THAT tfw WHEN JQ SAYS 'SKEWERS' (A new formative schema)

v0.3, uakci, 2020-06-30

0 Prologue

Goals of the formative schema presented in this *off*-whitepaper:

- 1. Set Ca free: allow arbitrary amounts of Ca-like transformations.
- 2. Set incorporation free: allow arbitrary many roots to be incorporated, with each retaining its independence (i.e., no SSI shenanigans).
- 3. Keep things short and, to an extent, pronounceable.
- 4. Not introduce any cop-out phonemes (new phonemes to break old quirks in the rotten grammar).

The specific vowel/consonant values introduced here aren't final or consequential – they're here only to fuel the examples of the prototype. They may be changed at any time.

Colour coding employed: black – words on a page; blue – stuff that's new. *Much* credit goes to John Quijada. I've decided for the most part to adhere to the choice and naming of concepts present in the draft for the Ithkuil successor language (hereafter referred to as 'TNIL'), version 0.12, also borrowing from the ongoing Freetnil project, but the general concepts and patterns may easily be transported to different Category realms.

0.1 Stipulations

- The following kinds of consonant runs are deemed *reserved*: being \(\frac{1}{2} \); starting with \(\hat{h/\circ}/ \); ending in \(\hat{h/w/y} \). Where noted, such consonant runs may not be slot values or are reserved for future use.
- TNIL's External Juncture holds in this model too.

0.3 New in v0.3

Improved the English immensely. Added an ease-in overview and a less misleading diagram, clarified here and there, and cleaned up. (No such thing as too *much* proofreading.) Renamed and reordered concepts for clarity. Modified a couple **Ca** values, a **V** value, and a **Cv** value. Added a second shape for the affixual adjunct. Plus, minutiae.

1 The formative schema

1.1 Overview

The formative is greatly simplified in comparison to Ithkuil and TNIL, predominantly composed of three (disproportionate) parts:

- 1. The *initial stem*: CvVrCr, VrCr, or just Cr (if the previous values are zero). Cv is always a reserved value (one that Cr cannot be), and Vr is never ë. This is the lexical basis upon which the formative is built. Examples: cçiamž-, helly-, g-.
- 2. The *transformations*. In short, a transformation is an operation which transforms the meaning of what comes before it (derives a new, more sophisticated, meaning from the old meaning). The initial stem serves as the starting point for the transformations, which are applied in sequence; each intermediate result is derived from the one directly preceding it, forming a chain of sorts. For example, here is a sequence of **VaCa** transformations (what that is we'll discuss in a moment. Take heed of the fact that each intermediate result is a valid word yes, even ald!):

alḍ		alḍat		alḍatš = alḍač		alḍačk		aldıčkaz
tree	\rightarrow	many trees; trees	\rightarrow	trees close to each other; a pack of trees	\rightarrow	a pack of disparate trees; a mixed forest	→	somewhere within a mixed forest
	t	multiplex many X's	š	connected adjacent in space or time	k	heterogeneous different from each other	Z	proximal part of X
heps		hepsat		hepsatš = hepsač		hepsačk		hepsičkaz
incident	\rightarrow	many incidents; incidents	\rightarrow	incidents in quick succession; a sequence of incidents	\rightarrow	a sequence of disparate incidents; a situation	\rightarrow	(at) some point within a situation

For didactic purposes, we divide transformations into two categories:

• Casual – those transformations which narrow down a meaning (designate a subset of it). For example, Connected asserts that a group of objects touches in space or follows in tight succession in time; however, all Connected X's are still X's and that's what makes Connected a casual

- transformation. They don't interfere with each other and can thus be swapped with one another, as if an implicit 'and' joined them: 'connected heterogeneous trees' = 'heterogeneous connected trees'.
- Modular those transformations which transpose the meaning in such a way that the output may be disjoint from the input. For example, Multiplex forms a multiplicity of objects given one (think plural number); many X's are never the same thing as one X and that's what makes Multiplex a modular transformation. They may not be moved around because of their groundbreaking quality: aivřadz is the applying of Multiplex, then Proximal on aivř- 'stick, pole', yielding 'among a bunch of sticks', while aivřazd follows the opposite order, yielding 'many bits of sticks'.

In addition, transformations inflect for Type:

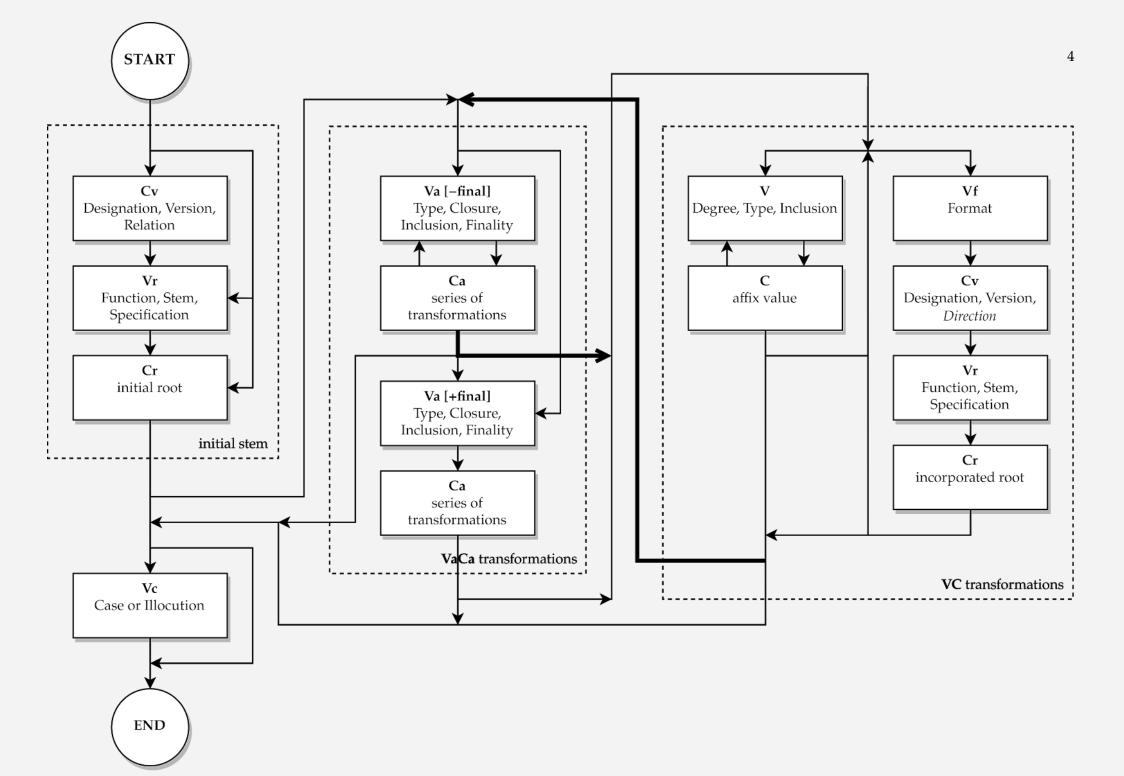
- *Type-1*, or *circumstantial* transformations don't alter a meaning any further than their semantics allow for example, the plural of 'tree' is *just* 'many trees'; the trees just so happen to be many, with us treating the concept in a one-off, informal, *unlexicalized* way.
- *Type-2*, or *derivational* transformations create a new referential whole, a *novel*, *opaque*, *lexical*(*ized*) concept for example, while the type-1 plural of 'cup' may be translated as 'service', but *needn't* be, and will in most situations be rendered into English as 'cups', the type-2 plural *most definitely* corresponds to the English word 'service'. This is the only manner in which new lexical concepts are formed in this language.

There may be many Type-2 transformations present in a single word. For example, the concept of 'many bound pages of writing' lexicalizes into 'a book'; from there, we may consider 'a shelf of books', whence 'bookshelf' if Type-2 is exercised once again. The exclusion of the inner lexicalization may cause a different meaning to arise: 'a shelf of bound bunches of pages' may lexicalize as 'paper tray' or even possibly 'letter box'. This is because the underlying sense of 'book' – 'a bound bunch of pages' – may be interpreted in a way that suits the context more appropriately, which might not ever be expected of a Type-2-born lexeme.

This part of the formative may be populated with *VaCa* and *VC* transformations. The *VaCa*, which are expected immediately after the initial stem, define the nature and 'shape' of a concept (like grammatical number, gender, etc. in natural languages) and are an extension of TNIL's *Ca* complex. They're followed by the *VC*, whose functions are varied, and which cover the operational space of TNIL's *VxC* affixes, the *VnCn* mood/aspect slot, and root incorporation. *VaCa* inflects for Finality; non-final *Va* indicate that the *VaCa* in question isn't the last in sequence, and final *Va* indicate that following the *VaCa*, the *VC* will take lead.

In order to apply a VaCa where a VC is expected (the VC have no such termination strategy), or to apply VC with omitting the VaCa entirely, one may prefix the C/Ca value with a glottal stop. This is called a *glottal stop context switch*. (In the chart below, this is indicated with fat arrows.)

3. The last vowel of a formative, if present, is the illocution (if the formative is verbal – see Section 1.8) or case (if nominal).



1.2 Cv (Designation, Version, Relation)

The possible values for **Cv** are thus:

unframed 1	informal	formal
processual	(w/y)	h
completive	Ç	çl
framed ²		
processual	ļ	hw/hy
completive	çç	ļw/ļy

¹ For incorporated roots: governed.

The w/y value must be omitted when used in the initial stem, but may not be omitted for incorporated roots. If this slot isn't filled, but the following is, it becomes a glottal stop pronounced but not written to guard against external juncture (agá = 'agá).

1.3 **Vr** (Function, Stem, Specification)

	sta	dyn	sta	dyn	sta	dyn	sta	dyn
	bs	sc	obj	csv	ct	te	csv	obj
stem 1	(a)	u	aı	uı	ìa	ùa	ao	oa
stem 2	ä	ü	au	ìu	ìä	ùe	ae	öa
stem 3	e	0	еі	OI	ìe	ùo	ea	oe

² For incorporated roots: governing.

This slot may only be omitted if the preceding has been. The Stative/Dynamic + Basic/Contential/Constitutive/Objective combinations are ordered by usefulness.

1.4 **Cr** (initial root)

This is the only truly required slot. It may not be a reserved value iff after removing a final w/y, it still is one.

1.5 VaCa

The Freetnil Categories: Number, Homogeneity/Composition, Connectedness, Vagueness (= the TNIL Configuration metacategory), Envelope (= Extension), Disposition (= Affiliation), Perspective, and Essence are torn apart and repurposed as modulations, represented by consonants in a consonant cluster. **Va** communicates the type of closure strung upon the sequence of operations which follows, while the **Ca** consonant cluster contains the operations in sequence. (Beware: **Va** scopes over the **Ca** that it precedes.) **Va** inflects for Type and Finality, as well as:

- Closure whether, and how, the result should be reconsidered as a perceptual whole. Closure has three values: the zero value (i.e., do nothing), Group, and Gestalt. Group singularizes the concept while keeping the distinct identities of its members; Gestalt singularizes opaquely, into an indivisible unit. The difference between Group and Gestalt can be seen in practice: a group of clowns as a whole (= Gestalt) attacking me is not the same as each of them attacking me separately (Group). In this sense, Groups are expected to behave like a plurality while keeping a singular 'image' (in a grammatical number kind of way) for further derivation.
- *Inclusion* whether this **VaCa** applies to a preceding incorporated root (*Inner*) or the formative at large (*Outer*).

These are the 24 values for **Va**:

	type-1	type-2	final	
_	1	ö	a	u
group	е	o	aı	ìa
gestalt	uı	ìu	au	ùa

	ä	ü	oa	ao
inner	еі	ìe	oe	eo
	eu	ùe	oü	ùö

The value I may be used to break up troublesome consonant clusters.

The **Ca** is comprised of the following modulations:

	default number: on	e (unle	ess the underlying concept is polyadic)		
number	duplex	m	a pair of X		
number	multiplex	t/d	more than one X		
	potential	ň	one or more X (general)		
	default connectedness: unspecified				
	isolated	ls	scattered far apart		
connectedness	separate	S	close, but not touching		
	connected	š	adjacent		
	fused	(l)ļ	blended		
	default homogeneit	ty: uns	pecified		
homogeneity	homogeneous	p/b	similar to each other		
	heterogeneous	k/g	dissimilar from each other		
perspective	default perspective: monadic/instantial (the literal/concrete X)				

	nomic	(l)f	(stereo)typical or conventional representative of X, defined by possessing those traits of X which are expected of most X
	abstract	(l)w (l)y	the idea of X; quoted/'word-for-word' reference to X
***	default vagueness:	precise	e (true X's rather than X-likes)
vagueness	vague	r	X, but going by a relaxed definition
vonidicality	default veridicality	: norm	al (real X's rather than imaginary ones)
veridicality	representative	ř	X, but not necessarily real
	default envelope: d	elimiti	ive (the entirety of X)
	proximal	Z	some part of X; in the midst of X
	selective	lz	one of X; any of X
envelope	incipient	ž	at the onset of X
	attenuative	V	at the end of X
	graduative	lž	as X develops
	depletive	lv	as X dies off
	default disposition: other left unspecifie		lidative (purpose with regards to each
disposition	associative	(l)ç	each serving a similar purpose
	coalescent	ţ	complementing each other in purpose

	variative	(l)x	each serving a different purpose
, 11	no-op tandalone if the Ca therwise be empty)	L	

(It should be clarified that unlike in TNIL, where the omission of a non-default value causes the default to kick-in, the 'defaults' demonstrated above aren't any different from no-operations and are given to clarify the significance of each group of modulations. In addition, a modulation may be applied twice or more; the groups/kinds of modulations are only for cross-reference with TNIL's **Ca** categories and don't impose any limitations on the members of the respective groups, other than thematic similarity.)

Those shifts whose descriptions feature an 'X' are modular. t/d, p/b, k/g are in free variation; so are l/ll, c/lc, l/ll, l/ll,

Quijadic examples:

```
hänùačţ
h-ä-ň-ùa-č-ţ
FML-S2-'page.of.writing'-t2.gestalt.final-multiplex.connected-coalescent
'a book'

jwacgzá
jw-a-c-g-z-á
'laugh'-final-multiplex.separate-heterogenous-proximal-OBS/COG
'they are laughing variedly'
```

Showcase examples:

```
haıkšırčkcaılz
h-aı-kš-ı-r-č-k-c-aı-lz
```

FML-OBJ-'clown'-0-representative-multiplex.connected-heterogeneous-multiplex.separate-final.group-selective 'one of many groups of dissimilar people touching who pass for clowns'

Note: It is not necessary to show the end of **VaCa** with a Final value if following is Slot V (case/illocution), the end of the formative, or a glottal stop context switch. In such circumstances, the **VaCa** may even be zero: aga 'to walk'; this is equivalent to agala (this variation being strongly discouraged – why would you explicitly mark a zero transformation?).

1.6 VC: affixes and incorporated roots

VC affixes can be split into two groups. Those VC affixes whose C is a special, predesigned value, are irregular. All other affixes comply with JQ's TNIL design and inflect for Degree, Type, and Inclusion (see Va):

	type-1	type-2	inı	ner
degree 1	a	aı	ìa	ùa
degree 2	ä	au	ìä	ùä
degree 3	е	eı	ìe	ùe
degree 4	ë	eu	ìë	ùë
degree 5	1	ëı	eö	aö
degree 6	ö	ou	ìö	ùö
degree 7	o	OI	ìo	ùo
degree 8	ü	ìu	ìü	üö
degree 9	u	uı	ëu	üo
degree 0	ao	oa	eo	oe

If C is a Cv value, then this and the following VC form an incorporated root:

Vf	Cv	Vr	Cr		
Format	same as the initial stem				

The Relation part of **Cv** now refers to a new category called *Direction*. Unframed corresponds to Governed, while Framed corresponds to Governing. A Governed incorporated root modifies the base meaning, while a Governing incorporated root becomes the new base meaning, modified by the old base meaning (as if the formative was set up in reverse). In both cases, Format (**Vf**) is used as the proxy defining the nature of the relationship. After an incorporated root, the **VC** sequence resumes as normal; to add **VaCa** information onto the fresh incorporated root, use a glottal stop context switch to initiate a **VC**; there, use the Inner versions of **Va** (lest the **Ca** quantify and/or modify the new, composite, *outer* meaning).

1.7 The glottal stop context switch

By prefixing a consonant cluster with a glottal stop, the containing affix/shift sequence terminates, with the complementary sequence taking its place: VC gives way to VaCa, and VaCa to VC. Example:

hatxazálz

h-a-tx-a-z-alz

FML-0-'dine'-final-proximal-<want to>

'I want to (eat a dish)-proximal.'

hatxa'lza'zá

h-a-tx-a'lz-a-'z-á

FML-0-'dine'-<want to>-final-proximal-OBS/COG

'I (want to eat a dish)-proximal.'

In the second example, the context switch is used twice: first to terminate **VaCa** prematurely, then to return to it once more.

1.8 Case/Illocution (Vc) and stress

This slot follows the TNIL realization.

Stress can only be oxytonic or paroxytonic. Unlike in TNIL, monosyllabic formatives are nominal, not verbal. Formatives consisting just of the consonantal root, such as g or mřř, function as free nonce interjections (even for those roots which don't correspond to any formalized TNIL Bias). These are to be pronounced like (oxytonic) monosyllables and guarded with glottal stops.

The pitch accent system receives a revamp. Three registers (Low, Mid, High) are discerned. Mid is always used pre-stress; either Low or High (with each speaker pledging to keep using one and not the other) for the stressed syllable, and the other of the two for post-stress syllables:



ta-tá-ta tá-ta ta-tá tá

2 Adjuncts

2.1 Affixual adjunct



(prepositional/beforethought form)



(postpositional/afterthought form)



The affixual adjunct is simple in structure. The first shape is like the formative, but with the initial stem replaced with $\ddot{e}h$ (and there, a glottal stop pronounced but not written). The final epenthetic \ddot{e} is optional and may be included to offset External Juncture. The modulations are inherently a VC sequence; to apply VaCa modulations, use a glottal stop context switch as per usual. If the adjunct is polysyllabic and stressed on the last syllable, the modulations will be applied to the initial root (as if placed before the initial VaCa); otherwise, they are stacked on top of all remaining modulations (as if appended to the end of the formative). The second shape is restricted to one VC modulation, with the two slots reversed, stacked on top of the preceding formative.

An important function of the affixual adjunct is to bring attention to this initial/final set of modulations. For example:

otmasëmikt

o-tm-a-s-ëm-ıkt

S3/DYN-'work.towards.a.goal'-final-proximal-

'beneficial to all parties>-<at present>
'There is work being done for the benefit of us all'

This formulation is equivalent to all of the formulations below:

- ëhëmikt otmás
- ëhêm otmasíkt
- ëhikt otmasêm
- ëha'sëmıkt otmá
- ëha'sê otmë'míkt
- otmasëmá hëkti

2.2 Personal reference shape

(person 2)	ë	navoan 1	(modulations)	(case 1	(w/y + case 2))
(person 2)	6	person 1	(mountainons)	(illocution)	[+ ultimate stress]

The personal reference shape is a handy shortcut for personal references, patterned after TNIL's (and Ithkuil's) Personal Reference Adjunct. *Persons* are the same values as in TNIL and may be concatenated. If two persons and cases are given, *person 1* takes *case 1* and *person 2* takes *case 2*. (What a surprise, am I right?) This adjunct may also be used verbally by following the bottom row of the chart. The *person* values are the same as JQ's, and stacking is allowed; *modulations* apply to both persons independently (as if copied), starting with **VC** (use a glottal stop switch to **VaCa**).

The initial ë must be present. Don't forget that for non-combined referents you may use the personal reference roots to get forms shorter than these: an(a) / na 'I', enat(a) 'they', ätamsp(a) 'those two similar things'. These regular-formative forms can mark for Specification, but not for Effect.

Examples:

ësuwi 'you unto me' ëlsa = lësa 'you and I, THM'

ëlëwı 'I-STM-AFF'

rra ëluna = rra ëhun ëla = rra nu'na 'the COT and I' (what the hell was I thinking???)

ësmá 'it's you and them'

The end of the document says hi.