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).[1] 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).

(Aschmann 1959; Meigs 1935, 1939, 1970, 1974b; Mixco 2006; Zamponi 2004). 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.

The Pa'ipai (Pai-branch), long-settled emigrants at Santa Catarina, outnumber native Kiliwa and KʷʔaLʸ-Diegueño. The three languages and Spanish are spoken; yet, only Kiliwas speak a sister language. Due to more time in Baja than other Yumans, only the Kiliwa shared Cochimí cultural traits (Hinton & Owen 1957; Hinton & Watahomigie 1984; Langdon 1977, 1990; Meigs 1970, 1974; Miller 2001; Mixco 1977a, 1977b, 1977d, 1978, 1983, 1984b, 1991, 1994a, 2006).[2]

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).[3] 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=yu-ʔ-uʔ=h-ʔ-čhiʔ-uʔ 'burnt abandoned house'; Sp. *fraile* > folk etymology, *ʔ-ipaa=ʔiy=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-umiiy-mi-t*   ***(kʷat)***   *ʔ-that-paa-m h-qhaa*   ***mat***
     WH-male-this-SBJ   **(NEG)**   DN-dog-that-OBJ 4-shoot   **not**
     'this man **didn't** shoot that dog'

(2)   ***(mi-t)***   *mltiʔ-čaw-m*   *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***   *waʔ=čruuw-t*   ***(kʷat)***   ***waa mat***
     house=4-many-DEF-**IL**   house=clothes-SBJ   **(NEG)**   **SIT**   **not**
     'there's **no** store **in** town'

(4)   *mi-**l***   *myal-si-t*   ***yaq***
     this-**IL**   tortilla-INDF-SBJ   **LIE**
     'there's a tortilla **here**'

(5)   *xskaa-hi-**l***   *xpiip-t*   ***yuw***   ***mat-uʔ***
     pot-DEF-**IL**   beans-SBJ   **STAND:PL**   **not**-Q
     'are**n'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 (*waa* SIT:ACT (sg)/*wa-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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4   Third-person subject, zero /Ø-/ is mostly omitted here. Abbreviations: AL: allative; ATT: attributive adjective; BEN: benefactive/malefactive; CAUS: causative; COM: comitative; COMP: complementizer; CNJ: conjunction; DEF: definite; DEC: declarative; DIM: diminutive; DIST: distal; DN: dummy noun; DS: different subject; DSJ: disjunction; EMPH: emphatic; EVID: evidential; FRQ: frequentative; IF: IF/WHEN; conditional/counterfactual; IL: illative; IMP: imperative; INDF: indefinite; IRR: irealis; ITR: iterative; LNG: long:gender; NEG: negative; OBJ: object; PASS: passive; PL: plural; =POSS: modal, possible; POSS-: possessive; PRED: predicative; PRES: presentational; REL: non-subject relativizer; RND: round:gender; SS: same subject; SBJ: subject; WH: subject relativizer; /=/ compound & clitic bond; /-/ morpheme bond; ( ) optional.

5   AUX1 SPEAK with verbs for vocal, tactile, visual and mental events or conditions; hence, experiential.

(6)   *(pa-ña?-p-t)*   *?-maa-t-t*   *?-yuw-t*   *(?-?ñii-t-p)*
        (**PL-1:PRON-NOM-SBJ**)   **1**-eat-**PL**-SS   **1**-STAND:**PL**-SS   (**1**-DO-**PL**-DEC)
        '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*   *(?-?ii-t*   *?i-?)*   *mat*[6]
        (**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), *?ñii/uuy* DO (active), *?ii* 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-?ii-p)*
        2-UNSP-voice-ATT-PASS-SS   2-**SPEAK**-SS   (2-**SAY**-DEC)
        'you're (sg) talking'

(11)   *?-saaw-t*   *?-i-waa-t*   *(?-yuu-p)*
        1-see-SS   1-**PRED-SIT:STAT**-SS   (1-**BE**-DEC)
        'I'm looking'

(12)   *m-ti?čhat-t*   *m-waa-t*   *(m-?ñii-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-?ii-p*
        2-UNSP-voice-ATT-PASS-SS   **2-SAY-DEC**
        'you (sg) (**have**) **talked**'

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6 Suffix, */-?/* 'irrealis' (IRR) + long-vowel shortening with predicate, *mat* 'not' or interrogative suffix, */-u?/* (Q), *et al.*

7 Aux2 is *?ñii* DO; main verb, *uuy* 'do, make,' an emergent AUX2. AUX2 *yuu* BE, *?ii* SAY also occur as main verbs; absent AUX1 they are perfectives.

(16)   *m-tiʔčhat-t*   *m-ʔñii-p*
      2-work-SS   **2-DO-DEC**
      '**you** (sg) (**have**) work**ed**'

Plural Progressive + AUX1 + (AUX2):

(17)   *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)   *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)   *m-p-haʔ-y-p-t*   *m-kʷa-t-u-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)   *m-tiʔčhat-čaw-t*   *m-yuw-t*   *(m-ʔñii-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)   *m-tiʔčhat-t*   *m-ʔñii-p*
      2-work-SS   2-DO-**DEC**
      'you've worked'

(22)   *m-tiʔčhat-t*   *m-ʔñi-ʔ*   *mat-uʔ*
      2-work-SS   2-DO-IRR   not-**Q**
      'haven't you worked?'

(23)   *m-tiʔčhat-t*   *m-ʔñi-ʔ-aʔ*
      2-work-SS   2-DO-IRR-**Q:YES**
      'you have worked, right?'

Epistemic and Deontic Modals: */-khaʔ/* 'emphatic', */=(uʔ)=maʔ/* 'mild emphatic', and /-mit/ 'surmisal evidential' (EVID) in perfective sentences:

(24)   *m-tiʔčhat-t*   *m-ʔñii-p*
      2-work-SS   2-DO-**DEC**
      'you've (sg) worked'

(25)   *m-tiʔčhat-t* *m-ʔñii-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-**khaʔ***
      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*   *ʔaa-t*
      rattle=2-set:RND-OBJ   2-UNSP-grasp:PASS-IRR   SAY:PASS-SS

      *ʔaa-**p=maʔ***
      SAY:PASS-**DEC=EMPH**
      'your rattle! they say you **are to** bring it!'[8]

(30) *paa-m-h-uuy-m*   *m-maa-tay-m*   *ʔñi-ʔ=**uʔ**=**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-q-m-saaw*   *maat*   *m-yu-ʔ=**uʔ**=**maʔ***
      DN-AL-2-see   SELF   2-BE-**IRR=EMPH**
      '**Indeed,** you must have looked at it yourself?'

(32) *ñ-ʔap-l*   *p-khʷap-m-s-t*   *yu-ʔ=**uʔ**=**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

Durative and Anterior Aspects */xay/* 'still; early; now', is free (adverb) or bound: */khʷil=xay/* (already-early) 'in the past; formerly', *xay=h-uʔ-waa-m* (early 3-CAUS-sit-AWAY) 'first' (lit. set down early; (*cf. ʔ-q-p-lax-p* (DN-AL-UNSP-adhere-PASS) 'second; lit. stuck onto/adhering; see, Prefixes):[9]

(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-l-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-uuy-m,*   *ʔ-maa-**tay***   *ʔ-ʔñii-p=maʔ*
        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-kʷiil-**tay**-uʔ*
        INST-twist-**FRQ**-REL
        'colander'

Inceptive Aspect /-*sip*/:

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

(39)   *ʔ-ñaay*   *kʷ-khʷap-**sip**-t*
        DN-sun   PRF-enter:SG-**ALMOST**-SBJ
        'the sun has **almost** set/ is **about to** set'

(40)   *xaʔlaʔ*   *kʷ-msir-**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*   *p-lax=**uʔkun***   ***h-uuy*** *mnaq*
        mouth=water   UNSP-adhere=**ITR**   **4-DO**   four
        'he spat repeatedly, four (times)'

(42)   *k-p-t-ʔaa=m=**uʔkun***   ***k-uy-u***
        2:IMP-UNSP-PL-go:about=**ITR**   **2:IMP-DO-PL**
        '**stay** with him wherever he goes!'

(43)   *x-kʷii-y-p=**uʔkun***   ***ʔii*-**t   ***h-kʷa***
        CAUS-hear-ATT-PASS=**ITR**   **SAY-**SS   **4-SPEAK**[10]
        'he asked **repeatedly/he kept** asking'

Stative AUX2 'SAY' exhibits descriptive/onomatopoetic reduplication: *ʔar=ʔar ʔii* 'mushy heap'; *ʔuwn=ʔuwn ʔii* 'spherical; rounded'; *phayi=phayi ʔii* 'spongey; corky'; *riiy-p=riiy-p ʔii* 'exhausted; fatigued'; *niʔ=niʔ ʔii* 'nod (head)'; *qan=qan ʔii* 'shake (head)'; *wa=wa ʔii* 'bark'; *čis=čis ʔii* 'chirp'; *ʔaaq=ʔaaq ʔii* 'bleat' (Langdon 1977).

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[10] 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'; *xʔiis 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, */-s ʔii* AUX2/ 'about to, want to', with Irrealis Complementizer, */-s/* '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*
        rattle=2-set:RND-OBJ   2-UNSP-grasp:PASS-**IRR**   **SAY:PASS**-SS

        ʔaa-p=maʔ
        SAY:PASS-DEC=EMPH
        'they say **for** you **to** take your rattle!'[12]

(48)   *ñ-ʔa-ʔ-uʔ*   *ʔ-yiw-t*   *ʔ-ʔñii-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'

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[11] Note **/s-/** may be noun/verb irrealis prefix: *s-nay* (IRR-child) 'boy'; *n-s-kuu* (DIM-IRR-female) 'girl'; *s-pi-t-u* (IRR-die-PL-PL) 'mortals (*cf. pi* 'to die'); *s-maa* (IRR-sleep) 'sleep'; *s-ma(a)-y* (IRR-NEG-ATT) 'lose'; *s-paa* (IRR-leave) 'extinguish'; *s-puuw* (IRR-able) 'know'; *s-ʔaa-w* (IRR-be:about-DIR) 'give birth'.

[12] Passive roots, *yaw* and *ʔaa* may reflect personal possession, akin to inalienability and reflexivity; note possibly related prefix, */p-/* UNSP (see, Periphrastic Possession).

Future Certainty /-s-t yuu/:[13]

(51) (*ʔ-kʷiy*) *h-uhaa-k-m* *tiiyt* *h-uuy-s-t* **yuu**
(DN-cloud) 3-arrive-HITHER-DS little 3-DO-**IRR-SBJ** **BE**
'it **will** rain a little this way'

(52) *paa* *kʷ-umiiy-s-t* **yuu**
that WH-male-**IRR-SBJ** **BE**
'he **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 ʔii/ is to /-s ʔii/ (n.b., */-s-t ʔii/). 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* *ʔ-aa yuu=wn* *ñ-ñuu-t-s-m* **yuu-t**
this-COM-1-BE-SS 1-go:about BE=IF 3:1-kill:SG-PL-**IRR-DS** **BE**-SS
'if I go on like this, they **may** kill me!'

/-s-m ʔii/ differs from its BE analog, given its experiential content (*cf.* /-s ʔii/ 'SAY') as in desideratives and inceptive/inchoatives:

(55) *ʔ-maa-s-m* **ʔii**
1-eat-IRR-DS **SAY**
'I **feel like** eating; I **intend** to eat; I **want to** eat'

(56) *paa* *m-kʷii-s-m* **ʔii**
that 2-hear-**IRR-DS** **SAY**
'that's what you **want to** hear'

Optatives*: /-s-m ʔkʷiit/ ~ /-s ʔkʷiit/.* Both occur in mourning euphemisms, e.g. who (in life) would be. X.' (see, Kinship Terms):[14]

(57) *kus=waʔ=ʔaa-s* **ʔkʷiit**
old:man=house=**SAY:PASS-IRR** **OUGHT**
'deceased husband'

(58) *ñ-xmaan=ʔaa-s* **ʔkʷiit**
POSS-yo.bro.=**SAY:PASS-IRR** **OUGHT**
'deceased yo. brother'

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[13] In pre-Kiliwa, root-initial **y* is absorbed by preeding palatal; i.e., **yuu* > /uu/___**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, *ʔkʷiit* 'type, sort'; e.g. *ʔ-wiiy=k-wʔn-ʔkʷiit* '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-haa m-saw-s*   **ʔkʷiit**   *m-yu-ʔ=uʔ=maʔ*
        2-go   2-see-**IRR**   **OUGHT**   2-BE=IRR=MOD
        'you might/**should/ought** to just go take a look'

(60)   *x-qhaw=ʔaa-s-m*   **ʔkʷiit**
        CAUS-break=**SAY:PASS-IRR-DS**   **OUGHT**
        'it **shall/must** snap, sunder'

(61)   *h-iʔ-pat=ʔaa-s-m*   **ʔkʷiit**
        4-DIST-exit=**SAY:PASS-IRR-DS**   **OUGHT**
        'it **shall/must** be fished out'

(62)   *ñaʔ-m*   *Ø-wii=ʔaa-s-m*   **ʔkʷiit**   *h-ʔip*
        1:PRON-OBJ   3-give=**SAY:PASS-IRR-DS**   **OUGHT**   4-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, Presentationals):

(63)   *Juan Ø-p-uhaa=kun*   *yuu*   *ʔ-ʔip   mat*
        Juan   3-UNSP-arrive=**POSS**   **BE**   1-think 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, Presentationals; Purpose Clause; Mixco 1996, 2000):[15]

(64)   *m-maa-k*   *ʔ-ʔip*
        2-eat-**IRR**   1-think
        'I want you to eat/think you should'

(65)   *ʔ-ñuu-k*   *kʷ-ʔiip-t*   *m-yuu*
        1-kill:SG-**IRR**   WH-think:PL-SS   2-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).

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15 Desiderative /-k/ 'irrealis' < Proto-Yuman -**k* 'same-subject; hither,' replaced in Calif.-Delta by, -*č*- < -**č* 'subject'; Kiliwa, -**č* > -*t* 'subject; same-subject; plural'.

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) *kʷ-h-ñuu*   **_ʔñi=m=yuu-t_**   *nay=kʷ-waa*   *t-p-yaw*
     PRF-4-kill   **DO=DS=BE-SS**   child=WH-sit   UNSP:OBJ-UNSP-grasp:PASS

     p-lwat   *h-uy-u…*
     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 *ʔñii* DO for active verb, 'kill', (n.b., perfective prefix /kʷ-/); /-m/ 'DS' marks subject change in clause-2: 'they' > 'child'. Clause-2 AUX2 *yuu* BE denotes active > stative verb change in clause-2; both clauses are perfective:

(67) *ʔ-ipaa-m*   *pa-mat=h-uuy*   **_yu=m=yuu-t_**
     DN-people-OBJ   OBJ:PL-not=4-do   **BE=DS=BE-SS**

     tkʷhiiyp=kʷ-kuu=kʷ-waa-si-t   *waa*
     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 *yuu* BE for stative 'wiped out'*;* in clause-2 for the stative existence of the witch. Intervening suffix /-m/ 'DS', marks subject change in clause-2:

(68) *p-uʔ-yaq-y*   *paa-m-h-uy-u*   **_ʔñii=t=m=yuu-t_**   *ʔsul-m*   *ʔii=t=_**yuu-t**_*
     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 *ʔñii-t* DO*,* followed by, /-m/ 'DS' for subject change: crowd > child. The suddeness of slipping out takes momentaneous aspectual, *ʔii-m* SAY*,* followed by, *yuu* BE for the stative result of having slipped out; followed in turn by, *yuu* 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 monoclausal; Again is biclausal: clause-1 main verb has prefix, /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** ==> *SBJx*-***p***-**VERBx**-*SS SBJx*-**AUX2x**-***i?***

(69)   *m-**p**-x-qhaw-t*   ***m-?ñi-?-i?***
         2-**UNSP**-CAUS-cut-SS   **2-DO-IRR-RES**
         'you (sg) cut it **again'**

(70)   *m-**p**-?ñii-t*   *m-ma-**?**-**i?***
         2-**UNSP-DO**-SS   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-?ñii-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** => *SBJx*-***p***-**VERBx**-*SS SBJy*-**VERBx**-***i?*** => $\emptyset$ **SBJy-VERBx-*i?***

(71) $\emptyset$ *m-x-qhaw-**i?***
         $\emptyset$ 2-**UNSP**-cut-**RES**
         'you (sg) cut it **too'**

(72) $\emptyset$ *m-ma-?-**i?***
         $\emptyset$ 2-eat-IRR-**RES**
         'you eat/ate **too**'

Conjunction/Disjunction: /=*w?n*/ 'but/though' (< **wi?=win*) cliticizes onto a verb or AUX2 BE. Recall clitic, /=*k=w?n*/ 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-čhii paa-m-**yuu**=**w?n***   *m-maa mat*
         2-drink that-COM-**BE=CNJ**   2-eat not
         'you drink **but** you don't eat.'[17]

(74)   *?-paa-s-t*   *yuu*   *(?kʷiy)=h-uhaa-k*   *h-waa-hi=**w?n***
         1-leave-IRR-SS   BE   (cloud)=4-arrive-HITHER   4-SIT-DEF=**DSJ**
         'I'll leave **though** it's raining.'

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[16] A AUX2 clause-fronting is usual in interrogatives like the Manner question: *p-m-uuy-t m-ma-?-**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*   *h-waa* **yuu=wʔn** *ʔ-paa-s-t*   *yuu*
        (cloud)=4-arrive-HITHER   4-SIT   **BE=CNJ**   1-leave-IRR-SBJ   BE
        'it's raining **but** I'll leave (anyway)'

(76)   *t-h-paʔ-s-t*   *yu-ʔ*   *mat*   *paa-m-**yuu=wʔn***
        OBJ-4-place:RND-IRR-SBJ   BE-IRR   not   that-COM-**BE=CNJ**

        ñaʔ-p-t   *1-paʔ-s-t*   *yuu*
        1:PRON-NOM-SBJ   1-place:RND-IRR-SBJ   BE
        '(he) isn't going to plant (anything) **but** I'll plant'

In conjoined, non-clausal*,* NPs, clitic, *=wʔn* means 'or' (disjunctive): *ʔthat yuu=wʔn nmiʔ* (dog BE=DSJ cat) 'dog or cat'; *kʷ-ñiir yuu=wʔn ʔmsap* (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 ~=wn/* (*cf.* modal, *=kun,* < fossilized, **-k=win*). AUX2 may take subject-agreement (see, Modals, Presentationals; Mixco 1997c):

(77)   *m-paa-s*   *ʔii-t*   **m-yuu=win** *k-iʔ-kʷir-p*
        2-leave-IRR   SAY-SS   **2-BE=IF**   2:IMP-DIST-exert-PASS
        '**If** you're about to leave, hurry up!"

(78)   *(ʔkʷiy)=h-uhaa-k*   *h-waa* **Ø-yuu=wn** *ʔ-paa mat*
        (cloud)=4-arrive-HITHER   4-SIT   **3-BE=IF**   1-leave not
        '**If** it's raining, I'm not leaving'

(79)   *ʔ-saaw-t*   **ʔ-yuu=wn** *nay=čruuw-m*   *ʔ-p-x-kʷaaw-s-t yuu*
        1-see-SS   **1-BE=IF**   small=clothes-OBJ   1-UNSP-CAUS-yell-IRR-SS 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)   ***[ʔ-kʷit-m***   ***p-m-uuy]***   *m-spuuw-uʔ*
        [DN-what-OBJ   **UNSP-2-do]**   2-know-Q
        'What do you know (how) to do?'

(81)   ***[ʔ-kʷit=k=wʔn***   ***ʔ-uuy]*** *ʔ-spuuw   mat*
        [DN-something=IRR=CNJ   **1-do]**   1-know   not
        'I don't know how to do anything'

(82)   *ʔ-uñiiy* ***[mi-q***   ***m-ʔuuwm]****=k* *ʔii   ʔ-ʔip*
        1-want   **[this-AL**   **2-stay]**=IRR   SAY   1-think
        'I want you to stay here'

(83)   *ñ-saaw-t*   *ʔ-yuu-p*   *[m-msir-t   m-maa-t   m-waa]-hi-m*
         1:2-see-SS   1-BE-DEC   **[2-one-SS   2-eat-SS   2-SIT]**-DEF-OBJ
         'I saw (that) you (were) eating alone'

(84)   *[Juan   Ø-p-uhaa=kun   yuu]   ʔ-ʔip   mat*
         [Juan   3-UNSP-arrive=POSS   BE]   1-think   not
         'I don't think/I doubt that Juan might be coming'[18]

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]

(85)   *[ñaa   msiʔ]-t   Ø-yuu-p*
         [that:FAR   star]-SBJ   3-BE-DEC
         'That (far) is a star'

(86)   *[ñaa-čaw   msiʔ-čaw]-t   Ø-yuu-p*
         [that:FAR-PL   star-PL]-SBJ   3-BE-DEC
         'Those (far) are stars'

(87)   *[ʔkʷit   paa]   Ø-yuu-Ø*
         [what   that]   3-BE-Q)
         'What's that?'

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):

(88)   *[xpiʔ   xskaa   m-p-pux]-k=wiʔ-p-t   yuu-mit*
         [metate   pot   2-UNSP-shatter]-**IRR=PRES-NOM-SBJ   BE-EVID**
         'it's **as if** you'd shattered your metates and your pots'

(89)   *[kʷ-kuu   kʷ-liiw]-s-k=wiʔ-p-t   yuu*
         [WH-female   WH-Kiliwa]-IRR-IRR=PRES-NOM-SBJ   BE
         'the woman will be (a) Kiliwa'[20]

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

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[18] In the above, fronting of a VP to a pre-object position may be emphatic or may simply echo the Spanish target sentence in translation.

[19] Munro 1976 discusses the deceptive nature of Yuman subject complements. E.g. Mohave suffix, */-p/* (NOM) seen in PRESENTATIONALS below, marks the clause as an NP (see, Personal Pronouns). The penultimate example here is a question with zero /-Ø/ illocutionary suffix. Third-person zero's overt gloss maintains clarity.

[20] */-p/* NOM also occurs on personal pronouns. Many Yuman languages still take the suffix in subject complements (see, footnote 21; Munro 1976). N.b. Mixco 1983, 1997c, etc. have a flawed analysis, **/-s-kʷ-ʔip-t/* for */-s-k=wiʔ-p-t/*.

'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)   *ʔ-ipaa=wiʔ-t*   *(yuu)* *ñ-wii-m*   *ʔñii-p*   *ʔii*
       DN-person=**PRES-SBJ**   (**BE**) 3:1-give-DS   DO-DEC   say
       '"it was that man; he gave it to me," he said'

(91)   *kʷ-spiʔl=paa=t=t-ʔñii-t-uʔ=wiʔ-t*   *(yuu);*
       WH-all=that=PL=UNSP:OBJ-DO-PL-REL=**PRES-SBJ**   (**BE**)

       paa=t=t-yuu-t-uʔ=wiʔ-t   *(yuu)*
       that=PL=UNSP:OBJ-BE-PL-REL=**PRES-SBJ**   (**BE**)
       'that's what they all did; that's how they lived'

(92)   *kʷ-kuu*   *kʷ-liiw=wiʔ-t*
       WH-female   WH-Kiliwa=**PRES-SBJ**
       'the woman is (a) Kiliwa'

(93)   *p-m-ʔii*   *p-m-yuu=wiʔ-t*   *(yuu)*
       UNSP-2-SAY   UNSP-2-BE=**PRES-SBJ**   (**BE**)
       'what are you saying? how are you behaving?'

(94)   *kʷat=win*   *ʔaa=m=win-q*   *h-wat-m*   *ʔ-ʔii-t*   *mat*
       NEG=**PRES**   be:about=AWAY=**PRES-**AL   4-edge-DS   1-say-PL   not
       'we speak incompletey'[21]

(95)   *paa=win-t*   *yuu*
       that=**PRES-**SBJ   BE
       'that's what it is'

(96)   *ʔapu=win*   *m-uñiiy-uʔ*
       which=**PRES**   2-want-Q
       'which one is it you want?'

(97)   *xmir*   *mi*   *paa=win-t*   *xyil-m*   *paa=win-iʔ*
       Xmir   this   that=**PRES-**SBJ   Xyil-OBJ   that=**PRES-**RES
       'this Xmir, that's one; Xyil that's one too'[22]

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[21] lit. 'we're not speaking up to it/not reaching it as we talk'
[22] Xmir and Xyil, are canyons in the Sierra San Pedro Mártir; one flows East, the other West (Mixco 1983).

(98)   *paa ʔ-l-kʷ-t-č-haʔ-y-tay=maatq;*
       that DN-IL-WH-UNSP:OBJ-INSTR-voice-ATT-FRQ=only;

       *ñaʔ-p=**win**-iʔ*
       I:PRON-NOM=**PRES**-RES
       'they're real singers! I am one too!'

(99)   *ʔ-ipaa=**win***   *p-yu-ʔ-uʔ*   *ʔap-q*   *waa-uʔ*   *ʔii-t*
       DN-person=**PRES**   UNSP-BE-IRR-Q   where-AL   sit-Q   say-PL
       'they say, "it's that man; where is he?"'

(100) *maʔ-p-t*   *m-spuuw*   *ʔ-m-ʔaa=**win***   *kʷ-umiiy-t*
       2:PRON-NOM-SBJ   2-know   DN-COM-go:about=**PRES**   WH-male-SBJ

       p-haʔ-y-p-uʔ
       UNSP-voice-ATT-PASS-Q
       'he said, "do you know who it was the man told?"'

Synchronically, *wiʔ* and *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,
Verb=*(ʔ)=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:

> **...**CLAUSE-1 **AUX2=SR=AUX2** CLAUSE-2...
> **...**CLAUSE-1 ***wiʔ=k=win*** CLAUSE-2...

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) ...**S1 VERBx + S2 VERBx +S3 VERBx + ... Sn VERBx**
> 2) ...*CLAUSE-1 ***AUX2a-SS**=CLAUSE-2...* ***AUX2a** ==>*
> 3) ...*CLAUSE-1 ***AUX2a-SS**=*AUX2a** CLAUSE-2...==>*
> 4) ...*CLAUSE-1 ***wiʔ=k=win** CLAUSE-2...* ==>*
> 5) ... *CLAUSE-1 ***wʔ=k=wn** CLAUSE-2...* ==>*
> 6) ...*CLAUSE-1=***wʔ-kwn** CLAUSE-2...* ==>*
> 7) ...*CLAUSE-1=***uʔkun** CLAUSE-2...*
> 8) ...*CLAUSE-1=***uʔkun** AUX2 CLAUSE-2...*

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

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[23] *AUX2a here, represents archaic existentials, **wiʔ* and **win* < **wi* 'exist'

(101) *ʔipaʔ=san x-msir   x-msir   x-msir...*
       wood=litter CAUS-one   CAUS-one   CAUS-one ...)
       'he gathered kindling, and gathered and gathered, etc.'

(102) *kʷ-kuu-t   p-yii   p-yii   p-yii ...*
       WH-female UNSP-come   UNSP-come   UNSP-come
       'the woman came and came and came...'

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 *(*wiʔ)* 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, *wiʔ and/or *win. Their individual developments can be summarized as follows: *-wʔn* 'but; though; or' (CONJ/DISJ) < *wiʔ=win; *-wn* 'if/when' (COND) < *win; *=kun yuu* 'maybe; possibly' < *-*k=win yuu; =s-k=wiʔ -p-t* < *=s-k=wiʔ-p-t* 'Irrealis subject complement' (Mixco 1997c).

2.7. Relative Clauses

Relative Clauses distinguish subject- from non-subject relativization, the former with a verbal prefix, /kʷ-/ WH, the latter with a suffix, /-uʔ/ REL. In the preceding section, the phrase, 'female witch who sat (there)', provides two examples of, /kʷ-/ WH: *kʷ-kuu* (WH-female) 'woman', *kʷ-umiiy* (WH-male) 'man', respectively. Many noun compounds exhibit nominalized members: *ʔ-waʔ=kʷ-siʔhin* (DN-house=WH-run) 'automobile' (lit. 'house that runs'); *ʔwaʔ=kʷ-iʔ-hiw* (house=WH-CAUS-fly) 'airplane' (lit. 'house that flies'); *ʔwaʔ=kʷ-lkʷii-y-tay* (house=WH-back:carry-ATT-FRQ) 'train' (lit. 'house that habitually back: carries'); *xʷa=ʔiy=kʷ-kuus* (enemy=head:hair=WH-long:PL) 'Cocopa' (lit. 'long haired enemy'; see, Noun Compounds).

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

(103) *miy=m=m-x-khʷaap-**uʔ***
       legs=OBJ=2-CAUS-enter:PL-**REL**)
       'trousers' (lit. 'where you insert legs')

(104) *xtaʔ=h-qhaw=tuw=tuw=h-ʔ-h-u-ʔ-**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-ñiw=h-ma-ʔ-uʔ-l*   *hi-l-yuw*
        4-pit:roast=4-eat-IRR-**REL**-IL   INDF-IL-stand:PL
        '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***
        UNSP:OBJ-4-eat
        'food' (lit. '**what** one eats')

(107)   ***t-kʷ=maʔ***
        UNSP:OBJ-WH=edible
        'fruit' (lit. '**what** is ripe')

(108)   ***t-ha-ʔ-uʔ***
        UNSP:OBJ-go-IRR-REL
        '**where** it had gone...'

(109)   *ʔ-ipaa=**t**-ʔña-ʔ-uʔ*   ***t-h-yu-ʔ-uʔ***
        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-ñaʔ-p=**t**-ʔñii-t-uʔ*
        OBJ:PL-1:PRON-NOM=**UNSP:OBJ**-DO-PL-REL)
        '**what** we do/did...'

(111)   ***t-ñ-ʔii=h-maa-t-haa-uʔ-t***
        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)-wit/* 'benefactive' (BEN) is a clitic on a beneficiary NP':[24]

(112)   *ñ-Ø-xkʷaaw-t*   *ʔii-p*   *ʔ-mpuul-si*   ***paa=p-wit***
        3:1-3-ask-SS   SAY-DEC   DN-hat-INDF   **that=UNSP-BEN**

        ñ-ʔa-ʔ-uʔ   *ʔ-yiw-s*   *ʔii*
        POSS-own:PASS-IRR-REL   1-grasp-IRR   SAY
        'he asked me to buy a hat **for him**'

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[24] The **/t/** in the benefactive particle, /-wit/, may derive from a frequentative suffix, /-tay/ (FRQ) in turn deriving from < /tay/ 'big'. Yuman shows, an active and a fossil suffix, /-t/ 'big' from a compound with **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; **wi > wii* 'give', a common benefactive verb universally.

(113)   *p-h-uy-u*   *p-puuw*   *kʷ-mat*   *ʔñii-t*   *mltiʔ-mi*   *Ø=**h-waa=t=h-wit***
        UNSP-4-do-PL   UNSP-able   PRF-not   DO-PL   coyote-this   3=**4-SIT-SS=4-BEN**

        ʔxʷa h-paʔ
        enemy 4-set:RND
        'they can do nothing at all; these coyotes were (then) set **against him**'

(114)   *kʔmthiy-m*   *Ø=**h-wit***   *ʔxʷa*   *h-paʔ-m*   *ʔñii-t*
        snow-OBJ   **3=4-BEN**   enemy   4-set:RND-DS   DO-PL
        'they set the snow **against him'**

2.9. Minor-Clause Adverbials

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

(115)   *pa-maʔ-p-t*   *paa-m*   *2-nil-u-t*   *m-yuw-t-u-t*
        PL-2:PRON-NOM-SBJ   that-OBJ   2-touch-PL-SS   2-STAND:PL-PL-PL-SS

        nay=m-ʔñii-t
        small=2-DO-PL
        'you (pl) are touching it **gently**'

(116)   *paa-t*   *h-mii* ***nay=ʔii-t***
        that-SBJ   4-cry   **small=SAY-SS**
        '(s)he wept **softly'**

(117)   *paa-t*   *Ø-yii* ***msir=yuu-t***
        that-SBJ   3-come   **one=BE-SS**
        '(s)he came **straigh**t ahead'

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

(118)   *paa-čaw-t*   *ʔ-yuu-t-mi=**l***   ***yu-m***
        that-PL-SBJ   1-BE-PL-this=**COMP**   **BE-DS**
        'they **are like** we are here'

(119)   *kʷ-ʔal=mʔap=**l***   *ʔi-m*
        WH-bare=burn=**COMP**   **SAY-DS**
        'it **sounded like** a burning hide'

(120)   *ʔ-m-ʔ-ʔ-sii-y-p=**l***   *ʔi-m*
        DN-COM-1-PASS-shame-ATT-PASS=**COMP**   **SAY-DS**
        '**as if** I **were/was** embarrassed …'

(121)   *x-iʔ-kʷir-p=yuw=**l***   *ʔñi-m*
        CAUS-DIST-spin-PASS=stand=**COMP**   **DO-DS**
        '(s)he **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, /-iʔ/ '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 */ʔ-q-yuw-m/* (DN-COM-stand-AWAY) 'more' (lit. 'stand away from/beyond it'). Note AUX1 and AUX2:

(122) *paa-t ñaʔ=l*   ***yu-m   mat   ʔkus-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=l*   *ʔi-m*   *m-ʔiiltčhaʔy   mraay-iʔ*
         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=l*   *ʔñi-m   mat   kʷ-siʔhin   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***   *ʔ-uy-u   mat ʔ-q-yuw-m*   *ʔ-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-l-ʔ-ʔii-t-m-t*   ***p-yaa-m***   *ʔ-ʔii-ʔ-iʔ*
         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:

DEM-CASE-PL:OBJ-PRF-OBJ-SBJ-UNSP-CAUS-PL-<DIM>-<PASS>-ROOT-ATT-PASS-PL-
ASPECT-SR/ILLOCUTION[25]

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-

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[25] Angle brackets mark infixes, <-ʔ-> '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'; *čxpaa(2)* 'to straddle' and *čxuʔpaa(2)* 'to hurdle', etc. (Mixco 2000).

Some verbs roots are suppletive for patient/theme number agreement: *ñuu* 'kill' (sg); *tčaw* 'kill' (pl); *tilu* 'to drop (sg)'; *cf. tiilu* 'to drop (iterative)'; *xiʔwap* '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 sub-class 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: pa*n* 'warm', pa*l* 'hot' pa*r* 'very hot;' *-kʷin ~ -kʷil ~ -kʷir* '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.

Attributive Suffix: The derivational suffix, */-y/* 'attributive' (ATT) forms a verb from a noun or verb: *čpaa* 'agave stalk', *čpaa-y* 'bearing agave stalks, stalky', *haq* 'bone', *haq-y* 'rigid, bone-like', *mñaa* 'flavor, aroma', *mñaa-y* 'tasty; fragrant'.

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-čaʔ* '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: *ʔ-m-x-riw* 'to tie/secure;' *ʔ-m-x-riw-*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-way* 'to coil;' *s-waa-y* 'to coil;' *s-waa-y-*p (INST-

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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-1st, non-2nd person subjects.

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

sit-ATT-PASS) 'to be coiled, a coil;' *p-naq* 'to wear around neck'; *p-naq*-p (UNSP-neckwear-PASS) 'necklace, neckerchief'. *ʔ-m-ʔ-siiy*-p (DN-COM-PASS-tame-PASS) 'shy; embarrased' (*cf. p-siy* (UNSP-tame) 'to tame;' *h-siy* (4-tame) 'to be tame'). There are instances of fossilized passives in which /-p/ has an idiomatic function with no non-passive analog; *cf. p-haʔ-y*-p (UNSP-voice-ATT-PASS) 'to speak;' **p-haʔ-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'; *ʔii* 'to say'; *ʔaa* 'be said'; *ʔip* 'to think'; *ʔap* '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**   **ʔkʷiit**
       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) *ñpʔmuus=ʔ-ipaʔ=ʔ-ipaa=**h-ʔ-h-u-ʔ-uʔ***
       Ñ=DN-stick=DN-person=**4-PASS**-4-do-IRR-REL
       'Ñ, 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) *ʔ-waʔ=yu-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: *tux* '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

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28 The term i*nfix* 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: *ñ-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)'; *ča-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)'; *ʔ-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.

Perfective Prefix, /*kʷ-*/ 'already' (PRF), optionally with independent adverbial, /*khʷil*/ 'already'; (*khʷil*) *kʷ-ʔ-maa* 'I've already eaten.' Frequentative suffix, /*-tay*/ occurs in many derived nominals: *ʔ-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.)'; *hi-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]

Object	Subject	Meaning	Glosses
ñ-	ʔ-	2 < 1	1:2
Ø	ʔ-	3 < 1	1:3
ñ-	m-	1 < 2	2:1
Ø	m-/k-	3 < 2	2:3
ñ-	Ø -	1 < 3	3:1
m-	Ø -	2 < 3	2:3

Table 1. Subject-Object Verb Agreement

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[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 unglossed here. An underspecified third person subject is glossed as 'fourth' person /h-/: 'someone, one, (s)he, they, etc.'. The next examples exhibit co-occurence of the above prefixes and some others. A prefix portion of the verb-stem schema is replicated here:

(132)   DEM-CASE=PL:OBJ-PRF-OBJ-SBJ-UNSP-CAUS-PL-<DIM>-

       mi-l=pa-kʷ-ñ-m-p-x-n-pux
       this-IL=OBJ:PL-PRF-2:1-2-UNSP-CAUS-DIM-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)'.[32] 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), *-ñaa* 'that' (far from both): *ʔthat-hi* (dog-DEF) 'the dog'; *ʔwaʔ-si* (house-INDF) 'a house'; *ʔmphuh-mi* (box-this) 'this box/bag'; *nay*-paa (child-that) 'that child'; *myal*-ñaa (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)'; *ñaa-čaw* 'those; they (far from both)': *mi-t čam* 'This one/(s)he leaves (it)'; *mi-čaw-t čaam-u* 'These/they leave (it)'; *mi-m ʔ-saaw* 'I see this one/him/her'; *mi-čaw-m pa-ʔ-saaw* 'I see these/them'; *mi=m=xwaq-m ʔ-čam* 'I leave with this one/him/her'; *mi-čaw=m=xwaq-m ʔ-čam* 'I leave with these/them'; *mi-čaw-l ʔ-saaw* 'I looked into these ones/them'.

Nominal Case is suffixed on nouns, pronouns, nominal phrases and clauses (see, Complementation; Relative Clause): subject, */-t/*, 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'; *sʔaaw* woman's child; *s-n-ʔaaw* woman's little child'.

(133)   *ʔ-that-**čaw**-xmiʔq-**ñaa**=m=xwaq-m*[33]
         DN-dog-**PL**-three-**that:FAR-COM**=two-DS
         'with **those (far)** three dogs'

(134)   *ʔ-waʔ-čaw-nay-kʷ-ʔmsap-**mi-q***
         DN-house-**PL**-small-WH-white-**this-AL**
         '**at these** small white houses'

(135)   *ʔ-m-phuh-čaw-taay-u-kʷ-ñiir-**paa-l***
         DN-COM-container-**PL**-big:**PL-PL**-WH-black-**that-IL**
         '**in those** large black boxes'

(136)   *s-xʷaal-kʷ-mlʔsuw-msir-**mi-t***
         INST-rake-WH-blue/green-one-**this-SBJ**
         '**this** one blue/green comb' (**subj**)[34]

(137)   *kʷ-ʔsiiy-mi-**čaw**-t*
         WH-yellow-**this-PL-SBJ**
         '**these** yellow ones' (**subj**)

(138)   *s-xʷaal-kʷ-ʔkʷal-msir-**mi-m***
         INST-rake-WH-red-one-**this-OBJ/COM**
         '**this** one red comb' (obj)/**with this** one red comb'

Some noun plurals exhibit verb-like, vocalic length ablaut and plural suffixation: *ʔmpuul/ʔmpul-u* 'hat/hats'; *kʷ-kuu/kʷ-ku-t-u* 'woman/women'; *sʔaaw/sʔaw-u* 'child/children' (woman speaker); *čruuw/čruw-u* 'clothing/clothes' (see, Plural Verbs).

   Noun Compounds are prominent in the lexicon; they may consist of both derived and underived nouns: *nmiʔ=tay* (cat=big) 'cougar'; *xaʔ=tay* (water=big) 'ocean'; *haʔ=ñmiʔ* (mouth=hair) 'mustache/beard'; *phiʔ=msux* (nose=hole) 'nostril'; *yuw=haʔ* (eye=mouth) 'face'; *xaʔ=tay=h-wat-uʔ* (water-big=4-edge-REL) 'beach; Ensenada'; *myal=kʷ-s-n-ʔaw-u* (tortilla-WH-<DIM>-child-PL) 'cookies'; *ʔ-waʔ=kʷ-siʔhin=s-n-ʔaw-u* (DN-house-WH-<DIM>-run=child-PL) 'bicycles'; *xaq=m=kʷ-skʷaay* (cattle-OBJ=WH-guard) 'cowboy'; *psap-mi=t=h-wat=ʔ-ñaay=yuw=kʷ-l-yuu-m* (now-this-SBJ=4-edge=DN-sun=STAND=WH-IL-move-AWAY) 'from this day forward, in future'; *xaq=pi-y-l=t-kʷ-yaq* (cow=die-ATT-IL=UNSP:OBJ-WH-lie) 'deer' (see, Relative Clauses).[35]

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

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[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 Possesssives; 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): *ʔkʷit* 'something/what?' *ʔkʷit=k=wʔn* 'nothing'; *ʔapu* 'something/which?' *ʔap-l* 'somewhere/where?' *ʔap-l=k=wʔn* 'nowhere'; *(ʔ-ipaa)=ʔmʔaa=(wiʔ)*-CASE 'someone/who?'; *(ʔ-ipaa) =ʔmʔaa=k=wʔn* 'no one/nobody'; *(ʔ-ipaa)-si* 'someone/somebody'; *(ʔ-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   ʔñii   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?'

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36 *ʔmʔaa/ʔmhaa* 'someone' (*ʔ-m*-VERB (DN-COM-VERB); *cf. haa* 'go'; *ʔaa* 'go about' *ʔ-mat* (DN-earth) 'earth, world' also means 'year; world'.

(146) *Ɂ-waɁ-paa*   **p-yuu-((t waa)-t**   *yuu)*
  DN-house-that   **UNSP-BE-((SS SIT)-SBJ**   BE)
  '**what's** that house **like**?'

(147) *Ɂ-waɁ-paa*   **p-yu-Ɂ-uɁ**
  DN-house-that   **UNSP-BE-IRR-Q**
  '**what's** that house **like**?'

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-/*, *m-sɁuu* 'your (sg) father', *pa-m-sɁuu* 'your (pl) father', *pa-m-sɁuu-čaw* 'your (pl) fathers'; also compare, *xumay* 'X sired him; man's son' *sɁaaw* 'X bore it; woman's child'.

There is a small set of terms for generationally remote kinship: *m-kʷ-čan=ñmiɁ* (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).[37]

The following terms complete the system: *m-paaw* 'your father's father'; *m-maaw* '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-čaɁ* '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-ñɁuu* '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-čaɁ* 'your o. brother'; *m-ñ-xmaan* 'your yo. brother'; *m-n-kuu* 'your o. sister'; *m-laa* 'your o. sister's child'; *m-paan* 'your yo. sister'; *m-xumay* 'your son' (male parent); *m-sɁaaw=kʷ-umiiy* 'your son' (female parent; *cf. sɁaaw* 'give birth'); *m-pčiy* 'your daughter (male parent)'; *m-sɁaaw=kʷ-kuu* 'your daughter' (female parent); *m-čɁwa* 'your wife'; *m-kus=waɁ* 'your husband'; *m-kus=h-Ɂñii* 'your wife's father'; *m-kʷan=h-Ɂñii* 'your wife's mother'; *m-kñay* 'your husband's father'; *m-h-Ɂñii* 'your husband's mother'; *m-ñ-kiɁ* 'your wife's sibling(s)'; *m-syalyalpuɁ* 'your husband's siblings'; *m-hñay* 'your son's wife'; *m-Ɂñii* 'woman's son's wife'; *m-ñam-ɁiɁ=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-ñʔuu=ʔaa-s-m ʔkʷiit* (2-mother=SAY: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, xmiʔq, mnaq*. From 5 on, counting is on fingers and toes. Note that the root for 'hand/arm' is *sal*; 'finger' is *sal=čpaʔ* (hand= projection).[39] These combine in, five: *sal=čpam*. From 5 to 10, fingers lean to add 1: *sal=čpam=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 *čpam=msir* (fingers=one) meaning, 'a full count'. From 10-19, one counts toes: *čpam=msir=msir-t-hi-l=mat=haa* '11' (lit. '10 +1 goes there on the ground'). 20 is *čpam=xwaq* (i.e., '2 X 10'). The numbers between the decades are added on the pattern found from 11 -20, e.g. 21= *čpam=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 čpam=msir=uʔkun=yuu-hi=t=čpam=msir
     fingers=one=ITR=BE-DEF-SBJ=SS=fingers=one (lit. '10 X 10)';

'**200**' *čpam=msir=uʔkun=yuu-hi=t=čpam=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: 1st *(ʔ -)* and 2nd-person (*m-*); 3rd is (Ø-), or 4th (*h-*): *m-yuw* (2-eye(s)) 'your (sg) eye(s)', *pa-m-yuw* (PL-2-eye(s)) 'your (pl) eye(s)'; *m-sʔuu* (2-father); *pa-m-sʔuu* (PL-2-father) 'your (pl) father'; *pa-m-sʔuu-ʔ-čaw* (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] *Cf.* Proto-Yuman, **čpaa* 'exit'; *cf.* Kiliwa *paa* 'leave'.

Alienable Possession requires lexically determined alienable-possessive prefixes: /*ñ-*/ 'alienable' (POSS) or /*i-*/ 'predicative' (PRED). The possessor is prefixed to the resulting stem: *m-ñ-mat* (*2*-POSS-land) 'your (sg) land'; *m-i-phiʔ* (*2*-PRED-nose) 'your (sg) nose'. Compare the plural possessor pattern: *pa-m-ñ-mat* (PL-*2*-POSS-land) 'your (pl) land'; *pa-m-i-waʔ* (PL-*2*-PRED-house) 'your (pl) house'. Possessed-noun plurals take a suffix, /*-čaw*/: *pa-m-ñ-mat-čaw* (PL-2-POSS-land-PL) 'your (pl) lands'; *pa-m-i-waʔ-čaw* (PL-2-PRED-house-PL) 'your (pl) houses'.

Periphrastic Possession may take AUX2 SAY with optional attributive suffix (ATT) and an optional proclitic pronoun, *wiiy=(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]

Possessor Plurals require, /*pa-*/ 'object plural' prefix: *wiiy-čaw=m-ñ-ʔii* (mountain-PL=2-POSS-SAY) 'your (sg) mountains'; *cf. ʔwiiy-čaw=pa-m-ñ-ʔii* (mountain-PL=OBJ:PL-2-POSS-SAY) 'your (pl) mountains' (see, Verb Prefixes).

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: *čʔii/čʔi-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-ha-t-u* (small=clothing=2-set:LNG:PL-PL-PL) 'your knives' (lit. 'knives you lay down'); *ʔmpuul=m-čʔii* (hat=2-STAND) 'your hat' (lit. 'hat you stand'); *ʔmpul-u=m-čʔi-t-u* (hat:PL=PL-2-STAND:PL-PL-PL) 'your hats' (lit. 'hats you stand'). Possessor plural requires the plural suffix /*-čaw*/ on the clitic: *mpul-u=m-čʔi-t-u-čaw* (hat:PL=PL-2PL-STAND:PL-PL-PL-SBJ:PL) 'your (pl) hats' (lit. 'hats you (pl) stand'; see, Mixco 1991).

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]; *pup* [píp] 'puckered' (sg; *cf. puup* [póòp] 'puckered (pl))'; *h-uy-u* [híyu] 'they do' (*cf. h-uuy(2)* [hóòy] 'do (sg)'); *kʷ-ku-t-u* [kəkítu] 'women' (*cf. kʷ-kuu(2)* [kəkóò] 'woman (sg)'); *k-wl-čʔun* [kulčʔín] 'push (sg)!' (*cf. k-wl-čʔuun(2)* [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'

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40 POSSESSIVE AUX2 SAY lacks oral/aural content here *l*.

[sáwi], *čaam-u(2)* 'to leave sth.'; [čáàmi]. Yet, stressed /i/ and /u(u)/ are [u] before /w/: *čiw* [čuw] 'to smoke (sg)'; *yuu=wʔn* [yuwʔn].[41]

Long High Vowels /ii, uu/, always stressed and lowered, to [ee, oo]: *čiiw-u(2)* [čéèwi] 'to smoke (pl)'; *puup(2)* [póòp] 'puckered (pl)'; *k-wl-čʔuun(2)* [kulčʔóòn] '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)* [ʔəsáá] 'yucca cactus fruit' *ʔsaa(2)* [ʔəsáà] 'juniper' *ʔsee(3)* [ʔəsèè] 'vulture, buzzard'.

Consonants: /p t č k kʷ q ʔ s x xʷ h hʷ m n ñ r l w y/. Aside from permissible, root-initial clusters, most are variably broken up by epenthetic schwa, [ə] (which usually assimilates vowel quality in contiguous syllables). Non-root initial, intervocalic, voiceless stops /p t k kʷ/ are optionally lenited, voiced fricatives, [β ð ɣ ɣʷ]: *tpkʷis* [təβəkʷís ~ təβəkʷís ~ təβkʷís] 'wasp'; *x-papu* [xəpápu ~ xəpáβu ~ xpáβu] 'to sew'; *mukaa* [múɣaa] 'let's go!'; *ptlwat* [pətəlwát ~ pəðəlwát] 'to return (sg)'. Note that [ɣ] represents either /k/ or /r/.

Both /kʷ/ and /ñ/ dissimilate their respective, secondary labial and palatal features; e.g. /kʷ-/ 'subject-relative prefix' is [k] before a consonantal or vocalic labial environment (i.e., (C)u(u)): *kʷ-umiiy(2)* [kuméèy] 'man, male'; *kʷ-uuy(2)* [kóòy] 'doer'; *kʷ-miiy(3)* [kəmèèy] 'shaman'; *kʷ-ʔkʷal* [kəʔkʷàl] 'red'); *kʷ-ku-t-u* [kəkítu] 'women' (cf. *kʷ-kuu(2)* [kəkóò] 'woman (sg)'). Likewise, /ñ/ dissimilates its palatal to [n] before a consonantal or vocalic palatal environment (i.e. (C)i(i)): *ñ-ʔ-yaaw(2)* [nəʔyáàw] 'someone's tooth'; *ñ-ʔ-yuw* [nəʔyuw] 'someone's eye, an eye'; *ñ-ʔ-miy* [nəʔmiy] 'someone's foot/leg, a leg'.

Optional aspiration of non-initial prefix, /ʔ-/ yields [ʔʰ]; a voiced consonant optionally devoices after [ʔʰ]: *ñ-ʔ-yaaw(2)* [nəʔʰyáàw] ~ [nəʔYáàw] 'someone's tooth'; *ñ-ʔ-yuw* [nəʔʰyuw] ~ [nəʔYuw] 'someone's eye'; *ñ-ʔ-miy* [nəʔʰmiy] ~ [nəʔMiy] 'someone's footleg'.[42]

Glottal /h/ assimilates secondary rounding and palatalization from contiguous, /u/ or /i/, respectively: *m-p-iʔ-hiw* [məpiʔʰʸuw] ~ [məpiʔYuw] 'you (sg) fly'; *ʔ-p-ihaa(3)* [ʔəβihʸàà] 'I bring (it)'. Palatalization precedes vowel rounding and optional sonorant devoicing: *ʔ-t-uhaa(2)* [ʔətuhʷáà] ~ [ʔətuWáà] 'we arrive'. Note /h/ labialization after /u/ with subsequent optional devoicing of the sonorant labial component of /hʷ/ yielding [W] (see, Mixco 1977c).

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[41] Recall examples above with /-u/ as [u].

[42] See Mixco (1976) for the earliest transcription of the above aspiration rule by a nineteenth-century traveler in Baja.

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