DESIGN FOR THE NEW REVISION OF ITHKUIL (Version 0.14, August 15, 2020)   by John Q.

This document updates previous version 0.13.2. New or modified material is written in blue. The following changes have now been made:

- **Problem with Version 0.13 of the Design Document:** I've belatedly realized that using Slot V to show the V_C/V_K distinction does not work, because the last two rows of Slot V vowel-forms for V_K + Framed Relation are wasted, given that there is no such thing as a FRAMED formative that carries V_K (i.e., all FRAMED formatives must show a noun case in Slot XII, meaning they must take a V_C indicator, not V_K). Consequently, the V_C/V_K distinction is now shown by syllabic stress again (sorry!). I have now combined the V_C/V_K distinction with Relation to give three possible stress patterns: penultimate stress = UNFRAMED Relation + V_C, ultimate stress = UNFRAMED Relation + V_K, antepenultimate stress = FRAMED Relation + V_C.

- As a result of the above change in the way the V_C/V_K distinction is shown, the rule in Sec. 2.3 regarding monosyllabic Short-Form formatives has been modified — they are now considered to have ultimate stress (i.e., they are UNFRAMED verbal formatives).

- **Slot V changes:** Since syllabic stress now shows the V_C/V_K distinction again, Context must be shown elsewhere. Rather than resurrect the old way of showing context prior to v.0.13 of this document, Context is instead now shown as part of the revamping of Slot V (since Version alone is insufficient to fill Slot V by itself). Although this violates the scoping order for Context, we've played it fast and loose with Context for some time now, at various times showing it in the C_A slot, the Valence/Aspect slot, and via syllabic stress, so the precedent is well-established to show Context in various places.

- **Other Slot V changes:** Additionally, due to the fact that Simple Formatives only utilized eight vowels in Slot V, I've decided to use the Slot as an optional "short-cut" means for showing the **TPP** affix on simple formatives. Since the **TPP** affix will be commonly used with the **RTI** affix to provide detailed "tense" information, providing a short-cut that eliminates a syllable from a simple formative carrying such affixes makes sense.

- Since the V_C/V_K distinction has been moved to Slot XIV, use of a glottal-stop in Slot VII of a Short-Form formative will now show CPT version (again). There will no longer be any substitution of an -**h** for the glottal-stop. Because the old -**h**- marker for CPT Version is being eliminated, the previous rule in Sec. 3.11.3 on changing the initial **h**- increment of a Mood/Case-Scope C_N affix to **x**- has been eliminated; the initial **h**- of a Mood/Case-Scope C_N affixes now remains unchanged when moved to the C_A Slot (Slot IX). Additionally, the rules for glottal-stop insertion in Sec. 1.7 have been revised to eliminate reference to the **h**- marker for CPT Version.

- **Slot XI change:** Level and Effect have been switched in Slot XI; since Absolute Level was shown by Series 4 vowel-forms with a -**y**- infix, it makes sense that Relative Level also be shown by Series 4 vowel-forms but without the -**y**- infix.

1.0 PHONOLOGY

1.1 Phonemic Inventory

	LABIAL	LABIO-DENTAL	LABIO-VELAR	APICO-DENTAL	INTER-DENTAL	APICO-ALVEOLAR	ALVEOLAR RETROFLEX	ALVEOLO-PALATAL	PALATAL	VELAR	UVULAR	GLOTTAL	LATERAL
STOP	p b			t d						k g		’	
FRICATIVE		f v			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	ë	u
MID	e	ö				o
LOW	ä			a		

1.2 Pronunciation Notes and Allophonic Distinctions

1.2.1 Vowels: -**a**- is pronounced [a] or [ɑ], -**ä**- is [æ], -**e**- is [ɛ] or [e] but only as [e] at the beginning of a vocalic conjunct; -**ë**- is [ɤ] or [ə] when stressed but [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 ƭ, the character ḍ may be written as đ or đ, the character ň may be written as ņ or ņ, the character ř may be written as ŗ or ŗ, and the character ḷ may be written as ł or ļ.

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-initial and/or word-final vocalic Slots (e.g., Slot V, Slot XII) are filled.

1.6 The Standard Vowel-Form Sequence

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

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

The Standard Vowel-Form Sequence

	Series 1	Series 2	Series 3*	Series 4	Series 5	Series 6	Series 7	Series 8
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**).
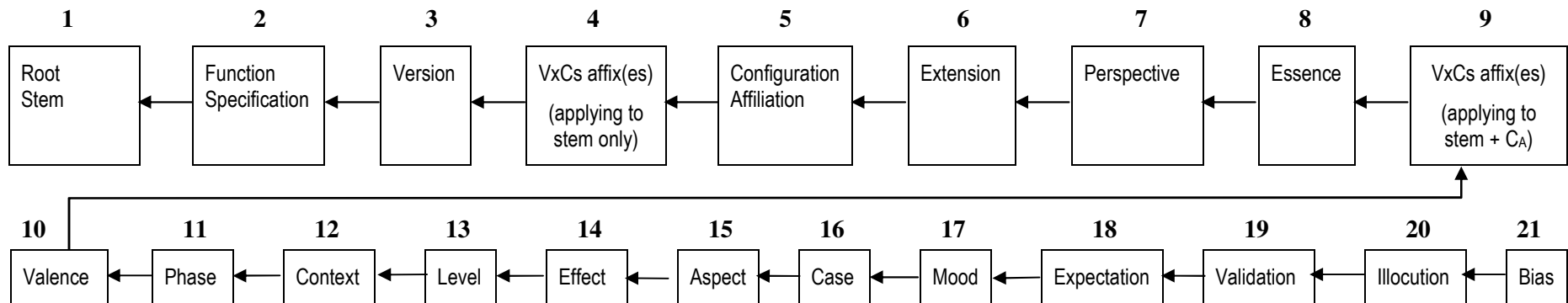
1.7 Rules for Inserting a Glottal-Stop Into a Vowel-Form

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

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

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

3. When applying Rule 1 above, if the infix results in a phonotactically impermissible or awkward conjunct, e.g., the following consonant-form is a geminated stop such as -**tt**- or two stops such as -**pk**, then an epenthetic vowel must be added as follows:

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

   o If **V** is a diphthong, then place the glottal-stop between the two vowels of the diphthong (as an exception to Rule 1 above); e.g., -**ai** becomes -**a'i** instead of the usual -**ai'**.

2.0 MORPHO-PHONOLOGICAL STRUCTURE OF A FORMATIVE

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

1	2	3	4	5	6	7	8	9
Root Stem ←	Function Specification ←	Version ←	VxCs affix(es) (applying to stem only) ←	Configuration Affiliation ←	Extension ←	Perspective ←	Essence ←	VxCs affix(es) (applying to stem + C$_A$) ↑

10	11	12	13	14	15	16	17	18	19	20	21
Valence ←	Phase ←	Context ←	Level ←	Effect ←	Aspect ←	Case ←	Mood ←	Expectation ←	Validation ←	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	XIV
—	—	—	—	'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 IV are not used in Simple Formatives				Version + Context + optional TPP affix short-cut	Main Root	Function + Stem + Specification of main root	V$_X$C$_S$ affix(es) in reversed form; affix(es) apply to stem but not to C$_A$	Configuration + Extension + Affiliation + Perspective + Essence	V$_X$C$_S$ affixes	Valence + Mood/Case-Scope **or** Aspect + Mood/Case-Scope **or** Phase + Mood/Case-Scope **or** Level + Mood/Case-Scope **or** Effect + Mood/Case-Scope	Case **or** Illocution+ Expectation+ Validation as determined by syllabic stress	Bias or Case-Scope or Mood / must be preceded by a glottal-stop unless Slot XI C$_N$ or Slot XII V$_C$/V$_K$ contains a glottal-stop	penultimate stress: UNFRAMED Relation + V$_C$ / ultimate stress: UNFRAMED Relation + V$_K$ / antepenultimate stress: FRAMED Relation + V$_C$
				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		

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	XIV
	incorporated root			V_V									
C_D	V_F	($C_S V_X$...')	C_I		Slots VI through XIV are the same as for Simple Formatives								
Version + incorp. type of incorporated stem * + alternate Slot II V_F value indicator + indicator if Slot III is filled	Format of incorp. stem	$V_X C_S$ affix(es) in reversed form; affix(es) apply to incorp. stem	Incorp. Root	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 unless alt. Slot II V_F value indicated by Slot I	last V_X in the series requires a -' to indicate end of Slot		vocalic affix									

* Incorporated roots are by default BSC Specification; if necessary to indicate a different Specification, use the SFI 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	XIV
—	—	—	—		C_R	V_R (') *							
	Slots I thru V are not used in Short-Form Formatives				Root	Specification + Function + Stem Add glottal stop to show CPT Version	Slots VIII through XIV 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.

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

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

2.4 A Self-Segregating Morphology

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

1. All unstressed syllables of a word prior to the stressed syllable carry neutral (MID-toned) pitch. Beginning with the stressed syllable, the remainder of the word must carry a single non-MID pitch contour, as described in Rule 2 below.

2. Beginning with the stressed syllable of the word, a word may carry ANY of the following pitch contours at the speaker's discretion: FALLING, HIGH, RISING-FALLING, FALLING-RISING. Additional pitch contours may be used in the following circumstances:

   - If the sentence carries PERFORMATIVE-RESPONSIVE Illocution+Expectation (equivalent to a yes/no question), the speaker may optionally utilize RISING pitch on the last word of the interrogative clause.

   - For clauses with non-NARRATIVE Register, the first and last word of the register clause may optionally be marked by LOW tone (in which case it is not necessary to utilize the end-register adjunct).

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

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

4. If a word carries word-initial stress (i.e., it does not begin with neutral MID pitch) or is monosyllabic, and is not at the beginning of a breath group, then it must carry a pitch whose initial tone is different than the final tone of the previous word, so that two identical tones are not juxtaposed at the boundary between two words. In practice, this means the following rules apply between two adjacent words within the same breath group (i.e., they are not separated from each other by a pause in speech), where the second word carries word-initial stress or is monosyllabic:

   - When preceded by a word with either FALLING, RISING-FALLING, or LOW pitch, a monosyllabic word or word with word-initial stress must have either FALLING, FALLING-RISING, or HIGH pitch.

   - When preceded by a word with either HIGH, RISING, or FALLING-RISING pitch, a monosyllabic word or word with word-initial stress must have either RISING, RISING-FALLING, or LOW pitch.

5. In unusual situations (e.g., singing a song) when pitch-accent is unavailable or undesirable as a means of parsing word boundaries and the placement of pauses between words is unrealistic, then a special parsing adjunct of the form **'V'** may be placed before any word to be parsed, where **'V'** represents a single vowel between two glottal stops, the particular vowel indicating the syllabic stress of the following word, as follows:

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

3.0 ANALYSIS OF FORMATIVE SLOTS

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

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

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

Incorporation Type: 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). Type-2 incorporation is derivational (i.e., lexicalizing), creating a new lexico-semantic gestalt usually requiring a different English translation. This is analogous to English forms like *polar bear* naming a new animal rather than stating a location. Likewise, English *elephant seal* establishes a new lexico-semantic gestalt rather than describing some sort of metaphorical relationship between elephants and seals.

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

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

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

3.2 SLOT II: V_F — Format of Incorporated Stem

Format signifies the incorporated stem's semantic relationship to the main stem, corresponding to the 68 case relationships from Slot 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). (For ease of reference and comparison, the Slot XI V_C forms are shown as well.)

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

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

FORMAT		V_F	V_C
FUN	FUNCTIVE	ai	ao
TFM	TRANSFORMATIVE	au	ae
CLA	CLASSIFICATIVE	ei	ea
RSL	RESULTATIVE	eu	eo
CSM	CONSUMPTIVE	ëi	eë

FORMAT		V_F	V_C
ACT	ACTIVATIVE	ui	a'o
DSC	DESCRIPTIVE	oi	a'e
TRM	TERMINATIVE	ou	e'a

3.3 SLOT III: $C_S V_X$ Affixes for the Incorporate Stem

This new optional slot holds one or more standard -$V_X C_S$ affixes **in reversed form**: -$C_S V_X$-.   These affixes apply to the incorporated stem. The V_X vocalic portion of the affix utilizes Series 1 vowel-forms to indicate Type-1 (circumstantial) and Series 2 vowel-forms to indiacte Type-2 (derivational) affixes applying to both the Stem and its (implicit) C_A complex. If, however, the affix is meant to apply to the incorporated stem only but not its C_A complex, use Series 4 vowel-forms instead for a Type-1 affix, and Series 4 vowel-forms with an infixed -**y**- for a Type-2 affix, as shown in the table below.

degree	Type-1	Type-2	Type-3	Type-1 (applies to Stem only, not to C_A)	Type-2 (applies to Stem only, not to C_A)
1	a	ai	ia / oä	ao	ayo
2	ä	au	iä / uä	ae	aye
3	e	ei	ie / oë	ea	eya
4	ë	eu	ië / uë	eo	eyo
5	i	ëi	ëu	eë	eyë
6	ö	ou	uö / iö	öe	öye
7	o	oi	uo / io	oe	oye
8	ü	iu	ue / eö	öa	öya
9	u	ui	ua / aö	oa	oya
0	üa	üe	üo	üö	üyö

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 **affix**: The specialized -V_X value, -**üä**, is used to indicate that the preceding -C_S consonant-form is to be interpreted as a C_A complex applied to the incorporated stem.

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

3.3.1 Glottal Stop To Indicate the End of Slot III: The last -$C_S V_X$- affix in Slot III must carry a glottal-stop to show where Slot III ends and Slot IV begins. See Sec. 1.7 (page 4) on how to add this glottal-stop to the affix. When applying a glottal-stop to the affixes in Column 5 above (Series 4 vowel-forms containing a -**y**- infix), the glottal stop is placed immediately before the -**y**- infix.

3.4 SLOT IV: C_I — the Incorporated Root

The incorporated root, C_I, is of the same format as the main root, C_R (see Sec. 3.6). By default, it is considered to be a nominal formative with BASIC Specification and ambiguous as to Function (see Sec. 3.7), 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 C_A-stacking affix in Slot III (see Sec. 3.3 above) or as an affixual adjunct.

If necessary to define particular Specification and Function for the incorporated root, use the **SFI** affix below in Slot III.

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

3.5 SLOT V: V_V — Version and Relation of Main Root, V_C vs. V_K Distinction, plus Stem of Incorporated Root

Slot V contains a vocalic affix indicating the following for the main stem: PROCESSUAL vs. COMPLETIVE Version, and four Contexts. Simple formatives also have the option of using this slot to show short-cuts to the TPP affix. For Complex Formatives, Slot V identifies the stem of the incorporated root, if present.

Slot V V_V Values for Simple Formatives

Context	Version		Optional Short-Cuts for TTP Affix Degrees 2 through 8 [1]						
			TTP/2	TTP/3	TTP/4	TTP/5	TTP/6	TTP/7	TTP/8
EXS	PRC	a	ai	ia / oä	ao	awo	ayo	a'wo	a'yo
	CPT	ä	au	iä / uä	ae	awe	aye	a'we	a'ye
FNC	PRC	e	ei	ie / oë	ea	ewa	eya	e'wa	e'ya
	CPT	i *	eu	ië / uë	eo	ewo	eyo	e'wo	e'yo
RPS	PRC	u	ui	ua / aö	oa	owa	oya	o'wa	o'ya
	CPT	ü	iu	ue / eö	öa	öwa	öya	ö'wa	ö'ya
AMG	PRC	o	oi	uo / io	oe	owe	oye	o'we	o'ye
	CPT	ö	ou	uö / iö	öe	öwe	öye	ö'we	ö'ye

Slot V V_V values for Complex Formatives

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

[1]   Columns 2 through 8 of the left-hand table are optional "short-cut" means of conveying Degrees 2 through 8 of the Type-1 TPP affix, having full scope over the formative as a whole, unless the RTI affix is present, in which case the Slot V short-cut TPP affix has the same scope as the RTI affix. These TPP short-cuts are not available for complex formatives or Short-Form formatives.

[2]   For FNC/CPT (/Stem 1): the vowel -i- is substituted for -ë- to preserve the latter for use with adjuncts.

[3]   **"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.

NOTE: Since Short-Form formatives do not have a Slot V, see Sec. 3.7 below to see how a Short-Form forative shows CPT version and non-EXS Context.

3.6 SLOT VI: 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.).

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

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

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

If the formative is a Short-Form Formative:

- To show CPT Version on a short-form formative, add a glottal stop to the vowel in Slot VII. **NOTE:** If adding a glottal stop adds a syllable (as per Rule No. 3 in Sec. 1.7), consider using the standard Simple Formative structure instead.

- To show non-EXS Context on a Short-Form Formative, use **V$_N$C$_N$-Pattern 3** in Slot XI. If this adds a syllable, consider using the standard Simple Formative structure instead.

The Four **Specifications** are explained below.

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

3.7.1 The Four Specifications:

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 psychological 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 psychological 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)

3.8 SLOT VIII: C_SV_X Affixes

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

degree	Type-1	Type-2	Type-3	Type-1 (applies to both main & incorp. stems)	Type-2 (applies to both main & incorp. stems)
1	a	ai	ia / oä	ao	ayo
2	ä	au	iä / uä	ae	aye
3	e	ei	ie / oë	ea	eya
4	ë	eu	ië / uë	eo	eyo
5	i	ëi	ëu	eë	eyë
6	ö	ou	uö / iö	öe	öye
7	o	oi	uo / io	oe	oye
8	ü	iu	ue / eö	öa	öya
9	u	ui	ua / aö	oa	oya
0	üa	üe	üo	üö	üyö

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

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

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

C_A **stacking**: The specialized -V_X value, **-üä**, is used to indicate that the preceding -C_S consonant-form is to be interpreted as a C_A complex having scope over (i.e., "stacked" upon) the Slot IX C_A complex stem of the main stem. This specialized C_A stacking affix may also be placed in Slot X instead.

Applicability to Incorporated Stem: If a Slot VIII affix is meant to apply to both an incorporated stem as well as the main stem, use the vowel-forms from columns 4 and 5 in the table (i.e., Series 4 vowel-forms, and Series 4 vowel-forms with an infixed -**y**-.

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

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

3.9 SLOT IX: The C$_A$ complex — Configuration + Extension + Affiliation + Perspective + Essence

CONFIGURATION				EXTENSION		AFFILIATION		PERSPECTIVE + ESSENCE		
UNIPLEX	**UXS SPECIFIC**		[zero]	**DEL** Delimitive	[zero]	**CSL** Consolidative	[zero]		**NRM**	**RPV**
	UPX POTENTIAL		ţ (lţ)	**PRX** Proximal	s	**ASO** Associative	t (d)[1]	**M** Monadic	[zero] (l)	ř
DUPLEX	**DPS** Similar	**DPD** Dissim.	**DPF** Fuzzy	**ICP** Incipient	š	**COA** Coalescent	k (g)[1]	**P** Polyadic	r / v[2] (r)	l (tļ)
				ATV Attenuative	f	**VAR** Variative	p (b)[1]	**N** Nomic	w (v)	m / h[3] (lm)
SEP Separate	rt	rn	řt	**GRA** Graduative	ţ			**A** Abstract	y (z)	n / ç[3] (ln)
CND Connected	rk	rň	řk	**DPL** Depletive	ç	**Values shown in parentheses are the stand-alone forms**				
FSD Fused	rp	rm	řp							
MULTIPLEX	**MPS** Similar	**MPD** Dissim.	**MPF** Fuzzy	**Allomorphic Substitutions:**						
SEP Separate	t	n	lt	ţs → z　　ts → c　　np → mb　　ňy → nz　　tt → sţ						
CND Connected	k	ň	lk	ţš → ž　　tš → č　　ňk → ng　　çy → nž　　kk → šf						
FSD Fused	p	m	lp	ţf → rf　　tt→ ḍ　　tf[C] → fs[C]　　čy → j　　pp → sf						
				tţ → rţ　　　　　　kf[C] → fš[C]　　　　　nn → nd						
				ţç → 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**.

3.9.1 Combining C$_A$ with a preceding glottal stop: For increased euphony or to avoid the need for an epenthetic vowel, a Slot VIII final glottal stop (or the Slot VII glottal stop of a CPT-versioned short-form formative) 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$_A$ consists of two or more consonants beginning with either 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 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 VIII glottal stop, the C$_A$ form is still distinguishable from a preceding Slot VIII C$_S$V$_X$ affix in that the resulting C$_A$ forms do not match any permissible Slot VIII C$_S$ form.

3.10   SLOT X: $V_X C_S$ Affixes

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

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

Slot XI contains three different patterns of a vocalic form V_N followed by a consonant form C_N. The first of these patterns uses the first four vowel-form series of the Standard Vowel Sequence to respectively indicate Valence, Phase, Level and Effect while the consonant indicates either Mood or Case-Scope (depending on the V_C/V_K distinction from Slot IV).   The second pattern uses the same four vowel-form series to show Aspect, differentiated from the first pattern by the addition of a glottal-stop before the C_N consonant. The third pattern is the same as the first, except that the C_N consonant indicates the three non-default Contexts rather than Mood/Case-Scope. This third pattern for Slot XI is used with Short-Form formative for indicating Context, since Slot V is not available.

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

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

+

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

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

For an explanation of Case-Scope, see Sec. 3.11.1 below.

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

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

MOOD	C$_N$	Case-Scope
FAC	'h	CCh
SUB	'hl	CCl
ASM	'hr	CCr
SPC	'hw	CCw
COU	'hm	CCm
HYP	'hn	CCn

+

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

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

+

CONTEXT	C$_N$
FNC	w*
RPS	'w
AMG	'y

* If V$_N$ is -**u**- or is a diphthong ending in -**u**-, then FNC -**w**- becomes -**y**-.

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

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

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

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

C_N **Case-Scope values**

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.

3.11.2 Showing both Mood and Case-Scope on a FRAMED formative: FRAMED formatives do not normally show Mood, deferring any mood information to the main verb, so that Slot XI C_N–Pattern 1 or 2 affix should be interpreted as showing Case-Scope rather than Mood. However, in certain circumstances, it may be advantageous to show both Mood and Case-Scope on a framed formative. To do so, show Mood via V_XC_S affix or an adjunct (see Sec. 4.1) or via the C_Y affix in Slot XIII (see Sec. 3.13.2).

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

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

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

Nouns and FRAMED verbs take Case, while UNFRAMED verbs take Illocution+Expectation+Validation instead (see Sec. 3.12.2 below).

3.12.1 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/situation or mental state which triggers an unwilled, affective response or is the trigger for an existential state such as possession.[2] Semantic role: STIMULUS.	that which is the affective STIMULUS of X	that of/for which X is the affective STIMULUS
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/force that initiates a chain of causal events or who induces another party to act as an agent (specifiable via the ENB affix). Also marks a force of nature acting as agent. Role: ENABLER	the ENABLER initiating an event chain leading to X	the event (chain) that the ENABLER X initiates
7	ERG	ERGATIVE	o	The animate party or inanimate force which initiates/causes an act/event which creates a tangible effect or change of state in a patient. Semantic role: AGENT or FORCE.	the AGENT who/that X's	that which the AGENT or FORCE X does/initiates
8	DAT	DATIVE	ü	The party which is the (intended) recipient of a verb of transference, transmission, or communication; the party at/to which a physically transferred entity, transmitted information, or a communicable entity is directed. Semantic role: RECIPIENT.	the RECIPIENT of X or of the act of X	that which the RECIPIENT X receives
9	IND	INDUCIVE	u	The patient who undergoes the tangible effect, impact, or change of state of an act/event initiated/caused by that self-same party. Semantic role: AGENT+PATIENT.	the AGENT who/that X's him-/her-/itself	that which the AGENT X does to him-/her-/itself

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

		APPOSITIVE CASES	V_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
		Slot II V_F form	ai			
29	TFM	TRANSFORMATIVE	ae	Identifies the outcome or final state of a process, often translatable by 'to,' 'until,' or 'into' in the sense of reaching a final state after undergoing some transformation. Examples: *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
		Slot II V_F form	au			
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
		Slot II V_F form	ei			
31	RSL	RESULTATIVE	eo	Identifies a result/consequence, translatable as 'resulting in X', 'with X as a consequence', etc.	the result/consequence of which, X occurs/is	that which results from or is a consequence of X
		Slot II V_F form	eu			
32	CSM	CONSUMPTIVE	eë	Identifies the entity consumed or used as a resource as a result of, or as a concurrent part of a process, e.g., *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
		Slot II V_F form	ëi			
33	CON	CONCESSIVE	öe	identifies a noun or phrase which gives rise to an implicitly expected result which does not occur. This translates in many ways such as 'despite,' 'in spite of,' 'notwithstanding,' 'although,' 'regardless of,' 'no matter what,' etc. Examples: ***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	a'a	entity identified as the location of X or where X occurs; 'at / in / on / by X'	where X occurs/is (situated); X's location	that which is located, situated, or occurring at X
		Slot II **V_F** form	i			
38	ATD	ATTENDANT	ä'ä	entity in whose presence something is/occurs	that in whose presence which, X is/occurs	that which is situated or occurring in X's presence
39	ALL	ALLATIVE	e'e	entity toward which another entity is moving/approaching	where X is headed/going toward	that which is headed toward X
40	ABL	ABLATIVE	ë'ë	entity away from which another entity is moving/receding	where X is coming from or moving away from	that which is coming from or moving away from X
41	ORI	ORIENTATIVE	i'i	entity (often a body part or sub-component) which serves as the "face" or surface or "front" or "head" of an entity in terms of external communication or interaction, or which serves as the forward "end" of a spatially orientated axis aligned to a vector of motion in terms of directional movement.	that which serves as X's orientational interface	that which is oriented, facing in the direction designated by X
42	IRL	INTERRELATIVE	ö'ö	signifies the directional/temporal orientation or position of an entity relative to another, i.e., a noun relative to whose position in space or time another noun is being described for purposes of spatial/temporal orientation, e.g., *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	o'o	Identifies a noun as being the spatio-temporal boundary point of a span or volume of space or a period of time, i.e, either the starting point or the ending point of a span of time or space. English translations include: 'as of X' / 'since X' /'until X'; for spatial contexts, translates as "between there and here" / "between here and there")	the place/time since/until/between which, X is/occurs	that which occurs since, until, or between the place(s)/time(s) designated by X
44	NAV	NAVIGATIVE	u'u *	entity whose literal or metaphorically inferred long axis serves as the direction of another entity's path, course, arc, or trajectory of translative motion	that which serves as X's directional trajectory, path or way	that which is traveling along the directional trajectory, path or way designated by X

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

SPATIO-TEMPORAL II			V_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
		Slot II V_F form	iu			
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
		Slot II **V_F** form	a			
54	ASI	ASSIMILATIVE	i'ä	Identifies a formative used as a context for analogy or metaphorical comparison to another formative; translatable as 'as/like' meaning 'as if (it were) X' in the sense of comparison or analogy between one thing and another that it is not, e.g., *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
		Slot II **V_F** form	ä			
55	ESS	ESSIVE	i'e	Identifies the role or name by which an entity is known or contextually identified. It translates English 'as/like' in the sense of naming or reference to the an entity's functional identity, e.g., *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
		Slot II **V_F** form	e			
56	COR	CORRELATIVE	i'ë	Indicates an abstract general relationship, association, or conjunction between one formative and another, including subjective, contextual, metaphorical, or symbolic associations. It translates general phrases such as 'relative to,' 'in relation to,' 'in correlation with,' 'in association with,' e.g., **career** goals, the soup o**f 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
		Slot II **V_F** form	ë			
57	CPS	COMPOSITIVE	ë'u	identifies a noun as being the literal or figurative substance or component(s) of which another is made, composed, formed, built or comprised. Example of usage would be *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
		Slot II **V_F** form	ëu			
58	COM	COMITATIVE	u'ö	Identifies a formative that accompanies another, translatable as '(along) with'. When used with PARALLEL or COMPLEMENTARY valence, signifies that the formative is being used in the same (or a complementary) way or is undergoing the same (or a complementary) activity as the other formative it is associated with (i.e., the meaning of the CONJUNCTIVE case in Ithkuil 2011).	that which accompanies X	that which X accompanies
		Slot II **V_F** form	ö			
59	UTL	UTILITATIVE	u'o	Identifies a formative in the process of being used while some other activity or state is in progress. It does not imply the INSTRUMENT of an act as does the instrumental case. Examples: *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
		Slot II **V_F** form	o			
60	RLT	RELATIVE	u'a	Identifies a formative (or case-frame) as constituting a relative clause associated with the preceding formative (or whatever formative is indicated by the DCD affix as being the head of the relative clause).	that which identifies or distinguishes X from other parties	the party identified by or distinguishable by X
		Slot II **V_F** form	u			

RELATIONAL CASES II			V_C	DESCRIPTION	case-accessor affix Type-1 = **-ll**; Type-2 = **-rr**	inverse accessor affix Type-1 = **-lw**; Type-2 = **-ly**
61	ACT	ACTIVATIVE	*a'o*	Identifies the EXPERIENCER of a modal state, such as obligation, necessity, desire, hope, expectation, wishing, being able to, etc. functioning as the "subject" of a modal(ized) verb governing a hypothetical state (i.e., what is wanted, needed, expected, able to be done, etc.)	the one who experiences a modal state of X	The modal state which X experiences
		Slot II **V**_F form	ui			
62	DSC	DESCRIPTIVE	*a'e*	Identifies a formative as describing another formative in an adjectival manner, translatable as 'characterized/describable as being like X; characterized/describable as having the quality/qualities of X'	that which is characterized or describable by/as X	that which characterizes or functions as a description for X
		Slot II **V**_F form	oi			
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;
		Slot II **V**_F form	ou			
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.

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

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

3.12.2.1   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.

3.12.2.2   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:

	EXPECTATION (i.e., what kind of response speaker desires from the addressee)		
ILLOCUTION	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.

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

ASR	ASSERTIVE Illocution		COG	RSP	EXE
OBS	OBSERVATIONAL	present sensory knowledge or present sensory experience: "I perceive… / I know…"	(á)	ái	iá / oâ
REC	RECOLLECTIVE	past sensory knowledge or past sensory experience – "I remember… / I know (from memory)…"	â	áu	iâ / uâ
PUP	PURPORTIVE	knowledge from a definitive/(quasi-)verifiable 3rd party source: "I've read… / (an expert) has said…"	é	éi	ié / oê
RPR	REPORTIVE	knowledge from a 3rd party: "I heard (from someone)… / someone has said…"	ê	éu	iê / uê
CVN	CONVENTIONAL	cultural/conventional (i.e., collectively agreed-upon) knowledge: "They say… / It is said…"	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…"	ô	óu	uô / iô
ITU	INTUITIVE	conclusion based on intuition, hunch, subjective feeling, past experiences, etc. – "I feel… / I have a hunch… / something tells me…"	ó	ói	uó / ió
IMA	IMAGINARY	unreal statement, not intended as true, based on whim, imagination, subjective revelation, dream, altered state, etc.	û	íu	ué / eô

PFM	PERFORMATIVE Illocution	ú	úi	uá / aô

3.13 Slot XIII: 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. 3.11 and 3.11.1). To prevent the Slot XII+XIII vowel+consonant form from being mistaken for a $V_X C_S$ affix, the C_B or C_Y affix must be immediately preceded a glottal stop unless (1) the Slot XI C_N increment contains a glottal-stop, or (2) the Slot XII **Vc/V$_K$** form contains a glottal-stop. Due to the potential for ambiguity with Slot IX C_A forms, use of a C_B Bias affix in Slot XIII requires that Slot XI and XII be filled. C_Y Mood/Case-Scope affixes do not match any C_A forms and therefore do not require Slot XI and XII to be filled.

3.13.1 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 XIII suffixes or autonomous adjuncts, they may be pronounced in an artificially prolonged fashion. Additionally, those Bias forms that end in a voiceless stop or voiceless affricate may aspirate or even 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!'*	PSC	PROSAIC	žžt	*'Meh... (said in disappointment)' 'How ordinary!'*
SKP	SKEPTICAL	rnž	*'Yeah, right!' 'Oh, sure! Like anyone's supposed to believe that!'*	CMD	COMEDIC	pḷḷ	*'Funny!' 'LOL'*
IPT	IMPATIENT	žžv	*'C'mon!,' 'What're you waiting for?' 'so…already!'* as in the sentence *'So dance already!'*	PPV	PROPOSITIVE	sl	*'what if…' 'It could be that….' 'Consider this: …' 'Posit the following: …' 'Assume for the sake of argument that….'*
RVL	REVELATIVE	mmḷ	*'No wonder…!'* or *'So that's why…!' 'A-ha!….' 'Well, well, well!….'*	SGS	SUGGESTIVE	ltç	*'How about...' 'We could...' 'Might I suggest...'*
TRP	TREPIDATIVE	llč	*'Oh, God…' 'Oh, no!….' 'Oh, dear!'* [fear-based]	DFD	DIFFIDENT	cč	*'sorry, but…' 'It's nothing. It's just…'*
RPU	REPULSIVE	šštḷ	*'Yuck! Ew! How gross!'*	RFL	REFLECTIVE	rrc	*'Look at it this way…' 'As I see it,…' 'In my opinion,…'* or *'From my point of view,….'*
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...'*	EUP	EUPHEMISTIC	vvt	*'Let's just say that….'* or *'Well, let me put it this way….'*
DPB	DISAPPROBATIVE	ffx	*'I don't like the fact that…' 'It bothers me that….' 'Unacceptable!' 'I hate it!'*	CRR	CORRECTIVE	ňṭ	*'that is to say…,' 'What I mean(t) to say is…' 'I mean….'*
CTP	CONTEMPTIVE	kšš	*'What nonsense!'* or *'What bullshit!'*	APB	APPROBATIVE	řs	*'(That's) OK' '(That's) alright' '(That's) good' '(That's) fine' 'Very well' 'Sure'*
EXA	EXASPERATIVE	kçç	*'Dammit!' 'Look, don't you get it?...' 'Look, I'm trying to tell you….'*	IRO	IRONIC	mmž	*'Oh, nice!' 'Just great!' 'Well, now, isn't this lovely!'*
IDG	INDIGNATIVE	pšš	*'The nerve!'* or *'How dare…!?"*	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,….'*
DIS	DISMISSIVE	kff	*'Is that it?' 'Big deal!' 'So what!?'*	GRT	GRATIFICATIVE	mmh	*'Ah! What bliss...!' 'Oh, there's nothing like….'* [physical pleasure only]
DRS	DERISIVE	pfc	*'How foolish!' 'How silly!' 'Look at how foolish/silly/ridiculous this is!'*	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.

3.13.2 C_Y — Alternate indication of Mood/Case-Scope in Slot XIII: Rather than showing Bias, Slot XIII may instead be used as an alternative way to indicate Mood or Case-Scope (see Secs. 3.11 and 3.11.1). This shortens a word by one syllable if Slot X would otherwise be empty (i.e., Valence+Mood/Case-Scope is MNO/FAC or MNO/CCh, there is no Aspect or Level, and Phase, Level, and Effect are all default/neutral and zero-marked) and Slot IX C_A is not default -**l**-.

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

The six C_Y suffixes are distinct from any C_B Bias suffixes, and are not pronounced with prolonged gemination. They are also distinct from any possible Slot IX 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 XII already contains a glottal-stop. For Slot XII V_K forms, the glottal stop may be placed between the two vowels of a diphthong, or if a single vowel, the vowel may be doubled and the glottal-stop placed between. Unlike C_B Bias affixes, the use of a C_Y suffix in Slot XIII does not require that Slots XI and XII be filled.

NOTE: As stated previously in Sec. 3.11.2, it is possible to show both Mood and Case-Scope separately on a framed formative. If utilizing both Slots XI (Patterns 1 or 2) and the C_Y affix in Slot XIII to do so, then the C_N increment of Slot XI shall indicate Case-Scope, while the C_Y affix in Slot XIII shows Mood.

3.14   Slot XIV: Syllabic Stress — Relation plus V_C / V_K Distinction

penultimate stress	UNFRAMED Relation + V_C
ultimate stress	UNFRAMED Relation + V_K
antepenultimate stress	FRAMED Relation + V_C

If a word does not have sufficient syllables to take antepenultimate stress, add syllables by filling Slots V and/or Slots XI and XII with their default vowels.

NOTE: monosyllabic words are considered morphologically to have penultimate stress.

4.0 ADJUNCTS

There are several types of adjuncts: a modular adjunct which functions like multiple iterations of formative Slot XI, an affix-scoping adjunct which gives detailed V_XC_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, and Mood/Case-Scope)

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 XI. 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-FAC/CCh** Valence+Mood/Case-Scope is zero-marked in Slot 2.

1	2	3	4	5
' or **w/y**	**Mood/Case-Scope + Valence/Phase/Level/Effect OR Aspect + Mood/Case-Scope**	**[same as Column 2]**	**[same as Column 2]**	**Aspect** or **Valence/Phase/Level/Effect**
Default = glottal-stop (unwritten); if adjunct applies to an incorpated stem, insert a **w**- or **y**- prefix	$(V_N C_N)$	$(V_N C_N)$	$(V_N C_N)$	V_N
	C_N = **h /hl / hr / hw / hm / hn** For Aspect: C_N = **'h / 'hl / 'hr / 'hw / 'hm / 'hn**			If only Slots 1 and 5 are filled, then Slot 5 = **Aspect**; If any of Slots 2, 3, or 4 are filled & stress is penultimate, then Slot 5 = **Valence** or **Phase** or **Level** or **Effect**; If any of Slots 2, 3, or 4 are filled & 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_XC_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-Affix 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 VIII affixes (i.e., as if it were the last affix in Slot VIII) **u** = affix applies to stem only (not to its **C$_A$**) and is subordinate to all Slot VIII affixes (i.e., as if it were the first affix in Slot VIII) **e** = affix applies to both Stem and **C$_A$** and has scope over all Slot X affixes (i.e., as if it were the last affix in Slot X) **i** = affix applies to both Stem and **C$_A$** and is subordinate to all Slot X affixes (i.e., as if it were the first affix in Slot X) **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	Penultimate stress = default Ultimate stress = affix applies to incorporated stem only

4.4 Affix-Scoping Adjunct

This adjunct associates two or more affixes to a formative. The tell-tale sign is that the second consonant-form will consist of -**h**-, or a non-root consonant (**h, w, y, hw, hl**, or **hr**) preceded by a glottal-stop. Examples: *dohast, stei'yaikra, ëjgi'woftôm, via'hlobrigli*. **NOTE:** Case-assessor affixes cannot appear in initial position in this adjunct — if necessary, show the case-assessor affix in a separate single-affix adjunct.

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

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. The last word of the foreign phrase or proper name can be indicated by the adjunct form **hü** if necessary, or by pronouncing that word/name with low tone.

ç	V_C
	Same as Formative Slot XII

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

Examples: *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 XII

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

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

4.8 Personal Reference Adjuncts

There are thirteen personal reference categories, each distinguishing three Effects (see Sec. 3.11, the bottom of 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	ḍ	"it"
pi	polyadic inanimate 3rd party	tļ	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	çn / nç *	çm / mç *	çň / ňç *	"something" "a thing" "things"
Nai	Nomic animate or inanimate	çl / lç *	çr / rç *	çř / 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

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

4.8.1 Single-referent or Dual-referent personal reference adjunct

1	2	3	4	5
$C_1 ((ë) C_1)$	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 Slot 4 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(ëC)-V** or **C(ëC)-V-w/y-V-C** structure which is unlike any other word-form (Formative Slot VII 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 4 if necessary for phonotactic purposes.   A second case may be stacked on Referent A by filling in Slot 3 but leaving Slot 4 empty.

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

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

4.8.2 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 roots 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 V		from formative Slot XII	**bz** = BSC **gz** = CTE **bž** = CSV **gž** = OBJ	V_XC_S suffix 1 (2, 3, ...)	same affixes as formative Slot XII	

4.8.3 The Two Personal Reference Roots: -N- .and -D- .

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

-N- '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 -**N**-:

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

4.9   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'

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

-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)

[Due to the recent elimination of Designation as a morphological category in the language, former Sections 5.3 and 5.4 of this document have been removed for revision pending the necessary restructuring of various roots and stems, including the carrier root.]