Introduction to the Kiliwa Language

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1. Background

Kiliwa is the sole member in the most divergent branch of the endangered Yuman family. In Baja California, Mexico (henceforth Baja), there may be only four speakers left, one in Ensenada, another at the Arroyo León, 70 and 150 miles from the international border, respectively. The Arroyo’s Lower Sonoran desert ravines empty from the Sierra San Pedro Mártir foothills into the Valle de la Trinidad. Two more speakers live at Santa Catarina, an ex-mission on the Llano del Álamo, an Upper Sonoran plateau north of the Valle; farther up, is the Sierra Juárez (Gerhard & Gulick 1967; Mares 1999; Miller & Baxter 1974; Mixco 1983a, 2006; Robinson 1972). Classifications of Yuman and Cochimí in an unverified Hokan stock are now discounted. Yet, there was a Cochimí-Yuman family. The Cochimí once roamed south of the Kiliwa in 380 miles of deserts down to the top of Baja’s last quarter (Campbell 1997; Del Barco 1973; Haas 1964; Hinton & Owen 1957; Langdon 1974; Mixco 1976, 1978, 1991, 1997a, 1997b, 2006).

1800s epidemics eradicated the Cochimí at Jesuit missions, like the speakers of little-known language isolates in the 1700s: Pericú, Huchití and Guaycura

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1 Ensenada, a Pacific commercial fishing/tourist port, is seat of the largest Mexican Municipio (county). Valle de la Trinidad slopes east into the San Felipe Desert on the Gulf of California. The valley splits two massifs, north and south, in the 160-mile long Cordillera Peninsular. Sierra Juárez, juts into U.S. California as the Laguna Mountains; the 11,000-ft. Sierra San Pedro Mártir, tallest in Baja, tapers south into the Desierto Central, at the old Kiliwa-Cochimí boundary (Mixco 1983, 1993).
Yuman River and Pai branches reside in the Colorado River drainage of Arizona. California-Delta straddles the international border; one member, Diegueño, extends from the Pacific almost to the other member, Cocopa, at the River’s Delta.


From 160 to 35 miles wide, from 110ºW to 117ºW longitude, Baja lies between the 100-mile wide Gulf of California and the Pacific. 800 miles long, with 62.9% mountains and 80% hot desert, it goes from temperate to tropical zones, 32º30’N to 23ºN latitude (Coyle & Roberts 1975; Davis 2006; Hicks 1963, 1974; Krutch 1961; Laylander 2006; Mares 1999).

Into the 1900s, the Kiliwa reaped seasonal resources on two coasts, in two alpine zones, Upper and Lower Sonoran deserts. With aboriginal ways in abeyance, men became laborers and cowboys, near and far; at home, families hunt and harvest cactus fruits and nuts (Aschman 1959; Hicks 1963, 1974; Mares 1999; Meigs 1939; Mixco 1983a).

Sporadic 16th-century Spanish contacts came by sea. A century later, Jesuit land expeditions found familiar cultures but unintelligible languages (Burrus 1966; Mathes 2006; Mixco 1978; Wilken-Roberson & Don Laylander 2006).

In the 1770s, the Franciscans left for Alta California, ceding Baja to the Dominicans, who added San Pedro Mártir de Anghiera and Santa Catarina de Siena to the Dominican Frontier; each was destroyed in highland uprisings (Meigs 1935). Mountaineers once traded jerky and pelts for Colorado River Indian harvests. The Spanish brought crops and cattle (Castetter & Bell 1951; Forbes 1965; Hicks 1963, 1974). Without paved roads, power, or much water, Baja’s interior remained remote and lightly populated. With time, modern contact brought grave challenges with opportunities (Gerhard & Gulick 1967; Miller & Baxter 1974; Robinson 1972).

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2 E.g. myths, ritual, human-hair capes, inscribed wooden tablets, “the second harvest”, etc. (see, Del Barco 1973).

3 ʔ-waʔ-yuʔ-ʔ-uʔ=h-ʔ-chiʔ-uʔ ‘burnt abandoned house’; Sp. fraile > folk etymology, ʔ-ipaaʔ=ʔy=liʔ (person=hair=shorn; Mixco 1983).
2. The language

2.1. Simple transitive sentence

Simple transitive sentence is OV, pro-drop, with optional post-verbal aspectuals (AUX1 and AUX2), pre-verb negative, /kʷat/ (NEG) and sentence-final predicate, /mat/ ‘not’.4

1  
\[ kʷ-umiy-mi-t \quad kʷat \quad ?-that-paa-m \quad h-qhaa \quad mat \]
WH-male-this-SBJ (NEG) DN-dog-that-OBJ 4-shoot not
‘this man didn’t shoot that dog’

2  
\[ (mi-t) \quad mltiʔ-čaw-m \quad pa-h-maa \]
(this-SBJ) coyote-PL-OBJ OBJ:PL-4-eat
‘this one/(s)he eats/ate coyotes’

Existential AUX1 positional verbs, requiring a locative NP, take subject-object agreement and encode subject shape/position gender (see, Presentationals):

3  
\[ waʔ=h-may-hi-l \quad waʔ=čruw-t \quad kʷat \quad waa \quad mat \]
house=4-many-DEF-IL house=clothes-SBJ (NEG) SIT not
‘there’s no store in town’

4  
\[ mi-l \quad myal-si-t \quad yaq \]
this-IL tortilla-INDF-SBJ LIE
‘there’s a tortilla here’

5  
\[ xskaa-hi-l \quad xpiip-t \quad yuw \quad mat-u? \]
pot-DEF-IL beans-SBJ STAND:PL not-Q
‘aren’t there beans in the pot?’

AUX1 + (AUX2) are optional after a main verb (as above). Both take subject-number/person agreement. AUX1 can be active (waʔ SIT:ACT (sg)/waʔ-t-u SIT:ACT (pl)) or stative (i-waa SIT:STAT (sg)/yuw STAND:PL. There is also, yuw STAND (sg); note predicative prefix, /i- (PRED) on i-waa, that shares suppletive plural yuw STAND:PL with yaq LIE. To its positionals, AUX1 adds, experiential, kʷaa (sg)/kʷa-t-u SPEAK (pl):5

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5  AUX1 SPEAK with verbs for vocal, tactile, visual and mental events or conditions; hence, experiential.
‘we’re eating standing’ (active)

(7) (kʷat) ?-saw-u-t ?-yuw-t (?-yuu-t) mat (NEG) 1-see-PL-SS 1-STAND:PL-SS (1-BE-PL) not
‘we’re (pl) not looking’

(8) (kʷat) ?-p-ha?-y-p-t ?-kʷa-t-u-t (?-ʔii-t ?i-?) mat6 (NEG) 1-UNSP-voice-ATT-PASS-SS 1-SPEAK-PL-PL-SS (1-SAY-PL SAY-IRR) not
‘we’re not talking’

AUX2 Behavioral Verbs echo the main-verb’s semantic category: yuu BE (stative), ʔñii/ʔuy do (active), ʔii SAY (experiential) and take person/no. subj. agreement.7

Progressive Singular AUX1 + (AUX2):

(9) m-smaa-t m-yaq-t (m-yuu-p) 2-sleep-ss 2-LIE-SS (2-BE-DEC)
‘you’re (sg) sleeping’

(10) m-p-ha?-y-p-t m-kʷaa-t (m-ʔii-p) 2-UNSP-voice-ATT-PASS-SS 2-SPEAK-SS (2-SAY-DEC)
‘you’re (sg) talking’

(11) ?-saaaw-t ?-i-waa-t (?-yuu-p) 1-see-ss 1-PRED-SIT:STAT-SS (1-BE-DEC)
‘I’m looking’

(12) m-tiʔchat-t m-waa-t (m-ʔñii-p) 2-work-ss 2-SIT-SS (2-DO-DEC)
‘you’re (sg) working’

Singular Perfective AUX2 (with no AUX1):

(13) m-smaa-t m-yuu-p 2-sleep-ss 2-BE-DEC
‘you (sg) (have) slept’

(14) (kʷat) m-smaa-t m-yu?- mat (NEG) 2-sleep-ss 2-BE-IRR not
‘you (sg) (haven’t/ didn’t) slept/sleep’

(15) m-p-ha?-y-p-t m-ʔii-p 2-UNSP-voice-ATT-PASS-SS 2-SAY-DEC
‘you (sg) (have) talked’

6 Suffix, /ʔ/ ‘irrealis’ (IRR) + long-vowel shortening with predicate, mat ‘not’ or interrogative suffix, /-uʔ/ (Q), et al.

7 Aux2 is ʔñii DO; main verb, ʔuy ‘do, make,’ an emergent AUX2. AUX2 yuu BE, ʔii SAY also occur as main verbs; absent AUX1 they are perfectives.
(16)  \textit{m-tiʔchat-t  m-ʔnii-p}  \\
2-work-SS  2-DO-DEC  \\
‘you (sg) (have) worked’

Plural Progressive + AUX1 + (AUX2):
(17)  \textit{m-smaa-t-t  m-yuw-t  (m-yuu-t-p)}  \\
2-sleep-PL-SS  2-STAND:PL-SS  (2-BE-PL-DEC)  \\
‘you (pl) lie sleeping’
(18)  \textit{ʔ-saw-u-t  ʔ-yuw-t  (ʔ-yuu-t-p)}  \\
1-see-PL-SS  1-STAND:PL-SS  (1-BE-PL-DEC)  \\
‘we’re looking’
(19)  \textit{m-p-haʔ-y-p-t  m-ʔii-t-t  (m-ʔii-t-p)}  \\
2-UNSP-voice-ATT-PASS-SS  2-SPEAK-PL-PL-SS  (2-SAY-PL-DEC)  \\
‘you’re (pl) talking’
(20)  \textit{m-tiʔchat-ʔaw-t  m-yuw-t  (m-ʔnii-t-p)}  \\
2-work-PL-SS  2-STAND:PL-SS  (2-DO-PL-DEC)  \\
‘you’re (pl) working’

2.2. Illocutionary suffixes

Interrogatives can be marked by zero (Ø-), /-uʔ/ (Q:YES/NO) or/-aʔ/ (Q:YES) Yes-question; suffixes above occur on any sentence-final predicate, declarative, /-p/ (DEC) on AUX2 only:
(21)  \textit{m-tiʔchat-t  m-ʔnii-p}  \\
2-work-SS  2-DO-DEC  \\
‘you’ve worked’
(22)  \textit{m-tiʔchat-t  m-ʔniiʔ  mat-uʔ}  \\
2-work-SS  2-DO-IRR  not-Q  \\
‘haven’t you worked?’
(23)  \textit{m-tiʔchat-t  m-ʔniiʔ-aʔ}  \\
2-work-SS  2-DO-IRR-Q:YES  \\
‘you have worked, right?’

Epistemic and Deontic Modals: /-khaʔ/ ‘emphatic’, /=(uʔ)=maʔ/ ‘mild emphatic’, and /-mitʔ/ ‘surmisal evidential’ (EVID) in perfective sentences:
(24)  \textit{m-tiʔchat-t  m-ʔnii-p}  \\
2-work-SS  2-DO-DEC  \\
‘you’ve (sg) worked’
(25)  \textit{m-tiʔchat-t  m-ʔnii-khaʔ}  \\
2-work-SS  2-DO-EMPH  \\
‘of course, you’ve worked’
(26) ʔsaal-t  yuu-mit
      drip-SBJ  BE-EVID
‘it’s evidently leaked’

(27) ʔsaal-t  yuu-kha?
      drip-SBJ  BE-EMPH
‘hey! it obviously leaked!’

(28) ʔ-ʔii-mit-t  yuu  h-ʔip
      1-SAY-EVID-SBJ  BE  3-think
‘“so, that’s what I felt!” he thought.’

Mild Emphatic Modal /(-ʔ=(uʔ))=maʔ/ (EMPH) Parenthesized elements are optional after roots, absent after modals, except, /-p/ ‘declarative’ (Mixco 1983a, 1983b):

(29)  xnaal=m-paʔ-m  m-p-yaw-s  ?aa-t
      ?aa-p=maʔ
      SAY:PASS-DEC=EMPH
‘your rattle! they say you are to bring it!’

(30)  paa-m-h-uy-y-m  m-maa-tay-m  ?ʔiʔʔ=ʔuʔ=maʔ
      that-COM-3-DO-DS  2-eat-FRQ-DS  DO-IRR=EMPH
‘surely, that’s how she’s done it and you’ve always eaten it?’

(31)  ?ʔ-g-m-saaw  maat  m-yuʔ=ʔuʔ=maʔ
      DN-AL-2-see  SELF  2-BE-IRR=EMPH
‘Indeed, you must have looked at it yourself?’

(32)  ŋʔiʔʔ=ʔap-l  p-khʷap-m-s-t  yuʔ=ʔuʔ=maʔ
      far-somewhere-IL  UNSP-enter:SG-AWAY-IRR-SBJ  BE-IRR=EMPH
‘He will take off for somewhere really far’

2.3. Morphological tense and aspect


(33)  xay  m-tim  k-p-yaw-t...
      now  2-bow  2:IMP-UNSP-grasp:PASS-SS...
      ‘now, take up your bow...’

(34)  h-maaw-t  ?ʔ-h-waa-xay-m  yuu-mit
      3-fa.mo.-SBJ  DN-IL-3-sit-still-DS  BE-EVID
‘his paternal grandmother was evidently still there....’

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8  xnaal ‘turtle; rattle’; rattles were made from turtle shells.
9  Never suppletive, Aux2 is ubiquitous in periphrastic modals and adverbials.
Frequentative Aspect /-tay/

(35) yu-ʔ-iʔ-tay
BE-IRR-RES-FRQ
‘traditionally; by custom’

(36) paa-m-h-uy-ʔiʔ-tay ʔ-ʔii-ʔ=ma?
that-COM-4-DO-DS 1-eat-FRQ 1-DO-DEC=EMPH
‘I’ve always eaten (it) when it’s done that way!’

(37) s-ʔiʔ-tay-u?
INST-twist-FRQ-REL
‘colander’

Inceptive Aspect /-sip/:

(38) taʔ=yit ʔ-ʔii ʔ-kʷ-mraay-sip
taʔ=seed 1-POSS-SAY WH-good-ALMOST
‘my corn is almost/about ready’

(39) ʔ-ʔnaay ʔ-kʷ-ʔap-sip-ʔ
DN-sun PRF-enter:SG-ALMOST-SBJ
‘the sun has almost set/ is about to set’

(40) xaʔ-laʔ ʔ-kʷ-ʔmsir-sip
moon PRF-one-ALMOST
‘about/almost a month’

Periphrastic Iterative Aspectual /=uʔkun AUX2/ involves a repeated event or state (see, Numerals, Presentationals, Switch Reference; Mixco 1983a, 1983b, 1994b, 1997c):

(41) haʔ=čhaʔ ʔ-p-lax=ʔkʷ-un kʷ-uuy mnaq
mouth=water UNSP-adhere=ITR 4-DO four
‘he spat repeatedly, four (times)’

(42) k-p-tʔaa=m=ʔkʷ-un k-uy-u
2:IMP-UNSP-PL-go:about=ITR 2:IMP-DO-PL
‘stay with him wherever he goes!’

(43) x-kʷii-y-ʔp=ʔkʷ-un ʔii-t h-kʷa
CAUS-hear-ATT-PASS=ITR SAY-SS 4-SPEAK
‘he asked repeatedly/he kept asking’


Note progressive AUX1 follows iterative AUX2. Iterative is Durative too.
Momentaneous AUX2 ‘SAY’ is a punctual, often onomatopoetic, event: ʔačq ʔii ‘leap’; lap ʔii ‘flash’; iʔ-hal ʔii ‘hop’; phuk ʔii ‘thud’; kʷax ʔii ‘knock’; xʔis ʔii ‘hiss’; rik ʔii ‘fall/be silent’; ruwp ʔii ‘sun sets’; niʔ ʔii ‘bow; bend’ (see above).

Irrealis Modals of Probability/Possibility: AUX2 members appear:/yuu/ BE, /ʔii/ SAY: Inceptive/Inchoative, /-ʔii/ AUX2/ ‘about to, want to’, with Irrealis Complementizer, /-ʔii/ ‘irrealis’ (see, Desiderative):

(44) ʔ-smaa-s ʔii
    1-sleep-IRR SAY
    ‘I’m about to go to sleep; I’m sleepy.’

(45) ʔ-maa-s ʔii
    1-eat-IRR SAY
    ‘I’m about to eat; I’m hungry.’

(46) ʔ-smaa-s yuu
    1-sleep-IRR BE
    ‘I may go sleep.’

Irrealis AUX2 Purpose Clauses:11

(47) xnaal=m-paʔ-m m-p-yaw-s ʔaa-t
    ʔaa-p=ma?
    SAY:PASS-DEC=EMPH
    ‘they say for you to take your rattle!’12

(48) ñ-aʔ-uʔ ʔ-yiw-t ʔ-ʔʔii-p nat m-waa-s ʔii-t
    POSS-SAY:PASS-IRR-REL 1-grasp-SS 1-DO-DEC top 2-sit-IRR SAY-SS
    ‘I bought it for you to ride’

(49) ʔ-ipaa s-pi-t-u-s ʔii-t
    DN-people IRR-die-PL-PL-IRR SAY-SS
    ‘(he did it) so that there would be mortals/death’

(50) paa-t ʔ-kʷiy-s yuu ʔii
    that-SBJ DN-cloud-IRR BE say
    ‘he said it might rain’


12 Passive roots, yuu and ñaa may reflect personal possession, akin to inalienability and reflexivity; note possibly related prefix, /p-\ unl (see, Periphrastic Possession).
Future Certainty /-s-t yuu/:\(^{13}\)

(51) *(ʔ-kʷiiy) h-uhaa-k-m tiiyt h-uuy-s-t yuu*(
      (DN-cloud)  3-arrive-HITHER-DS little  3-DO-IRR-SBJ BE
   ‘it \textbf{will} rain a little this way’

(52) paa kʰ-umiiy-s-t yuu
     that WH-male-IRR-SBJ BE
   ‘he \textbf{shall} be a man’

Modal /-s-m AUX2/: Both clitics below share the latter schema but differ semantically; /-s-m yuu/ is to /s-(t) yuu/ as /-s-m ?ii/ is to /-s ?ii/ (n.b., */-s-t ?ii/). If /-m/ is of SR origin, it implies semantic bleaching; nor is /-m/ a likely, ‘object case’, as /-t/ is ‘subject’:

(53) xmiʔq-s-m yuu
     three-IRR-DS BE
   ‘about/approximately/probably three’

(54) mi-m-ʔ-yuu-t ?-aa yuu=wn ŋ-ʔuu-t-s-m yuu-t
   ‘if I go on like this, they \textbf{may} kill me!’

/-s-m ?ii/ differs from its BE analog, given its experiential content (cf. /-s ?ii/ ‘\textbf{SAY}’) as in desideratives and inceptive/inchoatives:

(55) ?-maa-s-m ?ii
     1-eat-IRR-DS SAY
   ‘I \textbf{feel like} eating; I \textbf{intend} to eat; I \textbf{want to} eat’

(56) paa m-kʰii-s-m ?ii
     that 2-hear-IRR-DS SAY
   ‘that’s what you \textbf{want to} hear’

Optatives: /-s-m kʰʷiiit/ ~ /-s kʰʷiiit/. Both occur in mourning euphemisms, e.g. who (in life) would be. X.’ (see, Kinship Terms):\(^{14}\)

(57) kus=waʔ=ʔaa-s kʰʷiiit
     old:man=house=PASS-IRR OUGHT
   ‘deceased husband’

(58) ŋ-xmaan=ʔaa-s kʰʷiiit
     POSS-yo.bro.=PASS-IRR OUGHT
   ‘deceased yo. brother’

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\(^{13}\) In pre-Kiliwa, root-initial *y* is absorbed by preceding palatal; i.e., *yuu* > /ũũ/\(^{*}\) *š* or *č*. Note too: *š* and *č* > /-s/ and /-t/, respectively. Phonetically, /-s-yuu/ > [soo]; /-s-t-yuu/ >[stoo] (see, Long Vowels); irrealis /-s/ < Proto-Yuman *-x*.

\(^{14}\) Note unrelated root, kʰʷiiit ‘type, sort’; e.g. ʔ-wiiy=k-wʔn-kʰʷiiit ‘some sort of mountain’.
The optatives above are also deontic clause clitics; however, /-s-m-ʔkʷiit/ predominates in myths, as deities predict miracles. In the latter, the passive AUX2, /ʔaa/ SAY:PASS is not experiential (Mixco 1983a; see Passive):

(59)  
\[m\text{-}h\text{aa } m\text{-}s\text{aw}\text{-}s \quad \sqrt{\text{iit}} \quad m\text{-}yu\text{-}ʔ=\cancel{u}=\cancel{\text{ma}}\
\]
> 2\text{-go} 2\text{-see}\text{-IRR} \text{ OUGHT} 2\text{-BE}\text{=IRR}\text{=MOD}  
> ‘you might/should\text{/ought} to just go take a look’

(60)  
\[x\text{-}q\text{h}\text{av}=ʔ\text{aa}\text{-}s\text{-}m \quad \sqrt{\text{iit}}\]
CAUS\text{-break}=\text{SAY:PASS}\text{-IRR}\text{-DS} \text{ OUGHT}  
> ‘it shall/must snap, sunder’

(61)  
\[h\text{-}ʔ\text{-pat}=ʔ\text{aa}\text{-}s\text{-}m \quad \sqrt{\text{iit}}\]
4\text{-DIST}\text{-exit}=\text{SAY:PASS}\text{-IRR}\text{-DS} \text{ OUGHT}  
> ‘it shall/must be fished out’

(62)  
\[n\text{ʔa}\text{-}m \quad 0\text{-}w\text{ii}=ʔ\text{aa}\text{-}s\text{-}m \quad \sqrt{\text{iit}} \quad h\text{-}ʔ\text{ip}\]
1\text{-PRON-OBJ} 3\text{-give}=\text{SAY:PASS}\text{-IRR}\text{-DS} \text{ OUGHT} 4\text{-think}  
> ‘“it has to/must be given to me,” he thought.’

Periphrastic Modal Clitic /=kun yuu/ ‘maybe, perhaps’, contains fossilized morphemes. (<*-k=win, a vestige of *wi ‘exist’; see, Conditional, Presentational):

(63)  
Juan 0\text{-}p\text{-}uhaa=kun yuu ʔ-ip mat  
Juan 3\text{-UNSP}\text{-arrive}=\text{POSS} \text{ BE} 1\text{-think} \text{ not}  
> ‘I don’t think/I doubt that Juan is coming’ (lit. I don’t think John might come)

Periphrastic Desiderative: Some object complements take an irrealis/desiderative complementizer (see, Presentational; Purpose Clause; Mixco 1996, 2000):\footnote{Desiderative /-k/ ‘irrealis’ < Proto-Yuman -*k ‘same-subject; hither,’ replaced in Calif.-Delta by, -c- < -*c ‘subject’; Kiliwa, -*c > -t ‘subject; same-subject; plural’.}

(64)  
\[m\text{-}m\text{aa}\text{-}k \quad ʔ\text{-}ʔ\text{ip}\]
2\text{-eat}\text{-IRR} 1\text{-think}  
> ‘I want you to eat/think you should’

(65)  
\[\sqrt{\text{-nnu}}\text{-}k \quad k\text{-}ʔ\text{ip}\text{-t} \quad m\text{-}yuu\]
1\text{-kill}\text{-SG}\text{-IRR} \text{WH}\text{-think}\text{-PL}\text{-SS} 2\text{-BE}  
> ‘you (pl) who’ve thought, “I’ll kill (it)”’

2.4. Coordination and Switch-Reference (SR)

Coordinate clauses track Subject Continuity (or its absence) in the next clause: /-t/ ‘same-subject’ (SS), /-m/ ‘different-subject’ (DS). Examples appear throughout this paper (see, Simple Sentence; Mixco 1983a, 1985).
Predicate Continuity: such tracking may be unique to Kiliwa within Yuman. The schema below depicts the fronting of clause-final, clause-2 AUX2 to cliticize with clause-final AUX2 of clause-1, as a sentence-connector, bound over clause-1’s SR suffix. A clitic highlights predicate continuity/discontinuity, most frequent in myths. Examples below (see, Iterative Aspect; Presentational Predicates; Mixco 1983b, 1994b, 1997c):

CLAUSE-1 ... AUX2=SR=AUX2 ... CLAUSE-2 ...

(66) \[kʰ-h-ʔnuu \, \mathfrak{n}ii=m=yuuy-t \, \text{na}y=kʰ-waa \, t-p-yaw\]

\[\text{PRF-4-kill DO=DS=BE-SS child=WH-sit UNSP:OBJ-UNSP-grasp:PASS}\]

\[p-lwatt \, h-uy-u…\]

\[\text{UNSP-return 4-do-PL…} \]

‘having killed (him), they then grabbed the child, who was there and brought him back…’

Clause-1 above has AUX2 \(\mathfrak{n}ii\) DO for active verb, ‘kill’, (n.b., perfective prefix \(kʰ-/\); \(\text{-m}\) ‘DS’ marks subject change in clause-2: ‘they’ > ‘child’. Clause-2 AUX2 \(\text{yuuy BE}\) denotes active > stative verb change in clause-2; both clauses are perfective:

(67) \[\mathfrak{ʔ}-ipaa-m \, \text{pa-mat}=h-uyuy \, \text{yu}=m=yuuy-t\]

\[\text{DN-people-OBJ OBJ:PL-not=4-do BE=DS=BE-SS}\]

\[tkʰ-hiiyp=kʰ-kuu=kʰ-waa-si-t \, \text{waa}\]

\[\text{devil=WH-female=WH-sit:STAT-UNSP-SBJ sit:STAT…} \]

‘people were wiped out and so there was a witch…’

Clause-1 above has AUX2 \(\text{yuuy BE}\) for stative ‘wiped out’; in clause-2 for the stative existence of the witch. Intervening suffix \(\text{-m}\) ‘DS’, marks subject change in clause-2:

(68) \[p-uʔ-yaq-y \, \text{paa-m-h-uyu}-u \, \mathfrak{n}ii=t=m=yuuy-t \, \text{ʔsul-}m \, \mathfrak{ʔii}=t=yuuy-t\]

\[\text{UNSP-BEN-lie-ATT that-COM-4-do-PL DO=PL=DS=BE-SS slip-AWAY SAY=SS=BE-SS}\]

‘They cradled him in their arms and then (he) suddenly slipped out then…’

Cradled in clause-1 above, takes plural periphrastic active causative, \(-uuy\ ‘do’; hence, non-SR, plural suffix, \(-t/\) on \(\mathfrak{n}ii-t\) DO, followed by, \(-m\) ‘DS’ for subject change: crowd > child. The suddenness of slipping out takes momentaneous aspectual, \(\mathfrak{ʔii}-m\) SAY, followed by, \(\text{yuuy BE}\) for the stative result of having slipped out; followed in turn by, \(\text{yuuy BE}\), anticipating a following same-subject, stative clause, hence, \(-t/\ ‘SS’\) (see, Modals, Tenses and Aspects; Mixco 1983b).

Resumptive Also and Again suffix, \(-iʔ/\ ‘resumptive’ (RES) is shared by Also and Again constructions. The Also sentence is superficially monoclusal; Again is biclausal: clause-1 main verb has prefix, \(\text{/p- (UNSP)}\). Clause-2 AUX2 has Resumptive suffix, \(-iʔ/\); the affixes constitute a discontinuous morpheme (see, Passive; Mixco 1984a).
The Again structure has repetition/replication by a single subject. In clause-1, the subject executes an action or experiences a state; in clause-2, the same subject repeats this. Clause-2 AUX2 is a pro-verb for the shared verb; see schemata:

\[
SBJx-VERBx-SS \, SBJx-VERBx \implies SBJx-p-VERBx-SS \, SBJx-AUX2x-i? 
\]

(69) \( m-p-x-qhaw-t \, m-ʔʔi-ʔ-i? \)
2-UNSP-CAUS-cut-SS \( \rightarrow \) 2-DO-IRR-RES
‘you (sg) cut it again’

(70) \( m-p-ʔʔii-t \, m-ʔʔa-ʔ-i? \)
2-UNSP-DO-SS \( \rightarrow \) 2-eat-IRR-RES
‘you ate/eat again’

Clause re-ordering is allowed, as in the following Again sentence; AUX2-clause fronting may mark a change of emphasis, \( m-p-ʔʔii-t \, m-x-qhaw-i? \) (2-UNSP-DO-SS 2-CAUS-cut-RES) ‘you cut it again’.\(^{16}\) The Also surface sentence is monoclausal; yet, logic dictates a covert biclausal structure akin to Again, but with different subjects. Subject-2 (SBJy) copies subject-1’s action/state (SBJx). This presupposes subsequent elision of the absent clause with prefix, /p-/, leaving only one /-i?-clause:

\[
SBJx-VERBx-SS \, SBJy-VERBx \implies SBJx-p-VERBx-SS \, SBJy-VERBx-i? \implies Ø \, SBJy-VERBx-i? 
\]

(71) \( Ø \, m-x-qhaw-i? \)
Ø \( \rightarrow \) 2-UNSP-cut-RES
‘you (sg) cut it too’

(72) \( Ø \, m-ʔʔa-ʔ-i? \)
Ø \( \rightarrow \) 2-eat-IRR-RES
‘you eat/ate too’

Conjunction/Disjunction: /\( =wʔn/ \) ‘but/though’ (< *\( wiʔn= \)win) cliticizes onto a verb or AUX2 BE. Recall clitic, /\( =k= \)wʔn/ in negative Indefinite Demonstratives; the clitic attenuates the truth value of the host via negation. Here the host is a clause (see, Desiderative; Presentationals; Mixco 1983a, 1996, 1997c, 2000):

(73) \( m-\check{c}hii \, paa-m-yuu=\check{w}ʔn \, m-ʔʔa \, mat \)
2-drink that-COM-BE=CNJ 2-eat not
‘you drink but you don’t eat.’\(^{17}\)

(74) \( ?-paa-s-t \, yuu \, (\check{k}\check{iy})=h-uhaa-k \, h-waa-hi=\check{w}ʔn \)
1-leave-IRR-SS BE (cloud)=4-arrive-HITHER 4-SIT-DEF=DSJ
‘I’ll leave though it’s raining.’

\(^{16}\) A AUX2 clause-fronting is usual in interrogatives like the Manner question: \( p-m-uuy-t \, m-ʔʔa-ʔ-u? \) (UNSP-2-DO-SS 2-eat-IRR-Q) ‘how do/did you it eat (it)?’

\(^{17}\) Note: Demonstrative-COM-AUX2-SR here is like English transition: ‘but, that being so...’
(75) \( (ʔkʷiy)=h-uhaa-k \quad h-waa \quad yuu=w?n \quad ?-paa-s-t \) yuu
(cloud)=4-arrive-HITHER \quad 4-SIT \quad BE=CNJ \quad 1-leave-IRR-SBJ \quad BE
‘it’s raining but I’ll leave (anyway)’

(76) \( t-h-pa?=s-t \quad yu?= \quad mat \quad paa-m-yuu=w?n \)
OBJ-4-place:RND-IRR-SBJ \quad BE-IRR \quad not \quad that-COM-BE=CNJ
\( ña?=p-t \quad 1-pa?=s-t \quad yuu \)
1:PRON-NOM-SBJ \quad 1-place: RND-IRR-SBJ \quad BE
‘(he) isn’t going to plant (anything) but I’ll plant’

In conjoined, non-clausal, NPs, clitic, =w?n means ‘or’ (disjunctive): \( ?\text{that} \ yuu=w?n \ nmi? \) (dog BE=DSJ cat) ‘dog or cat’; \( kʷ-ʔniir \ yuu=w?n \ ?msap \) (black BE=DSJ white) ‘black or white’. Disjunctive ‘or’ fits the attenuation semantics proposed; e.g. X or Y = ‘if not X, then Y’.

Conditional IF/WHEN (IF), /=win \sim=~wn/ (cf. modal, \( =\text{kun} \), < fossilized, \( \ast-k=\text{win} \)). AUX2 may take subject-agreement (see, Modals, Presentationals; Mixco 1997c):

(77) \( m-paa-s \quad ?ii-t \quad m-yuu=\text{win} \quad k-i?=k*\text{ir-p} \)
2-leave-IRR \quad SAY-SS \quad 2-BE=IF \quad 2:IMP-DIST-exert-PASS
‘If you’re about to leave, hurry up!’

(78) \( (ʔkʷiy)=h-uhaa-k \quad h-waa \quad Θ-yuu=\text{wn} \quad ?-paa \quad mat \)
(cloud)=4-arrive-HITHER \quad 4-SIT \quad 3-BE=IF \quad 1-leave not
‘If it’s raining, I’m not leaving’

(79) \( ?-\text{saaw-t} \quad ?-\text{yuu}=\text{wn} \quad \text{nay}=\text{čruuw-m} \quad ?-p-x-k*\text{aaw-s}-s-t \ yuu \)
1-see-SS \quad 1-BE=IF \quad small=clothes-OBJ \quad 1-UNSP-CAUS-yell-IRR-SS \quad BE
‘If/when I see (him), I’ll ask him for the knife.’

2.5. Complementation

Clausal NPs take optional case suffixes: subject, /-t/ and object, /-m/ (the latter less often). Object Complements occupy the OV position. Both clause types are bracketed and boldfaced here:

(80) \( [\text{?} \text{-k*} \text{it-m} \quad \text{p-m-}\text{uuw}] \quad \text{m-spuuw-u}\?)
[DN-what-OBJ \quad UNSP-2-do] \quad 2-know-Q
‘What do you know (how) to do?’

(81) \( [\text{?} \text{-k*} \text{it}=k=w?n \quad \text{-uuw}] \quad \text{?-spuuw} \quad \text{mat} \)
[DN-something=IRR=CNJ \quad 1-do] \quad 1-know \quad not
‘I don’t know how to do anything’

(82) \( ?-uñiiy \quad [\text{mi-}\text{q} \quad \text{m-}\text{uuw}]=k \quad ?ii \quad ?-\text{ip} \)
1-want \quad [\text{this-AL} \quad 2-stay]=\text{IRR} \quad SAY \quad 1-think
‘I want you to stay here’
Subject-Complements in Yuman seem to violate subject-verb agreement; since, whatever the apparent subject (i.e., sentence-initial NP), main clause BE always has third-person singular agreement (viz., /Ø/-/ zero) with its subject clause (Munro 1976):19

Irrealis Subject Complement reveals fossilized morphosyntax. As elsewhere, archaic SR fossilized suffix, *-k ‘irrealis; (SS)’, precedes the presentational, wiʔ (<*wiʔ < *wi ‘exist’). The first example below is part of conditional/counterfactual structures; the second is a future tense (see, Iterative, Personal Pronouns; Presentationals; Mixco 1997c):

As in the Desiderative above, /-k/ is ‘irrealis’. The /-s-k/ structure is like, /-s-t/ in /-s-t yuu/ ‘future’ reflecting its two diachronic functions: ‘subject’ and SR
‘same-subject’. The modern irrealis/future with /-t/ is restricted to main clauses. The archaic morphosyntax with /-k/ only emerges in subordination. Embedded clauses are often resistant to historical change.

### 2.6. Presentational Predicates

Given their infrequency, the synchronic meaning of wiʔ and win has been elusive. Yet, internal reconstruction yields a likely diachronic clue. The following is an almost exhaustive set of tokens from texts (see, Conditional, Conjunction/ Disjunction, Iterative, Predicate Continuity; Mixco 1983, 1997c):

(90) \( ?\text{-ipaa=wiʔ-t} \quad (\text{yuu}) \quad \text{n-wii-m} \quad ?\text{nii-p} \quad ?\text{i} \)

\[ \text{DN-person=PRES-SBJ (BE) 3:1-give-DS DO-DEC say } \]

‘it was that man; he gave it to me,’ he said’

(91) \( k^\text{-spiʔl=paa=t-t?nii-t-uʔ=wiʔ-t} \quad (\text{yuu}); \)

\[ \text{WH-all=that=PL=UNSP:OBJ-DO-PL-REL=PRES-SBJ (BE) } \]

\[ \text{paa=t-t-yuu-t-u}=\text{wiʔ-t} \quad (\text{yuu}) \]

‘that’s what they all did; that’s how they lived’

(92) \( k^\text{-kuu} \quad k^\text{-liiw=wiʔ-t} \)

WH-female WH-Kiliwa=PRES-SBJ

‘the woman is (a) Kiliwa’

(93) \( p\text{-m-?i} \quad p\text{-m-yuu=wiʔ-t} \quad (\text{yuu}) \)

\[ \text{UNSP-2-SAY UNSP-2-BE=PRES-SBJ (BE)} \]

‘what are you saying? how are you behaving?’

(94) \( k^\text{at}=\text{win} \quad ?\text{aa=m=win-q} \quad h\text{-wat-m} \quad ?\text{-?i-t mat} \)

\[ \text{NEG=PRES be:about=AWAY=PRES-AL 4-edge-DS 1-say-PL not } \]

‘we speak incompletely’

(95) \( \text{paa}=\text{win-t} \quad \text{yuu} \)

\[ \text{that=PRES-SBJ BE} \]

‘that’s what it is’

(96) \( ?\text{apu}=\text{win} \quad m\text{-uʔii-u?} \)

\[ \text{which=PRES 2-want-Q} \]

‘which one is it you want?’

(97) \( \text{xmlir ml paa}=\text{win-t} \quad \text{xylm-paa}=\text{win-i?} \)

\[ \text{Xmir this that=PRES-SBJ XylOBJ that=PRES-RES} \]

‘this Xmir, that’s one; Xyl that’s one too’

---

21 lit. ‘we’re not speaking up to it/not reaching it as we talk’

22 Xmir and Xyl, are canyons in the Sierra San Pedro Mártir; one flows East, the other West (Mixco 1983).
(98)  \( \textit{ʔaʔ-} \textit{ʔ-p=win-i?} \)

I:PRON-NOM=WIN-RES

‘they’re real singers! I am one too!’

(99)  \( \textit{ʔ-ipaa=win p-yu-ʔ-u? \textit{ʔap-q waa-u? ?ii-t} } \)

DN-IL-WH-UNSP:OBJ-INSTR-voice-ATT-FRQ=only

‘they say, “it’s that man; where is he?”’

(100)  \( \textit{ʔaʔ-} \textit{ʔ-p-t m-spuuw } \textit{ʔaʔ-} \textit{-p-u } \textit{ʔ} \textit{-p-u? } \textit{ʔ} \textit{-ipaa=win p-yu-ʔ-u? \textit{ʔap-q waa-u? ?ii-t} } \)

DN-person=PRES UNSP-BE-IRR-Q where-AL sit-Q say-PL

‘they say, “it’s that man; where is he?”’

Synchronically, \( \textit{wiʔ} \) and \( \textit{win} \) only occur with subject complements. Initially, they were taken for focus particles, emphatic- or topic-continuity markers, etc. (Mixco 1997c). However, these were partial accounts. The schema, \( \text{Verb(?)=uʔkun AUX2} \) captures the structure of the Iterative Aspectual. Kiliwa affixes tend to be mono-segmental or, at least, monosyllabic, the morphemic status of a multisyllabic clitic was thus indeterminate. The following schemata seek to capture the morphosyntax of sentence connectors:

\[
\begin{align*}
\text{...CLAUSE-1 AUX2=SR=AUX2 CLAUSE-2...} \\
\text{...CLAUSE-1 *wiʔ=k=win CLAUSE-2...}
\end{align*}
\]

It is clear that with phonological compression, the component morphemes became a fossilized and semantically bleached sequence of mere syllables. The following schemata depict the stages of the hypothetical evolution; each stage is explicated below:\(^{23}\)

1) \( \text{...S1 VERBx + S2 VERBx + S3 VERBx + .... Sn VERBx} \)
2) \( \text{...CLAUSE-1 *AUX2a-ss=CLAUSE-2... *AUX2a} \Rightarrow \)
3) \( \text{...CLAUSE-1 *AUX2a-ss=AUX2a CLAUSE-2...} \Rightarrow \)
4) \( \text{...CLAUSE-1 *wiʔ=k=win CLAUSE-2...} \Rightarrow \)
5) \( \text{...CLAUSE-1 *wʔ=k=wn CLAUSE-2...} \Rightarrow \)
6) \( \text{...CLAUSE-1=*wʔ-kwn CLAUSE-2...} \Rightarrow \)
7) \( \text{...CLAUSE-1=uʔkun CLAUSE-2...} \Rightarrow \)
8) \( \text{...CLAUSE-1=uʔkun AUX2 CLAUSE-2...} \Rightarrow \)

Stage 1 depicts an initial stage of concatenated sentences as a stylistic iterative/durative narrative transition:

\(^{23}\) *AUX2a here, represents archaic existentials, *wiʔ and *win < *wi ‘exist’
Stage 2 reduces these conjoined structures to two *AUX2a-clauses linked by, SR, */-*k/ ‘same-subject’.

Stage 3 represents a fronted, clause-2 *AUX2a (*win), binding with a clause-1 *AUX2a (*wi?) over */-*k/ SS.

Stages 4-7 are stages of phonetic compression into syllables with bleached meanings.

Stage 8 adds modern Behavioral AUX2 compensating for information lost from the tractable *AUX2a structure (Mixco 1983a, 1983b, 1994b, 1997c; see, Predicate Continuity).

The above reconstruction provides a key to unlocking the variety of synchronic structures originating in, *wi? and/or *win. Their individual developments can be summarized as follows: -wʔn ‘but; though; or’ (CONJ/DISJ) < *wi?=win; -wn ‘if/when’ (COND) < *win; =kun yuu ‘maybe; possibly’ < -*k=win yuu; =s-k=wi?-p-t < *s-k=wi?-p-t ‘Irrealis subject complement’ (Mixco 1997c).

2.7. Relative Clauses


Non-Subject Relatives: The following are examples with, /-uʔ/ (REL) (see, Passive):

(103)  miyaw=m=x-kʰʷaap-uʔ
      legs=OBJ=2-CAUS-enter:PL-REL)
      ‘trousers’ (lit. ‘where you insert legs’)

(104)  xtaʔ=h-ʔhaw=tuw=tuw=hʔ-h-uʔ-uʔ
      reed=4-cut=toot:PL=4-STAT-4-PASS-do-IRR-REL
      ‘flute’ (lit. ‘reed one cuts with which tooting is done’)
(105)  
\[ h-hi=l-yuw \]
\[
\text{4-pit:roast=4-eat-IRR-REL-IL INDF-IL-stand:PL}
\]
\[
\text{‘there where they pit-roasted and ate, they are still in there’}
\]

Unspecified Object/Nominalizer /t-/ may occur with or without subject- (WH) and non-subject relativization (REL); in transitive verbs, it marks an unspecified object and often takes the unspecified fourth-person prefix /h-. In intransitives, /t-/ is simply a theme/patient nominalizer (also see above):

(106)  
\[ t-h-maa \]
\[
\text{UNSP:OBJ-4-eat}
\]
‘food’ (lit. ‘\text{what one eats}’)

(107)  
\[ t-kʷ=maʔ \]
\[
\text{UNSP:OBJ-\text{WH}=edible}
\]
‘fruit’ (lit. ‘\text{what is ripe}’)

(108)  
\[ t-ha-ʔ-uʔ \]
\[
\text{UNSP:OBJ-go-IRR-REL}
\]
‘where it had gone...’

(109)  
\[ t-ʔ-ipaa=t-ʔña-ʔ-uʔ t-h-yu-ʔ-uʔ \]
\[
\text{DN-person=UNSP:OBJ-DO:PASS-IRR-REL UNSP:OBJ-4-BE-IRR-REL}
\]
‘what was done by people and what they were like...’

(110)  
\[ pa-ʔäaʔ-p=t-ʔnii-t-uʔ \]
\[
\text{OBJ:PL-1:PRON-NOM=UNSP:OBJ-DO-PL-REL)}
\]
‘what we do/did...’

(111)  
\[ t-ʔnii=h-maa-t-haa-ʔ-uʔ-t \]
\[
\text{UNSP:OBJ-POSS-SAY=4-eat-PL-go-REL-SBJ}
\]
‘what they went along preparing to eat/for food...’

2.8. Periphrastic Benefactive/Malefactive

Periphrastic Benefactive/Malefactive /\(p\)-\text{wit}/ ‘benefactive’ (BEN) is a clitic on a beneficiary NP’.\(^\text{24}\)

(112)  
\[ ñ-ʔ-0-xkʷaaw-t ?ii-p ?-mpuuul-sti paa=p-wit \]
\[
\text{3:1-3:ask-SS SAY-DEC DN-hat-INDF that=UNSP-BEN}
\]
\[ ñ-ʔ-a-ʔ-uʔ ?-yiw-s ?ii \]
\[
\text{POSS-own:PASS-IRR-REL 1-grasp-IRR SAY}
\]
‘he asked me to buy a hat for him’

\(^{24}\text{The /t/ in the benefactive particle, /-\text{wit}/, may derive from a frequentative suffix, /-\text{tay}/ (FRQ) in turn deriving from < /\text{tay}/ ‘big’. Yuman shows, an active and a fossil suffix, /-t/ ‘big’ from a compound with *\text{tay} ‘big’; e.g. Mohave mahwat ‘bear’ < *mahwa=tay (badger=big); numet ‘cougar’ < *nume=tay (cat=big). The benefactive root may reflect an archaic existential; *\text{wi > wii} ‘give’, a common benefactive verb universally.}
2.9. Minor-Clause Adverbials

Minor-Clause Adverbials are periphrastic AUX2 structures showing subject and predicate verb agreement:

(115) pa-ma?=-p-t paa-m 2-nil-u-t m-yuw-t-u-t

\textit{nay=}m?-\textit{ñii}=t
small=2-DO-PL
‘you (pl) are touching it \textit{gently}’

(116) \textit{paa}=t h-mii \textit{nay}=?ii=t
that-SBJ 4-cry small=SAY-SS
‘(s)he wept \textit{softly}’

(117) \textit{paa}=t \Ø-yii msir=yuu-t
that-SBJ 3-come one=BE-SS
‘(s)he came \textit{straight ahead}’

AUX2 Comparative, /\textit{=l}/ AUX2-\textit{m}/, is a periphrastic clitic, with complementizer, /\textit{l}/ (COMP). AUX2 has a semantically bleached, idiomatic /-\textit{m}/ DS suffix (with AUX2 vowel shortening). AUX2 matches main verb category. Comparison of similarites is monoclusal, dissimilarities, biclausal:

(118) \textit{paa}=-\textit{č}aw-t \textit{yu}=u-t-mi=\textit{l} yu-m
that-PL-SBJ 1-BE-PL-this=COMP BE-DS
‘they are \textit{like} we are here’

(119) \textit{k}^-?\textit{al}=m?\textit{ap}=\textit{l} \textit{pi}=m
WH-bare=burn=COMP SAY-DS
‘it \textit{sounded like} a burning hide’

(120) \textit{?}-\textit{m}=?-\textit{p}-\textit{si}=\textit{y}=p=\textit{l}
dn-com-1-PASS-shame-ATT-PASS=COMP SAY-DS
‘\textit{as if} \textit{I were/was} embarrassed \ldots’

(121) x-i?\textit{k}=ir-p=\textit{yu}=u=\textit{l} \textit{ni}=m
CAUS-DIST-spin-PASS=stand=COMP DO-DS
‘(s)he \textit{acted like} a whirlwind’
Comparison of Dissimilarities takes negation in the comparison clause, followed by a second clause specifying the attribute’s difference. With a greater degree, the morpheme, /-rap/ ‘more’ occurs. A lesser degree can involve negation in both clauses. With equal degrees, clause-2 the shared attribute has a resumptive Also suffix, /-ʔ/ ‘also, too’ (RES) (see, Also and Again). There are also predicates like, /p-yaa-m/ (UNSP-come:PASS-DS) ‘less, lacking, fall short of, closer’ (i.e., ‘less far’; cf. ‘nearer’ p-yaa-m-rap), and /?-q-yuw-m/ (DN-COM-stand-AWAY) ‘more’ (lit. ‘stand away from/beyond it’). Note AUX1 and AUX2:

(122) paa-t ñaʔ=1 yu-m mat ?kus-rap  
that-SBJ=1:PRON=COMP BE-DS not long-more  
‘he’s taller than I’ (lit. ‘he’s not like me, he’s longer’)

(123) maʔ-p-t ñaʔ=1 ?iʔ-m m-ʔiilčhaʔy mraay-ʔiʔ  
2:PRON-NOM-SBJ 1:PRON=COMP SAY-DS 2-sing good-RES 
‘you sing as well as I’ (lit. ‘you sound like me, you sing well too’)

(124) paa-t ñaʔ=1 ?ũiʔ-m mat kʷ-ʔiʔhin mat  
that-SBJ=1:PRON=COMP DO-DS not WH-run not 
‘I’m faster than he is’ (lit. ‘he doesn’t act like me, he’s not fast’)

(125) p-yaa-m ?-uy-u mat ?-q-yuw-m ?-uy-u mat  
UNSP-less-DS 1-do-PL not DN-AL-STAND-DS 1-do-PL not 
‘we didn’t do less; we didn’t do more.’

(126) ?-ʔ?-ʔiʔ-t-m-t p-yaa-m ?-ʔʔiʔ-ʔʔiʔ  
DN-IL-1-say-PL-AWAY-SS UNSP-less-DS 1-say-IRR-RES 
‘we also said less, my words fall short’ (lit. ‘we spoke like that; I also spoke less’)

2.10. Verb morphology

Verb morphology is more complex than the noun’s. There are many verb prefixes, fewer suffixes; infixes are fewer yet. Prefixes express such grammatical concepts as, causative, distributive/collective-subject plurals, unspecified subject, subject-object agreement, diminutive, etc. Suffixes: subject plurals, attributives, passives, illocutionaries, modal and irrealis clitics, etc. Verb roots and, to a lesser degree, noun roots, exhibit several plural patterns, some combining affixation and root-vowel length ablaut (short to long; long to short; see, Noun Plurals). The following schema displays a fully expanded, potential verb stem, only approximated in use:


Verb Roots are mostly monosyllabic, with canonical shape: (C(C))V(V)(C(C)). A one- or two-consonant, root-initial cluster, is allowed. Its first member must be /s/ or /x/; /h/ can follow any stop, /ʔ/ any consonant. The root may be vowel-

---

25 Angle brackets mark infixes, <<-> ‘passive’ and <<-n->.
initial, short or long; in monosyllabic roots, it may be followed by, from zero to two consonants. Morphologically intractable, polysyllabic roots may result from accreted, semantically-bleached affixes; e.g. haa(3) ‘go, -ihaa(2) ‘bring’; čxpa(2) ‘to straddle’ and čxuʔpaa(2) ‘to hurdle’, etc. (Mixco 2000).

Some verbs roots are suppletive for patient/theme number agreement: ńuu ‘kill’ (sg); tčaw ‘kill’ (pl); tilu ‘to drop (sg)’; cf. tiilu ‘to drop (iterative)’; xipa ‘to spill, dump, drop collectively’. In non-suppletive transitive verbs, the plural object (theme/patient) prefix is /pa-" as on personal-pronoun plurals (see, Personal Pronouns).26

A small subclass of monosyllabic verb roots exhibits so-called, “sound symbolism;” this is merely non-onomatopoetic, consonantal ablaut. Its “symbolism” resides in that, each of three root-final sonorants /n~l~r/ matches a gradient of subject/object size or intensity of an action/condition, from least to most. Thus, /n/ is least, while /r/ is most; /l/ as neutral: pan ‘warm’, pal ‘hot’ par ‘very hot’; -kʰin ~ -kʰiɭ ~ -kʰir ‘spin; twist’ (Langdon 1971).

This discussion begins with verb suffixes but includes all types of affixal and non-affixal passives; it then takes up prefixes for subject-object person and number agreement, finally, returning to the remaining prefix sequence, in order from farthest to closest to the root.


Passive: The prefix, /p-/ ‘unspecified/underspecified agent’ (UNSP) indicates increased object/patient prominence with diminished or an absent agent focus in transitive verbs (e.g. change-of-state): smaa ‘to sleep, be asleep’, p-smaa ‘to fall asleep’. In reflexive/reciprocals, it indicates equal focus on agent and patient, the equivalent of lessened agent focus: maat p-ča? ‘to bite self’, maat p-ča-t-u ‘to bite selves; to bite each other’.27 The suffix, /-p/ ‘passive’ (PASS) derives intransitive verbs from transitives: ?-m-x-ríw ‘to tie/secure’; ?-m-x-ríw-p (DN-COM-CAUS-tie-PASS) ‘to be tied/secured’; h-uʔ-tar ‘to tilt (it)’; h-uʔ-tar-p (4-CAUS-tilt-PASS) ‘to be tilted’; s-ʔa-waa-y ‘to coil’; s-waa-y ‘to coil’; s-waa-y-p (INST-

26 In Table 1, under the heading Meaning, an object-subject order reflects prefix order; e.g. 2 < 1 reads, 1st-person acts on 2nd. Under Gloss, the order 1:2 reflects a synonymous English order. Third-person combinations are zero /Ø-Ø/, with /pa-/ OBJ:PL. /h-/* is a fourth-person prefix for underspecified non-1", non-2ed person subjects.

27 Attenuated subject-specificity in reflexive/reciprocal, /p-/ UNSP fits here, in view of subject-object coreference, implying increased prominence for the object (patient/theme), or the reverse for the subject. (see, Also and Again).

There are instances of fossilized passives in which /-p/ has an idiomatic function with no non-passive analog; cf. p-ha?-y-p (UNSP-voice-ATT-PASS) ‘to speak;’ *p-ha?-y (see Passives).

Vocalic-Ablaut Passive occurs in a small class of verbs in which a root vowel, /i(i)/ is replaced by /a(a)/: yiw ‘to grasp’; yaw ‘to be grasped’; ñ-ʔii-y ‘to own, belong;’ ñ-ʔaa-y ‘to be owned, be property;’ ḡʔ ‘to say;’ ḡaa ‘be said;’ ḡiʔ ‘to think;’ ḡap ‘be thought;’ -umiiy ‘to be male; to sire;’ -umay ‘to be sired/created, a creation/creature; be a man’s son’ (also see, Resumptive Also and Again).

Passive Infix: /-ʔ-/ (PASS) is often accompanied by phonological processes in certain verb roots:28

(127)  h-ʔ-saaw=ʔaa-s-m  ḡʔ*iiit
4-PASS-see=SAY:PASS-IRR-DS  OUGHT
‘it shall/must be visible’

(128)  s-ʔ-puuw=kun  yuu
s-PASS-know=POSS  BE)
‘it may/might be known’ (cf. spuuw ‘to know’)

(129)  ḡpʔmuus=ʔ-IPA=ʔ-ipaa=h-ʔ-h-u-ʔ-u?
Nd=DN-stick=DN-person=4-PASS-4-do-IRR-REL
‘Nh, the idol made of wood’ (cf. -uuy ‘to make, do’)29

(130)  s-ʔ-maa
s-PASS-sleep
‘a dream’ (cf. smaa ‘to sleep’)

(131)  ḡ-waʔ=yuʔ=ʔ-uʔ=h-ʔ-čhiʔ-uʔ?
DN-house=BE-IRR-REL=4-PASS-burn-REL
‘burnt, abandoned house’30

Plural Verbs are derived by affixation and vocalic length ablaut, alone or in concert. Examples of subject-number vocalic-length ablaut are: tuw ‘to uproot (sg),’ tuux ‘to uproot (pl),’ wl-čʔun ‘ro push’, wl-čʔuun (pl), puuw; puw-u ‘be able (sg/pl)’. The subject-plural agreement suffixes, /-t/, /-čaw/ and /-u/ occur as follows: smaa ‘to sleep (sg)’ smaa-t to sleep (pl), xpil ‘to be soiled (sg),’ xpil-čaw ‘to be soiled (pl)’ čiw ‘to smoke (sg),’ čiiw-u (pl). As stated, plural

28 The term *infix* is used advisedly in that it appears inside a root, not just in a sequence of prefixes. Recall the angle brackets (< >) in the Verb-Stem Schema.
29 The idol’s name relates to religious concepts: ḡ-p-<ʔ>-muus (POSS-UNSP-<PASS>-pubic:hair; see, Mixco 1994a).
30 See, Background section, for reference to the destroyed missions.
affixation may combine process and affix morphemes: čhaw ‘to chew hard thing(s) (sg)’; čhaaw-u ‘to chew hard thing(s) (pl)’; čiw ‘to smoke (sg)’; čiiw-u ‘to smoke (pl)’; pi ‘to die (sg); pi-t-u to die (pl)’; čaʔ ‘to bite (sg)’; čaʔ-t-u ‘to bite several/repeatedly’. There are plural verb stems with prefixes subject or object plural prefixes (possibly with other mechanisms): xkʷaq ‘to nail sth. (sg)’; x-t-kʷaq ‘to nail sth’ (singular subject + plural object); x-t-kʷaaq ‘to nail sth. (plural subject + plural object)’; ?-t-uhaa ‘we arrive’. There are also plural vowel prefixes: čan ‘to descend (sg)’; p-i-čan ‘to descend (pl)’.

Both Collective and Distributive plurals, reflect agent or patient/theme number. Distributive plural may shade into iterativity: tilu ‘to drop (sg)’; tiilu ‘to drop (iterative; distributive)’; cf. collective, xiʔwap ‘to spill, dump, drop collectively’. Straightforward suppletion is dealt with above.

Perfactive Prefix, /kʷ- ‘already’ (PRF), optionally with independent adverbial, /khʷ’il/ ‘already’; (khʷ’il) kʷʔ-maa ‘I’ve already eaten.’ Frequentative suffix, /-tay/ occurs in many derived nominals: ?-waʔ=kʷ-p-i-wil-tay (DN-house=WH-UNSP-PRED-make-FRQ) ‘carpenter’; as well as on verbs: paa-m-h-uuy-m m-maa-tay-uʔ (that-4-do-DS 2-eat-FRQ-Q) ‘do you eat it made that way a lot?’ (see Tense and Aspect).

Causative Prefixes are lexically determined for different meanings: /uʔ-/: h-uʔ-maa ‘to feed, cause to eat’; h-uʔ-smaa ‘to cause to sleep’. Others, such as /x-/ specify the use of force, deriving a transitive from an intransitive: qhaw ‘be cut, sundered, snapped (sg.)’; x-qhaw ‘cut, sunder, break (sg. trans)’. Prefix, /iʔ-/ ‘distal’ (DIST) involves separation or removal of a theme: p-iʔ-hiw ‘to fly (sg)’; p-iʔ-pat ‘to protrude’; h-iʔ-paa ‘to exit (pl.)’; hiʔ-iʔ-kiʔ ‘to remove; subtract’; h-iʔ-haa-y ‘to be distant’; p-iʔ-hal ‘surfaces separate (intrans); to separate surfaces’ (trans), e.g. ‘buoying, lifting or peeling’.

Certain causatives are instrumentals (INST) that specify the type of instrument: /č-/ ‘mouth/teeth’; č-pux ‘bite into; burst with teeth’; /s-/ ‘long instrument/hand’; s-pux ‘to pierce; burst with long instrument’; m-pux ‘to burst with foot/kick apart’; /wl-/ ‘with both hands/arms’; wl-wir ‘to grab with both hands; to detain’; k-wl-čʔun ‘push with both hands (sg)!’.31

<table>
<thead>
<tr>
<th>Object</th>
<th>Subject</th>
<th>Meaning</th>
<th>Glosses</th>
</tr>
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<tbody>
<tr>
<td>ʔ-n</td>
<td>ʔ-n</td>
<td>2 &lt; 1</td>
<td>1:2</td>
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<td>Ø</td>
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<td>m-/k-</td>
<td>3 &lt; 2</td>
<td>2:3</td>
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<tr>
<td>n-n</td>
<td>Ø -</td>
<td>1 &lt; 3</td>
<td>3:1</td>
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<tr>
<td>m-m</td>
<td>Ø -</td>
<td>2 &lt; 3</td>
<td>2:3</td>
</tr>
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Table 1. Subject-Object Verb Agreement

31 Instrumentals are glossed as generic causatives here, rather than specifying instrumentality.
2nd-person imperative is /k-/ , /m-/ elsewhere. First-person /ʔ-/ is most often inaudible following /ñ-/ . Zero 3d-person (Ø) is unmarked and un glossed here. An underspecified third person subject is glossed as ‘fourth’ person /h-/: ‘someone, one, (s)he, they, etc.’. The next examples exhibit co-occurrence of the above prefixes and some others. A prefix portion of the verb-stem schema is replicated here:

\[(132)\]  
\[DEM\text{-}CASE\text{=}PL\text{-}OBJ\text{-}PRF\text{-}OBJ\text{-}SBJ\text{-}UNSP\text{-}CAUS\text{-}PL\text{-}\langle\text{DIM}\rangle\text{-}\]  
\[mi\text{-}l\text{=}pa\text{-}k\text{=}ñ\text{-}m\text{-}p\text{-}x\text{-}n\text{-}pux\]  
\[this\text{-}IL\text{=}OBJ\text{-}PL\text{-}PRF\text{-}2\text{:}1\text{-}2\text{-}UNSP\text{-}CAUS\text{-}DIM\text{-}burst\]  
‘you have already burst us tiny ones forcefully inside this’

The hypothetical stem above displays most of the potential prefixes to be exemplified. The initial, locative proclitic takes either a demonstrative or unspecified nominal (i.e. /ʔ- ‘dummy noun’ (DN)). Plural-object prefix, /pa-/ follows; with /kʷ-/, ‘already’ (PRF). The object-subject prefix sequence (2:1-2; /ñ-m-/) follows, next to the unspecified subject, /p-/ (UNSP) and force causative, /x-/, ending with a diminutive infix, /n-/ , and root, puux ‘burst (pl)’. As stated, the multiply ambiguous diminutive can serve to express affect.

### 2.11. Noun morphology

Determiner NP: suffixed or free, Kiliwa distinguishes definite -hi ‘the’ (DEF; singular only), and Indefinite -si ‘a’ (INDF; singular only). Three degrees of distance are encoded by Demonstratives suffixed or free: -mi ‘this’ (near speaker), -paa ‘that’ (near hearer), -ñaа ‘that’ (far from both): ñthat-hi (dog-DEF) ‘the dog’; ñwa2-si (house-INDF) ‘a house’; ñmphuh-mi (box-this) ‘this box/bag’; nay-paa (child-that) ‘that child’; myal-ñaа (tortilla(s)-that (far)) ‘that/those (far) tortilla(s)’.

Demonstrative NP: the above also occur as independent third-person pronouns with the same measures of distance: mi-čaw ‘these; they (near speaker)’; paa-čaw ‘those; they (near hearer)’; ŋaа-čaw ‘those; they (far from both)’: mi-t ʕam ‘This one/(s)he leaves (it)’; mi-čaw-t čaam-u ‘These/they leave (it)’; mi-m ñ-saaw ‘I see this one/him/her’; mi-čaw-m pa-ñ-saaw ‘I see these/them’; mi=m=xwaq-m ñ-ʕam ‘I leave with this one/him/her’; mi-čaw=m=xwaq-m ñ-ʕam ‘I leave with these/them’; mi-čaw-l ñ-saaw ‘I looked into these ones/them’.

Nominal Case is suffixed on nouns, pronouns, nominal phrases and clauses (see, Complementation; Relative Clause): subject, /-l/ ; object /-m/ (in Kiliwa only), allative /-q/ , illative , /-l/ , comitative/instrumental ( /-m/ ); the following are numeral and adjective Determiner phrases with case and number suffixation (including Quantifiers and Number):

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32 For diminutive infix, /n-/ , cf., smaa ‘sleep; s-n-maa ‘little one sleeps; sleep a little’; x-umay ‘man’s son’; x-u-n-may ‘man’s little son’; tʃaaw woman’s child; s-n-tʃaaw woman’s little child’. 
Some noun plurals exhibit verb-like, vocalic length ablaut and plural suffixation:
ʔmpuul/ʔmpulu ‘hat/hats’; kʷ-ʔkuu/kʷ-ʔku-t-u ‘woman/women’; sʔaaw/sʔaw-u ‘child/children’ (woman speaker); čruuw/čruw-u ‘clothing/clothes’ (see, Plural Verbs).


Personal Pronouns: only first and second person occur; third persons are demonstratives (as above). Pronouns bear suffix, /-p/ ‘nominal’ (NOM): ňaʔ-p ‘I’, pa-ʔnaʔ-p ‘we’, maʔ-p ‘you (sg)’, pa-maʔ-p ‘you (pl)’, object-plural, /pa-/: the

33 The comitative idiom for ‘with’ is /m=xwaq/, ‘being two, a couple’.
34 Like other American languages, Kiliwa has one term for blue and green.
35 An example of the semantic displacement of a native, animal or plant term (X) by foreign analog, xaq ‘deer’ > ‘cattle’ with subsequent derivation of a term derived from the original referent, ‘wild X’: e.g. ‘wild deer’ above.
latter may occur as proclitics or on periphrastic possessives. As usual in pro-drop languages, pronominal subjects occur for emphasis only (see, Irrealis; Periphrastic Possessives; Subject Complement; Verb Prefixes).

Indefinite Pronouns are also Interrogatives (with case suffixes) in information questions; e.g. where and when bear illative case suffix, /-l/). Negative indefinites bear the clitic, /=-k=wʔn/ (cf. -k ‘irrealis’ + Conjunction/Disjunction, wʔn attenuates the “truth value” of its host clause; in negative indefinites, wʔn attenuates the “truth value” of its host totally (see, Conjunction/Disjunction; Illocutionaries; Presentationals). Constructions for positive and negative indefinites, who, how, when, when, how much and why are actually verbal, not pronominal. They are included here for convenience of exposition (see, Behavioral Auxiliary Verbs; Switch Reference): ?kʷit ‘something/what?’ ?kʷit=k=wʔn ‘nothing’; ?apu ‘something/which?’ ?ap-l ‘somewhere/where?’ ?ap-l=k=wʔn ‘nowhere’; (?-ipaa)=ʔmʔaa=(wiʔ)-CASE ‘someone/who?’; (?-ipaa) =ʔmʔaa=k=wʔn ‘no one/nobody’; (?-ipaa)-si ‘someone/somebody’; (?-ipaa)-si =k=wʔn ‘no one/nobody’.36

(139) ʔmat=p-ʔi-m
earth=UNSP-SAY-DS
‘some time/when?’

(140) ʔ-mat=p-ʔi-m=k=wʔn
DN-earth=UNSP-SAY-DS=IRR=CNJ
‘never’

(141) p-yuu=t=(s-m yu-ʔ-uʔ)
UNSP-BE=SS=(IRR-DS BE-IRR-Q)
‘some extent/about how much?’

(142) p-yuu=t=k=wʔn
UNSP-BE=SS=IRR=CNJ
‘no extent/none’

(143) p-ʔii-t yuu-m h-waa-t ?nii h-ʔip
UNSP-SAY-SS BE-DS 4-sit-SS DO 4-think
‘he thought, “how might it be to taste?”’

(144) t-h-maa-t p-ʔi-ʔ-uʔ
UNSP:OBJ-4-eat-SBJ UNSP-SAY-IRR-Q
‘how was the meal (taste)?’

(145) p-ʔ-ʔii p-ʔ-yuu=wiʔ-t ʔ-yuu
UNSP-1-SAY UNSP-1-BE=PRES-SBJ 1-BE
‘how do I speak and exist?’

36 ʔmʔaa/?mʔaa ‘someone’ (?-m-VERB (DN-COM-VERB); cf. haa ‘go’; ʔaa ‘go about’ ʔ-mat (DN-earth)
‘earth, world’ also means ‘year; world’.
2.12. Kinship Terms

Kinship Terms are verbs that exhibit nominal determiners and case; however, as with the pronouns, possessive affixation displays verb-like behavior. Thus, ‘my mother’ is, ‘to be mother to me’. Furthermore, possessor plurality is marked by the plural object prefix, /pa-/ , pa-m-sʔuu ‘your (sg) father’, pa-m-sʔuu ‘your (pl) father’, pa-m-sʔuu-čaw ‘your (pl) fathers’; also compare, xumay ‘X sired him; man’s son’ sʔaaw ‘X bore it; woman’s child’.

There is a small set of terms for generationally remote kinship: m-kʷ-čan=ñmiʔ (2-WH-descend-body: hair) ‘your father’s father’s parent’ (lit. ‘your lower body/pubic hair’); m-i-miy=haq ‘your father’s father’s father’ (2-PRED-leg=bone; lit. ‘your leg bone’). Such terms share interesting features in some kinship systems around the world).

The following terms complete the system: m-paaw ‘your father’s father’; m-maaaw ‘your father’s mother’; m-wiy ‘your father’s o. brother(s)’; m-taal ‘your father’s yo. brother(s)’; m-piy ‘your father’s sister(s)’; m-čaʔ ‘your father’s brother’s o. son’; m-xmaan ‘your father’s brother’s yo. son’; m-kuu ‘your father’s brother’s o. daughter’; m-paan ‘your father’s brother’s yo. daughter’; m-nhay ‘your father’s sister’s child’; m-ńʔuu ‘your (sg) mother’; m-kaat ‘your mother’s father’s father’; m-kuw ‘your mother’s father’; m-qhaaw ‘your mother’s mother’; m-kʷay ‘your mother’s brother(s)’; m-siy ‘your mother’s o. sister(s)’; m-miy ‘your mother’s yo. sister(s)’; m-n-kuu xmaan ‘your mother’s sister’s o. daughter’; m-wan xmaan ‘your mother’s sister’s yo. daughter’; m-n-hay ‘your mother’s brother’s child’; m-čaʔ ‘your o. brother’; m-ń-xmaan ‘your yo. brother’; m-n-kuu ‘your o. sister’; m-laaw ‘your o. sister’s child’; m-paan ‘your yo. sister’; m-xumay ‘your son’ (male parent); m-sʔaaw=kʷ-umiiy ‘your son’ (female parent; cf. sʔaaw ‘give birth’); m-pčiy ‘your daughter (male parent)’; m-sʔaaw=kʷ-kuu ‘your daughter’ (female parent); m-čʔwa ‘your wife’; m-kus=waʔ ‘your husband’; m-kus=hʔكني ‘your wife’s father’; m-kʷan=hʔكني ‘your wife’s mother’; m-kʰay ‘your husband’s father’; m-hʔكني ‘your husband’s mother’; m-ń-kiʔ ‘your wife’s sibling(s)’; m-syalyalpuʔ ‘your husband’s siblings’; m-hʰay ‘your son’s wife’; m-ʔكني ‘woman’s son’s wife’; m-ńam-ʔ問い=kʷ-tay ‘your peer generation’ (lit. your litter).

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37 These are relevant to Kiliwa religious concepts (Mixco 1994a).
Traditional Kiliwa culture was fraught with beliefs and practices relating to death, e.g. funerals, commemorative rituals, seances and mourning taboos. An example of the latter is the prohibition of uttering the name of the deceased; yet, perhaps influenced by Hispanic culture, there are euphemisms such as, ‘your late mother’ would be, \( m\-n\?uu=\?a\-a\-s-m \?k\=\!\!it \) (2-mother=SA\:PASS-IRR-DS OPTATIVE) ‘your late mother’ (lit. (s)he could/would/should be called your mother’ (Meigs 1970, 1974b; Mixco 1983, 1985,1994a; Michelsen & Owen 1967; see, Modals; Passives).38

2.13. Numerals

Numerals 1-4 are: \( msir, xwaq, xmi\=\!\!q, mnaq. \) From 5 on, counting is on fingers and toes. Note that the root for ‘hand/arm’ is \( sal; \) ‘finger’ is \( sal=\!\!c\=\!\!pa? \) (hand= projection).39 These combine in, five: \( sal=\!\!c\=\!\!pam. \) From 5 to 10, fingers lean to add 1: \( sal=\!\!c\=\!\!pam=msir-hi\=-l=\!\!h-paa-y-p \) (hand=finger(s)=one-DEF-IL=4-lean-ATT-PASS) ‘six’ (lit. ‘5 + 1 leans’), similarly, to add 2 and 3 for 7 and 8, respectively. 9 is an exception, \( msir\-t-q=mat \) (1-FRQ-AL=not); i.e., ‘1 lacking (to 10)’.

10 is \( \!\!c\=\!\!pam=msir \) (fingers=one) meaning, ‘a full count’. From 10-19, one counts toes: \( \!\!c\=\!\!pam=msir\-t-hi\=-l=mat=\!\!haa \) ‘11’ (lit. ’10 +1 goes there on the ground’). 20 is \( \!\!c\=\!\!pam=xwaq \) (i.e., ‘2 X 10’). The numbers between the decades are added on the pattern found from 11 -20, e.g. 21= \( \!\!c\=\!\!pam=xwaq=msir\-t-hi\=-l=mat=\!\!haa \) (10=2=1-SBJ-DEF-IL=earth=go) ‘two tens plus one goes on the ground’.

‘100’ is \( \!\!c\=\!\!pam=msir=u\?kun=yuu\-hi=t=\!\!c\=\!\!pam=msir \) fingers=one=ITR=BE-DEF-SBJ=SS=fingers=one (lit. ‘10 X 10’);

‘200’ \( \!\!c\=\!\!pam=msir=u\?kun=yuu\-hi=t=\!\!c\=\!\!pam=xwaq \) (lit. ‘10 X 20’; see, Iterative, Indefinite Demonstratives; Mixco 1985, 1994b).

2.14. Morphological possession

Morphological possession can be morphological or periphrastic, inalienable or alienable.

Inalienable Possessor is prefixed directly onto a root: 1\sup{st} (\? -) and 2\sup{nd} -person (m-); 3\sup{rd} is (\0-), or 4th (h-): \( m\-yuw \) (2-eye(s)) ‘your (sg) eye(s)’, \( pa\-m\-yuw \) (PL-2-eye(s)) ‘your (pl) eye(s)’; \( m\-s\?uu \) (2-father) ‘your (pl) father’; \( pa\-m\-s\?uu\-\!\!caw \) (PL-2-father-PL) ‘your (pl) fathers (pl)’. A possessor is a patient with object agreement: ‘your (pl) father’ is: ‘father to you (pl)’; ‘your (pl) eye(s)’ is: ‘eye(s) to you (pl)’.

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38 The corpse was cremated along with incineration of property, including house sites abandoned after burning. Non-combustibles were broken or otherwise destroyed.

39 \textit{Cf.} Proto-Yuman, *\( \!\!c\=\!\!paa \) ‘exit’; \textit{cf.} Kiliwa \( paa \) ‘leave’.

Periphrastic Possession may take aux2 say with optional attributive suffix (att) and an optional proclitic pronoun, wiivy=(pa-maʔ-p)=m-ñ-ʔii-(y) (mountain=(OBJ:PL-2:PRON-NOM)=2-POSS-SAY-(ATT)) ‘the mountain belongs to you (pl)/you (pl) own the mountain: your mountain’.40


Periphrastic Alienable Possessives with shape-gender agreement involve three transitive placement auxiliary verbs reflecting the shape/position gender of the possessed theme/patient; the possessor is an agent subject. Possessed plurals take verb agreement with a possessed noun or theme shape gender:

- ġʔi/i-t-u ‘to stand long/vertical object(s) (sg/pl)’, paʔ/pa-t-u ‘to place round object(s) (sg/pl)’, haʔ/ha-t-u ‘to lay long non-vertical object(s) (sg/pl)’, nay=čruuw=m-haʔ (small=clothing=2-set: LNG) ‘your knife’ (lit. ‘knife you lay down’);
- nay=čruuw=m-haʔ (small=clothing=2-set: LNG:PL-PL-PL) ‘your knives’ (lit. ‘knives you lay down’);


### 2.15. Phonology

Vowels: There are three vowel qualities, Short and Long: /i(i), u(u), a(a)/. The Short vowels, /u, i/ exhibit distinct phonetic realizations besides [u, i]. In closed syllables, stressed /u/ is [i]; puup [píp] ‘puckered’ (sg; cf. puup [ póòp] ‘puckered (pl)’); h-uy-u [hiyu] ‘they do’ (cf. h-uyuʔ2 [hóòy] ‘do (sg)’); kʷ-ku-t-u [kɔkìtu] ‘women’ (cf. kʷ-kuuʔ2 [kóò] ‘woman (sg)’); k-wl-čʔuun (kulčʔóòn) ‘push (pl)!’. Similarly, the plural-subject suffix, /-u/ loses rounding as [i] after root-final, voiced labials /w, m/: saw-u(2) ‘to see’

40 POSSESSIVE AUX2 SAY lacks oral/aural content here i.
[sáwi], čaam-u(2) ‘to leave sth.’; [čáami]. Yet, stressed /i/ and /u(/u)/ are [u] before /w/: čiw [čuw] ‘to smoke (sg); yuu=wʔn [yuwʔn].

Long High Vowels /ii, uu/, always stressed and lowered, to [ee, oo]: čiiw- [čéèwi] ‘to smoke (pl)’; puup(2) [pòòp] ‘puckered (pl)’; k-wl-čʔuun(2) [kulčʔóon] ‘push (pl)’.

Stress and Pitch Accent: Word stress is usually penultimate. All stressed long, root vowels bear one of three heights of Pitch Accent (with a minimal grammatical role), symbolized by a number (as above): high level (1), high falling (2) and low level (3); e.g. ʔsaa(1) [ʔǝsáá] ‘yucca cactus fruit’ ʔsaa(2) [ʔǝsáà] ‘juniper’ ʔsee(3) [ʔǝsèè] ‘vulture, buzzard’.

Consonants: /ptckkʷqšxʷhʷmnñrlw/. Aside from permissible, root-initial clusters, most are variably broken up by epenthetic schwa, [ǝ] (which usually assimilates vowel quality in contiguous syllables). Non-root initial, intervocalic, voiceless stops /p t k kʷ/ are optionally lenited, voiced fricatives, [βðɤɤʷ]: tpkʷis [tβɛkʷis ~ tβɛkʷis ~ tβɛkʷis] ‘wasp’; x-papu [xəpápu ~ xəpáβu ~ xpáβu] ‘to sew’; mukaa [múɤaa] ‘let’s go!’; ptlwat [pɛlwát ~ pɛlwát] ‘to return (sg)’. Note that [ɤ] represents either /k/ or /r/.

Optional aspiration of non-initial prefix, /ʔ-/ yields [ʔʰ]; a voiced consonant optionally devoices after [ʔʰ]: ʔ-ʔ-yaaw(2) [nəʔyáaw] ‘someone’s tooth’; ʔ-ʔ-yuw [nəʔyuw] ‘someone’s eye, an eye’; ʔ-ʔ-miy [nəʔmiy] ‘someone’s foot/leg, a leg’.

Glottal /h/ assimilates secondary rounding and palatalization from contiguous, /u/ or /i/, respectively: m-p-iʔ-hiw [mapiʔıyaw] ~ [mapiʔYuw] ‘you (sg) fly’; ʔ-p-ihaa(3) [ʔəbiháà] ‘I bring (it)’. Palatalization precedes vowel rounding and optional sonorant devoicing: ʔ-t-uhaa(2) [ʔətuwάà] ~ [ʔətuWάà] ‘we arrive’. Note /h/ labialization after /u/ with subsequent optional devoicing of the sonorant labial component of /hʰ/ yielding [W] (see, Mixco 1977c).
References


