

DESIGN FOR THE NEW REVISION OF ITHKUIL (Version 0.19, April 8, 2021) by JQ

This document assumes the reader is familiar with Ithkuil 2011 (i.e., Ithkuil III) grammar. It updates previous version 18.5.1. Changes since that version are written in blue and are summarized below.

- **Secs. 1.1, 1.2.1, and 1.6:** I have decided to eliminate the recently introduced vowel **-ĩ-** (it bothered me that an /i/ vs. /ɪ/ phonemic distinction was not balanced by a /u/ vs. /ʊ/ phonemic distinction, and the allophonic pronunciation rules for **-ĩ-** were too complicated). Additionally, the diphthongs **-äi-** and **-öi-** are now introduced into the language. As a result of these factors, the Standard Vowel Sequence as well as the Degree Zero tier of **V_X** affix forms and the **C_A**-stacking vowel-form have been changed. This change affects the vowel-forms in numerous Slots throughout the morpho-phonology.
- **Sec. 1.2.1:** Pronunciation rules for the vowel **-a-** have been changed to increase the phonetic distinction from **-ä-**.
- **Sec. 2.0:** Scope of the Concatenated Formative has been reverted back to its previous position after the Slot V affixes and before the **C_A** complex.
- **Sec. 3.5:** **C_A**-stacking has been reintroduced as an option for Slot V.
- **Sec. 3.6:** The **POLYADIC** Perspective has been eliminated from the **C_A** complex and replaced by the new **AGGLOMERATIVE** Perspective, expressing indeterminate number/fuzzy pluralization, explained at the end of Sec. 3.6. Additionally, the morpho-phonological structure of the **C_A** Complex has been redesigned (yet again), to reduce the number of allomorphic substitutions from 31 to 19. (The Phonotaxis document has been updated to version 0.5.4 to accommodate certain new consonant conjunct forms generated by the redesigned **C_A** Complex.) **POLYADIC** perspective remains as a category available solely for Referentials to provide equivalents for plural pronouns; see Sec. 4.6 for details.
- **Sec. 3.6.1:** Due to the changes in the **C_A** complex, the forms of various geminated **C_A** values have been modified.
- **Sec. 3.9.1:** The Special Note in this section has been modified to further restrict the rule on shortening **V_C** Case-forms containing a glottal-stop. This is necessary because the author discovered ambiguities between such shortened forms and certain Sec. 4.1.2 Multi-Affix Adjunct forms where the **C_N**-moving rule from Sec. 3.8.1.2 had been applied to the shortened forms.
- **Sec.3.9.1:** The order of the **STM** **STIMULATIVE** and **AFF** **AFFECTIVE** cases have been swapped in order to preserve **-i-** as the **AFF** case-marker.
- **Sec. 3.9.2:** At a suggestion from uakci, Type-3 case-accessor and inverse case-accessor affixes have been added and examples of their usage provided.
- **Sec. 3.9.3.3:** The ordering of the the **PURPORTIVE** and **REPORTIVE** Validations have been switched.
- **Sec. 3.9.3.4:** A note has been added regarding the use of Degree Zero of the **IVE** affix to indicate unspecified Validation.
- **Sec. 4.1.2:** The default **V_Z** form in the Multiple-Affix adjunct has been changed to **-ai** from previous **-ë**. Also: the author determined that the **C_Z** forms **'w** and **'y** gave rise to ambiguities with certain dual-referent referential adjunct forms. As a result, these **C_Z** forms have been changed to **'hl** and **'hr** (which in turn are now permissible as **C_Z** forms due to the new restriction on Sec. 3.9.1 described above).
- **Sec. 4.6:** The resumptive function of the **OBVIATIVE** Referential of previous versions has been split off into its own Referential. The new Referential is called **REDUPLICATIVE** (as the term *resumptive* is already used as the name of an aspect). Also, **POLYADIC** perspective remains as a category available for Referentials as a counterpart to **MONADIC**, thus providing forms equivalent to Western plural pronouns. The new affix **-v/-tʃ** has been introduced for appropriate Referential forms to show **AGGLOMERATIVE** perspective.

- **Sec. 4.6.2:** Due to the morpho-phonological redesign of the C_A complex complex, the Slot 3 values for Combination Referentials have been modified.
- **Sec. 4.6.3:** Due to elimination of the vowel -i- from the language, the rules for adding an initial epenthetic vowel when using a C_P Suppletive Adjunct form with a Referential have been changed.
- **Sec. 4.6.4:** Due to the changes in the Standard Vowel Sequence, the special Slot II V_V markers indicating a Specialized Personal-Reference Root have been changed.
- **Sec. 4.7:** The forms for Speculative and Counterfactual Mood Adjuncts, as well as the forms for Qualifier and Precedent Case-Scope Adjuncts, have been modified.
- **Sec. 4.8:** Two new Bias categories, the ARBITRARY and the EXPERIENTIAL have been added (the former suggested by telepath). The list of Biases has been alphabetized.
- **Secs. 5, 6, 7:** All Ithkuil example words, phrases, and sentences have been updated/corrected to reflect the above changes.

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 ɣ		ʔ	
FRICATIVE		f v			ʈ ɖ	s z		ʃ ʒ	ç	x		h	ɭ
AFFRICATE						c ʒ		č j					
NASAL	m			n						ŋ			
LIQUID	FLAP / TRILL						r						
	NON-FLAP												l
APPROXIMANT			w						y		ɣ̞		

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

1.2 Pronunciation Notes and Allophonic Distinctions

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

1.2.2 Consonants: The dental **-n-** assimilates to velar [ŋ] before **-k-**, **-g-**, and **-x-** (but not before **-ř-**); therefore, phonemic **-ñ-** is not permitted before **-k-**, **-g-**, or **-x-**; The fricative **-x-** may be pronounced with either velar or uvular articulation [x ~ χ]; The apico-alveolar-retroflex rhotic **-r-** is a single tap/flap [ɽ], which becomes a trill [ɽ̣] when geminated; when followed by a consonant in the same word, it may be pronounced as an apico-alveolar-retroflex approximant [ɽ̣], similar to (but further forward in the mouth than) the postalveolar [ɻ] 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 [ʁ̣]. 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^h, t^h, k^h, ts^h, tʃ^h]. Between two vowels, they are disyllabic and pronounced as in English *haphazard*, *at-hand*, *backhanded*, *it's here*, and *church hall*. The various specialized Slot I or Slot VIII conjuncts beginning with **-h-** are pronounced as follows: **hl** = [t̪] or [hl], **hr** = [ɾ] or [hr], **hm** = [m̥] or [hm], **hn** = [ŋ] or [hn].

1.3 Orthographic Conventions

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

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

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

1.4 Phonotactics

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

1.5 External Juncture

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

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

1.6 The Standard Vowel-Form Sequence

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

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

The Standard Vowel-Form Sequence

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

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

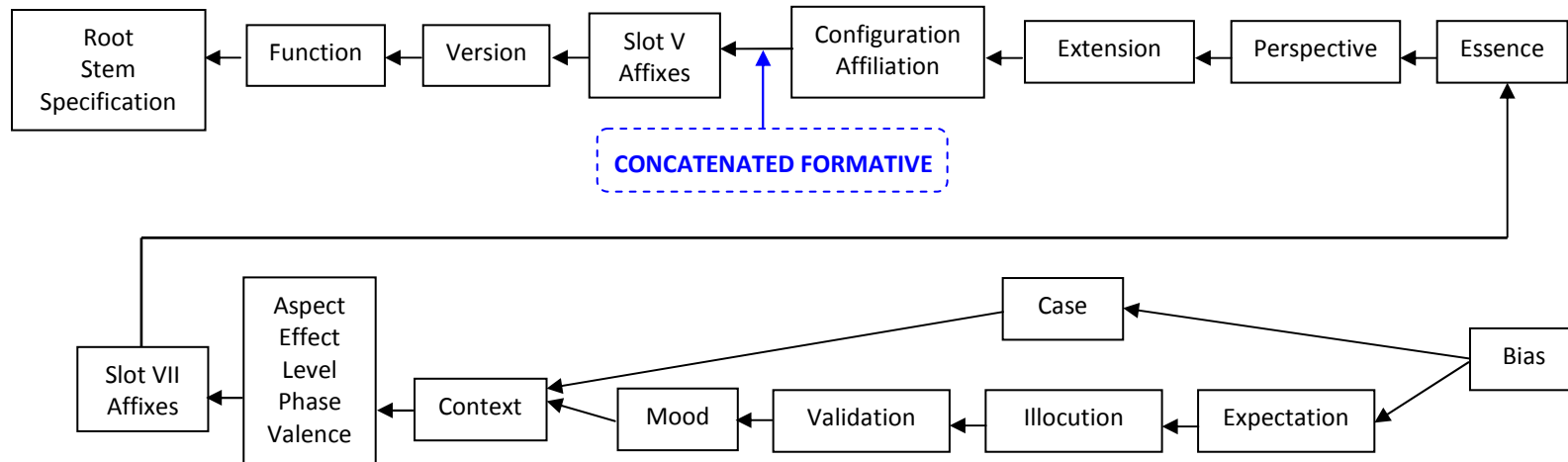
1.7 Rules for Inserting a Glottal-Stop Into a Vowel-Form

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

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

2.0 MORPHO-PHONOLOGICAL STRUCTURE OF A FORMATIVE

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



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

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

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

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

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

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

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

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

2.3 A Self-Segregating Morphology

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

1. All unstressed syllables of a word prior to the stressed syllable carry neutral (MID-toned) pitch. Beginning with the stressed syllable, the remainder of the word must carry a single non-MID pitch contour, as described in Rule 2 below.
2. Beginning with the stressed syllable of the word, a word may carry ANY of the following pitch contours at the speaker's discretion: FALLING, HIGH, RISING-FALLING, FALLING-RISING. Additional pitch contours may be used in the following circumstances:
 - If the sentence carries 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

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

2.4 Notational Conventions for Intralinear Analysis

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

3.0 ANALYSIS OF FORMATIVE SLOTS

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

3.3 SLOT III: C_R — The Main Root

The root is one to six consonants in length and must be phonotactically permissible (e.g., none of the following could be roots: *-kg-, *-nč-, *-zrb-, *-tpk-, *-fmst-). No root may contain a glottal-stop nor begin with -h-, nor can the forms -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.).

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

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

Slot IV V_R values

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

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

3.4.1 The Four Specifications:

BSC	BASIC: 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.
CTE	CONTENTIAL: 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>
CSV	CONSTITUTIVE: 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].
OBJ	OBJECTIVE: Whichever of the following is most salient to the semantics of the particular stem: (1) tangible tool/instrument/means by which a state act/state/event occurs, or if inapplicable, then (2) the third-party object/entity associated with the interaction between two parties (e.g., the object being given in a dative interaction), or if inapplicable then (3) the resulting tangible object/product/situation, or if inapplicable, then (4) the semantic patient or experiencer of the state/act/event. E.g., <i>the musical instrument being played during a live musical performance, the book containing a story being read, an object being given to someone, what an artist creates (i.e., a work of art), the entity/person/institution that forms the object/source of one’s belief, the resulting measurement from an act of measuring.</i>

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

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

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

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

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

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

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

3.6 SLOT VI: The C_A complex — Configuration + Extension + Affiliation + Perspective + Essence

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

C_A complex — Affiliation + Configuration + Extension + Perspective + Essence

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

Forms in parentheses
are standalone forms

- ¹ Use the alternate form when preceded by non-zero Configuration
² Use the alternate form when preceded by [C]t-, [C]k-, or [C]p-

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

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

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

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

NOTE: First apply all required allomorphic substitutions to the C_A form before applying the following rules:

1. For C_A forms consisting of a single consonant, geminate it, e.g., $p \rightarrow pp$, $t \rightarrow tt$, $m \rightarrow mm$, $c \rightarrow cc$, $z \rightarrow zz$, $r \rightarrow rr$, $s \rightarrow ss$.
2. The standalone form $t\downarrow$ becomes $tt\downarrow$.
3. For forms beginning with a stop (t, k, p, d, g, b) followed by a liquid or an approximant (l, r, \check{r}, w, y), geminate the stop, e.g., $pl \rightarrow ppl$, $gw \rightarrow ggw$.
4. For forms containing a sibilant fricative or affricate ($s, \check{s}, z, \check{z}, \check{c}, c, \check{c}$) in any position, geminate it, e.g., $kst \rightarrow ksst$, $gz \rightarrow gzz$, $\check{c}kl \rightarrow \check{c}\check{c}kl$, $\check{c}tw \rightarrow \check{c}\check{c}tw$.
5. For forms beginning with either a non-sibilant fricative ($f, \check{f}, v, \check{v}$) or a nasal (n, m, \check{n}), geminate it unless previous rule No. 4 pertaining to sibilant fricatives ($s, \check{s}, z, \check{z}, \check{c}$) applies, e.g., $fk \rightarrow ffk$, $mpw \rightarrow mmpw$.
6. For forms beginning with a voiceless stop (t, k, p) followed by a fricative ($s, \check{s}, f, \check{f}, \check{c}$), geminate the fricative, e.g., $pf \rightarrow pff$, $t\check{c}kl \rightarrow t\check{c}\check{c}kl$, $kst \rightarrow ksst$.
7. For C_A forms ending in two stops, for which the previous six rules are inapplicable, use the following substitutions:

a. $pt \rightarrow bb\check{d}$	$pk \rightarrow bbv$	$kt \rightarrow gg\check{d}$	$kp \rightarrow gg\check{v}$	$tk \rightarrow \check{d}v\check{v}$	$tp \rightarrow dd\check{v}$
---------------------------------	----------------------	------------------------------	------------------------------	--------------------------------------	------------------------------
8. For C_A forms ending in a stop (t, k, p, d, g, b) plus nasal (n, m, \check{n}) for which the previous seven rules are inapplicable, use the following substitutions:

a. $pm \rightarrow vmm$	$pn \rightarrow vvn$	$km \rightarrow xxm$	$kn \rightarrow xxn$	$tm \rightarrow \check{d}\check{d}m$	$tn \rightarrow \check{d}\check{d}n$
b. $bm \rightarrow b\check{z}\check{z}m$	$bn \rightarrow b\check{z}\check{z}n$	$gm \rightarrow g\check{z}\check{z}m$	$gn \rightarrow g\check{z}\check{z}n$	$dm \rightarrow jjm$	$dn \rightarrow jjn$
9. For forms beginning with l -, r - or \check{r} -, apply one of the above eight rules as if the l -, r - or \check{r} - were not present; if the resulting form including the initial l -, r - or \check{r} - is not phonotactically permissible or is euphonically awkward, geminate the l -, r - or \check{r} - instead.

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

3.6.3 Combination Referentials (see Sec. 4.6.2) have a structure that looks like a formative, except what would appear to be their C_A Slot is filled with either $-x$ -, $-xx$ -, $-lx$ -, or $-rx$ -, none of which are possible C_A forms. Thus, these four consonant conjuncts distinguish combination referentials from formatives.

3.7 SLOT VII: $V_X C_S$ Affixes

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

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

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

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

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

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

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

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

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

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

+

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

* see Sec. 3.8.1 below

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

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

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

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

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

+

MOOD	C _N	Case-Scope*
FAC	w/y	CCN
SUB	hw	CCA
ASM	hlw	CCS
SPC	hly	CCQ
COU	hnw	CCP
HYP	hny	CCV

* see Sec. 3.8.1 below

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

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

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

3.8.1 Case-Scope: For UNFRAMED verbal formatives the Slot VIII C_N affix 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

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

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

3.8.1.1 Showing both Mood and Case-Scope on a FRAMED formative: FRAMED formatives do not normally show Mood, deferring any mood information to the main verb, so that Slot VIII C_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_XC_S** affix or an adjunct (see Sec. 4.3 or 4.7).

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

3.9 SLOT IX: V_C or V_K— Case or Illocution+Expectation+Validation

In this slot, nouns and FRAMED verbs take Case (see Sec. 3.9.1 below), while UNFRAMED verbs take Illocution+Expectation+Validation instead (see Sec. 3.9.2 below).

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

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

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

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

² 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 _c	DESCRIPTION	case-accessor affix see Sec. 3.9.2 below	inverse accessor affix see Sec. 3.9.2 below
10	POS	POSSESSIVE	ai	The party which has alienable (i.e., removable or severable) possession of another noun in the sense of having physical control or oversight of that noun, whether by chance circumstance or deliberate manipulation.	the alienable/circumstantial possessor of X	that which X alienably or circumstantially possesses
		V _x form	ia/uä			
11	PRP	PROPRIETIVE	au	The party having alienable possession of another noun in the sense of quasi-permanent contextual control, ownership or oversight, whether by societal recognition, social convention, law, purchase or decree, which mere physical separation does not sever.	the owner of X; that to which/whom X belongs	that to whom/which X belongs; that which X owns
		V _x form	ie/uë			
12	GEN	GENITIVE	ei	The party which has inalienable (i.e., irremovable, non-severable) possession of or association with another noun in the sense of having that noun as an inherent or intrinsic attribute, characteristic, physical part, or genetic (i.e., familial) bond.	the inalienable possessor of X	that which X inalienably possesses
		V _x form	io/üä			
13	ATT	ATTRIBUTIVE	eu	The party which inalienably experiences the effects of, or otherwise has an affective (see the affective case above) relationship with another noun, either as a temporary or permanent attribute, characteristic, or experience, whether physical or psychological, objective or subjective in nature.	that to which/whom X is an attribute/characteristic	that which X has as an attribute/characteristic
		V _x form	iö/üë			
14	PDC	PRODUCTIVE	ëu	The party which is the creator, author or originator of another noun.	the originator/author/creator of X	that which X authored / created or originated
		V _x form	eë			
15	ITP	INTERPRETATIVE	ou	The party acting as the subjective interpretational context of another noun, that is the noun by or through which another noun is subjectively considered, interpreted or described, e.g., <i>Monet's Paris</i> , <i>my baseball team</i> (as spoken by a fan).	the party X by / thru which / whom something is subjectively interpreted / considered / described	that which is subjectively considered, described or interpreted by/thru X
		V _x form	uö/öë			
16	OGN	ORIGINATIVE	oi	The party which is the literal or figurative source of another, or which is the native location, origin, or usual locative context for another.	the original or inherent location/source of X	that of which X is the original or inherent source/location
		V _x form	uo/öä			
17	IDP	INTERDEPENDENT	iu	The party which has a coordinated, tandem, complementary or mutually dependent relationship with another. The relationship between the two nouns can be thought of as reciprocal in nature, i.e., each noun implies the other or needs the other to exist within its natural context	that with which, or to which, X has a complementary relationship	that which is the complementary relationship shared with X
		V _x form	ue/ië			
18	PAR	PARTITIVE *	ui	Indicates a quantitative or content-to-container relationship between the two nouns, e.g., <i>a cup of coffee</i> , <i>a box(full) of books</i> , <i>a train(load) of refugees</i> , <i>twelve chairs</i> .	that of which X is its apportioned or enumerated contents	that which is X's apportioned or enumerated contents
		V _x form	ua/iä			

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

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

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

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

¹ See Special Note in Sec. 3.9.1.² See Sec. 3.1.3 and the notes in Secs. 2.1 and 2.2 before eliding the PRN -a+’ affix.³ Ithkuil 2011’s CONJUNCTIVE case is eliminated. Use the COMITATIVE case + PARALLEL OR COMPLEMENTARY valence instead.

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

* See Special Note in Sec. 3.9.1 .

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

* See Special Note in Sec. 3.9.1 .

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

* See Special Note in Sec. 3.9.1 .

3.9.2 Case-Accessor and Case-Stacking Affixes

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

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

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

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

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

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

- ‘event’-PLE/7-INS₃ *‘that by which a pleasant event occurs’*
‘event’-PLE/7-Inverse:INS₃ *‘what a pleasant event is used for’*
- ‘upward.motion’-‘DNG₁/7-ERG₃ *‘the one who dangerously pushes (it) upward’*
‘upward.motion’-‘DNG/7-Inverse:ERG₃ *‘that which one dangerously pushes upward’*
- ‘interfere’-AUT₁/7-PUR₃ *‘the purpose for using one’s authority to interfere’*
‘interfere’-AUT₁/7-Inverse:PUR₃ *‘what using one’s authority to interfere is for’*
- ‘child’-CNC₂/2-TRM₃ *‘the selfish child’s goal’ / ‘what the selfish child is after’*
‘child’-CNC₂/2-Inverse:TRM₃ *‘the goal being (to have/produce/become) a selfish child’ / ‘in pursuit/hope of (having/becoming/there being) a selfish child’*

3.9.3 V_K — Illocution, Expectation, and Validation

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

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

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

Based on the above analysis, the morphological category of Sanction will no longer be a mandatorily required grammatical category in the language. The fact that the grammar requires a speaker to indicate the evidential basis for a statement is sufficient to imply whether an addressee should interpret a statement as an ontological fact, a statement of conventionalized knowledge, a subjective belief/assertion/proposition, or a conjecture. The resulting choice made by an addressee as to the type of statement will then entail the corollary choice as to whether to accept, disregard, or attempt to rebut/refute the statement, none of

which need be mandatorily expressed by the grammar. The category of Sanction has a V_xC_s affix assigned to it, and this affix will remain available as a means to *optionally* indicate in detail the specific nature of a particular statement, if desired.

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

Illocution

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

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

Expectation

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

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

ILLOCUTION	EXPECTATION (i.e., what kind of response the speaker desires from the addressee)		
	COGNITIVE	RESPONSIVE	EXECUTIVE
ASSERTIVE	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
PERFORMATIVE	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.*’

	COGNITIVE	RESPONSIVE	EXECUTIVE
ASSERTIVE	‘ <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> ’
PERFORMATIVE	‘ <i>Let there be toilet paper on your shoe!</i> ’	‘ <i>Is that toilet paper on your shoe?</i> ’ or ‘ <i>Do you know there’s toilet paper on your shoe?</i> ’ (yes/no response expected)	‘ <i>Do something about that toilet paper on your shoe!</i> ’

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

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

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

ASR ASSERTIVE Illocution			COG	RSP	EXE
OBS	OBSERVATIONAL	present sensory knowledge or present sensory experience: “I perceive... / I know...”	(á)	ái	íá / uâ
REC	RECOLLECTIVE	past sensory knowledge or past sensory experience – “I remember... / I know (from memory)...”	â	áu	íé / oê
PUP	PURPORTIVE	knowledge from a definitive/(quasi-)verifiable 3rd party source: “I’ve read... / (an expert) has said...”	é	éi	íó / üâ
RPR	REPORTIVE	knowledge from a 3rd party: “I heard (from someone)... / someone has said...”	í	éu	iô / üê

PFM PERFORMATIVE Illocution			êi	êu	eê

ASR ASSERTIVE Illocution					
IMA	IMAGINARY	unreal statement, not intended as true, based on whim, imagination, dream, altered mental state, etc.	ô	óu	uô / öê
CVN	CONVENTIONAL	cultural/conventional (i.e., collectively agreed-upon) knowledge: “They say... / It is said...”	ó	ói	uó / öâ
ITU	INTUITIVE	intuition, hunch, subjective feeling, past experiences, etc. – “I feel... / I have a hunch... / something tells me...”	û	íu	ué / iê
INF	INFERENCE	inference from evidence (or absence of alternatives), induction, extrapolation, etc. “I infer... / I reason...”	ú	úi	uá / iâ

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

-n]	IVE Illocution + Validation + Expectation				
degree	Illocution	Validation	Type-1 = COG Expectation	Type-2 = RSP Expectation	Type-3 = EXE Expectation
1	ASR Assertive	OBS Observational	a	ai	ia / uä
2		REC Recollective	ä	au	ie / uë
3		PUP Purportive	e	ei	io / üä
4		RPR Reportive	i	eu	iö / üë
5	PFM Performative		ëi	ëu	eë
6	ASR Assertive	IMA Imaginary	ö	ou	uö / öë
7		CVN Conventional	o	oi	uo / öä
8		ITU Intuitive	ü	iu	ue / ië
9		INF Inferential	u	ui	ua / iä

NOTE: Use Degree 0 of this affix to convey unspecified Validation in conjunction with ASR Illocution + one of the three Expectations

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

Penultimate Stress = UNFRAMED Relation + V_C	Ultimate Stress = UNFRAMED Relation + V_K	Antepenultimate Stress = FRAMED Relation + V_C
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If a word does not have sufficient syllables to take antepenultimate stress, add syllables by filling Slots II and/or Slots VIII and IX with their default values.

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

4.0 ADJUNCTS

4.1 Affixual Adjuncts

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

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

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

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

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

4.2 Specialized C_S-Roots in Lieu of Affix-Scoping Adjuncts

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

Slot II V_V Values Indicating a Specialized C_S-Root (i.e., that Slots III + IV constitute a C_SV_X affix)

Version	V _V	
	STA Function	DYN Function
PRC	ëi	eë
CPT	ëu	oë

These four specialized V_V values signal that the following consonantal form in Slot III is not a C_R form from the Lexicon, but rather the C_S-form of a V_XC_S affix. This functions to convert the meaning of the V_XC_S affix to the status of a lexical root. Due to this conversion into a root, no Type-1 vs. Type-2 affixial distinction is made.

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

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

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

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

Note that, unlike [Slot IV](#) of standard formatives, all nine tiers of the Standard Vowel Sequence are utilized in these Specialized C_S-roots.

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

4.3 Modular Adjunct

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

The structure of the adjunct is shown below. Slots 2, 3, and 4 can be “mixed and matched” to show any combination of the Slot VIII categories, including differing iterations of the same category (e.g., to show multiple aspects). Slots 1 and 5 are mandatory; the other slots are optional. Default **MNO-FAC/CCN** Valence+Mood/Case-Scope is zero-marked in Slot 2. Information in each successive slot scopes over the previous slot, but the adjunct as a whole does not have scope beyond its default formative Slot VIII, unless the new V_H value in Slot 5 of the adjunct indicates a different and specialized pattern of scoping.

Structure of a Modular Adjunct

1	2	3	4	5
' or w- or y-	Valence/Phase/Level/Effect + Mood/Case-Scope OR Aspect + Mood/Case-Scope	[same as Column 2]	[same as Column 2]	Aspect or Valence/Phase/Level/Effect or Specialized Scope of the Adjunct
w = adjunct applies to the parent formative only	$(V_N C_N)$	$(V_N C_N)$	$(V_N C_N)$	V_N or V_H
y = adjunct applies to the concatenated formative only	$C_N = \mathbf{h / hl / hr / hm / hn / hñ}$ For Aspect: $C_N = \mathbf{w\sim y / hw / hlw / hly / hnw / hny}$			<ul style="list-style-type: none"> • If only Slots 1 and 5 are filled, then Slot 5 = Aspect; • If any of Slots 2, 3, or 4 are filled & stress is penultimate, then Slot 5 = Valence or Phase or Level or Effect; • If any of Slots 2, 3, or 4 are filled and stress is ultimate, then Slot 5 = V_H whose values are shown below.

Slot 5 V_H values (if the adjunct has ultimate stress):

- a** = affixes in Slots 2, 3, and 4 have successive right-to-left scope order over each other (Slot 2 < Slot 3 < Slot 4) and have scope over Case/Mood and Validation + Illocution + Expectation
- e** = affixes in Slots 2, 3, and 4 have successive right-to-left scope order over each other (Slot 2 < Slot 3 < Slot 4) and have scope over Case/Mood
- i/u** = affixes in Slots 2, 3, and 4 have successive right-to-left scope order over each other (Slot 2 < Slot 3 < Slot 4) and have scope over the formative as a whole but not any adjacent affixal adjuncts (do not use if adjacent affixal adjunct's V_5 , C_z , or V_z values show scope over a modular adjunct)
- o** = affixes in Slots 2, 3, and 4 have successive right-to-left scope order over each other (Slot 2 < Slot 3 < Slot 4) and have scope over the formative as a whole including any adjacent affixal adjuncts (do not use if adjacent affixal adjunct's V_5 , C_z , or V_z values show scope over a modular adjunct)

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

4.4 Register Adjunct

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

Register Adjunct	Register		Initial Adjunct	Final Adjunct
	DSV	DISCURSIVE (direct speech)		ha
PNT	PARENTHETICAL (parenthetical aside)		he	(hei)
SPF	SPECIFICATIVE (proper name of preceding referent) ¹		hi	(hiu)
EXM	EXEMPLIFICATIVE ('for example, ...')		ho	(hoi)
CGT	COGITANT (silent/subjective thoughts)		hö	(höi)
MTH	MATHEMATICAL expression in the mathematical sub-language		hu	(hui)
CAR	CARRIER-END end of term/phrase governed by carrier stem/adjunct ²		—	(hü)

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

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

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

4.5 Suppletive Adjuncts

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

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

The **C_P** affix of these adjuncts may be used in the **C₁** Slot of a Single--, Dual-, or Combination Referential (see Sec. 4.6.3). When so used, the **C_P** affix must be preceded by a word-initial **epenthetic vowel** to avoid the adjunct being mistaken for a modular adjunct or a concatenated formative. See Sec. 4.6.3 for the specific rules involved.

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

C_P	V_C
hl	Same as Formative Slot IX

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

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

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

C_P	V_C
hm	Same as Formative Slot IX

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

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

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

C_P	V_C
hn	Same as Formative Slot IX

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

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

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

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

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

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

C_P	V_C
hñ	Same as Formative Slot IX

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

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

4.6 Referentials

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

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

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

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

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

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

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

4.6.1 Single- or Dual- Referential

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

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

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

(Note that the last three of these examples illustrate that Sec. 1.7, Rule 3, applies to Slot 2 V_{C1} and Slot 3 V_{C2} for Cases 37 through 52.)

The tell-tale sign of this adjunct is its (**ë**)C(C)-V or (**ë**)C(C)-V-w/y-V-C structure (Formative Slot II has no V_V value -ë- nor any Slot IV V_R value containing -w- or -y-). If there is only one referent, it is the A referent and uses Slot 1 and 2. Combinations are permissible in both Slot 1 C₁ and Slot 4 C₂ (e.g., **smlö** ‘you (sg.) and (s)he and I’-ERGATIVE) as long as the combination is phonotactically permissible. The epenthetic -ë- vowel appears before or within C₁ combinations if necessary due to phonotactic rules (e.g., **zëmse** ‘it and s/he and you(sg.)-ABS’, and may also be suffixed to Slot 4 if necessary for phonotactic purposes. A second case may be stacked on Referent A by filling in Slot 3 but leaving Slot 4 empty.

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

4.6.2 Combination Referential with Case-Stacking

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

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

1	2	3	4	5	6
(ë-) C₁ (+ C₂ (+ C₃))	V_C	x / xt / xp / xx	(V_XC_S ...)	(V_{C2} or epenthetic -a)	Stress
Combination Referential	Case of Combination Referential	Specification of Combination Referential		2nd (stacked) case of Combination Referential	Penultimate stress = default
	from formative Slot IX	x = BSC xt = CTE xp = CSV xx = OBJ	V_XC_S suffix 1 (2, 3, ...)	same affixes as formative Slot IX except for THM case = -üa	Ultimate stress = adjunct has RPV Essence.

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

In addition to the Referential affixes shown in Sec. 4.6, the **C₁** slot of the Combination Referential above as well as the **C₁** slot of the the Single- or Dual-Referent Referential in Sec. 4.6.1 may also take any of the **C_P** Suppletive Adjunct affixes (**hl-**, **hm-**, **hn-**, **-hñ-**), thus allowing these adjuncts the same scope and flexibility as Referentials in terms of showing Specification, **V_XC_S** affixes, and case-stacking for a following proper noun, foreign word/phrase, or quote.

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

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

4.6.4 New “Specialized Personal-Reference” Roots

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

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

Version	V_V
PRC	ae
CPT	ea

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

Combination Referential clusters requiring an epenthetic -*ë*- vowel cannot be used in these Specialized Personal-Reference roots.

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

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

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

	STEM 1 Nominal meaning	STEM 1 Verbal meaning
BASIC	'I (myself)'	'to be me/to be myself', 'to do/act what/how I do [because it's me]'
CONTENTIAL	'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]
CONSTITUTIVE	'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]
OBJECTIVE	'entity with/on which I act or with which I associate (i.e., place, thing, person, etc. with/in/on which/whom I [inter-]acts)'; 'something/someone from/in my life/niche/environment'	'to be an entity in my life/niche/environment; to be something/someone that/who is in my life/niche/environment'

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

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

Additionally, Column 4 vowel-forms from the Standard Vowel-Sequence may be employed as shortcuts for the Transrelative cases regardless of other V_xC_s affixes being present in the same Slot.

Slot V or VII V_x Values Indicating a Referential Shortcut

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

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

4.7 Mood/Case-Scope Adjuncts

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

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

CCN	NATURAL	hrai
CCA	ANTECEDENT	hrei
CCS	SUBALTERN	hriu
CCQ	QUALIFIER	hroi
CCP	PRECEDENT	hröi
CCV	SUCCESSIVE	hrui

4.8 Bias Adjuncts

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

ACC	ACCIDENTAL	lf	<i>‘As luck would have it...’ ‘Fate has decided that...’ ‘What luck!’</i>
ACH	ARCHETYPAL	mçt	<i>what (a) ...!; how . . .! ; Boy! Did (does) X ever ...</i>
ADM	ADMISSIVE	l	<i>‘Mm-hm’ ‘Uh-huh’ (said as mere acknowledgement of a statement without any implied agreement with or assent to the statement)</i>
ANN	ANNUNCIATIVE	drr	<i>‘Guess what!’ or ‘Wait till you hear this!’</i>
ANP	ANTICIPATIVE	lst	<i>‘I’m looking foward to this!’</i>
APB	APPROBATIVE	řs	<i>‘(That’s) OK’ ‘(That’s) alright’ ‘(That’s) good’ ‘(That’s) fine’ ‘Very well’ ‘Sure’</i>
APH	APPREHENSIVE	vvz	<i>‘I’m worried...’ ‘I’ve got a bad feeling about this...’</i>
ARB	ARBITRARY	xt	<i>‘..Yeah, whatever...’, ‘...Ah, what the hell, I’m going ahead and...’</i>
ATE	ATTENTIVE	ňj	<i>‘Well, whaddya know...’ ‘Well, will you look at that...!’ ‘Well, go figure...’ ‘Who would’ve thought...?’ ‘Well I’ll be!’</i>
CMD	COMEDIC	pl	<i>‘Funny!’ ‘LOL’</i>
CNV	CONTENSIVE	rrj	<i>‘I’m telling you...’, ‘I told you so!’, ‘You see?!’</i>
COI	COINCIDENTAL	ššč	<i>‘What a coincidence!’</i>
CRP	CORRUPTIVE	gžž	<i>‘How corrupt!’ ‘What corruption!’</i>
CRR	CORRECTIVE	ňt	<i>‘that is to say...’, ‘What I mean(t) to say is...’ ‘I mean....’</i>
CTP	CONTEMPTIVE	kšš	<i>‘What nonsense!’ or ‘What bullshit!’</i>
CTV	CONTEMPLATIVE	gvv	<i>‘I wonder how...’, ‘that’s odd...’, ‘I don’t get it...’, or a quizzical ‘hmmmm.’</i>
DCC	DISCONCERTIVE	gzj	<i>‘I’m not sure about this.’ ‘I don’t feel comfortable about this.’ ‘I’m feeling out of my element here.’</i>
DEJ	DEJECTIVE	žžg	<i>‘(sigh)’ [of dejection/disillusionment]</i>
DES	DESPERATIVE	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>
DFD	DIFFIDENT	cč	<i>‘sorry, but...’ ‘It’s nothing. It’s just...’</i>
DIS	DISMISSIVE	kff	<i>‘Is that it?’ ‘Big deal!’ ‘So what!?’</i>
DLC	DELECTATIVE	zmm	<i>‘Whee!’</i>

DOL	DOLOROUS	řřx	'Ow!' 'Ouch!'
DPB	DISAPPROBATIVE	ffx	'I don't like the fact that...' 'It bothers me that....' 'Unacceptable!' 'I hate it!'
DRS	DERISIVE	pfc	'How foolish!' 'How silly!' 'Look at how foolish/silly/ridiculous this is!'
DUB	DUBITATIVE	mmf	'Hmm, not likely.' 'I doubt it.' 'Sounds fishy to me' 'I don't trust this/it/him/her/them...'
EUH	EUPHORIC	gzz	'(Sigh) What bliss!'
EUP	EUPHEMISTIC	vvt	'Let's just say that....' or 'Well, let me put it this way....'
EXA	EXASPERATIVE	kçç	'Dammit!' 'Look, don't you get it?...' 'Look, I'm trying to tell you....'
EXG	EXIGENT	rrs	'It's now or never!'
EXP	EXPERIENTIAL	pss	'Ah!', 'Well, now!' 'So!' [Italian 'Allora!']
FOR	FORTUITOUS	lzp	'It's just as well that...' or 'All's well that ends well...'
FSC	FASCINATIVE	žžj	'Cool!' 'Wow!' 'Awesome!'
GRT	GRATIFICATIVE	mmh	'Ah! What bliss...!' 'Oh, there's nothing like....' [physical pleasure only]
IDG	INDIGNATIVE	pšš	'The nerve!' or 'How dare...!?'
IFT	INFATUATIVE	vvr	'Praise be to...!' 'Oh, thank God for...!' 'There's nothing more sacred/holy/important than...!'
IPL	IMPLICATIVE	vll	'of course,' 'after all,' 'needless to say.'
IPT	IMPATIENT	žžv	'C'mon!, 'What're you waiting for?' 'so...already!' as in the sentence 'So dance already!'
IRO	IRONIC	mmž	'Oh, nice!' 'Just great!' 'Well, now, isn't this lovely!'
ISP	INSIPID	lçp	'Meh... (said due to lack of interest)' 'How boring/tedious/dull!'
IVD	INVIDIOUS	řřn	'Why does he/she/they get to... and I don't?!' 'How unfair (that I don't get to...)!'
MAN	MANDATORY	msk	'take it or leave it,' 'this is your last chance,'
OPT	OPTIMAL	ççk	prolonged 'so' or 'totally' as in 'I so don't care!' or 'That is totally not what I meant.'
PES	PESSIMISTIC	ksp	'Yeah, like it really matters that...' 'Pfft! What's it to me?'
PPT	PROFITIOUS	mll	'it's a wonder that' as in 'It's a wonder he didn't break a bone in that fall.'
PPX	PERPLEXIVE	llh	'Huh? What do you mean...? What the hell? 'WTF!?' 'You gotta be kidding me!'
PPV	PROPOSITIVE	sl	'what if...' 'It could be that...' 'Consider this: ...' 'Posit the following: ...' 'Assume for the sake of argument that....'
PSC	PROSAIC	žžt	'Meh... (said in disappointment)' 'How ordinary!'
PSM	PRESUMPTIVE	nnț	'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,....'
RAC	REACTIVE	kll	'My goodness! 'Wow!' 'Amazing!'
RFL	REFLECTIVE	llm	'Look at it this way...' 'As I see it,...' 'In my opinion...' 'From my point of view...'
RNC	RENUNCIATIVE	msf	'So much for...!' 'There goes...!'

RPU	REPULSIVE	ššt̩	<i>'Yuck! Ew! How gross!'</i>
RVL	REVELATIVE	mm̩	<i>'No wonder...!' or 'So that's why...!' 'A-ha!....' 'Well, well, well!....'</i>
SAT	SATIATIVE	l̩t̩	<i>'How satisfying...!' 'At last, the pleasue of knowing/being/seeing/doing....' [psychological/emotional pleasure/satiety only]</i>
SGS	SUGGESTIVE	lt̩ç	<i>'How about... 'We could...' 'Might I suggest...'</i>
SKP	SKEPTICAL	rnž	<i>'Yeah, right!' 'Oh, sure! Like anyone's supposed to believe that!'</i>
SOL	SOLICITATIVE	ňňs	<i>'please'</i>
STU	STUPEFACTIVE	l̩č̩	<i>'Woah!' 'Holy, bejeezus!' 'What the...!' 'Jeez, Louise...!'</i>
TRP	TREPIDATIVE	ll̩č̩	<i>'Oh, God...' 'Oh, no!....' 'Oh, dear!'" [fear-based]</i>
VEX	VEXATIVE	ksk	<i>'How annoying!' 'What a bother!' 'What a pain!'</i>

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

4.9 The Parsing Adjunct

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

4.10 Recommendation on the Pronunciation of Adjuncts and Referentials

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

5.0 MISCELLANEOUS DESIGN NOTES

5.1 Rethinking the use of RECIPROCAL Valence

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

Write-RCP they-IND.

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

Write-RCP they-IND-SBS/1.

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

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

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

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

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

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

talk-RCP they-IND clown-REF

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

PRS Aspect + DEL Extension = simple future tense

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

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

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

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

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

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

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

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

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

-It	RTI — Relative Timeline Indicator
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"> • <i>Flowering plants had not yet developed / were yet to develop during the Cambrian geological period</i> (but they have developed since). • <i>The enemy’s code will still be unbroken / will have yet to be broken by the time they attack us</i> (but it will be eventually broken) • <i>The boy later realized / had not yet realized the clown was lying about the Clown Planet</i> (but he realizes it now). (TPP/3)
2	<p>X is/occurs after the relative/contextual present of a statement (as may be defined by TPP affix) and its occurrence is still outstanding/impacting the speaker’s present viewpoint. Note in the examples below how English translations of this affix may require use of a negative not present in the original:</p> <ol style="list-style-type: none"> 1. <i>Hurry! The bus is yet to depart / has not yet departed.</i> (lack of TPP affix implies present context) <ul style="list-style-type: none"> • <i>By leaving your seat just now to get a soda, you’ve missed (seeing) / have not seen the magician do his disappearing act.</i> (TPP/4) • <i>The boy hasn’t (yet) realized the clown was lying about the Clown Planet.</i> (TPP/3)
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"> • <i>She was (still) sleeping when I left the apartment.</i> (TPP/3 or TPP/4) • <i>She’ll (still) be sleeping when I arrive.</i> (TPP/6 or TPP/7) • <i>Civilizations rise and fall but the Euphrates River keeps rolling along.</i> (NOMIC or TPP/5) • <i>I’ve been watching TV all day.</i> (lack of TPP affix implies present context) • <i>We’ll be watching the apartment all night.</i> (TPP/7)

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"> • <i>She was (still) sleeping when I left the apartment.</i> (TPP/3 or TPP/4) (but she's no longer sleeping now) • <i>She'll (still) be sleeping when I arrive.</i> (TPP/6 or TPP/7) (but she's not sleeping yet) • <i>I've been watching TV all day.</i> (lack of TPP affix implies present context) (but I'm not doing so now) • <i>We'll be watching the apartment all night.</i> (TPP/7) (but we're not doing so yet)
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"> • <i>the once-and-future king</i> • <i>I did it before and I will do it again.</i>
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"> • <i>The band had started playing / The band was now playing (then, but no longer).</i> • <i>The war will have begun.</i> (TPP/6 or TPP/7) (then, but not now). • <i>Dody the (one-and-only) sentient dinosaur (due to a freak mutation), had watched the giant meteor approach her home, whose name 65 million years later would be Chicxulub, with a sense of dread.</i> (TPP/1)
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"> • <i>The band has started playing / The band is now playing.</i> • <i>The war will have begun.</i> (TPP/6 or TPP/7) • <i>Dody the (one-and-only) sentient dinosaur (due to a freak mutation), watched the giant meteor approach her home, whose name 65 million years later would be Chicxulub, with a sense of dread.</i> (TPP/1)
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"> • <i>The bus had (already) departed when/by the time I arrived.</i> (TPP/3) • <i>The bus will have (already) departed by the time I arrive.</i> (TPP/7)
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"> • <i>The river had (already) dried up when/by the time the settlers arrived.</i> (TPP/2 or TPP/3) • <i>The Sun will have (already) gone nova when/by the time we develop interstellar ships.</i> (TPP/8)

5.3 Using STATIVE vs. DYNAMIC Function

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

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

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

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

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

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

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

Sec. 5.4 Relative Clause Formation

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

1a. Weñayá kšilo äpçólöwa lu eñtyarkena.

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

A clown wrote the book I just finished reading.

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

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

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

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

A clown wrote the book I just finished reading.

The following two sentences utilize a RELATIVE case-frame:

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

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

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

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

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

'Children who like clowns have obviously been corrupted.'

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

Sec. 5.5 Use of the ATTENDANT Case

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

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

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

[with second party in DATIVE case:] Muliųtmá mu hlü Jon hma ažxíp. <i>'She shouted "fire!" to John'</i>	[with second party in ATTENDANT case:] Muliųtmá mu hli'e Jon hma ažxíp. <i>'She shouted "fire!" in John's presence' / 'She shouted "fire!" with John nearby'</i> (thus causing John to do something, e.g., run for a fire extinguisher, run out of the building, etc.)
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[with second party in COMITATIVE case:] Wanzvihá mu welë'i. <i>'She is playing a game with the child.'</i>	[with second party in ATTENDANT case:] Wanzvihá mu weli'e. <i>'She is playing a game [with someone] while the child watches/while the child sits nearby/in the child's presence.'</i>
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Also, for sentences where the semantic role of the external head of a relative clause is left unstated (as in the left-hand sentence below or in Sentence 5b in the previous section), the implied case would be ATTENDANT. Thus, the two sentences below are semantically equivalent.

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

Although WH-questions can be handled as in Ithkuil 2011 using a verb such as 'state' or 'say/tell' to express a PERFORMATIVE-EXECUTIVE command to provide the information being sought, in many, perhaps most cases, use of such a verb will be unnecessary because the use of of ASSERTIVE-RESPONSIVE Illocution+ Expectation will be sufficient to convey that a response regarding the statement is expected, thus being equivalent to a WH-question, e.g., **Málái muyüs** 'What did s/he tell you?', **Ūnhalái wúrçpö'e su** 'How long (is it / has it been) since you danced?', **Špálái agphäv** 'What colour is feces?'

Additionally, one can form the equivalent of WH-questions using the new PVS Referential in conjunction with the IVE₂/1 affix **-ain!** indicating ASSERTIVE-RESPONSIVE Illocution+ Expectation so that the PVS Referential functions much like an English interrogative pronoun. Examples: **Mmiäxain!** 'Why? [i.e., For what purpose?]', **Mma'oxain!** 'When?', **Nniexain!** 'To/for whose benefit? / To the benefit of what?', **Ňñeoxain!** 'Resulting (detrimentally) in what? / With what undesirable result?', **Mmauxain!** 'Whose? / Belonging to what?'

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

New PTN Affix

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

Examples:

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

Utxolái akftyäloë lalufkusvu. ‘What kind of person drinks ammonia?’

5.7 Using Case on UNFRAMED Verbal Formatives

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

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

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

Intrilinear analysis: RTR Type2.concatenated.root:‘person’-Stem2-IND - parent.root:Stem1-‘self-centered.behavior’-DYN/CSV-CRL₂/1-default.CA-PCR-ASR/COG/OBS

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

5.8 Syntax

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

6.0 DATES AND TIMES OF DAY

The new SPT Affix is now available for use in expressing the hour of day, day of the week, week of the month, month of the year, the year and the century. It is used with the number roots (usually Stem 3) to render, e.g., ‘the eighth hour of the day’, ‘the third day of the week (i.e., Wednesday)’ or ‘20th of May’, etc. Furthermore, each use of this affix can in turn be modified by a following Type-3 number affix (e.g., **XX2**, **XX3**, 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., *ksialärsëirwiasta* ‘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 15th of March, 1969’ *wustarsëirwiazā walzarsa’o walzörsürwë’i*
- ‘on Saturday’ *wucpirwa’o*
- ‘on Saturday of next week’ *wucpirwölta’o*
- ‘the 21st century’ *wüllärsurya*
- ‘by the 34-second mark’ *wupšersaryo’a*

Time of Day Using Degree 3 of the affix:

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

6.1 Alternate Names of the Months

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

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

January: *wurđainta / wurđauzca*

February: *wurđaunta / wurđauks*

March: *wurđeinta / wurđauz*

April: *wurđeunta / wurđaupš*

May: *wurđaušt*

June: *wurđaucpa*

July: *wurđaušns*

August: *wurđaučka*

September: *wurđounta / wurđaulza*

October: *wurđointa / wurđaušš*

November: *wurđiunta / wurđaucga*

December: *wurđuinta / wurđaujda*

7.0 PROPER NAMES OF GEOGRAPHIC AND DEMOGRAPHIC ENTITIES

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

-ɖc	CLG CULTURAL or GEO-DEMOGRAPHIC ASSOCIATION *
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.

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

Africa: *usarça áfrika*

Antarctica: *usarça antártika*

Asia: *usarça asya*

Europe: *usarça europa*

Oceania: *usarça oseanya*

North America: *usarçaidna amérika*

South America: *usarçuidna amérika*

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

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

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

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

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

Southern/Antarctic Ocean: *bwaluidna*

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

-ft	POR Portion or Section
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: *hluséi-bwaloufta mediterrera*

Baltic Sea: *hluséi-bwalëufta balt*

Black Sea: *hraxmé-bwaleufta*

Sea of Azov: *hluséi-bwaleifta azof*

Caribbean Sea: *hluséi-bwalëufta karíb*

North Sea: *bwalaidneufta*

Bering Sea: *hluséi-bwalëufta bering*

Arabian Sea: *hluséi-bwalëufta arab*

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

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

Caspian Sea: *hluséi-wubwiuxa kaspi*

Aral Sea: *hluséi-wubwoixäkta aral*

Lake Baikal: *hluséi-wubwoixa baikál*

Lake Geneva: *hluséi-wubwoixa ženév*

Lake Erie: *hluséi-walziuxa ériè*

Sea of Galilee: *hluséi-wulza kínnret*

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

Bay of Biscay: *hluséi-bwaleufta biskaya*

Bight of Benin: *hluséi-bwalaufta benín*

Gulf of Mexico: *hluséi-bwaleufta méxiko*

San Francisco Bay: *hluséi-bwalaifta sanfransisko*

Hudson Bay: *hluséi-bwaleufta hëdsën*

James Bay: *hluséi-bwaleifta jeimz*

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

Gobi Desert: *hluséi-wazha gob*

Andes Mountains: *hluséi-ejlamska andes*

Central Asian Steppe: *hluséi-wezhoixidna asya*

Grand Canyon: *wevñiuxa*

Himalaya Mountains: *hluséi-ejlamska himálaya*

Tibetan Plateau: *hluséi-wujliuxa phö*

Siberian Tundra: *hluséi-wuzha sibír*

Niagara Falls: *hluséi-urřraňska nayagra*

Amazon River Delta: *hluséi-welzwa amazonas*

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

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

Ob	<i>ob</i>
Irtysh	<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>gënga</i>
Don	<i>don</i>
Rio Grande	<i>riogrande</i>
Irrawaddy	<i>eyawëdi</i>

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

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

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

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

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

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

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

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

Cameroon	<i>kamerún</i>
Canada	<i>kánada</i>
Central African Republic	[see Note following the table]
Chad	<i>čad</i>
Chile	<i>čile</i>
China	<i>čũkwo</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>domínika</i>
Dominican Republic	[see Note following the table]
Ecuador	<i>ekwadór</i>
Egypt	<i>misr</i>
El Salvador	<i>elsalbadór</i>
Equatorial Guinea	[see Note following the table]
Eritrea	<i>ertra</i>
Estonia	<i>esti</i>
Eswatini	<i>eswatini</i>
Ethiopia	<i>ityopyya</i>
Fiji	<i>vičǵ</i>
Finland	<i>súomi</i>
France	<i>ǵrans</i>
Gabon	<i>gabón</i>

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

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

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

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

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

Central African Republic: *hlusëudnéi-eđtëila áfrika*

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

Dominican Republic: *hluséi-eđtëila domínika*

Equatorial Guinea: *hlantnú-wusa giné*

North Macedonia: *wusaidna makedóniya*

South Africa: *wusuidna áfrika*

South Sudan: *wusuidna sudán*

United Arab Emirates: *hlléllú-ellkina hi arab*

United States of America: *hluséi-eksmaça amérika*

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

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

-ĐT- REPRESENTATIVE GOVERNANCE		
BSC	Stem 1: (to be) a democratic form of government, i.e., direct governance by the people as a shared responsibility; to govern democratically	Stem 2: (to be) a republican/representative form of governance, i.e., governance by the people through elected representatives to a central debating/decision-making body Stem 3: (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.
CTE	(to be) a state of democratic governance	
CSV	(to be) a practice associated with democratic governance; to perform/carry out an act associated with, or demonstrating democratic governance	
OBJ	(to be) a society/group/party governed by means of democracy	

-LLK- MONARCHAL GOVERNANCE / AUTOCRATIC GOVERNANCE / OLIGARCHICAL GOVERNANCE		
BSC	Stem 1: (to be) a monarchical form of government, i.e., governance by a (hereditary) monarch; to govern monarchically	Stem 2: (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. Stem 3: (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.
CTE	(to be) a state of monarchic governance	
CSV	(to be) a practice associated with monarchic governance; to perform/carry out an act associated with, or demonstrating monarchic governance, to reign	
OBJ	(to be) a society/group/party governed by means of monarchism/monarchy.	

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

-KSM- GEOPOLITICAL COUNTRY/LAND/ TERRITORY/REGION	
BSC	<p>Stem 1: (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>Stem 2: (to be) a state or province or subdivision of Stem 1, subject to some degree of regional autonomous governmental administration</p> <p>Stem 3: (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>
CTE	(to be) the state of being a geopolitical country/land/territory
CSV	(to be) the particular location and/or geographic/terrestrial features/terrain associated with a geopolitical country/land/territory
OBJ	(to be) a particular (i.e., named) geopolitical country/land/territory