DESIGN FOR THE NEW REVISION OF ITHKUIL (Version 0.12.1, June 17, 2020)   by John Q.

This document updates previous version 0.11.1.1 The author's recent "alpha" testing has revealed that: (1) words are too long, especially complex formatives; (2) the abundance of -**w**- and -**y**- sounds creates an unpleasant sing-song "twanginess" to the language (and it was the author himself who originally championed the use of -**w**- and -**y**- within vowel-forms. Oh, well, live and learn....). Therefore, the following significant changes have now been made:

- Columns 5 through 8 of the Standard Vowel Sequence now utilize glottal stops instead of -**w**- and -**y**- sounds. The sequence has also been revised to create an unrounded vs. rounded distinction in the initial vowels of tiers 1 through 5 versus tiers 6 through 9. This will allow certain binary distinctions (i.e., Designation and Function) to be more easily recognizable based on the unrounded vs. rounded initial vowel of their respective vowel-forms.

- Eighteen disyllabic Slot II V_F Format vowel-forms now have monosyllabic short forms available, used in conjunction with alternate Slot I C_D prefixes.

- Delineation (indicating that a $V_X C_S$ affix applies to an incorporated stem rather than the main stem) is now shown on each individual affix itself.

- The inability to designate a particular stem of an incorporated root without resorting to use of the SSI affix contributes to extra syllables. Therefore, Slot IV has been revised and expanded to show the stem of an incorporated root and to use the new unrounded vs. rounded distinction in initial vowels to convey INFORMAL VS. FORMAL Designation.

- As per the first bullet above, Slot VI now distinguishes an unrounded vs. rounded initial-vowel form in STATIVE VS. DYNAMIC function.

- Since the stem of an incorporated root is now specified in Slot IV, the SSI affix in Sec. 3.3 has been changed from -**çk**- to -**ng**- and its content revised.

- Sec. 3.8: the C_A consonant-values have been revised to be more straightforward. The order of Affiliation and Extension has been switched. Also, to decrease the need for an epenthetic vowel, there are new rules for combining a preceding Slot VII (or short-form Slot VI) glottal stop with the C_A form.

- Sec. 3.10: Given that Valence, Aspect, Phase, Effect, and Level all have $V_X C_S$ affix forms, there is no need to devote two slots to them. As a result, they are now combined along with Context into a single slot, Slot X, and their morpho-phonological values have been revised.

- The categories of Mood and Case-Scope, previously shown in Slot XII, have been collapsed into the new Slot X structure.

- Sec. 3.11.1: The ordering of the Adverbial noun cases, the Spatio-Temporal cases, and the Relational cases have been changed.

- Sec. 3.11.2: Based on ideas from u/aftermeasure, the category of Illocution has been revised from scratch and now operates in conjunction with a new category called Expectation. The category of Validation is also reintroduced. As a result, the V_K affix has been revised and restructured.

- Sec. 3.12: The ASSERTIVE Bias has been renamed the CONTENSIVE to free up the name ASSERTIVE for a revised Illocution category.

- Sec. 4.1: Due to the collapsing of old Slot X-XI-XII categories into the new Slot X, the Modular Adjunct has been restructured and simplified.

- Sec. 4.3: The replacement of -**w**-/-**y**- increments by the glottal stop within V_C case affixes 37 through 68 has allowed the single-affixual adjunct to be revised and expanded to include affix-scoping information.

- Sec. 4.4: The structure of the Affixual Scoping Adjunct has been drastically simplified (and renamed the Affix-Scoping Adjunct)

- Secs. 4.5, 4.6 and 4.7: The initial **h**- of the Carrier Adjunct has been changed to **ç**-, and the initial **ç**- of the Concatenative Adjunct has been changed to **hr**- in order to free up initial **h**- for use in register adjuncts. The abbreviation for the COGITANT register adjunct has been changed to CGT.

- Sec. 4.8.1: The above changes have allowed the single- and dual-referent Personal Reference Adjunct to be redesigned and simplified.

- Sections 5.3 and 5.4 have been added to the document to describe how to express dates, times of day, and geographic names.

Changes to v. 0.12.1: Several errors/ambiguities have been corrected. Several values in the C_A table have been changed/corrected; a rule has been added to Sec. 4.4 regarding case-assessor affixes used in affix-scoping adjuncts. The structure of the single- and dual-personal reference adjunct has been modified. The Slot X table showing the values for Effect has been corrected. The new root -**KSM**- has been added to the list of geographic-related roots in Sec. 5.4.7.

1.0 PHONOLOGY

1.1 Phonemic Inventory

	LABIAL	LABIO-DENTAL	LABIO-VELAR	APICO-DENTAL	INTER-DENTAL	APICO-ALVEOLAR	ALVEOLAR RETROFLEX	ALVEOLO-PALATAL	PALATAL	VELAR	UVULAR	GLOTTAL	LATERAL
STOP	p b			t d						k g		ʼ	
FRICATIVE		f v			ṭ ḍ	s z		š ž	ç	x		h	ļ
AFFRICATE						c ẓ		č j					
NASAL	m			n						ň			
LIQUID FLAP / TRILL							r						
LIQUID NON-FLAP													l
APPROXIMANT			w						y		ř		

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

1.2 Pronunciation Notes and Allophonic Distinctions

1.2.1 Vowels: -a- is pronounced [a] or [ɑ], -ä- is [æ], -e- is [ɛ] or [e] but only as [e] at the beginning of a vocalic conjunct; -ë- is [ɤ] or [ə] when stressed but [ɯ] when unstressed; -i- is pronounced either [ɪ] or [i] but only as [i] at the beginning of a vocalic conjunct and only as [ɪ] when preceded or followed by -y-; -o- is [ɔ] or [o] but only as [o] at the beginning of a vocalic conjunct; -ö- is [œ] or [ø] but only [ø] at the beginning of a vocalic conjunct; -u- is [ʊ] or [u] but only [u] at the beginning of a vocalic conjunct and only as [ʊ] when preceded or followed by -w-; -ü- as [ʉ] or [y] but only [ʉ] when preceded by -y- or -w-). Diphthongs followed by -r or -ř in the same syllable as the diphthong may be pronounced disyllabically for ease-of-pronunciation; when doing so, be sure not to accidentally introduce a glottal-stop between the two vowels.

1.2.2 Consonants: The dental -n- assimilates to velar [ŋ] before -k-, -g-, and -x- (but not before -ř-); therefore, phonemic -ň- is not permitted before -k-, -g-, and -x-; The fricative -x- may be pronounced with either velar or uvular articulation [x ~ χ]; The apico-alveolar-retroflex rhotic -r- is a single tap/flap [ɾ], which becomes a trill [r] when geminated; when followed by a consonant in the same word, it may be pronounced as an apico-alveolar-retroflex approximant [ɻ], similar to (but further forward in the mouth than) the postalveolar [ɹ] of standard English; The uvular -ř- is an approximant [ʁ] as in colloquial French or German; when geminated it is either [ʁ:] or can be strengthened to a uvular trill [ʀ]. Care should be taken to ensure the pronunciations of -př- and -tř- are differentiated from -px- and -tx-. Syllable-initial or word-final -ph-, -th-, -kh-, -ch-, -čh- are pronounced as aspirated stops/affricates [pʰ, tʰ, kʰ, tsʰ, tʃʰ]. Between two vowels, they are disyllabic and pronounced as in English *haphazard*, *at-hand*, *backhanded*, *it's here*, and *church hall*.

1.3 Orthographic Conventions

The tables on the previous page indicate the romanization system. The following alternatives are available for writing the language in romanized script: The character **ṭ** may be written as **ţ** or **ț**, the character **ḍ** may be written as **ḑ** or **đ**, the character **ň** may be written as **ņ** or **n̦**, the character **ř** may be written as **ŗ** or **r̦**, and the character **ḷ** may be written as **ł** or **l̦**.

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., -**Cìa**-, -**Cìo**, etc.) — this is to remind the speaker/reader that this -**ì**- is to be pronounced long /i:/ in order to distinguish such syllables from syllables of the form **Cy+V** (e.g., *karesya* vs. *karésìa*, *ávelkyo* vs. *ávelkìo*). A grave accent may similarly be used over the vowel -**u**- to remind the speaker/reader not to collapse the /u/-sound into /w/ in words like *ehùá*.

1.4 Phonotactics

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

1.5 External Juncture

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

1.6 The Standard Vowel-Form Sequence

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

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

The Standard Vowel-Form Sequence

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

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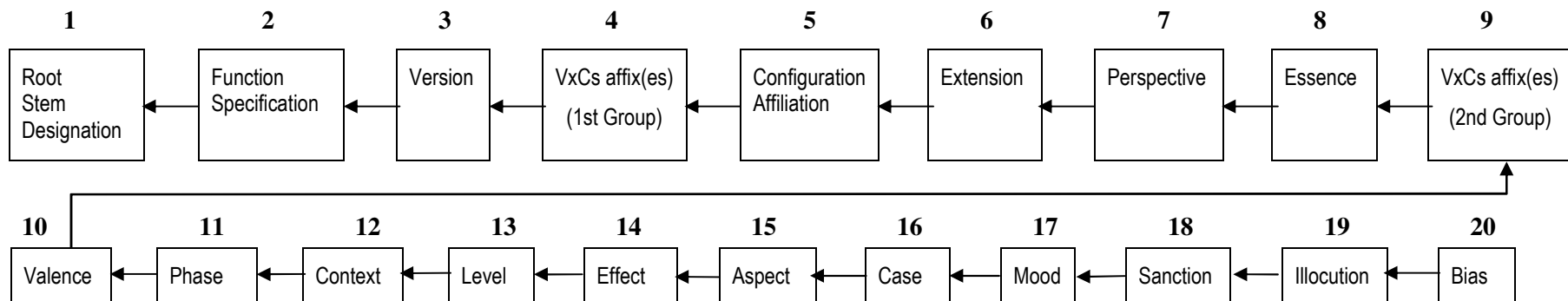

1.7 Rules for Inserting a Glottal-Stop or -**h**- Into a Vowel-Form

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

1. If **V** is a single vowel or diphthong, the glottal-stop or -**h**- is placed after **V**, e.g., -**a** becomes -**a'**, -**ai** becomes -**ai'**; -**a** becomes -**ah**, -**ai** becomes -**aih**.

2. If **V** is a disyllabic conjunct, place the infix between the two syllables of **V**, e.g., -**ua** becomes -**u'a**; -**ua** becomes -**uha**.

3. When applying Rule 1 above, if the infix results in a phonotactically impermissible or awkward conjunct, e.g., the following consonant-form is a geminated stop such as -**tt**- or infixation results in an ambiguous form such as -**hr**- (which could be mistaken for a C_C/C_M affix), then an epenthetic vowel must be added as follows:

   o If **V** is a single vowel, reduplicate this vowel following the infix; e.g., -**a** becomes -**a'a**; -**a** becomes -**aha**.

   o If **V** is a diphthong, then place the infix 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'**; -**ai** becomes -**ahi** instead of the usual -**aih**.

4. If adding both a glottal stop and -**h**, the former precedes the latter, which must be followed by a vowel as per Rule 2 or 3, e.g., -**e'ha**, -**u'hu**, -**a'hi**.

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:

1	2	3	4	5	6	7	8	9
Root Stem Designation ←	Function Specification ←	Version ←	VxCs affix(es) (1st Group) ←	Configuration Affiliation ←	Extension ←	Perspective ←	Essence ←	VxCs affix(es) (2nd Group)

10	11	12	13	14	15	16	17	18	19	20
Valence ←	Phase ←	Context ←	Level ←	Effect ←	Aspect ←	Case ←	Mood ←	Sanction ←	Illocution ←	Bias

2.1 Slot Structure of a Simple Formative (i.e., No Incorporated Stem Is Present)

I	II	III	IV	V	VI	VII	VIII	IX	X	XI	XII	XIII
—	—	—	$'V_V$	C_R	V_R	$(C_S V_X ... ')$	C_A	$(V_X C_S ...)$	$(V_N C_N)$	V_C / V_K	$(')C_B$ or $(')C_Y$	[stress] *
Slots I thru III are not used in Simple Formatives			Designation + Version + Relation	Main Root	Function + Stem + Specification of main root	VxCs affix(es) in reversed form; affix(es) apply to stem but not to C_A	Configuration + Extension + Affiliation + Perspective + Essence	VxCs affixes	Valence+Context+Mood/Case-Scope **or** Aspect+Mood/Case-Scope **or** Phase+Context **or** Level+Context **or** Effect+Context	Case **or** Illocution+ Expectation+ Validation as determined by syllabic stress	Bias or Case-Scope or Mood / must be preceded by a glottal-stop unless Slot X C_N or Slot XI V_C/V_K contains a glottal-stop	penultimate: Slot XI = V_C / ultimate: Slot XI = V_K / antepenultimate: Slot XI = V_C + FNC Context / ultimate: Slot XI = V_K + FNC Context
			vocalic affix		vocalic affix	last V_X in the series requires a glottal stop to indicate end of Slot	consonantal form	Apply to main stem + C_A	Modular Slot containing a vowel-form + consonant-form	vocalic affix		

* Both penultimate and ultimate stress can shift (the former to antepenultimate, the latter to pre-antepenultimate) as a short-cut means for showing FUNCTIONAL Context.

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

I		II	III	IV		V	VI	VII	VIII	IX	X	XI	XII	XIII
incorporated stem				V_V										
C_D		V_F	C_I					Slots V through XIII are the same as for Simple Formatives						
Designation + Version + incorp. type of incorporated stem *		Format of incorp. root	Incorp. Root	Designation + Version + Relation of Main Stem + Stem of Incorp. Root *										
Form beginning with **h**- or **ç**-, or **w**-, or **y**-		same forms as Slot XI V_C		vocalic affix										

* Incorporated roots are by default BSC Specification; if necessary to indicate a different Specification, use the now-revised SSI Affix shown in Sec. 3.3.

2.3   "Short-Form" Slot Structure for UNFRAMED Simple Formatives (i.e., No Incorporated Stem, UNFRAMED Relation Only) and C_R-Form Is Permissible in Word-Initial Position)

I	II	III	IV	V	VI	VII	VIII	IX	X	XI	XII	XIII
—	—	—	—	C_R	V_R (') *							
Slots I thru IV are not used in Short-Form Formatives				Root	Specification + Function + Stem Add glottal stop to show FML Designation Add -**h**- to show CPT Version	Slots VII through XIII are the same as for Simple Formatives						

*   See Sec. 1.7 for phonological details on adding a glottal-stop and/or -**h**- to Slot VI. Also: if Slot VI empty in a short-form formative contains a glottal-stop and the following slot Slot VII is empty, then the Sec. 3.8.1 rules on combining a glottal-stop with the Slot VIII C_A complex apply.

Special Short Form: If Slot VIII of a short-form formative contains the default C_A form -**l**- (UXS-DEL-CSL-M-NRM), and the -C_SV_X- Slot VII is empty, and Slot VI contains an -**h**- to show CPT version, then the C_A form -**l**- may be elided, so that a noun such as **dehla** becomes **deha**, and the verb form **dehá** becomes **deh**.

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

2.1 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 INTERROGATIVE Illocution, 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 word bears ultimate stress
'o'	indicates the following word bears penultimate stress
'u'	indicates the following word bears antepenultimate stress
'i'	indicates the following word bears pre-antepenultimate stress

3.0 ANALYSIS OF FORMATIVE SLOTS

3.1 SLOT I: C_D — Designation, Version and Incorporation-Type of Incorporated Stem

This slot shows the following for the incorporated stem: Designation, Version, Incorporation-Type, and an indicator for alternate Slot II V_F values. For formatives with no incorporated stem, this slot, plus Slots II and III, will be empty.

		PRC	CPT	PRC (alt. V_F) *	CPT (alt. V_F) *
Type-1 Incorporation	IFL	h	hw	hlw	hmw
	FML	ç	çw	hly	hnw
Type-2 Incorporation	IFL	w	hl	hm	hmy
	FML	y	hr	hn	hny

Incorporation Type: There are two types of stem incorporation. Type-1 incorporation implies a circumstantial relationship between the incorporated stem and the main stem (equivalent to placing the incorporated stem into a case-frame instead). Type-2 incorporation is derivational (i.e., lexicalizing), creating a new lexico-semantic gestalt usually requiring a different English translation. This is analogous to English forms like *polar bear*, where the form names a new animal rather than stating where a particular bear originates or is situated. Likewise, English *elephant seal* establishes a whole new lexico-semantic gestalt rather than merely describing some sort of metaphorical relationship between elephants and seals.

* C_D forms from the last two columns indicate that the Slot II V_F Format vowel of the incorporated Stem (see Sec. 3.2 below) is an optional monosyllabic short-cut form.

Pronunciation: hl = [ɬ], hr = [ɾ̥], hlw = [ɬw], hly = [ɬj], hm = [m̥], hn = [n̥], hmw = [m̥w], hnw = [n̥w], hmy = [m̥j], hny = [n̥j].

3.2 SLOT II: V_F — Format of Incorporated Stem

Format signifies the incorporated stem's semantic relationship to the main stem, corresponding to the 68 case relationships from Slot XI. The V_F values are by default the same as the 68 V_C vocalic Case affixes from Slot XI. However, for eighteen formats whose standard V_F affix forms are disyllabic, there are optional monosyllabic shorter forms available to decrease the number of syllables. These 18 alternate V_F forms are shown below. They must be used with the alternate PRC or CPT C_D values shown in Slot I (see Sec. 3.1 immediately above).

FORMAT		V_F
REF	REFERENTIAL	a
ASI	ASSIMILATIVE	ä
ESS	ESSIVE	e
COR	CORRELATIVE	ë
CPS	COMPOSITIVE	ëu

FORMAT		V_F
COM	COMITATIVE	ö
UTL	UTILITIVE	o
RLT	RELATIVE	u
LOC	LOCATIVE	i
CNR	CONCURSIVE	iu

FORMAT		V_F
FUN	FUNCTIVE	ai
TFM	TRANSFORMATIVE	au
CLA	CLASSIFICATIVE	ei
RSL	RESULTATIVE	eu
CSM	CONSUMPTIVE	ëi

FORMAT		V_F
ACT	ACTIVATIVE	ui
DSC	DESCRIPTIVE	oi
TRM	TERMINATIVE	ou

3.3   SLOT III: C_I — the Incorporated Root

The incorporated root, C_I, is of the same format as the main root, C_R (see Sec. 3.5). By default, it is considered to be a nominal formative with BASIC Specification and ambiguous as to Function (see Sec. 3.6), with no C_A information defined. This is usually sufficient, given that stem-incorporation (especially Type-2) generally functions as merely a mnemonic heuristic for associating one formative with another for the purpose of identification and lexicalization of new concepts. To define a C_A complex for the incorporated root, use a delineated C_A-stacking affix (see Sec. 3.7) or as an affixual adjunct.

If necessary to define particular Specification and Function for the incorporated root, use the new **SSI** affix below; it may be placed in either Slot VII or Slot IX with no Delineation marking required.

-ng	SSI Alternate Function and Specification for Incorporated Root
1	incorp.stem is in BASIC Specification and STATIVE Function
2	incorp.stem is in CONTENTIAL Specification and STATIVE Function
3	incorp.stem is in CONSTITUTIVE Specification and STATIVE Function
4	incorp.stem is in OBJECTIVE Specification and STATIVE Function
5	incorp.stem is a verbal formative in BASIC Specification with Function unspecified
6	incorp. stem is in OBJECTIVE Specification and DYNAMIC Function
7	incorp. stem is in CONSTITUTIVE Specification and DYNAMIC Function
8	incorp. stem is in CONTENTIAL Specification and DYNAMIC Function
9	incorp. stem is in BASIC Specification and DYNAMIC Function

3.4   SLOT IV: V$_V$ — Designation, Version, and Relation of Main Root, plus Stem of Incorporated Root

Slot IV contains a vocalic affix indicating the following for the main stem: INFORMAL vs. FORMAL Designation, PROCESSUAL vs. COMPLETIVE Version, and UNFRAMED vs. FRAMED Relation. Additionally, Slot IV also identifies the stem of the incorporated root, if present.

Slot IV V$_V$ Values for Simple Formatives

Designation	Version	Relation	
INFORMAL	PRC	Unframed	a
		Framed	ä
	CPT	Unframed	e
		Framed	i *
FORMAL	PRC	Unframed	u
		Framed	ü
	CPT	Unframed	o
		Framed	ö

Slot IV V$_V$ values for Complex Formatives

Designation	Version	Relation	Stem of Incorporated Root			
			Stem 1	Stem 2	Stem 3	Stem 0 **
INFORMAL	PRC	Unframed	a	ai	ia / oä	ao
		Framed	ä	au	iä / uä	ae
	CPT	Unframed	e	ei	ie / oë	ea
		Framed	i *	eu	ië / uë	eo
FORMAL	PRC	Unframed	u	ui	ua / aö	oa
		Framed	ü	iu	ue / eö	öa
	CPT	Unframed	o	oi	uo / io	oe
		Framed	ö	ou	uö / iö	öe

*   For IFL/CPT/Framed (/Stem 1): the vowel -**i**- is substituted for -**ë**- to preserve the latter for use with personal reference adjuncts.

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

3.5 SLOT V: C$_R$ — The Root

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

3.6 SLOT VI: V$_R$ — Function, Specification, and Stem of Main Root (plus Designation and Version for Short-Form Formatives)

Slot VI: Function, Specification, and Stem of Main Root					
Function	**Specification**	**Stem 1**	**Stem 2**	**Stem 3**	**Stem 0**
STA	**BSC**	a	ai	ia / oä	ao
	CTE	ä	au	iä / uä	ae
	CSV	e	ei	ie / oë	ea
	OBJ	i *	eu	ië / uë	eo
DYN	**BSC**	u	ui	ua / aö	oa
	CTE	ü	iu	ue / eö	öa
	CSV	o	oi	uo / io	oe
	OBJ	ö	ou	uö / iö	öe

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

If the formative is a SHORT FORM Formative:
To show FORMAL Designation on a short-form formative, add a glottal stop to the vowel in Slot VI. For CPT Version add -**h**-. **NOTE:** If adding a glottal stop or -**h**- adds a syllable (as per Rule No. 3 in Sec. 1.7), then use the standard Simple Formative structure instead of the Short-Form structure.

The Four **Specifications** are explained below:

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

The Four **Specifications** are explained below:

BSC	**BASIC**: A holistic instantiation of a root, prior to the application of one of the other eight Specifications, essentially encompassing the meanings of the CTE, CSV, OBJ 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., the *content of a piece of art* [what it represents or is an image/statue of]; *the water within a river* [regardless of its channel or course]; *the communicative content of a message* [regardless of the means/medium by which it is conveyed]; *something (made of/in) iron* [its form/shape as opposed to merely being an example of the substance]*; a room as a functional/habitable space, established by its socially communicated purpose or discernible by its design, furnishings, decor, etc.*

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., *a work of art* [as constituted by it being a painted canvas, sculpted marble, etc., irrespective of what the image is or what/who the statue is of]; *the course of a river; the form/medium (written, spoken, recorded, etc.) of a message* [irrespective of what it communicates], *something iron (focus on it being of a particular material/substance regardless of its form/shape), a room as a contained volume of space established by conjoined walls and ceiling* [regardless of its purpose, dimensions, layout, design, furnishings, or decor].
OBJ	**OBJECTIVE**: Target or "object" or product associated with the act/state/event, , e.g., *what an artist creates, a work of art, the entity/person/institution that forms the object/source of one's belief, what one measures* (the object, span, gap, etc. to be measured)

3.7 SLOT VII: $C_S V_X$ Affixes

This optional slot holds one or more standard -$V_X C_S$ affixes **in reversed form**: **-$C_S V_X$-**. **NOTE**: Slot VII affixes apply only to the main stem or to the incorporated stem as per Delineation (described in the footnote below). They do not have scope over the C_A information in Slot VIII or over any subsequent slots.

degree	Type-1	Type-2	Type-3	Type-1 Delineated *	Type-2 Delineated *
1	a	ai	ia / oä	ao	awo
2	ä	au	iä / uä	ae	awe
3	e	ei	ie / oë	ea	ewa
4	ë	eu	ië / uë	eo	ewo
5	i	ëi	ëu	eë	ewë
6	ö	ou	uö / iö	öe	öwe
7	o	oi	uo / io	oe	owe
8	ü	iu	ue / eö	öa	öwa
9	u	ui	ua / aö	oa	owa
0	üa	üe	üo	üö	üwö

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

Type 3: applies to previous $C_S V_X$ affix only (or the following affix if it is the first in the slot).

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

C_A **stacking**: There are two specialized -V_X values, **-eä** and **-öä**, used to indicate that the following -C_S consonant-form is to be interpreted as a C_A complex (see next page) whose info is stacked or layered on the formative's primary C_A complex; **-eä** indicates the C_A complex applies to the main stem, while **-öä** means it applies to the incorporated stem.

NOTE: The last $C_S V_X$ affix in Slot VII must carry a glottal stop, so the audience will know where Slot VIII begins. See Sec. 1.7 (page 4) for details on adding a glottal stop to an affix. Note also that this glottal stop will often merge with the following Slot VIII C_A complex as per the new rules in Sec. 3.8.1 on the next page.

* Delineation signifies the affix applies to the incorporated stem rather than the main stem. Type-2 delineated forms are the same as Type-1 delineated but with infixed -**w**-.

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

3.7.1   Glottal Stop To Indicate the End of Slot VII: The last -$C_S V_X$- affix in Slot VII must carry a glottal stop to show where Slot VII ends and Slot VIII begins. See Sec. 1.7 (page 4) on how to add this glottal stop to the affix. This glottal stop will often merge with the following Slot VIII C_A complex as per the new rules in Sec. 3.8.1 on the next page. Note that if the last Slot VII affix is a Type-2 delineated affix, the glottal-stop precedes the -**w**- infix of the affix.

3.8   SLOT VIII: The C_A complex — Configuration + Extension + Affiliation + Perspective + Essence

CONFIGURATION

	DPS Similar	DPD Dissim.	DPF Fuzzy
UNIPLEX — UXS SPECIFIC	[zero]		
UNIPLEX — UPX POTENTIAL	ţ (lţ)		
DUPLEX	DPS Similar	DPD Dissim.	DPF Fuzzy
SEP Separate	rt	rn	řt
CND Connected	rk	rň	řk
FSD Fused	rp	rm	řp
MULTIPLEX	MPS Similar	MPD Dissim.	MPF Fuzzy
SEP Separate	t	n	lt
CND Connected	k	ň	lk
FSD Fused	p	m	lp

EXTENSION

DEL Delimitive	[zero]
PRX Proximal	s
ICP Incipient	š
ATV Attenuative	f
GRA Graduative	ţ
DPL Depletive	ç

AFFILIATION

CSL Consolidative	[zero]
ASO Associative	t (d)[1]
COA Coalescent	k (g)[1]
VAR Variative	p (b)[1]

PERSPECTIVE + ESSENCE

	NRM	RPV
M Monadic	[zero] (l)	ř
P Polyadic	r / v^2 (r)	l (tḷ)
N Nomic	w (v)	m / h^3 (lm)
A Abstract	y (z)	n / ç[3] (ln)

Values shown in parentheses are the stand-alone forms

Allomorphic Substitutions: lţ

ţs → z	ts → c	np → mb	ňy → nz	tt → ls
ţš → ž	tš → č	ňk → ng	çy → nž	kk → lš
ţf → rţ	tţ→ ḍ	tf[C] → fs[C]	čy → j	pp → lf
tţ → rs		kf[C] → fš[C]		nn → nd
tç → rç		nf[C] → v[C]		mm → mz

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

[2]   Form used with DPF forms beginning with -**ř**- for ease of pronunciation, e.g., **řkr ➙ řkv**, **řctr ➙ řctv**. May also be used with preceding -**d**-, -**g**-, or -**b**-.

[3]   Form used if preceded by a fricative + stop (i.e., non-zero Extension + non-zero Affiliation), e.g., **stm ➙ sth, pfkm ➙ pfkh, tçpn ➙ tçpç**.

3.8.1   Combining C_A with a preceding glottal stop: For increased euphony or to avoid the need for an epenthetic vowel, a Slot VII final glottal stop merges with the C_A form based on the rules below. **NOTE:** First apply all required allomorphic substitutions to the C_A form before applying the following rules:

- If C_A is two or more consonants and begins with a continuant (i.e., -**r**-, -**l**-, a nasal, or a fricative) or an affricate (e.g., -**ck**-, -**čpw**-, etc.), delete the glottal stop and geminate the initial continuant or affricate instead, e.g., **'rt ➙ rrt**, **'nkl ➙ nnkl**, **'st ➙ sst**, **'čpw ➙ ččpw**, etc.

- If C_A is a stop (i.e., -**p**-, -**t**-, -**k**-, -**b**-, -**d**-, -**g**-) followed by -**l**, -**r**, -**ř**, -**w**, or -**y**, delete the glottal stop and geminate the stop, e.g., **'py ➙ ppy**, **'dr ➙ ddr**

- If C_A is a single consonant or is a conjunct not included in the above two rules, no changes are made and Sec. 1.7 applies to the glottal-stop.

Note that although the above rules eliminate the Slot VII glottal stop, the C_A form is still distinguishable from a preceding Slot VII $C_S V_X$ affix in that the resulting C_A forms do not match any permissible Slot VII C_S form.

3.9 SLOT IX: $V_X C_S$ Affixes

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

3.10 SLOT X: $V_N C_N$ — Context + either: Valence+Mood/Case-Scope, Phase, Effect, or Level, OR Aspect+Mood/Case-Scope

Slot X shows one of five patterns of additional categories: (1) Valence+Context+Mood/Case-Scope, (2) Aspect+Mood/Case-Scope, (3) Phase+Context, (4) Effect+Context, or (5) Level+Context. If Slot X is filled, the following Slot XI must also be filled.

The vowel-form portion of Slot X, V_N, is the same for all five patterns (being simply the first four columns of the Standard Vowel Sequence). It is the C_N consonant-form that distinguishes which of the five patterns is being displayed. The $V_N C_N$ forms for each pattern are shown below.

Slot X – Pattern 1: Valence + Context + Mood/Case-Scope

V_N		CONTEXT			
VALENCE		EXS	FNC	RPS	AMG
1	MNO	(a)	ai	ia / oä	ao
2	PRL	ä	au	iä / uä	ae
3	CRO	e	ei	ie / oë	ea
4	RCP	ë	eu	ië / uë	eo
5	CPL	i	ëi	ëu	eë
6	DUP	ö	ou	uö / iö	öe
7	DEM	o	oi	uo / io	oe
8	CNG	ü	iu	ue / eö	öa
9	PTI	u	ui	ua / aö	oa

+

MOOD	C_N	Case-Scope
FAC	(h)	CCh
SUB	hl	CCl
ASM	hr	CCr
SPC	hw	CCw
COU	hm	CCm
HYP	hn	CCn

For an explanation of Case-Scope, see Sec. 3.10.1 below.

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

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

	ASPECT															MOOD	C_N	Case-Scope
RTR	RETROSPECTIVE	a	RSM	RESUMPTIVE	ai	PMP	PREEMPTIVE	ia / oä	DCL	DISCLUSIVE	ao					**FAC**	**'h**	**CCh**
PRS	PROSPECTIVE	ä	CSS	CESSATIVE	au	CLM	CLIMACTIC	iä / uä	CCL	CONCLUSIVE	ae					**SUB**	**'hl**	**CCl**
HAB	HABITUAL	e	PAU	PAUSAL	ei	DLT	DILATORY	ie / oë	CUL	CULMINATIVE	ea					**ASM**	**'hr**	**CCr**
PRG	PROGRESSIVE	ë	RGR	REGRESSIVE	eu	TMP	TEMPORARY	ië / uë	IMD	INTERMEDIATIVE	eo	**+**				**SPC**	**'hw**	**CCw**
IMM	IMMINENT	i	PCL	PRECLUSIVE	ëi	MTV	MOTIVE	ëu	TRD	TARDATIVE	eë					**COU**	**'hm**	**CCm**
PCS	PRECESSIVE	ö	CNT	CONTINUATIVE	ou	SQN	SEQUENTIAL	uö / iö	TNS	TRANSITIONAL	öe					**HYP**	**'hn**	**CCn**
REG	REGULATIVE	o	ICS	INCESSATIVE	oi	EPD	EXPEDITIVE	uo / io	ITC	INTERCOMMUTATIVE	oe							
ATC	ANTECEDENT	ü	SMM	SUMMATIVE	iu	PTC	PROTRACTIVE	ue / eö	XPD	EXPENDITIVE	öa							
ATP	ANTICIPATORY	u	IRP	INTERRUPTIVE	ui	PPR	PREPARATORY	ua / aö	LIM	LIMITATIVE	oa							

Slot X – Pattern 3: Phase + Context

V_N		CONTEXT				C_N
PHASE		EXS	FNC	RPS	AMG	
1	**CTX**	(a)	ai	ia / oä	ao	
2	**PCT**	ä	au	iä / uä	ae	
3	**ITR**	e	ei	ie / oë	ea	
4	**REP**	ë	eu	ië / uë	eo	**+ w/y***
5	**ITM**	i	ëi	ëu	eë	
6	**RCT**	ö	ou	uö / iö	öe	
7	**FRE**	o	oi	uo / io	oe	
8	**FRG**	ü	iu	ue / eö	öa	
9	**FLC**	u	ui	ua / aö	oa	

* if V_N ends in (or is) -**i**-, use -**w**; if V_N ends in (or is) -**u**-, use -**y**.

Slot X – Pattern 4: Level + Context

V_N		CONTEXT				C_N
LEVEL *		EXS	FNC	RPS	AMG	
1	**MIN**	a	ai	ia / oä	ao	
2	**SBE**	ä	au	iä / uä	ae	
3	**IFR**	e	ei	ie / oë	ea	
4	**DFC**	ë	eu	ië / uë	eo	**+ 'w**
5	**EQU**	i	ëi	ëu	eë	
6	**SUR**	ö	ou	uö / iö	öe	
7	**SPL**	o	oi	uo / io	oe	
8	**SPQ**	ü	iu	ue / eö	öa	
9	**MAX**	u	ui	ua / aö	oa	

* unmarked Level = no Level applies

Slot X – Pattern 5: Effect + Context

V_N		CONTEXT				C_N
EFFECT *		EXS	FNC	RPS	AMG	
1	**1 / BEN**	(a)	ai	ia / oä	ao	
2	**2 / BEN**	ä	au	iä / uä	ae	
3	**3 / BEN**	e	ei	ie / oë	ea	
4	**all / BEN**	ë	eu	ië / uë	eo	**+ 'y***
5	**UNK [unknown]**	i	ëi	ëu	eë	
6	**all / DET**	ö	ou	uö / iö	öe	
7	**3 / DET**	o	oi	uo / io	oe	
8	**2 / DET**	ü	iu	ue / eö	öa	
9	**1 / DET**	u	ui	ua / aö	oa	

* zero-marked Effect = neutral (i.e., Effect unspecified)

Effect conveys whether the speaker considers the utterance to be beneficial, neutral or detrimental to some party or parties. Effect may also be indicated using a -$V_X C_S$ suffix, an affixual adjunct, or via a personal-reference adjunct.

Note that absence of Effect is equivalent to Neutral Effect, i.e., no statement about the Effect on a party is being made on the formative (e.g., because Effect is shown elsewhere in the sentence on a different formative or via a personal-reference adjunct or modular adjunct).

3.10.1   Case-Scope: For UNFRAMED verbal formatives the C_N affix for Slot X Patterns 1 and 2 shows Mood, whereas for nominal and FRAMED verbal formatives, it shows Case-Scope. Formatives showing Case use the C_N Case-Scope to indicate the scope of the case-marked formative over adjacent formatives or the entire clause containing the case-marked formative. This is useful when there is a string of cases modifying another "head" formative; C_N specifies which formative has scope over which other formative.

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

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

3.10.2 **Showing both Mood and Case-Scoped in FRAMED formatives:** FRAMED formatives do not normally show Mood, deferring any mood information to the main verb, so that Slot X C_N–Pattern 1 or 2 affix should be interpreted as showing Case-Scope rather than Mood. However, in certain circumstances, it may be advantageous to show both Mood and Case-Scope on a framed formative. To do so, show Mood via $V_X C_S$ affix or an adjunct (see Sec. 4.1).

3.10.3 **Moving the C_N–Pattern 1 affix to the Slot VIII C_A Slot:** If the V_N Valence+Context value in Slot X is default MNO/EXS, or if Slot X is not available to show Mood or Case-Scope (due to Slot X being used to show Phase, Level, or Effect), Mood/Case-Scope may instead be shown in Slot VIII (the C_A Slot) under the following circumstance: if C_A in Slot VIII is default -l- (UXS-DEL-CSL-M-NRM), then the C_A may be replaced by the Mood/Case-Scope C_N affix in Slot VIII. (In the case where Slot X is zero-marked (i.e., MNO Valence, no Aspect, CTX Phase, no Level, neutral Effect), moving C_N to Slot VIII makes the word one syllable shorter. Note that the C_N–Pattern 1 affix FAC/CCh -h- never moves to Slot VIII because it instead elides whenever Slot X is zero-marked.

NOTE ON SHORT-FORM FORMATIVES: When moving the Mood/Case-Scope C_N affix to Slot VIII in a short-form formative, the initial **h**- increment of the affix changes to **x**- to prevent the C_N affix from being misinterpreted as C_A preceded by a short-form Slot VI CPT version marker -**h**-.

3.10.4 **Alternate Means of Showing Mood or Case-Scope:** If there is no C_B Bias suffix in formative Slot XII, and the Slot VIII C_A value is non-default, then either Mood or Case-Scope can alternately be shown in Slot XII via the new C_Y suffix. This is explained in Sec. 3.12.2.

3.11   SLOT XI: V_C or V_K— Case or Illocution+Sanction

Nouns and FRAMED verbs take Case, while UNFRAMED verbs take Illocution+Expectation+Validation instead (see Sec. 3.11.2 below).

3.11.1 Case: The following are the 68 noun cases with their V_C case marker. Case-accessor and inverse-accessor V_XC_S affixes are also given. Note that the V_X value of these accessor affixes is the same as the corresponding V_C case marker, this being an exception to the standard V_XC_S format.

TRANSRELATIVE CASES			V_C	DESCRIPTION	case-accessor affix Type-1 = -ll; Type-2 = -rr	inverse accessor affix Type-1 = -lw; Type-2 = -ly
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
2	INS	INSTRUMENTAL	ä	The entity acting as means utilized by an explicit or implicit agent to implement/carry out the effect/impact of an act/event. Semantic role: INSTRUMENT.	the INSTRUMENT/MEANS by/via which X occurs	that by/via which X is the INSTRUMENT/MEANS
3	ABS	ABSOLUTIVE	e	The party that/who is the target of, and/or undergoes, the effect/impact or change of state as a result of a tangible act/event. Semantic role: PATIENT.	the PATIENT to which/whom X happens	that which happens/is done to the PATIENT X
4	STM	STIMULATIVE [2]	ë	The party/entity/idea/thought/memory/situation or mental state which triggers an unwilled, affective response in another party. Semantic role: STIMULUS.	that which is the affective STIMULUS of X	that of/for which X is the affective STIMULUS
5	AFF	AFFECTIVE	i	The party who undergoes an unwilled, affective experience, e.g., coughing, sneezing, feeling hot/cold, trembling, experiencing sensory input (tactile, olfactory, visual, aural, gustatory), proprioceptive states, psychological/emotional states, reflex reactions such as cringing, yawning, ducking, screaming in fright, etc. Semantic role: EXPERIENCER.	the EXPERIENCER or undergoer of X (as an affective experience)	that which the X undergoes as an affective experience
6	EFF	EFFECTUATIVE	ö	The party who initiates a chain of causal events or who induces another party to act as an agent (specifiable via the ENB affix). Semantic role: ENABLER.	the ENABLER initiating an event chain leading to X	the event (chain) that the ENABLER X initiates
7	ERG	ERGATIVE	o	The animate party or inanimate force which initiates/causes an act/event which creates a tangible effect or change of state in a patient. Semantic role: AGENT or FORCE.	the AGENT who/that X's	that which the AGENT or FORCE X does/initiates
8	DAT	DATIVE	ü	The party which is the (intended) recipient of a verb of transference, transmission, or communication; the party at/to which a physically transferred entity, transmitted information, or a communicable entity is directed. Semantic role: RECIPIENT.	the RECIPIENT of X or of the act of X	that which the RECIPIENT X receives
9	IND	INDUCIVE	u	The patient who undergoes the tangible effect, impact, or change of state of an act/event initiated/caused by that self-same party. Semantic role: AGENT+PATIENT.	the AGENT who/that X's him-/her-/itself	that which the AGENT X does to him-/her-/itself

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

[2]   Ithkuil 2011's DERIVATIVE case is renamed the STIMULATIVE and now only shows the STIMULUS of an affective response; inanimate agential FORCES now take the ERGATIVE or EFFECTUATIVE cases (the inanimate status of the agent is sufficient to distinguish its semantic role as FORCE rather than AGENT).

		APPOSITIVE CASES	V_c	DESCRIPTION	case-accessor affix Type-1 = **-ll**; Type-2 = **-rr**	inverse accessor affix Type-1 = **-lw**; Type-2 = **-ly**
10	POS	POSSESSIVE	ai	The party which has alienable (i.e., removable or severable) possession of another noun in the sense of having physical control or oversight of that noun, whether by chance circumstance or deliberate manipulation.	the alienable/circumstantial possessor of X	that which X alienably or circumstantially possesses
11	PRP	PROPRIETIVE	au	The party having alienable possession of another noun in the sense of quasi-permanent contextual control, ownership or oversight, whether by societal recognition, social convention, law, purchase or decree, which mere physical separation does not sever.	the owner of X; that to which/whom X belongs	that to whom/which X belongs; that which X owns
12	GEN	GENITIVE	ei	The party which has inalienable (i.e., irremovable, non-severable) possession of or association with another noun in the sense of having that noun as an inherent or intrinsic attribute, characteristic, physical part, or genetic (i.e., familial) bond.	the inalienable possessor of X	that which X inalienably possesses
13	ATT	ATTRIBUTIVE	eu	The party which inalienably experiences the effects of, or otherwise has an affective (see the affective case above) relationship with another noun, either as a temporary or permanent attribute, characteristic, or experience, whether physical or psychological, objective or subjective in nature.	that to which/whom X is an attribute/characteristic	that which X has as an attribute/characteristic
14	PDC	PRODUCTIVE	ëi	The party which is the creator, author or originator of another noun.	the originator/author/creator of X	that which X authored/created or originated
15	ITP	INTERPRETIVE	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., **Monet's** Paris, **my** baseball team (as spoken by a fan).	the party X by / thru which / whom something is subjectively interpreted / considered	that which is subjectively considered, described or interpreted by/thru X
16	OGN	ORIGINATIVE	oi	The party which is the literal or figurative source of another, or which is the native location, origin, or usual locative context for another.	the original or inherent location/source of X	that of which X is the original or inherent source/location
17	IDP	INTERDEPENDENT	iu	The party which has a coordinated, tandem, complementary or mutually dependent relationship with another. The relationship between the two nouns can be thought of as reciprocal in nature, i.e., each noun implies the other or needs the other to exist within its natural context	that with which, or to which, X has a complementary relationship	that which is the complementary relationship shared with X
18	PAR	PARTITIVE *	ui	Indicates a quantitative or content-to-container relationship between the two nouns, e.g., *a cup **of coffee***, *a box(ful) **of books***, *a train(load) **of refugees***, *twelve **chairs***.	that of which X is its apportioned or enumerated contents	that which is X's apportioned or enumerated contents

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

	ASSOCIATIVE CASES		V_C	DESCRIPTION	case-accessor affix Type-1 = -ll; Type-2 = -rr	inverse accessor affix Type-1 = -lw; Type-2 = -ly
19	APL	APPLICATIVE	ia / oä	The entity/act/event which constitutes the circumstantial, potentially one-time, temporary purpose of another entity/act/event. 'for the (circumstantial/temporary/one-time) purpose of X', 'being used (temporarily/circumstantially) as X'	the purpose/function/use to which X is circumstantially put	that which has X as its circumstantial, temporary use/function/purpose
20	PUR	PURPOSIVE	iä / uä	The entity/act/event which constitutes the inherent/innate/intrinsic purpose of another entity/act/event. 'for the (dedicated) purpose/function of X'	the intrinsic/inherent/innate purpose of X	that which has X as its intrinsic, inherent, innate purpose
21	TRA	TRANSMISSIVE	ie / oë	Renamed from the BENEFACTIVE in Ithkuil 2011, this case indicates the party for which/whom an entity/act/event occurs or is transmitted, with the intention that the entity/act/event be beneficial/detrimental to the named party. 'for (the benefit/detriment of) X'	that which/whom the intended benefit/detriment from X is for	that which is the intended benefit or detriment of (receiving/being impacted by) X
22	DFR	DEFERENTIAL	ië / uë	The entity for whose sake, or out of deference/respect to whom, an act/event occurs. 'for X's sake', 'out of deference for X', 'out of respect for X'	the one for whose sake, or out of deference/respect to whom, X occurs	that which occurs or is done out of respect/deference, or for the sake of, X
23	CRS	CONTRASTIVE	ëu	The party for which something is substituted, or of which another party/entity takes its place; 'instead of X', 'as a substitute for X', 'in place of X'	that which substitutes for X or takes X's place	that for which X is substituted or whose place X takes
24	TSP	TRANSPOSITIVE	uö / iö	The party on whose behalf something is/occurs.	that on whose behalf X occurs/is	that which is (done) on X's behalf
25	CMM	COMMUTATIVE	uo / io	The party in exchange for which, a reciprocal or complementary act/event occurs; e.g., *He paid 100 dollars **in exchange for the tickets***.	that which is received in an act of exchange	that which is relinquished in an act of exchange
26	CMP	COMPARATIVE	ue / eö	The party being compared to another, translatable as 'as compared to', 'as opposed to,' 'versus'; with verbs it translates as 'whereas' or 'while' (in its synonymous usage to 'whereas'). Examples: *She chose the red one **as opposed to the others***, *Sam drives a van **versus Joe**, who prefers a truck, At the party, she danced **while/whereas I ate***.	that which is according to or pursuant to X; that which occurs as per, or in conformance to X	that, according to or pursuant to which, or as per or in conformance to which, X is/occurs
27	CSD	CONSIDERATIVE	ua / aö	The entity according to which, another entity is, or an act/event occurs.	that which is according to X	that which X is according to

ADVERBIAL CASES			V_c	DESCRIPTION	case-accessor affix Type-1 = **-ll**; Type-2 = **-rr**	inverse accessor affix Type-1 = **-lw**; Type-2 = **-ly**
28	FUN	FUNCTIVE	ao	Identifies a noun used to describe/characterize the manner in which an act/event/state occurs or exists, e.g., *She dances **gracefully**; The boys ate **with gusto**; That clown is speaking **nonsense**; Father speaks **with such fortitude***.	the manner in which X is/occurs	that which is/occurs in a manner described or characterized by X
29	TFM	TRANSFORMATIVE	ae	Identifies the outcome or final state of a process, often translatable by 'to,' 'until,' or 'into' in the sense of reaching a final state after undergoing some transformation. Examples: *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***.	that into which, X transforms/changes	that which is/occurs as a result of the transformation of X
30	CLA	CLASSIFICATIVE	ea	identifies a noun as a basis for arranging, sorting, classifying, or counting, e.g., *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***. Also identifies the basis for recurring increments, e.g., *month by month; day in, day out; box upon box, clown after clown.*	the basis by which X is arranged, sorted, patterned or counted	that which is arranged, sorted, patterned, or counted by/via X
31	RSL	RESULTATIVE	eo	Identifies a result/consequence, translatable as 'resulting in X', 'with X as a consequence', etc.	the result/consequence of which, X occurs/is	that which results from or is a consequence of X
32	CSM	CONSUMPTIVE	eë	Identifies the entity consumed or used as a resource as a result of, or as a concurrent part of a process, e.g., *She cooks **with tomatoes**, The clown fed her **an apple**, He reads **by candle(light)***.	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: ***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.*	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: *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***.	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., ***Without peace**, this society is doomed; We'll be safe **unless the clowns find us***. 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.' ***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***.	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., ***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*. 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

SPATIO-TEMPORAL I			V_c	DESCRIPTION	case-accessor affix Type-1 = **-ll**; Type-2 = **-rr**	inverse accessor affix Type-1 = **-lw**; Type-2 = **-ly**
37	**LOC**	LOCATIVE	aʼa	entity identified as the location of X or where X occurs; 'at / in / on / by X'	where X occurs/is (situated); X's location	that which is located, situated, or occurring at X
38	**ATD**	ATTENDANT	äʼä	entity in whose presence something is/occurs	that in whose presence which, X is/occurs	that which is situated or occurring in X's presence
39	**ALL**	ALLATIVE	eʼe	entity toward which another entity is moving/approaching	where X is headed/going toward	that which is headed toward X
40	**ABL**	ABLATIVE	ëʼë	entity away from which another entity is moving/receding	where X is coming from or moving away from	that which is coming from or moving away from X
41	**ORI**	ORIENTATIVE	iʼi	entity (often a body part or sub-component) which serves as the "face" or surface or "front" or "head" of an entity in terms of external communication or interaction, or which serves as the forward "end" of a spatially orientated axis aligned to a vector of motion in terms of directional movement.	that which serves as X's orientational interface	that which is oriented, facing in the direction designated by X
42	**IRL**	INTERRELATIVE	öʼö	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., *He turned his back **on me**, It lies just west **of the house**, Tell me when the parade starts **relative to my arrival**.*	the place/time relative to which, X is/occurs	that which occurs relative to the place/time designated by X
43	**INV**	INTRATIVE	oʼo	Identifies a noun as being the spatio-temporal boundary point of a span or volume of space or a period of time, i.e, either the starting point or the ending point of a span of time or space. English translations include: 'as of X' / 'since X' /'until X'; for spatial contexts, translates as "between there and here" / "between here and there")	the place/time since/until/between which, X is/occurs	that which occurs since, until, or between the place(s)/time(s) designated by X
44	**NAV**	NAVIGATIVE	uʼu *	entity whose literal or metaphorically inferred long axis serves as the direction of another entity's path, course, arc, or trajectory of translative motion	that which serves as X's directional trajectory, path or way	that which is traveling along the directional trajectory, path or way designated by X

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

SPATIO-TEMPORAL II			V_c	DESCRIPTION	case-accessor affix Type-1 = **-ll**; Type-2 = **-rr**	inverse accessor affix Type-1 = **-lw**; Type-2 = **-ly**
45	CNR	CONCURSIVE	a'i	indicates a "temporal locative" meaning 'at or during the time of X', i.e., the point or stretch in time at or during which an entity or an act/event exists or occurs.	when X is/occurs	that which is/occurs at a certain time X
46	ASS	ASSESSIVE	a'u	Specifies the increment of space or time or unit by which a contextual ratio of mesurement is created, e.g., *He charges **by the minute**. It travels at 90 kilometers **per hour**. He earns $25 **per book***.	the spatiial, temporal, or unit basis for the ratio by which X is measured, alloted, etc.	that which is measured via a ratio based on a spatial, temporal, or unit increment X.
47	PER	PERIODIC	e'i	identifies the span of time / time frame at some point(s) during which, separate events, repetitions, or durationally segmented acts or states take place. Examples would be *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*.	the time period or event during which X occurs	that which is/occurs during or within a time period X
48	PRO	PROLAPSIVE	e'u	signifies the duration of an act, condition, or event, i.e., how long it takes or lasts, e.g., *He prayed **through lunch**, It rained **all night**, It took **three days** for the fever to break, She sang **for an hour***.	(the time period or event constituting) the duration of X	that which lasts, endures, or takes up an amount of time X
49	PCV	PRECURSIVE	ë'i	Identifies an entity acting as a point in time prior to which an act, condition, or event occurs, e.g., *'this city **before the war**', 'a presentation **preceding the banquet**'*.	the act/event or point in time, prior to which, X occurs	the act/event or point in time which is/occurs prior to X
50	PCR	POSTCURSIVE	o'u	Identifies an entity acting as a point in time after which, following which, subsequent to which, an act, state, or event occurs, e.g., *'this city **after the war**', 'a presentation **following the banquet**'*.	the act/event or time, after/following which or subsequent to which, X occurs	the act/event or time which is/occurs after or following or subsequent to X
51	ELP	ELAPSIVE	o'i	identifies the amount of time that has passed or is expected to pass between the contextual present and the time of the act, condition, or event being spoken of. It corresponds to English '…ago' or '...from now'. Examples would be ***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.	the amount of elapsed time between X and a past or future act/event/time	the act/event/state which occurs X amount of elapsed time between then and the contextual present.
52	PLM	PROLIMITIVE	u'i	Signifies the spatio-temporal boundary point of a span of time or space during which or within which something is expected to or must occur or be situated. Equivalent to English phrases: by the end of X / within the period ending in X / within the period ending with X / before X is over / before X is up / inside of (the period signified by) X	the time/event by which time X is/occurs	the act/event or point in time which is/occurs by the time of X

RELATIONAL CASES I		V_c	DESCRIPTION	case-accessor affix Type-1 = -ll; Type-2 = -rr	inverse accessor affix Type-1 = -lw; Type-2 = -ly
53 REF	REFERENTIAL	i'a	Identifies the general referent of another formative, translating such English terms as 'about,' 'regarding,' 'concerning,' 'in regard to,' 'in reference to,' 'pertaining to,' or 'as for.'	that which X is about or to which X pertains/is in regard	that which pertains to X or which is about or in regard to X
54 ASI	ASSIMILATIVE	i'ä	Identifies a formative used as a context for analogy or metaphorical comparison to another formative; translatable as 'as/like' meaning 'as if (it were) X' in the sense of comparison or analogy between one thing and another that it is not, e.g., *She sings **like a bird**, ; Treat her **as/like a princess*** (= as if she were a princess), *He talks **like a child*** (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
55 ESS	ESSIVE	i'e	Identifies the role or name by which an entity is known or contextually identified. It translates English 'as/like' in the sense of naming or reference to the an entity's functional identity, e.g., *They called him **a clown**, The woman entered the club **as an equal** of any man, We consider you **our only hope**, Treat her **as/like a princess*** (because she is one), *He talks **like a child*** (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
56 COR	CORRELATIVE	i'ë	Indicates an abstract general relationship, association, or conjunction between one formative and another, including subjective, contextual, metaphorical, or symbolic associations. It translates general phrases such as 'relative to,' 'in relation to,' 'in correlation with,' 'in association with,' e.g., ***career** goals, the soup of **the day**, the direction **of that road**, The elapsed time **relative to the distance** determines the winner, Our next topic is sex **and/in art*** (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
57 CPS	COMPOSITIVE	ë'u	identifies a noun as being the literal or figurative substance or component(s) of which another is made, composed, formed, built or comprised. Example of usage would be *That statue was carved **out of marble**, She owns three **gold(en)** coins, We were caught in a web **of lies**, I use a **wooden** ladder, It was a house **of cards**, **Three suits** comprise his wardrobe, Joe detests **styrofoam** cups.*	that of which X is made/composed or consists of	that which consists of, is made of, or is composed of X
58 COM	COMITATIVE	u'ö	Identifies a formative that accompanies another, translatable as '(along) with'. When used with PARALLEL or COMPLEMENTARY valence, signifies that the formative is being used in the same (or a complementary) way or is undergoing the same (or a complementary) activity as the other formative it is associated with (i.e., the meaning of the CONJUNCTIVE case in Ithkuil 2011).	that which accompanies X	that which X accompanies
59 UTL	UTILITATIVE	u'o	Identifies a formative in the process of being used while some other activity or state is in progress. It does not imply the INSTRUMENT of an act as does the instrumental case. Examples: *the **gun-wielding** man, the **umbrella-toting** pedestrian, a girl **with backpack (on)***.	that which circumstantially uses/utilizes X	that which is used/utilized circumstantially by X
60 RLT	RELATIVE	u'a	Identifies a formative (or case-frame) as constituting a relative clause associated with the preceding formative (or whatever formative is indicated by the DCD affix as being the head of the relative clause).	that which identifies or distinguishes X from other parties	the party identified by or distinguishable by X

			V_c	DESCRIPTION	case-accessor affix Type-1 = **-ll**; Type-2 = **-rr**	inverse accessor affix Type-1 = **-lw**; Type-2 = **-ly**
RELATIONAL CASES II						
61	**ACT**	ACTIVATIVE	a'o	Identifies the EXPERIENCER of a modal state, such as obligation, necessity, desire, hope, expectation, wishing, being able to, etc. functioning as the "subject" of a modal(ized) verb governing a hypothetical state (i.e., what is wanted, needed, expected, able to be done, etc.)	the one who experiences a modal state of X	The modal state which X experiences
62	**DSC**	DESCRIPTIVE	a'e	Identifies a formative as describing another formative in an adjectival manner, translatable as 'characterized/describable as being like X; characterized/describable as having the quality/qualities of X'	that which is characterized or describable by/as X	that which characterizes or functions as a description for X
63	**TRM**	TERMINATIVE	e'a	Identifies a noun as being the goal of an act/event, e.g., *We seek **a new planet**; a desire **to see his homeland**; an academy **for (making) champions***	X's goal; what X pursues as a goal	the goal X;
64	**SEL**	SELECTIVE	e'o	Identifies a contextually recurring time-period, as well as a string of recurring entities, e.g., *I visit him **every three days**; **Each year**, I travel to the Clown Planet; He works **nights**; **By day**, she is an artisan; The clowns visit us **on Sundays**; ...**every third book**; ...**every green one.***	the recurring entity/period on/for/with which X occurs	that which is/occurs on a recurrent schedule or iteration X
65	**CFM**	CONFORMATIVE	e'ë	The entity pursuant to which, as per which, or in conformance with which, another entity is, or an act/event occurs.	that which is pursuant to, as per, or in conformance with X	that which X is pursuant to or in conformance with
66	**DEP**	DEPENDENT	ö'e	identifies as formative as being the basis of a dependency phrase on which another formative or phrase acts as the contingency, translatable as **'...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 new DPC affix.	that upon which the existence/occurrence of X depends	that whose existence or occurrence depends on X
67	**PRD**	PREDICATIVE	o'e	Identifies the non-causal basis, foundation, sustenance (literally or figuratively), or required existential condition for another noun or clause, translatable by the phrases 'based (up)on,' 'dependent (up)on' or 'relying on.' Examples of use are *a book **dependent on a publisher**, a man **relying on charity**, laws **based in reason**, success **supported by corruption***.	that upon which X relies or is based upon	that which relies on or is based upon X
68	**VOC**	VOCATIVE	o'a	Signifies a noun being used in direct address.	—	—

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

3.11.2 V$_K$ — Illocution, Expectation, and Validation

Illocution, Expectation, and Validation appear on UNFRAMED verbal formatives, shown by a V$_K$ vowel-form affix in Slot XI. Nominal formatives or FRAMED verbal formatives take a V$_C$ case affix in this slot instead. The V$_K$ vowel-forms are differentiated from V$_C$ case vowel-forms by having ultimate syllabic stress.

3.11.2.1   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 knoweldge, inference, intution, etc.). This is sufficient to alert the addressee as to whether the ontological vs. conventional status of a statement, its refutability vs. conclusiveness, and its accuracy vs. inaccuracy should be questioned. It is not additionally productive for the grammar to overtly state these qualities. They will be analyzed by the addressee regardless of whether the grammar of the language requires the speaker to overtly assign them.

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

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

3.11.2.2 Illocution: 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 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	expectation is that addressee respond verbally (i.e., reply, comment, rebuttal, explanation, answer to inquiry, etc.)	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	*'There's toilet paper on your shoe.'* *(no acknowledgement needed)*	*'I'm letting you know there's toilet paper on your shoe.'* OR *'You should thank me for telling you, there's toilet paper on your shoe.'*	*'You might want to do something about the toilet paper on your shoe.'*
PERFORMATIVE	*'Let it be known there's toilet paper on your shoe!'*	*'Is that toilet paper on your shoe?'* (yes/no response expected)	*'Do something about that toilet paper on your shoe!"*

The equivalent to WH-questions will be handled as in Ithkuil 2011, a command to state the information being sought. As per the above matrix, such commands will be PERFORMATIVE-EXECUTIVE statements translatable as *'State your height,'* or *'Tell me the time of day'*. Hortatives ("if only.../were it so that...") are expressable by the combination of PERFORMATIVE Illocution + EXECUTIVE Expectation + COUNTERFACTUAL Mood.

3.11.2.3 Validation: The category of Validation, which had been subsumed under Illocution in previous versions of this design document, is now reintroduced due to the simplification and restructuring of Illocution. Validation refers to the evidential basis for an statement in ASSERTIVE illocution. It does not apply to statements with PERFORMATIVE illocution.

			ASR Illocution			PFM Illocution		
			COG	**RSP**	**EXE**	**COG**	**RSP**	**EXE**
OBS	**OBSERVATIONAL**	present sensory knowledge or present sensory experience – "I perceive… / I know…"	(á)	ái	áu	ê	ô	û
REC	**RECOLLECTIVE**	past sensory knowledge or past sensory experience – "I remember… / I know (from memory)…"	é	éi	éu			
RPR	**REPORTIVE**	knowledge from a 3rd party or cultural/conventional knowledge – "I heard (from X)… / X has said… / They say…"	í	êi	êu			
INF	**INFERENTIAL**	knowledge based on a process of inference from evidence (or absence of alternatives), induction, extrapolation, comparison, analogy, etc. "I infer… / I reason…"	ó	ói	óu			
ITU	**INTUITIVE**	conclusion based on intuition, hunch, subjective feeling, past experiences, etc. – "I feel… / I have a hunch… / something tells me…"	ú	úi	íu			
IMA	**IMAGINARY**	unreal statement, not intended as true, based on whim, imagination, subjective revelation, dream, altered state, etc.	â	aé	aó			

NOTE: While previous versions of this document provided for an UNSPECIFIED illocution which signified that the evidential basis for a statement is unknown or unspecified, the author has reconsidered this option; like natural languages which grammaticize evidentiality, this language will require the speaker to select one of the above overt evidential bases for an assertion.

3.12   Slot XII: C_B – Bias, or C_Y – alternate Mood/Case-Scope

A word-final C_B or C_Y consonantal suffix is optional. The C_B affix indicates the category of Bias, while C_Y is an alternative means of indicating Mood or Case-Scope (see Secs. 3.10 and 3.10.1). To prevent the Slot XI+XII vowel+consonant form from being mistaken for a $V_X C_S$ affix, C_B or C_Y it must be immediately preceded a glottal stop unless (1) Slot X is filled and its C_N increment contains a glottal-stop, or (2) the Slot XI Vc/V_K form contains a glottal-stop.

3.12.1   C_B — Bias: Each Bias suffix has the same consonant-form as an associated lexico-semantic root. The lexical roots/stems associated with each Bias category are pronounced as written, with their consonant forms of normal length. However, these roots are phonologically structured to contain continuant and sonorant consonants, so that when they are used as Slot XII suffixes or autonomous adjuncts, they may be pronounced in an artificially prolonged fashion. Additionally, those Bias forms that end in a voiceless stop or voiceless affricate may aspirate or even ejectivize the consonant.. Bias adjuncts function much like English "supra-segmental" interjections such as "Phew!", "Damn!", "tsk-tsk", "Pssshhh", "huh?", "meh", "hmmm", etc.

The Bias suffixes are listed below. Their associated roots/stems are shown in the List of Roots document.

DOL	DOLOROUS	řřx	*'Ow!' 'Ouch!'*
SKP	SKEPTICAL	rnž	*'Yeah, right!' 'Oh, sure! Like anyone's supposed to believe that!'*
IPT	IMPATIENT	žžv	*'C'mon!,' 'What're you waiting for?' 'so…already!'* as in the sentence *'So dance already!'*
RVL	REVELATIVE	mmḷ	*'No wonder…!'* or *'So that's why…!' 'A-ha!….' 'Well, well, well!….'*
TRP	TREPIDATIVE	llč	*'Oh, God…' 'Oh, no!….' 'Oh, dear!"* [fear-based]
RPU	REPULSIVE	šštḷ	*'Yuck! Ew! How gross!'*
DES	DESPERATIVE	mřř	*'I don't know how to say this, but…' 'I'm afraid that….' 'I'm sorry to have to tell you, but...'*
DPB	DISAPPROBATIVE	ffx	*'I don't like the fact that…' 'It bothers me that….' 'Unacceptable!' 'I hate it!'*
CTP	CONTEMPTIVE	kšš	*'What nonsense!'* or *'What bullshit!'*
EXA	EXASPERATIVE	kçç	*'Dammit!' 'Look, don't you get it?…' 'Look, I'm trying to tell you….'*
IDG	INDIGNATIVE	pšš	*'The nerve!'* or *'How dare…!?"*
DIS	DISMISSIVE	kff	*'Is that it?' 'Big deal!' 'So what!?'*
DRS	DERISIVE	pfc	*'How foolish!' 'How silly!' 'Look at how foolish/silly/ridiculous this is!'*

PSC	PROSAIC	žžt	*'Meh... (said in disappointment)' 'How ordinary!'*
CMD	COMEDIC	pḷḷ	*'Funny!' 'LOL'*
PPV	PROPOSITIVE	sl	*'what if…' 'It could be that….' 'Consider this: …' 'Posit the following: …' 'Assume for the sake of argument that….'*
SGS	SUGGESTIVE	ltç	*'How about...' 'We could...' 'Might I suggest...'*
DFD	DIFFIDENT	cč	*'sorry, but…' 'It's nothing. It's just…'*
RFL	REFLECTIVE	rrc	*'Look at it this way…' 'As I see it,…' 'In my opinion,…'* or *'From my point of view,….'*
EUP	EUPHEMISTIC	vvt	*'Let's just say that….'* or *'Well, let me put it this way….'*
CRR	CORRECTIVE	ňṭ	*'that is to say…,' 'What I mean(t) to say is…' 'I mean….'*
APB	APPROBATIVE	řs	*'(That's) OK' '(That's) alright' '(That's) good' '(That's) fine' 'Very well' 'Sure'*
IRO	IRONIC	mmž	*'Oh, nice!' 'Just great!' 'Well, now, isn't this lovely!'*
PSM	PRESUMPTIVE	nnṭ	*'It can only mean one thing…,' 'and that's that!' 'and that's all there is to it!'* or *'There's no two ways about it,….'*
GRT	GRATIFICATIVE	mmh	*'Ah! What bliss...!' 'Oh, there's nothing like….'* [physical pleasure only]
SAT	SATIATIVE	ff	*'How satisfying...!' 'At last, the pleasue of knowing/being/seeing/doing….'* [psychological/emotional pleasure/satiety only]

PES	PESSIMISTIC	ksp	*'Yeah, like it really matters that...' 'Pfft! What's it to me?'*
DUB	DUBITATIVE	mmf	*'Hmm, not likely.' 'I doubt it.' 'Sounds fishy to me' 'I don't trust this/it/him/her/them...'*
IVD	INVIDIOUS	řřn	*'Why does he/she/they get to... and I don't?!' 'How unfair (that I don't get to...)!'*
DCC	DISCONCERTIVE	gzj	*'I'm not sure about this.' 'I don't feel comfortable about this.' 'I'm feeling out of my element here.'*
STU	STUPEFACTIVE	ḷḷč	*'Woah!' 'Holy, bejeezus!' 'What the...!' 'Jeez, Louise...!'*
FSC	FASCINATIVE	žžj	*'Cool!' 'Wow!' 'Awesome!'*
IFT	INFATUATIVE	vvr	*'Praise be to...!' 'Oh, thank God for...!' 'There's nothing more sacred/holy/important than...!'*
EUH	EUPHORIC	gzz	*'(Sigh) What bliss!'*
DLC	DELECTATIVE	ẓmm	*'Whee!'*
ATE	ATTENTIVE	ňj	*'Well, whaddya know...' 'Well, will you look at that...!' 'Well, go figure...' 'Who would've thought...?' 'Well I'll be!'*
RNC	RENUNCIATIVE	mzt	*'So much for...!' 'There goes...!'*
MND	MANDATORY	msk	*'take it or leave it,' 'this is your last chance,'*
EXG	EXIGENT	rrs	*'It's now or never!'*
ISP	INSIPID	lçp	*'Meh... (said due to lack of interest)' 'How boring/tedious/dull!'*
ADM	ADMISSIVE	lḷ	*'Mm-hm' 'Uh-huh' (said as mere acknowledgement of a statement without any implied agreement with or assent to the statement)*
APH	APPREHENSIVE	vvz	*'I'm worried...' 'I've got a bad feeling about this...'*

PPX	PERPLEXIVE	llh	*'Huh? What do you mean…? What the hell? 'WTF!?' 'You gotta be kidding me!'*
CTV	CONTEMPLATIVE	gvv	*'I wonder how…,' 'that's odd…,' 'I don't get it…,' or a quizzical 'hmmmm.'*
PPT	PROPITIOUS	mll	*'it's a wonder that' as in It's a wonder he didn't break a bone in that fall.*
SOL	SOLICITATIVE	ňňs	*'please'*
RAC	REACTIVE	kll	*'My goodness! 'Wow!' 'Amazing!'*
COI	COINCIDENTAL	ššč	*'What a coincidence!'*
FOR	FORTUITOUS	lzp	*'It's just as well that...' or 'All's well that ends well...'*
ANN	ANNUNCIATIVE	drr	*'Guess what!' or 'Wait till you hear this!*
OPT	OPTIMAL	ççk	prolonged *'so'* or *'totally'* as in *'I so don't care!'* or *'That is totally not what I meant.'*
CNV	CONTENSIVE	rrj	*'I'm telling you...', 'I told you so!', 'You see?!'*
IPL	IMPLICATIVE	vll	*'of course,' 'after all,' 'needless to say.'*
ACC	ACCIDENTAL	lf	*'As luck would have it...' 'Fate has decided that...' 'What luck!'*
ANP	ANTICIPATIVE	lst	*'I'm looking foward to this!'*
ACH	ARCHETYPAL	mçt	*what (a) ...!; how . . .! ; Boy! Did (does) X ever …*
VEX	VEXATIVE	ksk	*'How annoying!' 'What a bother!' 'What a pain!'*
CRP	CORRUPTIVE	gžž	*'How corrupt!' 'What corruption!'*
DEJ	DEJECTIVE	žžg	*'(sigh)'* [of dejection/disillusionment]

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

3.12.2 C_Y — Alternate indication of Mood/Case-Scope in Slot XII:

Rather than showing Bias, Slot XII may instead be used as an alternative way to indicate Mood or Case-Scope (see Secs. 3.10 and 3.10.1). This shortens a word by one syllable if Slot X would otherwise be empty (i.e., Valence+Context is MNO/EXS, there is no Aspect or Level, and Phase, Level, and Effect are all default/neutral and zero-marked) and Slot VIII C_A is not default -**l**-.

FAC / CCh	SUB / CCl	ASM / CCr	SPC / CCw	COU / CCm	HYP / CCn
[zero]	x	rz	rž	lz	lž

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

Like C_B Bias affixes, C_Y suffixes must be preceded by a glottal stop unless a preceding V_C form in Slot XI already contains a glottal-stop. For Slot XI V_K forms, the glottal stop may be placed between the two vowels of a diphthong, or if a single vowel, the vowel may be doubled and the glottal-stop placed between. Care should be taken in such case that stress falls on the newly created final syllable (to signify that the vowel-form is V_K rather than V_C).

3.13 Slot XIII: Syllabic Stress — V_C vs. V_K Distinction in Slot XI

penultimate stress	Slot XI represents V_C
ultimate stress	Slot XI represents V_K
antepenultimate stress	Slot XI represents V_C; Context = FUNCTIONAL
pre-antepenultimate stress	Slot XI represents V_K; Context = FUNCTIONAL

Penultimate or ultimate stress may optionally shift (to antepenultimate and pre-antepenultimate, respectively) as a short-cut to show FUNCTIONAL Context.

4.0 ADJUNCTS

There are several types of adjuncts: a modular adjunct which functions like multiple iterations of formative Slot X, an affix-scoping adjunct which gives detailed $V_X C_S$ information, a case-stacking adjunct, a single-affix adjunct, a carrier adjunct, a register adjunct, and two personal-reference adjuncts.

4.1 Modular Adjunct (Primary purpose: to show Valence, Phase, Level, Effect, Aspects, Mood/Case-Scope and Context)

This adjunct has three slots for showing Aspect+Mood/Case-Scope or Valence+Context, Phase+Context, Level+Context, Effect+Context, or can show a single lone Aspect. It can be applied to the main stem or the incorporated stem. The tell-tale sign of this adjunct is the absence of any full consonant forms; the only permissible consonants are -**w**-, -**y**-, or a form consisting of or beginning with -**h**-, any of which may be preceded by a glottal stop. Examples: *o, yu, wea, üha, ihwe, ye'wia, uhlai'wi, uya, öwo'yó, wa'huá.*

The structure of a modular adjunct is shown below. Slots 2, 3, and 4 are essentially iterations of Formative Slot X. Slots 1 and 5 are mandatory; the other slots are optional. If one or two optional slots are missing (i.e., zero-marked), another slot may be substituted into it (e.g., to display multiple aspects, or to display both Effect and Level, etc.). Default MNO-EXS-FAC/CCh Valence+Context+Mood/Case-Scope is zero-marked in Slot 2.

1	2	3	4	5
' or **w/y**	**Valence + Context + Mood/Case-Scope** **OR Aspect + Mood/Case-Scope**	**Phase** **(+ Context)**	**Level** or **Effect** **(+ Context)**	**Aspect** or **Valence**
If adjunct applies to an incorporated stem, insert a **w**- or **y**- prefix	$(V_N C_N)$	$(V_N C_N)$	$(V_N C_N)$	V_N
	Valence: C_N = **h /hl / hr / hw / hm / hn** Aspect: C_N = **'h / 'hl / 'hr / 'hw / 'hm / 'hn** depending on Mood/Case-Scope	C_N = -**w**/-**y**	Level: C_N = -**'w** Effect: C_N = -**'y**	If only Slots 1 and 5 are filled, then Slot 5 = **Aspect**; if Slots 2, 3, or 4 are filled & stress is penultimate, Slot 5 = **Valence**; if Slots 2, 3, or 4 are filled & stress is ultimate, Slot 5 = **Aspect**

4.2 Case-Stacking Adjunct

The case-stacking adjunct from previous versions has been eliminated. Instead, use the new case-stacking $V_X C_S$ affix, -**rl**, whose V_X value, like case-assessor affixes, is the same as the Slot XIII V_C value of the particular case. This affix can in turn become an adjunct by using it as a Single-Affixual Adjunct as shown in Sec. 4.3 below.

4.3   Single-Affixual Adjunct

This adjunct associates a single V_XC_S affix to the following formative and provides scoping information over the formative's other V_XC_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, a'úll, he'erl*

'V_XC_S	V_S		Stress
single standard V_XC_S affix [initial glottal-stop is pronounced but not written]	**(a)** =	affix applies to stem only (not to its **C**$_A$) and has scope over all Slot VII affixes (i.e., as if it were the last affix in Slot VII)	Penultimate stress = default or IFL Designation
	u =	affix applies to stem only (not to its **C**$_A$) and is subordinate to all Slot VII affixes (i.e., as if it were the first affix in Slot VII)	Ultimate stress = FML Designation
	e =	affix applies to both Stem and **C**$_A$ and has scope over all Slot IX affixes (i.e., as if it were the last affix in Slot IX)	Antepenultimate = IFL + CPT Version
	i =	affix applies to both Stem and **C**$_A$ and is subordinate to all Slot IX affixes (i.e., as if it were the first affix in Slot IX)	Pre-antepenultimate = FML+CPT Version
	o =	affix has scope over the entire formative as a whole, including Valence, Mood or Case, Illocution/Validation, etc.	
	ö =	affix has scope over the entire formative as a whole as well as other adjacent adjuncts	

4.4   Affix-Scoping Adjunct

This adjunct associates two or more affixes to a formative. The tell-tale sign is that the word-initial vowel-form will contain a glottal stop inserted as per the rules in Sec. 1.7. Examples: *o'mast, e'extaikra, i'aploftôm, e'abrigli*. **NOTE:** Case-assessor affixes with a case-form V_X containing a glottal stop cannot appear in initial position in this adjunct — if necessary, show the case-assessor affix in a separate single-affixual adjunct.

V_X'C_S...	V_S		Stress
standard V_XC_S affixes – V_X of the first affix must contain a glottal stop (inserted as per rules in Sec. 1.7)	**(a)** =	preceding affixes apply to the stem only (not to its **C**$_A$) and has scope over all Slot VII affixes (i.e., as if they were the last affixes in Slot VII)	Penultimate stress = default or IFL Designation
	u =	preceding affixes apply to the stem only (not to its **C**$_A$) and is subordinate to all Slot VII affixes (i.e., as if they were the first affixesin Slot VII)	Ultimate stress = FML Designation
	e =	preceding affixes apply to both Stem and **C**$_A$ and has scope over all Slot IX affixes (i.e., as if they were the last affixes in Slot IX)	Antepenultimate = IFL + CPT Version
	i =	preceding affixes apply to both Stem and **C**$_A$ and is subordinate to all Slot IX affixes (i.e., as if they were the first affixes in Slot IX)	Pre-antepenult. = FML+CPT Version
	o =	preceding affixes have scope over the entire formative as a whole, including Valence, Mood or Case, Sanction/Illocution, etc.	
	ö =	preceding affixes have scope over the entire formative as a whole as well as other adjacent adjuncts	

NOTE: This adjunct has been simplified compared to previous versions of this document and no longer has separate slots distinguishing formative Slot VII affixes from Slot IX affixes. If necessary to apply one affix-scope to one (set of) affix(es) while applying a different affix-scope to another (set of) affix(es), use two separate affix-scoping adjuncts.

4.5 Carrier Adjunct

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

ç	V_C
	Same as Formative Slot XI

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

Examples: *ça, çei, çoa*

4.6 Concatenative Adjunct

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

> Hey, **shit-for-brains!** Stop your **stumbling-around-in-the-dark** behavior and watch how the **know-how-to-get-things-done** guy gets it done!
>
> *"Let the kid try, he's from the neighborhood." "O-oh!* **'He's from the neighborhood!'** *"* [said sarcastically with a *"big deal/so what?"* tone of voice]
>
> *Is that the actor who starred in that* **aliens-invade-but-die-after-discovering-chocolate** *movie?*

hr	V_C
	Same as Formative Slot XI

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

4.7 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	(hai)
PNT	**PARENTHETICAL** (parenthetical aside)		he	(hei)
CGT	**COGITANT** (silent/subjective thoughts)		ho	(hoi)
EXM	**EXEMPLIFICATIVE** ('for example, …')		hö	(hëi)
SPF	**SPECIFICATIVE** (proper name of preceding referent) [1]		hi	(hiu)
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 the Sec. 1.5 external juncture rules do not apply to foreign names/words, it may be necessary to insert a pause in one's speech after uttering the foreign name/words, prior to pronouncing the CAR adjunct *hü*.

4.8 Personal Reference Adjuncts

There are thirteen personal reference categories, each distinguishing three Effects (see Sec. 3.10, Pattern 5 on Pg. 16 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 3rd party	**m**	**p**	**b**	"he" / "she" / "they (sg.)"
pa	polyadic animate 3rd party	**ň**	**k**	**g**	"they (pl.)"
mi	monadic inanimate 3rd party	**z**	**ţ**	**ḑ**	"it"
pi	polyadic inanimate 3rd party	**ļ**	**f**	**v**	"they (inanimate)"
Mx	mixed animate/inanimate 3rd party	**x**	**c**	**ẓ**	mixed animate+inanimate, e.g., "s/he+it", "they+those", "it+they", "those+s/he", etc.
Obv	Obviative/Resumptive	**th**	**ph**	**kh**	3rd-party other than most recently referenced (used with SWR affix)
IPa	impersonal animate	**tç**	**pç**	**kç**	"one" "you" "people" "a person" (French "on"; German "man")
IPi	impersonal inanimate	**nç**	**mç**	**ňç**	"something" "a thing" "things"
Nai	Nomic animate or inanimate	**lç**	**rç**	**řç**	NOMIC 3rd-party, e.g., a referent as a generic concept; all examples of X through time
Aai	Abstract animate or inanimate	**rr**	**č**	**j**	ABSTRACT 3rd-party, e.g., an idea, a concept, a situation

4.8.1 Single-referent or Dual-referent personal reference adjunct

1	2	3	4	5
C_1 (($ë$) C_1)	V_{C1}	(w/y + V_{C2})	(C_2 ($ë$)))	**Stress**
Personal Referent A (if present)	Case of Personal Referent A Same affixes as formative Slot XI	Case of Personal Referent B, or in absence of Referent B, to add (i.e.,stack) a 2nd Case on to Referent A. Same affixes as formative Slot XI	Personal Referent B	**monosyllabic** or **penultimate** = default **ultimate** (used only in the absence of Referent B) = Slot 3 instead represents V_K, to give a verbal meaning to Referent A

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

The tell-tale sign of this adjunct is its **C($ë$C)-V** or **C($ë$C)-V-w/y-V-C** structure which is unlike any other word-form (Formative Slot VI has no V_R value -$ë$- nor any V_R value containing -**w**- or -**y**-). For If there is only one referent, it is the A referent and uses Slot 1 and 2. Combinations are permissible in both Slot 1 C_1 and Slot 4 C_2, e.g., *smlo* 'you, (s)he, and I' -ERGATIVE. The epenthetic -$ë$- vowel appears in C_1 combinations if necessary due to phonotactic rules, and may also be suffixed to Slot 5 if necessary for phonotactic purposes.

Note that this adjunct allows a single-referent personal referent, placed in Slot 1, to show Illocution+Sanction information in Slot 3, thus creating a verbalized adjunct (whose meaning is the same as the verbal meaning of a personal-reference stem as shown in Sec. 4.8.3 below).

Note also that for personal referents other than the MONADIC speaker 'I', if represented by a single consonant, it is now possible to show two separate (i.e., different) instances of that referent in one category by placing one instance of the consonant in the Referent A slot, and another in the Referent B slot (creating a phonological geminate), e.g., *üppü* [ma/BEN/DAT] 'to him/her and to (a different) him/her', *äzzie* [mi/INS - mi/TRA] 'with it and for (a different) it'.

4.8.2 Combination Personal-Referent Adjunct with Case-Stacking

This adjunct is used to add Designation, Specification, -V_XC_S suffix information or a second case (case-stacking) to one of the combination Personal Reference forms (e.g., for non-combination single-referent forms, one may use this adjunct or the new Personal-Reference root explained in Sec. 4.8.3).

The tell-tale signs of this adjunct are the Slot 4 consonant-forms containing -**bz**-, -**gz**-, -**bž**-, or -**gž**- in what looks like the C_A slot of a Simple Formative (these four consonant conjuncts are not possible C_A forms). Examples: *slebz, etkegz, olsuorbžéd, abneigžamzúi.*

1	2	3	4	5	6	7
('V_V)	C_1 + C_2 (+ C_3)	V_C	**bz / gz / bž / gž**	(V_XC_S …)	(V_{C2} or V_K or epenthetic -**a**)	**Stress**
Designation + Version + Relation	Combination Personal Referent	Case of Combination Personal Referent	Specification		2nd (stacked) case of Combination Personal Referent or an Illocution+Expectation+Validation affix to give a verbal meaning	Default = penultimate Ultimate stress means Slot 6 = V_K. Antepenult. stress means Slot 6 is epenthetic -**a**- (to distinguish it from V_C = THM.
from Formative Slot IV		from formative Slot XI	**bz** = BSC **gz** = CTE **bž** = CSV **gž** = OBJ	V_XC_S suffix 1 (2, 3, …)	same affixes as formative Slot XI	= THM.

4.8.3 The Two Personal Reference Roots: -B- and -D-

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

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

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

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

-B- INFORMAL: [generic personal referent]; FORMAL: '[the personal referent's] identity'	
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'

The INFORMAL designation of the above stems refers to the referent in a temporary, incidental, or "situation-at-hand" context. The FORMAL counterparts refer to the party in an iconic, archetypal, quasi-permanent context; for the above stem this would translate as *'my identity'*.

4.9 The Parsing Adjunct

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

4.10 Recommendation on the Pronunciation of Adjuncts

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

5.0 MISCELLANEOUS DESIGN NOTES

5.1 Rethinking the use of RECIPROCAL Valence

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

> Write-RCP they-IND.
> TRANSLATION: '*They write* (to an unnamed party and that other party presumably writes back).'

> Write-RCP they-IND-SBS/1.
> TRANSLATION: '*They write to each other*.' [i.e. , one member of the 'they'-referent writes to another member of the 'they'-referent and vice-versa]

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

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

> talk-RCP man-IND child-DAT clown-REF
> TRANSLATION: *The man and the child talk to each other about the clown*. OR *The man and the child discuss the clown*.

> talk-RCP they-IND clown-REF
> TRANSLATION: *They talk about the clown (with somebody else).* OR *They discuss the clown(with somebody).*

> talk-RCP they-IND-SBS/1 clown-REF
> TRANSLATION: *They talk to each other about the clown.* OR *They discuss the clown.*

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

> talk-RCP man-IND child-DAT man-REF-SWR/5
> TRANSLATION: *The man and the child talk to each other about the man* [i.e., the man being talked about is the same man who is talking with the child].

5.2 "Tense"-Like Connotations of Various Aspect/Extension Combinations

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

RTR Aspect + **DEL** Extension = 'has been / has done'　　　　　　**PRS** Aspect + **DEL** Extension = simple future tense

RTR Aspect + **PRX** Extension = 'has been (doing) [and may still be (doing)]'　　**PRS** Aspect + **PRX** Estension = 'will be/do & may already be (doing)'

RTR Aspect + **ICP** Extension = 'began to be' / 'began doing'　　　　**PRS** Aspect + **ICP** Extension = 'will begin to be' / 'will start doing'

RTR Aspect + **ATV** Extension = 'finished being / finished doing'　　　**PRS** Aspect + **ATV** Extension = 'will finish being/doing'

RTR Aspect + **GRA** Extension = 'gradually developed into being/doing'　　**PRS** Aspect + **GRA** Extension = 'will develop into being/doing'

RTR Aspect + **DPL** Extension = 'gradually stopped being/doing & is/does no longer　**PRS** Aspect + **DPL** Extension = 'will gradually stop being/doing'

RTR Aspect + **PCS** Aspect = 'just now finished being/doing'　　　　**PRS** Aspect + **PCS** Aspect = 'just about to be/do'

RTR + **HAB** Aspects + **DEL** Extension = 'used to be/do but no longer'　　**PRS** + **RTR** Aspects = 'will have' (e.g., *By then he will have done it.*)

RTR + **HAB** Aspects + **PRX** Extension = 'used to be/do and may still be (doing)'　**PRS** + **HAB** Aspects + **DEL** Extension = 'will now be (doing) but not yet'

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

-lt	RTI — Relative Timeline Indicator
1	X is/occurs after the relative/contextual present of a statement (as may be defined by TPP affix) but is considered completed or no longer applicable after-the-fact from the speaker's present viewpoint. Note in the examples below how English translations of this affix may require use of a negative not present in the original: • *Flowering plants **had not yet developed / were yet to develop** during the Cambrian geological period* (but they have developed since). • *The enemy's code **will still be unbroken / will have yet to be broken** by the time they attack us* (but it will be eventually broken) • *The boy **later realized / had not yet realized** the clown was lying about the Clown Planet* (but he realizes it now). (TPP/3)
2	X is/occurs after the relative/contextual present of a statement (as may be defined by TPP affix) and its occurrence is still outstanding/impacting the speaker's present viewpoint. Note in the examples below how English translations of this affix may require use of a negative not present in the original: • *Hurry! The bus **is yet to depart / has not yet departed**.* (lack of TPP affix implies present context) • *By leaving your seat just now to get a soda, you've **missed (seeing) / have not seen** the magician do his disappearing act.* (TPP/4) • *The boy **hasn't (yet) realized** the clown was lying about the Clown Planet.* (TPP/3)
3	X continues to occur or have an effect in the relative/contextual present or has begun during or prior to the relative/contextual present and will continue into the future of that same relative/contextual present, e.g., • *She **was (still) sleeping** when I left the apartment.* (TPP/3 or TPP/4) • *She**'ll (still) be sleeping** when I arrive.* (TPP/6 or TPP/7) • *Civilizations rise and fall but the Euphrates River **keeps rolling along**.* (NOMIC or TPP/5) • *I've **been watching** TV all day.* (lack of TPP affix implies present context) • *We'll **be watching** the apartment all night.* (TPP/7)

4	X continues to occur or have an effect in the relative/contextual present or has begun during or prior to the relative/contextual present and will continue into the future of that same relative/contextual present, but does not continue into, or have a retrograde effect/impact on the speaker's contextual present, e.g., • *She **was (still) sleeping** when I left the apartment*. (TPP/3 or TPP/4) (but she's no longer sleeping now) • *She**'ll (still) be sleeping** when I arrive*. (TPP/6 or TPP/7) (but she's not sleeping yet) • ***I've been watching** TV all day*. (lack of TPP affix implies present context) (but I'm not doing so now) • ***We'll be watching** the apartment all night.* (TPP/7) (but we're not doing so yet)
5	X has been/done so in the past and will again in the future, but not being/doing so at present, e.g., • *the **once-and-future** king* • *I **did it before** and I **will do** it **again***.
6	X begins to be/occur before the relative/contextual present of a statement (as may be defined by TPP affix) and continues to be/occur during that same relative/contextual present but does not impact the speaker's contextual present, e.g., • *The band **had started playing** / The band **was now playing*** (then, but no longer). • ***The war will have begun**.* (TPP/6 or TPP/7) (then, but not now). • *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.* (TPP/1)
7	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., • *The band **has started playing** / The band **is now playing***. • ***The war will have begun**.* (TPP/6 or TPP/7) • *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.* (TPP/1)
8	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., • *The bus **had (already) departed** when/by the time I arrived.* (TPP/3) • *The bus **will have (already) departed** by the time I arrive.* (TPP/7)
9	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., • *The river **had (already) dried up** when/by the time the settlers arrived.* (TPP/2 or TPP/3) • *The Sun **will have (already) gone nova** when/by the time we develop interstellar ships.* (TPP/8)

5.3 Dates and Times of Day

The new SPT Affix is now available for use in expressing the hour of day, day of the week, week of the month, month of the year, the year and the century. It is used the number roots (usually Stem 3) to render, e.g., 'the eighth hour of the day', 'the third day of the week (i.e., Wednesday)' or '20th of May', etc. Furthermore, each use of this affix can in turn be modified by a following Type-3 number affix (e.g., 2XX, 3XX, etc.) to enumerate the higher-ordered time-period named by the affix. For example, for the word *ksialärsirwa* '22nd day of the month', the **SPT/5** affix *-irw-* can in turn be modified by a following Type-3 number affix, e.g., *ksialärsirwiasta* '22nd of May'. Other Type-3 affixes may also be used in the same fashion, as per the third example below.

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

Examples:
- 'the 15th of March, 1969' *stialarsirwiaza alẓalarsa'i alẓalörsürwu'ö*
- 'on Saturday' *cpialërwa'i*
- 'on Saturday of next week' *cpialërwölţa'i*
- 'the 21st century' *llialärsurya*
- 'by the 34-second mark' *pšialersaryu'i*

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

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

If using the **SEQ₂** affix, the first four months are formed by placing the affix in Degrees 1 through 4 on Formal Stem No. 3 of -**RḌ**- 'month'. The remaining eight months utilize Type-2/Degree 5 of the same affix (-**ëint**) followed by the **5XX**, **6XX**, **7XX**, **8XX**, **9XX**, **10X**, **11X**, and **12X** affixes in Type-3/Degree 1. The last four months have the option of being expressed using Degrees 6 through 9 of the **SEQ₂** affix. Thus:

January: *urḍialainta*

February: *urḍialaunta*

March: *urḍialeinta*

April: *urḍialeunta*

May: *urḍialëintiasta*

June: *urḍialëintiacpa*

July: *urḍialëintiansa*

August: *urḍialëintiačka*

September: *urḍialëintialza* (or *urḍialönta*)

October: *urḍialëintiašša* (or *urḍialonta*)

November: *urḍialëintiacga* (or *urḍialünta*)

December: *urḍialëintiajda* (or *urḍialunta*)

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

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

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

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

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

5.4.1 Names of Continents (to be preceded by the carrier stem form *sa'imka*)

Africa: *sa'imka áfrika*   **Antarctica:** *sa'imka antárktika*   **Asia:** *sa'imka asya*   **Europe:** *sa'imka europa*

Oceania: *sa'imka oseanya*   **North America:** *sa'imkadna amérika*   **South America:** *sa'imkudna amérika*

5.4.2 Names of Oceans: Preceded by the word *hnesaibwala* [FORMAL Carrier Stem 2 incorporated into INFORMAL 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 INFORMAL stem 1 of -**BW**- 'ocean'. As an alternative to incorporating the carrier stem, a carrier adjunct with ESS case *çi'e* may be used or the SPF register adjunct *hi*.

Pacific Ocean: *hnesaibwala pasífika* OR *bwala hi pasífika*   **Atlantic Ocean:** *hnesaibwala atlantis* OR *bwala hi atlantis*

Indian Ocean: *hnesaibwala indus* OR *bwala hi indus*   **Arctic Ocean:** *hnesaibwala arktos* OR *bwala hi arktos*

Southern/Antarctic Ocean: *bwaluidna*

5.4.3 Names of Seas and Lakes: Preceded by the word *hnesaibwaleuxa* ('smaller ocean named...') if referring to a large mostly landlocked salt-water sea (e.g., Mediterranean, Black, Asov), or *hnesaibwalafta* ('section of an ocean named...' utilizing a new **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: *hnesaibwaloufta mediterra*

Baltic Sea: *hnesaibwalëifta balt*

Black Sea: *hnexmabwaleufta*

Sea of Azov: *hnesaibwaleifta azof*

Caribbean Sea: *hnesaibwalëifta karíb*

North Sea: *bwalaidneufta*

Bering Sea: *hnesaibwalëifta bering*

Arabian Sea: *hnesaibwalëifta arab*

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

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

Caspian Sea: *hnesaibwialiuxa kaspi*

Aral Sea: *hnesaibwialoixäkta aral*

Lake Baikal: *hnesaibwialoixa baikal*

Lake Geneva: *hnesaibwialoixa ženév*

Lake Erie: *hnesailzaliuxa érie*

Sea of Galilee: *hnesailzaila kínneret*

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

Bay of Biscay: *hnesaibwaleufta biskaya*

Bight of Benin: *hnesaibwalaufta benín*

Gulf of Mexico: *hnesaibwaleufta méxiko*

San Francisco Bay: *hnesaibwalaifta sanfransisko*

Hudson Bay: *hnesaibwaleufta hëdsën*

James Bay: *hnesaibwaleifta jeimz*

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

Gobi Desert: *hnesuizhala gob*

Andes Mountains: *hnesuijlaimska andes*

Central Asian Steppe: *hnesuizhailoixidna asya*

Grand Canyon: *uvňailiuxa*

Himalaya Mountains: *hnesuijlaimska himálaya*

Tibetan Plateau: *hnesuijlialiuxa phö'*

Siberian Tundra: *hnesuizhiala sibír*

Niagara Falls: *hnesuiţriaňska nayagra*

Amazon River Delta: *hnesuilzwaila amazonas*

5.4.5 Names of Large Rivers: The native names of rivers often vary depending on the various enthnographic domains they pass through. In some instances, I have chosen the dominant ethonymn (e.g., *dijla* for the Tigris), in other instances I have combined names (e.g., *caňpobrahmaputra* for the Brahmaputra), while in others I have used a form derived from an underlying proto-language (e.g., *purát* for the Euphrates, *danu* for the Danube). The following names are preceded by *hnesailzala* OR *alzala çi'e* 'river named...' (FORMAL Carrier Stem 2 incorporated into INFORMAL Stem 2 of the root -LZ-).

Nile	*nil*		Ob	*ob*		Tigris	*dijla*
Amazon	*amazonas*		Irtysh	*irtiš*		Euphrates	*purát*
Yangtze	*caňčyaň*		Volga	*volga*		Danube	*danu*
Mississippi	*misisipi*		Amur	*amur*		Ganges	*gënga*
Missouri	*misuri*		Mekong	*mekoň*		Don	*don*
Yenisei	*yeniséi*		Brahmaputra	*caňpobrahmaputra*		Rio Grande	*riogrande*
Yellow	*hwaňhe*		Indus	*indus*		Irrawaddy	*eyawëdi*

5.4.6 Names of World's Largest Cities: The following names are preceded by *hnesuirhwanga* or *urhwanga hi* 'city named...'

Tokyo	*tokyo*		Manila	*manila*		Bangkok	*kruňthép*		Dongguan	*tunkwan*
Delhi	*dilli*		Lagos	*eko*		Seoul	*sëúl*		Hangzhou	*haňce*
Shanghai	*zaňhe*		Rio de Janeiro	*uhiujižëneiru*		Nagoya	*nagoya*		Foshan	*fatšën*
São Paulo	*saupaulu*		Tianjin	*tçenčin*		Hyderabad	*háidërëbad*		Shenyang	*šënyaň*
Mexico City	*méxiko*		Kinshasa	*kinšasa*		London	*lëndën*		riyadh	*erriyáḍ*
Cairo	*alkáhira*		Guangzhou	*kwoňcëu*		Tehran	*tehrán*		Baghdad	*bařdád*
Mumbai	*mumbëi*		Los Angeles	*losânjeles*		Chicago	*šikago*		Santiago	*santyago*
Beijing	*peičiň*		Moscow	*mëskvá*		Chengdu	*chëňtu*		Surat	*surat*
Dhaka	*dhaka*		Shenzhen	*šënčën*		Nanjing	*nančin*		Madrid	*maḍríḍ*
Osaka	*osaka*		Lahore	*lahór*		Wuhan	*uxán*		Suzhou	*sëucöü*
New York City	*nuyórk*		Bangalore	*bengëluru*		Ho Chi Minh City	*hotçimin*		Pune	*pune*
Karachi	*kërači*		Paris	*paří*		Luanda	*luanda*		Harbin	*háërbin*
Buenos Aires	*bwenosaires*		Bogotá	*bogotá*		Ahmendabad	*ámdavad*		Houston	*çustën*
Chongqing	*choňčhin*		Jakarta	*jakarta*		Kuala Lumpur	*kúalëlumpor*		Dallas	*dälës*
Istanbul	*istanbul*		Chennai	*čennái*		Xi'an	*šián*		Toronto	*tërantou*
Kolkata	*kolkata*		Lima	*lima*		Hong Kong	*hönkoň*		Dar Es Salaam	*daressalám*

5.4.7 Names of Countries (to be preceded by the carrier stem form *sai'la*, or more exactly, *sai'luḑca*, meaning approximately *'land/country of [the] ...'*)

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	*afgan*	Cameroon	*kamerún*	Gambia	*kambi*
Albania	*škyípëri*	Canada	*kánada*	Georgia	*kartvel*
Algeria	*jaza'ír*	Central African Republic	[see Note following the table]	Germany	*doič*
Andorra	*andorra*	Chad	*čad*	Ghana	*gana*
Angola	*angola*	Chile	*čile*	Greece	*elaḑa / helás*
Antigua & Barbuda	*antigwabarbuda*	China	*čuňkwo*	Grenada	*greneida*
Argentina	*arxentina*	Colombia	*kolombya*	Guatemala	*gwatemala*
Armenia	*haik*	Comoros	*komori*	Guinea	*giné*
Australia	*ostralya*	Congo	*kongo*	Guinea-Bissau	*ginebisó*
Austria	*östëřaiç*	Costa Rica	*kostarrika*	Guyana	*gayana*
Azerbaijan	*azärbaiján*	Croatia	*xrvacka*	Haiti	*aití*
Bahamas	*bahama*	Cuba	*kuba*	Honduras	*onduras*
Bahrain	*bahráin*	Cyprus	*kipros*	Hungary	*madyar*
Bangladesh	*baňla*	Czechia	*česko*	Iceland	*is*
Barbados	*barbeidos*	Democratic Republic of Congo	[see Note following the table]	India	*bharët*
Belarus	*byelarús*	Denmark	*tänmak*	Indonesia	*indonesia*
Belgium	*belž*	Djibouti	*jibuti*	Iran	*irán*
Belize	*belíz*	Dominica	*domínika*	Iraq	*irák*
Benin	*benín*	Dominican Republic	[see Note following the table]	Ireland	*eryë*
Bhutan	*trukül*	Ecuador	*ekwadór*	Israel	*yisra'él*
Bolivia	*bolivya*	Egypt	*misr*	Italy	*italya*
Bosnia & Herzogovina	*bosnaxercegovina*	El Salvador	*elsalbadór*	Jamaica	*jameka*
Botswana	*bocwana*	Equatorial Guinea	[see Note following the table]	Japan	*nihon*
Brazil	*brëzíu*	Eritrea	*ertra*	Jordan	*urdún*
Brunei	*brunai*	Estonia	*esti*	kazakhstan	*kazak*
Bulgaria	*bëlgáriya*	Eswatini	*eswatini*	kenya	*kenya*
Burkina Faso	*burkinafaso*	Ethiopia	*ityoppya*	Kiribati	*kiribati*
Burundi	*burundi*	Fiji	*viči*	kuwait	*kuwet*
Côte d'Ivoire	*kotëdivwář*	Finland	*súomi*	Kyrgyzstan	*këřëz*
Cabo Verde	*kabuverdi*	France	*ffrans*	Laos	*lau*
Cambodia	*kampučië*	Gabon	*gabón*	Latvia	*látviya*

Lebanon	*libnén*	North Korea	*čosën*	Spain	*espanya*
Lesotho	*sutu*	North Macedonia	[see Note below]	Sri Lanka	*srilanka*
Liberia	*laibirya*	Norway	*noryë*	Sudan	*sudán*
Libya	*líbiya*	Oman	*oman*	Suriname	*sürinamë*
Liechtenstein	*líçtenštain*	Pakistan	*pak*	Sweden	*svériyë*
Lithuania	*lyetuvá*	Palau	*belau*	Switzerland	*švaic*
Luxembourg	*lêcëbuřš*	Palestine	*falaštín*	Syria	*suriya*
Madagascar	*madagaskyarë*	Panama	*panamá*	Tajikistan	*tojikí*
Malawi	*malavi*	Papua New Gunea	*papuanyugini*	Tanzania	*tanzania*
Malaysia	*mëleisya*	Paraguay	*paragwái*	Thailand	*thai*
Maldives	*divehi*	Peru	*perú*	Timor-Leste	*timorlešte*
Mali	*mali*	Philippines	*pilipinas*	Togo	*togo*
Malta	*malta*	Poland	*polska*	Tonga	*tonga*
Marshall Islands	*mřazyel*	Portugal	*portugál*	Trinidad & Tobago	*trinidadantobago*
Mauritania	*muritaniya*	Qatar	*gatar*	Tunisia	*tunisiya*
Mauritius	*mořís*	Romania	*romênia*	Turkey	*tûrkiye*
Mexico	*méxiko*	Russia	*rasiya*	Turkmenistan	*türkmen*
Micronesia	*mikronesya*	Rwanda	*rwanda*	Tuvalu	*tuvalu*
Moldova	*moldova*	Saint Kitts & Nevis	*seintkicannevis*	Uganda	*uganda*
Monaco	*monakó*	Saint Lucia	*seintlusya*	Ukraine	*ukrayina*
Mongolia	*mongol*	St. Vincent & the Grenadines	*saintvinsentangrénadinz*	United Arab Emirates	[see Note below]
Montenegro	*crnagora*	San Marino	*sanmarino*	United Kingdom	[see Note below]
Morocco	*magrib*	São Tomé & Príncipe	*sautume'eprínsipë*	United States of America	[see Note below]
Mozambique	*musambiki*	Saudi Arabia	*arabiya'assu'udiya*	Uruguay	*urugwái*
Myanmar	*myëmá*	Senegal	*sénegal*	Uzbekistan	*ozbek*
Namibia	*namibya*	Serbia	*sërp*	Vanuatu	*vanuatu*
Nauru	*naoero*	Seychelles	*sešél*	Vatican City	*vatikano*
Nepal	*nepál*	Sierra Leone	*sieraleón*	Venezuela	*beneswela*
Netherlands	*néderland*	Somalia	*somáliya*	Vietnam	*vietnám*
New Zealand	*nyuziland*	South Africa	[see Note below]	Yemen	*yaman*
Nicaragua	*nikaragwa*	South Korea	*hanguk*	Zambia	*zámbia*
Niger	*nižéř*	South Sudan	[see Note below]	Zimbabwe	*zimbabwe*
Nigeria	*naijeria*				

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

Central African Republic: *hnisaiḑteulewëdna áfrika*   **Democratic Republic of Congo:** *hnuiḑtaḑteula hi kongo*

Dominican Republic: *hnesaiḑteula domínika*   **Equatorial Guinea:** *hnuntňusaila giné*   **North Macedonia:** *sai'laidna makedóniya*

South Africa: *sai'luidna áfrika*   **South Sudan:** *sai'luidna sudan*   **United Arab Emirates:** *hnullaillkeuna hi arab*

United States of America: *hnesaiksmaima américa*   **United Kingdom (of Great Britain and North Ireland):** *hnullaillkila (hi britanya hiu sai'ladnuň eryë)*

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

-ḌT- 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
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	**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.
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.
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	**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.
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
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	**Stem 3:** (to be) a state/act of being situated or occurring on/at the [geographic, not magnetic] south pole
OBJ	(to be) what is situated or takes place on/at the equator	

-KSM- GEOPOLITICAL COUNTRY/LAND/ TERRITORY/REGION	
BSC	**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.	**Stem 2:** (to be) a state or province or subdivision of Stem 1, subject to some degree of regional autonomous governmental administration **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.
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	