1 Introduction

Property concepts

Dixon’s (1982) property concepts (PCs): notions expressed by adjectives in languages that have them.

(1) Dixon’s seven classes of PCs

<table>
<thead>
<tr>
<th>Dimension</th>
<th>Big, small, long, tall, short, wide, deep, etc.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Age</td>
<td>New, young, old, etc.</td>
</tr>
<tr>
<td>Value</td>
<td>Good, bad, lovely, atrocious, perfect, proper, etc.</td>
</tr>
<tr>
<td>Color</td>
<td>Black, white, red, etc.</td>
</tr>
<tr>
<td>Physical</td>
<td>Hard, soft, heavy, wet, rough, strong, hot, sour, etc.</td>
</tr>
<tr>
<td>Speed</td>
<td>Fast, quick, slow, etc.</td>
</tr>
<tr>
<td>Human propensity</td>
<td>Jealous, happy, kind, clever, generous, cruel, proud, etc.</td>
</tr>
</tbody>
</table>

Crosslinguistic variation in property concept encoding

Much is known about the syntax and semantics of constructions headed by PC words when the PCs are encoded as adjectives (see e.g., Kamp 1975; Cresswell 1977; Klein 1980; von Stechow 1984; Kennedy 1999 among many others).

However, as is well known at least since Dixon’s work, many languages have only a very small class of adjectives (and some languages may lack the category altogether, though see Baker 2003; Dixon 2004).

In such languages, many PCs are encoded by other lexical categories, mostly verbs and nouns.

This talk: PC encoding in Huave, a language isolate of Oaxaca, Mexico. There are four dialects of this language. This talk treats the endangered variety of of San Francisco del Mar based on fieldwork by the first author.\(^1\)

Preview: Huave has three classes of PC word—those encoded as nouns, adjectives, and verbs (Kim 2008:189). We show how words in these three classes differ from one another in their syntactic behavior in constructions of: predication, attribution, and argumenthood.

We conclude by speculating about forces that drive the different morphosyntactic behavior.

\(^*\)We are grateful for collaboration in work on Huave with the community of San Francisco del Mar, and we particularly thank Bernabé Gómez Vargas, Epifanía Martínez Martínez, and Benito Nieto Martínez for their patience and generosity in language teaching. Many examples were elicited and should not be taken to reflect the actual opinions or circumstances of any speakers. We alone are responsible for any errors. This work is supported financially by Arts and Humanities Research Council Grant AH/H033645/1.

\(^1\)Orthographic conventions: \(j\) = voiceless glottal fricative; \(x\) = voiceless palato-alveolar fricative; \(ch\) = voiceless palato-alveolar affricate; \(y\) = palatal glide; \(ty, ndy\) = palatal plosives; \(ly\) = palatal lateral; \(n\) = palatal nasal; \(f\) = voiceless bilabial fricative.
2 Adjectival roots

Attribution
A common diagnostic for adjectiveness is attributive modification of nouns (Bhat 1994; Beck 2002; Baker 2003 a.o.).

Huave adjectives have this property, being able to attributively modify nouns in their unmarked form.

(2) a. *anots tongoy xiol*
   one *bent wood*
   ‘a bent stick’

b. *Ajka tongoy xiol ke ngo m-a-rang buen.*
   DET *bent wood DIST NEG SUB-TV-do good*
   ‘That bent stick is no good.’

   where visible-ITR-RFL DET *low hill there POSS-land DET 3SG*
   ‘Where the low hill is visible, there is his/her land.’

While modifying nouns also appear morphologically bare in Noun-Noun compounds, the Adjective + Noun word order contrasts with the head-initial structure found in compounds.

(3) a. *piats poy*
   tortilla oven
   ‘oven-baked tortilla’ (*tortilla de horno*)

b. *yom ŋity*
   house palm
   ‘palm-thatched house’ (*casa de palma*)

Predication
In predication, words in the PC adjective class are also unmarked (4), in the same way that nominal predicates are unmarked in predication (5).

(4) a. *Tongoy a ḫandyely.*
   bent DET candle
   ‘The candle is bent.’

b. *Tarrap a jely.*
   wide DET skirt
   ‘The skirt is wide/broad.’

c. *Ajka piats ka kayang.*
   DET tortilla PROX hard
   ‘This tortilla is hard, stale.’

(5) a. *Aj  ka ñunch.*
   DET PROX boy
   ‘This one is a boy.’

b. *Aj  ki piats.*
   DET MED tortilla
   ‘That is a tortilla.’

That neither the class of words in (4) or (5) is verbal is shown by their lack of verbal tense/aspect morphology, a hallmark of verbal predication (6).
Some adjectival PC words

(7) tongoy ‘bent’; tsapaj ‘thick’; kayang ‘hard, stiff’; lapats ‘low to the ground’; tokots ‘short’; tarrap ‘broad’; kuchujch ‘small’; jagats ‘new’; mbuwiol ‘yellow’; ngarrats ‘old and worn’; tyengex ‘pot-bellied’; tsontsok ‘wrinkled’; torrots (said of the leg of someone who limps)

3 Nominal roots

The nominal class contrasts with the adjectival in both ways, i.e., in their morphosyntactic marking in attributive and predicative contexts. Additionally, they can be used as bare arguments of predicates.

Bare arguments

A good argument that there are PC words that are nominal (or at least have nominal uses) is that such words can be used in their bare form as arguments of predicates.

(8) a. T-a-sap xiok a añch.
   PST-TV-grab 1SG DET laziness
   ‘Laziness seized me.’

b. Ngo n-a-rang añch.
   NEG 1SUB-TV-do laziness
   ‘I’m not lazy.’ (lit. ‘I don’t do laziness.’)

c. Ňipinaj loke k-a-jior a añch, xu k-a-patyey.
   people REL K-TV-have DET laziness very K-TV-ugly
   ‘It’s a very bad thing when people are lazy (lit. ’have laziness’).’

d. Aj ki rrambe.
   DET MED gluttony.
   ‘That is gluttony.’ (said after enumerating some examples of gluttonous behavior)

e. Ngo m-a-ndyiom xi-miajts a rrambe.
   NEG SUB-TV-want 1POSS.CL1-heart DET gluttony
   ‘I don’t like gluttony.’

Predication

When predicating a property concept of an entity, PC nominal roots, in most cases, add an “adjectivizing” prefix Ňi- and display person- and number-marking (although 3sg. is unmarked). The Ňi-prefix is morphologically decomposable as a prefix n- (here allophonically palatalized), which usually has stative or nominalizing functions, plus a theme vowel i-.

(9) a. Ň-i-rrambe a pi.
   STAT-TV-gluttony DET hen
   ‘The hen is gluttonous.’

b. Ajka nazuy ke Ň-i-añch.
   DET man DIST STAT-TV-laziness
   ‘That man is lazy.’
c. *Xiok ŋ-i-añch-ius.*
   1SG  STAT-TV-laziness-1
   ‘I am lazy.’

d. *Ñu-af ŋ-i-nchew-iaf.*
   3-3PL STAT-TV-dumb-3PL
   ‘They are dumb.’

Such nouns can also be used predicatively with the expected kind of meaning (loosely, ‘has salient properties of N’ (cf. English adjectivizer –ey, e.g., fishey, etc.), as in (10-a). (A few additional ŋi-prefixed noun roots have unpredictable lexicalized meanings, such as deriving `deaf’ from ‘ear’, (10-b)).

(10)  a. *Ñ-i-rrants i-mbiom.*
   STAT-TV-sieve 2POSS.CL1-home
   ‘Your roof is leaky.’

b. *Xiok ŋ-i-lajk-as.*
   1SG  STAT-TV-ear-1
   ‘I am deaf.’

A second morphosyntactic option for PC nominal roots in predication is a possessive strategy, where they appear affixed with morphology otherwise used to mark possession on a possessive noun phrase.

(A noteworthy morphosyntactic feature of this kind of possessive strategy is that while it invokes nominal possessive morphology, as is the case with Ulwa (Koontz-Garboden and Francez 2010), the possessive morphology also shows agreement with the subject in PC predication, unlike Ulwa.)

(11)  a. *xa-pek*
   1POS-shoulder
   ‘my shoulder’

b. *mi-pek*  *(yok)*
   2/3POS-shoulder *(you)*
   ‘your shoulder’

c. *mi-pek*  *(ńu)*
   2/3POS-shoulder *(s/he)*
   ‘his/her shoulder’

(12)  a. *Xiok xu xa-añch.*
   1SG  very 1POSS-laziness
   ‘I am very lazy.’

b. *Yok xuwe mi-rrambe.*
   2SG very  POS-gluttony
   ‘You are very gluttonous.’

c. *Xiok y xa-chijk-iow xuwe xa-rrambe-yan.*
   1SG  and 1POSS-younger.sibling-3PL very 1POSS-gluttony-1/2PL
   ‘I and my younger siblings are very gluttonous.’

d. *Ñu-af xuwe mi-rrambe-yaf.*
   3-3PL very  POS-gluttony-3PL
   ‘They are very gluttonous.’
This strategy appears to be an extension of the strategy used for possessive predication with Huave mass nouns more generally, as shown in (13). Count nouns, by contrast, appear with the verb *have* to form possessive predicates.

(13)  *Xuwe xa-tomion.*
very  1POSS-money
‘I have a lot of money.’

(14)  *Ajka chily ke xu k-a-jior sats.*
det  mojarra.negra dist  very  k-TV-have bone
‘That *mojarra negra* fish has a lot of bones.’

The possessive strategy of predication is the preferred and most frequent one in the context of degree modification by *xu* or *xuwe* ‘very’, as illustrated by the data in (14).

For some speakers it appears to be limited to the degree-modification context, with *nǐ*-prefixation being obligatory in all other predicative uses.

Some examples of possessive morphology on PC nominals without ‘very’-modification are attested, but at least one speaker rejects these types of constructions as ungrammatical.

(15)  *a.*  *Pero mi-ańch kuchu pa nax.*
but  POSS-laziness little  fem girl
‘But the little girl is lazy.’

*b.*  *Porque ŉu mi-nchew xa-kwal.*
because 3SG  POSS-dumbness  1POSS-child
‘Because my son is dumb.’

Whether this speaker is idiosyncratic, or whether this is a real generalization (that holds as a dialectal feature?) is important to understand.

Some additional potentially confounding data come from predication in past and future tense.

There is no overt verbal copula in the present, but the past and future use the verb root *-rang- ‘to do, make’* to host inflectional marking for TAM (as well as person/number).

(16)  Regular nouns

*a.*  *Wax t-a-rang kuchu ŉuńch...*
on  PST-TV-do little  boy...
‘When he was a boy...’

*b.*  *Al m-a-jlaik fundado ajka kambaj ka xiok t-a-rang-as kosineru.*
when  SUB-TV-be founded det town  prox 1SG PST-TV-do-1 cook
‘When this town was founded, I served as a cook.’

Notably, in this predicative context PC nouns occur as bare roots, invoking neither *nǐ*-prefixation nor the possessive strategy.

(17)  *a.*  *Nũ xu t-a-rang rrujch.*
3SG very PST-TV-do stinginess
‘He was very stingy.’
b.  *Xiok t-a-rang-as ańch. Kana la  ngok.*
   1SG PST-TV-do-laziness now already no
   ‘I used to be lazy. Not anymore.’

c.  *Aj kuchu ŋuńch ke pak-aw-e que i-m-a-rang rrujch.*
   DET little boy DIST visible-ITR-RFL that FUT-SUB-TV-do stinginess
   ‘One can see that that little boy is going to be stingy.’

That these PC nominals should invoke the possessive strategy in the present, but not in the past or future seems surprising.

Possibly relevant in relation to this is that tentatively, it seems that adjectival PCs behave like regular nouns in past/future contexts, i.e., also appear as the complement of the TAM-marked verb –rang–.

(18)  *Ajka ŋuńch ke ngome m-a-rang tokots u-lyej.*
   DET boy DIST NEG SUB-TV-do short 3POSS.CL1-leg
   ‘That boy is not going to be short.’

If adjectives also behave this way in past/future contexts, what this may mean is that there are adjectival variants of these PC nominals, and that the adjectival version is used in past/future contexts and the nominal one in present tense ones.

If that were the case, we might expect to find the “adjectival version” to be able to appear in adjectival contexts, e.g., attributive modification, and bare in present tense predication. Both of these happen—the the former in (19), the latter in the relative clause contexts in (20).

(19)  *anop ańch naxuy*
   one lazy man
   ‘a lazy man’

(20)  a.  *Xa-prim anop naxuy ańch.*
   1POSS-cousin one man lazy
   ‘My cousin is a lazy man (a man who is lazy).’

   b.  *Ngo m-a-ndyiom xi-miajts ńi-pinaj rrujch.*
   NEG SUB-TV-want 1POSS.CL1-heart people stingy
   ‘I don’t like stingy people (people who are stingy).’

However, bare PC nominals are unattested as predicates in matrix clauses:

(21)  *?xiok ańch.*
   1SG laziness
   ‘I am lazy.’

Attributive modification

As seen above, bare PC nominals do sometimes appear in attributive contexts (in which case they are, by hypothesis, actually adjectives).

The ŋi-prefixed roots are also used in attributive constructions.

(22)  a.  *anop ŋi-ańch naxuy*
   one STAT-TV-laziness man
   ‘a lazy man’
b. Ajka ŋi-kich naxuy ke xa-prim.
   DET STAT-TV-skinniness man DIST 1POSS-cousin
   ‘That skinny man is my cousin.’

Prefixation of PC nominal roots with ŋi- is parallel to ŋi-prefixation of regular nouns which enables them to appear as attributive modifiers.

(23) ŋi-kiŋiok katy
   STAT-TV-salt fish
   ‘salty fish’

Possessive morphology on PC nominals, by contrast, doesn’t make attribution possible.

(24) *anop mi-aŋch naxuy
   one POSS-laziness man
   Intended meaning: ‘a lazy man’

Attempts to elicit degree-modified PC nominals in attributive uses (‘a very lazy man’) have resulted exclusively in relative-clause constructions.

(25) a. anop naxuy xu mi-aŋch
   one man very POSS-laziness
   ‘a very lazy man’/’a man who is very lazy’

b. anop naxuy xu mi-rrujch
   one man very POSS-stinginess
   ‘a very stingy man’/’a man who is very stingy’

That these are relative clauses can be seen by comparison with (26).

(26) Ajka naxuy xu k-a-ndyak way ngome xa-tyety.
   DET man very K-TV-speak lie NEG 1POSS-father
   ‘The man who says a lot of lies is not my father.’

More restrictions on the possessive strategy of predication
There are two additional predicative contexts that we know of in which the use of the possessive strategy is disallowed.

Comparatives
Bare PC adjectives (27-a), stative-marked PC verbs (discussed further below) (27-b), ŋi-marked PC nominals (27-c), and bare PC nominals (or the adjectival versions of them?) (28) are all found in comparative constructions.

(27) a. Ajka xiol ka mas tongoy que ajk anots ke.
   DET wood PROX more bent than DET one DIST
   ‘This stick is more bent than that one.’

b. Mas n-a-xip-ius que ŋu.
   more STAT-TV-fat-1 than 3SG
   ‘I’m fatter than him/her.’

c. Xiok mas ŋ-i-aŋch-ius que ŋu.
   1SG more STAT-TV-laziness-1 than 3SG
   ‘I’m lazier than him/her.’
(28)  a.  Xiok mas añch que ́nú.
    1SG more lazy  than 3SG
    ‘I am lazier than him/her.’
    b.  Xiok mas rrujch xiok que ́nú.
    1SG more stingy  1SG than 3SG
    ‘I am stingier than him/her.’

We might expect to find some comparative strategy invoking possessive morphosyntax for the PC nominals; such a strategy does not seem to be available in the comparative, however. E.g., (29) is unattested.

(29)  ?Xiok mas xa-añch que ́nú.
    1SG more 1POSS-laziness than 3SG
    ‘I am lazier than him/her.’

NEGATIVE PREDICATION
Negation provides another context where we see the parallel distribution of bare PC adjectives, stative-marked PC verbs, and ́ni-marked PC nominals.

    NEG short 3POSS.CL1-leg
    ‘S/he is not short.’
    b.  ́Nú ngome n-a-xip.
    3SG NEG STAT-TV-fat
    ‘S/he is not fat.’
    c.  ́Nú ngome ́n-i-añch.
    3SG NEG STAT-TV-laziness
    ‘S/he is not lazy.’

Possessive morphology on PC nominals appears to be ungrammatical in negation contexts (although these judgments are from the same speaker who vetoes possessive morphology without ‘very’ modification).

(31)  *Ngome xa-añch.
    NEG 1POSS-laziness
    ‘I am not lazy.’

(32)  *Ngome mi-añch.
    NEG POSS-laziness
    ‘You/he/she is/are not lazy.’

In short: There are nominal PC words that when used as predicates in their bare form can invoke possessive morphosyntax in a way similar to other mass nouns in possessive predication. The distribution of these bare PC nominals is restricted in ways that we do not yet fully understand.

Loans
Spanish adjectives are borrowed into the PC nominal class. However, they seem resistant to taking inflectional suffixes, e.g., (33-c) lacks the 3pl. that would be expected.

Such uses, like the ones above, are found with degree modification in predicative contexts.
Additionally, there is evidence of ňi-prefixation on Spanish loan adjectives, parallel to native PC nominals.

(34)  ň-i-blank  u-mbas.
STAT-TV-white 3POSS.CL1-exterior
'It is white.' (referring to the skin of a species of jicaco fruit)

Similarly for: ň-i-lok ‘crazy’; ň-i-mud ‘mute’; ň-i-groser ‘rude’; ň-i-mala ‘bad’ (referring to a person).

Some nominal PC words
In addition to the Spanish loans, the native words in (35) exhibit nominal behavior.

(35)  ańch  ’laziness’; nchew  ’dumbness’; rrambe  ’gluttony’; rrwjch  ’stinginess’; kich  ’skinniness’; way  ’untruthfulness, mendaciousness’

4 Verbal roots
The majority of Huave property concept words are what appear to be stativized forms of inchoative verb roots. (Whether this is the right description is open to question; it could be that they are static, with inchoative contextually derived, as in Tongan (Koontz-Garboden 2007). This is a matter for further investigation.)

These roots contrast with the nominal and adjectival ones in being bound.

(36)  a.  ñu  n-a-xip.
3SG  STAT-TV-fat
‘He is fat.’

b.  *ñu  xip.
3SG  fat
‘He is fat.’

We conjecture that these are verbs because they take alongside the stativizing morphology ň, an otherwise verbal theme vowel a.
These stative forms can also be used attributively.

Are the $n$ affix and the $nɪ$ from above actually one and the same—adj? It is quite likely since the words formed with the $n/nɪ$ morphology seem to have identical morphosyntactic distributions, i.e., can be used attributively, have identical behavior in predication (i.e., do not invoke the possessive strategy).

Some verbal PC words

5 Summary

There are (at least) three classes of PC root in Huave, each with its own set of morphosyntactic contexts.

Adjectival roots:

• Bare in attribution.

• Bare in present tense predication.

• Past predication with tarang ‘did/made’.

• Bare in negative predicatives.

• Bare in comparatives.

Nominal roots:

• Bare as arguments.

• Can take $nɪ$– in many predicative constructions (present, comparative, relative clause, negative).

• Past predication with bare root as complement of tarang ‘did/made’.

• Can invoke possessive strategy of predication (in present assertive predication), particularly with degree modifier very.

5 Summary

There are (at least) three classes of PC root in Huave, each with its own set of morphosyntactic contexts.

Adjectival roots:

• Bare in attribution.

• Bare in present tense predication.

• Past predication with tarang ‘did/made’.

• Bare in negative predicatives.

• Bare in comparatives.

Nominal roots:

• Bare as arguments.

• Can take $nɪ$– in many predicative constructions (present, comparative, relative clause, negative).

• Past predication with bare root as complement of tarang ‘did/made’.

• Can invoke possessive strategy of predication (in present assertive predication), particularly with degree modifier very.
- \( \tilde{n}i \)– marking in attribution.
- Can be bare predicate internal to a relative clause (all PC nominals?).
- Can be bare in attribution (all PC nominals?).

Verbal roots:
- Roots are morphologically bound, taking verbal theme affix \(-a\) in stative forms.
- \( n \)– in predicative constructions (present, negative, relative clause).
- Attributive modification with \( n \)–.

6 Discussion and concluding remarks
The facts discussed here raise some interesting analytical questions for future work:
- There seems to be some indication that the possessive strategy of predication requires overt degree modification (i.e., very). Whether this is true or not needs to be better established, and if so, its consequences for the syntactic and semantic nature of the construction considered.
- The possessive strategy of predication seems to be productive (since it occurs with loans), but restricted to present tense affirmative predicative contexts. Why not in negated contexts? Past? Comparatives?
- To what extent are denominal and deverbal \( \tilde{n}i/n \) related to one another? How to state this relationship in light of a more articulated understanding of the differences in meaning between the PC nominals and PC verbs?
- What is the meaning of verbal PC roots? State or change of state? Answering this question presupposes a better understanding of Huave tense/aspect than we currently have.
- More broadly, are there systematic differences in the lexical semantics of the different types of roots? If so, do the observed morphosyntactic contrasts follow from these differences?

References


**Abbreviations**

<table>
<thead>
<tr>
<th>Abbreviation</th>
<th>Meaning</th>
</tr>
</thead>
<tbody>
<tr>
<td>DET</td>
<td>determiner</td>
</tr>
<tr>
<td>DIST</td>
<td>distal</td>
</tr>
<tr>
<td>FEM</td>
<td>feminine determiner</td>
</tr>
<tr>
<td>FUT</td>
<td>future</td>
</tr>
<tr>
<td>ITR</td>
<td>intransitive</td>
</tr>
<tr>
<td>K</td>
<td>verbal inflection, 3rd person only, possibly with nominalizing properties</td>
</tr>
<tr>
<td>MASC</td>
<td>masculine determiner</td>
</tr>
<tr>
<td>MED</td>
<td>medial</td>
</tr>
<tr>
<td>NEG</td>
<td>negative</td>
</tr>
<tr>
<td>1/2PL</td>
<td>1st/2nd person plural</td>
</tr>
<tr>
<td>3PL</td>
<td>3rd person plural</td>
</tr>
<tr>
<td>POSS</td>
<td>possessive (default)</td>
</tr>
<tr>
<td>1POSS</td>
<td>1st person possessive (default)</td>
</tr>
<tr>
<td>POSS.CL1</td>
<td>Class 1 possessive</td>
</tr>
<tr>
<td>PROX</td>
<td>proximal</td>
</tr>
<tr>
<td>PST</td>
<td>past/completive</td>
</tr>
<tr>
<td>REL</td>
<td>relativizer</td>
</tr>
<tr>
<td>RFL</td>
<td>reflexive</td>
</tr>
<tr>
<td>SG</td>
<td>singular</td>
</tr>
<tr>
<td>STAT</td>
<td>stative</td>
</tr>
<tr>
<td>SUB</td>
<td>subordinate</td>
</tr>
<tr>
<td>1SUB</td>
<td>1st person subordinate</td>
</tr>
<tr>
<td>TV</td>
<td>theme vowel</td>
</tr>
</tbody>
</table>