië / uë	eo	eyo	
5	i	ëi	ëu	eë	eyë	
6	ö	ou	uö / iö	öe	öye	
7	o	oi	uo / io	oe	oye	
8	ü	iu	ue / eö	öa	öya	
9	u	ui	ua / aö	oa	oya	
0	üa	üe	üo	üö	üyö	

No C<sub>S</sub> form can contain a glottal-stop or begin with **h-**, nor can the following mono-consonantal or biconsonantal forms occur as C<sub>S</sub>: **-l-**, **-w-**, **-y-**, **-ç-**, or **-çw-**. Additionally, geminated stops and affricates (**-pp-**, **-tt-**, **-kk-**, **-bb-**, **-dd-**, **-gg-**, **-cc-**, **-čč-**, **-žž-**, and **-jj-**) cannot be C<sub>S</sub> forms.

**3.8.1 Glottal Stop To Indicate the End of Slot VIII:** The last -C<sub>S</sub>V<sub>X</sub>- affix in Slot VIII must carry a glottal stop to show where Slot VIII ends and Slot IX begins. See Sec. 1.7 (page 4) on how to add this glottal stop to the affix. This glottal stop will often merge with the following Slot IX C<sub>A</sub> complex as per the rules in Sec. 3.9.1 on the next page.

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

CONFIGURATION			EXTENSION		AFFILIATION		PERSPECTIVE + ESSENCE			
<b>UPX</b>	<b>UNIPLEX</b>	[zero]	<b>DEL</b> Delimitive	[zero]	<b>CSL</b> Consolidative	[zero]		<b>NRM</b>	<b>RPV</b>	
<b>MPS</b> MULTIPLEX - SIMILAR	<b>SEP</b> Separate	t	<b>PRX</b> Proximal	s	<b>ASO</b> Associative	t (d) <sup>1</sup>	<b>M</b> Monadic	[zero] (l)	ř	
	<b>CND</b> Connected	k	<b>ICP</b> Incipient	š	<b>COA</b> Coalescent	k (g) <sup>1</sup>	<b>P</b> Polyadic	r / v <sup>2</sup> (r)	l (tł)	
	<b>FSD</b> Fused	p	<b>ATV</b> Attenuative	f	<b>VAR</b> Variative	p (b) <sup>1</sup>	<b>N</b> Nomic	w (v)	m / h <sup>3</sup> (lm)	
<b>MPD</b> MULTIPLEX - DISSIMILAR	<b>SEP</b> Separate	n	<b>GRA</b> Graduative	ț	<b>Values shown in parentheses are the stand-alone forms</b>			<b>A</b> Abstract	y (z)	n / ç <sup>3</sup> (ln)
	<b>CND</b> Connected	ň	<b>DPL</b> Depletive	ç						
	<b>FSD</b> Fused	m								
<b>MPF</b> MULTIPLEX - FUZZY	<b>SEP</b> Separate	lt								
	<b>CND</b> Connected	lk								
	<b>FSD</b> Fused	lp								
For <b>DUPLEX (DPS, DPD, DPF)</b> forms, add prefix <b>r-</b> to the above <b>MULTIPLEX</b> forms. For <b>DPF</b> , the <b>r-</b> prefix plus <b>lp/lk/lp</b> becomes <b>řp/řk/řp</b> .			<b>Allomorphic Substitutions:</b> ts → c      np → mv      ñy → ñž      [V]tt → nd      ltt → ld      rtt → rd      řtt → řd tš → č      ňk → ñz      çy → ž      [V]kk → ng      lkk → lg      rkk → rg      řkk → řg tț → đ      nf → v      cy → z      [V]pp → mb      lpp → lb      rpp → rb      řpp → řb tf → fs      čy → j      nn → nz      rnm → nž      rňm → řv kf → fš                              mm → mz      rmn → mž      rňn → nđ							

<sup>1</sup> The stand-alone Affiliation values **-d-**, **-g-**, and **-b-** are also used if Configuration and Extension are both zero but the Perspective + Essence value is non-zero (so that the Affiliation values are not mistaken for being MPS Configuration values).

<sup>2</sup> **-v-** is used with DPF forms beginning with **-ř-** for ease of pronunciation, e.g., **řkr → řkv**, **řctr → řctv**. May also be used with preceding **-d-**, **-g-**, or **-b-**.

<sup>3</sup> A/RPV **-h-** and **-ç-** are used if preceded by a fricative + stop (i.e., non-zero Extension + non-zero Affiliation), e.g., **stm → sth**, **pfkm → pfk h**, **tçpn → tçpç**. Also: A/RPV **-h-** and **-ç-** are used after a voiceless stop consonant (i.e., MPS forms) immediately preceded by a Slot VII/VIII glottal-stop, e.g., **'km → 'kh**, **'pn → 'pç**.

**3.9.1 Combining C<sub>A</sub> with a preceding glottal stop:** For increased euphony or to avoid requiring an epenthetic vowel, a Slot VIII final glottal-stop (or the Slot VII glottal-stop of a CPT-versioned short-form or complex formative) merges with the C<sub>A</sub> form as per the rules below. **NOTE:** First apply all required allomorphic substitutions to the C<sub>A</sub> form before applying the following rules:

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

- For C<sub>A</sub> forms containing two stops, use the following substitutions:

'pk → rrç	'tk → llç	'kt → řřt̥	'pt → rr̥t̥	'kp → řřf	'tp → llf	
'lpk → llz	'rpk → rrz	'řpk → řřz		'lpt → llž	'rpt → rrž	'řpt → řřž
'ltk → lls	'rtk → rrs	'řtk → řřs		'lkp → llš	'rkp → rrš	'řkp → řřš
'lkt → llđ	'rkt → rrđ	'řkt → řřđ		'ltp → llv	'rtp → rrv	'řtp → řřv

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

'bm → vvm	'bn → vvn	dm → đđm	dn → đđn	gm → žžm	gn → žžn
-----------	-----------	----------	----------	----------	----------

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

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

**3.9.2 Combination Personal-Reference Adjuncts** (see Sec. 4.8.2) have a structure that looks like a formative, except what looks like 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.



### 3.10 SLOT X: $V_X C_S$ Affixes

This optional slot holds one or more standard  $-V_X C_S$  affixes with the same  $V_X$  values as for Slot VIII. The affix is not reversed as in Slot VIII. The last affix in Slot X does not take any glottal stop. Unlike Slot VIII affixes, Slot X  $-V_X C_S$  affixes have scope over the  $C_A$  information in Slot IX.

degree	Type-1	Type-2	Type-3	Type-1 (applies to both main & incorp. stems)	Type-2 (applies to both main & incorp. stems)	Type 1: circumstantial	Type 2: derivational
1	a	ai	ia / oä	ao	ayo	<p><b>Type 3:</b> applies to previous <math>C_S V_X</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 preceding <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 IX <math>C_A</math> complex stem of the main stem. This specialized <math>C_A</math> stacking affix may also be placed in Slot X instead.</p> <p><b>Applicability to Incorporated Stem:</b> If a Slot VIII affix is meant to apply to both an incorporated stem as well as the main stem, use the vowel-forms from columns 4 and 5 in the table (i.e., Series 4 vowel-forms, and Series 4 vowel-forms with an infix <math>-y-</math>).</p>	
2	ä	au	iä / uä	ae	aye		
3	e	ei	ie / oë	ea	eya		
4	ë	eu	ië / uë	eo	eyo		
5	i	ëi	ëu	eë	eyë		
6	ö	ou	uö / iö	öe	öye		
7	o	oi	uo / io	oe	oye		
8	ü	iu	ue / eö	öa	öya		
9	u	ui	ua / aö	oa	oya		
0	üä	üe	üo	üö	üyö		

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

Slot XI contains three 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  $V_C/V_K$  distinction from Slot IV). The second pattern uses the same four vowel-form series to show Aspect, differentiated from the first pattern by the addition of a glottal-stop before the  $C_N$  consonant. The third pattern is the same as the first, except that the  $C_N$  consonant indicates the three non-default Contexts rather than Mood/Case-Scope. This third pattern for Slot XI is used with Short-Form formative for indicating Context, since Slot V is not available.

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

**Effect:** The category of Effect conveys an utterance to be beneficial, neutral or detrimental to some party. Effect may also be indicated using a  $-V_xC_S-$  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	<b>X M 's the least (or is the least M) within/among Y (or ever)</b>
<b>DFC</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	<b>X M 's the most (or is the most M) within/among Y (or ever)</b>
<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 XI – Pattern 1: Valence or Phase or Level or Effect + Mood/Case-Scope

V <sub>N</sub>										+	MOOD		
VALENCE			PHASE		EFFECT		LEVEL *		C <sub>N</sub>		Case-Scope		
1	MNO	(a)	CTX	(ai)	1 / BEN	ia / oä	MIN	ao	FAC	(h)	CCh		
2	PRL	ä	PCT	au	2 / BEN	iä / uä	SBE	ae	SUB	hl	CCl		
3	CRO	e	ITR	ei	3 / BEN	ie / oë	IFR	ea	ASM	hr	CCr		
4	RCP	ë	REP	eu	SLF / BEN **	ië / uë	DFC	eo	SPC	hw	CCw		
5	CPL	i	ITM	ëi	UNK [unknown]	ëu	EQU	eë	COU	hm	CCm		
6	DUP	ö	RCT	ou	SLF / DET **	uö / iö	SUR	öe	HYP	hn	CCn		
7	DEM	o	FRE	oi	3 / DET	uo / io	SPL	oe					
8	CNG	ü	FRG	iü	2 / DET	ue / eö	SPQ	öa					
9	PTI	u	FLC	ui	1 / DET	ua / aö	MAX	oa					

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

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

**Slot XI – 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	MTV	MOTIVE	ëu	TRD	TARDATIVE	eë
PCS	PRECESSIVE	ö	CNT	CONTINUATIVE	ou	SQN	SEQUENTIAL	uö / iö	TNS	TRANSITIONAL	öe
REG	REGULATIVE	o	ICS	INCESSATIVE	oi	EPD	EXPEDITIVE	uo / io	ITC	INTERCOMMUTATIVE	oe
ATC	ANTECEDENT	ü	SMM	SUMMATIVE	iu	PTC	PROTRACTIVE	ue / eö	XPD	EXPENDITIVE	öa
ATP	ANTICIPATORY	u	IRP	INTERRUPTIVE	ui	PPR	PREPARATORY	ua / aö	LIM	LIMITATIVE	oa

MOOD	C <sub>N</sub>	Case-Scope
FAC	'h	CC <sub>h</sub>
SUB	'hl	CC <sub>l</sub>
ASM	'hr	CC <sub>r</sub>
SPC	'hw	CC <sub>w</sub>
COU	'hm	CC <sub>m</sub>
HYP	'hn	CC <sub>n</sub>

**Slot XI – Pattern 3: Valence or Phase or Level or Effect + Non-Default Context** (used with Short-Form and Complex formatives for showing Context)

V <sub>N</sub>									
VALENCE			PHASE		EFFECT		LEVEL *		
1	MNO	(a)	CTX	(ai)	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 / oe	IFR	ea	
4	RCP	ë	REP	eu	SLF / BEN **	ië / uë	DFC	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	

CONTEXT	C <sub>N</sub>
FNC	w*
RPS	'w
AMG	'y

\* If V<sub>N</sub> is -u- or is a diphthong ending in -u-, then FNC -w- becomes -y-.

**NOTE:** To show non-default Mood/Case-Scope on a Short-Form or Complex formative where Slot XI is already being used to show non-EXS Context, use the C<sub>γ</sub> suffix in Slot XIII or a modular adjunct. To show Aspect, use a modular adjunct or a V<sub>x</sub>C<sub>5</sub> affix.

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

**3.11.1 Case-Scope:** For UNFRAMED verbal formatives the  $C_N$  affix for Slot XI Patterns 1 and 2 shows Mood, whereas for nominal and FRAMED verbal formatives, it shows Case-Scope. Formatives showing Case use the Case-Scope  $C_N$  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;  $C_N$  specifies which has scope over which other formative.

$C_N$  Case-Scope values

<b>CCh</b>	<b>(h)</b>	X's case is governed by the noun-case of the formative marked $C_c = -hl-$ ; in the absence of such, X's case is associated with the main verb (or framed verb if within a case-frame). [See the SPECIAL NOTE below for an exception to this rule.]
<b>CCl</b>	<b>hl</b>	X is the “head” whose case governs all $C_c$ -unmarked nouns in the clause (or nouns marked with $C_c = -h/-\zeta-$ )
<b>CCr</b>	<b>hr</b>	X is the formative to which formatives in the clause marked with $C_c = -hw-$ are associated
<b>CCw</b>	<b>hw</b>	X is associated by noun-case to the formative marked by $C_c = -hr-$
<b>CCm</b>	<b>hm</b>	X's noun-case associates only with the immediately following formative
<b>CCn</b>	<b>hn</b>	X's noun-case associates only with the immediately preceding formative

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

**3.11.1.1 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 XI  $C_N$ -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  $V_X C_S$  affix or an adjunct (see Sec. 4.1) or via the  $C_Y$  affix in Slot XIII (see Sec. 3.13.2).

**3.11.1.2 Moving the  $C_N$ -Pattern 1 affix to the Slot IX  $C_A$  Slot:** If the  $V_N$ -Pattern 1 Valence/Phase/Level/Effect+Mood/CaseScope value in Slot XI is default MNO/FAC or MNO/CCh, Mood/Case-Scope may instead be shown in Slot IX (the  $C_A$  Slot) under the following circumstance: if  $C_A$  in Slot IX is default -I- (UXS-DEL-CSL-M-NRM), then the  $C_A$  in Slot IX may be replaced by the Mood/Case-Scope  $C_N$  affix, thus shortening the word by one syllable. Note that the  $C_N$ -Pattern 1 affix FAC/CCh -h- never moves to Slot IX because it instead elides whenever Slot XI is zero-marked.

**3.11.1.3 Alternate Means of Showing Mood or Case-Scope:** If there is no  $C_B$  Bias suffix in formative Slot XIII, and the Slot IX  $C_A$  value is non-default, then either Mood or Case-Scope can alternately be shown in Slot XIII using the new  $C_Y$  suffix. This is explained in Sec. 3.13.2.

### 3.12 SLOT XII: $V_C$ or $V_K$ — Case or Illocution+Expectation+Validation

Nouns and FRAMED verbs take Case, while UNFRAMED verbs take Illocution+Expectation+Validation instead (see Sec. 3.12.3 below).

**3.12.1 Case:** The following are the 68 noun cases with their  $V_C$  case marker. Case-accessor and inverse-accessor  $V_X C_S$  affixes are also given. Note that the phonological structure of these accessor affixes has been changed from previous versions of this document. See new Sec. 3.12.3 below for this new structure.

TRANSRELATIVE CASES			$V_c$	DESCRIPTION	case-accessor affix see Sec. 3.12.3 below	inverse accessor affix see Sec. 3.12.3 below
1	THM	THEMATIC	(a) <sup>1</sup>	The (usually inanimate) party which is a participant to the verbal predicate which does not undergo any tangible change of state. Semantic role: CONTENT.	party acting as the THEME/CONTENT of X	that of/for which X functions as the THEME/CONTENT
2	INS	INSTRUMENTAL	ä	The entity acting as means utilized by an explicit or implicit agent to implement/carry out the effect/impact of an act/event. Semantic role: INSTRUMENT.	the INSTRUMENT/MEANS by/via which X occurs	that by/via which X is the INSTRUMENT/MEANS
3	ABS	ABSOLUTIVE	e	The party 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
4	STM	STIMULATIVE <sup>2</sup>	ë	The party/entity/idea/thought/situation or mental state which triggers an unwilling, affective response or is the trigger for an existential state such as possession. <sup>2</sup> Semantic role: STIMULUS.	that which is the affective STIMULUS of X	that of/for which X is the affective STIMULUS
5	AFF	AFFECTIVE	i	The party who undergoes an unwilling, affective experience, e.g., coughing, sneezing, feeling hot/cold, trembling, experiencing sensory input (tactile, olfactory, visual, aural, gustatory), proprioceptive states, psychological/emotional states, reflex reactions such as cringing, yawning, ducking, screaming in fright, etc. Semantic role: EXPERIENCER.	the EXPERIENCER or undergoer of X (as an affective experience)	that which the X undergoes as an affective experience
6	EFF	EFFECTUATIVE	ö	The party/force that initiates a chain of causal events or who induces another party to act as an agent (specifiable via the ENB affix). Also marks a force of nature acting as agent. Role: ENABLER	the ENABLER initiating an event chain leading to X	the event (chain) that the ENABLER X initiates
7	ERG	ERGATIVE	o	The animate party or inanimate force which initiates/causes an act/event which creates a tangible effect or change of state in a patient. Semantic role: AGENT or FORCE.	the AGENT who/that X's	that which the AGENT or FORCE X does/initiates
8	DAT	DATIVE	ü	The party which is the (intended) recipient of a verb of transference, transmission, or communication; the party at/to which a physically transferred entity, transmitted information, or a communicable entity is directed. Semantic role: RECIPIENT.	the RECIPIENT of X or of the act of X	that which the RECIPIENT X receives
9	IND	INDUCIVE	u	The patient who undergoes the tangible effect, impact, or change of state of an act/event initiated/caused by that self-same party. Semantic role: AGENT+PATIENT.	the AGENT who/that X's him-/her-/itself	that which the AGENT X does to him-/her-/itself

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

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

APPOSITIVE CASES			V <sub>c</sub>	DESCRIPTION	case-accessor affix see Sec. 3.12.3 below	inverse accessor affix see Sec. 3.12.3 below
10	POS	POSSESSIVE	ai	The party which has alienable (i.e., removable or severable) possession of another noun in the sense of having physical control or oversight of that noun, whether by chance circumstance or deliberate manipulation.	the alienable/circumstantial possessor of X	that which X alienably or circumstantially possesses
11	PRP	PROPRIETIVE	au	The party having alienable possession of another noun in the sense of quasi-permanent contextual control, ownership or oversight, whether by societal recognition, social convention, law, purchase or decree, which mere physical separation does not sever.	the owner of X; that to which/whom X belongs	that to whom/which X belongs; that which X owns
12	GEN	GENITIVE	ei	The party which has inalienable (i.e., irremovable, non-severable) possession of or association with another noun in the sense of having that noun as an inherent or intrinsic attribute, characteristic, physical part, or genetic (i.e., familial) bond.	the inalienable possessor of X	that which X inalienably possesses
13	ATT	ATTRIBUTIVE	eu	The party which inalienably experiences the effects of, or otherwise has an affective (see the affective case above) relationship with another noun, either as a temporary or permanent attribute, characteristic, or experience, whether physical or psychological, objective or subjective in nature.	that to which/whom X is an attribute/characteristic	that which X has as an attribute/characteristic
14	PDC	PRODUCTIVE	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
15	ITP	INTERPRETATIVE	ou	The party acting as the subjective interpretational context of another noun, that is the noun by or through which another noun is subjectively considered, interpreted or described, e.g., <i>Monet's Paris</i> , <i>my baseball team</i> (as spoken by a fan).	the party X by / thru which / whom something is subjectively interpreted / considered	that which is subjectively considered, described or interpreted by/thru X
16	OGN	ORIGINATIVE	oi	The party which is the literal or figurative source of another, or which is the native location, origin, or usual locative context for another.	the original or inherent location/source of X	that of which X is the original or inherent source/location
17	IDP	INTERDEPENDENT	iu	The party which has a coordinated, tandem, complementary or mutually dependent relationship with another. The relationship between the two nouns can be thought of as reciprocal in nature, i.e., each noun implies the other or needs the other to exist within its natural context	that with which, or to which, X has a complementary relationship	that which is the complementary relationship shared with X
18	PAR	PARTITIVE *	ui	Indicates a quantitative or content-to-container relationship between the two nouns, e.g., <i>a cup of coffee</i> , <i>a box(full) of books</i> , <i>a train(load) of refugees</i> , <i>twelve chairs</i> .	that of which X is its apportioned or enumerated contents	that which is X's apportioned or enumerated contents

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

ASSOCIATIVE CASES			V <sub>c</sub>	DESCRIPTION	case-accessor affix see Sec. 3.12.3 below	inverse accessor affix see Sec. 3.12.3 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. 3.12.3 below	inverse accessor affix see Sec. 3.12.3 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>; The boys ate <b>with gusto</b>; That clown is speaking <b>nonsense</b>; Father speaks <b>with such fortitude</b>.</i>	the manner in which X is/occurs	that which is/occurs in a manner described or characterized by X
		Slot II V <sub>F</sub> form	ai			
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>, Mother reached a state <b>of tranquility</b>, The clowns will turn our children <b>into slaves</b>, Her father drank himself <b>to death</b>.</i>	that into which, X transforms/changes	that which is/occurs as a result of the transformation of X
		Slot II V <sub>F</sub> form	au			
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>, The workers arranged the tables <b>in rows</b>, He lay down <b>lengthwise</b>, Can you count <b>by fives</b>?, I will sort them <b>by color</b>. Also identifies the basis for recurring increments, e.g., <i>month by month; day in, day out; box upon box, clown after clown.</i></i>	the basis by which X is arranged, sorted, patterned or counted	that which is arranged, sorted, patterned, or counted by/via X
		Slot II V <sub>F</sub> form	ei			
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
		Slot II V <sub>F</sub> form	eu			
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>, The clown fed her <b>an apple</b>, He reads <b>by candle(light)</b>.</i>	that by which X is consumed or used up	that which is consumed in the process of X
		Slot II V <sub>F</sub> form	ëi			
33	CON	CONCESSIVE	öe	identifies a noun or phrase which gives rise to an implicitly expected result which does not occur. This translates in many ways such as 'despite,' 'in spite of,' 'notwithstanding,' 'although,' 'regardless of,' 'no matter what,' etc. Examples: <i><b>In spite of his stupidity</b>, he passed the test; <b>The law notwithstanding</b>, I will stand my ground; <b>No matter how ignorant</b> (they may be), they are welcome, <b>Although a foreigner</b>, we will let him in.</i>	that, in spite of or regardless of which, X occurs/is	that which is/occurs in spite of or regardless of X
34	AVR	AVERSIVE	oe	Identifies a source or object of fear and/or avoidance. With nouns, it translates expressions such as 'for fear of,' 'in order to avoid,' or 'in avoidance of.' With verbs, it would translate English 'lest.' Examples: <i>She finished her plate <b>for fear of my wrath</b>, I traveled by night <b>to avoid the sun</b>. Hide the children, <b>lest the clowns find them</b>.</i>	that, in aversion to which, X occurs/is	that which is/occurs in avoidance or fear of X
35	CVS	CONVERSIVE	öa	Identifies an exception. When the exception is to a hypothetical situation, it translates as 'unless' in verbal phrases, and 'without' for nouns, e.g., <i><b>Without peace</b>, this society is doomed; We'll be safe <b>unless the clowns find us</b>. If applied to a real or actual situation, it translates as 'except (for),' 'but for,' 'but (not),' 'excluding,' 'if not for,' 'if it wasn't for,' 'if it wasn't on account of.' <i><b>If not for the rain</b>, we would have had a good time; She loves everybody <b>except clowns</b>; All pets are vermin, <b>excluding dogs</b>; He eats almost anything <b>but (not) spinach</b>.</i></i>	that, if not for which, or but for which, or except for which, X (would) occur(s)	that which would be/occur but for, or if not for, or except for X
36	SIT	SITUATIVE	oa	Identifies a noun as the background context for a clause without implying any direct causative relationship between the background context and the associated or consequent act/state/event. It translates in many ways, e.g., <i><b>Because of war</b>, our planet will never be able to join the Federation; <b>Given the presence of clowns</b>, we must accept the corruption of our children; <b>With my plan</b>, we will defeat the enemy. Other translations include: 'inasmuch as / insofar as / to the extent that / taking X into account / in view of the fact that / given that / considering'.</i>	that, because of which, or given which, X occurs/is	that which is/occurs because of, on account of, or given, X



SPATIO-TEMPORAL I			V <sub>c</sub>	DESCRIPTION	case-accessor affix see Sec. 3.12.3 below	inverse accessor affix see Sec. 3.12.3 below
37	LOC	LOCATIVE	a'a	entity identified as the location of X or where X occurs; 'at / in / on / by X'	where X occurs/is (situated); X's location	that which is located, situated, or occurring at X
		Slot II V <sub>F</sub> form	i			
38	ATD	ATTENDANT	ä'ä	entity in whose presence something is/occurs	that in whose presence which, X is/occurs	that which is situated or occurring in X's presence
39	ALL	ALLATIVE	e'e	entity toward which another entity is moving/approaching	where X is headed/going toward	that which is headed toward X
40	ABL	ABLATIVE	ë'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
41	ORI	ORIENTATIVE	i'i	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
42	IRL	INTERRELATIVE	ö'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
43	INV	INTRATIVE	o'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
44	NAV	NAVIGATIVE	u'u *	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

\* Note that the last four groups of cases, Spatio-Temporal I, Spatio-Temporal II, Relational I, and Relational II, each contain only eight rather than nine cases. As a result, vowel-form No. 8 of the nine forms of the generalized standard vowel-sequence is not used in these four groups of cases.

SPATIO-TEMPORAL II			V <sub>c</sub>	DESCRIPTION	case-accessor affix see Sec. 3.12.3 below	inverse accessor affix see Sec. 3.12.3 below
45	CNR	CONCURSIVE	a'i	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
		Slot II V <sub>f</sub> form	iu			
46	ASS	ASSESSIVE	a'u	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.
47	PER	PERIODIC	e'i	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
48	PRO	PROLAPSIVE	e'u	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
49	PCV	PRECURSIVE	ë'i	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
50	PCR	POSTCURSIVE	o'u	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
51	ELP	ELAPSIVE	o'i	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.
52	PLM	PROLIMITIVE	u'i	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

RELATIONAL CASES I			V <sub>c</sub>	DESCRIPTION	case-accessor affix see Sec. 3.12.3 below	inverse accessor affix see Sec. 3.12.3 below
53	REF	REFERENTIAL	i'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
		Slot II V <sub>F</sub> form	a			
54	ASI	ASSIMILATIVE	i'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
		Slot II V <sub>F</sub> form	ä			
55	ESS	ESSIVE	i'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
		Slot II V <sub>F</sub> form	e			
56	COR	CORRELATIVE	i'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
		Slot II V <sub>F</sub> form	ë			
57	CPS	COMPOSITIVE	ë'u	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
		Slot II V <sub>F</sub> form	ëu			
58	COM	COMITATIVE	u'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
		Slot II V <sub>F</sub> form	ö			
59	UTL	UTILITATIVE	u'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
		Slot II V <sub>F</sub> form	o			
60	RLT	RELATIVE	u'a	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: a formative in RELATIVE case need not be in FRAMED Relation.</b>	that which identifies or distinguishes X from other parties	the party identified by or distinguishable by X
		Slot II V <sub>F</sub> form	u			

RELATIONAL CASES II			V <sub>c</sub>	DESCRIPTION	case-accessor affix see Sec. 3.12.3 below	inverse accessor affix see Sec. 3.12.3 below
61	ACT	ACTIVATIVE	a'o	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
		Slot II V <sub>F</sub> form	ui			
62	DSC	DESCRIPTIVE	a'e	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
		Slot II V <sub>F</sub> form	oi			
63	TRM	TERMINATIVE	e'a	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;
		Slot II V <sub>F</sub> form	ou			
64	SEL	SELECTIVE	e'o	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
65	CFM	CONFORMATIVE	e'ë	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
66	DEP	DEPENDENT	ö'e	identifies as formative as being the basis of a dependency phrase on which another formative or phrase acts as the contingency, translatable as ' <i>...if the circumstances regarding X are such to allow/warrant it</i> ' 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 new DPC affix.	that upon which the existence/occurrence of X depends	that whose existence or occurrence depends on X
67	PRD	PREDICATIVE	o'e	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
68	VOC	VOCATIVE	o'a	Signifies a noun being used in direct address.	—	—

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

### 3.12.2 Case-Assessor and Case-Stacking Affixes

The phonological structure of case-assessor, inverse-case assessor, and case-stacking affixes in previous versions of this document was found to cause problems and ambiguities when placing these affixes in Slot VIII or in an affix-scoping adjunct. Consequently, these affixes are now restructured as follows: The  $V_X$  portion of the affix will now be the standard four vowel-form series of regular  $V_X C_S$  affixes, rather than substituting the  $V_C$  case-affix for  $V_X$ . There will be two separate  $C_S$  increments for each of the five types of affix (Type-1 Case-Assessor, Type-2 Case-Assessor, Type-1 Inverse Case-Assessor, Type-2 Inverse Case-Assessor, 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 will be the first four standard-vowel form series (i.e., they will be the same as their corresponding  $V_C$  case-affixes). The Spatio-Temporal and Relational cases will also utilize the first four standard-vowel form series, distinguished from the first 36 cases by their different  $C_S$  increment.

	Case Assessor Affix				Inverse Case Assessor 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>ll</b>	1	<b>lw</b>	1	<b>sw</b>	1	<b>zw</b>	1	<b>šw</b>
<b>Cases 10 thru 18</b>	2		2		2		2		2	
<b>Cases 19 thru 27</b>	3		3		3		3		3	
<b>Cases 28 thru 36</b>	4		4		4		4		4	
<b>Cases 37 thru 44 *</b>	1	<b>rr</b>	1	<b>ly</b>	1	<b>sy</b>	1	<b>zy</b>	1	<b>šy</b>
<b>Cases 45 thru 52 *</b>	2		2		2		2		2	
<b>Cases 53 thru 60 *</b>	3		3		3		3		3	
<b>Cases 61 thru 68 *</b>	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  $\ddot{u}$ -tier) for each group is not used, similarly the eighth tier of vowel-forms are not used for these case-assessor or case-stacking affixes.

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

### 3.12.3 $V_K$ — Illocution, Expectation, and Validation

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

**3.12.3.1 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.

**3.12.3.2 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 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>

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., **Mālái muyüs** *'What did s/he tell you?'*. Hortatives ("if only.../were it so that...") are expressible by the combination of PERFORMATIVE Illocution + EXECUTIVE Expectation + COUNTERFACTUAL Mood.

**3.12.3.3 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

**3.12.3.4 If desired to show  $V_K$  information on a FRAMED formative:** Since Slot XII 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:

-rI	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	<b>PFM</b> 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



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

A word-final C<sub>B</sub> or C<sub>Y</sub> consonantal suffix is optional. The C<sub>B</sub> affix indicates the category of Bias, while C<sub>Y</sub> is an alternative means of indicating Mood or Case-Scope (see Secs. 3.11 and 3.11.1). To prevent the Slot XII+XIII vowel+consonant form from being mistaken for a V<sub>X</sub>C<sub>S</sub> affix, the C<sub>B</sub> or C<sub>Y</sub> affix must be immediately preceded a glottal stop unless (1) the Slot XI C<sub>N</sub> increment contains a glottal-stop, or (2) the Slot XII Vc/V<sub>K</sub> form contains a glottal-stop. Due to the potential for ambiguity with Slot IX C<sub>A</sub> forms, use of a C<sub>B</sub> Bias affix in Slot XIII requires that Slot XI and XII be filled. C<sub>Y</sub> Mood/Case-Scope affixes do not match any C<sub>A</sub> forms and therefore do not require Slot XI and XII to be filled.

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

<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>	mmļ	<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>	šštļ	<i>‘Yuck! Ew! How gross!’</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>PSC</b>	<b>PROSAIC</b>	žžt	<i>‘Meh... (said in disappointment)’ ‘How ordinary!’</i>
<b>CMD</b>	<b>COMEDIC</b>	pļļ	<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,...’ or ‘From my point of view,...’</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>	ņņ	<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>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>	lļč	<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>DLC</b>	<b>DELECTATIVE</b>	zmm	<i>'Whee!'</i>
<b>ATE</b>	<b>ATTENTIVE</b>	ňj	<i>'Well, whaddya know...' 'Well, will you look at that...!' 'Well, go figure...' 'Who would've thought...?' 'Well I'll be!'</i>
<b>RNC</b>	<b>RENUNCIATIVE</b>	mzt	<i>'So much for...!' 'There goes...!'</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>	nnř	<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>	ff	<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>PROPTIOUS</b>	mll	<i>'it's a wonder that' as in 'It's a wonder he didn't break a bone in that fall.'</i>
<b>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>OPT</b>	<b>OPTIMAL</b>	ççk	<i>prolonged 'so' or 'totally' as in 'I so don't care!' or 'That is totally not what I meant.'</i>
<b>CNV</b>	<b>CONTENSIVE</b>	rrj	<i>'I'm telling you...', 'I told you so!', 'You see?!'</i>
<b>IPL</b>	<b>IMPLICATIVE</b>	vll	<i>'of course,' 'after all,' 'needless to say.'</i>

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

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

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

**3.13.2 C<sub>Y</sub> — Alternate indication of Mood/Case-Scope in Slot XIII:** Instead of showing Bias, Slot XIII may be used to indicate Mood or Case-Scope (see Secs. 3.11 and 3.11.1). This shortens a word by one syllable if Slot X would otherwise be empty and Slot IX C<sub>A</sub> is not default -I-.

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

The six C<sub>Y</sub> suffixes are distinct from any C<sub>B</sub> Bias suffixes, and are not pronounced with prolonged gemination. They are also distinct from any possible Slot IX C<sub>A</sub> form.

Like C<sub>B</sub> Bias affixes, C<sub>Y</sub> suffixes must be preceded by a glottal-stop unless a preceding V<sub>C</sub> form in Slot XII already contains a glottal-stop. For Slot XII V<sub>K</sub> forms, the glottal-stop may be placed between the two vowels of a diphthong, or if a single vowel, the vowel may be doubled and the glottal-stop placed between. Unlike C<sub>B</sub> Bias affixes, the use of a C<sub>Y</sub> suffix in Slot XIII does not require that Slots XI and XII be filled.

**Note:** If using Slots XI and XIII to show both Mood and Case-Scope on a FRAMED formative, Slot XII C<sub>N</sub> shows Case-Scope, while Slot XIII C<sub>Y</sub> shows Mood.

### 3.14 Slot XIV: Syllabic Stress — Relation plus V<sub>C</sub>/V<sub>K</sub> Distinction

Penultimate Stress = UNFRAMED Relation + V <sub>C</sub>	Ultimate Stress = UNFRAMED Relation + V <sub>K</sub>	Antepenultimate Stress = FRAMED Relation + V <sub>C</sub>
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If a word does not have sufficient syllables to take antepenultimate stress, add syllables by filling Slots V and/or Slots XI and XII with their default vowels.

**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 Modular Adjunct

This adjunct has three slots corresponding to formative Slot XI (showing Valence, Phase, Level, or Effect, in combination with either Mood/Case-Scope or Context, or showing Aspect plus Mood/Case-Scope); it can also show a single lone Aspect. It can be applied to the main stem or to the incorporated stem. 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-**, any of which may be preceded by a glottal stop. Examples: *o*, *yu*, *wea*, *iha*, *ihwe*, *ye'wia*, *uhlai'wi*, *uya*, *öhwo'yó*, *wa'huá*.

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 XI categories, including differing iterations of the same category (e.g., to show multiple aspects, or Mood/Case-Scope *plus* Context). Slots 1 and 5 are mandatory; the other slots are optional. If one or two optional slots are missing (i.e., zero-marked), another slot may be substituted into it (e.g., to display multiple aspects, or to display both Effect and Level, or to show Context in addition to Mood/Case-Scope, etc.). Default **MNO-FAC/CCh** Valence+Mood/Case-Scope is zero-marked in Slot 2.

1	2	3	4	5
' or w/y	Valence/Phase/Level/Effect + either Mood/Case-Scope or non-EXS Context OR Aspect + Mood/Case-Scope	[same as Column 2]	[same as Column 2]	Aspect or Valence/Phase/Level/Effect
Default = glottal-stop (unwritten); if adjunct applies to an incorporated stem, insert a w- or y- prefix	(V <sub>N</sub> C <sub>N</sub> )  C <sub>N</sub> = h /hl / hr / hw / hm / hn For Aspect: C <sub>N</sub> = 'h / 'hl / 'hr / 'hw / 'hm / 'hn For non-EXS Context: C <sub>N</sub> = w or y / 'w / 'y	(V <sub>N</sub> C <sub>N</sub> )	(V <sub>N</sub> C <sub>N</sub> )	V <sub>N</sub>  If only Slots 1 and 5 are filled, then Slot 5 = <b>Aspect</b> ; If any of Slots 2, 3, or 4 are filled & stress is penultimate, then Slot 5 = <b>Valence</b> or <b>Phase</b> or <b>Level</b> or <b>Effect</b> ; If any of Slots 2, 3, or 4 are filled & stress is ultimate, Slot 5 = <b>Aspect</b>

### 4.2 Case-Stacking Adjunct

The case-stacking adjunct from previous versions has been eliminated. Instead, use the case-stacking V<sub>X</sub>C<sub>s</sub> affixes, **-lw** and **-ly**, shown in new Sec. 3.12.2. This affix can in turn become an adjunct by using it as a Single-Affixual Adjunct as shown in Sec. 4.3 below.

### 4.3 Single-Affix Adjunct

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

$'V_X C_S$	$V_S$	Stress
single standard $V_X C_S$ affix  [initial glottal-stop is pronounced but not written]	<b>(a)</b> = affix applies to stem only (not to its $C_A$ ) and has scope over all Slot VIII affixes (i.e., as if it were the last affix in Slot VIII) <b>u</b> = affix applies to stem only (not to its $C_A$ ) and is subordinate to all Slot VIII affixes (i.e., as if it were the first affix in Slot VIII) <b>e</b> = affix applies to both Stem and $C_A$ and has scope over all Slot X affixes (i.e., as if it were the last affix in Slot X) <b>i</b> = affix applies to both Stem and $C_A$ and is subordinate to all Slot X affixes (i.e., as if it were the first affix in Slot X) <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	Penultimate stress = default  Ultimate stress = affix applies to incorporated stem only

### 4.4 Affix-Scoping Adjunct

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

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

## 4.5 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
<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)		hõ	(hěi)
<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.

## 4.6 Carrier Adjunct

This is a “shortcut” for a full carrier stem, providing Case information only. It is used when the identity/nature of the foreign word(s) or proper name following the adjunct is already known to the addressee. The tell-tale sign of the adjunct is the initial **ç-** with no subsequent consonant forms. The last word of the foreign phrase or proper name can be indicated by the adjunct form **hü** if necessary, or by pronouncing that word/name with low tone.

ç	V <sub>C</sub>
	Same as Formative Slot XII

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

Examples: *çá, çei, çoa*

The Carrier Adjunct affix **-ç-** may also be used in the **C<sub>1</sub>** Slot of a Single-Referent-, Dual-Referent-, or Combination Personal-Reference Adjunct (see Sec. 4.8.3).

#### 4.6.1 Quotative Adjunct

This new adjunct combines the Carrier Adjunct with the DISCURSIVE Register Adjunct to allow direct quotes to be placed within a case-frame, useful for translating the imbedded quote within sentences such as *He told me “get out of the house!”* The form of this adjunct is **hl** + **V<sub>C</sub>**. The end of the quote may be marked by **hü**.

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

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

Examples: *hla, hlei, hloa*

The Quotative Adjunct affix **-hl-** may also be used in the **C<sub>1</sub>** Slot of a Single-Referent-, Dual-Referent-, or Combination Personal-Reference Adjunct (see Sec. 4.8.3).

#### 4.7 Concatenative Adjunct

This adjunct is essentially a specialized form of the carrier adjunct above, in that it provides Case information as a “short cut” to Formal Stem Zero of a Carrier Root. Formal Stem Zero of the Carrier Root serves a special function to apply meta-level grammatical information to the entire subsequent phrase as a whole. This is similar to a case-frame, except that where case-frames function solely as an equivalent to subordinate clauses in Western languages, Formal Stem Zero of the Carrier Root causes the phrase to become a conventionalized, (quasi-)lexicalized gestalt. It thus serves as an equivalent to English phrasal gestalts (often hyphenated), as in the following examples:

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

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

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

<b>hr</b>	<b>V<sub>c</sub></b>
	Same as Formative Slot XII

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

The Concatenative Adjunct affix **-hr-** may also be used in the **C<sub>1</sub>** Slot of a Single-Referent-, Dual-Referent-, or Combination Personal-Reference Adjunct (see Sec. 4.8.3).

## 4.8 Personal Reference Adjuncts

There are thirteen personal reference categories, each distinguishing three Effects (see Sec. 3.11, the top of Pg. 17 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>ř</b>	<b>đ</b>	“it”
<b>pi</b>	polyadic inanimate 3 <sup>rd</sup> party	<b>tř</b>	<b>f</b>	<b>v</b>	“they (inanimate)”
<b>Mx</b>	mixed animate/inanimate 3 <sup>rd</sup> party	<b>x</b>	<b>c</b>	<b>z</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 (used with SWR affix)
<b>IPa</b>	impersonal animate	<b>tç</b>	<b>pç</b>	<b>kç</b>	“one” “you” “people” “a person” (French “on”; German “man”)
<b>IPi</b>	impersonal inanimate	<b>çn / nç *</b>	<b>çm / mç *</b>	<b>çň / ñç *</b>	“something” “a thing” “things”
<b>Nai</b>	Nomic animate or inanimate	<b>çl / lç *</b>	<b>çr / rç *</b>	<b>çř / řç *</b>	NOMIC 3 <sup>rd</sup> -party, e.g., a referent as a generic concept; all examples of X through time
<b>Aai</b>	Abstract animate or inanimate	<b>rr</b>	<b>č</b>	<b>j</b>	ABSTRACT 3 <sup>rd</sup> -party, e.g., an idea, a concept, a situation

\* The first form shown is the Slot 1 form for the adjunct below, the second form shown is the Slot 4 form.

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

1	2	3	4	5
<b>C<sub>1</sub> ((ë) C<sub>1</sub>)</b>	<b>V<sub>C1</sub> (or V<sub>V</sub> *)</b>	<b>(w/y + V<sub>C2</sub>)</b>	<b>(C<sub>2</sub> (ë) )</b>	<b>Stress</b>
Personal Referent A (if present)	Case of Personal Referent A Same affixes as formative Slot XI	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 XI	Personal Referent B	<b>monosyllabic</b> or <b>penultimate</b> = default <b>ultimate</b> (used only in the absence of Slot 4 Referent B) = Slot 3 instead represents V <sub>k</sub> , to give a verbal meaning to Referent A

\* If the adjunct bears ultimate stress (i.e., it is functioning verbally) then Slot 2 shows V<sub>V</sub> information (from Formative Slot V) rather than V<sub>C</sub> Case information.

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



The tell-tale sign of this adjunct is its **C(ëC)-V** or **C(ëC)-V-w/y-V-C** structure which is unlike any other word-form (Formative Slot VII has no **V<sub>R</sub>** value **-ë-** nor any **V<sub>R</sub>** value containing **-w-** or **-y-**). For 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, (s)he, and I’-ERGATIVE. The epenthetic **-ë-** vowel appears in **C<sub>1</sub>** combinations if necessary due to phonotactic rules, and may also be suffixed to Slot 4 if necessary for phonotactic purposes. A second case may be stacked on Referent A by filling in Slot 3 but leaving Slot 4 empty.

Note that this adjunct allows a single-referent personal referent, placed in Slot 1, to show Illocution+Expectation+Validation information in Slot 3, thus creating a verbalized adjunct (whose meaning is the same as the verbal meaning of a personal-reference stem as shown in Sec. 4.8.4 below). **In such a case, Slot 2 shows V<sub>V</sub> information (from Formative Slot V) rather than V<sub>C</sub> Case information**

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’, *zäwierz* [mi/INS - mi/TRA] ‘with it and for (a different) it’.

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

This adjunct is used to add Designation, Specification, **V<sub>X</sub>C<sub>S</sub>** affix information or a second case (case-stacking) to one of the combination Personal Reference forms (e.g., for non-combination single-referent forms, one may use this adjunct or the new Personal-Reference roots explained in Sec. 4.8.4).

The tell-tale signs of this adjunct are the Slot 4 consonant-forms containing **-x-**, **-xl-**, **-xr-**, or **-xw-** in what looks like the **C<sub>A</sub>** slot of a Simple Formative (these four consonant conjuncts are not possible **C<sub>A</sub>** forms). Examples: *slex*, *etkexx*, *olsuojxéd*, *abneirxamzüi*.

1	2	3	4	5	6	7
( 'V <sub>V</sub> )	<b>C<sub>1</sub> + C<sub>2</sub> (+ C<sub>3</sub>)</b>	<b>V<sub>C</sub> (or V<sub>V</sub> *)</b>	<b>x / xx / lx / rx</b>	( <b>V<sub>X</sub>C<sub>S</sub> ...</b> )	( <b>V<sub>C2</sub> or V<sub>K</sub> or epenthetic -a</b> )	<b>Stress</b>
Context + Version + optional EXN affix info	Combination Personal Referent	Case of Combination Personal Referent	Specification		2nd (stacked) case of Combination Personal Referent or an Illocution+Expectation+Validation affix to give a verbal meaning	Default = penultimate Ultimate stress means Slot 6 = <b>V<sub>K</sub></b> . Antepenult. stress means Slot 6 is epenthetic <b>-a-</b> (to distinguish it from <b>V<sub>C</sub></b> = THM).
from Formative Slot V		from formative Slot XII	<b>x</b> = BSC <b>xl</b> = CTE <b>xr</b> = CSV <b>xw</b> = OBJ	<b>V<sub>X</sub>C<sub>S</sub></b> suffix 1 (2, 3, ...)	same affixes as formative Slot XII	

\* If the adjunct bears ultimate stress (i.e., it is functioning verbally) then **V<sub>V</sub>** information is shown in Slot 3 instead of Slot 1.

#### 4.8.3 Applying Carrier, Quotative, and Concatenative Adjunct Forms to Personal-Reference Adjuncts

In addition to the personal-reference affixes shown in Sec. 4.8, the **C<sub>1</sub>** slot of the Combination Personal-Reference Adjunct above as well as the Single- or Dual-Referent Personal-Reference Adjunct in Sec. 4.8.1 may also take the Carrier Adjunct affix (**-ç-**), the Quotative Adjunct affix (**-hl-**), and the Concatenative Adjunct affix (**-hr-**), thus allowing the Carrier, Quotative, and Concatenative adjuncts the same scope and flexibility as personal-reference adjuncts in terms of showing Specification, **V<sub>X</sub>C<sub>S</sub>** affixes, and case-stacking for a following proper noun, foreign word/phrase, quote, or descriptive “

#### 4.8.4 The Two Personal Reference Roots: -N- and -D-

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

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

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

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

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

#### 4.8.5 Use of Type-3 $V_X C_S$ Affix Format as Short-Cut for Personal Reference Adjuncts

Similar to Ithkuil 2011, if either of the  $V_X C_S$  affix slots, Slots VIII or X, 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 39 Personal Reference Adjunct consonant-forms from the table in Sec. 4.8 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.

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

## 4.9 The Parsing Adjunct

See Section 2.1, paragraph No. 5 (on Page 7) for a description of this specialized adjunct.

## 4.10 Recommendation on the Pronunciation of Adjuncts

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

## 5.0 MISCELLANEOUS DESIGN NOTES

### 5.1 Rethinking the use of RECIPROCAL Valence

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

Write-RCP they-IND.

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

Write-RCP they-IND-SBS/1.

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

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

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

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

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

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

talk-RCP they-IND clown-REF

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

-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 / were yet to develop</b> during the Cambrian geological period (but they have developed since).</i></li> <li>• <i>The enemy's code <b>will still be unbroken / will have yet to be broken</b> by the time they attack us (but it will be eventually broken)</i></li> <li>• <i>The boy <b>later realized / had not yet realized</b> the clown was lying about the Clown Planet (but he realizes it now). (TPP/3)</i></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> <ul style="list-style-type: none"> <li>• <i>Hurry! The bus <b>is yet to depart / has not yet departed</b>. (lack of TPP affix implies present context)</i></li> <li>• <i>By leaving your seat just now to get a soda, you've <b>missed (seeing) / have not seen</b> the magician do his disappearing act. (TPP/4)</i></li> <li>• <i>The boy <b>hasn't (yet) realized</b> the clown was lying about the Clown Planet. (TPP/3)</i></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. (TPP/3 or TPP/4)</i></li> <li>• <i>She'll <b>(still) be sleeping</b> when I arrive. (TPP/6 or TPP/7)</i></li> <li>• <i>Civilizations rise and fall but the Euphrates River <b>keeps rolling along</b>. (NOMIC or TPP/5)</i></li> <li>• <i>I've <b>been watching</b> TV all day. (lack of TPP affix implies present context)</i></li> <li>• <i>We'll <b>be watching</b> the apartment all night. (TPP/7)</i></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. (TPP/3 or TPP/4) (but she's no longer sleeping now)</i></li> <li>• <i>She'll <b>(still) be sleeping</b> when I arrive. (TPP/6 or TPP/7) (but she's not sleeping yet)</i></li> <li>• <i>I've <b>been watching</b> TV all day. (lack of TPP affix implies present context) (but I'm not doing so now)</i></li> <li>• <i>We'll <b>be watching</b> the apartment all night. (TPP/7) (but we're not doing so yet)</i></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>. (TPP/6 or TPP/7) (then, but not now).</i></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. (TPP/1)</i></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><b>The war will have begun.</b> (TPP/6 or TPP/7)</i></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. (TPP/1)</i></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. (TPP/3)</i></li> <li>• <i>The bus <b>will have (already) departed</b> by the time I arrive. (TPP/7)</i></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. (TPP/2 or TPP/3)</i></li> <li>• <i>The Sun <b>will have (already) gone nova</b> when/by the time we develop interstellar ships. (TPP/8)</i></li> </ul>

### 5.3 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’ *stialarsirwiazā alžalarsa’i alžalörsürwu’ö*
- ‘on Saturday’ *cpialërwa’i*
- ‘on Saturday of next week’ *cpialërwölta’i*
- ‘the 21st century’ *llialärsurya*
- ‘by the 34-second mark’ *pšialersaryu’i*

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

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

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

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

**January:** *arđialainta*

**February:** *arđialaunta*

**March:** *arđialeinta*

**April:** *arđialeunta*

**May:** *arđialëintiasta*

**June:** *arđialëintiaca*

**July:** *arđialëintiansa*

**August:** *arđialëintiačka*

**September:** *arđialönta*

**October:** *arđialonta*

**November:** *arđialünta*

**December:** *arđialunta*



## 5.4 Proper Names of Oceans, Rivers, Countries, Major Cities, and Major Geographic 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.

-ḍc-	CLG CULTURAL or GEO-DEMOGRAPHIC ASSOCIATION * (primarily used with carrier stems)
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

-dn-	OGC Orientation Relative to a Geographic Central Point
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.

### 5.4.1 Names of Continents (to be preceded by the carrier stem form *siamka*)

**Africa:** *siamka áfrika*

**Antarctica:** *siamka antárktika*

**Asia:** *siamka asya*

**Europe:** *siamka europa*

**Oceania:** *siamka oseanya*

**North America:** *siamkadna amérika*

**South America:** *siamkudna amérika*

**5.4.2 Names of Oceans:** Preceded by the word *hwesiabwala* [Carrier Stem 3 incorporated into 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 *çi'e* may be used or the SPF register adjunct *hi*.

**Pacific Ocean:** *hwesiabwala pasífika* OR *bwala hi pasífika*

**Atlantic Ocean:** *hwesiabwala atlantis* OR *bwala hi atlantis*

**Indian Ocean:** *hwesiabwala indus* OR *bwala hi indus*

**Arctic Ocean:** *hwesiabwala arktos* OR *bwala hi arktos*

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

**5.4.3 Names of Seas and Lakes:** Preceded by the word *hwesiabwaleuxa* ('smaller ocean named...') if referring to a large mostly landlocked salt-water sea (e.g., Mediterranean, Black, Azov), or *hwesiabwalafta* ('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:** *hwesiabwaloufta mediterr*

**Baltic Sea:** *hwesiabwalëifta balt*

**Black Sea:** *hnexmabwaleufta*

**Sea of Azov:** *hwesiabwaleifta azof*

**Caribbean Sea:** *hwesiabwalëifta karíb*

**North Sea:** *bwalaidneufta*

**Bering Sea:** *hwesiabwalëifta bering*

**Arabian Sea:** *hwesiabwalëifta arab*

Those examples above utilizing an incorporated carrier stem may alternately be expressed using the carrier adjunct *çi'e* or the SPF register adjunct *hi*, i.e., *bwaloufta hi mediterr*, *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:** *hwesiabwialiuxa kaspi*

**Aral Sea:** *hwesiabwialoixäkta aral*

**Lake Baikal:** *hwesiabwialoixa baikal*

**Lake Geneva:** *hwesiabwialoixa ženév*

**Lake Erie:** *hwesialzaliuxa ériè*

**Sea of Galilee:** *hwesialzaila kínnret*

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

**Bay of Biscay:** *hwesiabwaleufta biskaya*

**Bight of Benin:** *hwesiabwalaufta benín*

**Gulf of Mexico:** *hwesiabwaleufta méxiko*

**San Francisco Bay:** *hwesiabwalaifta sanfransisko*

**Hudson Bay:** *hwesiabwaleufta hëdsën*

**James Bay:** *hwesiabwaleifta jeimz*

**5.4.4 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:** *hwesiazhala gob*

**Andes Mountains:** *hwesiajlaimska andes*

**Central Asian Steppe:** *hwesiazhailoixidna asya*

**Grand Canyon:** *uvñailiuxa*

**Himalaya Mountains:** *hwesiajlaimska himálaya*

**Tibetan Plateau:** *hwesiajlialiuxa phö'*

**Siberian Tundra:** *hwesiazhiala sibír*

**Niagara Falls:** *hwesiartriańska nayagra*

**Amazon River Delta:** *hwesialzwaila amazonas*

**5.4.5 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 *hwsialzala* OR *alzala çì'e* ‘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>hwañhe</i>

Ob	<i>ob</i>
Irtysch	<i>irtiš</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>gěnga</i>
Don	<i>don</i>
Rio Grande	<i>riogrande</i>
Irrawaddy	<i>eyawēdi</i>

**5.4.6 Names of World’s Largest Cities:** The following names are preceded by *hwesarhwañza* or *arhwañza hi* ‘city named...’

Tokyo	<i>tokyo</i>
Delhi	<i>dilli</i>
Shanghai	<i>zañhe</i>
São Paulo	<i>saupaulu</i>
Mexico City	<i>méxico</i>
Cairo	<i>alkáhira</i>
Mumbai	<i>mumbēi</i>
Beijing	<i>peičičin</i>
Dhaka	<i>dhaka</i>
Osaka	<i>osaka</i>
New York City	<i>nuyórk</i>
Karachi	<i>kěrači</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>uhuijižěneiru</i>
Tianjin	<i>tčenčín</i>
Kinshasa	<i>kinšasa</i>
Guangzhou	<i>kwoñčěu</i>
Los Angeles	<i>losânjeles</i>
Moscow	<i>měskvá</i>
Shenzhen	<i>šěncěn</i>
Lahore	<i>lahór</i>
Bangalore	<i>bengěluru</i>
Paris	<i>paří</i>
Bogotá	<i>bogotá</i>
Jakarta	<i>jakarta</i>
Chennai	<i>čěnnái</i>
Lima	<i>lima</i>

Bangkok	<i>kruñthép</i>
Seoul	<i>sěúl</i>
Nagoya	<i>nagoya</i>
Hyderabad	<i>háiděřebad</i>
London	<i>lěnděn</i>
Tehran	<i>tehrán</i>
Chicago	<i>šikago</i>
Chengdu	<i>chěñtu</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>kúalělumpor</i>
Xi’an	<i>šían</i>
Hong Kong	<i>hönkoñ</i>

Dongguan	<i>tunkwan</i>
Hangzhou	<i>hañce</i>
Foshan	<i>faččěn</i>
Shenyang	<i>šěnyañ</i>
riyadh	<i>erriyáđ</i>
Baghdad	<i>bařdád</i>
Santiago	<i>santyago</i>
Surat	<i>surat</i>
Madrid	<i>mađriđ</i>
Suzhou	<i>sěucöü</i>
Pune	<i>pune</i>
Harbin	<i>háěrbin</i>
Houston	<i>çustěn</i>
Dallas	<i>dälēs</i>
Toronto	<i>těrantou</i>
Dar Es Salaam	<i>daressalám</i>

**5.4.7 Names of Countries** (to be preceded by the carrier stem form *sialuḍca* (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 *siala*).

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

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

Cameroon	<i>kamerǵn</i>
Canada	<i>kǵnada</i>
Central African Republic	[see Note following the table]
Chad	<i>čad</i>
Chile	<i>čile</i>
China	<i>čũkkwo</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>tǵnmak</i>
Djibouti	<i>jibuti</i>
Dominica	<i>domǵnika</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>vičǵ</i>
Finland	<i>súomi</i>
France	<i>řřans</i>
Gabon	<i>gabón</i>

Gambia	<i>kambi</i>
Georgia	<i>kartvel</i>
Germany	<i>doič</i>
Ghana	<i>gana</i>
Greece	<i>elaḍa / helás</i>
Grenada	<i>greneida</i>
Guatemala	<i>gwatemala</i>
Guinea	<i>giné</i>
Guinea-Bissau	<i>ginebisó</i>
Guyana	<i>gayana</i>
Haiti	<i>aití</i>
Honduras	<i>onduras</i>
Hungary	<i>madyar</i>
Iceland	<i>is</i>
India	<i>bharǵt</i>
Indonesia	<i>indonésia</i>
Iran	<i>irǵn</i>
Iraq	<i>irǵk</i>
Ireland	<i>eryǵ</i>
Israel	<i>yisra’él</i>
Italy	<i>italya</i>
Jamaica	<i>jameka</i>
Japan	<i>nihon</i>
Jordan	<i>urdún</i>
kazakhstan	<i>kazak</i>
kenya	<i>kenya</i>
Kiribati	<i>kiribati</i>
kuwait	<i>kuwet</i>
Kyrgyzstan	<i>kǵřřǵz</i>
Laos	<i>lau</i>
Latvia	<i>lǵtviya</i>

Lebanon	<i>libnén</i>
Lesotho	<i>sutu</i>
Liberia	<i>laibirya</i>
Libya	<i>líbiya</i>
Liechtenstein	<i>líçtenštáin</i>
Lithuania	<i>lyetuvá</i>
Luxembourg	<i>lécěbuřš</i>
Madagascar	<i>madagaskyarě</i>
Malawi	<i>malavi</i>
Malaysia	<i>měleisya</i>
Maldives	<i>divehi</i>
Mali	<i>mali</i>
Malta	<i>malta</i>
Marshall Islands	<i>mřazyel</i>
Mauritania	<i>muritaniya</i>
Mauritius	<i>mořís</i>
Mexico	<i>měxiko</i>
Micronesia	<i>mikronesya</i>
Moldova	<i>moldova</i>
Monaco	<i>monakó</i>
Mongolia	<i>mongol</i>
Montenegro	<i>crnagora</i>
Morocco	<i>magrib</i>
Mozambique	<i>musambiki</i>
Myanmar	<i>myěmá</i>
Namibia	<i>namibya</i>
Nauru	<i>naoero</i>
Nepal	<i>nepál</i>
Netherlands	<i>néderland</i>
New Zealand	<i>nyuziland</i>
Nicaragua	<i>nikaragwa</i>
Niger	<i>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 Guinea	<i>papuanyugini</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 the new Ithkuil, with the carrier stem then being incorporated to reference the part of the name which is a proper noun. For countries whose name contains a directional or orientational word (e.g., South Sudan), the new **OGC** affix is employed on the carrier stem. The full names (including carrier-stem) of such countries are listed below:

**Central African Republic:** *hwisiaḍteuleyēdna áfrika*

**Dominican Republic:** *hwisiaḍteula domínika*

**South Africa:** *sialuidna áfrika*

**United States of America:** *hwesiaksmaima amérika*

**Democratic Republic of Congo:** *hwoiḍtaḍteula hi kongo*

**Equatorial Guinea:** *hwuntñasiala giné*

**South Sudan:** *sialuidna sudan*

**United Kingdom (of Great Britain and North Ireland):** *hwullaillkila (hi britanya hiu sialadnuñ eryë)*

**North Macedonia:** *sialaidna makedóniya*

**United Arab Emirates:** *hwullaillkeuna hi arab*

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

<b>-ḐT- 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>-NTÑ- ‘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