

PROPOSAL FOR ELIMINATION OF INCORPORATED STEMS & ESTABLISHING V_R+C_A SHORTCUTS

At the request of uakci and presumably supported by others in the community, I have come up with the following proposed scheme for eliminating incorporated stem and replacing them with what I am calling “concatenated” formatives. Doing so will allow these replacements for incorporated stems to take all the morphology usually associated with other formatives (with the exception of Bias). Additionally, this scheme allows us to simplify/streamline the morpho-phonological structure of formatives in general and allows for the introduction of eight V_R+C_A shortcut forms that will shorten many formatives by one syllable.

Proposed Slot Structure of a Formative

| I | II | III | IV | V | VI | VII | VIII | IX | X* | XI |
|--|---|----------------|--|--|---|--|---|--|--|--|
| (C _C) | 'V _V | C _R | (V _R) | (V _X C _S ...) | (C _A) | (V _X C _S ...) | (V _N C _N) | V _C * / V _K | (')C _B or (')C _Y | [stress] |
| Concatenation status indicator + V _R +C _A shortcut indicator | Version + Stem + C _A short-cut | Main Root | Function + Specification | V _X C _S affix(es) apply to stem but not to C _A If Slots IV & VI values are present then form is reversed to -C _S V _X - | Configuration + Extension + Affiliation + Perspective + Essence | V _X C _S affixes apply to stem + C _A | Valence + Mood/Case-Scope or Aspect + Mood/Case-Scope or Phase + Mood/Case-Scope or Level + Mood/Case-Scope or Effect + Mood/Case-Scope | Case or Illocution + Expectation + Validation as determined by syllabic stress | Bias or Case-Scope or Mood must be preceded by a glottal-stop unless Slot VIII C _N or Slot IX V _C /V _K contains a glottal-stop | penultimate stress = UNFRAMED Relation + V _C ultimate stress = UNFRAMED Relation + V _K antepenultimate stress = FRAMED Relation + V _C |
| consonantal prefix | vocalic affix | cons. form | vocalic affix; presence determined by C _C in Slot I | last V _X in the series requires a glottal stop to indicate end of Slot | consonant form; presence determined by C _C in Slot I | | Modular Slot containing a vowel-form + consonant-form | vocalic affix | | |

* Concatenated formatives (see discussion for Slots I and II below) label the V_C Case marker as V_F Format; additionally, Slot X must be empty in a concatenated formative.

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

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

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

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

The first formative of the pair, the concatenated formative, is structured as a regular formative, able to take any and all morphology as appropriate and semantically permissible for the concatenated pair as a whole (except for Slot X). The second formative of the pair, the parent formative, however, will show one of the following eight C_C values in Slot I to indicate that it and the preceding formative constitute a concatenated pair. The meaning of the different C_C values is explained below the table.

| Slot I C_C Values | V_F of Preceding Formative = Formats 1 thru 36 | V_F of Preceding Formative = Formats 37-68 | V_F of Preceding Formative = Formats 1 thru 36 + [w-] C_A shortcut* | V_F of Preceding Formative = Formats 37-68 + [y-] C_A shortcut* |
|----------------------|---|---|---|---|
| Type-1 Concatenation | h | ç | hl | hm |
| Type-2 Concatenation | hw | çw | hr | hn |

* See Slot II below for an explanation of the w- and y- C_A shortcuts

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

Alternate V_F Indicator: Concatenated formatives do not use a glottal-stop in the Slot IX V_F form. Instead, Columns 2 and 4 of the above table are used to indicate that the Slot IX V_F Format vowel of the preceding concatenated formative is actually a Format 37-through-68 form but without the glottal stop.

C_A Short-Cut Indicator for Parent Formatives: Columns 3 and 4 of the above table are used if the Slot IV V_R value is default -a- (STA/BSC/EXS) and the Slot VI C_A affix is one of eight specific C_A values shown on the next page.

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

Morpho-phonological Restrictions on a Concatenated Formative: Concatenated formatives do not utilize a glottal-stop in the Slot IX V_F value; instead they utilize the V_F values 1 through 36 (identical to values 37 through 68 except for the glottal-stop) and the immediately following formative takes a Slot I C_C value from Column 3 or 4 of the C_C table above. Additionally, Slot X must be empty in a concatenated formative.

“Phrasal” Concatenation: More than two formatives may be concatenated. Three or more formatives may be concatenated to form the equivalent of “phrasal” incorporation. The second and all subsequent formatives of such a “concatenated string” must take one of the eight C_C values above to indicate that each is a parent formative for the immediately preceding formative.

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

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

Slot II contains a vocalic affix, V_V, showing the formative’s Stem and Version. Additionally, if Slot I contains a **w-** or **y-**, or one of the four Column 3 or 4 values from the C_C table on the previous page, then the V_V value also indicates a Slot IV V_R value of default **-a-** plus one of eight Slot VI C_A values. Additionally, the actual Slot IV/VI **a+C_A** forms will be elided (i.e., missing), thus shortening the formative by one syllable.

The eight specific Slot IV/VI **a+C_A** forms for which there are V_V shortcuts are as follows: **-al-** (UPX/DEL/CSL/M/NRM), **-as-** (UPX/PRX/CSL/M/NRM), **-ar-** (UPX/DEL/CSL/P/NRM), **-av-** (UPX/DEL/CSL/N/NRM), **-ař-** (UPX/DEL/CSL/M/RPV), **-asř-** (UPX/PRX/CSL/M/RPV), **-asl-** (UPX/PRX/CSL/P/RPV), **-az-** (UPX/PRX/CSL/A/NRM).

Slot II V_V Values

| Slot I (C _C) | Stem | Version | C _C = w | C _C = y | C _C = w | C _C = y | C _C = w | C _C = y | C _C = w | C _C = y | same as the first four columns at left + short-cut for NEG _{1/4} affix | | | |
|-----------------------------|---------|---------|--------------------|--------------------|--------------------|--------------------|--------------------|--------------------|--------------------|--------------------|--|-----|-----|-----|
| | | | [default] | PRX | P | N | RPV | PRX/RPV | PRX/P/RPV | A | | | | |
| (w) or (y) | Stem 1 | PRC | (a) | | ai | | ia / oä | | ao | | awa | awi | iwa | awo |
| | | CPT | ä | | au | | iä / uä | | ae | | äwä | awu | iwä | awe |
| | Stem 2 | PRC | e | | ei | | ie / oë | | ea | | ewe | ewi | iwe | ewa |
| | | CPT | i ** | | eu | | ië / uë | | eo | | iwi | ewu | iwë | ewo |
| | Stem 3 | PRC | u | | ui | | ua / aö | | oa | | uyu | uwi | uya | owa |
| | | CPT | ü | | iu | | ue / eö | | öa | | üwü | iwu | uye | öwa |
| | Stem 0* | PRC | o | | oi | | uo / io | | oe | | owo | owi | uyo | owe |
| | | CPT | ö | | ou | | uö / iö | | öe | | öwö | owu | uyö | öwe |

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

** The vowel -i- is substituted for -ë- to preserve the latter for use with adjuncts.

SLOT IV: V_R — Function, Specification, and Context

Slot IV V_R values

| Function of Main Root | Specification of Main Root | Context | | | |
|-----------------------|----------------------------|---------|-----|-----|-----|
| | | EXS | FNC | RPS | AMG |
| STA | BSC | a | ai | ia | ao |
| | CTE | ä | au | iä | ae |
| | CSV | e | ei | ie | ea |
| | OBJ | i * | eu | ië | eo |
| DYN | BSC | u | ui | ua | oa |
| | CTE | ü | iu | ue | öa |
| | CSV | o | oi | uo | oe |
| | OBJ | ö | ou | uö | öe |

Due to the elimination of incorporated stems, there is no longer any need for the V_R Slot to carry a glottal stop to show Version or Function, etc.

NOTE: If the C_C value in Slot I indicates a V_R+C_A shortcut is operating, then Slot IV and Slot VI (containing C_A) will be empty.

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

This optional slot holds one or more standard $-V_X C_S$ affixes which apply to the stem only and do not have scope over the following Slot VI C_A complex or any other slots. Note that the fourth and fifth column of V_X values from previous versions has been removed, since incorporated stems have been eliminated (the fourth and fifth column of V_X values will likewise be removed from Slot VII $V_X C_S$ affixes).

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

| degree | Type-1 | Type-2 | Type-3 | |
|--------|--------|--------|---------|---|
| 1 | a | ai | ia / oä | <p>Type 1: circumstantial Type 2: derivational</p> <p>Type 3: applies to previous $C_S V_X / V_X C_S$ affix only (or the following affix if it is the first in the slot).</p> <p>Degree 0: unspecified degree; refers to the affix's general semantic concept as a whole.</p> <p>C_A stacking: The specialized $-V_X$ value, $-üä$, is used to indicate that the preceding C_S- consonant-form is to be interpreted as a C_A complex having scope over (i.e., “stacked” upon) the Slot IX C_A complex stem of the main stem. This specialized C_A stacking affix may also be placed in either Slot V or Slot VII.</p> |
| 2 | ä | au | iä / uä | |
| 3 | e | ei | ie / oë | |
| 4 | ë | eu | ië / uë | |
| 5 | i | ëi | ëu | |
| 6 | ö | ou | uö / iö | |
| 7 | o | oi | uo / io | |
| 8 | ü | iu | ue / eö | |
| 9 | u | ui | ua / aö | |
| 0 | üa | üe | üo | |

Glottal Stop To Indicate the End of Slot V: The last $-C_S V_X$ - or $-V_X C_S$ - affix in Slot V must carry a glottal stop to show where Slot V ends and Slot VI begins. See Sec. 1.7 (page 4) on how to add this glottal stop to the affix. For reversed $-C_S V_X$ - forms, this glottal stop will often merge with the following Slot VI C_A complex as per the rules in Sec. 3.9.1 of version 0.16 of the Design Document.

NOTE: The Concatenative Adjunct from Sec. 4.6 of version 0.16 of the Design Document will be renamed the “Phrasal Adjunct” in order to avoid confusion with the new Concatenation process described in this proposal.