TENTATIVE MORPHO-PHONOLOGICAL DESIGN FOR A NEW LANGUAGE BASED ON ITHKUIL (Version 0.6^{*}, Jan. 19, 2019) by John Q.

This document updates the previous version 0.4.1 from December 27, 2018. This new (as-yet-unnamed) language is being created to preserve Ithkuil's general morphology and lexico-semantic principles, while drastically altering the morpho-phonology to be more agglutinative, systematic, and modular—all to facilitate greater ease-of-learning in comparison to Ithkuil. Additionally, this new language will address various flaws, ambiguities, gaps, and other issues in Ithkuil's design as observed and noted by astute fans. The Ithkuil lexicon will also be rethought and restructured to (hopefully) allow for greater systematization and design consistency. Note that this document pre-supposes familiarity on the part of the reader with existing Ithkuil grammar.

1.0 INTRODUCTION

Due to the recent online discussions regarding the need to establish a set hierarchical scoping order for the application of morphological categories to a formative, the changes in this current version of the document compared to version 0.4.1 are significant:

- The slot structure of the formative has been radically revised to reflect the new hierarchical scoping order (i.e., the sequential order of appearance of morphemes within a formative now follows fairly closely the order of the new scoping hierarchy). As a result, the morpho-phonological manifestation of several morphological categories has been changed compared to previous versions of this document. Adjuncts have also had to be redesigned.
- Incorporated stems now come in two types which parallel the distinction in $V_x C_s$ affix types: Type 1 incorporated stems function as in Ithkuil, essentially as mere shortcuts for a case-frame. The new Type 2 incorporated stems, however, are lexicalizing, i.e., the resulting compound word constitutes a new lexico-semantic unit in the language similar to the English lexical units "polar bear" or "elephant seal", referring to distinct entities other than those named by their individual component lexemes. This should (hopefully) go a long way toward obviating the need for extensive derivatives using Ithkuil's SSD affix.
- The new ordering of structural slots for formatives allows a separate slot for $V_X C_S$ affixes that apply to the stem only vs. those applied to the stem and its C_A complex (Configuration, Affiliation, Extension, Perspective and Essence). As a result the expansion of $V_X C_S$ affix types from three to six, seen in previous versions of this document, will no longer be necessary. Also: new scoping rules are given for $V_X C_S$ affixes appearing in adjuncts.
- ASCRIPTIVE and IMPLICATIVE moods are eliminated; their equivalents can be accomplished using INFERENTIAL illocution in conjunction with whichever of the remaining six moods best describes the factuality of the assumption on which the inference is based and of the statement itself.
- Illocution and Sanction are now shown only on the main (UNFRAMED) verbal formative of a sentence, its scope applying to the sentence as a whole. They are now mutual exclusive to Case, which is not applicable to UNFRAMED verbs.
- The new Illocution+Sanction Slot is structured to allow the reintroduction of word-final Ithkuil-style Bias suffixes.
- The first assigned roots and suffixes are given.

The general differences in the new language as compared to Ithkuil are detailed in the pages that follow.

^{*} This document differs significantly from the recently posted "preview of version 0.5" document; therefore, I have numbered it v.0.6; version 0.5 will not be released.

1.1 PHONOLOGY

	LABI	AL	LABIO-	DENTAL	INTER-	ALVEOLAR	ALVEOLO-	PALATAL	VELAR	PHARYNGEAL		FRO	NT	CENT	RAL	BAC	ск
			DENTAL		DENTAL		PALATAL					unrounded	rounded	unrounded	rounded	unrounded	rounded
STOP	р	b		t d					k g	,	HIGH	i	ü				u
AFFRICATE						СŻ	čj					1	ŭ				G
FRICATIVE			f v		ţ, ġ*	s z	šž	Ç	Х	h	MID	e	ö			ë	0
NASAL	m	l		n					ň								
LIQUID				1		r					LOW			а		ä	i
APPROXI- MANT	W	r						у									

1.1.1 Phonemic Inventory: 29 consonants and 9 vowels shown below in romanized orthography by place and manner of articulation.

* Optionally, the voiced interdental fricative may be represented by a crossed-d (D/d) or by means of an underposed dot.

Four Ithkuil vowels and 16 consonants have been eliminated:

The vowels -ê-, -î-, -ô-, and -û- are eliminated; the vowels -e-, -i-, -o-, -u- will now have free variation in their pronunciation: [ε] ~ [e], [I] ~ [i], [ɔ] ~ [o], and [υ] ~ [u]. As the initial member of a disyllabic vocalic conjunct, as well as in word-final position, each of these four vowels takes its more closed pronunciation; thus, for example, the conjuncts -ea-, -ia-, -oa-, and -ua- are pronounced [ea, ia, oa, ua], not [εa, ia, oa, υa].

As for the remaining vowels, -**a**- is pronounced [a], -**ä**- as either [a] or [b], -**ö**- as [α] or [β], -**ü**- as [y] or [**u**], and -**ë**- as [x] or [β] except in unstressed word-final position where the author recommends -**ë**- be pronounced allophonically as [**u**] to better differentiate it from unstressed word-final -**a**.

- All aspirated, ejective, and uvular consonants are eliminated as phonemes. The fricative -x- may be pronounced with either velar or uvular articulation
 [x] ~ [χ].
- The lateral fricative -1- is eliminated as a phoneme. The sound [1] will exist as an allophone of word-initial hl- (in free variation with voiceless [1]).

1.1.2 Orthographic changes: The Ithkuil vowel -**â**- will now be written -**ä**- to be consistent with the other vowels having diacritics. This in turn renders the circumflex accent available for use as a syllabic-stress indicator, as explained in the next paragraph.

The rules for showing syllabic stress have been simplified. A stressed vowel carrying no diacritic takes the acute accent. A stressed vowel carrying a diaeresis diacritic, changes the diaeresis to a circumflex accent (e.g., $\ddot{o} \rightarrow \hat{o}$). The grave accent is now used only on the second character of a disyllabic vowel conjunct to distinguish the conjunct from a diphthong (e.g., $-a\dot{u}$ -); this grave accent changes to acute if the second vowel of the conjunct is stressed.

1.1.3 Phonotactics: The vowel $-\ddot{\mathbf{e}} - [\imath \sim \vartheta]$, is now permitted in word final position, where, as stated above, it should be pronounced [u] to better differentiate it from $-\mathbf{a}$ - in this position. Phonemic distribution of the consonant $-\check{\mathbf{n}}$ - will now be limited in that this sound [ŋ] will now be the standard allophonic pronunciation of the phoneme $-\mathbf{n}$ - prior to velar consonants. Consequently, phonemic $-\check{\mathbf{n}}$ - will not be permitted immediately preceding velar consonants. The diphthongs $-\breve{\mathbf{o}}$ - and $-\breve{\mathbf{o}}$ - have been eliminated (although their disyllabic counterparts $-\breve{\mathbf{o}}$ - and $-\breve{\mathbf{o}}$).

The unstressed conjunct i+V (e.g., -ia, -io, etc.), when preceded by a consonant, must be pronounced with an initial long /i:/ in order to distinguish such syllables from syllables of the form Cy+V (e.g., *káresya* vs. *káresia*, *véţkyo* vs. *véţkio*, *heskojyorú* vs. *heskojiorú*). Such words will be spelled with a diaeresis accent over the -i- as an orthographic reminder of the /i:/ pronunciation. Thus, e.g., *káresïa*, *véţkö*, *heskojiorú*.

1.1.4 Tone: Tone is eliminated as a phonological process. Tone will still be used optionally in two circumstances: (1) like most Western languages, rising tone can be used as a substitute for showing INTERROGATIVE illocution, and (2) as English uses low tone to demarcate independent relative clauses, low tone can optionally be used in this new language to demarcate single (non-nested) register clauses (in which case an end-of-register adjunct becomes unnecessary).

1.2 MORPHO-PHONOLOGY

1.2.1 Grammatical Typology: Mostly agglutinative; synthetic (portmanteau) affixes still operate in some slots of formatives, although the phonological structure of these suffixes is highly patterned (thus facilitating memorization).

1.2.2 Parsability / Self-Segregating Morphology: Since Tone is no longer available as a means of creating a self-segregating morphology (i.e., what allows a listener to parse the word boundaries within a spoken passage), parsability rules now involve phonotactic constraints on the glottal-stop and consonant -h-, as well as rules relating to word-stress, and rules determining when formative Slots I and II can or cannot be elided. See Sections 1.7 and 1.7.1 below for details.

1.2.3 Ordering and Prominence of Morphological Categories within a Formative: The ordering of Slots within a Formative has been drastically revised to reflect a newly established hierarchical scoping order, i.e., the order in which individual morphological categories are applied to a formative (with each category's semantic contribution to the formative "subsumed" under the meaning of the next category applied). Such a set order for applying morphemes within a formative will prevent various ambiguities from arising when translating highly-inflected formatives in the language.

1.2.4 Pattern has been eliminated from root/stem lexical morphology. Roots now have only three stems. The various lexico-semantic derivations/associations previously indicated by Pattern 2 and 3 stems will instead be handled by the new **Specification** category.

1.2.5 $-V_xC_s$ affixes now indicate (by means of which slot they are in) whether they apply to the stem *and* its C_A information, or to the stem only. Sequential ordering of suffixes is now relevant.

1.2.6 Assigning the First $V_x C_s$ Slot to an Incorporated Stem: Formatives will now be able to delineate whether the affixes within the first $V_x C_s$ slot apply to the main stem or to an incorporated stem.

1.2.7 The C_A complex as a $V_X C_S$ affix: In addition to having a dedicated slot within a formative, the C_A complex can now be used as a $V_X C_S$ affix (utilizing a special V_X value to be able to recognize it as such). This will allow "stacking" of C_A information onto a formative. When used in conjunction with the rule in Sec. 1.2.6 immediately above, it will now be possible to assign C_A information to an incorporated stem within a formative.

1.2.8 Modularity of Certain Formative Slots: One formative slot and several slots within certainadjuncts ares now "modular", where affixes associated with different morphological categories (e.g., Phase, Level, Effect, Aspect) can be placed in the slot. This allows formatives and adjunct to be more morphosemantically "customized".

1.2.9 Portability of affixes between Formatives and Adjuncts: Adjuncts now operate mostly in a modular fashion to allow a speaker to piece together the adjunct in a customized fashion from the same affixes used within formatives. No more having to memorize a separate set of affixes for a given category depending on whether it is used in a formative versus an adjunct.

1.2.10 Personal-Reference Adjuncts: The number of personal-reference adjuncts is reduced from Ithkuil's 44 to twelve. Those adjuncts which were combinations of two or more basic adjuncts are eliminated. Instead, the 12 basic adjuncts will combine modularly to allow such combination adjuncts to be transparent. A full personal-reference root now exists, eliminating the need for all but the most simple forms of personal-reference adjuncts.

1.3 MORPHOLOGY

1.3.1 Modality has been removed as formative category; the various modalities are now simple $-V_XC_S$ suffixes (which can also be used as affixual adjuncts).

1.3.2 Specification is a new category of nine semantic derivations available for each stem, as needed. They are a systematic replacement to Pattern in Ithkuil.

1.3.3 Illocution, Validation and Sanction: The logical incongruities between these categories have been eliminated by subsuming five Ithkuil validations under the category of Illocution. Additionally, a speaker can now choose to mark evidential provenance of a statement as UNSPECIFIED. Illocution and Sanction now operate mutually exclusive to Case.

1.3.4 Case: The 24 Comparison cases have been eliminated. A formative in a "...than X" comparison will now be declined in the COMPARATIVE case in conjunction with a new set of suffixes equivalent to the 24 comparison cases from Ithkuil. Twelve Ithkuil noun cases have been eliminated or consolidated and there are a twelve new cases, including cases for adjectival association, a case allowing for simple relative clauses, a "since X / until X" case, a "spatially relative to" case, a case identifying the semantic role of GOAL, a "whether or not" case, and several cases created out of Ithkuil's Format category.

1.3.5 Format: The category of Format for incorporated stems has changed. Formats are now based solely on noun-cases and take the same vocalic markers.

1.3.6 Effect is a new category showing whether an utterance is considered by the speaker to be beneficial or detrimental and to which party or parties.

1.3.7 Mood: IMPLICATIVE and ASCRIPTIVE moods are eliminated. Instead, use INFERENTIAL illocution plus any mood appropriate to the semantic context.

1.4 LEXICO-SEMANTICS

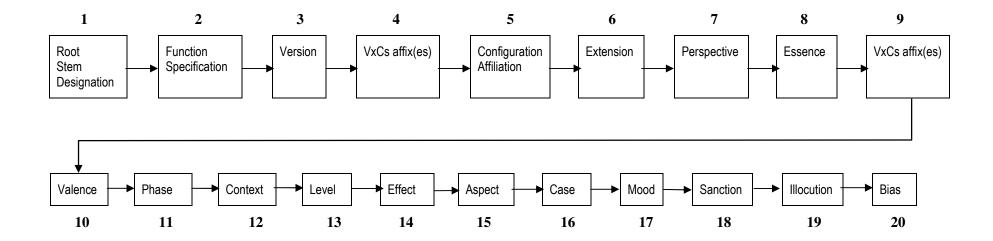
The basic meaning of a STATIVE verbal formative based on an intrinsic noun will be 'there is/be (an) X'. The basic meaning of a nominal formative based on an verbal concept will be 'an instance of X-ing'. All semantic derivation there from will be accomplished morphologically via case-marking of associated arguments, affixes, and assignment of Function and the new category of Specification. This will allow for greater semantic consistency for formatives.

1.5 LEXICON

The morpho-lexical structure of the lexicon is being simplified as described above via the elimination of Pattern. The assignment of lexical roots and stems will be rethought from scratch, hopefully resulting in a more systematic and consistent pattern of lexemes and their derivatives, with less reliance on arbitrary SSD-suffix derivatives. The phonology of the new language allows for over 8000 mono-consonantal to hexa-consonantal roots.

1.6 HIERARCHY OF SCOPE FOR THE APPLICATION OF MORPHEMES

The Slot structure of formatives has been completely redesigned compared to previous versions of this document. This is so that the linear sequence of slots will more or less reflect the following hierarchy of morphemes within a formative, i.e., the order in which each morpheme's semantic information should be applied to the preceding morphology as the word sequentially unfolds in speech or writing.



Applying the above sequence to the structure of the formative yields the new structure shown on the next page. The sequencing mostly follows the above order.

I	II	III	IV	v	VI	VII	VIII	IX	x	XI	XII	XIII	XIV	xv
' / h	V _R	C _R	(V _I C _I	V _F (')) ated stem	((w/y)V _V)	(C _s V _x ')	C _A	(V _x C _s)	(V _N	(V _P / V _L / V _E / V _T)	'С _м)	V_c / (V_K	(C _B))	stress ²
Desig- nation	Specification + Function + Stem of main root	main Root	Specifica- tion +Function + Stem + incorp. root	Format of inc. stem	Version of main stem + incorp. type + delineation ¹	VxCs affixes (in reversed format)	Config + Affil + Extens.+ Perspec- tive + Essence	VxCs affixes	Valence	Phase or Level or Effect or Aspect	Mood [zero] / 1 (-x-) -ç- -cż- -čj-	Case or Illocution + Sanction	Bias	Context
' / h for inc. stems: hl hr hm hr	if Slot I is ', & there is no incorp stem, & Context is EXS, delete Slots I & II, move V _R to Slot VI and show CPT version via glottal stop after V _R [see "short form" structure below]		V _I is same vowel forms as V _R in Slot II	same as Vc infix from Slot XIV glottal stop shows Type 2 incorpora- tion	also shows: Version of incorp stem x 2 Delinea- tions ¹ preceded by w- / y- if Slots III & IV filled (i.e., if incorp. stem present)	apply only to main stem (or only to incorp stem as per delineation in Slot VI) glottal stop after last Vx	[It's BAAA- AACK!]	apply to all main stem + C _A	12 vowel forms	Modular Slot forms must have initial w- or y-	if Slots VIII thru XI have their default values, any non-zero C _M goes in Slot VIII instead w/o initial glottal stop	vocalic infix	can only appear after a V _K infix in Slot XIII	word- initial ultimate penult- imate antepen- ultimate

1.6.1 MORPHO-PHONOLOGICAL STRUCTURE OF A FORMATIVE

¹ Delineation is not a new morphological category; it is merely an indicator as to whether the Slot VII $V_x C_s$ affixes apply to the main stem or to the incorp. stem.

² For words with penultimate or antepenultimate stress, a minimum of 3 syllables is required to distinguish them from word-initial stress (4 syllables for antepenultimate stress). **Two- or three-syllable words with stress on the first syllable are to be interpreted as having word-initial stress, not penultimate or antepenultimate stress**. To show penultimate or antepenultimate or antepenultimate stress in words having 2 (or 3) syllables or less, the necessary syllable(s) must be added by showing optional default values in any appropriate syllabic slot(s).

"Short-Form" Formative Structure — for formatives with INF Designation, word-initial stress (i.e., EXS Context), and no incorporated stem

I	II	ш	IV	v	VI	VII	VIII	IX	х	XI	XII	XIII	XIV	xv
		C _R			V _R (') [moved from Slot II]									stress = word-
_	_	main Root	_	_	Specification + Function + Stem of main root add glottal stop to show CPT version			Slots V	'll through)	KIV same as	above			initial stress

The Slot structure of simple formatives is significantly different than that of Ithkuil formatives. Slot XI is modular, in that one has a choice as to which of four morphological categories to display in the slot. This modularity allows one to somewhat "customize" a formative in terms of which morphological categories are displayed while maintaining morpho-phonological conciseness, thus reducing reliance on adjuncts.

1.7 A SELF-SEGREGATING MORPHOLOGY

Due to the absence of tone as in Ithkuil, this new language utilizes the glottal stop, consonant -h-, and syllabic stress to establish a self-segregating morphology (so a listener can parse word boundaries). This often requires Slots I and II to be filled, with default information if necessary, in order to comply with the language's new parsing rules.

The following phonotactic, morpho-lexical, and phono-syntactic requirements establish a self-segregating morphology for this language:

- All words contain one stressed syllable; any other syllables of the same word are unstressed (i.e., there is no secondary stress in a word).
- The consonant -h- occurs only in word-initial position. It may be followed by any vocalic-form (i.e., a vowel or diphthong), or may appear as the first member of the following consonant-forms: hl-, hr-, hm-, hn-, or hw-, these being followed by a vocalic-form.
- The glottal stop (') cannot occur inter-vocalically (i.e., between two vowels). It can only occur in word-initial position followed by a vowel ('V-), or in syllable-final position preceded by a vowel and followed by a consonant (-V'C-). It cannot appear in word-final position.
- No word begins with a vowel. All words seeming to begin with a vowel are preceded by an unwritten glottal stop. Learners should remain consciously aware of this word-initial glottal stop, as its pronunciation is crucial for parsing purposes. At the same time, speakers must take care **not** to insert a glottal stop into the middle of disyllabic vocalic conjuncts such as **-ea-**, **-oa-**, **-ae-**, etc. (i.e., do not pronounce them as **-e'a-**, **-o'a-**, **-a'e-**).
- If a word does not have word-initial stress, it must begin with a glottal-stop '- or h- (i.e., Slots I and II must be filled), unless it is at the start of a natural breath-group and Slots I and II needn't otherwise be filled.

1.7.1 Parsing Rules

Parsing rules allow a listener to know the word boundaries within a spoken passage. The above requirements allow the following rules to be established:

- The start of a natural breath-group signals the start of a new word.
- Any syllable beginning with a glottal-stop or **h** signals the beginning of a new word (e.g., 'V-, hV-, hl-, hr-, hm-, or hw-)
- The first stressed syllable following a word-initial 'V- or h- (which may be the very same syllable containing the 'V- or h-) constitutes the stressed syllable for that word. If another stressed syllable subsequently occurs without an intervening 'V- or h-, then this second stressed syllable signals the beginning of the next word.

2.1 SLOT I: C_D — Designation of Main Stem (+ Designation of Incorporated Stem)

In conformance to the new mandate to present morphemes more or less in order of application, Designation is now moved into Slot I. The slot shows Designation values for both the main stem and any incorporated stem as well (i.e., Slot I no longer mandatorily indicates the presence of an incorporated stem).

C _D Designation	prefixes	No incorp. stem	incorp. stem has INF Designation	Incorp. Stem has FRM Designation	* The glottal stop is pronounced but is unwritten.
Designation of	INF	*	hl	hm	If Slot I contains the glottal-stop, Slot II is - a -, and stress is word-initial (i.e., Context is Exs), then both
Main Stem	FRM	h	hr	hn	Slots I and II can be elided.

2.2 SLOT II: V_R — Function × Stem × Specification

Ithkuil's notion of Pattern has been eliminated. Each root now has only six associated stems (three for each of the two Designations). The notion of complementary stems derived from a holistic stem, mandatory in Ithkuil, will now be applicable on a case-by-case basis depending on the semantics of the root.

V _R Iı	nfixes	STE	CM 1	STE	M 2	ST	EM 3	The MANIFESTIVE and DESCRIPTIVE functions of Ithkuil are being eliminated, as is the
		STA	DYN	STA	DYN	STA	DYN	INCHOATIVE function from the previous version 0.2.1 of this document. Their equivalents in this new language are described below:
	BASIC	(a)	ai	ia / aì	ao	ae	ayu	• The "X is Y" copular function of the Ithkuil MANIFESTIVE will be handled by an
	CONTENT	e	ei	ie / eì	eo	eë	eyu	"X-STATIVE Y-RELATIVE" formula, utilizing the new RELATIVE case "which is X" described on Page 18 below, rendering phrases literally translatable as "there
z	CONSTITUTIVE	0	oi	io / oì	oa	oë	oyu	is X, which is Y." The new copular root may also be used (see Page 43).
SPECIFICATION	OBJECTIVE	u	ui	iö / öì	oe	uë	uyu	Ithkuil's DESCRIPTIVE function is now a new noun-case (see Page 18).
ICA	FACILITATIVE	i	ëi	ië / ëì	ea	ëu	iwi	• The INCHOATIVE "become X / turn into X" meaning can be handled by either:
CIE	FOUNDATIONAL	ü	iu	uö / öù	öe	üö	uwi	1. INCEPTIVE + new RELATIVE case ("which begins to (be/do) X")
SPE	INTENTIVE	ö	ou	uo / où	öa	üo	owi	 arranging the sentence to utilize a TRANSFORMATIVE case-frame the SCT suffix
	EXPERIENTIAL	ë	eu	ue / eù	eö	üe	ewi	4. (for Simple Formatives) by incorporating a stem with TRANSFORMATIVE
	PREREQUISITIVE	ä	au	ua / aù	aö	üa	awi	format into the stem "transform into".

NOTE: "Short-Form" formatives (INF Designation, EXS Context, and no incorporated stem) show V_R in Slot VI instead, and Slots I & II are elided.

Specifications (NOTE: the descriptions below are illustrated using the example stems "ARTISTIC ENDEAVOR", "BELIEF/BELIEVE", and "MEASURE(MENT)")

r	
1 BSC	BASIC : The "raw" default semantic instantiation of a root, prior to the application of one of the other eight Specifications. For roots representing naturally "activized", "time-unstable", dynamic, or psychologically verb-like notions, the BASIC nominal formative would mean "an instance/occurrence of X", while the BASIC verbal formative would mean "(an instance/occurrence of) X(-ing happens)". For roots representing naturally "reified", "time-stable", stative, or psychologically noun-like notions, the BASIC nominal formative would mean "an (unspecified/certain) amount/volume of X", whereas the BASIC verbal formative would carry a STATIVE interpretation meaning "(an) X (is present)"; the expansion of this meaning verbally would be accomplished using other Specifications and/or Functions.
2 CTE	CONTENT : This specification complements the CONSTITUTIVE 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 <i>content of a piece of art</i> [what it represents or is an image/statue of]; <i>the water within a river</i> [regardless of its channel or course]; <i>the communicative content of a message</i> [regardless of the means/medium by which it is conveyed]; <i>something iron</i> [regardless of its form/shape]; <i>a room as a habitable space</i> .
3 CSV	CONSTITUTIVE : The form (physical or non-physical) in which an entity/state/act actually expresses itself, is shaped, or is realized, as opposed to its functional/purposeful content, i.e., "what constitutes X", e.g., <i>a work of art</i> [as constituted by it being a painted canvas, sculpted marble, etc., irrespective of what the image is or what/who the statue is of]; <i>the course of a river; the form/medium (written, spoken, recorded, etc.) of a message</i> [irrespective of what it communicates], <i>the form taken by or manifested by a substance (piece of iron as opposed to the substance itself), a room as a set of conjoined walls</i> [as opposed to it being a habitable space].
4 OBJ	OBJECTIVE : Target or "object" associated with the act/state/event, or alternately, the stimulus of an affective state, e.g., <i>what an artist creates</i> (in this case synonymous with INTENTIVE-COMPLETIVE below, <i>a work of art</i>), <i>the entity/person/institution that forms the object/source of one's belief, what one measures</i> (the object, span, gap, etc. whose dimensions are to be measured)
5 FCL	FACILITATIVE : Function as / act as / use as, e.g., object/entity seen, interpreted, or functioning as a work of art / to function or serve as a work of art; what functions or serves as a means to believe / what serves as one's belief; to function as means of measuring / process used as means of measuring.
6 FND	FOUNDATIONAL: Cause/reason/source thereof, e.g., inspirational source of a work of art, causal event/state for one seeking/choosing to believe, reason for needing to measure.
7 INT	INTENTIVE : Use/purpose/intent: = desired/expected resulting use/outcome/consequences of act, e.g., envisioned/planned work of art; a desired belief (what the believer wants his/her belief to be / tries to hold as a belief); expected measurement result, to obtain (expected) measurement result.
	With CPT Version, this specification becomes resultative, showing the result/outcome/impact/consequences associated with the act/state/event, e.g., finished work of art; a belief (what the believer actually holds as their belief); resulting measurement, to obtain the actual measurement.
8 EXP	EXPERIENTIAL : The physical experience/feeling/sensation in doing/undergoing, e.g., the experience of an artist as s/he creates a work of art; the experience of believing (i.e., faith); the experience of measuring something.
	With CPT Version, this specification indicates the experiential aftermath/outcome of the completed state/act/event.
9 PRQ	PREREQUISITIVE : underlying premise/assumption or prerequisite for, e.g., the assumption that the resources needed for a work of art exist (i.e., that the artist has artistic talent and the tools, time, resources, desire to make the work of art); capacity to believe, be open to believing or willing to believe; having the tools/means/capacity/opportunity to measure.

In Ithkuil, the eighteen stems associated with each root frequently fall into similar semantic derivations, e.g., result/outcome, experience/sensation thereof, associated "target" or "object", physical form taken, underlying premise/pre-condition, etc. In this new language, these derivatives are now formalized into the above nine **Specifications** which can be systematically applied to any of the three stems of a root, wherever semantically feasible and needed. Not all roots/stems will take all specifications; where semantically anomalous, a specification is simply not used.

2.3 SLOT III: C_R — The Root

The root is a single consonantal form, from one to six consonants in length. Any multi-consonant root must be phonotactically permissible (e.g., none of the following could be roots: -kg-, -nč-, -zrb-, -tpk-, -fmst-). No consonant form containing -h- or a glottal-stop is permissible as a root, nor can the single consonants -w- or -y- be roots (however, multi-consonant roots ending in -w- or -y- are permissible, e.g., -gw-, -rpy-). Over 8000 roots are possible.

2.4 SLOT IV: V₁C₁ — Function x Stem x Specification of Incorporated Root plus the Incorporated Root Itself

 V_I infix values are the same values as for the V_R infix in Slot II. They show Function, Stem, and Specification for the C_I incorporated root. Likewise, the incorporated root, C_I , is the same as any standard C_R root. For formatives with no incorporated stem, this slot and Slot V will be empty.

2.5 SLOT V: V_F — Format of Incorporated Stem plus Incorporation Type

Case is now used to describe Format, the incorporated stem's semantic relationship to the main stem (this was only an option in Ithkuil). The V_F infix values are the same as the V_C vocalic Case affixes in Formative Slot XIII. For formatives with no incorporated stem, this slot and Slot IV will be empty.

2.5.1 Incorporation Type: There will now be two types of stem incorporation in this language. The first type is unmarked and, like Ithkuil stem incorporation, implies a circumstantial relationship between the incorporated stem and the main stem (equivalent to placing the incorporated stem into a case-frame instead).

The second type of stem incorporation is new. Type-2 incorporation is derivational (i.e., lexicalizing). Just as Type-2 V_xC_s affixes in Ithkuil create the semantic equivalent of a new English translation (by creating a new semantic gestalt), so formatives with Type-2 stem incorporation will establish the equivalent of a new lexico-semantic gestalt. This is analogous to English forms like "polar bear", where the form names a new animal rather than stating where a particular bear originates or is situated. Likewise, English "elephant seal" establishes a whole new lexico-semantic gestalt rather than merely describing some sort of metaphorical relationship between elephants and seals.

Type-2 stem incorporation is shown by placing a glottal stop immediately after the V_F infix.

2.6 SLOT VI: (w/y)V_V — Version of Main Stem + Version of Incorporated Stem plus Delineation of Slot VII assignment

This slot holds a vocalic infix which indicates the Version of both the main stem and any incorporated stem. It also delineates whether the $-C_SV_{X^-}$ affixes in the subsequent slot (Slot VII) are to be applied to the main stem or to the incorporated stem. (Obviously, if there is no incorporated stem, there will be no such delineation.) NOTE: If formative Slots IV and V are filled (i.e., the formative has an incorporated stem), V_V must be preceded by a -w- or -y-.

V_V infixes

Version of	no	incorp. stem h	as PRC version	incorp. stem ha	s CPT version	NOTE: "Short-Form" formatives (INF Designation,
main stem	incorp. stem	$C_{S}V_{X}$ affixes apply to main stem	$C_S V_X$ affixes apply to incorp. stem	$C_S V_X$ affixes apply to main stem	$C_S V_X$ affixes apply to incorp. stem	$_{\rm EXS}$ Context, and no incorporated stem) have a V_R infix in Slot VI instead of a V_V infix; in such case,
PRC	(ë)	a	ai	e	ei	CPT version is shown by adding a glottal stop after the V_{R} infix.
СРТ	i	0	oi	u	ui	

2.7 SLOT VII: -C_sV_x- Affixes

This optional slot holds one or more standard $-V_xC_s$ affixes familiar from Ithkuil, but in reversed form: $-C_sV_{X^-}$. NOTE: Slot VII affixes apply only to the main stem (or the incorporated stem as per the delineation in Slot VI). They do not have scope over the C_A information in Slot VIII or any subsequent slots.

degree	Type 1	Type 2	Туре 3	
1	а	ai	ia / aì	Type 1: circumstantial
2	e	ei	ie / eì	Type 2: derivational
3	0	oi	io / oì	Type 3: applies to previous C _s V _x affix only (or the following affix if it is the first in the slot.)
4	u	ui	iö / öì	Type 5. applies to previous C _S v _x and only (or the following and in this the first in the slot.)
5	i	ëi	ië / ëì	Degree 0: unspecified degree
6	ü	iu	uö / öù	C_A stacking : There are two specialized - V _x values, - üa and -üe , used to indicate that the following - C _s consonant-form is
7	ö	ou	uo / où	to be interpreted as a C_A complex (see next page) whose info is stacked or layered on the formative's primary C_A
8	ë	eu	ue / eù	complex; - üa indicates the C _A complex applies to the main stem, while - üe means it applies to the incorporated stem.
9	ä	au	ua / aù	NOTE: The last C _s V _x affix in Slot VII must be followed by a glottal stop, so the listener will know where Slot VIII begins.
0	ae	ëu	uë / ëù	

CONFIG	GURATION	AFI	FILIATION	E	XTENSION	PE	RSPECTIVE	ESSENCE
UNI	[zero]	CSL	[zero] / s (z)	DEL	[zero] / t	М	[zero] / 1	RPV Essence shown by gemination of:
DPX	ň	ASO	š (ž)	PRX	d + voicing	Р	r	1. the Affiliation infix, or
DCT	1	VAR	ţ (d)	ICP	р	Ν	y / n *	,
AGG	r	COA	f (v)	ΑΤ٧	b + voicing	Α	w / m *	2. the Configuration infix if Affiliation is zero, or
SEG	n	For Exter	nsion values	GRA	k			 the Extension infix if Configuration and Affiliation are both zero, or
CPN	m	requiring	voicing, any	DPL	g + voicing		- n - and - m - if Ision is zero but	,
СОН	rn		n value should				ation is non-zero.	 if the first 3 slots are all zero, use alternate Affilation value -s- or alternate Extension
CST	rm		biced form shown theses above.					value -t- and geminate it.
MLT	rň	purch						

2.8 SLOT VIII: The C_A complex — 9 Configurations + 4 Affiliations + 6 Extensions + 4 Perspectives + 2 Essences

(ACKNOWLEDGEMENT: this C_A table is modeled after a similar design by Selpahi)

NOTES ON THE ABOVE TABLE:

- Use zero values for default CSL, DEL, and M except per the rules below or where necessary to disambiguate a combination; if all 4 slots have default zero values, MONADIC perspective shall be shown by -l- (the C_A value DCT-CSL-DEL-M is shown as -ls- or -lt-).
- Configurations ending in -ň (DPX, MLT) cannot be followed by -k- or -g- (GRA, DPL extension). Use the alternate CSL value (-s-, -z-) to separate them.
- Configurations ending in -n- (SEG, COH) cannot be followed by -p- or -b- (ICP, ATV extension). Use the alternate CSL value (-s-, -z-) to separate them.
- The Configuration values -l- and -r- (DCT, AGG) cannot be immediately followed by each of their identical Perspective values -l- and -r- (M, P). Use either the alternate CSL value (-s-) or the alternate DEL value (-t-) to separate them.
- A C_A value of lone -n- is to be interpreted as SEG configuration, not NOMIC perspective (use -sn- or -ty- instead). A C_A value of lone -m- is to be interpreted as CPN configuration, not ABSTRACT perspective (use -sm- or -tw- instead).

NOTE: If the C_A value is default -l- (UNI-CSL-DEL-M) and Slots IX through XI are empty, and the C_M Mood infix in Slot XII is non-zero, the C_A infix becomes zero and the C_M Mood infix is moved into Slot VIII (without its initial glottal stop).

2.9 SLOT IX: -V_XC_S- Affixes

This optional slot holds one or more standard $-V_XC_S$ affixes familiar from Ithkuil. The format of the affix is not reversed as in Slot VII. **NOTE**: Slot IX affixes apply to the main stem and have scope over the C_A information in Slot VIII. The V_X values and types are the same as those of Slot VII, however, the last affix in Slot IX does not take any glottal stop (unlike Slot VII affixes).

2.10 SLOT X: V_N — Valence

This slot holds a vocalic infix indicating Valence. There are twelve Valences compared to the Ithkuil's fourteen; the NON-RELATIONAL and the RESISTIVE, have been eliminated. (The former because, morpho-syntactically, I realize it doesn't make sense — why imply a second party in a predicate if that second party has nothing to do with the predicate of the sentence? — for the latter, use the DLB/8 or CTR/1 suffix instead.)

C_V Valence infixes

MNO	PRL	CRO	RCP	CPL	DUP	DEM	ІМТ	CNG	PTI	IDC	MUT
[zero] / a	e	i	0	u	ä	ö	ü	ae	oe	ea	oa

If either Slot XI or XII is filled, V_N in Slot X must also be filled (i.e., MNO must be marked with its alternative value -a-).

2.11 SLOT XI: $V_P / V_L / V_E / V_T$ — Phase or Level or Effect or Aspect

This is a modular slot showing either Phase or Level or Effect or Aspect. Level will operate in conjunction with the COMPARATIVE case plus a new set of $V_x C_s$ suffixes (see Sec. 4.3 on Page 39) which take the place of Ithkuil's 24 Comparison cases. The new category of Effect is explained on the next page.

The vocalic infixes for the first three categories are shown in the three tables below. The presence of any non-zero or non-default value in this Slot requires the presence of V_N in Slot X. The values for Aspect are shown on the next page.

PHA V	
СТХ	(wai)
PCT	wei
ITR	woi
REP	wui
ITM	wëi
RCT	wiu
FRE	wou
FRG	weu
FLC	wau

EFFE	CT V _E
neutral	[zero]
1 / BEN	yai
2 / BEN	yei
3 / BEN	yoi
all / BEN	yui
unknown	yëu
all / DET	yiu
3 / DET	you
2 / DET	yeu
1 / DET	yau

LEVEL V _L	Relative	Absolute
(none)	[zero]	[zero]
MIN	waì	yaì
SBE	weì	yeì
IFR	woì	yoì
DFC	wöì	yöì
EQU	wëì	yëì
SUR	wöù	yöù
SPL	woù	yoù
SPQ	weù	yeù
МАХ	waù	yaù

2.11.1 Aspect: There are 36 aspects compared to Ithkuil's 32. Ithkuil's EXPERIENTIAL aspect is renamed ANTECEDENT (the term 'EXPERIENTIAL' is now used to name a Specification). The PROTRACTIVE has been reassigned as the name of a new aspect meaning 'take one's time being/doing'. The old PROTRACTIVE aspect from Ithkuil is renamed DILATORY and restricted to meaning '(be) long-delay(ed) in being/doing'. Ithkuil's CONSEQUENTIAL and RECESSATIVE aspects are eliminated; use the DLB/8 suffix for the former and CSS aspect + ITN/2 suffix for the latter. There are six new aspects compared to Ithkuil (listed in green in the table below): the ANTICIPATORY, the SUMMATIVE the INTERRUPTIVE, the PROTRACTIVE (see paragraph above), the PREPARATORY, and the LIMITATIVE. Their meanings are as follows:

- ANTICIPATORY: 'have yet to (begin) X-ing' (NOTE: This 'have yet to' meaning has been reassigned from Ithkuil's CONTINUATIVE aspect.)
- SUMMATIVE: '...(have) already X'd' (NOTE: The 'already' meaning of Ithkuil's RTR aspect is no longer valid due to the elimination of "boundedness".)
- INTERRUPTIVE: 'to get interrupted while X-ing' or 'to X only so far or so much before having to stop'
- PROTRACTIVE: 'take one's time X-ing'
- PREPARATORY: 'to be/do X in advance', 'to be/do X in preparation for a future situation'
- LIMITATIVE: 'to be/do X (just) in time'; culminates an anticipatory context. (In Ithkuil this is a noun case; here it is a new aspect).

RTR	RETROSPECTIVE	wa	R	SM	RESUMPTIVE	ya	РМР	PREEMPTIVE	wao	DCL	DISCLUSIVE	yao
PRS	PROSPECTIVE	we	C	SS	CESSATIVE	ye	CLM	CLIMACTIC	weo	CCL	CONCLUSIVE	yeo
HAB	HABITUAL	wo	P	٩U	PAUSAL	уо	DLT	DILATORY	woa	CUL	CULMINATIVE	yoa
PRG	PROGRESSIVE	wu	R	GR	REGRESSIVE	yu	ТМР	TEMPORARY	woe	IMD	INTERMEDIATIVE	yoe
IMM	IMMINENT	wi	P	CL	PRECLUSIVE	yi	MTV	MOTIVE	wea	TRD	TARDATIVE	yea
PCS	PRECESSIVE	wü	С	ТИ	CONTINUATIVE	yü	SQN	SEQUENTIAL	wöe	TNS	TRANSITIONAL	yöe
REG	REGULATIVE	wö	IC	s	INCESSATIVE	yö	EPD	EXPEDITIVE	wöa	ITC	INTERCOMMUTATIVE	yöa
ATC	ANTECEDENT	wë	SI	лм	SUMMATIVE	yë	PTC	PROTRACTIVE	weö	CSM	CONSUMPTIVE	yeö
ATP	ANTICIPATORY	wä	IF	R P	INTERRUPTIVE	yä	PPR	PREPARATORY	waö	LIM	LIMITATIVE	yaö

V_T Infixes — Aspect (absence of aspect on a formative is zero-marked)

2.11.2 Effect: The new category of Effect conveys the speaker's subjective intent behind an utterance, i.e., whether the utterance is beneficial or detrimental to some party or parties. There are three effects: NEUTRAL, BENEFICIAL, and DETRIMENTAL, in turn associated with a particular party or argument. NEUTRAL (i.e., unspecified Effect) is zero-marked. Effect may also be indicated using a $-V_xC_s$ suffix, an affixual adjunct, or via a personal-reference adjunct (see Pages 24-25).

When Effect is shown via a $-V_xC_s$ suffix, the structure of that suffix is as below. Also shown for convenience sake is a new corollary suffix, the Appraisal suffix, which can be utilized to convey an even more comprehensive understanding of the speaker's intent behind the utterance:

-g	EFE: Effect of Statement
1	(potential) beneficial effect on speaker
2	(potential) beneficial effect on listener/addressee
3	(potential) beneficial effect on 3rd party
4	(potential) beneficial effect on all parties
5	effect unknown or yet to be determined
6	(potential) detrimental effect on all parties
7	(potential) detrimental effect on 3rd party
8	(potential) detrimental effect on listener/addressee
9	(potential) detrimental effect on speaker

-xl	APP: Appraisal of Outcome/Effect
1	and that's the way it HAS to be /and it can't be any other way
2	and that's the way it's supposed to be /and that's the way it works
3	and that's acceptable /and that'll work well enough
4	and even if it's not supposed to be that way, we'll find a way to make it work
5	unknown or irrelevant if it's okay that way
6	but we'll see if we can make it work that way /but I'm unsure if it'll work that way
7	and it's going to be a problem /but there's a problem
8	but it shouldn't be like that / but it's not supposed to be like that
9	but it's all wrong / but it won't work

2.12 SLOT XII: 'C_M — Mood and FRAMED Relation

The eight moods of Ithkuil are being reduced to six; the IMPLICATIVE and ASCRIPTIVE moods are being eliminated. For the equivalent to these two moods, use INFERENTIAL illocution in conjunction with whichever of the remaining six moods best describes the factuality of the assumption on which the inference is based and of the statement itself.

The presence of C_M requires that V_N in Slot X be present. Additionally, C_M must be immediately preceded by a glottal stop. Besides infixes for the six moods there is also a "null" infix for use in nominal formatives (which do not have a mood). This null infix is usually zero but has an alternate value -l- available if necessary (e.g., in FRAMED formatives).

	FAC	SUB	ASM	SPC	COU	НҮР
[null]	FACTUAL	SUBJUNCTIVE	ASSUMPTIVE	SPECULATIVE	COUNTERFACTUAL	HYPOTHETICAL
[zero] / 1 ¹	(x) ²	Ç	С	Ż	č	j

C_M Infixes

The C_M value is null in nominal formatives; the alternate value -l- appears if the nominal formative is the head of a case-frame (to show FRAMED relation).

² For UNFRAMED verbal formatives, FAC mood is only marked if Slot X has a non-zero V_N value. For FRAMED verbal formatives, however, FAC mood is indicated by -x- (to show FRAMED relation) and V_N in Slot X cannot be zero.

NOTE: If formative Slots VIII thru XI are all default/zero/empty, any non-zero C_M is placed in Slot VIII instead of Slot XII, without the initial glottal stop.

2.13 SLOT XIII: V_C or V_K— Case or Illocution + Sanction

2.13.1 Nominal formatives and FRAMED verbal formatives take Case. UNFRAMED verbal formatives take Illocution + Sanction instead (see Sec. 2.13.2 below).

The sequential order of the cases has been changed from Ithkuil in order to organize them into groups of nine for a one-to-one match-up with the new $-V_xC_s$ "case accessor" suffixes. Cases listed in red have had their name and/or their functionality changed in comparison to Ithkuil. Cases in green are new cases. An explanation of these and other changes to cases is given on the next page. [NOTE: The ordering/groupings of cases have not yet been finalized].

TRANSRELATIVE CASES			
1	тнм	THEMATIC	а
2	ABS	ABSOLUTIVE	e
3	ERG	ERGATIVE	0
4	IND	INDUCIVE	u
5	AFF	AFFECTIVE	i
6	DAT	DATIVE	ü
7	EFF	EFFECTUATIVE	ö
8	DER	DERIVATIVE	ae
9	INS	INSTRUMENTAL	ä

APPOSITIVE CASES			
10	POS	POSSESSIVE	ai
11	PRP	PROPRIETIVE	ei
12	GEN	GENITIVE	oi
13	ATT	ATTRIBUTIVE	ui
14	PDC	PRODUCTIVE	ëi
15	ITP	INTERPRETIVE	iu
16	OGN	ORIGINATIVE	ou
17	IDP	INTERDEPENDENT	eu
18	PAR	PARTITIVE	au

ASSOCIATIVE CASES				
19	APL	APPLICATIVE	ia / aì	
20	PUR	PURPOSIVE	ie / eì	
21	BEN	BENEFACTIVE	io / oì	
22	DFR	DEFERENTIAL	iö / öì	
23	TSP	TRANSPOSITIVE	ië / ëì	
24	CRS	CONTRASTIVE	uö / öù	
25	СММ	COMMUTATIVE	uo / où	
26	CSD	CONSIDERATIVE	ue / eù	
27	CFM	CONFORMATIVE	ua / aù	

ADVERBIAL CASES				
28	CON	CONCESSIVE	ao	
29	AVR	AVERSIVE	eo	
30	CVS	CONVERSIVE	oa	
31	SIT	SITUATIVE	oe	
32	TFM	TRANSFORMATIVE	ea	
33	FUN	FUNCTIVE	öe	
34	CLA	CLASSIFICATIVE	öa	
35	IRS	IRRESPECTIVE	eö	
36	RSL	RESULTATIVE	aö	

SPATIO-TEMPORAL CASES I			
37	LOC	LOCATIVE	aya
38	ATD	ATTENDANT	eya
39	ORI	ORIENTATIVE	oya
40	ALL	ALLATIVE	uya
41	ABL	ABLATIVE	ëya
42	NAV	NAVIGATIVE	iwa
43	INT	INTRATIVE	owa
44	IRL	INTERRELATIVE	ewa
45	PRT	PRECURRENT	awa

SPATIO-TEMP. CASES II			
46	ASS	ASSESSIVE	aye
47	ACS	ACCESSIVE	eye
48	CNR	CONCURSIVE	oye
49	PER	PERIODIC	uye
50	PRO	PROLAPSIVE	ëye
51	PCV	PRECURSIVE	iwe
52	PCR	POSTCURSIVE	owe
53	ELP	ELAPSIVE	ewe
54	PLM	PROLIMITIVE	awe

RELATIONAL CASES I				
55	REF	REFERENTIAL	ayo	
56	COR	CORRELATIVE	eyo	
57	CPS	COMPOSITIVE	оуо	
58	DEP	DEPENDENT	uyo	
59	PVS	PROVISIONAL	ëyo	
60	PRD	PREDICATIVE	iwo	
61	ESS	ESSIVE	owo	
62	ASI	ASSIMILATIVE	ewo	
63	SBL	SEMBLATIVE	awo	

RELATIONAL CASES II				
64	VOC	VOCATIVE	ayu	
65	SEL	SELECTIVE	eyu	
66	СОМ	COMITATIVE	oyu	
67	CNJ	CONJUNCTIVE	uyu	
68	UTL	UTILITATIVE	ëyu	
69	DSC	DESCRIPTIVE	iwi	
70	RLT	RELATIVE	owi	
71	TRM	TERMINATIVE	ewi	
72	CMP	COMPARATIVE	awi	

The arrangement and ordering of the cases has been changed to eight groups of nine cases each (the ordering/groupings is not-yet-finalized). As for Ithkuil's 72 primary cases, twelve have been either eliminated or consolidated, while twelve new cases have been added. Ithkuil's 24 Comparison cases have been eliminated; instead, use the COMPARATIVE case in conjunction with a new $-V_xC_s$ suffix (see Pg. 39). The following is a description of the changes in cases:

- No. 1: Ithkuil's OBLIQUE case is renamed the THEMATIC to better indicate its semantic role of THEME (as used in theta-role terminology).
- No. 5: The ACTIVATIVE case is eliminated; use the AFFECTIVE instead with any second occurrence of an AFFECTIVE noun put into a case-frame.
- No. 9: The MEDIATIVE case has been eliminated; instead, use the INSTRUMENTAL in conjunction with NOMIC perspective.
- No. 23 (and No. 24): The CONTRASTIVE case is more overtly distinguished from the TRANSPOSITIVE case -- the latter is limited to its 'on behalf of' meaning (i.e., carrying a benefactorial component), while the former is simple substitution "instead of / in place of".
- NO. 31: SITUATIVE case moved from the Transrelative cases to the Adverbial cases; its meaning has been expanded to include "inasmuch as / insofar as / to the extent that / taking X into account / in view of the fact that / given that / considering".
- No. 39: The PROCURSIVE has been merged with the ORIENTATIVE (the former's meaning occurs with static verbs, the latter's meaning with verbs of motion).
- No. 48: The SIMULTANEITIVE case has been eliminated use CONCURSIVE or ACCESSIVE instead, as appropriate to context; the DIFFUSIVE case has also been eliminated and its function merged with the CONCURSIVE case.
- NO. 50: The INTERPOLATIVE case is eliminated; use the PROLAPSIVE instead.
- NO. 53: The ALLAPSIVE case is eliminated and its function merged with the ELAPSIVE case (use Aspect to distinguish its '...ago' vs. '...from now' meaning).
- No. 56: The scope of the CORRELATIVE has been changed. Its "characterized by X" function is now moved to the new DESCRIPTIVE case. It's "spatially relative to" function is now moved to the new INTERRELATIVE case (see below). The CONDUCTIVE case has been merged into the CORRELATIVE.
- No. 57: The 2nd use of the COMPOSITIVE, when used with verbs (e.g., *She cooks using tomatoes*), is eliminated. Instead, this usage can be accomplished via either the INSTRUMENTAL or the UTILITATIVE, depending on the context.
- NO. 59: The POSTULATIVE case is eliminated and its function merged with the PROVISIONAL case.
- NO. 65: The SELECTIVE is renamed from Ithkuil's EPISODIC case and expanded to include spatial phenomena, e.g., every third book, every green one.
- NO. 66: The ABESSIVE case is eliminated; instead use the COMITATIVE case with a negatory suffix.

Additionally: The EXCEPTIVE case is eliminated; instead use a new coordinative suffix meaning "except for; but (not)...". The LIMITATIVE case is eliminated and its name and function have been reassigned to a new Aspect.

The twelve new cases are listed and described as follows:

- No. 22: **DEFERENTIAL** (DFR) case = 'out of respect for,' 'for the sake of,' or 'in deference toward,' (This case is reintroduced from 2004 Ithkuil; it had been merged with the BENEFACTIVE case in 2011 Ithkuil but is reintroduced to disambiguate phrases such as 'I have a gift *for your mother*' meaning either your mother is the intended recipient (BENEFACTIVE) or your mother is the motivating reason for the gift (DEFERENTIAL).
- No. 27: CONFORMATIVE (CFM) case = 'as per (the requirements of)' = 'in conformance with (the dictates of)' = 'as is necessitated by' [split off from Ithkuil's CONSIDERATIVE case]
- No. 35: IRRESPECTIVE (IRS) case: 'whether X or not', 'whether or not X', 'regardless of X' (previously named the RESTRICTIVE (RST)

- No. 36: **RESULTATIVE** (RSL) case = 'resulting in X', 'and as a consequence, (there's) X'
- No. 38: ATTENDANT (ATD) case = 'in the presence of X', 'before/with X' = 'in X's presence' [implies purposeful or a relational reference to X, different from LOCATIVE which only signifies location], e.g., the difference between '*I am in my car*' (LOCATIVE) vs. '*I am at my car*' (ATTENDANT), the latter implying "I've arrived at my car" or "My car is before me."
- No. 43: INTRATIVE (INT) case: 'since X'/'until X' (applies to spatial contexts as well, meaning "between there and here" / "between here and there")
- No. 44: **INTERRELATIVE** (IRL) case: 'spatially/temporally relative to' [taken from the 2nd function of existing Ithkuil CORRELATIVE case]
- No. 45: **PRECURRENT** (PRT) case = 'there having first been X' / 'preceded by X' (temporal or spatial)
- No. 63: **SEMBLATIVE** (SBL) case = 'as if (it were) X'. Distinguished from the ASSIMILATIVE to disambiguate phrases such as *treat her as/like a princess* having two different implications: (1) '...because she is a princess (or like one)' [ASSIMILATIVE] or (2) '...even though she isn't a princess (or doesn't look/act/seem like one)' [new SEMBLATIVE case].
- No. 69: **DESCRIPTIVE** (DSC) case = adjectival case: 'X-ish; having the quality/characteristics of X'
- No. 70: RELATIVE (RLT) case: '...which/that is/does X' [creates the equivalent to a simple relative clause]
- No. 71: **TERMINATIVE** (TRM): identifies a GOAL (whether circumstantial, sequential, figurative, spatial or temporal) [NOTE: the name TERMINATIVE has been reassigned from Ithkuil's TERMINATIVE extension, which in turn has been renamed the ATTENTUATIVE in this language.]

2.13.1.1 "Case-Accessor" Affixes

A new set of $-V_x C_s$ suffixes is being created to allow a formative to be referenced as a function of a particular case relationship, allowing one to readily express sentences such as 'I know who you killed', 'What we depend on is your charity', 'I can't tell you why I ran away', 'She learned where they're from', etc. These would be suffixed to FRAMED verbal formatives. They can also be suffixed to personal-reference adjuncts or to the new "general demonstrative" root.

NOTE: These affixes are an exception to the standard $V_X C_S$ format. The V_X value is the same as the corresponding V_C case marker. The C_S form is -rl.

1	THM	THEMATIC	party who/that is the THEME/CONTENT/STIMULUS of X		
2	ABS	ABSOLUTIVE	the PATIENT to which/whom X happens		
3	ERG	ERGATIVE	the AGENT who/that X's		
4	IND	INDUCIVE	the AGENT who/that X's him-/her-/itself		
5	AFF	AFFECTIVE	the EXPERIENCER/UNDERGOER of X		
6	DAT	DATIVE	the RECIPIENT of X or of the act of X		
7	EFF	EFFECTUATIVE	the ENABLER initiating an event chain leading to X		
8	DER	DERIVATIVE	the FORCE/ENTITY who/that X's		
9	INS	INSTRUMENTAL	the INSTRUMENT/MEANS by/via which X occurs/is		

10	POS	POSSESSIVE	the alienable/circumstantial POSSESSOR of X		
11	PRP	PROPRIETIVE	the OWNER of X; that to which/whom X belongs		
12	GEN	GENITIVE	the inalienable POSSESSOR of X		
13	ATT	ATTRIBUTIVE	that to which/whom X is an attribute/chararacteristic		
14	PDC	PRODUCTIVE	the ORIGINATOR/AUTHOR/CREATOR of X		
15	ITP	INTERPRETIVE	the party by/thru which/whom X is interpreted/described		
16	OGN	ORIGINATIVE	the original or inherent location/source of X		
17	IDP	INTERDEPENDENT	that to which/whom X has a complementary relationship		
18	PAR	PARTITIVE	that of which X is a portion or is enumerated by		

19	APL	APPLICATIVE	the purpose/function for which X is used		
20	PUR	PURPOSIVE	the intrinsic/primary purpose of X		
21	BEN	BENEFACTIVE	that which benefits from X; what/whom X is for		
22	DFR	DEFERENTIAL	that for which X is/does out of respect or the sake of		
23	TSP	TRANSPOSITIVE	that which subtitutes for X; what/who takes X's place		
24	CRS	CONTRASTIVE	that on whose behalf X occurs/is		
25	CMM	COMMUTATIVE	that which/who is in exchange for X		
26	CSD	CONSIDERATIVE	that which is according to or pursuant to X		
27	CFM	CONFORMATIVE	that as per which X is/does in conformance to		

28	CON	CONCESSIVE	that in spite of or regardless of which, X occurs/is		
29	AVR	AVERSIVE	that in aversion to which, X occurs/is		
30	CVS	CONVERSIVE	that if not for which, or but for which, X (would) occur(s)		
31	SIT	SITUATIVE	that because of which, or given which, X occurs/is		
32	TFM	TRANSFORMATIVE	that into which, X transforms/changes		
33	FUN	FUNCTIVE	the manner in which X is/occurs		
34	CLA	CLASSIFICATIVE	the basis by which X is arranged/sorted/patterned/counted		
35	IRS	IRRESPECTIVE	that, whether or not which, X is/does		
36	RSL	RESULTATIVE	the consequence or result of which, X occurs/is		

37	LOC	LOCATIVE	where X occurs/is (situated)		
38	ATD	ATTENDANT	that in whose presence which, X is/occurs		
39	ORI	ORIENTATIVE	that which serves as X's orientational direction		
40	ALL	ALLATIVE	where X is headed/going toward;		
41	ABL	ABLATIVE	where X is emanating/coming from;		
42	NAV	NAVIGATIVE	that which serves as X's orientational trajectory/path/way		
43	INT	INTRATIVE	the place/time since/until/between which, X is/occurs		
44	IRL	INTERRELATIVE	the place/time relative to which, X is/occurs		
45	PRT	PRECURRENT	the place/time immediately preceding which, X is/occurs		

46	ASS	ASSESSIVE	the basis for the ratio by which X is measured, alloted, etc.		
47	ACS	ACCESSIVE	the moment in which X occurs		
48	CNR	CONCURSIVE	when X is/occurs		
49	PER	PERIODIC	the time period or event during which X occurs		
50	PRO	PROLAPSIVE	(the time period or event constituting) the duration of X		
51	PCV	PRECURSIVE	the time/event/moment prior to which X is/occurs		
52	PCR	POSTCURSIVE	the time/event/moment after which X is/occurs		
53	ELP	ELAPSIVE	the amount of time between X and a past or future event		
54	PLM	PROLIMITIVE	the time/event by which time X is/occurs		

55	REF	REFERENTIAL	that which X is about or to which X pertains/regards		
56	COR	CORRELATIVE	that which X is associated/relative to or in relation to		
57	CPS	COMPOSITIVE	that of which X is made/composed or consists of		
58	DEP	DEPENDENT	that upon which X depends or is contingent		
59	PVS	PROVISIONAL	that provided which or in case of which, X is/occurs		
60	PRD	PREDICATIVE	that upon which X relies of is dependent		
61	ESS	ESSIVE	that whose role is X, or what/who is named (as) X		
62	ASI	ASSIMILATIVE	that which/who is like or as X		
63	SBL	SEMBLATIVE	that as if it were which, X is/occurs		

64	VOC	VOCATIVE	the name by which X is hailed or directly addressed		
65	SEL	SELECTIVE	the basis for the recurrences, arrangement, sorting of X		
66	СОМ	COMITATIVE	that which accompanies X		
67	CNJ	CONJUNCTIVE	that which (is/operates/behaves) in conjunction with X		
68	UTL	UTILITATIVE	that which is used or gets utilized in conjunction with X		
69	DSC	DESCRIPTIVE	that which describes the characteristics of X		
70	RLT	RELATIVE	that concerning which, X pertains/is/occurs		
71	TRM	TERMINATIVE	that which is X's goal, destination, ultimate purpose		
72	СМР	COMPARATIVE	that which is in comparison to X		

2.13.2 Illocution and Sanction

Illocution and Sanction appear on UNFRAMED verbal formatives; they do not appear on nominal formatives or FRAMED verbal formatives, which instead take a V_C case marker in this slot.

The Ithkuil category of Validation (showing evidentiality) is eliminated as an autonomous category and subsumed under Illocution. Five of Ithkuil's validations (assertions specifying an evidential component) are now simply the first five illocutions. The speaker will have the option to use the $-V_xC_s$ affix -lk- showing verifiability of an evidential source for any of the five assertive illocutions (See Section 4.4 on Page 39).

What were Ithkuil's AFFIRMATIVE and REPORTIVE validations are eliminated; instead use CNF plus the verifiability $-V_xC_s$ affix -lk-. Ithkuil's ADMONITIVE and HORTATIVE illocutions are eliminated; for ADMONITIVE use a stem meaning 'beware of / take care to / exercise caution regarding' plus DIR illocution; for HORTATIVE use the new UNSPECIFIED illocution (see footnote 3 below) + a new modality $-V_xC_s$ suffix DSD/5 meaning 'if only....'' (see Sec. 4.1 on Page 28).

	PPS	EPI	ALG	IPU	RFU	REB	CJT ⁵	EXV	АХМ	[null] ⁶
CNF	(ë) / a'ya ¹	a'ye	a'yo	a'yu	a'wi	a'wu	a'wo	a'we	a'wa	a'yë
INF	e'ya	e'ye	e'yo	e'yu	e'wi	e'wu	e'wo	e'we	e'wa	e'yë
ITU	o'ya	o'ye	o'yo	o'yu	o'wi	o'wu	o'wo	o'we	o'wa	o'yë
REV ²	u'ya	u'ye	u'yo	u'yu	u'wi	u'wu	u'wo	u'we	u'wa	u'yë
HSY	i' ya	i'ye	i'yo	i'yu	i'wi	i'wu	i'wo	i'we	i' wa	i'yë
USP ³	ü'ya	ü'ye	ü'yo	ü'yu	ü'wi	ü'wu	ü'wo	ü'we	ü'wa	ü'yë
DIR	ö'ya	ö'ye	ö'yo	ö'yu	ö'wi	ö'wu	ö'wo	ö'we	ö'wa	ö'yë
IRG ⁴	ë'ya	ë'ye	ë'yo	ë'yu	ë'wi	ë'wu	ë'wo	ë'we	ë'wa	ë'yë
DEC	ä'ya	ä'ye	ä'yo	ä'yu	ä'wi	ä'wu	ä'wo	ä'we	ä'wa	ä'yë

V_K Illocution & Sanction infixes — 9 Illocutions x 9 Sanctions

¹ The CNF/PPS affix is -**ë** (which is elided if phonotactically permissible), unless it is followed by a Bias suffix, in which case it is -**a'ya**-.

² REV = a new REVELATORY illocution; used when the speaker makes an assertion based on information from a dream or vision or other altered mental state.

³ USP = UNSPECIFIED illocution is new to this language; used when deliberately omit specifying the provenance of an assertion (also see NOTE at the bottom of this page).

⁴ INTERROGATIVE illocution may alternately be shown by rising tone of voice on the sentence as a whole.

⁵ Ithkuil's THEORETICAL sanction is renamed the CONJECTURAL in this language.

⁶ Null sanction is used if the speaker wishes to leave Sanction unspecified, or if Sanction is shown via $-V_xC_s$ affix elsewhere.

NOTE: I have decided to eliminate the POTENTIATIVE illocution which I had introduced in a previous version of this document; instead use USP illocution in conjunction with an appropriate modality affix indicating a hope/wish/desire/hortative, etc.

2.14 Slot XIV: Bias

UNFRAMED verbal formatives may add a word-final Bias suffix following the Illocution + Sanction affix. There is no need for a glottal stop before the Bias suffix (as in Ithkuil). The Bias suffix will be distinguishable from a $V_x C_s$ suffix by the presence of the glottal stop separating the Illocution portion from the Sanction portion of the Slot XIV affix.

Unlike Ithkuil, Bias suffixes in this language will be the same consonant-form as an associated lexico-semantic root. For example, the root -**XXC**-'CONTEMPT', will have an associated Bias suffix -**xxc**. All Bias roots and suffixes will be phonologically structured to contain continuant and sonorant consonants, so that they may be pronounced in an artificially prolonged fashion. Additionally, any stop or affricate consonants they contain may be artificially emphasized via aspirated or even glottalicized (i.e., ejectivized) secondary pronunciation.

Like Ithkuil, these Bias affixes will be separable into autonomous consonantal adjuncts, which function much like English "supra-segmental" interjections such as "Phew!", "Damn!", "tsk-tsk", "Pssshhh", "huh?", "meh", "hmmm", etc.

2.15 Slot XVI: Syllabic Stress — Context

EXS	EXISTENTIAL	word-initial stress		
FNC	FUNCTIONAL	ultimate stress		
RPS	REPRESENTATIONAL	penultimate stress *		
AMG	AMALGAMATIVE	antepenultimate stress *		

* For words with penultimate or antepenultimate stress, a minimum of 3 syllables is required to distinguish them from word-initial stress (4 syllables for antepenultimate stress). Two- or three-syllable words with stress on the first syllable are to be interpreted as having word-initial stress, not penultimate or antepenultimate stress. To show penultimate or antepenultimate stress in words having 2 (or 3) syllables or less, the necessary syllable(s) must be added by showing optional non-zero default values in any appropriate syllabic slot(s).

3.0 ADJUNCTS

3.1 Modular Adjunct 1 (Primary purpose: to show Phase, Level, multiple Effects and Aspects, and Valence)

This adjunct has three modular slots for any combination of Phase, Level, Effect, or Aspect, including multiple Effects or multiple Aspects. It can be applied to the main stem or the incorporated stem and can optionally show Valence as well. The tell-tale sign of this adjunct is the absence of any full consonant forms (e.g., C_R , C_A , C_S , etc.); only h-, -w-, or -y- will be present. Slots 1 and 2 are mandatory if subsequent slots are empty. If Slot 3 is filled and stress is word-initial, Slots 1 and 2 may be elided. Examples: *o*, *áewa*, *ya*, *hayóu*, *íwoi'wi*, *hewe'yo'weá*

1	2	3	4	5	6
' / h	(V _N (') or -ë(')-)	$V_P/V_L/V_E/V_T$	$('V_P/'V_L/'V_E/'V_T$	$('V_P / 'V_L / 'V_E / 'V_T))$	Stress [if word is multisyllabic]
h- prefix required if this adjunct has ultimate	Valence or epenthetic -ë-	Phase or Level or Effect or Aspect	Phase or Level or Effect or Aspect	Phase or Level or Effect or Aspect	Ultimate stress = CPT version
stress, in which case Slot II must be filled by V_N or epenthetic - \ddot{e} -	from Formative Slot X ' = adjunct applies to incorp. stem	from Formative Slot XI	from Formative Slot XI; must begin with glottal stop	from Formative Slot XI; must begin with glottal stop	

3.2 Modular Adjunct 2 (Primary purpose: detailed application of V_xC_s affixes; also Phase, Level, Valence, Effects and Aspects)

Similar to the above, this adjunct shows Valence for either the main stem or an incorporated stem, and provides two modular slots for showing Phase, Level, Effect, or Aspect. However, this adjunct allows one modular slot to apply to the main stem; the second to the incorporated stem (or to the main stem too, if there is no incorporated stem).

There are also slots for $V_x C_s$ affixes for both a stem only and a stem plus its C_A . This adjunct, unlike formatives, allows each $V_x C_s$ affix to show whether it applies to the main or incorporated stem. (Formatives only assign the entire $V_x C_s$ slot to the main stem or the incorporated stem.) Bias may also be shown.

The tell-tale sign of this adjunct is the initial **hw**- in Slot 1. If Slot 2 is present only Slots 1 and 2 are mandatory. If Slot 2 is empty, Slots 1, 3, and 4 are mandatory. Slots 4 through 6 require the presence of Slot 3. Slot 7 requires Slot 6. Examples: *hwasec, hwóyao, hwewai'yérrjj, hwúktospaewačisto*

1	2	3	4	5	6	7	8
hw	(V _X C _S)	(V_N (') or -ë	$V_{P}/V_{L}/V_{E}/V_{T}(')$	(C _S V _X) *	$(V_P^{}/V_L^{}/V_E^{}/V_T^{})$	$(C_B))$	Stress
	applies to stem only, not to C _A if an affix applies to the inc. stem, insert glottal stop after its V _X	Valence from formative Slot X; or epenthetic -ë- glottal stop shows V _N applies to inc. stem	Phase or Level or Effect or Aspect from formative Slot XI; affix applies to main stem add glottal stop if Slot 5 is empty but Slot 6 is filled	* [Note reversed form] applies to stem and C _A insert glottal stop after V _x if affix applies to the inc. stem	Phase or Level or Effect or Aspect from formative Slot XI; affix applies to the incorporated stem; if no incorp. stem, affix applies to the main stem	Bias from formative Slot XIV	ultimate stress shows CPT version on main stem

3.3 Modular Adjunct 3 (Primary purpose: Case-stacking and Illocution+Sanction; also Phase, Level, Valence, Mood, Effects Aspects, & Bias)

This adjunct is essentially formative Slots X through XIV extracted intact, preceded by **hl**- in the first slot. Slot 6, the V_C/V_K slot, is mandatory, essentially making this adjunct primarily a case-stacking adjunct or Illocution + Sanction Adjunct. Additionally, Valence, Phase, Level, Effect, Aspect, Mood, Bias, and Version may be shown. Slots 3 and 4 require the presence of Slot 2, which in turn requires Slot 5 be present. The presence of initial **hl**- followed by only one or two full consonant forms, C_M and C_B (or even none) distinguishes this adjunct from a formative. Examples: *hle, hlo'c, hláe'lui, hlewoi'ya'čétxx*

1	2	3	4	5	6	7	8
hl	(V _N or -ë-	$(V_P/V_L/V_E/V_T$	$('V_{P}/'V_{L}/'V_{E}/'V_{T}))$	'С _м)	v_c / ($v_{\rm K}$	(C _B))	Stress [if word is multisyllabic]
	Valence or epenthetic -ë-	Phase or Level or Effect or Aspect	Phase or Level or Effect or Aspect	Mood	Case or Illocution+Sanction	Bias	Ultimate stress = CPT version
	from Formative Slot X	from Formative Slot XI	from Formative Slot XI; must begin with glottal stop	from Formative Slot XII	from Formative Slot XIII	from Formative Slot XIV (can only appear after a V _K affix)	

3.4 Single Affixual Adjunct

h / hr	V _X (')C _S	(epenthetic -ë)
h: adjunct applies to stem only hr: adjunct applies to stem + its C _A	single V_xC_s suffix; glottal stop after V_x = affix applies to incorporated stem	[if phonotactically necessary]

Examples: hef, hoask, hrumwë

NOTE: To show multiple V_xC_s affixes via an adjunct, use Modular Adjunct 2 on the previous page.

SPECIAL NOTE: $V_X C_S$ affixes shown in an adjunct have scope over other $V_X C_S$ affixes and the C_A shown in the formative but not over additional morphology (Slots X thru XV) i.e., it acts simply like the last $V_X C_S$ affix in Slot IX. However, using a *Type 3* $V_X C_S$ affix by itself in the Single Affixual Adjunct shown immediately above indicates it applies it has scope over the formative as a whole, including Slots X thru XV.

3.5 Carrier Adjunct

This is a "shortcut" for a full carrier stem. The tell-tale sign of the adjunct is the initial **hm**-/**hn**- form, which can be distinguished from a formative by the presence of only one word-medial consonant form (whereas a formative beginning with **hm**-/**hn** - would minimally have three separate word-medial consonant forms: C_R , C_I , and C_A). The end of the proper noun or foreign phrase can be indicated by the adjunct form **hi**, if necessary.

hm / hn	V _R	C _A	V _c / V _κ	Stress
hm = INF	Function+Specification+Stem	Standard C _A complex from	Case or Illocution+Sanction	Ult. stress = CPT version
hn = FML	from formative slot II	formative Slot VIII	same as formative Slot XIII	

Examples: hmala, hmoesské, hníamtro'yu

3.6 Register Adjunct

All clauses marked by non-NARRATIVE register may be pronounced with low tone throughout (even if the register clause is otherwise a case-frame); this low-tone is analogous to the low-tone used in English when pronouncing unrestricted relative clauses. The end of the register clause is marked by a return to non-low tone. If the speaker chooses not to utilize the low-tone pronunciation, the register clause must end with final adjunct as indicated below.

Register	Initial Adjunct	Final Adjunct
DISCURSIVE (direct speech)	ha	hia
PARENTHETICAL (parenthetical aside)	he	hie
COGITANT (silent thoughts)	ho	hio

Register	Initial Adjunct	Final Adjunct
EXEMPLIFICATIVE ('for example,')	hö	hiö
IMPRESSIONISTIC (subjective impression)	hu	hiù
expression in the mathematical sub-language	hai	hau
end of term/phrase governed by carrier stem/adjunct		(hi)

3.7 Personal Reference Adjuncts

Ithkuil's 44 personal reference categories have been reduced to 12. Those Ithkuil categories consisting of combinations of discrete persons (e.g., 1m+2m) have been eliminated and are instead transparently composed of their specific combinatory markers. Another change is that the new category of Effect (see Sec. 2.11.2 on Page 14) can optionally be shown on individual personal referents. This is useful if a sentence has different effects on different parties; the effect on one or two parties can be shown on the verbal formative while the effect on the other party can be shown on a personal reference adjunct, if present.

		NEUTRAL	BENEFICIAL	DETRIMENTAL	
1m	monadic speaker	1	n	m	"I"
2m	monadic addressee	S	š	ž	"you (sg.)"
2p	polyadic addressee	Z	t	d	"you (pl.)"
ma	monadic animate 3rd party	r	р	b	"he" / "she" / "they (sg.)"
ра	polyadic animate 3rd party	ň	k	g	"they (pl.)"
mi	monadic inanimate 3rd party	X	ţ	ģ	"it"
рі	polyadic inanimate 3rd party	Ç	f	v	"they (inanimate)"
Obv	Obviative/Resumptive	c	SS	ZZ	3 rd -party other than most recently referenced (used with SWR affix)
IPa	impersonal animate	č	šš	žž	"one" "you" "people" "a person" (French "on"; German "man")
IPi	impersonal inanimate	çç	ff	vv	"something" "a thing" "things"
Col	Collective	Ż	nn	mm	NOMIC 3 rd -party
Abt	Abstract	j	rr	XX	ABSTRACT 3 rd -party

The Ithkuil universal animate ("everyone"), universal inanimate ("everything"), indefinite animate ("anyone"), indefinite inanimate ("anything") have been eliminated. They are expressable via the IPa (impersonal animate) and IPi (impersonal inanimate) in conjunction with appropriate DEF or INL - V_xC_s suffixes.

In this new language the Obviative is expanded to include its use as a "resumptive" personal referent. This allows the Obviative personal referent to refer back to a party named earlier in a complex sentence. The SWR switch-reference suffix may be used to specify which party in the sentence is being referenced.

At first glance, the consonantal values in the above table of personal reference categories may seem somewhat unsystematic in their distribution. However, the distribution of consonants has been designed to maximize the ability of the consonant-forms to to combine with one another in phonotactically permissible (and easy-to-pronounce) ways, in order to provide transparent values for the many Ithkuil personal-reference forms that have been eliminated in this new language.

As for the eliminated personal reference categories from Ithkuil comprising combinations of other personal referents, the following chart shows examples of how such combination personal referents will now be formed:

1/NEU+2m/NEU	ls/sl	1/NEU+2m/BEN	lš/šl	2m/NEU+ma/NEU	sr / rs	1/BEN+2m/BEN	nš / šn	1/NEU+2m/NEU+ma/NEU	lsr / rsl
1/NEU+2p/NEU	lz/zl	1/NEU+2p/BEN	lt/tl	2m/NEU+pa/NEU	sň / ňs	1/ben+2m/det	nž / žn	1/NEU+2m/NEU+pa/NEU	rňl / lňr
1/ NEU+ma/NEU	lr/rl	1/ NEU+ma/BEN	lp/pl	2m/NEU+mi/BEN	sţ / ţs	1/BEN +ma/BEN	pn *	1/det+2p/Neu+ma/BeN	msp / psm
1/ NEU+pa/NEU	lň/ňl	1/ NEU+pa/BEN	lk/kl	2m/NEU+pi/BEN	sf / fs	1/BEN +ma/DET	bn *	1/BEN+2p/NEU+pa/BEN	ntk / nkt
1/ NEU+mi/NEU	lx/xl	1/ NEU+Obv/BEN	lss/ssl	2m/NEU+IPa/NEU	sč	1/BEN+pa/DET	ng / gn	2p/det+ma/Neu+pi/Neu	çdr / rçd
1/ NEU+pi/NEU	lç/çl	1/NEU+2m/DET	lž/žl	2p/NEU+ma/NEU	zr / rz	2m/BEN+pa/BEN	šk / kš	1/NEU+2m/BEN+pi/DET	lšv / švl
1/ NEU+Obv/NEU	lc/cl	1/NEU+2p/DET	ld/dl	2p/NEU+pa/NEU	zň/ ňz	2m/det+pa/Ben	žk	2p/BEN+pi/NEU+ma/BEN	tçp / pçt / ptç / tpç

* The forms -**np**- and -**nb**- are phonotactically impermissible. If all combinations of two forms are phonotactically impermissible (e.g., *-**sç**- / *-**çs**- for 2m/BEN+pi/NEU), then the they cannot be combined and must appear as separate adjuncts. This also applies to the C₁+C₂ consonant conjunction in dual-referent personal reference adjuncts below.

3.7.1 Single-referent or Dual-referent personal reference adjunct

,	V _C	C ₁	(C ₂	(V _C))
	Case of Personal Referent 1; same suffixes as formative Slot XII	Personal Referent 1	Personal Referent 2 (if present)	Case of Personal Referent 2 (if present); same suffixes as formative Slot XII

The tell-tale sign of this adjunct is its 'V-C-V structure containing only one word-medial (or word-final) full consonant form.

Combinations are permissible in the C_1 slot of a single-referent adjunct, e.g., *orls* 'you, me, and her'-ERGATIVE. For dual-referent adjuncts, the C_1+C_2 consonant conjunction can only consist of two individual referents (e.g., *olše* '1m/NEU/ERG-2m/BEN/ABS), since 3-referent adjuncts would be ambiguous as to the case of the middle referent. Examples: *or*, *ias*, *eyarf*, *olkui*, *íasme*, *éyafdou*

3.7.2 Combination Personal-Referent Adjunct

This adjunct is available when there is a need to add Specification, Designation, $-V_xC_s$ suffix information and aspectual information to one of the combination Personal Reference forms (e.g., for non-combination single-referent forms, one may use this adjunct or the new Personal-Reference root explained below):

,	(V _R)	$C_1 + C_2 (+ C_3)$	V _C	ks / ps	(V _x C _s)	(epenthetic -ë)
	Specification x Stem x Function	Combination Personal Referent	Case of Combination Personal Referent	Designation of Combination Referent	VxCs suffix 1 (2, 3,)	

The tell-tale sign of this adjunct is -ks- or -ps- appearing in what looks like the C_A slot of a formative (these are not possible C_A forms). Examples: *sleks, étkeaks, álxopsegwë*

3.7.3 The Personal Reference Root: -V-

While I initially agreed with suggestions to create a separate root for each personal-reference category, I've since decided having twelve such roots (one for for each personal-referent) constitutes lexico-semantic overkill. The same purpose can be achieved by simply having one root used for all personal referents, the particular referent in question being indicated by a $-V_xC_s$ suffix. The meaning of the bare root itself would be somewhat like the English word 'self', the various suffixes specifying words similar to English emphatic (**not** reflexive) forms, e.g., *myself*, *itself*, etc., as in '*I*, *myself*, *don't think so*'.

The $-V_XC_S$ suffix used with this root is structured as follows:

-n	PSN: Personal Referent			
1	1m - monadic speaker	·Ц.,		
2	2m - monadic addressee	"you (sg.)"		
3	2p - polyadic addressee	"you (pl.)"		
4	ma - monadic animate 3rd party	"he" / "she" / "they (sg.)"		
5	pa - polyadic animate 3rd party	"they (pl.)"		
6	mi - monadic inanimate 3rd party	"it"		
7	pi - polyadic inanimate 3rd party	"they (inanimate)"		
8	Obv - Obviative/Resumptive	3 rd -party other than most recently referenced (used with SWR affix)		
9	IPa - impersonal animate	"one / you / people / a person" (French "on"; German "man")		

The reader will note that three personal-referents are missing from the above suffix: the **Impersonal Inanimate**, the **Collective**, and the **Abstract**. For Collective and Abstract use NOMIC or ABSTRACT perspective on the appropriate 3rd-party referent above; for Impersonal Inanimate, either use the bare root below without a personal-referent suffix, or instead use the root for 'thing/entity' + the DEF/3 (or similar) suffix.

As for the 'self'-like root which takes the above suffixes, its structure is shown below:

		-V- INFORMAL: / 'self' / [generic personal refer	ent]; FORMAL: 'identity'
		STEM 1 Nominal meaning	STEM 1 Verbal meaning
1	BASIC	'(X-)self'	'to be oneself/X-self' / 'to do/act what/how X does [because it's X]'
2	CONTENT	'(X-)self (as one's personality, mind, psyche, sentient thoughts, psychological sense of individuality, or "essence"; irrespective of one's physical body)'	[same as above applied to Content meaning at left]
3	CONSTITUTIVE	'(X-)self (as one's 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]
4	OBJECTIVE	'entity with/on which X acts (i.e., place, thing, person, etc. with/in/on which/whom X [inter-]acts)'; 'something/someone from/in X's life/niche/environment'	'to be an entity in X's life/niche/environment; to be something/someone that/who is in X's life/niche/environment'
5	FACILITATIVE	a representation of X-self; FML = 'avatar of X-self'	'to do/act as X [would] do/act'
6	FOUNDATIONAL	'X's reason for existence'	'to have/be a reason for X's existence'
7	INTENTIVE	'X's purpose in life; what X wants to do/be'; CPT Version: 'X's accomplishments; X's legacy'	'to have a purpose in life; to have a sense of what X wants to be/do' / 'to pursue X's purpose; pursue what X wants to do'; CPT: "achieve X's purpose(s); to accomplish what X sets out to do'
8	EXPERIENTIAL	'(the experience of) being X'	'to experience being X'
9	PREREQUISITIVE	'what it takes to be X; everything that goes into being X'	'to do/put what it takes into being X'

The INFORMAL designation of the above stems refers to a temporary, incidental, or "situation-at-hand" context. The FORMAL counterparts refer to the party in an iconic, archetypal, quasi-permanent context, translatable as 'identity'. Stems 2 and 3 are equivalent to Stem 1, plus BENEFICIAL and DETRIMENTAL Effect respectively.

4.0 NEW V_xC_s AFFIXES & ASSOCIATED ROOTS

This new section of the document provides details on various new (or redesigned) $V_X C_S$ affixes, many of which are based on an associated root.

4.1 Modality Suffixes

-nd	DSD: Desiderative modalities
1	want to/that
2	hope to/that, wish to/that; Type 2: dream about / long to
3	request/ would like to/that / if you please
4	feel like / up for / be inclined to
5	if only / were it so that [GENERAL HORTATIVE]
6	deign to / acquiesce to / assent to
7	be willing to, not mind, be open to, be OK with
8	would rather / prefer to
9	demand to/that

1 1	tend to / be apt to/ be prone to
2	be prepared/ready to
3	promise to / swear to / vow to
4	look forward to / eagerly await
5	free to, available to
6	anticipate / expect to/that
7	intend to / plan on/ shall
8	(be) face(d with)
9	be predisposed to, be destined to

-rd	CPC: Capacitative modalities
1	can/could = have the potential to / possibility of
2	can/be able = have oppty to
3	can/be able = have phys. ability/capacity to
4	can/be able = offer to / volunteer to
5	can/be able = have knowledge/skill needed to
6	can/be able = be permitted to
7	let / allow to / permit that
8	suggest that / propose to
9	take advantage of (the opportunity to)

-lt	OBG: Obligative/necessitative
1	must / have to
2	should / ought to
3	be supposed/expected to, would be best if
4	feed driven/compelled to / feel a need to
5	need to / be necessary that/to
6	agree to
7	attempt to / try to
8	be forced/coerced to
9	to be fated/destined to

-mv	DBV: Deliberative modalities
1	be devoted/committed to
2	have impression/feeling that
3	think (believe) that
4	remember to
5	consider, think about> CPT: decide/resolve to, make up one's mind to to
6	resigned to
7	dare to
8	choose to
9	help to, aid in, assist with

-ňt	AVS: Aversive (simple negations of other modalities)
1	forget to
2	avoid / shy away from
3	fear to / dare not
4	hinder, interfere with
5	prevent / prohibit / not let
6	refrain/abstain from
7	dread, not look forward to
8	be forced to /unwillingly
9	would rather not / prefer not to

4.2 Roots and Suffixes For Motion and Spatial Position

English has the ability to create succinct "moving images" of complex trajectories, paths, treks, and in-situ movements by simple juxtaposition of locative/directional particles (i.e., prepositions acting mostly as adverbial particles). For example, imagine the manager of a basement nightclub talking to a friend on the sidewalk outside his club. He invites the friend to the small patio outside the back of the club, which one finds by descending into the club, going past the dance floor, up a flight of stairs, and down a long hallway to the back door. He does so by saying, *Come on down inside up along through out to the back*.

This new language will allow a speaker to create similar succinct "moving images". Each motion root (whether referring to in-situ or translative motion) will have a corresponding $-V_xC_s$ affix of the same form (e.g., if the root for 'OBLIQUE LINEAR MOTION' is -KR-, it will have a corresponding suffix -kr.) Each of these suffixes will then have the following nine degrees:

1	Interior perlative motion/movement in a manner described by the suffix's corresponding root among/within an external/surrounding/underlying (quasi-)static medium. For translative motion suffixes, implies motion along a course described by the suffix's corresponding root where the course is set, determined, or prescribed by an externally surrounding/underlying medium/channel, etc.
2	Interior motion/movement: static or translative movement/motion in a manner described by the suffix's corresponding root while inside another object/entity (where, unlike the perlative degree, the exterior object/entity does not define/prescribe/determine the course of the moving object/entity
3	Implies entry from an exterior space/medium/context into an interior space/medium/context
4	Implies continued/continuous movement in a manner described by the suffix's corresponding root; for translative motion suffixes, implies continued/continuous motion along a course/direction described by the suffix's corresponding root
5	Motivational "on" as in "come on", "go on", "move on" - implies/reinforces need/impetus to begin/keep moving in the manner or direction described by the suffix's corresponding root without stopping
6	Implies a single motion in a manner described by the suffix's corresponding root across from one point/side of the contextual space to another; for translative motion suffixes, implies a single motion along a course/direction described by the suffix's corresponding root across a gap/gulf/space from one place to another
7	Implies exit from an interior space/medium/context out to an exterior space/medium/context
8	exterior motion/movement: static or translative movement/motion in a manner described by the suffix's corresponding root while outside another object/entity (where, unlike the perlative degree, the other object/entity does not define/prescribe/determine the course of the moving object/entity
9	exterior perlative motion/movement outside of, over, next to, alongside, "above"/"under" an adjacent (quasi-)static surface/medium; for translative motion suffixes, implies motion on a course described by the suffix's corresponding root along, over, parallel to, around, "above"/"under", or tracking/following an adjacent (quasi-)static surface/medium

For Degree 6, the various Modulative suffixes as well as Phase can be used to describe repeated, ongoing movement/motion, e.g., back-and-forth, to-and-fro, side-to-side, up-and-down, in-and-out, out-and-back, etc.

Besides movement/motion Roots, roots denoting any spatial referent/area would also have corresponding suffix-forms utilizing this pattern (e.g., front side, rear area, top area/space, area below/underneath, etc.).

IMPORTANT NOTE: Suffixes based on Translative Motion and Spatial Position roots have a particular semantic feature: **Type 1 suffixes correspond to Stem 2** of the root, whereas **Type 2 suffixes correspond to Stem 3** of the root.

4.2.1 Translative Motion Roots: Roots involving translative motion will be modeled after the following basic root:

		-TR- 'PATH-ORIENTED, QUASI-LINEAR TRANSLATIVE MOTION' Suffix form: -tr-	
		STEM 1	
1	BASIC	translative motion (i.e., changing location through spacetime) from one place to another; to move (i.e., change location through spacetime) from one place to another	STEM 2: Same as Stem 1 except that
2	CONTENT	The process of movement itself from one place to another; to be moving from one place to another	the perspective is on motion to(ward) the topical referent
3	CONSTITUTIVE	The path/trajectory/course/route followed between two places; to move along/through the path/trajectory/course/route from one place to another	of the sentence or clause,
4	OBJECTIVE	The entity moving from one place to another; to be the entity moving from one place to another	i.e., "come; approach"; CPT = "arrive"
5	FACILITATIVE	An act which functions/serves as translative motion; to act/function as translative motion	
6	FOUNDATIONAL	The cause/source/reason for moving from one place to another; to be the cause/source/reason thereof	STEM 3:
7	INTENTIVE	The purpose (i.e., desired outcome) for an act of translative motion; to move from one place to another for a specific purpose/reason. [CPT version = (to achieve) the desired outcome thereof	Same as Stem 1 except that the perspective is on motion away from the topical referent
8	EXPERIENTIAL	The physical experience/sensation of translative motion; to undergo the experience/sensation thereof	of the sentence or clause,
9	PREREQUISITIVE	The underlying premise/assumption/prerequisite for an act of translative motion; to be an underlying premise/assumption/prerequisite for an act of translative motion.	i.e., "go; go away; move away"; CPT = "leave; depart"

INFORMAL stems refer to a circumstantial, context-of-the-moment movement; FORMAL stems refer to planned travel, a formal traversal, a dedicated journey, a pre-planned route, etc.

The above root therefore generates translations for English *move* (from one place to another), *go*, *come*, *approach*, *leave*, *depart(ure)*, *travel*, *journey*, *traveler*, *destination* (in the sense of being the purpose of a journey).

Roots (and suffixes) following the same model as **-TR-** above include the following:

- -**PR** 'VERTICAL QUASI-LINEAR TRANSLATIVE MOTION', i.e., movement up/down; Stem 2 = 'ascent/ascend; going (straight) up; rise/raise'; Stem 3 = 'descent/descend; going (straight) down; "drop"; lower(ing)'
- -KR- 'OBLIQUE VERTICAL QUASI-LINEAR MOTION', i.e., ascending/descending at an angle/slant'; Stem 2 = oblique ascent; Stem 3 = oblique descent
- -DR- 'HORIZONTAL PLANAR TRANSLATIVE MOTION', i.e., movement along a line/path on a horizontal plane between the topical referent and a second location; Stem 2 = 'approach, getting nearer'; Stem 3 = 'recede/receding, getting farther away'
- -BR- 'PERPENDICULAR-PLANAR TRANSLATIVE MOTION', i.e., movement along a line/path "across" one's forward path or field of vision, moving laterally (i.e., horizontally perpendicular) to the positional/orientational position or path of the topical referent (i.e., analogous to watching something moving in a line across a screen held in front of one's eys); Stem 2 = movement from left-to-right relative to the topical referent; Stem 3 = movement from right-to-left relative to the topical referent.

- -GR- 'OBLIQUE LATERAL TRANSLATIVE MOTION', i.e., moving laterally at an oblique angle on same horizontal plane as the topical referent; Stem 2 = lateral movement at an oblique angle approaching (i.e., getting nearer to) the topical referent; Stem 3 = lateral movement at an oblique angle moving away from (getting farther away from) the topical referent.
- -FR- 'PARALLEL TRANSLATIVE MOTION', i.e., movement along same path/trajectory as the topical referent; Stem 1 = parallel movement in same direction alongside topical referent; Stem 2 = parallel movement alongside but in opposite direction to topical referent
- -GL- 'HORIZONTAL-PLANAR RANGE OF MOTION', i.e., random directed movement within/throughout a 2-dimensional horizontal plane.
- -DL- 'VERTICAL-PLANAR RANGE OF MOTION', i.e., random directed movement within/throughout a 2-dimensional vertical plane.
- -KL- 'PERPENDICULAR-PLANAR RANGE OF MOTION', i.e., random directed movement within/throughout a 2-dimensional vertical plane perpendicular to the perspective of the topical referent (i.e., lying "across" one's visual field or directional path, analogous to a painting or flat screen held up in front of a person).
- -PL- 'TRANSLATIVE MOTION ALONG PRABOLIC/ARC-LIKE TRAJECTORY RELATIVE TO GRAVITY'
- -BL- 'MOTION IN A CURVE'
- -TL- 'GENERIC/OBLIQUE 3-DIMENSIONAL RANGE OF MOTION', i.e., 3-D pervasive movement throughout or within a volume of space

4.2.2 Spatial Position/Location Roots: Roots involving spatial position/orientation/direction will be modeled after the following basic root:

		-F- 'SPATIAL POSITION, LOCATION, ORIENTATION, DIRECTION' Suffix form: -f-	
		STEM 1	
1	BASIC	spatial position of an entity; to be situated/located at	STEM 2:
2	CONTENT	The act of physically occupying a/the position/location in space; to physically occupy a/the position in space	Direction relative to the observer (i.e., linear
3	CONSTITUTIVE	A/the position/location in space occupied by an entity; to be a/the position/location in space	directional path between an
4	OBJECTIVE	The entity situated/located at; to be the entity situated/located at	object and the observer)
5	FACILITATIVE	An act which functions/serves as a/the spatial position/location; to act/function as a/the spatial position/location	STEM 3: Area, general vicinity of a particular position/location relative to the observer, whether 2-dimensional or 3-dimensional according to the situational context
6	FOUNDATIONAL	The cause/source/reason for being situated/located at; to be the cause/source/reason thereof	
7	INTENTIVE	The purpose (i.e., desired outcome) for an act of being spatially positioned/located; to be spatially positioned/located for a specific purpose/reason. [CPT version = (to achieve) the desired outcome thereof	
8	EXPERIENTIAL	The physical experience/sensation of being situated/located at; to undergo the experience/sensation thereof	
9	PREREQUISITIVE	The underlying premise/assumption/prerequisite for an act of being situated/located at; to have an underlying premise/assumption/prerequisite for an act of being situated/located at.	

INFORMAL stems refer to a circumstantial, context-of-the-moment position/location; FORMAL stems refer to a dedicated, fixed, (quasi-)permanent, "official" position/location. Roots (and suffixes) following the same model as $-\mathbf{F}$ - above include the following based on a 3-dimensional X/Y/Z axial grid:

- -**T** 'POSITION/LOCATION AT 0 / 0 / 0', i.e., "right here"; at the center point of the observer's 3-dimensional spatial frame of reference.
- -**ȚY** 'POSITION/LOCATION AT 0 / 0 / +Z', 'above the observer'
- -ŢW- 'POSITION/LOCATION AT 0 / 0 / -Z', 'below the observer'
- -P- 'POSITION/LOCATION AT 0 / +Y / 0', 'in front of the observer'
- -K- 'POSITION/LOCATION AT 0 / -Y / 0', 'behind the observer'
- -S- 'POSITION/LOCATION AT +X/0/0', 'to the right of the observer'
- -Z- 'POSITION/LOCATION AT -X / 0 / 0', 'to the left of the observer'

For mnemonic convenience, combinations of the above positional concepts are designated by corresponding combinations of the phonemes of the above X/Y/Z roots (-**ȚY**- and -**ȚW**- are shortened to -**Y** and -**W**):

- -PY- 'POSITION/LOCATION AT 0 / +Y / +Z', 'in front of and above the observer'
- -PW- 'POSITION/LOCATION AT 0 / +Y / -Z', 'in front of and below the observer'
- -KY- 'POSITION/LOCATION AT 0 / -Y / +Z', 'behind and above the observer'
- -KW- 'POSITION/LOCATION AT 0 / -Y / -Z', 'behind and below the observer'
- -SP- 'POSITION/LOCATION AT +X / +Y / 0', 'to the right and in front of the observer'
- -SK- 'POSITION/LOCATION AT +X / -Y / 0', 'to the right and behind the observer'
- -SY- 'POSITION/LOCATION AT +X / 0 / +Z', 'to the right and above the observer'
- -SW- 'POSITION/LOCATION AT +X / 0 / -Z', 'to the right and below the observer'
- -ZB- 'POSITION/LOCATION AT -X / +Y / 0', 'to the left and in front of the observer'
- -ZG- 'POSITION/LOCATION AT -X / -Y / 0', 'to the left and behind the observer'
- -ZY- 'POSITION/LOCATION AT -X / 0 / +Z', 'to the left and above the observer'
- -ZW- 'POSITION/LOCATION AT -X / 0 / -Z', 'to the left and below the observer'

-SPY- 'POSITION/LOCATION AT +X / +Y / +Z', 'to the right, in front, and above the observer' -SPW - 'POSITION/LOCATION AT +X / +Y / -Z', 'to the right, in front, and below the observer' -SKY- 'POSITION/LOCATION AT +X / -Y / +Z', 'to the right, behind, and above the observer' -SKW- 'POSITION/LOCATION AT +X / -Y / -Z', 'to the right, behind, and below the observer' -ZBY- 'POSITION/LOCATION AT -X / +Y / +Z', 'to the left, in front, and above the observer' -ZBW- 'POSITION/LOCATION AT -X / +Y / -Z', 'to the left, in front, and below the observer' -ZGY- 'POSITION/LOCATION AT -X / -Y / +Z', 'to the left, behind, and above the observer' -ZGW- 'POSITION/LOCATION AT -X / -Y / -Z', 'to the left, behind, and below the observer'

- -FT- 'POSITION BETWEEN/AMIDST/AMONG [IN A QUASI-PLANAR CONTEXT]', e.g., among others in a crowded room
- -FK- 'POSITION BETWEEN/AMONG [IN A LINEAR UNIDIMENSIONAL CONTEXT]', e.g., between two others in a queue
- -FP- 'INDEFINITE POSITION AMIDST/AMONG [IN A 3-DIMENSIONAL VOLUME]', e.g., among a sky full of balloonists
- -VD- 'POSITION/STATE INTERTWINED/INTERMINGLED/INTERMIXED IN 2-DIMENSIONAL PLANAR CONTEXT [INDIVIDUAL COMPONENTS SEPARABLE/EXTRACTABLE]', e.g., the red marbles amidst a tabletop covered with different colored marbles
- -VB- 'POSITION/STATE INTERTWINED/INTERMINGLED/INTERMIXED IN 3-DIMENSIONAL VOLUME [INDIVIDUAL COMPONENTS SEPARABLE/EXTRACTABLE]', e.g., the red marbles within a jar full of different colored marbles
- -VŻ- 'POSITION/STATE INTERTWINED/INTERMINGLED/INTERMIXED IN 2-DIMENSIONAL PLANAR CONTEXT [INDIVIDUAL COMPONENTS INSEPARABLE/PERMANENTLY COMBINED]', e.g., yellow paint spread onto a blue canvas to make a green area
- -VG- 'POSITION/STATE INTERTWINED/INTERMINGLED/INTERMIXED IN 3-DIMENSIONAL VOLUME [INDIVIDUAL COMPONENTS INSEPARABLE/PERMANENTLY COMBINED]', e.g., sugar granules poured into a cup of coffee

4.2.3 Roots Designating Positionally-Defined Componential Parts Of A Whole

As seen above, Stem 3 of -**F**- type spatial position roots convey the meaning of "the area/vicinity around X", so that the Stem 3 root of -**K**- above would mean "the area behind or in back (of)". Nevertheless, as in Ithkuil, separate roots will exist to describe positionally-defined componential parts of an entity, to distinguish "the area behind or in back of" from "the rear/back part/side of" where the latter refers to a part of the entity itself. This allows one to distinguish phrases such as "behind the box" from "the back/rear side of the box." Such positionally-defined componential roots are modeled on the following:

		-FS- POSITIONALLY-DEFINED COMPONENTIAL PART' Suffix form: -fs-	
		STEM 1	
1	BASIC	positionally-defined part/section of an entity (e.g., side, front, top, bottom, rear, etc.); to be a positionally-defined part/section of an entity	STEM 2:
2	CONTENT	The state/act of physically being/doing what a positionally-defined part/section of an entity is/does; to physically bed/do what a positionally-defined part/section of an entity is/does	Inalienable, inherent, inseparable, "built-in" component part/section in
3	CONSTITUTIVE	A/the (relative) spatial position/location which defines/delineates a part/section of an entity; to be a/the spatial position/location which defines/delineates a part/section of an entity	relation to the whole
4	OBJECTIVE	The entity of which the componential part/section is a part; to be the entity of which the componential part/section is a part	STEM 3:
5	FACILITATIVE	Something that functions/serves as a/the positionally-defined part/section of an entity; to act/function as a/the positionally-defined part/section of an entity	Alienable, separarable, detachable component
6	FOUNDATIONAL	The cause/source/reason for being a positionally-defined part/section of an entity; to be the cause/source/reason thereof	part/section in relation to
7	INTENTIVE	The purpose (i.e., desired outcome) for an act of being a positionally-defined part/section of an entity; to be a positionally-defined part/section of an entity for a specific purpose/reason. [CPT version = (to achieve) the desired outcome thereof	the whole
8	EXPERIENTIAL	The physical experience/sensation of being a positionally-defined part/section of an entity; to undergo the experience/sensation thereof	
9	PREREQUISITIVE	The underlying premise/assumption/prerequisite for an act of being a positionally-defined part/section of an entity; to be an underlying premise/assumption/prerequisite for an act of being a positionally-defined part/section of an entity	

INFORMAL stems refer to a circumstantial, context-of-the-moment position/location; FORMAL stems refer to a dedicated, fixed, (quasi-)permanent, "official" position/location.

Roots (and suffixes) following the same model as **-FS-** above include the following:

- -CL- 'LINEAR UNI-DIMENSIONAL MIDDLE, CENTER [AS SEEN PARALLEL TO LONG AXIS OF ENTITY (OR HEIGHT-AXIS OF A "TALL" ENTITY)]'
- -CR- 'LINEAR UNI-DIMENSIONAL MIDDLE, CENTER [AS SEEN PERPENDICULAR TO LONG AXIS OF ENTITY (OR HEIGHT-AXIS OF A "TALL" ENTITY)]'
- -ŻL- 'PLANAR 2-DIMENSIONAL MIDDLE, CENTER [RUNNING VERTICALLY AND LATERALLY PARALLEL TO LONG (OR TALL) SIDE OF ENTITY]'
- ŻR- 'PLANAR 2-DIMENSIONAL MIDDLE, CENTER [RUNNING VERTICALLY PARALLEL BUT LATERALLY PERPENDICULAR TO LONG (OR TALL) SIDE OF ENTITY]'
- -ŻŻ- 'PLANAR 2-DIMENSIONAL MIDDLE, CENTER [RUNNING VERTICALLY AND LATERALLY PERPENDICULAR TO LONG (OR TALL) SIDE OF ENTITY]'
- -CC- 'CENTER POINT OF AN ENTITY, i.e., the zero-dimensional point most equidistant from all points on the periphery or surface of an entity

-NGR- 'SIDE/FLANK OF AN ENTITY'

- -LPÇ- 'FRONT PART OF AN ENTITY [RELATIVE TO ITS DIRECTIONAL ORIENTATION OR PRIMARY EXTERNAL INTERFACE]'
- -RKÇ- 'REAR/BACK PART OF AN ENTITY [RELATIVE TO ITS DIRECTIONAL ORIENTATION OR PRIMARY EXTERNAL INTERFACE]'
- -NGY- 'TOP/PEAK/SUMMIT OF AN ENTITY [RELATIVE TO ITS TYPICAL ORIENTATION UNDER GRAVITY]'
- -MBW- 'BOTTOM/FOUNDATION OF AN ENTITY [RELATIVE TO ITS TYPICAL ORIENTATION UNDER GRAVITY]'
- -LGY- 'UPPER PART/"HALF" OF AN ENTITY [RELATIVE TO ITS TYPICAL ORIENTATION UNDER GRAVITY]'
- -RBY- 'LOWER PART/"HALF" OF AN ENTITY [RELATIVE TO ITS TYPICAL ORIENTATION UNDER GRAVITY]'
- -ST- 'INTERIOR/INTERNAL PART/"INSIDE(S)"/"INNARDS" OF AN ENTITY'
- -ZV- 'EXTERIOR/EXTERNAL SURFACE/"OUTSIDE"/"SKIN" OF AN ENTITY'

The following roots relating to component parts/features of an entity are also modeled on the same root -XX-, even though they do not specify a particular spatial position relative to the whole:

- -NZD- 'EXTERNAL POINT-LIKE OUTWARD-FACING VERTEX/"CORNER" OF AN ENTITY'
- -ZJ- 'EXTERNAL QUASI-LINEAR EDGE OF AN ENTITY'
- -ŇZR- 'EXTERNAL QUASI-LINEAR JOINING OF SURFACES/"SEAM" OF AN ENTITY'
- -XF- 'EXTERNAL ATTACHMENT POINT OR FASTENING MECHANISM OF AN ENTITY', i.e., handle, hook, latch, velcro patch, knob, peg, etc.
- -ÇTL- 'ROTATIONAL OR BENDING/SWIVEL POINT/JOINT OF AN ENTITY'

4.2.4 Additional Affixes for Use With Spatial and Translative Motion Roots

The following new affixes can be used with both motion and positional roots to provide added detail and specificity. Several of these affixes (e.g., ZZG, SPR, CRC), when combined with roots of motion, take the place of dedicated roots in Ithkuil. For example, the ZZG affix below combined with directional motion roots obviates the need for a root meaning 'veer/switchback', while the the CRC affix below obviates the need for roots describing corkscrew-like or even spiral paths (if augmented by certain Modulative affixes).

-jj	BDM — IN SITU BODILY MOVEMENTS (augment with Type 3 ITN, RPN and/or Modulative suffixes if necessary)
1	with arms or non-ambulatory appendages waving/bending
2	with arms or non-ambulatory appendages making jerking, stop & start, choppy movements
3	with arms or non-ambulatory appendages making (seemingly) random/spasmodic/out-of-control movements
4	with main body of object/entity twisting or bending
5	with main body of object/entity making jerking, stop & start, choppy movements
6	with main body of object/entity making (seemingly) random/spasmodic/out-of-control movements
7	with legs or ambulatory appendages waving/bending
8	with legs or ambulatory appendages making jerking, stop & start, choppy movements
9	with legs or ambulatory appendages making (seemingly) random/spasmodic/out-of-control movements

-žd	ZZG — Secondary Zig-Zag Motion (augment with Type 3 ITN, RPN and/or Modulative suffixes if necessary)
1	short-period 2-D zig-zag motion on parallel-vertical plane relative to the direction of travel
2	varying-period 2-D zig-zag motion on parallel-vertical plane relative to the direction of travel
3	long-period 2-D/planar zig-zag motion on parallel-vertical plane relative to the direction of travel
4	short-period 2-D zig-zag motion on oblique plane relative to the direction of travel
5	varying-period 2-D zig-zag motion on oblique plane relative to the direction of travel
6	long-period 2-D/planar zig-zag motion on oblique plane relative to the direction of travel
7	short-period 2-D zig-zag motion on parallel-horizontal plane relative to the direction of travel
8	varying-period 2-D zig-zag motion on parallel-horizontal plane relative to the direction of travel
9	long-period 2-D/planar zig-zag motion on parallel-horizontal plane relative to the direction of travel

-bgy	SNW — Secondary Sine Wave-like Motion (augment with Type 3 ITN, RPN and/or Modulative suffixes if necessary)
1	short-period 2-D sine wave-like motion on parallel-vertical plane relative to the direction of travel
2	varying-period 2-D sine wave-like motion on parallel-vertical plane relative to the direction of travel
3	long-period 2-D/planar sine wave-like motion on parallel-vertical plane relative to the direction of travel
4	short-period 2-D sine wave-like motion on oblique plane relative to the direction of travel
5	varying-period 2-D sine wave-like motion on oblique plane relative to the direction of travel
6	long-period 2-D/planar zig-zag motion on oblique plane relative to the direction of travel
7	short-period 2-D sine wave-like motion on parallel-horizontal plane relative to the direction of travel
8	varying-period 2-D sine wave-like motion on parallel-horizontal plane relative to the direction of travel
9	long-period 2-D/planar sine wave-like motion on parallel-horizontal plane relative to the direction of travel

-vgw	SPR — Spin/Rotation of an Object (augment with Type 3 ITN, RPN and/or Modulative suffixes if necessary)
1	short-period (i.e., fast) spinning motion on parallel-vertical plane relative to the direction of travel (i.e., forward-rolling or pitch-like tumbling motion)
2	varying-period (i.e., variable-speed) spinning motion on parallel-vertical plane relative to the direction of travel (i.e., forward-rolling or pitch-like tumbling motion)
3	long-period (i.e., slow) spinning/revolving motion on parallel-vertical plane relative to the direction of travel (i.e., forward-rolling or pitch-like tumbling motion)
4	short-period (i.e., fast) spinning motion on perpendicular plane relative to the direction of travel (i.e., spiral vector in direction of travel)
5	varying-period (i.e., variable-speed) spinning motion on perpendicular plane relative to the direction of travel (i.e., spiral vector in direction of travel)
6	long-period (i.e., slow) spinning/revolving motion on perpendicular plane relative to the direction of travel (i.e., spiral vector in direction of travel)
7	short-period (i.e., fast) spinning motion on parallel-horizontal plane relative to the direction of travel (i.e., horizontally revolving/rotating)
8	varying-period (i.e., variable-speed) spinning motion on parallel-horizontal plane relative to the direction of travel (i.e., horizontally revolving/rotating)
9	long-period (i.e., slow) spinning/revolving motion on parallel-horizontal plane relative to the direction of travel (i.e., horizontally revolving/rotating)

-mky	CRC — Circular Motion/Path of an Object (augment with Type 3 ITN, RPN and/or Modulative suffixes if necessary)
1	while traveling in (a) short-period (i.e., fast/small) circle(s) on a plane perpendicular to the direction of travel (i.e., resulting in a corkscrew-like path)
2	while traveling in (a) short-period (i.e., fast/small) circle(s) on a plane vertically parallel to the direction of travel (i.e., where X rolls or tumbles along, e.g., a ball or a tumbleweed)
3	while traveling in (a) short-period (i.e., fast/small) circle(s) on a plane horizontally parallel to the direction of travel (i.e., resulting in a path of moving epi-cycles / "curlycues")
4	while traveling in (a) mid-period (i.e., medium-sized/paced) circle(s) on a plane perpendicular to the direction of travel (i.e., resulting in a corkscrew-like path)
5	while traveling in (a) mid-period (i.e., medium-sized/paced) circle(s) on a plane vertically parallel to the direction of travel (i.e., where X rolls along, e.g., a ball or tumbleweed)
6	while traveling in (a) mid-period (i.e., medium-sized/paced) circle(s) on a plane horizontally parallel to the direction of travel (i.e., a path of moving epi-cycles / "curlycues")
7	while traveling in (a) long-period (i.e., slow/large) circle(s) on a plane perpendicular to the direction of travel (i.e., resulting in a corkscrew-like path)
8	while traveling in (a) long-period (i.e., slow/large) circle(s) on a plane vertically parallel to the direction of travel (i.e., where X rolls or tumbles along, e.g., a ball or tumbleweed)
9	while traveling in (a) long-period (i.e., slow/large) circle(s) on a plane horizontally parallel to the direction of travel (i.e., resulting in a path of moving epi-cycles / "curlycues")

-šgw	SDM — Miscellaneous In-Situ Motions of an Object (augment with Type 3 ITN, RPN and/or Modulative suffixes if necessary)
1	while changing/re-arranging one's bodily shape/formation/outline/configuration
2	while making/undergoing sudden paroxysmic, spasmodic jumping/leaping/spiking/lurching movement(s)> while shaking
3	while expanding in overall-size (keeping all dimensions approximately proportionate to each other)
4	while shrinking/contracting in overall-size (keeping all dimensions approximately proportionate to each other)
5	while expanding in length
6	while expanding in width/girth
7	while expanding in height
8	while extending (an) appendage(s) or protrusion(s) outward
9	while contracting (an) appendage(s) or protrusion(s) inward

The following three affixes allow one to provide information similar to Hilbert-space coordinates in physics, i.e., the internal positional orientation of an object relative to an external observer, secondary to its overall motion through space

-rky	IPE — Internal Positional Orientation of a (Quasi-)Long Object Having an Orientational "End" or "Ends"
1	with X's (an) orientational "end" facing toward the observer
2	with X's orientational "ends" at an oblique angle to, but equidistant from (i.e., neither facing toward or away from) the observer
3	with X's (an) orientational "end" pointing perpendicularly upward/upright/vertically upward relative to the observer
4	with X's orientational "end(s)" changing position relative the observer
5	with the observer being unable to discern/determine the position of X's orientational "end(s)" relative to the observer
6	with X's orientational "ends" at an oblique angle to the observer with one end closer to observer than the other
7	with X's orientational "end" pointing perpendicularly downward/upside-down/vertically downward relative to the observer
8	with X's orientational "end(s)" pointing horizontally sideways relative to the observer (i.e., "lying flat with ends pointing left and right")
9	with X's (an) orientational "end" facing away from the observer

-rpy	PFE — Internal Positional Orientation of an Object Having an Orientational "Face" or "Front"
1	with X's orientational "face" or "front" facing toward the observer
2	with X's orientational "face" or "front" at an oblique angle to (i.e., neither facing toward or away from) the observer
3	with X's orientational "face" or "front" pointing perpendicularly upward/upright/vertically upward relative to the observer
4	with X's orientational "face" or "front" changing position relative the observer
5	with X's internal orientation relative to the observer indeterminable due to the (seeming) lack of an orientational "face" or "front"
6	with the observer being unable to discern/determine the position of X's orientational "face" or "front" relative to the observer
7	with X's orientational "face" or "front" pointing perpendicularly downward/upside-down/vertically downward relative to the observer
8	with X's orientational "face" or "front" pointing horizontally sideways relative to the observer
9	with X's orientational "face" or "front" facing away from the observer

-rty	PFL — Internal Positional Orientation of a (Quasi-)Flat Object
1	with X's "front/top" side visible to the observer but largely pointed away at a severe angle
2	with X's "front/top" side visible to the observer but pointed away at an oblique angle
3	with X's "front/top" side directly facing the observer
4	with X's orientation being "edge-on" and at an oblique angle relative to the observer
5	with X's orientation being "edge-on" and horizontal relative to the observer
6	with X's orientation being "edge-on" and vertical relative to the observer
7	with X's "back/bottom" side directly facing the observer
8	with X's "back/bottom" side visible to the observer but somewhat pointed away at an oblique angle
9	with X's "back/bottom" side visible to the observer but largely pointed away at a severe angle

4.3 New Affix For Use with Levels

This suffix is applied to the "Y" noun to which something is compared (the "than Y"). The "Y" noun is declined into the COMPARATIVE Case.

-mt	SCL: Standards for Comparison for Use with Levels
1	where X was previously less M (or M 'd less) than Y
2	where X was previously more M (or M 'd more) than Y
3	where X is still less M (or M 's less) than Y
4	where X is still more M (or M 's more) than Y
5	where X is now less M (or M 's less) than Y
6	where X is now more M (or M 's more) than Y
7	where X was previously as M (or M 'd as much) as Y
8	where X 's previous state of M-ness (or level of M-ing) relative to Y is unknown
9	where X's previous state of M-ness (or level of M-ing) relative to Y is inapplicable or irrelevant

4.4 Verifiability/Trustworthiness Affix For Use with Illocution

-lk	VRF: Verifiability of Info & Trustworthiness of its Source
1	source trustworthy, info verifiable
2	source trustworthy, verifiability of info unknown
3	source trustworthy, info not verifiable
4	trustworthiness of source unknown, but info verifiable
5	trustworthiness of source unknown, and verifiability of info unknown
6	trustworthiness of source unknown, and info not verifiable
7	source untrustworthy, but info verifiable
8	source untrustworthy, and verifiability of info unknown
9	source untrustworthy, and info not verifiable

4.5 Affix Specifying the Scope of a Formative's Case-Marking

-ż	SCP: scope of case-marking on a noun
1	X's noun-case applies only to immediately preceding word
2	X is the head noun to which following nouns are associated via their case-marking
3	X's noun-case applies to the first (head) noun of the clause in a string of 3 or more nouns
4	X is the head noun to which the surrounding nouns are associated via their case-marking
5	X's noun-case applies to the entire clause
6	X's noun-case applies to the marked (via degree 2 of this affix) head noun within the clause
7	X's noun-case applies to the last (head) noun of the clause in a string of 3 or more nouns
8	X is the head noun to which the preceding nouns are associated via their case-marking
9	X's noun-case applies only to immediately following word

4.6 Two New Systemic Suffixes

The following two suffixes can be used in conjunction with the specialized - $\ddot{u}a$ /- $\ddot{u}e C_A$ suffixes to specify structures/networks/systems of increasing complexity/dynamism. For each degree below, use of Type 2 V_xC_s affixes indicates that the superset establishes a new gestalt (i.e., a higher-order pattern/configuration more cognitively simple or salient than the lower order pattern/configuration).

The first of these suffixes is a redesign of Ithkuil's SPS Superset suffix:

-rs	SPS — Superset
1	configurative set of X where the number of individual members/nodes is sufficient to give rise to (sub-)patterns or potential sub-sets within the set
2	2nd-level superset containing X based on additional layer of infrastructure or additional order of complexity
3	Higher-order superset containing X based on additional layer of infrastructure or additional order of complexity and the set's internal sub-sets operate (quasi-) independently
4	Higher-order superset containing X based on additional layer of infrastructure or additional order of complexity and the set's internal sub-sets operate inter-dependently, i.e., the superset is now a complex system
5	High-order super-system, consisting of multiple levels of interdependent systems; the super-system manifests synergistic/emergent effects/properties
6	Same as Degree 4 except that the additional infrastructure/complexity gives rise to synergistic/emergent effects/properties
7	Same as Degree 3 except that the additional infrastructure/complexity gives rise to synergistic/emergent effects/properties
8	Same as Degree 2 except that the additional infrastructure/complexity gives rise to synergistic/emergent effects/properties
9	Same as Degree 1 except that the additional infrastructure/complexity gives rise to synergistic/emergent effects/properties

The second suffix establishes and describes networks, systems and their behavior:

-dd	SYS — Networks & Systems
1	X as an entity/element within a larger, interconnected/interdependent network of elements, the whole of which forms a niche/milieu/context/situation/setting
2	Same as Degree 1 where the complexity or natural configuration of the network establishes/constitutes a (quasi-)mechanistic system
3	Same as Degree 1 where the complexity or natural configuration of the network establishes/constitutes a dynamic/feedback-driven/self-sustaining system
4	Same as Degree 1 where the complexity or natural configuration of the network establishes/constitutes an autopoietic system
5	A feedback-driven/self-sustaining/autopoietic system based on X whose dynamism complexity generates/manifests synergistic/emergent effects/properties
6	Same as Degree 9 where the complexity or natural configuration of the network establishes/constitutes an autopoietic system
7	Same as Degree 9 where the complexity or natural configuration of the network establishes/constitutes a dynamic/feedback-driven/self-sustaining system
8	Same as Degree 9 where the complexity or natural configuration of the network establishes/constitutes a (quasi-)mechanistic system
9	an individual entity/element contextually bound to or associated with X within a larger, interconnected/interdependent network of elements, the whole of which forms a niche/milieu/context/situation/setting

Combining the above two suffixes with various configurations, affiliations, specifications, designations, contexts, as well as other suffixes (e.g., the Semantic Network suffix) would generate the following examples of usage:

X = 'entertaining diversion/amusement' would then give rise to a series such as 'playground' \rightarrow 'carnival' \rightarrow 'amusement park' \rightarrow 'adventure park'

X = (living) bodily tissue' \rightarrow 'bodily organ' \rightarrow 'bodily system (e.g., musculo-skeletal, endocrine, immune, reproductive, etc.)' \rightarrow 'living organism' \rightarrow 'community/colony (of living organisms)' \rightarrow 'biome'

X = (natural) physical entity (i.e., thing existing/residing in natural setting) ' \rightarrow 'element of nature (including living and non-living entities) ' \rightarrow 'ecological niche; local eco-system' \rightarrow 'Nature' \rightarrow 'Gaia'

4.7 Miscellaneous Affixes

-rx	LET: 'to let X be/happen/manifest'		
1	by deliberate inaction, not doing anything to prevent/stop it		
2	by acting against one's own interests		
3	by deliberately inadequate preventative measures		
4	by removal of hindrance/blockage, cessation of preventative measure		
5	by one's granting of permission		
6	by unwitting/unknowing inaction, unwittingly not doing anything to prevent/stop it		
7	by inadvertently/accidentally/unwittingly inadequate preventative measures		
8	by underestimating, misjudging, failing to anticipate the situation leading to inadequate preventative measures		
9	despite attempting to prevent it		

-sm	ASQ: Aspectual Sequencing	
1	before X (before start)	
2	about to X / right before X (immediately before beginning)	
3	start X-ing / the start or beginning of X	
4	just started X-ing / right after the start of X	
5	in the middle of X-ing / the middle part of X	
6	about to stop X-ing / right before the end of X	
7	stop X-ing / the end of X	
8	just stopped X-ing / right after X (immediately after end)	
9	after X (after the end)	

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 and/or the RTN suffix and/or Phase to provide additional detail if necessary.

5.2 General Demonstrative Root: -C-

There will be a new root: "this/that / the one at-hand / the one in question" referring to entities, situations, abstract notions, etc. (depending on the C_A complex). Using cases, this root provides translations for phrases such as "thus"/"in this/that manner", "there"/"in that place/location", "Yes"/"It is that", "No"/"It is not that", "some / some of that", etc. As a verb, this root will mean "to be/do this/that" / "to be/do what is under discussion".

5.3 Copular Root: -T-

The scope of this root's usage is narrow. It is used only in contexts requiring ontological or epistemic equivalence/identity. e.g., "I am your father." It is **not to be used** in the following circumstances:

- when "be" means "be named/called", e.g., "My dog is [named/called] Toto." (Use stem meaning "be named; be called; have an appellation")
- when "be" initiates an adjectival phrase, e.g., "Rain is beneficial." (Use adjectival case or a verbal stem, e.g., "to (be of) benefit")
- when "be" indicates a spatio-temporal relation, e.g., "The box is on the table" (Use stem signifying the specific relation, e.g., "be on the top surface of"
- when "be" means "occur / happen / take place", e.g., "Wednesday is the best day for shopping." (Use stem meaning "occur, take place, happen")
- when "be" means "exist (ontologically)", e.g., "Such is life", "I think, therefore I am." (Use stem meaning "existent entity; to ontologically exist")
- when "be" indicates exemplary membership in a set, e.g., "A hammer is a tool." (Use stem meaning "exemplify; be an example of" or "be a type of")
- when "be" indicates composition, e.g., "Rain is water." (Use stem meaning "to consist of")

IFL Stems: the copular relation/equivalence is circumstantial/contextual; FML Stems: the copular relation/equivalence is inherent/inalienable/permanent

	-T- 'BE (i.e., copular identificaton) / EQUIVALENCE'						
		STEM 1	STEM 2	STEM 3			
1	BASIC	(to be ontologically the) self-same entity (as) (i.e., [to be] simply another name for the self-same entity)	be epistemically equivalent to or (functionally) identified/identifiable as; be (functionally) the same as; be equal to	to be epistemically synonymous/tantamount/convertible to			
2	CONTENT	to be ontologically the self-same entity (as) in terms of essence, sense of identity, behavior, personality, mind, etc.	be epistemically equivalent to or (functionally) identif(ied/-iable) as in terms of essence, sense of identity, behavior, personality, mind, etc.	to be epistemically synonymous/tantamount/convertible in terms of essence, sense of identity, behavior, personality, mind, etc.			
3	CONSTITUTIVE	to be ontologically the self-same entity (as) in terms of appearance, physical manifestation or construction	to be epistemically equivalent to or (functionally) identif(ied/-iable) as in terms of appearance, physical manifestation or construction	to be epistemically synonymous/tantamount/convertible to in terms of appearance or outward physical manifestation			
4	OBJECTIVE	what X ontologically is (as opposed to being something else), X's natural identity, X's existence as X; to be X as itself (as opposed to something else)	what X is epistemically equivalent to (as opposed to something else), X's natural identity, X's existence as X; to be X as itself (as opposed to something else)	(to be)what X is epistemically synonymous/tantamount/convertible to (as opposed to something else), X's convertibility to			
5	FACILITATIVE	to function/act as the self-same entity (as)	to function/act as the equivalent to	to function/act synonymously/convertibly with			
6	FOUNDATIONAL	the cause/reason behind being one's self	the cause/reason behind being equivalent to	the cause/reason behind being synonymous/tantamount/convertible to			
7	INTENTIVE	the desired consequences/purpose of being oneself; CPT=the consequences thereof	the desired consequences/purpose of being equivalent to; CPT=the consequences thereof	the desired consequences/purpose of being synonymous/tantamount/convertible to; CPT=the consequences thereof			
8	EXPERIENTIAL	the experience/feeling of being the self-same entity as	the experience/feeling of being equivalent to	the experience/feeling of being synonymous/tantamount/convertible to			
9	PREREQUISITIVE	(to be) what goes into being oneself	(to be) what goes into being equivalent to	(to be) what goes into being synonymous/tantamount/convertible to			

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

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

RTR Aspect + DEL Extension = 'has been/done'	PRS Aspect + DEL Extension = simple future tense
RTR Aspect + PRX Extension = 'has been (doing) [and may still be (doing)]'	PRS Aspect + PRX Estension = 'will be/do & may already be (doing)'
RTR Aspect + ICP Extension = 'began to be' / 'began doing'	PRS Aspect + ICP Extension = 'will begin to be' / 'will start doing'
RTR Aspect + TRM Extension = 'finished being/doing'	PRS Aspect + TRM Extension = 'will finish being/doing'
RTR Aspect + GRA Extension = 'gradually developed into being/doing'	PRS Aspect + GRA Extension = 'will develop into being/doing'
RTR Aspect + DPL Extension = 'gradually stopped being/doing & is/does no longer	PRS Aspect + DPL Extension = 'will gradually stop being/doing'
RTR + HAB Aspects + DEL Extension = 'used to be/do but no longer'	PRS + RTR Aspects = 'will have' (e.g., By then he will have done it.)
RTR + HAB Aspects + PRX Extension = 'used to be/do and may still be (doing)'	PRS + HAB Aspects + DEL Extension = 'will now be (doing) but not yet'

NOTE: Ithkuil's notion of "boundedness" is eliminated. The UNBOUNDED Perspective is now the POLYADIC and refers only to "more than one" of a configurative entity (i.e., it functions like standard pluralization, except this pluralization applies to an entity first subject to the formative's Configuration/Affiliation categories). This also applies to verbal formatives; i.e., verbs in the POLYADIC now signify simply more than one instance/occurrence of an act/state/event.

... and the work continues!