

- ʔɪɫɔɔ ɫɔʔɪ ɪʔɔɔ.

Hite xohu huke.

[hi'sɛ xɔ'hə hə'kɛ.] ← as a stand-alone word, the first syllable is pronounced, the second syllable receives full stress

'This is really a tool.' (verb indicates certainty)

- ʔɪɫɔɔ-ɪʔɔɔ ɫɔʔɪ ɲɪʔɔɔ.

Hite-huke xohu nuwa.

[hi'tɛ,kɛ ʃɔ'hə nə'wa] ← appended to *Hite* 'this' as a MARKER, first syllable dropped, second syllable lower stress

'This-tool is certainly not useful (in this situation).'

8.1.2. Topics

These are the topics of GENI whose words serve as functionals. Each is detailed in its own section.

NN	Roman	IPA	Semantics	Location
ɪɪɪ-	<i>huh-</i>	həh	Exclamations	§8.2.1
ɪɪɫ-	<i>hux-</i>	həʃ	Role and Number with focus	§8.2.2
ɪɪɟ-	<i>hus-</i>	həs	Role-state Perspective	§8.2.3
ɪɪɟɫ-	<i>huf-</i>	həʃ	Relationals (Genitive, Possessive, etc.)	§8.2.4
ɪɪɾ-	<i>hur-</i>	həʁ	Sequencers	§8.2.5
ɪɪɿ-	<i>huy-</i>	həʒ	Manner, comparison	§8.2.6
ɪɪɿɟ-	<i>hun-</i>	hən	Discourse links	§8.2.7
ɪɪɿɾ-	<i>hum-</i>	həm	Bio-social Status – age, gender	§8.2.8
ɪɪɿɾɟ-	<i>huk-</i>	hək	Word classifiers	§8.2.9
ɪɪɿɿ-	<i>huc-</i>	hətʃ	Qualifiers: attitudinals & size	§8.2.10
ɪɪɿɿɟ-	<i>hut-</i>	hət	Message types	§8.2.11
ɪɪɿɿɾ-	<i>hup-</i>	həp	Shape classifiers	§8.2.12
ɪɪɿɿɾɟ-	<i>hug-</i>	həg	Creation and Use	§8.2.13
ɪɪɿɿɿ-	<i>huj-</i>	hədʒ	Social markers	§8.2.14
ɪɪɿɿɿɟ-	<i>hud-</i>	həd	Time	§8.2.15
ɪɪɿɿɿɾ-	<i>hub-</i>	həb	Role and number without focus	§8.2.16
ɟɪɪ-	<i>suh-</i>	səh	Cause and effect	§8.2.17
ɟɪɿɿ-	<i>sun-</i>	sən	Inclusion and Selection	§8.2.18
ɟɪɿɿɾ-	<i>sum-</i>	səm	Thematic Relations	§8.2.19
ɟɪɿɿɾɟ-	<i>suk-</i>	sək	Discourse Connectives	§8.2.20
ɟɪɿɿɿ-	<i>suc-</i>	sətʃ	Ideal and Instance	§8.2.21
ɟɪɿɿɿɟ-	<i>sut-</i>	sət	Verbal punctuation	§8.2.22
ɟɪɿɿɿɾ-	<i>sup-</i>	səp	Life and Force	§8.2.23

8.2. Vocabulary

In this section, each of the GENI of FUNCTIONALS will be listed and briefly discussed.

8.2.1. 𐎠𐎠𐎠 *huHu* 0: Exclamations

Roman	IPA	NN	Semantics
<i>huhu</i>	hə'hə əəə	𐎠𐎠𐎠	Uncertainty, hesitation, getting attention (gently)
<i>huhi</i>	hə'hi i	𐎠𐎠𐎡	Yes
<i>huhe</i>	hə'hɛ ɛ	𐎠𐎠𐎡	Perhaps, maybe
<i>huhei</i>	hə'hɛj hɛj, ɛj	𐎠𐎠𐎡	Interest, getting attention (emphatically)
<i>huha</i>	hə'ha ha, aaa	𐎠𐎠𐎡	Pleasure, mirth
<i>huhai</i>	hə'haj haj, aj	𐎠𐎠𐎡	Greeting
<i>huho</i>	hə'hə hə, ɔɔ	𐎠𐎠𐎡	Surprise
<i>huhoi</i>	hə'həj həj, ɔj	𐎠𐎠𐎡	Pleasant surprise
<i>huhw</i>	hə'hu hu, u	𐎠𐎠𐎡	No
<i>huhwi</i>	hə'hwi hwj, wj	𐎠𐎠𐎡	Questioning (general)
<i>huhwe</i>	hə'hwɛ hwɛ, wɛ	𐎠𐎠𐎡	Negative questioning (really?)
<i>huhwei</i>	hə'hwɛj hwɛj, wɛj	𐎠𐎠𐎡	Annoyed questioning
<i>huhwa</i>	hə'hwa hwa, waa	𐎠𐎠𐎡	Disappointment, resignation (*sigh*)
<i>huhwai</i>	hə'hwaj hwaj, waj	𐎠𐎠𐎡	Fear, pain
<i>huhwo</i>	hə'hwə hwə, wə	𐎠𐎠𐎡	Dismay, alarm
<i>huhwoi</i>	hə'hwəj wəj	𐎠𐎠𐎡	Anger

Exclamations, and several other GENI, are included as FUNCTIONALS to provide quick, informal ways for expressing conversational utterances which are frequent in many situations.

In exclamations, only the 2nd vowel is normally pronounced. The initial 𐎠𐎠 *Huh-* may be pronounced for clarity or emphasis.

Exclamations are also discussed in the chapter on Discourse, §9.2.2.

‘Yes’ and ‘No’ can also be expressed with degrees of certainty using SPECIES *Nub-*, §10.6.

8.2.2. 𐄂𐄂𐄂 *huXu* 1: Role and Number with Focus

Clarify the grammatical **ROLE** and **NUMBER** (SINGULAR, PLURAL, COLLECTIVE) and indicate focus; optional. Species 𐄂𐄂𐄂 *hubu* is identical while **not** indicating focus §8.2.16.

Roman	IPA	NN	Semantics
huxu	hə'ʃə ɦə'ʃə	𐄂𐄂𐄂	FOCUS
huxi	hə'ʃi ɦə'ʃi	𐄂𐄂𐄂	SINGULAR with FOCUS
huxe	hə'ʃɛ ɦə'ʃɛ	𐄂𐄂𐄂	OBJECT of an action with FOCUS
huxei	hə'ʃɛj ɦə'ʃɛj	𐄂𐄂𐄂	SINGULAR OBJECT with FOCUS
huxa	hə'ʃa ɦə'ʃa	𐄂𐄂𐄂	BENEFACTIVE / POSSESSIVE with FOCUS
huxai	hə'ʃaj ɦə'ʃaj	𐄂𐄂𐄂	SINGULAR BENEFACTIVE with FOCUS
huxo	hə'ʃɔ ɦə'ʃɔ	𐄂𐄂𐄂	ACTOR with FOCUS
huxoi	hə'ʃɔj ɦə'ʃɔj	𐄂𐄂𐄂	SINGULAR ACTOR with FOCUS
huxw	hə'ʃu ɦə'ʃu	𐄂𐄂𐄂	PLURAL with FOCUS
huxwi	hə'ʃwi ɦə'ʃwi	𐄂𐄂𐄂	COLLECTIVE with FOCUS
huxwe	hə'ʃwɛ ɦə'ʃwɛ	𐄂𐄂𐄂	PLURAL OBJECT with FOCUS
huxwei	hə'ʃwɛj ɦə'ʃwɛj	𐄂𐄂𐄂	COLLECTIVE OBJECT with FOCUS
huxwa	hə'ʃwa ɦə'ʃwa	𐄂𐄂𐄂	PLURAL BENEFACTIVE with FOCUS
huxwai	hə'ʃwaj ɦə'ʃwaj	𐄂𐄂𐄂	COLLECTIVE BENEFACTIVE with FOCUS
huxwo	hə'ʃwɔ ɦə'ʃwɔ	𐄂𐄂𐄂	PLURAL ACTOR with FOCUS
huxwoi	hə'ʃwɔj ɦə'ʃwɔj	𐄂𐄂𐄂	COLLECTIVE ACTOR with FOCUS

ROLE and NUMBER FUNCTIONALS provide semantic-structural information about things referred to in messages. The FUNCTIONAL as a word can be used to clarify ROLES if questions arise, or in discussions of grammar. As MARKERS these provide a simple set of “inflections” that can be attached to words that function as nouns.

If a speaker wishes to provide more detail, other DEICTICS can be used with a substantive instead of the single-syllable MARKER from this species. These alternatives are discussed in §7.2.

8.2.2.1. *Final Vowel Meanings*

- u : unspecified, general
- e : OBJECT of action (direct object, accusative case)
- a : BENEFACTIVE (relationship with another entity in the discourse: recipient of, possessor of, or similar relationship)
- o : ACTOR (instigator of action, ergative case)
- i : Singular
- w : Plural
- w-i : COLLECTIVE or Group = indicating several entities participating as a unit

8.2.2.2. *Semantics*

- huxu : grammatical ROLE: for use in language discussion; as a single syllable, may be most useful as a hesitation sound
- huxe : OBJECT: recipient of the effect of an action VERB
- huxa : BENEFACTIVE: possessor; participant in certain processes that require more than an ACTOR and an OBJECT
- huxo : ACTOR: instigator of action of a verband the focus of the sentence

8.2.2.3. *Discussion*

There are several similar and overlapping meanings in GENI ɬɬ_L *Hux-* “Role and Number” and ɬɬ_L *Hus-* “Role-State Perspective”, §8.2.3 next. ɬɬ_L *Hux-* is concerned more with the role of words in a MESSAGE, while ɬɬ_L *Hus-* deals with attributes of the words themselves. Also, ɬɬ_L *Hus-* does not distinguish number (singular, plural, or collective). If a speaker wishes to express aspects of both, the ɬɬ_L *Hux-* MARKER is placed after a ɬɬ_L *Hus-* FUNCTIONAL.

ɬɬ_Lɔ̃ *Huxo* and ɬɬ_Lɔ̃ *huso* have overlapping meanings. Both carry the sense of instigating action; ɬɬ_Lɔ̃ *huso* also carries the sense of the attached word being a PARTICLE, as opposed to a WAVE or FIELD, and as such can be useful in nominalizing words whose primary semantics imply being WAVES or FIELDS. ɬɬ_Lɔ̃ *Huxo* does not specifically carry the sense of a PARTICLE, though initiators of actions are often understood to be PARTICLES.

In contexts where the speaker does not feel a need to indicate PRONOUN DISTANCE (first-, second-, or third person) or ANIMACY, a ɬɬ_L *Hux-* FUNCTIONAL can be used alone, instead of the PERSONAL PRONOUN.

8.2.3. 𐌹𐌶 𐌶𐌵 *huSu* 2: Role-state Perspective

Clarifies how the HEADWORD (the word to which it is attached) interacts with other words in the sentence; optional.

Roman	IPA	NN	Grammatical Term	Function of the MARKER-form
<i>husu</i>	hə'sə ɦə_sə	𐌹𐌶 𐌶𐌵	ROLE or state of language element	Meaningless as a MARKER; may be used alone as a hesitation sound
<i>husi</i>	hə'si ɦə_si	𐌹𐌶 𐌶𐌰	Active; Exerting effect on another entity in the sentence	For emphasis or for use when word-order or context does not make clear that the HEADWORD is active
<i>huse</i>	hə'sɛ ɦə_sɛ	𐌹𐌶 𐌶𐌰	Verbal (action) – WAVE	The HEADWORD is an action – it is to be understood as having an active verbal role in the sentence. Particularly useful for words with strong entity-attributes 𐌶𐌰𐌹𐌶-𐌹𐌶 𐌶𐌰 <i>jegu-huse</i> 'handing (to someone)' (𐌶𐌰𐌹𐌶 <i>Jegu</i> 'hand';)
<i>husei</i>	hə'sɛj ɦə_sɛj	𐌹𐌶 𐌶𐌰	Active transitive verb; Indicating action transmitting effect from one entity in the sentence to another	Indicating the HEADWORD is an action; can be attached to words whose primary attributes are as entities 𐌶𐌰𐌹𐌶-𐌹𐌶 𐌶𐌰 <i>Jegu-husei</i> 'handing (something to someone)'
<i>husa</i>	hə'sa ɦə_sa	𐌹𐌶 𐌶𐌰	Adjectival – FIELD	Attribute of an entity, state or action. As a MARKER, clarifies that the HEADWORD describes the entity, action or state with which it is associated. 𐌶𐌰𐌹𐌶-𐌹𐌶 𐌶𐌰 <i>Jegu-husa</i> 'handy'
<i>husai</i>	hə'saj ɦə_saj	𐌹𐌶 𐌶𐌰	Active adjectival	The HEADWORD is an adjective with the sense of imposing the quality it represents on the HEADWORD 𐌶𐌰𐌹𐌶-𐌹𐌶 𐌶𐌰 <i>Jegu-husai</i> 'making (something) handy'
<i>huso</i>	hə'sə ɦə_sə	𐌹𐌶 𐌶𐌰	Substantive – PARTICLE; noun, entity	The basic (Aristotelian) category “Substance” (οὐσία, <i>ousia</i>) essence or substance. Clarifies that the HEADWORD functions in this message as an entity (noun) 𐌶𐌰𐌹𐌶-𐌹𐌶 𐌶𐌰 <i>sesi-huso</i> 'a proceeding, to proceed' (𐌶𐌰𐌹𐌶 <i>Sesi</i> 'move forward, proceed')

Roman	IPA	NN	Grammatical Term	Function of the MARKER-form
<i>husoi</i>	hə'səj ʰə,səj	Ἦ ἸḶ	Active agent, ergative	Clarifies that the HEADWORD is an entity and causes the action in the sentence to happen ἸḶḶḶ-Ἦ ἸḶ <i>Sesi-husoi</i> 'Proceeding, moving forward' (as in "moving forward caused the accident")
<i>husw</i>	hə'su ʰə,su	Ἦ ἸḶ	Passive	The HEADWORD is receiving the action in the sentence
<i>huswi</i>	hə'swi ʰə,swi	Ἦ ἸḶ	Middle	The HEADWORD is affecting, or acting upon, itself
<i>huswe</i>	hə'swɛ ʰə,swɛ	Ἦ ἸḶ	Passive verbal – WAVE	HEADWORD represents an action received by the (focus of the) sentence. ἮḶḶḶ-Ἦ ἸḶ <i>Jegu-huswe</i> 'handed' (as in, "It is being handed to you")
<i>huswei</i>	hə'swɛj ʰə,swɛj	Ἦ ἸḶ	Middle verbal	HEADWORD represents an action directed back upon the actor ἮḶḶḶ ḶḶḶḶ-Ἦ ἸḶ <i>Himo teyw-huswei</i> 'He/she lied to self' (ḶḶḶḶ <i>Teyw</i> 'Falsehood, lie')
<i>huswa</i>	hə'swa ʰə,swa	Ἦ ἸḶ	Passive adjectival – FIELD	HEADWORD is an attribute received from an associated entity ἮḶḶḶ ḶḶḶḶ-Ἦ ἸḶ ἮḶḶḶ <i>hemai teri-huswa homwo</i> 'You are made important by them' (ḶḶḶḶ <i>Teri</i> 'important')
<i>huswai</i>	hə'swaj ʰə,swaj	Ἦ ἸḶ	Middle adjectival	HEADWORD is an attribute self-imposed by the associated entity ἮḶḶḶ ḶḶḶḶ-Ἦ ἸḶ <i>Homwo teri-huswai</i> 'They make themselves important'
<i>huswo</i>	hə'swə ʰə,swə	Ἦ ἸḶ	Passive substantive – PARTICLE	HEADWORD is an entity which receives action from the verb of the sentence; the entity is the "object" of the sentence
<i>huswoi</i>	hə'swəj ʰə,swəj	Ἦ ἸḶ	Middle substantive	HEADWORD is an entity which is acting upon itself.

8.2.3.1. Final Vowel Meanings

u	:	unspecified, general
e	:	WAVE – Action – Verb

a	:	FIELD – State – Adjective
o	:	PARTICLE – Entity – Noun (see Discussion below)
i	:	Active
w	:	Passive
w-i	:	Middle

8.2.3.2. *Semantics*

WAVE, FIELD, PARTICLE: described further in the Overview chapter, §1.3.1.

- Active: The HEADWORD is usually an entity engaged in activity, often directed at a more passive entity in the sentence;
- Passive: The HEADWORD usually refers to an entity or concept that receives an action;
- Middle: The referent of the HEADWORD engages in activity directed primarily at itself.

8.2.3.3. *Discussion*

This species is intended for two purposes:

- To facilitate discussion of grammar, in which case they are treated as stand-alone words rather than markers;
- and to clarify sentences where meanings may be ambiguous – for example, when oratory, poetry, or stylistic considerations have altered the default SVO (“Subject Verb Object”) word order.

𐎡𐎢𐎣 *huxo* (§8.2.2) and 𐎡𐎢𐎣 *huso* have some overlapping meanings. Both carry the sense of instigating action; 𐎡𐎢𐎣 *huso* also carries the sense of the HEADWORD being a PARTICLE, as opposed to a WAVE or FIELD, and as such can be useful in nominalizing words whose primary semantics imply being waves or fields – for example, the English verb ‘build’ can be used as a noun, as in “Software build 3.5.7”; in NN, -𐎡𐎢𐎣 *-huso* can be added to clarify this. To identify a “doer” – a person who performs the action of a verb like “builder” – the marker 𐎡𐎢𐎣 *-humu* can be added. (Expanded from discussion in 𐎡𐎢𐎣 *huxo* above.)

𐎡𐎢𐎣 *Hus-* is paired with SPECIES 𐎡𐎢𐎣 *hub-* to provide FOCUSED and FOCUS-free FUNCTIONALS. The ending vowels carry the same meanings in these two linked SPECIES.

8.2.4. 𐄂𐄂𐄂 *huFu* 3: Relational (Genitive, Possessive, etc.)

Expresses a relationship between the HEADWORD “X” to which the MARKER is appended and the following entity or concept. NN has no possessive pronoun forms; these MARKERS can be attached to pronouns or other entities to convey that meaning.

Roman	IPA	NN	Semantics
<i>hufu</i>	hə'fə ɦə,fə	𐄂𐄂𐄂	General relation to X (Note 1)
<i>hufi</i>	hə'fi ɦə,fi	𐄂𐄂𐄂	Genitive: X's, i.e. produced by X, born of X
<i>hufe</i>	hə'fɛ ɦə,fɛ	𐄂𐄂𐄂	Close (inalienable) possession: X's hand
<i>hufei</i>	hə'fɛj ɦə,fɛj	𐄂𐄂𐄂	Inalienable offspring: X's child
<i>hufa</i>	hə'fa ɦə,fa	𐄂𐄂𐄂	Mid (permanent) possession: X's toothbrush
<i>hufai</i>	hə'faj ɦə,faj	𐄂𐄂𐄂	Permanent product: X's term paper
<i>hufo</i>	hə'fɔ ɦə,fɔ	𐄂𐄂𐄂	Far (temporary) possession: X's library book
<i>hufoi</i>	hə'fɔj ɦə,fɔj	𐄂𐄂𐄂	Assisting in making: X's crop of vegetables.
<i>hufw</i>	hə'fu ɦə,fu	𐄂𐄂𐄂	General relation of subordination to or membership in X (Note 2)
<i>hufwi</i>	hə'fwi ɦə,fwi	𐄂𐄂𐄂	General relation of originating from X
<i>hufwe</i>	hə'fwɛ ɦə,fwɛ	𐄂𐄂𐄂	An organic part: X's tribe or family
<i>hufwei</i>	hə'fwɛj ɦə,fwɛj	𐄂𐄂𐄂	Organic origin: X's father or mother
<i>hufwa</i>	hə'fwa ɦə,fwa	𐄂𐄂𐄂	Permanent membership: X's old college
<i>hufwai</i>	hə'fwaj ɦə,fwaj	𐄂𐄂𐄂	Produced by: X book's author
<i>hufwo</i>	hə'fwɔ ɦə,fwɔ	𐄂𐄂𐄂	Temporary membership: X's biology class
<i>hufwoi</i>	hə'fwɔj ɦə,fwɔj	𐄂𐄂𐄂	Assistant producer: X vegetable's grower.

8.2.4.1. Notes and Discussion

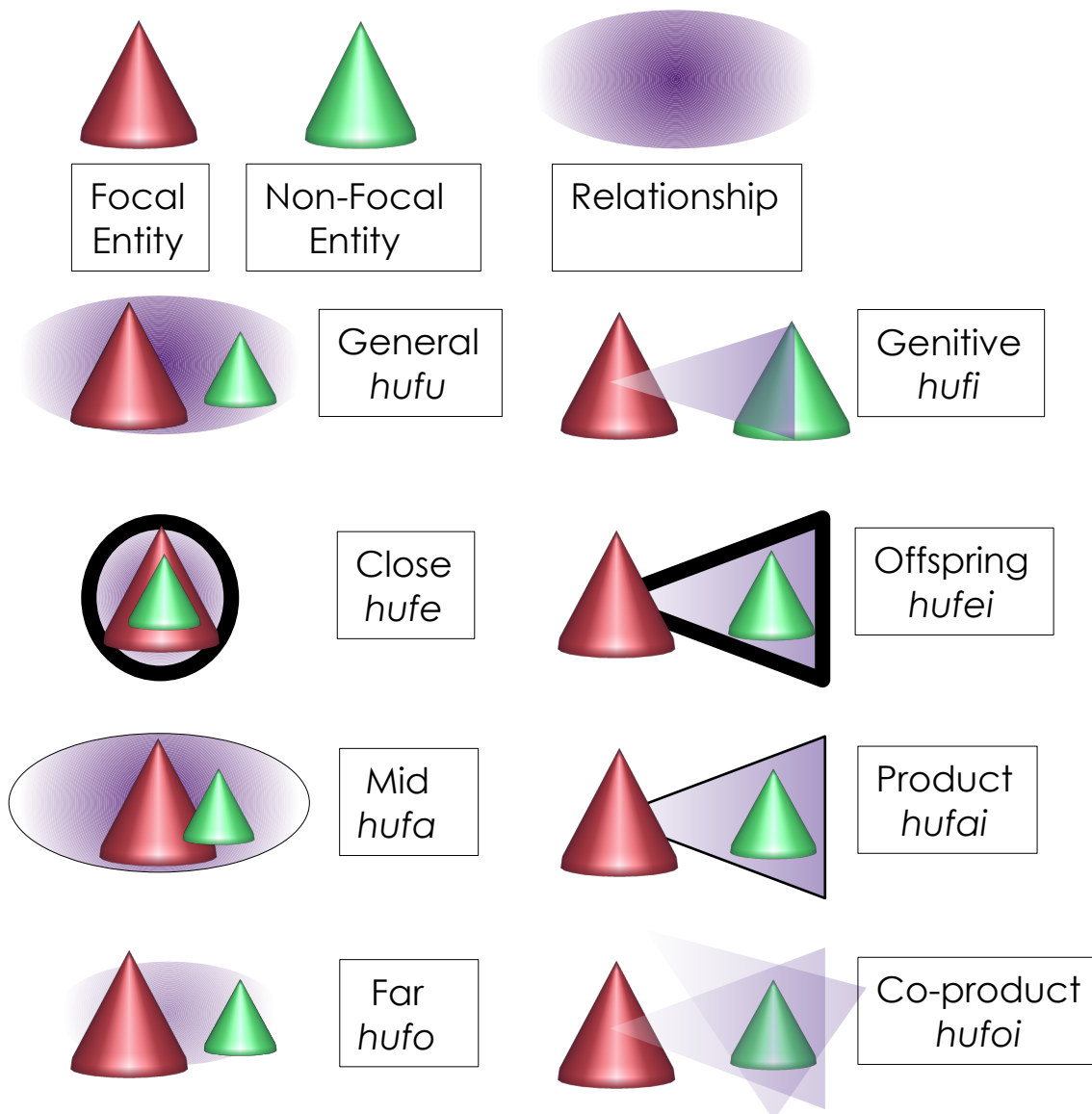
Note 1: When attached to X: Taking X as the HEADWORD; as a free-standing word: the relationship between any two entities or concepts: the basic (Aristotelian) category of relatedness between entities (πρός τι, *pros ti*, toward something)

Note 2: Used when X is the thing possessed rather than the possessor

8.2.4.2. Final Vowel Meanings

u : unspecified, general – used when the nature of the relationship is unclear or unimportant

- e : close, inalienable – relationship cannot be severed
a : mid, permanent – relationship is intended to last the life of the possessed entity
o : far, temporary – relationship is intended to last only for a while
i : Genitive, originating – born or made by the possessor
w : Partitive – X is a part or member of the other entity: X's country, X's group
w-i : Complementary-genitive – X originated with the assistance of the following entity
Dp 8.1 is an attempt to illustrate the relationships graphically.



Dp 8.1: Relations represented by Iṭṭhufu words

8.2.5. 𐄂𐄂𐄂 *huRu* 4. Sequencers

Indicate the order in which entities or actions are organized.

Roman	IPA	NN	Semantics
<i>huru</i>	hə'kə ʰə,kə	𐄂𐄂𐄂	Ordered sequence; marks ordinal number
<i>huri</i>	hə'ki ʰə,ki	𐄂𐄂𐄂	ahead, before
<i>hure</i>	hə'kɛ ʰə,kɛ	𐄂𐄂𐄂	close (in space or time)
<i>hurei</i>	hə'kɛj ʰə,kɛj	𐄂𐄂𐄂	next
<i>hura</i>	hə'ka ʰə,ka	𐄂𐄂𐄂	Moderate distance
<i>hurai</i>	hə'kaj ʰə,kaj	𐄂𐄂𐄂	somewhat ahead
<i>huro</i>	hə'kɔ ʰə,kɔ	𐄂𐄂𐄂	distant
<i>huroi</i>	hə'kɔj ʰə,kɔj	𐄂𐄂𐄂	farthest ahead, first
<i>hurw</i>	hə'ku ʰə,ku	𐄂𐄂𐄂	behind, after
<i>hurwi</i>	hə'kwi ʰə,kwi	𐄂𐄂𐄂	neighboring
<i>hurwe</i>	hə'kwɛ ʰə,kwɛ	𐄂𐄂𐄂	previous
<i>hurwei</i>	hə'kwɛj ʰə,kwɛj	𐄂𐄂𐄂	same position, two in same position, simultaneous
<i>hurwa</i>	hə'kwa ʰə,kwa	𐄂𐄂𐄂	somewhat behind, soon after
<i>hurwai</i>	hə'kwaj ʰə,kwaj	𐄂𐄂𐄂	multiples in same position, multiple simultaneity
<i>hurwo</i>	hə'kwɔ ʰə,kwɔ	𐄂𐄂𐄂	last
<i>hurwoi</i>	hə'kwɔj ʰə,kwɔj	𐄂𐄂𐄂	all in same position, no sequence, unordered

8.2.5.1. Final Vowel Meanings

u	:	Unmodified direction
e	:	near
a	:	mid-distance
o	:	far
i	:	ahead, before
w	:	behind, after
w-i	:	neighboring

8.2.5.2. Discussion

As MARKERS: 𐄂𐄂𐄂 *huru* is attached to the cardinal numbers to make them ordinals:

Tihwe-huru [ti'hwɛ,ɹə] 𐄂𐄂𐄂𐄂𐄂𐄂 'tenth'

8.2.6. ᐃᐃᐃ huYu 5: Manner, Comparison

Roman	IPA	NN	Semantics
huyu	hə'ʒə ɦə'ʒə	ᐃᐃᐃ	Manner, style – general marker
huyi	hə'ʒi ɦə'ʒi	ᐃᐃᐃ	Same as
huye	hə'ʒɛ ɦə'ʒɛ	ᐃᐃᐃ	Great
huyei	hə'ʒɛj ɦə'ʒɛj	ᐃᐃᐃ	Like, similar to
huya	hə'ʒa ɦə'ʒa	ᐃᐃᐃ	Greater
huyai	hə'ʒaj ɦə'ʒaj	ᐃᐃᐃ	Nearly (closer similarity)
huyo	hə'ʒɔ ɦə'ʒɔ	ᐃᐃᐃ	Greatest
huyoi	hə'ʒɔj ɦə'ʒɔj	ᐃᐃᐃ	Almost (closest similarity)
huyw	hə'ʒu ɦə'ʒu	ᐃᐃᐃ	Unlike
huywi	hə'ʒwi ɦə'ʒwi	ᐃᐃᐃ	Different
huywe	hə'ʒwɛ ɦə'ʒwɛ	ᐃᐃᐃ	Least
huywei	hə'ʒwɛj ɦə'ʒwɛj	ᐃᐃᐃ	Hardly (greatest dissimilarity)
huywa	hə'ʒwa ɦə'ʒwa	ᐃᐃᐃ	Lesser
huywai	hə'ʒwaj ɦə'ʒwaj	ᐃᐃᐃ	Hardly (less similar)
huywo	hə'ʒwɔ ɦə'ʒwɔ	ᐃᐃᐃ	Less
huywoi	hə'ʒwɔj ɦə'ʒwɔj	ᐃᐃᐃ	Hardly

8.2.6.1. Final Vowel Meanings

u	:	unspecified, general
e	:	some
a	:	moderate
o	:	most
i	:	similarity
w	:	comparative-negative
w-i	:	dissimilarity

8.2.6.2. Discussion

As MARKERS: These can be used as straight comparitors –

- ᐃᐃᐃ-ᐃᐃᐃ yidu-huyi 'rabbit-like'
- ᐃᐃᐃ-ᐃᐃᐃ kimwe-huyoi 'almost-gold (metaphorically, high-valued)'
- or the opposite ᐃᐃᐃ-ᐃᐃᐃ kimwe-huywoi 'hardly-gold (metaphorically, low-value)'
- ᐃᐃᐃ-ᐃᐃᐃ nufe-huyo 'greatest possibility, most likely'
- ᐃᐃᐃ-ᐃᐃᐃ sefw-huywe 'leftward-least (move just a little to the left)'
- ᐃᐃᐃ-ᐃᐃᐃ nuyi-huyu 'simple-manner, simply'

As stand-alone words:

𐎡𐎴𐎠𐎹 *huyu* by itself invites consideration of the nature or manner of something 𐎡𐎴𐎠𐎹𐎶𐎵𐎠𐎹 *yiru huyu* ‘the nature of sheep, sheepishness’.

The series *huye* – *huya* – *huyo* ‘great – greater – greatest’ can be used to express quantity or degree of enthusiasm, as the opposite can be expressed with *huywe* – *huywa* – *huywo* ‘least – lesser – less’.

It is difficult to express in English the distinction between 𐎡𐎴𐎶𐎵 *huyw* and 𐎡𐎴𐎶𐎵𐎶𐎵 *huywi*; 𐎡𐎴𐎶𐎵 *huyw* focuses on the polarity – the opposition – of the compared things (as in “black and white” differences), while 𐎡𐎴𐎶𐎵𐎶𐎵 *huywi* focuses on the lack of similarity, the inability to compare two items (as in “apples to oranges”).

8.2.7. 𐀄𐀆𐀇 huNu 6: Discourse Links

Roman	IPA	NN	Semantics	Usage
hunu	hə'nə 𐀄𐀆, nə	𐀄𐀆𐀇	discourse	Can be used at the opening of a DISCOURSE
huni	hə'ni 𐀄𐀆, ni	𐀄𐀆𐀈	reason	Refers to the mental process by which a MESSAGE is formed
hune	hə'ne 𐀄𐀆, ne	𐀄𐀆𐀉	message (received)	general term for transmission of IDEAS, usually by language. 'Message received' acknowledges receipt, 'I hear you'
hunei	hə'nej 𐀄𐀆, nej	𐀄𐀆𐀊	understand	As response to a MESSAGE, 'Message successfully decoded', 'I understand'
huna	hə'na 𐀄𐀆, na	𐀄𐀆𐀋	time (when)	Refers and links to the general temporal context of a MESSAGE
hunai	hə'naj 𐀄𐀆, naj	𐀄𐀆𐀌	period of time (when)	Refers and links to the specific time mentioned in a MESSAGE
huno	hə'no 𐀄𐀆, no	𐀄𐀆𐀍	place	Refers and links to the general location of a MESSAGE
hunoi	hə'nɔj 𐀄𐀆, nɔj	𐀄𐀆𐀎	location	Refers and links to the specific location of a MESSAGE
hunw	hə'nu 𐀄𐀆, nu	𐀄𐀆𐀏	question	A MESSAGE that seeks a response; can be attached as a MARKER to point out the specific item in question
hunwi	hə'nwi 𐀄𐀆, nwi	𐀄𐀆𐀐	explanation	Response to a request for information about the reasoning behind a STATEMENT 'Because'
hunwe	hə'nwe 𐀄𐀆, nwe	𐀄𐀆𐀑	repeat	Request to repeat a MESSAGE. 'What?'
hunwei	hə'nweɟ 𐀄𐀆, nweɟ	𐀄𐀆𐀒	explain	Request for information about the reasoning behind a STATEMENT 'Why?'
hunwa	hə'nwa 𐀄𐀆, nwa	𐀄𐀆𐀓	when?	Request for the temporal context of a MESSAGE
hunwai	hə'nwaj 𐀄𐀆, nwaj	𐀄𐀆𐀔	specify time	Request for the specific time of a MESSAGE
hunwo	hə'nwɔ 𐀄𐀆, nwɔ	𐀄𐀆𐀕	where?	Request for the physical context of a MESSAGE
hunwoi	hə'nwɔɟ 𐀄𐀆, nwɔɟ	𐀄𐀆𐀖	specify place	Request for the specific location of a MESSAGE

8.2.7.1. Discussion

This SPECIES is designed for linking and managing aspects of DISCOURSE (that is, the set of MESSAGES that makes up a unified session between a SENDER and RECIPIENTS). Chapter 9 “Discourse” discusses this topic in more detail.

SPECIES 𐄂𐄂- *Hun-* provides connections between the IDEAS represented in a discourse. Another set of linking-words is provided in SPECIES 𐄂𐄂- *Suk-*, (§8.2.20) whose primary purpose is to connect words and phrases within a sentence.

As functionals attached to a headword, these can focus on a specific concept in a message. For example, in the message, “The shirt will be blue linen,” a recipient might wonder why the shirt was blue, or why it was linen. In English, the recipient could ask, “Why blue?”; in NN, they could ask, “𐄂𐄂𐄂𐄂-𐄂𐄂?” “*Nifo-hunwei?*” (*nifo* ‘blue’).

8.2.8. 𐌸𐌹𐌺 huMu 7: Bio-social Status – age, gender

Roman	IPA	NN	Semantics
<i>humu</i>	hə'mə ʰə,mə	𐌸𐌹𐌺	Person
<i>humi</i>	hə'mi ʰə,mi	𐌸𐌹𐌺	Young person
<i>hume</i>	hə'mɛ ʰə,mɛ	𐌸𐌹𐌺	Female person
<i>humei</i>	hə'mɛj ʰə,mɛj	𐌸𐌹𐌺	Female youth
<i>huma</i>	hə'ma ʰə,ma	𐌸𐌹𐌺	flex-genderd person (see note)
<i>humai</i>	hə'maj ʰə,maj	𐌸𐌹𐌺	flex-gendered youth
<i>humo</i>	hə'mɔ ʰə,mɔ	𐌸𐌹𐌺	Male person
<i>humoi</i>	hə'mɔj ʰə,mɔj	𐌸𐌹𐌺	Male youth
<i>humw</i>	hə'mu ʰə,mu	𐌸𐌹𐌺	Elder person
<i>humwi</i>	hə'mwi ʰə,mwi	𐌸𐌹𐌺	Adult person, neither old nor young
<i>humwe</i>	hə'mwɛ ʰə,mwɛ	𐌸𐌹𐌺	Elder female person
<i>humwei</i>	hə'mwɛj ʰə ,mwɛj	𐌸𐌹𐌺	Adult female person
<i>humwa</i>	hə'mwa ʰə,mwa	𐌸𐌹𐌺	flex-gendered elder person
<i>humwai</i>	hə'mwaj ʰə ,mwaj	𐌸𐌹𐌺	flex-gendered adult person
<i>humwo</i>	hə'mwɔ ʰə,mwɔ	𐌸𐌹𐌺	Elder male person
<i>humwoi</i>	hə'mwɔj ʰə ,mwɔj	𐌸𐌹𐌺	Adult male person

8.2.8.1. Final Vowel Meanings

u	:	unspecified, general, 'person'
e	:	female
a	:	flex-gender (See Note below)
o	:	male
i	:	Young
w	:	Old
w-i	:	Adult

8.2.8.2. Note

The final vowel -ɾ -a 'flex gender' refers to situations where the simple dichotomy "male vs. female" is not appropriate. This can be used for those whose gender or preferred gender-identity is different from their

birth-gender, including neutered males (eunuchs), LGBTQ+ people and persons medically or surgically gender-changed. The term “flex-gender” is used without prejudice here as a portmanteau gloss. $\text{ḥḥḥ} \text{ḥuma}$ ‘flex-gender’ is a specific gender designation, in contrast with $\text{ḥḥḥ} \text{ḥumu}$ unspecified gender, which ignores gender entirely.

8.2.8.3. Discussion

The term “bio-social” here means those characteristics of biology that influence social roles and positions in many cultures. Many languages require an indication of gender and/or age when speaking to or about a member of that culture. NN therefore provides this species, together with ḥḥḥ - *Huj*- ‘Social Markers’, to enable culturally acceptable communications in cultures where these are required.

This SPECIES refers to “people” - that is, to animate beings with the capability of “intelligent” interaction. All humans are “people”, and other creatures may be referred to with these words as the speaker wishes. To differentiate, animal status is referred to using ḥḥḥ - *Yuh*- with the final vowel carrying age and gender identical to those of $\text{ḥḥḥ} \text{ḥumu}$.

The final vowels $-\text{ḥ}$, $-\text{ḥ}$, $-\text{ḥ}$ $-\text{i}$, $-\text{w}$, $-\text{wi}$ refer to age without specifying gender, and can be combined, if desired, with gender vowels. When context makes number and grammatical function clear, they can function as pronouns.

8.2.9. ᐃᐃᐃ huKu 8: Word Classifiers

Roman	IPA	NN	Semantics
<i>huku</i>	hə'kə ʰə,kə	ᐃᐃᐃ	thing
<i>huki</i>	hə'ki ʰə,ki	ᐃᐃᐃᐃ	place (general)
<i>huke</i>	hə'kɛ ʰə,kɛ	ᐃᐃᐃᐃ	instrument, -tool
<i>hukei</i>	hə'kej ʰə,kɛj	ᐃᐃᐃᐃ	Small place (spot)
<i>huka</i>	hə'ka ʰə,ka	ᐃᐃᐃᐃ	machine
<i>hukai</i>	hə'kaj ʰə,kaj	ᐃᐃᐃᐃ	Medium place (building, etc.)
<i>huko</i>	hə'kɔ ʰə,kɔ	ᐃᐃᐃᐃ	system
<i>hukoi</i>	hə'kɔj ʰə,kɔj	ᐃᐃᐃᐃ	Large place (area)
<i>hukw</i>	hə'ku ʰə,ku	ᐃᐃᐃᐃ	covering, wrapping, clothing
<i>hukwi</i>	hə'kwi ʰə,kwi	ᐃᐃᐃᐃ	Time
<i>hukwe</i>	hə'kwɛ ʰə,kwɛ	ᐃᐃᐃᐃ	thin, inner cover (membrane, underwear)
<i>hukwei</i>	hə'kwɛj ʰə,kwɛj	ᐃᐃᐃᐃ	Short time, moment
<i>hukwa</i>	hə'kwa ʰə,kwa	ᐃᐃᐃᐃ	Medium cover (jacket, rind)
<i>hukwai</i>	hə'kwaj ʰə,kwaj	ᐃᐃᐃᐃ	moderate time, a while
<i>hukwo</i>	hə'kwɔ ʰə,kwɔ	ᐃᐃᐃᐃ	thick protective cover (shell)
<i>hukwoi</i>	hə'kwɔj ʰə,kwɔj	ᐃᐃᐃᐃ	Long time, age, era

8.2.9.1. Final Vowel Meanings

u	:	unspecified, general
e	:	small
a	:	moderate
o	:	large, system
i	:	Place, location
w	:	Covering, clothing
w-i	:	Time

8.2.9.2. Discussion

This class of MARKER is appended to words to indicate the type of object (or concept) it represents. Many languages use word-classifiers to clarify or amplify word meanings. Their use is not required in NN, but this species is made available for those who find it helpful. In certain contexts, they can be used as stand-alone functionals in place of deictics.

Words may also be classified according to shape, using species 𐀓𐀕 - *hup*- 'Shape Classifiers', §8.2.12.

There are four independent concepts combined, providing sixteen words by different combinations of final vowels. As usual in NN, the sizes are relative to the context of the conversation. They are shown here with a few examples of their use.

8.2.9.3. Examples

Things: in general, instruments, machines, systems:

- | | | | |
|----------|---------------|-----------------------|--|
| • 𐀓𐀕𐀓 | - <i>huku</i> | (any thing) | as in 'flying-thing, flyer', |
| • 𐀓𐀕𐀓𐀓 | - <i>huke</i> | (small thing) | as in 'twisting-tool, screwdriver', |
| • 𐀓𐀕𐀓𐀓𐀓 | - <i>huka</i> | (moderate thing) | as in 'hole-machine, drill' |
| • 𐀓𐀕𐀓𐀓𐀓𐀓 | - <i>huko</i> | (Large thing, system) | as in 'movement-system, transportation system' |

Places and areas: 𐀓𐀓 -*i*

- | | | | |
|-----------|----------------|--------------------------------|-------------------------------|
| • 𐀓𐀕𐀓𐀓 | - <i>huki</i> | (any place) | as in 'play-place' |
| • 𐀓𐀕𐀓𐀓𐀓 | - <i>hukei</i> | (small place) | as in 'clothes-place, closet' |
| • 𐀓𐀕𐀓𐀓𐀓𐀓 | - <i>hukai</i> | (medium size place, building) | as in 'work-shop' |
| • 𐀓𐀕𐀓𐀓𐀓𐀓𐀓 | - <i>hukoi</i> | (city, country, or large area) | as in 'disaster-zone' |

Covering, wrapping, clothing: 𐀓𐀓 -*w*

- | | | | |
|-----------|----------------|-----------------------------------|--------------------------------|
| • 𐀓𐀕𐀓𐀓 | - <i>hukw</i> | (any covering) | as in 'a covered bin' |
| • 𐀓𐀕𐀓𐀓𐀓 | - <i>hukwe</i> | (small covering) | as in 'foot-inner-cover, sock' |
| • 𐀓𐀕𐀓𐀓𐀓𐀓 | - <i>hukwa</i> | (moderate size cover) | as in 'shoe' |
| • 𐀓𐀕𐀓𐀓𐀓𐀓𐀓 | - <i>hukwo</i> | (large, thick, or outer covering) | as in 'boot', 'tortoise shell' |

Time: 𐀓𐀓𐀓 -*w-i*

- | | | | |
|------------|-----------------|------------------------|---------------------------|
| • 𐀓𐀕𐀓𐀓𐀓 | - <i>hukwi</i> | (any time period) | as in 'play-time, recess' |
| • 𐀓𐀕𐀓𐀓𐀓𐀓 | - <i>hukwei</i> | (short period) | as in 'rest-moment, nap' |
| • 𐀓𐀕𐀓𐀓𐀓𐀓𐀓 | - <i>hukwai</i> | (medium length period) | as in 'dinner hour' |
| • 𐀓𐀕𐀓𐀓𐀓𐀓𐀓𐀓 | - <i>hukwoi</i> | (long period) | as in 'ice-age' |

8.2.10. ᐃᐃᐃ huCu 9: Qualifiers: Attitudinals and Size

Roman	IPA	NN	Semantics
<i>hucu</i>	hə'tʃə ʰə, tʃə	ᐃᐃᐃ	Evaluative, e.g. <i>yinu-hucu</i> 'porcine'
<i>huci</i>	hə'tʃi ʰə, tʃi	ᐃᐃᐃᐃ	Good
<i>huce</i>	hə'tʃɛ ʰə, tʃɛ	ᐃᐃᐃᐃ	Small (diminutive)
<i>hucei</i>	hə'tʃɛj ʰə, tʃɛj	ᐃᐃᐃᐃᐃ	Small & good (endearment)
<i>huca</i>	hə'tʃa ʰə, tʃa	ᐃᐃᐃᐃ	Moderate size
<i>hucai</i>	hə'tʃaj ʰə, tʃaj	ᐃᐃᐃᐃᐃ	Moderate size and good
<i>huco</i>	hə'tʃɔ ʰə, tʃɔ	ᐃᐃᐃᐃᐃ	Large
<i>hucoi</i>	hə'tʃɔj ʰə, tʃɔj	ᐃᐃᐃᐃᐃᐃ	Large and good
<i>hucw</i>	hə'tʃu ʰə, tʃu	ᐃᐃᐃᐃ	Bad
<i>hucwi</i>	hə'tʃwi ʰə, tʃwi	ᐃᐃᐃᐃᐃ	Moderate quality, so-so
<i>hucwe</i>	hə'tʃwɛ ʰə, tʃwɛ	ᐃᐃᐃᐃᐃ	Small and unpleasant (e.g. a bug)
<i>hucwei</i>	hə'tʃwɛj ʰə, tʃwɛj	ᐃᐃᐃᐃᐃᐃ	Small and indifferent quality
<i>hucwa</i>	hə'tʃwa ʰə, tʃwa	ᐃᐃᐃᐃᐃ	Moderate size and bad
<i>hucwai</i>	hə'tʃwaj ʰə, tʃwaj	ᐃᐃᐃᐃᐃᐃ	Indifferent size and quality
<i>hucwo</i>	hə'tʃwɔ ʰə, tʃwɔ	ᐃᐃᐃᐃᐃᐃ	Large and bad (as in "Who's afraid of the wolf- <i>hucwo</i> ")
<i>hucwoi</i>	hə'tʃwɔj ʰə, tʃwɔj	ᐃᐃᐃᐃᐃᐃᐃ	Large and moderate quality

8.2.10.1. Final Vowel Meanings

u	:	unspecified, general
e	:	Small
a	:	Mid
o	:	Large
i	:	Goodness
w	:	Badness
w-i	:	Moderate quality

8.2.10.2. Discussion

This SPECIES is intended to make it quick and easy for people to express their attitude toward whatever they're talking about. Many languages have postfixes or other methods of expressing this, such as the postfixes in Spanish *-ito, -ita* 'small, dear'; Japanese *-chan* 'small, dear'; Spanish *-ote, -ón* 'big, clumsy'.

Like similar FUNCTIONALS, these can be used in place of pronouns or deictics in certain contexts. They are a more informal way of expressing attitude and evaluation than the words discussed in §10.1, and 𐎧𐎡𐎴- *Tum-* 'Size Ranges', §12.3.

8.2.11. 𐄂𐄂𐄂 *hutu* 10: Message Types

Roman	IPA	NN	Semantics
<i>hutu</i>	hə'tə ɦə'tə	𐄂𐄂𐄂	Statement
<i>huti</i>	hə'ti ɦə'ti	𐄂𐄂𐄂𐄂	Polite statement
<i>hute</i>	hə'te ɦə'te	𐄂𐄂𐄂𐄂	Question
<i>hutei</i>	hə'tej ɦə'tej	𐄂𐄂𐄂𐄂𐄂	Polite question
<i>huta</i>	hə'ta ɦə'ta	𐄂𐄂𐄂𐄂	Request, suggestion
<i>hutai</i>	hə'taj ɦə'taj	𐄂𐄂𐄂𐄂𐄂	Polite request, suggestion
<i>huto</i>	hə'tɔ ɦə'tɔ	𐄂𐄂𐄂𐄂𐄂	Command
<i>hutoi</i>	hə'tɔj ɦə'tɔj	𐄂𐄂𐄂𐄂𐄂𐄂	Polite command
<i>hutw</i>	hə'tu ɦə'tu	𐄂𐄂𐄂𐄂𐄂	Negative
<i>hutwi</i>	hə'twi ɦə'twi	𐄂𐄂𐄂𐄂𐄂𐄂	Polite negative
<i>hutwe</i>	hə'twɛ ɦə'twɛ	𐄂𐄂𐄂𐄂𐄂𐄂	Negative question
<i>hutwei</i>	hə'twɛj ɦə'twɛj	𐄂𐄂𐄂𐄂𐄂𐄂𐄂	Polite negative question
<i>hutwa</i>	hə'twa ɦə'twa	𐄂𐄂𐄂𐄂𐄂𐄂	Negative request
<i>hutwai</i>	hə'twaj ɦə'twaj	𐄂𐄂𐄂𐄂𐄂𐄂𐄂	Polite negative request
<i>hutwo</i>	hə'twɔ ɦə'twɔ	𐄂𐄂𐄂𐄂𐄂𐄂𐄂	Negative command
<i>hutwoi</i>	hə'twɔj ɦə'twɔj	𐄂𐄂𐄂𐄂𐄂𐄂𐄂𐄂	Polite negative command

8.2.11.1. Meaning of Final Vowels

u	:	Statement, general
e	:	Question
a	:	Request
o	:	Command
i	:	Polite
w	:	Negative
w-i	:	Polite negative

8.2.11.2. Discussion

These words are available to express the purpose of a message.

The primary use is to attach one as a MARKER to the verb, but in messages without specific verbs they can be used as stand-alone words to clarify the speaker's intent or express respect.

These are further discussed in §4.7, §4.8, and §6.4.

8.2.12. 𐄂𐄂𐄂 huPu 11: Shape Classifiers

Roman	IPA	NN	Semantics
<i>hupu</i>	hə'pə ʰə, pə	𐄂𐄂𐄂	-Shaped (like the headword) as in pear-shaped (2-D or 3-D)
<i>hupi</i>	hə'pi ʰə, pi	𐄂𐄂𐄂	Speck, mote (dimensionless)
<i>hupe</i>	hə'pɛ ʰə, pɛ	𐄂𐄂𐄂	Long slender (rod, pin; skinny – ectomorphic) 3-D
<i>hupei</i>	hə'pɛj ʰə, pɛj	𐄂𐄂𐄂	String, filament, line (2-D focus)
<i>hupa</i>	hə'pa ʰə, pa	𐄂𐄂𐄂	Broad and thin (sheet, leaf, layer; mesomorphic) 2-D or 3-D
<i>hupai</i>	hə'paj ʰə, paj	𐄂𐄂𐄂	Wedge-shaped, triangular, arrow-headed
<i>hupo</i>	hə'pɔ ʰə, pɔ	𐄂𐄂𐄂	Spherical, globe-shaped (endomorph) 3-D
<i>hupoi</i>	hə'pɔj ʰə, pɔj	𐄂𐄂𐄂	Circular, curving 2-D
<i>hupw</i>	hə'pu ʰə, pu	𐄂𐄂𐄂	Shapeless, amorphous 2-D or 3-D
<i>hupwi</i>	hə'pwi ʰə, pwi	𐄂𐄂𐄂	Tangled 2-D or 3-D
<i>hupwe</i>	hə'pwe ʰə, pwe	𐄂𐄂𐄂	Long but not slender – somewhat more length than breadth 3-D
<i>hupwei</i>	hə'pwej ʰə, pwej	𐄂𐄂𐄂	Twisting, but not tangled – mountain road, coiled wire
<i>hupwa</i>	hə'pwa ʰə, pwa	𐄂𐄂𐄂	Blocky, chunky, cube-shaped 3-D
<i>hupwai</i>	hə'pwaj ʰə, pwaj	𐄂𐄂𐄂	Pyramid-shaped; massive at one end, pointed at the other 3-D
<i>hupwo</i>	hə'pwo ʰə, pwo	𐄂𐄂𐄂	Somewhat globular
<i>hupwoi</i>	hə'pwoj ʰə, pwoj	𐄂𐄂𐄂	Curved, drop-shaped 3-D

8.2.12.1. Final Vowel Meanings

u	:	shape, general
e	:	Length-emphasis
a	:	similar as to length and breadth
o	:	Circular
i	:	Thinness, lower dimensionality
w	:	Blurred distinctiveness
w-i	:	Complex

8.2.12.2. Discussion

Humans have a propensity for associating objects and concepts with shapes. In languages like English, this is optional and often expressed with “of”. Ex. “A wedge of cheese”, “a line of code”, “a ball of fire”.

In other languages, shape classifiers are used to disambiguate words which may be homophones. NN provides this species of word to fill this apparent human propensity, along with SPECIES 𐏃𐏃- *Huk*- for classifying things, places, coverings, and time. They can also be used in certain contexts as PRONOUNS or DEICTICS.

8.2.13. 𐎧𐎡𐎴 huGu 12: Creation and Use

Roman	IPA	NN	Semantics
<i>hugu</i>	hə'gə ɦə,gə	𐎧𐎡𐎴	Maker and/or user of X1
<i>hugi</i>	hə'gi ɦə,gi	𐎧𐎡𐎵	Maker/creator of X
<i>huge</i>	hə'gɛ ɦə,gɛ	𐎧𐎡𐎶	Controlled by X
<i>hugei</i>	hə'gɛj ɦə,gɛj	𐎧𐎡𐎷	Maker of X, but controlled or dominated by X
<i>huga</i>	hə'ga ɦə,ga	𐎧𐎡𐎸	User or associate of X
<i>hugai</i>	hə'gaj ɦə,gaj	𐎧𐎡𐎹	Maker, and user/associate of X
<i>hugo</i>	hə'gɔ ɦə,gɔ	𐎧𐎡𐎺	Controller (operator, driver) of X
<i>hugoi</i>	hə'gɔj ɦə,gɔj	𐎧𐎡𐎻	Maker and controller of X
<i>hugw</i>	hə'gu ɦə,gu	𐎧𐎡𐎼	X is creation of Y
<i>hugwi</i>	hə'gwi ɦə,gwi	𐎧𐎡𐎽	X is creation of and controlled by Y
<i>hugwe</i>	hə'gwɛ ɦə,gwɛ	𐎧𐎡𐎾	X is controller of Y
<i>hugwei</i>	hə'gwɛj ɦə,gwɛj	𐎧𐎡𐎿	X controls and is creation of Y
<i>hugwa</i>	hə'gwa ɦə,gwa	𐎧𐎡𐏀	X is user/associate of Y
<i>hugwai</i>	hə'gwaj ɦə,gwaj	𐎧𐎡𐏁	X is user/associate and created by Y
<i>hugwo</i>	hə'gwɔ ɦə,gwɔ	𐎧𐎡𐏂	X is controlled by Y
<i>hugwoi</i>	hə'gwɔj ɦə,gwɔj	𐎧𐎡𐏃	X is created and controlled by Y

8.2.13.1. Final Vowel Meanings

u	:	unspecified, general
e	:	Controlled
a	:	Interactive, equal
o	:	Controller
i	:	Originator
w	:	Controlled by
w-i	:	Creator is controlled by

8.2.13.2. Discussion

This SPECIES allows detailed expression of the relationship between people or entities and the objects they make and use. These are usually appended to an object, X, though possibly to a person.

8.2.13.3. Example

𐎧𐎡𐎴 𐎧𐎡𐎵 𐎧𐎡𐎵-𐎧𐎡𐎵. *Himoi xutu hisa-hugi.* [hi'məjʃtə hi'sa,gi] 'He/she is the maker of that.'

8.2.14. 𐄂𐄂𐄂 *huJu* 13: Social Markers

Roman	IPA	NN	Semantics
<i>huj</i>	hə'dʒə ɦə, dʒə	𐄂𐄂𐄂	Member of society, citizen
<i>huj</i>	hə'dʒi ɦə, dʒi	𐄂𐄂𐄂	Student
<i>huj</i>	hə'dʒɛ ɦə, dʒɛ	𐄂𐄂𐄂	companion, friend, ordinary person
<i>huj</i>	hə'dʒej ɦə, dʒej	𐄂𐄂𐄂	Apprentice, trainee
<i>huj</i>	hə'dʒa ɦə, dʒa	𐄂𐄂𐄂	Respected person
<i>huj</i>	hə'dʒaj ɦə, dʒaj	𐄂𐄂𐄂	Respected young person
<i>huj</i>	hə'dʒɔ ɦə, dʒɔ	𐄂𐄂𐄂	honored person
<i>huj</i>	hə'dʒɔj ɦə, dʒɔj	𐄂𐄂𐄂	honored young person
<i>huj</i>	hə'dʒu ɦə, dʒu	𐄂𐄂𐄂	Master, experienced person
<i>huj</i>	hə'dʒwi ɦə, dʒwi	𐄂𐄂𐄂	Skilled worker, craftsman
<i>huj</i>	hə'dʒwɛ ɦə, dʒwɛ	𐄂𐄂𐄂	Highly experienced worker, master craftsman
<i>huj</i>	hə'dʒwɛj ɦə, dʒwɛj	𐄂𐄂𐄂	Experienced workman
<i>huj</i>	hə'dʒwa ɦə, dʒwa	𐄂𐄂𐄂	Respected expert
<i>huj</i>	hə'dʒwaj ɦə, dʒwaj	𐄂𐄂𐄂	Respected experienced person
<i>huj</i>	hə'dʒwɔ ɦə, dʒwɔ	𐄂𐄂𐄂	honored expert, doctor
<i>huj</i>	hə'dʒwɔj ɦə, dʒwɔj	𐄂𐄂𐄂	honored experienced person, master

8.2.14.1. *Final Vowel Meanings*

u	:	unspecified, general
e	:	Equal or lower standing; friend, companion
a	:	Politely respected
o	:	Highly respected
i	:	Beginning skill level, student
w	:	High skill level, Master
w-i	:	Competent skill level, journeyman

8.2.14.2. *Discussion*

These would generally be appended to words describing actions, skills, or institutions, indicating people associated in various degrees.

There is a close relationship between species 𐄂𐄂- *Huj*- and species 𐄂𐄂- *Mij*- 'Politically-based Rank and Seniority'. Both refer to relative status. The difference is that the 𐄂𐄂- *Huj*- functionals refer loosely to

social status as determined by history and custom, while 𐎡𐎢𐎴 - *Mij* - words refer to rank within an organizational structure.

Additionally, 𐎡𐎴 *Huj*- shares social functions with 𐎡𐎴 - *Hum*- “Bio-Social Status – Age, Gender’. The difference is that 𐎡𐎴 *Huj*- focuses on skill, status and achievement, while 𐎡𐎴 - *Hum*- expresses biological status. These words can serve as pronouns, though without indication of NUMBER or grammatical ROLE; or as MARKERS appended to pronouns for greater precision.

Ꮘ 8.2: Dimensional display of 𐎡𐎴 - Huj- species

			unspecified skill level	Beginning skill level, student		High skill level, Master		Competent skill level, journeyman	
Core value				𐎡 i		𐎡 w		𐎡 wi	
unspecified, general	𐎡 u	𐎡𐎴𐎴 <i>hujū</i>	Member of society, citizen	𐎡𐎴𐎢 <i>hujī</i>	Student, young person	𐎡𐎴𐎡 <i>hujw</i>	Master, older person	𐎡𐎴𐎡 <i>hujwi</i>	Skilled worker, craftsman
Equal or lower social standing	𐎡 e	𐎡𐎴𐎡 <i>hujē</i>	Companion, friend, ordinary person	𐎡𐎴𐎡 <i>hujēi</i>	Apprentice, trainee	𐎡𐎴𐎡 <i>hujwe</i>	Highly experienced worker	𐎡𐎴𐎡 <i>hujwei</i>	craft worker
Politely respected	𐎡 a	𐎡𐎴𐎡 <i>hujā</i>	Respected person	𐎡𐎴𐎡 <i>hujai</i>	Respected student	𐎡𐎴𐎡 <i>hujwa</i>	Respected master	𐎡𐎴𐎡 <i>hujwai</i>	Respected craftsman
Honored, highly respected	𐎡 o	𐎡𐎴𐎡 <i>hujō</i>	Honored person	𐎡𐎴𐎡 <i>hujoi</i>	Honored student	𐎡𐎴𐎡 <i>hujwo</i>	Honored master, doctor	𐎡𐎴𐎡 <i>hujwoi</i>	Honored craftsman

8.2.15. 𐌸𐌹𐌺 huDu 14: Time

Roman	IPA	NN	Semantics
hudu	hə'də ^{hə} ,də	𐌸𐌹𐌺	-time(e.g. bed-; cf.hukwi)
hudi	hə'di ^{hə} ,di	𐌸𐌹𐌺	Future in general
hude	hə'dɛ ^{hə} ,dɛ	𐌸𐌹𐌺	Present near, 'right now'
hudei	hə'dɛj ^{hə} ,dɛj	𐌸𐌹𐌺	Future very short-term 'very soon'
huda	hə'da ^{hə} ,da	𐌸𐌹𐌺	Present in general 'now'
hudai	hə'daj ^{hə} ,daj	𐌸𐌹𐌺	Future mid-term 'down the road'
hudo	hə'do ^{hə} ,do	𐌸𐌹𐌺	Present broadly speaking 'these days'
hudoi	hə'dɔj ^{hə} ,dɔj	𐌸𐌹𐌺	Future far distant 'in coming ages'
hudw	hə'du ^{hə} ,du	𐌸𐌹𐌺	Past in general
hudwi	hə'dwi ^{hə} ,dwi	𐌸𐌹𐌺	Irrespective of time, always
hudwe	hə'dwɛ ^{hə} ,dwɛ	𐌸𐌹𐌺	In the very recent past 'just now'
hudwei	hə'dwɛj ^{hə} ,dwɛj	𐌸𐌹𐌺	Timeless but in our vicinity
hudwa	hə'dwa ^{hə} ,dwa	𐌸𐌹𐌺	Mid-term past, the last few years
hudwai	hə'dwaj ^{hə} ,dwaj	𐌸𐌹𐌺	Generally but not necessarily forever
hudwo	hə'dwɔ ^{hə} ,dwɔ	𐌸𐌹𐌺	Distant past 'ages ago'
hudwoi	hə'dwɔj ^{hə} ,dwɔj	𐌸𐌹𐌺	Eternally, 'for ever and ever'

8.2.15.1. Final Vowel Meanings

u	:	unspecified, general
e	:	near
a	:	mid
o	:	far
i	:	future
w	:	past
w-i	:	timeless

8.2.15.2. Discussion

This MARKER is used to assign a temporal context to any word. As stand-alone words, they can be used to refer to various time-periods (§6.5).

The last vowel is assigned to be identical to the last vowel of verbs (L--- X---), which carry time information.

For words that imply some action (such as the dynamic relational words) this MARKER in effect makes them into simple verbs.

8.2.16. 𐄂𐄂𐄂 *hubu* 15. Role and Number without focus

This SPECIES corresponds to 𐄂𐄂𐄂 *huxu*, with the same meanings except **not** indicating FOCUS.

Roman	IPA	NN	Semantics
<i>hubu</i>	hə'bə ɦə,bə	𐄂𐄂𐄂	GRAMMATICAL ROLE: for use in language discussion
<i>hubi</i>	hə'bi ɦə,bi	𐄂𐄂𐄂	SINGULAR without focus: used to specify that only one entity is referred to
<i>hube</i>	hə'bɛ ɦə,bɛ	𐄂𐄂𐄂	OBJECT without focus: recipient of the effect of an action verb
<i>hubei</i>	hə'bɛj ɦə,bɛj	𐄂𐄂𐄂	SINGULAR OBJECT: one object
<i>huba</i>	hə'ba ɦə,ba	𐄂𐄂𐄂	BENEFACTIVE: (dative/genitive)
<i>hubai</i>	hə'baj ɦə,baj	𐄂𐄂𐄂	SINGULAR BENEFACTIVE
<i>hubo</i>	hə'bɔ ɦə,bɔ	𐄂𐄂𐄂	ACTOR without FOCUS: instigator of action of a verb
<i>huboi</i>	hə'bɔj ɦə,bɔj	𐄂𐄂𐄂	SINGULAR ACTOR: one instigator
<i>hubw</i>	hə'bu ɦə,bu	𐄂𐄂𐄂	PLURAL: specifying more than one entity
<i>hubwi</i>	hə'bwi ɦə,bwi	𐄂𐄂𐄂	COLLECTIVE: specifying a group of entities participating as a unit
<i>hubwe</i>	hə'bwe ɦə,bwe	𐄂𐄂𐄂	PLURAL OBJECT: more than one recipient of action
<i>hubwei</i>	hə'bweɟ ɦə,bweɟ	𐄂𐄂𐄂	COLLECTIVE OBJECT: group of objects as a unit
<i>hubwa</i>	hə'bwa ɦə,bwa	𐄂𐄂𐄂	PLURAL BENEFACTIVE: more than one benefactive
<i>hubwai</i>	hə'bwaj ɦə,bwaj	𐄂𐄂𐄂	COLLECTIVE BENEFACTIVE: group of benefactives as a unit
<i>hubwo</i>	hə'bwɔ ɦə,bwɔ	𐄂𐄂𐄂	PLURAL ACTOR: more than one instigator
<i>hubwoi</i>	hə'bwɔj ɦə,bwɔj	𐄂𐄂𐄂	COLLECTIVE ACTOR: group of instigators as a unit

8.2.16.1. Final Vowel Meanings

- u : unspecified, general
- e : OBJECT of action (direct object, accusative case)
- a : BENEFACTIVE (relationship with another entity in the discourse: recipient of, possessor of, or similar relationship)
- o : ACTOR (instigator of action, ergative case)
- i : Singular
- w : Plural
- w-i : Collective or Group = indicating several entities participating as a unit

8.2.16.2. Semantics

- hubu : grammatical ROLE: for use in language discussion
- hube : RECIPIENT: recipient of the effect of an ACTION VERB
- huba : BENEFACTIVE: possessor; participant in certain processes that require more than an ACTOR and an OBJECT
- hubo : ACTOR: instigator of action of a VERB; not the FOCUS of the sentence - to indicate focus, 𐄂𐄂𐄂 *huxo* is used

8.2.16.3. Discussion

“Without FOCUS” does not mean “unfocused”; rather, it is mute on the topic of FOCUS. Thus this species can be used by speakers who do not prefer to assign FOCUS through MARKERS. This SPECIES is paired with SPECIES ɬɛ_L - *Hux*-, which indicates the same ROLE and NUMBER **with** FOCUS.

8.2.17. 𐀔𐀓𐀕 *suHu* 0: Cause and Effect

Roman	IPA	NN	Semantics
<i>suHu</i>	sə'hə s ^ə ,hə	𐀔𐀓𐀕	Cause-effect relation in general
<i>suhi</i>	sə'hi s ^ə ,hi	𐀔𐀓𐀌	Cause
<i>suhe</i>	sə'he s ^ə ,he	𐀔𐀓𐀍	Means (manner of accomplishment)
<i>suhei</i>	sə'hɛj s ^ə ,hɛj	𐀔𐀓𐀎	Impulse, action causing change
<i>suha</i>	sə'ha s ^ə ,ha	𐀔𐀓𐀏	Condition (physical, psychological, etc.)
<i>suhai</i>	sə'haj s ^ə ,haj	𐀔𐀓𐀐	status quo, original condition
<i>suho</i>	sə'hɔ s ^ə ,hɔ	𐀔𐀓𐀑	Factors or occasions associated with change
<i>suhoi</i>	sə'hɔj s ^ə ,hɔj	𐀔𐀓𐀒	Mover, agent of change
<i>suhw</i>	sə'hu s ^ə ,hu	𐀔𐀓𐀓	Effect
<i>suhwi</i>	sə'hwi s ^ə ,hwi	𐀔𐀓𐀔	Goal
<i>suhwe</i>	sə'hwe s ^ə ,hwe	𐀔𐀓𐀕	Process of change
<i>suhwei</i>	sə'hweɟ s ^ə ,hweɟ	𐀔𐀓𐀖	Unintended effect
<i>suhwa</i>	sə'hwa s ^ə ,hwa	𐀔𐀓𐀗	Resulting condition, “after” environment
<i>suhwai</i>	sə'hwaj s ^ə ,hwaj	𐀔𐀓𐀘	Hinderance, counter-measure, preventive
<i>suhwo</i>	sə'hwɔ s ^ə ,hwɔ	𐀔𐀓𐀙	After-effect
<i>suhwoi</i>	sə'hwɔj s ^ə ,hwɔj	𐀔𐀓𐀚	Instrument

8.2.17.1. Final Vowel Meanings

e	:	action (WAVE)
a	:	condition (FIELD)
o	:	concept (PARTICLE)
i	:	before
w	:	after
w-i	:	purposiveness

8.2.17.2. Discussion

In cause and effect relations, 𐀔𐀓𐀕 *suHu* assumes two states: 𐀔𐀓𐀐 *suhai* 'before' and 𐀔𐀓𐀗 *suhwa* 'after'.

In the 'before' state, a 'situation' 𐀔𐀓𐀏 *suha* may exist, which may be identified with the 𐀔𐀓𐀌 *suhi* 'cause' which may bring about change to a different 'resulting condition' 𐀔𐀓𐀗 *suhwa*. A 𐀔𐀓𐀚 *suhwoi* 'instrument' may be used in the process – itself not directly part of the cause.

These 'conditions' may arise due to certain factors, 𐀔𐀓𐀑 *suho*, bringing about 𐀔𐀓𐀕 *suhwe* 'change' that results in the 𐀔𐀓𐀓 *suhw* 'effect', or 𐀔𐀓𐀖 *suhwei* 'unintended effects' which may take place also.

Change 𐀔𐀓𐀗 *suhwa* may take place as a result of a certain 𐀔𐀓𐀗 *suhei* 'action, impulse', and may be carried forward by some individual 'mover' 𐀔𐀓𐀗 *suhoi* (animate or inanimate), possibly with a 𐀔𐀓𐀗 *suhwi* 'goal'.

The action causing the change to occur is the 𐀔𐀓𐀗 *suhei* 'impulse' and brings about the 𐀔𐀓𐀗 *suhwa* 'resulting condition', but 'negative conditions or factors' 𐀔𐀓𐀗 *suhwai* may impede or prevent the change.

In the narrative of a changing situation, the MARKER versions can be appended to a specific entity or action to indicate its cause-and-effect role.

8.2.18. 𐄂𐄂𐄂 *suNu* 6: Inclusion and Selection

Roman	IPA	NN	Semantics
<i>sunu</i>	sə'nə -sə,nə	𐄂𐄂𐄂	selection, set
<i>sunī</i>	sə'ni -sə,ni	𐄂𐄂𐄂	individual
<i>sune</i>	sə'ne -sə,ne	𐄂𐄂𐄂	minority, small set
<i>sunei</i>	sə'nɛj -sə,nɛj	𐄂𐄂𐄂	each
<i>sunā</i>	sə'na -sə,na	𐄂𐄂𐄂	balanced set
<i>sunai</i>	sə'naj -sə,naj	𐄂𐄂𐄂	several
<i>sunō</i>	sə'no -sə,no	𐄂𐄂𐄂	all
<i>sunoi</i>	sə'noj -sə,noj	𐄂𐄂𐄂	many
<i>sunw</i>	sə'nu -sə,nu	𐄂𐄂𐄂	rejected, except
<i>sunwi</i>	sə'nwi -sə,nwi	𐄂𐄂𐄂	only
<i>sunwe</i>	sə'nwe -sə,nwe	𐄂𐄂𐄂	not many
<i>sunwei</i>	sə'nweɪ -sə,nweɪ	𐄂𐄂𐄂	only a few
<i>sunwa</i>	sə'nwa -sə,nwa	𐄂𐄂𐄂	a few
<i>sunwai</i>	sə'nwaj -sə,nwaj	𐄂𐄂𐄂	primarily
<i>sunwo</i>	sə'nwɔ -sə,nwɔ	𐄂𐄂𐄂	none
<i>sunwoi</i>	sə'nwɔj -sə,nwɔj	𐄂𐄂𐄂	all exclusively

8.2.18.1. Final Vowel Meanings

u	:	unspecified, general
e	:	small
a	:	mid
o	:	large
i	:	individual
w	:	excluded
w-i	:	exclusive

8.2.18.2. Discussion

These concepts are FUNCTIONALS in order that they may be easily appended to nouns or pronouns as a rich set of “singular-plural” concepts.

When these FUNCTIONALS are appended as MARKERS to a noun X, the meaning is approximately as shown below:

<i>sunu</i>	a set of X	<i>sunī</i>	a single X	<i>sunw</i>	no Xs	<i>sunwi</i>	only Xs
<i>sune</i>	a small set of X	<i>sunei</i>	each individual X	<i>sunwe</i>	one or two Xs	<i>sunwei</i>	only a few Xs
<i>sunā</i>	moderate set of X	<i>sunai</i>	several Xs	<i>sunwa</i>	a few Xs	<i>sunwai</i>	primarily Xs
<i>sunō</i>	all Xs	<i>sunoi</i>	many Xs	<i>sunwo</i>	none of the Xs	<i>sunwoi</i>	all the Xs and only the Xs

8.2.19. 𐀓𐀔𐀕 *suMu* 7: Thematic Relations

Roman	IPA	NN	Semantics
<i>sumu</i>	sə'mə -sə,mə	𐀓𐀔𐀕	Theme
<i>sumi</i>	sə'mi -sə,mi	𐀓𐀔𐀕	Agent
<i>sume</i>	sə'me -sə,me	𐀓𐀔𐀕	Source or origin
<i>sumei</i>	sə'mej -sə,mej	𐀓𐀔𐀕	Stimulus
<i>suma</i>	sə'ma -sə,ma	𐀓𐀔𐀕	Location
<i>sumai</i>	sə'maj -sə,maj	𐀓𐀔𐀕	Instrument
<i>sumo</i>	sə'mə -sə,mə	𐀓𐀔𐀕	Direction, Goal
<i>sumoi</i>	sə'məj -sə,məj	𐀓𐀔𐀕	Time
<i>sumw</i>	sə'mu -sə,mu	𐀓𐀔𐀕	Patient
<i>sumwi</i>	sə'mwi -sə,mwi	𐀓𐀔𐀕	Manner
<i>sumwe</i>	sə'mwe -sə,mwe	𐀓𐀔𐀕	Recipient
<i>sumwei</i>	sə'mweɣ -sə,mweɣ	𐀓𐀔𐀕	Cause
<i>sumwa</i>	sə'mwa -sə,mwa	𐀓𐀔𐀕	Force
<i>sumwai</i>	sə'mwaj -sə,mwaj	𐀓𐀔𐀕	Purpose
<i>sumwo</i>	sə'mwə -sə,mwə	𐀓𐀔𐀕	Beneficiary
<i>sumwoi</i>	sə'mwəj -sə,mwəj	𐀓𐀔𐀕	Experiences

8.2.19.1. Final Vowel Meanings

This species isn't dimensional, so final vowels have no consistent meaning.

8.2.19.2. Discussion – Thematic Relations

Thematic relations or roles emerged from a meta-analysis that attempts to identify all the possible uses to which noun-phrases are put in sentences.¹² Many of these roles correspond to participants required by verbs in a sentence – that is, the “valence” of the verb and the type of noun phrase required to fill each “slot” in the sentence.

For example, a verb like English ‘give’ requires three participants: an Agent 𐀓𐀔𐀕 *sumi* (the person doing the giving), a Beneficiary 𐀓𐀔𐀕 *sumwo* or Recipient 𐀓𐀔𐀕 *sumwe* (sometimes called the “indirect object” of the sentence, who gets the gift), and a Patient 𐀓𐀔𐀕 *sumw* – the gift itself (sometimes called the “direct object”).

In another respect, thematic roles correspond to a list of “cases” that could be assigned in languages like Russian or Finnish, marking the role of words in a sentence by changing their endings. It is unlikely that any language has a separate “case” for all of the 16 roles listed here (Russian has 6, Finnish has 15), since

¹²The roles and their descriptions are drawn from the ‘Role and Reference Grammar’ of Robert Van Valin Jr. The descriptions quoted in this section are drawn directly from https://en.wikipedia.org/wiki/Thematic_relation, accessed 2025-05-11.

many can easily be combined with others (such as Beneficiary and Recipient, Agent and Force), some are represented by prepositions (like ‘to’ for the Beneficiary in English), while others, such as Manner or Location, are more appropriate at the MESSAGE-level.

These terms are clearly useful in analytical and technical discussions, but they are placed in this supplementary MARKER SPECIES for use by speakers who feel more comfortable identifying the roles of words precisely. They are used by appending them to the ends of the nouns that play the corresponding role in the sentence.

NN also has MARKERS in SPECIES 𐄂𐄂𐄂 *huxu* and 𐄂𐄂𐄂𐄂 *hubu* (§8.2.2 and §8.2.16 above) representing three “cases” (ACTOR, OBJECT, and OBLIQUE) plus FOCUS for speakers whose preference is to provide basic sentence-role information.

Words in the *Sum-* SPECIES allow speakers to convey much more nuanced roles if they wish to do so, though *Sum-* does not indicate NUMBER or FOCUS.

NN also provides other words that express concepts some languages encode with “cases”. For example, Finnish and Russian both have a “genitive case” to indicate an relational association between two ideas being discussed. NN offers SPECIES 𐄂𐄂𐄂𐄂 *hufu* whose words can be used as MARKERS indicating 16 types of relationship between two nouns. Finnish has 8 cases indicating locations and movements relative to things or people; in NN, almost the entire *S---* FAMILY is devoted to locational movements and spacial relations, offering hundreds of choices, though these are not appended as markers, so they do not work like Finnish cases.

8.2.19.3. Explanations of Thematic Relations

Roman	NN	Semantics	Definition	NN Synonyms ¹³	Synonym Notes
<i>sumu</i>	𐄂𐄂𐄂𐄂	Theme	undergoes the action but does not change its state (e.g. We believe in one <u>God</u> . I have two <u>children</u> . I put the <u>book</u> on the table. He gave the gun to the police officer.) (Sometimes used interchangeably with patient.) In syntax, the theme is the direct object of a ditransitive verb.	<i>huxe, hube</i>	object with focus, Object without focus. Both lack the sense of not changing state.
<i>sumi</i>	𐄂𐄂𐄂𐄂	Agent	deliberately performs the action (e.g. <u>Bill</u> ate his soup quietly). The actions can be both conscious or unconscious. In syntax, the agent is the argument of a transitive verb that corresponds to the subject in English.	<i>huxo, hubo</i>	actor with focus, Actor without focus

¹³ Synonyms: not translations or exact equivalents

Roman	NN	Semantics	Definition	NN Synonyms	Synonym Notes
<i>sume</i>	𐌸𐌹𐌳	Source or origin	where the action originated (e.g. The rocket was launched <u>from Central Command</u> . She walked <u>away from him</u> .).	<i>sehw</i>	outward motion from a center (of reference)
<i>sumeī</i>	𐌸𐌹𐌳𐌹	Stimulus	entity that prompts sensory or emotional feeling – not deliberately (e.g. David loves <u>onions</u> !).	<i>suhei</i>	impulse causing action
<i>suma</i>	𐌸𐌹𐌳𐌰	Location	where the action occurs (e.g. Johnny and Linda played carelessly <u>in the park</u> . I'll be <u>at Julie's house</u> studying for my test.).	<i>sehi</i>	inward motion toward a center (of reference)
<i>sumai</i>	𐌸𐌹𐌳𐌺	Instrument	used to carry out the action (e.g. Jamie cut the ribbon <u>with a pair of scissors</u> .).	<i>suhwoi</i>	instrument (of change)
<i>sumo</i>	𐌸𐌹𐌳𐌴	Direction, Goal	where the action is directed towards (e.g. The caravan continued on <u>toward the distant oasis</u> . He walked <u>to school</u> .).	<i>seki;</i> <i>suhwi</i>	center of an (enclosed) area; Goal (of change)
<i>sumoi</i>	𐌸𐌹𐌳𐌶	Time	the time at which the action occurs (e.g. The pitcher struck out nine batters <u>today</u> .).	<i>hukwi;</i> <i>hudu</i>	(a) time (for something)
<i>sumw</i>	𐌸𐌹𐌳𐌺	Patient	undergoes the action and changes its state (e.g. The falling rocks crushed the <u>car</u>). (Sometimes used interchangeably with theme.) In syntax, the patient is the single object of a (mono)transitive verb.	<i>huxe;</i> <i>hube</i>	object with focus, Object without focus; Includes number and focus
<i>sumwi</i>	𐌸𐌹𐌳𐌺	Manner	the way in which an action is carried out (e.g. <u>With great urgency</u> , Tabitha phoned 911.).	<i>huyu (husa)</i>	manner, style (FIELD-izer marker)
<i>sumwe</i>	𐌸𐌹𐌳𐌺	Recipient	a special kind of goal associated with verbs expressing a change in ownership, possession (e.g. I sent <i>John</i> the letter. He gave the book <u>to her</u>). In syntax, the recipient or goal is the indirect object of a (di)transitive verb.	<i>huxa</i>	indirect case marker
<i>sumwei</i>	𐌸𐌹𐌳𐌺	Cause	what caused the action to occur in the first place; not for what , rather because of what (e.g. <u>Because Clyde was hungry</u> , he ate the cake.).	<i>suhi</i>	(logical) cause
<i>sumwa</i>	𐌸𐌹𐌳𐌺	Force	force or natural cause: mindlessly performs the action (e.g. An <u>avalanche</u> destroyed the ancient temple.).		
<i>sumwai</i>	𐌸𐌹𐌳𐌺	Purpose	the reason for which an action is performed (e.g. Tabitha phoned 911 right away <u>in order to get some help</u> .).	<i>suha;</i> <i>suho</i>	condition (for change); Situation impelling a change
<i>sumwo</i>	𐌸𐌹𐌳𐌺	Beneficiary	the entity for whose benefit the action occurs (e.g. I baked <u>Reggie</u> a cake. He built a car <u>for me</u> . I fight <u>for the king</u> .).	<i>huxa</i>	indirect case marker
<i>sumwoi</i>	𐌸𐌹𐌳𐌺	Experiencer	the entity that receives sensory or emotional input (e.g. <u>Susan</u> heard the song. I cried).		

8.2.19.4. Correspondence with Species *Hux-* and *Hub-*

For speakers who want to use case-markers but prefer the simpler structure of SPECIES 𐌸𐌹𐌳 - *Hux* - and 𐌸𐌹𐌳𐌺 - *Hub* -, here is how Thematic Relations correspond to the simpler three-case system (ignoring NUMBER).

MARKER	𐄂𐄂	Definition	Can be used for Themes
-huxo	-𐄂𐄂𐄂𐄂	Actor with focus ¹⁴	Agent as Subject Force as Subject (or 𐄂𐄂𐄂𐄂 <i>suhoi</i>)
-hubo	-𐄂𐄂𐄂𐄂	Actor	Agent not necessarily Subject
-huxe	-𐄂𐄂𐄂𐄂	Object with focus	Patient Stimulus as Subject (or 𐄂𐄂𐄂𐄂 <i>suhwi</i>)
-hube	-𐄂𐄂𐄂𐄂	Object	Patient not necessarily as Subject Stimulus not necessarily as Subject
-huxa	-𐄂𐄂𐄂𐄂	Indirect with focus	Source or origin as Subject + 𐄂𐄂𐄂𐄂 <i>sekw</i> Direction or goal as Subject Location as Subject (or 𐄂𐄂𐄂𐄂 <i>huki</i>) Time as Subject (or 𐄂𐄂𐄂𐄂 <i>hukwi</i>) Instrument as Subject (or 𐄂𐄂𐄂𐄂 <i>suhwoi</i>) Recipient as Subject with 𐄂𐄂𐄂𐄂 <i>seki</i> Beneficiary as Subject with 𐄂𐄂𐄂𐄂 <i>seki</i> Experiencer as Subject Cause as Subject + 𐄂𐄂𐄂𐄂 <i>suhi</i> Purpose as Subject
-huba	-𐄂𐄂𐄂𐄂	Indirect	Recipient not necessarily as Subject (or 𐄂𐄂𐄂𐄂 <i>seki</i>) Beneficiary not necessarily as Subject Experiencer not necessarily as Subject Purpose not necessarily as as Subject
-huxu	-𐄂𐄂𐄂𐄂	Focus	Theme as Subject Manner as Subject
-husa	-𐄂𐄂𐄂𐄂	Field (adjectival or adverbial)	Manner not necessarily as Subject
-suhwi	-𐄂𐄂𐄂𐄂	Impulse, action causing change	Stimulus not necessarily as Subject (or 𐄂𐄂𐄂𐄂 <i>hube</i>)
-suhwoi	-𐄂𐄂𐄂𐄂	Instrument	Instrument not necessarily as Subject
-huki	-𐄂𐄂𐄂𐄂	Place (general)	Location not necessarily as Subject
-hukwi	-𐄂𐄂𐄂𐄂	Time (general)	Time not necessarily as Subject
<i>seki</i>	𐄂𐄂𐄂𐄂	To (center)	Direction or goal not necessarily as Subject Recipient not necessarily as Subject
<i>sekw</i>	𐄂𐄂𐄂𐄂	From (center)	Source or origin not necessarily as Subject

14 Focus indicates that the speaker wants to draw the receiver's attention to an IDEA. This is shown here using the conventional term Subject. SPECIES 𐄂𐄂 - *Hux-* is one way to indicate FOCUS. SPECIES 𐄂𐄂 - *Hub-* does not indicate FOCUS. It doesn't deny FOCUS; it simply ignores FOCUS, as do the other MARKERS listed here. So in this description, the expression "not necessarily as Subject" is used. Speakers who want to indicate the roles of nouns in sentences may choose to indicate FOCUS by position in the sentence, while using one of the "not necessarily Subject" MARKERS indicated, rather than 𐄂𐄂 - *Hux-*.

<i>sehi</i>	𐀓𐀔𐀕	Cause	Cause not necessarily as Subject
<i>suhoi</i>	𐀓𐀔𐀖	Mover, agent of change	Force not necessarily as Subject

8.2.20. ᐱᓕᓕᓕᓕ *suKu* 8: Discourse Connectives

Roman	IPA	NN	Semantics	Closest Natural English
<i>suku</i>	sə'kə s̥,kə	ᐱᓕᓕᓕ	sequence	and
<i>suki</i>	sə'ki s̥,ki	ᐱᓕᓕᓕ	emphatic sequence	and also
<i>suke</i>	sə'ke s̥,ke	ᐱᓕᓕᓕ	listing	next
<i>sukei</i>	sə'kej s̥,kej	ᐱᓕᓕᓕ	emphatic listing	next also
<i>suka</i>	sə'ka s̥,ka	ᐱᓕᓕᓕ	temporal sequence	then
<i>sukai</i>	sə'kaj s̥,kaj	ᐱᓕᓕᓕ	emphatic temporal sequence	and then
<i>suko</i>	sə'kə s̥,kə	ᐱᓕᓕᓕ	first logical alternative	ὁ μὲν 'on the one hand'
<i>sukoi</i>	sə'kəj s̥,kəj	ᐱᓕᓕᓕ	emphatic logical sequence	so of course
<i>sukw</i>	sə'ku s̥,ku	ᐱᓕᓕᓕ	alternative	or
<i>sukwi</i>	sə'kwi s̥,kwi	ᐱᓕᓕᓕ	unexpected sequence	but
<i>sukwe</i>	sə'kwe s̥,kwe	ᐱᓕᓕᓕ	alternative listing	or else
<i>sukwei</i>	sə'kwɛj s̥,kwɛj	ᐱᓕᓕᓕ	unexpected listing	but also
<i>sukwa</i>	sə'kwa s̥,kwa	ᐱᓕᓕᓕ	temporal alternative	or then
<i>sukwai</i>	sə'kwaj s̥,kwaj	ᐱᓕᓕᓕ	unexpected temporal sequence	but then
<i>sukwo</i>	sə'kwə s̥,kwə	ᐱᓕᓕᓕ	second logical alternative	ὁ δὲ, on the other hand
<i>sukwoi</i>	sə'kwəj s̥,kwəj	ᐱᓕᓕᓕ	unexpected logical alternative	but on the other hand

8.2.20.1. Final Vowel Meanings

u	:	simple
e	:	Example + listing
a	:	temporal sequence
o	:	alternatives of logic or discourse
i	:	Emphatic sequences
w	:	Alternative
w-i	:	Contrary to expectation

8.2.20.2. Discussion

“Discourse connectives” are the words used to join logical assertions, members of lists, and sequences of temporal events. See the Chapter “Discourse” for background discussion on this topic. Because they are used so frequently, these words have been assigned to a SPECIES which can be easily reduced to a single syllable (by speakers of many language, though not necessarily all). The default usage is to place them between the words or phrases they join. They may also be attached to a second word or later word in a list, though not at the end of the second of two phrases being connected.

⌈ **e: Example + listing** is an itemized set of entities, actions, or attributes. Clauses and phrases may also be joined as a list.

⌈ **u: Simple sequences** are the normal listings of items or events, not implying an order or precedence.

⌈ **a: Temporal sequences** are listings of events occurring in a particular order.

⌈ **o: Alternatives of logic or discourse** are items or assertions structured according to a reasoning process or structured narrative.

⌈ **i: Emphatic** words are used to strengthen the speaker's points.

⌈ **w: Alternatives** are items in a list or sequence which are offered as options.

⌈ **w+i: Contrary to expectation** is used in a broad sense for items or events which break a pattern or may seem out of place.

SPECIES ⌈ **Hun-** (§8.2.7) provides another set of words for linking MESSAGES within a DISCOURSE. The purpose of SPECIES ⌈ **Suk-** is to connect words and phrases within a sentence; ⌈ **Hun-** provides connections between the IDEAS the words represent.

8.2.21. 𐄂𐄂𐄂 *suCu* 9: Ideal and Instance

Roman	IPA	NN	Semantics
<i>sucu</i>	sə'cə -sə,cə	𐄂𐄂𐄂	Abstract and Concrete
<i>suci</i>	sə'ci -sə,ci	𐄂𐄂𐄂	Instance, '-etic', φαινόμενα
<i>suce</i>	sə'ce -sə,ce	𐄂𐄂𐄂	Behavioral or communication action
<i>sucei</i>	sə'cej -sə,cej	𐄂𐄂𐄂	Action instance
<i>suca</i>	sə'ca -sə,ca	𐄂𐄂𐄂	Behavioral or communication field
<i>sucai</i>	sə'caj -sə,caj	𐄂𐄂𐄂	Situation instance
<i>suco</i>	sə'cə -sə,cə	𐄂𐄂𐄂	Behavioral or communication entity
<i>sucoi</i>	sə'cəj -sə,cəj	𐄂𐄂𐄂	Entity instance
<i>sucw</i>	sə'cu -sə,cu	𐄂𐄂𐄂	Abstract, '-emic', εἶδος
<i>sucwi</i>	sə'cwi -sə,cwi	𐄂𐄂𐄂	Instance is example of abstract, 'allo-'
<i>sucwe</i>	sə'cwe -sə,cwe	𐄂𐄂𐄂	Abstract action
<i>sucwei</i>	sə'cwej -sə,cwej	𐄂𐄂𐄂	Variant action
<i>sucwa</i>	sə'cwa -sə,cwa	𐄂𐄂𐄂	Abstract situation
<i>sucwai</i>	sə'cwaj -sə,cwaj	𐄂𐄂𐄂	Variant of an abstract situation
<i>sucwo</i>	sə'cwə -sə,cwə	𐄂𐄂𐄂	Abstract entity
<i>sucwoi</i>	sə'cwəj -sə,cwəj	𐄂𐄂𐄂	Variant of an abstract entity

8.2.21.1. Final Vowel Meanings

u	:	simple
e	:	WAVE
a	:	FIELD
o	:	PARTICLE
i	:	Instance Level (-etic)
w	:	Abstract Level (-eme, -emic)
w-i	:	Variant of Abstract Level (allo-)

8.2.21.2. Discussion – Significance Units: Classification of Symbolic Significance

This SPECIES refers primarily to communication, but can be applied to philosophy and a wide variety of other situations as well. 𐄂𐄂𐄂 *sucw* may be compared to the Platonic εἶδος (eidos) and 𐄂𐄂𐄂 *suci* to φαινόμενα (phainomena).

At the point in the communication process (see §16.2 “Communication Model Discussion”) when the sender has ENCODED (𐄂𐄂𐄂 *nweme*) a MESSAGE (𐄂𐄂𐄂 *nweco*) in a given language (𐄂𐄂𐄂 *paho*, such as English), the lexical symbols (𐄂𐄂𐄂 *panu*, words) must be further encoded (𐄂𐄂𐄂 *nwecei*) for a particular channel (𐄂𐄂𐄂 *nwego*, such as spoken or written). Each channel has its own code (𐄂𐄂𐄂 *nwegi*, such as letters or speech sounds), consisting of ideal 𐄂𐄂𐄂 *sucwo* shapes (letter forms) or ideal sounds (phonemes), but in order to be transmitted these ideals must be embodied (𐄂𐄂𐄂 *nwegwei*) by the physical action of writing or voicing.

The distinction between the ideal or abstract code 𐄧𐄫𐄫 *sucwo* and the embodiment 𐄧𐄫𐄫 *sucoi* of that code is the focus of this SPECIES. In linguistics and related fields, the distinction has come to be represented in the affixes **-eme**, **-emic** for the abstract ideals, **-etic** for the embodiment, and **allo-** for variants.

It has been well established that one ideal symbol 𐄧𐄫𐄫-𐄧𐄫𐄫 *nwegi-sucwo* can have various instances in physical form 𐄧𐄫𐄫-𐄧𐄫𐄫 *nwegi-sucoi*. The ideal written letter “grapheme” **T**, for example, takes the capital form “allograph” **T** at the beginning of a sentence or name, and in certain writing styles; but also takes the form **t** in other positions or styles, with “variants” in handwritten *t* and printed *ŧ* fonts.

Similarly, the English speech sound “phoneme” /t/ is embodied as [tʰ] at the beginning of a stressed syllable, as [t] at the beginning of an unstressed syllable or after /s/, or between a stressed and unstressed syllables (in some dialects) as [ɾ].

In NN, these distinctions are represented by words beginning 𐄧𐄫𐄫- *suc-*, which can be used as a free-standing word or (optionally dropping the unstressed -ɾ-- -u--) as a FUNCTIONAL suffixed to another word.

8.2.21.2.1 𐄧𐄫𐄫 𐄧𐄫𐄫 e a o

The final syllable’s central vowel -e -a -o represents WAVE (action), FIELD (condition), or PARTICLE (entity), as in many other similar words.

8.2.21.2.2 𐄧𐄫𐄫 𐄧𐄫𐄫 i w wi

The outer vowels of the final syllable -i -w -wi represent embodiment (instance, -etic), ideal (abstract, -emic), and variant (allo-).

8.2.21.2.3 Application

In addition to the illustrations shown here, the concept can be widely applied at other levels of communication and social behavior. For example, at the level of language’s basic meaningful units, “morphemes” are also embodied in different forms with “allomorphs”. Social rituals, such as greetings, have ideal forms in each culture, and are embodied with variations – the handshake in northern European-based cultures, for example. In certain schools of cultural psychology, the concept of “archetypes” might be represented by 𐄧𐄫𐄫 𐄧𐄫𐄫 *sucw*.

Practical processes such as crafts also distinguish between ideal techniques for doing something, like knitting, and the variations that work or do not work to accomplish certain tasks. 𐄧𐄫𐄫- *suc-* words can be applied to clarify these concepts too.

8.2.22. 𐌸𐌹𐌸 *sutu* 10: Verbal Punctuation

Roman	IPA	NN	Semantics
<i>sutu</i>	sə'tə s̥'tə	𐌸𐌹𐌸	General connective
<i>suti</i>	sə'ti s̥'ti	𐌸𐌹𐌺	General subordinator beginning
<i>sute</i>	sə'te s̥'te	𐌸𐌹𐌻	Phrase-level connective
<i>sutei</i>	sə'tej s̥'tej	𐌸𐌹𐌼	Phrase-level subordinator beginning
<i>suta</i>	sə'ta s̥'ta	𐌸𐌹𐌽	Clause-level connective
<i>sutai</i>	sə'taj s̥'taj	𐌸𐌹𐌾	Clause-level subordinator beginning
<i>suto</i>	sə'to s̥'to	𐌸𐌹𐌿	Discourse level connective
<i>sutoi</i>	sə'toj s̥'toj	𐌸𐌹𐍀	Discourse-level subordinator beginning
<i>sutw</i>	sə'tu s̥'tu	𐌸𐌹𐍁	General stop
<i>sutwi</i>	sə'twi s̥'twi	𐌸𐌹𐍂	General subordinator ending
<i>sutwe</i>	sə'twe s̥'twe	𐌸𐌹𐍃	Lowest level (phrase) stop
<i>sutwei</i>	sə'tweɟ s̥'tweɟ	𐌸𐌹𐍄	Lowest level (phrase) subordinator ending
<i>sutwa</i>	sə'twa s̥'twa	𐌸𐌹𐍅	Mid-level (clause, sentence) ending
<i>sutwai</i>	sə'twaj s̥'twaj	𐌸𐌹𐍆	Mid-level (clause, sentence) subordinator ending
<i>sutwo</i>	sə'twə s̥'twə	𐌸𐌹𐍇	High-level (discourse, paragraph) ending
<i>sutwoi</i>	sə'twəɟ s̥'twəɟ	𐌸𐌹𐍈	High-level (discourse, paragraph) + subordinator ending

8.2.22.1. Final Vowel Meanings

u	:	unspecified, structure
e	:	Phrase-level
a	:	Clause-level
o	:	Discourse-level
i	:	Beginning
w	:	Ending
w-i	:	Subordinator ending

8.2.22.2. Discussion

“Verbal punctuation” is provided to supplement written punctuation and spoken intonation. Its use is not obligatory, but may be useful in situations where misunderstanding is likely.

𐌸𐌹𐌸 *suku* and 𐌸𐌹𐌸 *sutu* are similar. 𐌸𐌹𐌸 *suku* is primarily for connecting ideas, while 𐌸𐌹𐌸 *sutu* is for connecting language structures.

8.2.23. 𐀓𐀕𐀖 suPu 11: Life and Force

Roman	IPA	NN	Semantics
<i>supu</i>	sə'pə s̚,pə	𐀓𐀕𐀖	Animacy-Potency
<i>supi</i>	sə'pi s̚,pi	𐀓𐀕𐀗	Animate
<i>supe</i>	sə'pe s̚,pe	𐀓𐀕𐀔	Low potency
<i>supei</i>	sə'pej s̚,pej	𐀓𐀕𐀕	Animate, low potency
<i>supa</i>	sə'pa s̚,pa	𐀓𐀕𐀖	Moderate (normal) potency
<i>supai</i>	sə'paj s̚,paj	𐀓𐀕𐀗	Animate, moderate potency
<i>supo</i>	sə'pə s̚,pə	𐀓𐀕𐀖	High potency
<i>supoi</i>	sə'pəj s̚,pəj	𐀓𐀕𐀕	Animate, high potency
<i>supw</i>	sə'pu s̚,pu	𐀓𐀕𐀔	Inanimate
<i>supwi</i>	sə'pwi s̚,pwi	𐀓𐀕𐀗	Quasi-animate
<i>supwe</i>	sə'pwe s̚,pwe	𐀓𐀕𐀔	Inanimate, low potency
<i>supwei</i>	sə'pwej s̚,pwej	𐀓𐀕𐀕	Quasi-animate, low potency
<i>supwa</i>	sə'pwa s̚,pwa	𐀓𐀕𐀔	Inanimate, moderate potency
<i>supwai</i>	sə'pwaj s̚,pwaj	𐀓𐀕𐀕	Quasi-animate, moderate potency
<i>supwo</i>	sə'pwo s̚,pwo	𐀓𐀕𐀔	Inanimate, high potency
<i>supwoi</i>	sə'pwəj s̚,pwəj	𐀓𐀕𐀕	Quasi-animate, high potency

8.2.23.1. Final Vowel Meanings

u	:	Unspecified potency
e	:	Low energy
a	:	Moderate energy
o	:	High energy
i	:	Animate
w	:	Inanimate
w-i	:	Quasi-Animate

8.2.23.2. Discussion

These terms can be used as words or MARKERS.

As words, they represent levels of life and energy either as FIELDS - possibly as abstract entities (ideas, principles); or they can serve as DISTANT (third-person) pronouns if the speaker wishes to convey potency information.

Note that Personal Pronouns in the ɬ--- H--- family can convey the same three degrees of animacy as are conveyed by ɬɪɿ - Sup- , but lack means of expressing potency.

As MARKERS, these are primarily useful for attaching to names or specific entities for clarification or to express relative standing.

Life: many languages require speakers to specify whether something of interest is alive or not. Though NN does not require it, three levels of life can be referred to. (See §7.4.2.)

Levels of “potency” or “energy” are expressed in NN because most vertebrate brains appear to be equipped with specialized threat-assessment capability. This seems to function as a survival mechanism, below the level of conscious or rational thought, and triggers basic instinctive physiological and conscious reactions. Levels of potency are expressed in NN at three levels:

Low potency: Used for entities not perceived as threatening, unlikely to affect the speaker’s decisions. In general, seen by speakers as of lower power than themselves. These entities can probably be controlled if necessary.

Moderate potency: Perceived as being roughly the same force, energy, or power as the speaker. The speaker might be able to control this entity if necessary, but might not.

High potency: Speaker perceives this entity as more powerful than self; potential threat but perhaps potentially very useful. May require submission or skillful handling to use its potency effectively or avoid danger. The speaker can probably be overcome by this entity.

These are guidelines, not definitions. NN leaves flexibility for speakers to use these categories intuitively.

Evaluation: this SPECIES does not provide positive or negative evaluation (“good” or “bad”, “safe” or “dangerous”) of animacy or potency – simply the perceived levels of each. Evaluation is provided by a large number of other NN SPECIES, including functional ɬɪɿ - Huc- discussed in §8.2.10 of this chapter, and others in Chapter 10, “Love and Hate”.

The concludes the discussion of Nwehu Nuswei FUNCTIONALS.