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Some Cocopa Clause Batteries

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A. Introduction. This paper presents several of the basic clause types of the Cocopa language. The same method of analysis is used as in the previous paper entitled 'Transformational Paradigms of some Cocopa Sentence Types'.

The batteries in this paper are most likely incomplete. Field work in the year ahead should fill in many of the blank spots; and perhaps produce new battery types as well.

The next step beyond this point would be a careful examining of the constants which occur in more than one battery to see if their use and form is predictable. This would set up a class of battery multipliers, reducing considerably the number of formulas in the larger batteries. In particular I'm thinking of:

weeyawp...	'it shows' (includes yuuyawp)
-ñchaam...	'this time'
ĩñaam xañ...	'much, very'
ñmaamxs...	'always'
mulay...	'he doesn't know how'
mupar...	'he knows how'

But at present I do not feel there is sufficient data to predict when these can occur and when they cannot, and with which affixes, without several more days of field work.

As in the previous paper too, the formulas are correct for the sample clause given, but no claims are made beyond this point. Other verb-like words, some listed at the conclusion of the formulas of a battery, others still secluded in my notebook, have certain restrictions (probably semantic ones). They will take most of the formulas, but not all, and there has been time to spot check only a few of them thus far.

Once again, peripheral elements are omitted from the formulas. All phonologically bound morpheme constants are written with a hyphen.

My thanks go to Lorna Thomas Wilson, who has faithfully taught me her language for the past nine weeks. And also to David Thomas for providing both the method of study and constant encouragement through the summer.

B. Abbreviations. Abbreviations used in this paper are:

Csd ... caused
Csr ... causer
*d.n.... discontinuous negative
f.d.... future tense dependent sequential
f.sq... future tense sequential; indefinite 'be so'
i.f.... indefinite reference
o.f.... object focus
p.d.... past tense dependent
p.sq... past tense sequential
s.f.... subject focus
t.v.... transitive verb

Note: Items in parenthesis are optional. Items marked {} indicate a class of constants.

1. Identification Battery

1.1 The Identification Battery type 'A' consists of:

1. <Item, -cha> Simple Assertion
 stuuvcha.
 stove,-assertion.
 It is a stove.
2. <Item, -ch, yum, -pa> Strong Assertion
 stuuvch yumpa
 stove,-it is, it's so,-emphatic
 It is a stove.
3. <Item, luyum, -ch> Simple Negation
 stuuv luyumch.
 stove, not be so, -assertion.
 It is not a stove.

*The discontinuous negative occurs preceding and following the verb root plus personal pronoun prefixes. In this paper though it has been indicated as d.n. prior to the main verb only in the example sentence divided up for morphemes. But it has been indicated as l...m following the main verb in the formulas.

4. <Item, luyum, -ch, iñ, -pa> Strong Negation
 stuuu luyumch inpa.
 stove, not be so, -assertion, I say too, -emphatic.
 It is not a stove I say.
5. <Item, -ch, yum, -question intonation> Yes/ no Question
 stuuu ch yum?
 stove, -assertion, be so, -question.
 Is it a stove?
6. <Item, pronoun of possession, -ch> Simple Possession
 stuuu na'isch
 stove, me belongs, -assertion.
 The stove belongs to me.
7. <Item, pronoun of possession, -ch, yum, -pa> Strong Possession
 stuuu na'isch yumpa
 stove, me belongs, -assertion, it's so, -emphatic
 The stove is mine.
8. <Item, pronoun of possession, luyum> Negative Possession
 stuuu a'is luyum
 stove, me belongs, not be so
 The stove isn't mine.
9. <Item, pronoun of possession, luyum, -pa> Negative Strong Possession
 stuuu a'is luyumpa.
 stove, me belongs, not be so, -emphatic
 It isn't my stove.
10. <Item, pronoun of possession, -ch, yum, question intonation> Possession Question₁
 stuuu na'isch yum?
 stove, me belongs, -assertion, it's so, -question?
 Is it my stove?
11. <Indefinite Pronoun, Item, 3rd pronoun of possession, -ch, yum, question intonation> Possession Question₂
 makan stuuu nu'asch yum?
 whose, stove, him belongs, -assertion, it's so,
 whose stove is it? -question?
12. <Item, pronoun of possession, -ch, yus...> Contrastive₁
 stuuu na'isch yus maam laax.
 stove, me belong, -assertion, it's so -but..now not be.
 That was my stove but now it isn't.
13. <Item, pronoun of possession, -ch, yuks...> Contrastive₂
 stuuu na'isch yuks neeraarx.
 stove, me belongs, -assertion, be so future -but..I
 work it -intend.
 If it were my stove I'd work on it.

1.2 The Identification Battery type 'B' consists of:

1. <Title, -ch, uyun, -pa> Assertion
 kwapach uyunpa.
 Cocopa, -assertion, he be so, -emphatic.
 He is a Cocopa.

2. <Title, -ch, uyum, question intonation> Question
kwapach uyum?
Cocopa, -assertion, he be so, -question?
Is he a Cocopa?
3. <Title, -ch, luyum, -ch, uyũ, -pa> Negation
kwapach luyumch uyũpa.
Cocopa, -assertion, not he be so, -assertion, he be so,
he isn't a Cocopa. -emphatic.

At present it seems only names of inanimate articles may occur in the Item slot of Battery 'A'. Only terms for animate beings may occur in the Title slot of Battery 'B'. Further field work may result in grouping Batteries 'A' and 'B' together.

Note: luyum... 'not be so' has been left undissected in the formulas (and so throughout the paper) though it consists of:

- 1...m 'discontinuous negative'
- u - yu 'he/it be so.'

mainly because the problem of morphophonemic alternation has not yet been thoroughly studied, to know when the u- preceding the yu may be omitted.

2. Descriptive Battery.

2.1 Descriptive Battery Type 'A' consists of:

- A1. <Item, (-pich), Description> Simple
mat (-pich) xay.
ground, -(s.f.), wet
The ground is wet.
- A2. <Item, Description, -chs> Assertion Stress
mat xaychs.
ground, wet, -assertion stress
The ground is wet.
- A3. <Item, Description, lu...m, -chs> Negation₁
mat luxaymchs.
ground, d.n. wet, -assertion stress
The ground isn't wet.
- A4. <Item, Description, lu...m, laax> Negation₂
mat luxaym laax.
ground, d.n. wet, not be so
The ground isn't wet.
- A5. <Item, Description, lu...m, laax, -chs> Negation₃
mat luxaym laaxchs.
ground, d.n. wet, not be so, -assertion stress
The ground isn't wet.

- A6. <Item, Description, -m, laax, -chs> Zeroed 'l'
mat xaym laaxchs. Negation
ground, wet d.n., not be so, -assertion stress
The ground isn't wet.
- A7. <Item, Description, Question force, -a> Question₁
mat xay-a?
ground, wet, -question?
Is the ground wet?
- A8. <Item, Description, -ch, yum, -question intonation>
mat xaych yum? Question₂
ground, wet, -assertion, be so, -question?
Is the ground wet?
- A9. <Item, Description, kayu, -question intonation>
mat xay kayu? Question₃
ground, wet, indefinite be so?
Is the ground wet (do you know)?
- A10. <Item, -pich, Description, -nchaam, -chs> 'this time'
matpich xaynchaamchs.
ground, -subject focus, wet, -this time, -assertion
stress.
The ground is wet this time (finally!).
- A11. <Item, -pich, Description, lu...m, -chaam, -chs>
'not this time'
matpich luxaymchaamchs.
ground, -s.f., d.n., -wet, -this time, -assertion
stress
The ground is not wet this time (finally!).
- A12. <Item, -pich, Description, -nchaam, question force, -a>
matpich xaynchaam-a? 'this time?'₁
ground, -subject focus, wet, -this time, -question?
Is the ground wet this time (finally)?
- A13. <Item, -pich, Description, -nchaam, kayu, question intonation> 'this time?'₂
matpich xaynchaam kayu?
ground, -subject focus, wet, -this time, indefinite
be so?
Is the ground wet this time (do you know)?
- A14. <Item, Description, -ch...> Sequential
mat xaych... eerux-a?
ground, wet, -p.sq...
when the ground is wet is it slippery?
- A15. <Item, Description, -m...> Dependent Change of Subject
mat xaym...matlil mpam-a?
ground, wet, -p.d...
when the ground was wet...did you fall?
- A16. <Item, Description, -s...> Contrastive
mat xays mapill s'aar-a?
ground, wet, -but, now dry-question?
Was the ground wet, but dry now?
mat xays sayuks spaxs.
ground, wet, -but, the way it is, -but, I go out,
-intend stress.
The ground is wet but I'm going out anyway.

- A17. <Item, Description, -ch, weeyawp> Visible Statement
mat xaych weeyawp.
ground, wet, -assertion, 'it shows'
The ground is wet (it shows).
- A18. <Item, Description, weeyawp, -ch, yum, question Intonation> Visible Question₁
mat xay weeyawpch yum?
ground, wet, it shows, -assertion, be so, -question?
Does it show that the ground is wet?
- A19. <Item, Description, weeyawp, question force, -a> Visible Question₂
mat xay weeyawp-a?
ground, wet, it shows, -question?
Does it show that the ground is wet?
- A20. <Item, description, weeyawp, kayu, question intonation> Visible Question₃
mat xay weeyawp kayu?
ground, wet, it shows, indefinite be so?
Does it show that the ground is wet?
- A21. <Item, (-pich), Description, -k, luyum, xañ> 'Never'
mat(pich) xayk luyum xañ.
ground, (s.f.), wet, -f.sq., not be so, very
The ground is never wet.
- A22. <Item, (-pich), Description, chuyak, xañ> 'Always'
matpich xay chuyak xañ.
ground, (-subject focus), wet, stay-lying, very
The ground is always wet.
- A23. <Item, (-pich), ñach, llyaaam, Description> 'Sometimes'
matpich ñach llyaaam xay.
ground, (-subject focus), day, -sometimes, wet.
The ground is sometimes wet.
- A24. <Item, (-pich), Description, -ch, yum, -pa> Emphasis₁
matpich xaych yumpa.
ground, (-subject focus), wet, -assertion, be so,
The ground is w-e-t. (disgust?) -emphatic
- A25. <Item, (-pich), Description, xañ> Emphasis₂
matpich xay xañ.
ground, (-subject focus), wet, very.
The ground is real wet.
- A26. <Item, (-pich), Description, iñaam, xañ> Intensive Emphasis
matpich xay iñaam xañ.
ground, (-subject focus), wet, much, very.
The ground is really really wet. (too wet)

Examples of other verbs occurring in this battery are:

seemirq ... 'slippery'
xwat ... 'red'
s'aar ... 'dry'
shax ... 'stink'

2.2 Descriptive Battery Type 'B' consists of:

- B1. <Actor, {-pich}, Action> Simple
Spri mat kuman.
Spri, ground he gets up (runs).
Spri runs.
- B2. <Actor, {-pich}, Action, -x> Simple Expectation
Spri mat kumanx
Spri, ground he run, -intend
Spri will run.
- B3. <Actor, {-pich}, Action, -ch, uyus> Assertive
Sprich mat kumanch uyus.
Spri, subject, he run, -completive or assertive, he
Spri ran. do/be so stress.
- B4. <Actor, {-pich}, Action, l...m, -chs> Negation₁
Sprich mat lkumanchs.
Spri, d.n. he run, -assertion stress
Spri didn't run.
- B5. <Actor, {-pich}, Action, l...m, laax> Negation₂
Sprich mat lkumanm laax.
Spri, d.n. he run, not be so
Spri didn't run.
- B6. <Actor, {-pich}, Action, l...m, laax, -chs> Negation₃
Sprich mat lkumanm laaxchs.
Spri, d.n. he run, not be so, -assertion stress
Spri didn't run.
- B7. <Actor, {-pich}, Action, l...m, laax, -ch, uyus> Negation₄
Sprich mat lkumanm laaxch uyus.
Spri, d.n. he run, not be so, -assertion, he-be so-
Spri didn't run. stress
- B8. <Actor, {-pich}, Action, question force, -a> Question₁
Sprich mat kuman-a?
Spri, he run, -question
Did Spri run?
- B9. <Actor {-pich}, Action, -ch, uyum, question intonation>
Sprich mat kumanch uyum? Question₂
Spri, he run, he be so, -question
Did Spri run?
- B10. <Actor {-pich}, Action, -chaam, -ch, uyus> 'this time'
Sprich mat kumanchaam ch uyus.
Spri, he run, -this time, -assertion, he be so-stress
Spri ran this time.
- B11. <Actor {-pich}, Action, l...m, -chaam, -ch, uyus>
Sprich mat lkumanmchaam ch uyus. 'not this time'
Spri, d.n. he run, -this time, -assertion, he be so-
Spri didn't run this time. stress
- B12. <Actor {-pich}, Action, ñchaam, question force, -a>
Sprich mat kumanñchaam-a? 'this time?'
Spri, he run, -this time, -question
Did Spri run this time?

- B13. <Actor { -pich} , Action, -ch...> Sequential
 Sprich mat kumanch...uraw-a?
 Spri, he run, -assertion...he fast, -question
 Does Spri run fast enough?
- B14. <Actor, { -pich} , ñ-, action, -m...ichs> Dependent Change
 of Subject Past
 Sprich mat ñkumanm...mat kman ichs
 Spri, when, -he run, -p.d.,...I run...,I say-asser-
 tion stress.
 When Spri ran, I ran (too).
- B15. <Actor, { -pich} , Action, -s...> Contrastive
 Sprich mat kumang...lpaweemchs.
 Spri, he ran, -but...d.n. him I say-assertion stress.
 Spri ran but I didn't see him.
- B16. <Actor, { -pich} , Action, -km...> Dependent Change
 of Subject Future
 Sprich mat kumankm...Tom mak weex.
 Spri, he run, -when...Tom, behind next, I see-
 intensive.
 When Spri runs, Tom will be next, behind.
- B17. <Actor, { -pich} , Action, -xm, pu'aa> 'Might'
 Spri mat kumanxm pu'aa.
 Spri, run, he might, he stand.
 Spri is about to run.
- B18. <Actor, { -pich} , Action, -xm, pu'aa, question force, -a>
 Sprich mat kumanxm pu'aa-a? 'Might' Question
 Spri, he run, -might, he stand, -question?
 Is Spri going to run?
- B19. <Actor, { -pich} , Action, -xi-ki, question intonation>
 Sprich mat kumanxiki. 'huh' Question
 Spri, he run, -future question, -huh?
 Will Spri run? (Might he?) huh?
- B20. <Actor, { -pich} , Action, -x, ðeechs> 'I think'
 Sprich mat kumanx ðeechs.
 Spri, he run, -intend, I think.
 Spri might run I think (not sure).
- B21. <Actor, { -pich} , Action, mupar> 'Knows how'
 Sprich mat kuman mupar.
 Spri, he run, he knows how.
 Spri knows how to run.
- B22. <Actor { -pich} , Action, mupar, xañ> 'Knows how well'
 Sprich mat kuman mupar xañ.
 Spri, he run, he knows how, very.
 Spri really knows how to run.
- B23. <Actor, { -pich} , Action, mupar, iñaam, xañ> 'Knows how ex-
 tremely well'
 Sprich mat kuman mupar iñaam xañ.
 Spri, he run, he knows how, much, very.
 Spri really really knows how to run.
- B24. <Actor, { -pich} , Action, mupar, question force, -a>
 Sprich mat kuman mupar-a? 'Knows how?'
 Spri, he run, he know how, -question?
 Does Spri know how to run?

- B25. <Actor, {-pich}, Action, iñaam xañ> Extremely
Sprich mat kuman iñaam xañ.
Spri, he run, much, very
Spri can really run.
- B26. <Actor, {-pich}, Action, mulay> 'Doesn't know how'₁
Sprich mat kuman mulay.
Spri, he run, not know how.
Spri doesn't know how to run.
- B27. <Actor, {-pich}, Action, mulay, -ch, uyum> 'Doesn't know how'₂
Sprich mat kuman mulaych uyum.
Spri, he run, he not know how, -assertion, he be so.
Spri doesn't know how to run.
- B28. <Actor, {-pich}, Action, mulay, -ch, uyum, -pa> 'Doesn't know how' emphatic
Sprich mat kuman mulaych uyumpa.
Spri, he run, not know how, -assertion, he be so,
Spri sure doesn't know how to run. -emphatic
- B29. <Actor, {-pich}, Action, waayaa> Contemporary
Sprich mat kuman waayaa.
Spri, he run, he around.
Spri is running around (Locally & present continuative?)
- B30. <Actor {-pich}, Action, waayaa, l...m, laax> Negative
Sprich mat kuman lwaayaam laax. Contemporary
Spri, he run, d.n. he around, not be so.
Spri is not running. (around)(now)
- B31. <Actor, {-pich}, Action, waayaa, question force, -a> Interrogative Contemporary
Sprich mat kuman waayaa-a?
Spri, he run, around, -question?
Is Spri running around?
- B32. <Actor, {-pich}, Action, luxañ> 'Doesn't hardly'
Sprich mat kuman luxañ.
Spri, he run, not very.
Spri doesn't hardly run. (Lorna's free translation)
- B33. <Actor, {-pich}, Action, myum, xañ> 'you form' (adds myum and drops lu..)
Mapuch mat kman myum xañ.
you, subject, run, you be so, very
You don't hardly run.
- B34. <Actor, {-pich}, Action, ñmaam, xañ> 'Always'₁
Sprich mat kuman ñmaam xañ.
Spri, he run, done (now?), very.

(possibilities of this morpheme
not understood yet)

Spri always runs.
- B35. <Actor, {-pich}, Action, ñmaam, -xs> 'Always'₂
Sprich mat kuman nmaamxs.
Spri, he run, done, -intend-stress
Spri always runs.
- B36. <Actor, {-pich}, Action, -m, laax, xañ> 'Never' (zeroed 'l' of d.n.)
Sprich mat kumanm laax xañ.
Spri, he run, -d.n. not be so, very.
Spri never runs.

- B 37. <Actor, {-pich}, Action, -ñi-question force, -a> 'Ever?'
 Sprich mat kumañi-a?
 Spri, he run, -(unknown), -question?
 Does Spri ever run?

Examples of other verbs occurring in this battery are:

usañ'he gets down'
 xuseel.....'he blows his nose'
 xuchaał.....'he crawls'
 umi.....'he cries'
 ukuk.....'she cooks'

To date, this appears to be the second largest class of verbs in the language. However, the transitive battery absorbs the most verbs so far: for each verb in this battery there are three in the transitive battery.

{-pich} is a class of phonologically bound morphemes consisting of:

-chsubject indicator
 -pich.....subject focus indicator
 -∅.....zero subject indicator

Note: mat kuman...'he runs' is a two-word idiom (it could also be interpreted as a compound word) meaning literally 'ground-he flies'. The first word (ground) remains unchanged. The second word (fly) is inflected for person, and takes the usual suffixes and prefixes of tense and condition.

3. Intransitive Battery.

The Intransitive Battery consists of:

1.	<Actor, -pich, Action, {a}>
xañapich chaqs chaqs a.
frog, -s.f., jump jump, he does.
The frog jumped.	Simple Statement
2.	<Actor, -pich, Action {a}, -ch>
xañapich chaqs chaqs ach.
frog, -s.f., jump-jump-, he does, -assertion or past
The frog jumped. tense	Statement ₂
3.	<Actor, -pich, Action, {a}, -ch, uyus>
xanapich chaqs-chaqs ach uyus.
frog, -s.f., jump-jump, he does, -assertion, be so-stress
The frog jumped.	Statement ₃

4. <Actor, -pich, Action, {a}, l...m, laax> Negative₁
 xañapich chaqs-chaqs lu'am laax.
 frog, -s.f., jump-jump, d.n.-he do, not be so.
 The frog didn't jump.
5. <Actor, -pich, Action, {a}, l...m, xañ> Negative₂
 xañapich chaqs-chaqs lu'am xañ.
 frog, -s.f., jump-jump, d.n.-he do, very.
 The frog didn't (doesn't) jump.
6. <Actor, -pich, Action, {a}, l...m, -chs> Negative₃
 xañapich chaqs-chaqs lu'amchs.
 frog, -s.f., jumps, d.n.-he do, -assertion stress.
 The frog doesn't jump.
7. <Actor, -pich, Action, {a}, l...m, xañ, -ch, uyus>
 Negative 'hardly'
 xañapich chaqs-chaqs lu'am xañch uyus.
 frog, -s.f., jump-jump, d.n.-he do, very, -assertion,
 he do/be so-stress.
 The frog doesn't hardly jump.
8. <Actor, -pich, Action, {a}, question force, -a> Question₁
 xañapich chaqs-chaqs a-a?
 frog, -s.f., jump-jump, he do, -question?
 Did the frog jump?
9. <Actor, -pich, Action, {a}, -xi, -ki question intonation,>
 Future Question
 xañapich chaqs-chaqs axiki
 frog, -s.f., jump-jump, he do, -future question,
 Will the frog jump? huh? question?
10. <Actor, -pich, Action, {a}, -ch, kayu, question force, -a>
 Question 'Where'
 xañapich chaqs-chaqs ach kaayu-a?
 frog, -s.f., jump-jump, he do, -past or assertion, i.r
 he be so, -question
 Where did the frog jump to?
11. <Actor, -pich, Action, {a}, question force, -a> 'Question 'Why'
 xañapich chaqs-chaqs ay-a?
 frog, -s.f., jump-jump, he did, -question
 Why did the frog jump?
12. <Actor, -pich, Action, {a}, -ñchaam, -chs> 'this time'
 xañapich chaqs-chaqs añchaamchs.
 frog, -s.f., jump-jump, he did, -this time, -assertion stress.
 The frog jumped this time.
13. <Actor, -pich, Action, {a}, l...m, -chaam, -chs> 'this time'
 negative
 xañapich chaqs-chaqs lu'am chaamchs.
 frog, -s.f., jump-jump, d.n.-he do, -this time,
 -assertion stress
 The frog didn't jump this time.
14. <Actor, -pich, Action, {a}, nchaam, question force, -a>
 'this time' question
 xañapich chaqs-chaqs añchaam-a?
 frog, -s.f., jump-jump, he did, -this time, -question?
 Did the frog finally jump?

15. <Actor, -pich, Action, {a}, -m...> Conditional₁
 xañapich chaqs-chaqs am...pmwee-a?
 frog, -s.f., jump-jump, he did, p.d...him-you see,
 Did you see the frog jump? -question?
16. <Actor, -pich, Action, {a}, -s...> Contrastive₁
 xañapich chaqs-chaqs aas lmsukanmchs.
 frog, -s.f., jump-jump, he did, -but...d.n.-he run away-
 assertion stress.
 The frog jumped but he didn't run away.
17. <Actor, -pich, Action, ñ-, {a}, -km, ...> Conditional₂
 xañapich chaqs-chaqs naa'akm...knaka!
 frog, -s.f., jump-jump, when-, he did-f.d.,...kill!
 When the frog jumps kill it!
18. <Actor, -pich, Action, {a}, -xm, payaas...> Contrastive₂
 xañapich chaqs-chaqs axm payaas nimee rap mich laaxchs.
 frog, -s.f., jump-jump, he do, -might, it's there,
 -but...his leg, hurt, (unknown), not be so-assertion
 stress
 The frog would jump but he hurt his leg.
19. <Actor, -pich, Action, ñ-, {a}, -m...> Conditional₃
 xañapich chaqs-chaqs naa'am chaqs inchs.
 frog, -s.f., jump-jump, when-, he do, -p.d...jump, I
 I do-too-assertion stress.
 When the frog jumped, I jumped, too.
20. <Actor, -pich, Action, {a}, -ch...> Sequential
 xañapich chaqs chaqs ach...pum uxap.
 frog, -s.f., jump jump, he do, / that way, he go.
 assertion...
21. <Actor, -pich, Action, {a}, -ch, mulay> Inability₁
 xañapich chaqs chaqs ach mulay. ('doesn't know how')
 frog, -s.f., jump jump, he do, -assertion, he unable.
 The frog can't (doesn't know how to) jump.
22. <Actor, -pich, Action, {a}, -ch, mulay, uyum> Inability₂
 (doesn't know how')
 xañapich chaqs chaqs ach mulay uyum.
 frog, -s.f., jump jump, he do, -assertion, he unable,
 The frog can't jump. he be so.
23. <Actor, -pich, Action, {a}, -ch, yuuyawp> 'You Can Tell'
 xañapich chaqs chaqs ach yuuyawp.
 frog, -s.f., jump jump, he do, -assertion, seeable.
 You can tell the frog is jumping up and down.
24. <Actor, -pich, Action, {a}, -xm, puwach> Possible('might')
 xañapich chaqs chaqs axm puwach.
 frog, -s.f., jump jump, he do, -might, he sit.
 The frog might jump.
25. <Actor, -pich, Action, {a}, -x, puwach, uyum, question marker> Future Question
 xañapich chaqs chaqs ax puwach uyum?
 frog, -s.f., jump jump, he do, -intend, he sit, he be
 so, -question?
 Will the frog jump?

26. <Actor, -pich, Action, {a}, xañ> Intensive₁
 xañapich chaqs chaqs a xañ.
 frog, -s.f., jump jump, he do, very.
 The frog really jumps.
27. <Actor, -pich, Action, {a}, -ch, waayaa> 'Around'
 xañapich chaqs chaqs ach waayaa.
 frog, -s.f., jump jump, he do, -assertion, he around.
 The frog is jumping around.
28. <Actor, -pich, Action, {a}, -ch, lu'am, xañ> 'Never'
 xañapich chaqs chaqs ach lu'am xañ.
 frog, -s.f., jump jump, he do, -assertion, d.n.he do, very
 The frog never jumps.
29. <Actor, -pich, Action, {a}, -ñmaamxs> 'Always'
 xañapich chaqs chaqs anmaamxs.
 frog, -s.f., jump jump, he do, this time future inten-
 tion stress.
 The frog always jumps.
30. <Actor, -pich, Action, {a}, -m, iñaam, xañ> Intensive₂
 xañapich chaqs chaqs am iñaam xañ.
 frog, -s.f., jump jump, he do, -p.d., much, very.
 The frog jumps a lot.
31. <Actor, -pich, Action, {a}, -x, lleechs> 'I Think'
 xañapich chaqs chaqs ax lleechs
 frog, -s.f., jump jump, he do, -intend, I think.
 The frog will jump I think.
32. <Actor, -pich, Action, {a}, -m, iñaam, xañ, -a> Intensive
 Question
 xañapich chaqs chaqs am iñaam xañ-a?
 frog, -s.f., jump jump, he do, -p.d., much, very,
 Does the frog jump a lot? -question?

Class -ch includes:

- ch....past time assertion
- x.....future intention

Class a includes (so far):

- i.....I do
- m'i...you do
- a.....he does
- aa'a..?
- ay....? semantic distinctions unknown yet
- aa....he did

(the last three are sub-types of a...he does)

Other verbs fitting this battery are:

- saq saq i.....I itch
- kwar kwar a....he talks
- xween a.....he moves
- yaws a.....he grabs it

4. Directional Battery.

The Directional Battery consists of:

1. <Actor, -pich, Direction, -{m}, Action> Simple
 apapich chakweem wa.
 man, -s.f., store, -to, he went (goes).
 The man went to the store.
2. <Actor, -pich, Direction, -{m}, Action, -ch> Statement₁
 apapich chakweem wach.
 man, -s.f., store, -to, he go, -assertion (or completive)
 The man went to the store.
3. <Actor, -pich, Direction, -{m}, Action, -chs> Statement₂
 apapich chakweem wachs.
 man, -s.f., store, -to, he went, -assertion stress.
 The man went to the store.
4. <Actor, -pich, Direction, -{m}, Action, -ch, uyus> Statement₃
 apapich chakweem wach uyus. (Auxiliary Verb)
 man, -s.f., store, -to, he went, -assertion, he did-stress
 The man went to the store.
5. <Actor, -pich, Direction, -{m}, Action, illeechs> 'I think'
 apapich chakweem wa illeechs
 man, -s.f., store, -to, he went, I think.
 The man went to the store I think.
6. <Actor, -pich, Direction, -{m}, Action -ch, paa> 'already'₁
 apapich chakweem wach paa.
 man, -s.f., store, -to, he went, -assertion, (unknown)
 The man went to the store already.
7. <Actor, -pich, Direction, -{m}, Action, -ch paachs> 'already'₂
 apapich chakweem wach paachs.
 man, -s.f., store, -to, he went, -assertion, (unknown).
 The man did (already) go to the store.
8. <Actor, -pich, Direction, -{m}, Action, -m, payaachs> 'already'₃
 apapich chakweem wam payaachs.
 man, -s.f., store, -to, he went, -(unknown), he left a
 long time ago.
 The man already went to the store.
9. <Actor, -pich, Direction, -{m}, Action, -ch, paaypa> 'already'₄
 apapich chakweem wach paaypa.
 man, -s.f., store, -to, he went, -assertion, he already
 The man went to the store already. went
10. <Actor, -pich, Direction, -{m}, Action, -ñ, -chs> 'Also'
 apapich chakweem wanchs.
 man, -s.f., store, -to, he went, -too, -assertion stress
 The man went to the store, too.
11. <Actor, -pich, Direction, -{m}, Action aa, l...m, -chs>
 apapich chakweem laamchs. Negation₁
 man, -s.f., store, -to, d.n. he go, -assertion stress
 The man didn't go to the store.
12. <Actor, -pich, Direction, -{m}, Action [aa], l...m, laax>
 apapich chakweem laam laax. Negation₂
 man, -s.f., store, -to, d.n.-he go, not be so.
 The man didn't go to the store.

13. <Actor, -pich, Direction, -{m}, Action, 1...m, laax, -chs>
apapich chakweem luwam laaxchs. Negation₃
man, -s.f., store, -to, d.n.-he go, not be so,
-assertion stress.
The man didn't go to the store.
14. <Actor, -pich, Direction, -{m}, Action wa, 1...m, laax,
-ch, uyus> Negation₄ (Aux.verb)
apapich chakweem luwam laaxch uyus.
man, -s.f., store, -to, d.n.-he go, not be so, -asser-
tion, he do-stress.
The man didn't go to the store.
15. <Actor, -pich, Direction, -{m}, Action [aa], 1...m, laax,aya>
Quotative₁
apapich chakweem laam laax aya.
man, -s.f., store, -to, d.n.-he go, not be so, he said.
The man said he didn't want to go to the store.
16. <Actor, -pich, Direction, -{m}, Action [aa], 1...m, laax,
aypa>Quotative₂
apapich chakweem laam laax aypa.
man, -s.f., store, -to, d.n.-he go, not be so, he said
The man said he wasn't going to the store. -stress.
17. <Actor, -pich, Direction, -{m}, Action [aa], 1...m, laax,
illeechs> Negative 'I think'
apapich chakweem laam laax illeechs.
man, -s.f., store, -to, d.n.-he go, not be so, I think
I don't think the man went to the store.
18. <Actor, -pich, Direction, -{m}, Action [aa], 1...m laax,
xskay, -chs> 'Yet'
apapich chakweem laam laax xskaychs.
man, -s.f., store, -to, d.n.-he go, not be so, still,
-assertion stress.
The man hasn't gone to the store yet.
19. <Actor, -pich, Direction -{m}, Action, -m, laaxchs>Negation₅
apapich chakweem wam laaxchs.
man, -s.f., store, -to, he go, -past tense?, not be so,
-assertion stress.
The man didn't go to the store.
20. <Actor, -pich, Direction -{m}, Action, -m, laaxs> Negation₆
apapich chakweem wam laaxs.
man, -s.f., store, -to, he go, -past tense?, not be
so-stress.
The man didn't go to the store.
21. <Actor, -pich, Direction -{m}, Action, Question force, -a>
apapich chakweem wa-a? Question₁
man, -s.f., store, -to, he go, -question?
Did the man go to the store?
22. <Direction, -{m}, Action, question force, -a>Zeroed Actor
Question (marginal accept-
ability)
chakweem wa-a?
store, -to, he go, -question?
Did he go to the store?

23. <Actor, -pich, Direction, -{m}, Action, kaayu, question in-
tonation> Question₂
apapich chakweem wa kaayu?
man, -s.f., store, -to, he go, i.r.?
Did the man go to the store?
24. <Actor, -pich, Direction, -{m}, Action, -ch, paa, -a> Question₃
apapich chakweem wach paa-a?
man, -s.f., store, -to, he go, -assertion, (unknown),
Did the man go to the store? -question?
25. <Actor, -pich, Direction, -{m}, Action, ...m, laax, xskay,
question force, -a> Negative 'yet' Question
apapich chakweem wam laax xskay-a?
man, -s.f., store, -to, he go, -past tense?, not be so,
yet, -question?
The man didn't go to the store did he?
26. <Actor, -pich, Direction, -{m}, Action, [aa], l...m, laax,
question force, -a> Negative Question
apapich chakweem laam laax-a?
man, -s.f., store, -to, d.n.-he go, not be so, -question?
The man didn't go to the store did he?
27. <Actor, -pich, Direction, -{m}, Action, -ñchaam, -chs>
apapich chakweem wañchaamchs. 'this time'₁
man, -s.f., store, -to, he go, -this time, -assertion₁
This time the man went to the store. stress.
28. <Actor, -pich, Direction, -{m}, Action, -ñchaam, -ch, uyus>
'this time'₂ (Auxiliary verb)
apapich chakweem wañchaamch uyus.
man, -s.f., store, -to, he go, -this time, -assertion,
he do-stress.
This time the man went to the store.
29. <Actor, -pich, Direction, -{m}, Action [aa], l...m, -chaamchs>
'this time' Negation₁
apapich chakweem laamchaamchs.
man, -s.f., store, -to, d.n.-he go, -this time, -asser-
tion stress.
This time the man didn't go to the store.
30. <Actor, -pich, Direction, -{m}, Action [aa], l...m, -chaamch,
uyus> 'this time' Negation₂
apapich chakweem laamchaamch uyus. (Auxiliary verb)
man, -s.f., store, -to, d.n.-he go, -this time, assertion,
he do- stress.
This time the man didn't go to the store.
31. <Actor, -pich, Direction, -{m}, Action [aa], l...m, -chaam,
illeechs> 'this time' Negative
apapich chakweem laamchaam illeechs. 'I think'
man, -s.f., store, -to, d.n.-he go, -this time, I think.
I don't think the man went to the store this time.
32. <Actor, -pich, Direction, -{m}, Action, -ñchaam, question force,
-a> 'this time' Question₁
apapich chakweem wañchaam-a?
man, -s.f., store, -to, he go, -this time, -question?
Did the man go to the store this time?

33. <Actor, -pich, Direction, -{m}, Action, -ñchaam, kaayu,
question intonation> 'this time' Question₂
apapich chakweem wañchaam kaayu?
man, -s.f., store, -to, he go, -this time, i.r.
Did the man go to the store this time?
34. <Actor, -pich, Direction, -{m}, Action, -ñchaam, paa,
question force, -a> 'this time' Question₃
apapich chakweem wañchaam paa-a?
man, -s.f., store, -to, he go, -this time, (unknown),
-question?
Did the man go to the store this time?
35. <Actor, -pich, Direction, -{m}, Action, -m,...> Dependent
apapich chakweem wam...paweechs. past
man, -s.f., store, -to, he go, -p.d...him-I saw-
assertion stress
I saw the man go to the store.
36. <Actor, -pich, Direction, -{m}, u-, Action, -yimi, ñpuch,...>
Identification
apapich chakweem uwayimi ñpuch...kuwaak paachs.
man, -s.f., store, -to, ?-, he went, -remember?, that
one...home he went
Remember the man that went to the store? - he went home,
37. <Actor, -pich, maam, Direction, -{m}, Action, -x, ach>
Quotative present intention
apapich maam chakweem wax ach.
man, -s.f., now, store, -to, he go, -intend, he said.
The man said he's going to the store now.
38. <Actor, -pich, Direction, -{m}, Action, -x> Simple Intention
apapich chakweem wax.
man, -s.f., store, -to, he go, -intend.
The man will go to the store.
39. <Actor, -pich, Direction, -{m}, Action, -x, ach> Quotative₁
apapich chakweem wax ach.
man, -s.f., store, -to, he go, -intend, he said.
The man said he's going to the store.
40. <Actor, -pich, Direction, -{m}, Action, -x, achs> Quotative₂
apapich chakweem wax achs.
man, -s.f., store, -to, he go, -intend, he said-stress
The man said he was going to the store.
41. <Actor, -pich, Direction, -{m}, Action, -ñchaam, -x> 'this
apapich chakweem wañchaamx. time' Intention₁
man, -s.f., store, -to, he go, -this time, -intend.
The man is going to the store this time.
42. <Actor, -pich, Direction, -{m}, Action, -ñchaam, -x,
pu'aach, uyus> 'this time' Intention₂ (Auxiliary verb)
apapich chakweem wañchaamx pu'aach uyus.
man, s.f., store, -to, he go, -this time, -intention,
he stand, he do so stress.
This time the man is going to the store.
43. <Actor, -pich, Direction, -{m}, Action, -x, aypa> Quotative₃
apapich chakweem wax aypa
man, -s.f., store, -to, he go, -intend, he said-emphasis
The man is going to the store he said.

44. <Actor, -pich, Direction, -{m}, Action-ñ, -x, ach> Quotative⁴
 apapich chakweem wanx ach. (wants to)
 man, -s.f., store, -to, he go, -too, -intend, he said
 The man wants to go to the store also.
45. <Actor, -pich, Direction, -{m}, Action, -x, aa, ach> Quotative⁵
 apapich chakweem wax aa ach.
 man, -s.f., store, -to, he go, -intend, he do/ say, he
 said.
 He said the man wanted to go to the store he said.
46. <Actor, -pich, Direction, -{m}, Action, -x alleem> 'doesn't
 apapich chakweem wax alleem. feel like'
 man, -s.f., store, -to, he go, -intend, he doesn't feel
 The man doesn't feel like going to the store. like
47. <Actor, -pich, Direction, -{m}, Action -x, alleem, ach>
 Quotative⁶ (doesn't feel like)
 apapich chakweem wax alleem ach.
 man, -s.f., store, -to, he go, -intend, he doesn't feel
 like, he said.
 The man doesn't feel like going to the store, he said.
48. <Actor, -pich, Direction, -{m}, Action, -x, aya> Quotative⁷
 apapich chakweem wax aya.
 man, -s.f., store, -to, he go, -intend, he said.
 The man wants to go to the store he said.
49. <Actor, -pich, Direction, -{m}, Action, -x, question force,
 apapich chakweem wax-a? -a> Future Question¹
 man, -s.f., store, -to, he go, -intend, -question?
 Is the man going to the store?
50. <Actor, -pich, Direction, -{m}, Action, -x, -i, -ki, question
 intonation> Future Question²
 apapich chakweem waxiki?
 man, -s.f., store, -to, he go, -intend, -question,
 Is the man going to the store? -question?
51. <Actor, -pich, Direction, -{m}, Action, -x, -ch, uyum, ques-
 tion intonation> Future Question³
 apapich chakweem waxch uyum?
 man, -s.f., store, -to, he go, -intend, -assertion, he
 Is the man going to the store? do-question?
52. <Actor, -pich, Direction, -{m}, Action, -x, aa, question force,
 apapich chakweem wax aa-a? -a> Quotative Question
 man, -s.f., store, -to, he go, -intend, he say, -question?
 Did the man say he was going to the store?
53. <Actor, -pich, Direction, -{m}, Action, -ñchaam, -x, aa,
 question force, -a> 'this time' Quotative Question
 apapich chakweem wanñchaamx aa-a?
 man, -s.f., store, -to, he go, -this time, -intend, he
 say, -question?
 Did the man say he was going to the store this time?

Class {m} consists of:

m ... to, forward
 ñ... in, into

[aa] seems to be an alternate form of wa... 'he go' if combined with the discontinuous negative to produce laam... 'he didn't go'.

The discontinuous negative l...m here takes the form lu..m for some reason(?).

The -ch affix used in this battery and others has been called assertion, but it may be a past tense indicator (?).

Other verbs belonging in this battery found to date are:

uxap... 'he went (in)'
saa.... 'he went along'

5. Transitive Battery.

The transitive battery consists of:

1. <Subject, {-pich}, object, (-piñ), T.V.> Simple
 xat xtpapiñ paasaa.
 dog, coyote-o.f., him-he-bite.
 The dog bit the coyote.
2. <T.V., -chs> Zeroed Subject and Object
 paasaachs
 him, he-bite-assertion stress.
 He bit him.
3. <Subject, {-pich}, object, (-piñ), T.V., l...m, laax, -chs>
 xatpich xtpapiñ lpaasaam laaxchs. Negation₁
 dog, -s.f., coyote, -o.f., d.n.-him-he-bite, not be so,
 -assertion stress.
 The dog didn't bite the coyote.
4. <Subject, {-pich}, object, (-piñ), T.V., l...m, laax, -s>
 xat xtpa lpaasaam laaxs. Negation₂
 dog, coyote, d.n. him-he-bite, not be so, -stress.
 The dog didn't bite the coyote.
5. <Subject, {-pich}, object (-piñ), T.V., l...m, laax, -ch, u'as> Negation₃
 xatpich xtpapiñ lpaasaam laaxch u'as.
 dog, -s.f., coyote, -o.f., d.n.-him-he-bite, not be so, -
 assertion, he did, -stress
 The dog didn't bite the coyote.
6. <Subject, {-pich}, object, (-piñ), T.V., l...m, laax, -ch, uyus> Negation₄
 Spri Lornapiñ lpsukanm laaxch uyus.
 Spri, Lorna-o.f., d.n.-her he ran from, not be so,
 -assertion, he do-stress.
 Spri didn't run away from Lorna.

This formula can't be used with paasaa and a few other transitive verbs.

7. <Subject, {-pich}, object, (-piñ), T.V., question force, -a>
 xatpich xtpapiñ paasaa-a? Question₁
 dog, -s.f., coyote, -o.f., him-he-bite, -question?
 Did the dog bite the coyote?
8. <Subject, {-pich}, object, (-piñ), T.V., -m, uyum, question intonation> Question₂
 xat xtpapiñ paasaam uyum?
 dog, coyote-o.f., him-he-bite, -?, he do-question?
 Did the dog bite the coyote?
9. <Subject, {-pich}, object, (-piñ), T.V., {kaayu}, question intonation> Question₃
 xatpich xtpapiñ paasaa kaayu?
 dog, -s.f., coyote, (-o.f.), him-he-bite, i.r.-question?
 Did the dog bite the coyote?
10. <Subject, {-pich}, object, (-piñ), T.V., l...m, laax, question force, -a> Negative Question
 xat xtpa lpaasaam laax-a?
 dog, coyote, d.n.-him-he-bite, not be so, -question?
 Didn't the dog bite the coyote?
11. <Subject, {-pich}, object, (-piñ), T.V., -m...> Dependent₁
 xatpich xtpapiñ paasaam...umich uyus.
 dog, -s.f., coyote, -o.f., him-he-bite, -p.d...he cry-p.sq.
 he do-stress
 When the dog bit the coyote he cried.
12. <Subject, {-pich}, object, (-piñ), ñ-, T.V., -m...> Dependent₂
 xatpich xtpapiñ npaasaam...umich uyus.
 dog, -s.f., coyote, -o.f., when, -him-he-bit, -p.d...he
 cry-p.sq. he do-stress.
 When the dog bit the coyote he cried.
13. <Subject, {-pich}, object, (-piñ), T.V., u'ach...> Dependent₃
 xatpich xtpapiñ paasaam u'ach...umich uyus.
 dog, -s.f., coyote, -o.f., him-he-bite, -p.d...he do-sq. he
 cry-p.sq. he do-stress.
 When the dog bit the coyote he cried.
14. <Subject, {-pich}, object, (-piñ), T.V., uyum...> Dependent₄
 xatpich xtpapiñ paasaam uyum...paweechs.
 dog, -s.f., coyote, -o.f., him-he-bite, -p.d., he do-p.d.
 (?)...him-I see-assertion stress
 When the dog bit the coyote I saw him. (sequential?)
15. <Subject, {-pich}, object, (-piñ), T.V., -s...> Contrastive
 xatpich xtpapiñ paasaas...xtpapich lumim laaxch uyus.
 dog, -s.f., coyote, -o.f., him-he-bite, -but...coyote-s.f.
 d.n.-he cry not be so-assertion he do-stress
 The dog bit the coyote but the coyote didn't cry.
16. <Subject, {-pich}, object, (-piñ), ñ-, T.V., -km...> Dependent₅
 xatpich xtpapiñ npaasaakm...xtpapichumix.
 dog, -s.f., coyote, -o.f., if, -him-he bites, -f.d...coyote
 -s.f. he cry-intend (future probable).
 When (if) the dog bites the coyote, the coyote will cry.

17. <Subject, {-pich}, object, (-piñ), T.V., -ch, mulay> Inability
xatpich xtpapiñ paasaach mulay
dog, -s.f., coyote, -o.f. him-he bite, -?, he unable
The dog didn't know how to bite the coyote.
18. <Subject, {-pich}, object, (-piñ), T.V., -ch, mupar> Ability
xatpich xtpapiñ paasaach mupar.
dog, -s.f., coyote, -o.f., him-he-bite, (p.sq.), he able.
The dog knows how to bite the coyote.
19. <Subject, {-pich}, object, (-pin), T.V., -ñchaam, -chs>
xatpich xtpapiñ paasaanchaamchs. 'this time'₁
dog, -s.f., coyote, -o.f., him-he-bite, -this time,
-assertion stress
This time the dog bit the coyote (finally!).
20. <Subject, {-pich}, object, (-piñ), T.V., ñchaam, -ch, u'as>
xatpich xtpapiñ paasaanshaamch u'as.
dog, -s.f., coyote, -o.f., him-he-bite, -this time,
-assertion, he do-stress.
This time the dog bit the coyote (finally!).
21. <Subject, {-pich}, object, (-pin), T.V., l...m, -chaam,
-ch, u'as> 'this time' Negative
xatpich xtpapiñ lpaasaamchaamch u'as.
dog, -s.f., coyote, -o.f., d.n.-him-he-bite, -this time,
-assertion, he do-stress.
This time the dog didn't bite the coyote (finally!).
22. <Subject, {-pich}, object, (-piñ), T.V., -ñchaam, question
force, -a> 'this time' Question
xatpich xtpapiñ paasaanchaam-a?
dog, -s.f., coyote, -o.f., him-he-bite, -this time,
-question?
Did the dog bite the coyote this time?
23. <Subject, {-pich}, object, (-piñ), T.V., -k, luyum> 'never'
xatpich xtpapiñ paasaak luyum.
dog, -s.f., coyote, -o.f., him-he-bite, -f.sq., not be
The dog never bites the coyote. so.
24. <Subject, {-pich}, object, (-piñ), T.V., ñmaam> 'always'
xatpich xtpapiñ paasaa nmmam.
dog, -s.f., coyote, -o.f., him-he-bite, 'always'
The dog always bites the coyote.
25. <llaam, subject, {-pich}, object, (-piñ), T.V., -ch, u'as>
llaam xatpich xtpapiñ paasaach u'as.
sometimes, dog, -s.f., coyote, -o.f., him-he-bite,
-p.sq., he do-stress.
The dog sometimes bites the coyote.

Class {-pich} is optional in this battery, and consists of:
-pich ... subject focus suffix
-ch..... subject suffix

Three of the formulas in this battery have an alternative word constant, making in reality six formulas rather than three.

- a. u'as (see formula no. 5) alternates with
uyus (see formula no. 6)

We are not yet sure what factor(s) condition the choice of the one versus the other. Some verbs, in fact, may take both forms. We feel they are alloconstants which are predictable if we know the rules (but we don't yet). Hence we have made two formulas, nos. 5 and 6, out of them, rather than a class.

- b. u'ach (see formula no. 13)
uyum (see formula no. 14)

For some reason, u'ach was not allowable preceding paweechs, and uyum was. Once again the conditioning factor is undetermined and for the present we will have the two formulas rather than a constant class. The third case involved is different, however.

- c. kaayu ... animate indefinite reference
kayu inanimate indefinite reference

Since we can predict that kaayu will be used only when the object is animate, we have made this into a constant word class:

{kaayu} consisting of:

kayu ... (inanimate indefinite reference to manner,
time, quantity, object, purpose) 'it is
somehow so'

kaayu... 'he/they is/are somehow so'

Thus using only the one formula (no. 9).

Note: At present several apparently homophonous morphemes are giving us some trouble. Whether they are really different morphemes with different functions or whether they are the same morpheme with several functions we don't know. The extent of their functions haven't been thoroughly studied, either. Admittedly there is some ambiguity and overlapping in this paper regarding two of the most troublesome of these:

-ch...subject suffix, past tense sequential verb suffix;
past tense indicator; assertion (of truthfulness?)(especially in narrations); sentence conclusion indicator (may be followed only by -s ... indicating stress(?)). Neither the aspective nor the syntactic function of this morpheme is thoroughly understood yet.

-m...final half of the discontinuous negative morpheme;
past tense dependent change of subject indicator; question indicator, 'direction toward' suffix on nouns, 'direction away from' prefix on verbs, (and others yet unanalyzed).

Other examples of verbs fitting in the transitive battery are:

1. Animate object verbs:
pchaachuup ... he made her pregnant
paayaa he got him

pshmukwir ... he gets jealous of him
pshuusheel .. he doesn't know him
(Verbs of this type will take kaayu instead of kayu.)

2. Inanimate object verbs:
shukux ... he knocks at
suuqwaq... he tears
uma he eats

6. Caused Motion Battery.

The Caused Motion Battery consists of:

1. <Csd, Csr, Motion, achs> Simple Statement
Frank pa'im xween achs.
Frank, him-I do-p.d., move, he do/say assertion stress.
I made Frank move.
2. <Csd, Csr, Motion, lu'amchs> Negative
Frank pa'im xween lu'amchs.
Frank, him-I do-p.d., move d.n.-he do-assertion stress.
I didn't make Frank move.
3. <Csd, Csr, Motion, a, question force, -a> Yes/No Question
Frank pa'im xween a-a?
Frank, him-I do-p.d., move, he do/say-question?
Did I make Frank move over?
4. <Csd, Csr, Motion, a, -ñchaamch, uyus> 'This time'
Frank pa'im xween anchaamch uyus.
Frank, him-I do-p.d., move, he do/say-this time-assertion, he do-stress.
I made Frank move over this time.
5. <Csd, Csr, Motion lu'am, -chaamch, uyus> 'this time' negative
Frank pa'im xween lu'amchaamch uyus.
Frank, him-I do-p.d., move, d.n.-he do-this time-assertion, he do-stress.
I didn't make Frank move over this time.
6. <Csd, Csr, Motion, a, -ñchaam, question force, -a> 'this time' Yes/No Question
Frank pa'im xween añchaam-a?
Frank, him-I do-p.d., move, he do/say-this time,
Did I make Frank move this time? -question
7. <Csd, Csr, Motion, ñ-, aa'ach,...ichs> Dependent Temporal
Frank pa'im xween naa'ach...mshuuray ichs.
Frank, him-I do-p.d., move, when, -he-do, -tense past,
he mad, I do/say.
8. <Csd, Csr, Motion, aa, -g...> Contrastive
Frank pa'im xween aas ... lnmuuxaymchs.
Frank, him-I do-p.d., move, he do, -but...d.n.-he like
-assertion stress.
I make Frank move over, but he didn't like it.

9. <Csd, Csr, Motion, a, -km,...> Dependent₂
 Frank pa'im xween akm...nawee uweem meexannx.
 Frank, him-I do-p.d., move, he do/ say, -f.d...somethingg
 he see-p.d. good-future probable
 I made Frank move so he could see better.
 Note: no. 7 formula above may actually be

<Csd, Csr, Motion, ñ, Csd, Dsr, tense {ch} ichs>

but we haven't had time to check for

ñ-aa'a {ch}.

Class {-ch} would probably consist of:

- ch ... past time, completed
- x ... future intention

To date no other root fits this battery.

7. Yatam Battery.

The Yatam Battery consists of:

1. <Actor, (-pich), Goal, (-piñ), yatam, paa'a, -ch> Simple State-
 Rose Bruce yatam paa'ach. ment
 Rose, Bruce, love, him, -she-say, -assertion or comple-
 Rose loves Bruce. tive.
2. <Actor, (-pich), Goal, (-piñ), yatam, paa'a, l...m, laax>
 Rose Bruce yatam lpaa'am laax. Negative₁
 Rose, Bruce, love d.n., -him, she say, not be so.
 Rose doesn't love Bruce.
3. <Actor, (-pich), Goal, (-piñ), yatam, paa'a, l...m, -chs>
 Rose Bruce yatam lpaa'amchs. Negative₂
 Rose, Bruce, love, d.n. him-she say, -assertion stress?
 Rose doesn't love Bruce.
4. <Actor, (-pich), Goal, (-piñ), yatam, paa'a, l...m, laax, -chs>
 Rose Bruce yatam lpaa'am laaxchs. Negative₃
 Rose, Bruce, love, d.n. -him-she say, not be so, -asser-
 Rose doesn't love Bruce. tion stress.
5. <Actor, (-pich), Goal, (-piñ), yatam, paa'a?> Yes/No Question
 Rose Bruce yatam paa'a-a?
 Rose, Bruce, love, him-she say, -question?
 Does Rose love Bruce?
6. <Actor, (-pich), Goal, (-piñ), yatam, paa'aa, -s...> Contrastive
 Rose Bruce yatam paa'aas...nawee lu'am laax xanxs
 Rose, Bruce, love, him-she say, -but...something not do
 not be so very-future-stress.
 Rose loves Bruce but she never says so.

To date, no other root fits this battery.

COCOPA CLAUSE TREES

Statements:

1. An n-tuple acceptable in a terminal battery is acceptable in all the batteries that lie in its path down the tree. Short forms are ellipses of forms from higher batteries.

Individual n-tuples may have some restrictions (semantic usually) of forms they can take, but in general the above holds true.

2. Verbs (as well as nouns) fit Identification battery "B" (except for possessives).
3. Verbs (as well as nouns) fit Identification battery "A" (possessives excepted again).
4. Main verbs fitting Tree #2 are inflected for person. Main verbs fitting Tree #1 are not. (That is the reason why two trees are needed for the language instead of only one.)

N-tuples moving down path of Tree #1

Descriptive "A"

mat xay 'The ground is wet.'
ground wet

etc.

Identification "A"

mat-cha 'It's ground.'
(noun)

etc.

or

xay -cha 'It's wet.' (except possessives)
(verb)

etc.

N-tuples moving down path of Tree #1

1. Double Transitive Branch

Tompich Spripin xma su'ap x-wak peech (u'as).
Tom-subject Spri-object eggs 2 him he gave he did

etc.

Transitive

Tompich Spripin peech (u'as).

etc.

Descriptive "B"

Tompich peech

etc.

- Identification "B"
 peech uyuñpa.
 or
 Tompich uyuñpa.
etc.
2. Caused Motion Branch
 Frank pa'im xweeñ ach. 'I made Frank move.'
 Frank him I made move he did
etc.
- Intransitive
 Frank xween ach. 'Frank moved.'
etc.
- Descriptive "B"
 Frank ach.
etc.
- Identification "B"
 Frankch uyuñpa.
 or
 Ach uyuñpa (except possessives)
etc.
3. Directional Battery Branch
 apapich chakweem wa(ch) 'The man went to the store.'
 man-subject store-to he went
etc.
- Descriptive "B"
 apapich wa(ch)
etc.
- Identification "B"
 1.wach uyuñpa (except possessives)
etc.
- or
 2.apach uyum
 or
 apapich uyum
 or
 3.apacha
etc.