Prosodic Determinants of Syntactic Form: Central Pomo Constituent Order
Marianne Mithun
University of California, Santa Barbara

Constituent order has often been dismissed as an arbitrary syntactic variable, since it varies both across and within languages. An alternative approach is to hypothesize that the diversity of orders that occur reflects the multiplicity of forces that can shape them. Different languages may show the effects of different forces. Even within a single language, different constructions may reflect different motivations. In what follows, constituent order will be examined in Central Pomo, a language indigenous to Northern California. Material will be drawn from the spontaneous speech of Mrs. Frances Jack of the Hopland rancheria, and Mrs. Salome Alcantra and Mrs. Florence Paoli of the Yokem rancheria. Although a basic, pragmatically unmarked constituent order can be discerned, a number of syntactic constructions exhibit quite different orders. It will be shown that the variability of word order within the language can be understood in terms of two kinds of motivations: one cognitive, the other physiological. The physiological factor becomes clear when we look at prosody. Basic constituent order in Central Pomo is SOV, as in (1).

(1) Basic SOV: full NPs

s o čá::ʔem=ʔel mei sómle·lo=ške dá·ʔ-du-w-an. man-old=DEF such hat=only want-RFL-IMPRF-PRF-IMPRF

'Ve never saw her.'

Basic SOV order in Central Pomo is SOV, as in (2).

(2) Basic SOV: pronouns

α o v rá::mu pʰ-wí-w šin.

1.AGT 3.PAT visually-perceive-PRF NEG-IMPRF

'He doesn't mix with Indians.'

Clauses with pronominal arguments show the same SOV order, as in (2).

Dependent clauses typically precede main clauses.

(4) Dependent clause - main clause

comp [khu=m=ʔel ba=pʰé-m-ka-w] dá·ʔ-du-w-ač čów. root=DEF INDEF·DIAG-COOP-CAUS-PRF want-RFL-IMPRF-PL-PRF-IMPRF-PL NEG

'They don't want [people to dig for sedge roots].' Yet not all sentences exhibit SOV order. A number of syntactic constructions are characterized by alternative orders.

1. Initial position

In one set of constructions, a usually sentence-medial constituent appears initially.

1.1. Simple pragmatic ordering

Particularly newsworthly constituents often appear in initial position. The sentence in (5) was part of a discussion of an area a few miles away. As a whole, the sentence conveyed a new idea: the proposition was new to the discourse, not presupposed. Within the proposition, however, the object 'lots of acorns' was more newsworthly than the subject 'we', which was accessible from context. The newsworthly constituent appeared at the beginning of the clause.

(5) OSV: newsworthly object

půd=ʔuda-w ya ša-pʰá-m-a·č-ač hůw ʔe.

acorn much 1.pl. pulling-gather-COOP-IMPRF-PL-IMPRF-PL HAB COP

'We used to pick lots of acorns [there].'

1.2. Focus of contrast

Initial position is also used to highlight a focus of contrast. The contrast may involve any syntactic category: subjects, direct objects, indirect objects, adverbials, even predicates. During a discussion of the difficulty of obtaining government funding for services on the rancheria, Mrs. Paoli made the remark in (6). Here the contrast was overtly specified.

(6) Focus of contrast

dá· čá·č=yácol pé·su, ʔó·ř-a·q-an

other person=PAT money give.many-M,E-PRF-PL-IMPRF

'Other people they're giving money to;
(7) Focus of contrast with copula

\[ \text{masá·nya } \text{čanó·d=a.} \]
White talk.sg-imprf.sg=imm
You're talking English!

\[ \text{yd=kay } \text{rel me-n } \text{?i-m-ma-w } \text{?e, member?} \]
1.pl-agt=too cop so do-m.e-coop-prf cop
We did that too, remember?

Constructions like that in (7) are somewhat similar to the stressed focus it-clefts of English. As characterized by Prince 1978 and others, these English clefts consist of an initial strongly stressed constituent plus following clause: It was golf that killed her. The initial focused constituent represents new, often contrasting information, while the following clause conveys a presupposition, information the speaker assumes is known or can be deduced (something killed her). Like the English it-cleft, the Central Pomo focus construction can contain a copula, but the clause that follows need not represent a presupposition. It is thus less marked pragmatically and accordingly more frequent. The English cleft 'It was us that did that too' would be inappropriate in the context surrounding (7).

1.3. Question formation

Another syntactic construction that deviates from basic SOV order is question formation. In Central Pomo questions, an interrogative marker =wa is encliticized to the first major constituent of the clause. In yes-no questions, this constituent is normally the focus of the question, the element called into question.

(8) \[ \text{dalóm=wa } \text{ši=tel?} \]
wildcat=Q name=def
'Is Dalóm the name?'

(9) \[ \text{kúči- } \text{čēdu=wa } \text{mú-k=tel?} \]
child.pl lots=Q 3.poss
'Does she have a lot of children?'

(10) \[ \text{ʃáwhal } \text{yhé-n=wa } \text{mú-l?} \]
work do-imprf=Q 3.agt
'Does he work?'

(11) \[ \text{mú?i- }=\text{wa } \text{mu-l } \text{mé-n yhé-l-a } \text{?e} \]
true=Q that so do-m.e-imprf.pl
'Is it true they're going to do that?'

In question-word or lexical gap questions, the question-word usually appears initially.

(12) \[ \text{qó=wa } \text{?a- } \text{mú:yu } \text{qaë- }=\text{ya } ... \]
what=Q 1.agt 3.pat give.pl-smll-prf=personal.experience
'What did I give him?'

(13) \[ \text{bá- }=\text{ga }=\text{wa } \text{nap }=\text{ó-w} \]
indef=pat=Q marry-prf
'Who did she marry?'

(14) \[ \text{ši-n } \text{ši=wa=ka } \text{mu-l, míya } \text{báya-l?} \]
how name=Q=inferential that 3.poss man-pat
'What was her husband's name?'

(15) \[ \text{pe-y= } \text{tiw=wa } \text{mu-l } \text{ʃáwhal } \text{yhé-n?} \]
where=from=Q 3.agt work do-imprf
'Where was she working?'

Unlike the focus constructions described in 1.2, the lexical gap questions do contain a presupposition, that I gave him something in (12), that she married someone in (13), that her husband was named something in (14), and that she was working somewhere in (15).

1.4. Topic shift

As in many other languages, initial constituents in Central Pomo may signal a shift in topic. The new topic is not normally brand new; it is generally a
participant that has been mentioned previously in the discourse, or one that is somehow related to one mentioned previously, or one present in the extralinguistic context. It is accessible in the sense of Chafe (to appear).

The reintroduction of a previously mentioned referent can be seen in (16). Mrs. Jack was explaining that her husband had been married to another woman before her mother. That couple had had three children. The woman had also had another son by a different man. The remark in (16) draws the aforementioned son into the center of attention.

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2.1. Final nominals: confirmation

Nominals sometimes appear postverbally when they confirm the identity of already established referents. Similar constructions in English and other languages have been termed right-detached nominals, right dislocations, antitopics, or (less felicitously) 'afterthoughts'. The most common postverbal noun phrases in Central Pomo are subjects, not surprising since subjects are typically identifiable referents. Such a construction can be seen in (20). Mrs. Jack had reported that a cousin had sold all of her mother's baskets.

(20) Final subject

FJ ma-t'é-\(=k\)\(\acute{e}\)\(l\) lóq-ay,
\(\text{own-mother=}\text{poss}\) \(\text{thing=}\text{distr}\)
'Her mother's things,'

h\(\text{h}i\)\(\text{n}g\)\(\text{l}\) lóq-ay=\(\text{el}\) k\(\text{b}m\)\(\text{u}\)
\(\text{Indian}\) \(\text{thing=}\text{distr=}\text{all}\) \(\text{all}\) the Indian things,

\(?=\text{dó}m\)\(\text{a}\) mu-l bá=\(=\text{el}\)\(\text{ši}\)\(\text{w}\).
\(\text{cop=}\text{quot}\) \(\text{that}\) \(\text{indef=}\text{sell} \text{- prf}\)
she sold.'

FP, SA Oh. Mmm.

FJ ʰa'\l\text{bó}y\text{a}\text{•} k\(\text{ú}\)\(\text{č}\) ʰ\(\text{a}\)\(\text{•}\) dé-\(=\text{w}\)\(\text{-an}\),
bead little guess carry-around-\text{-imprf}
'She had a few beads,'

m\(\text{a}t\)\(\text{ú}l\)\(\text{=}\text{el}\).
\(\text{old.lady=}\text{def}\)
the old lady.

mu-l=k\(\text{ay}\) \(?=\text{e}\)\(\text{mu}\)\(\text{l}\),
that=too \(\text{cop}\) \(\text{that}\)
Those too

bá=\(=\text{el}\)\(\text{ši}\)\(\text{w}\).
\(\text{indef=}\text{sell} \text{- prf}\)
she sold.'

The sentence-final nominal 'the old lady' was uttered as a separate prosodic phrase or intonation unit, as is typical of such constructions. It clarifies the identity of the subject of the clause 'she had a few beads', useful since it could have been either the mother or the cousin. It does not announce a topic shift, however. The cousin was the unspecified subject of the following clauses ('[the cousin] sold those too'), and no more was said about the mother.

Object nominals also appear finally. The pragmatic difference between preverbal and postverbal nominals can be seen in (21). When Mrs. Jack first commented that she had forgotten a name, the object 'name' appeared in the unmarked position before the verb 'forget'. When she elaborated that she never could remember it, the object appeared after the verb.

(21) Preverbal and postverbal objects

\(\text{mú}\)\(\text{•}y\)\(\text{u}\) \(\text{ʃ}o\) \(\text{ʃi}\) \(?=\text{ná}\)\(\text{=}\text{ya}\).
\(\text{3.\text{pat}\text{•} 1.\text{pat}\text{• name}}\text{ mentally-hide=}\text{personal.witness}\)
'I forgot her name.'

\(?\text{ʃo}\) \(?=\text{ʃi}\)\(\text{ʒi}\)\(\text{ʒ}d\)\(\text{a}d\)\(\text{-hu}d\)\(\text{-w}\)
\(\text{1.\text{pat}\text{• what=}\text{even}}\text{ know-imprf-prf} \text{-imprf-prf}\) \(\text{neg} \text{- prf}\)
I never remember (it) at all,

\(\text{mú}\)\(\text{•}y\)\(\text{u}\) \(\text{ʃi}\)\(\text{=}\text{el} \ldots\)
\(\text{3.\text{pat}\text{• name=}\text{def}}\)
her name.'

Such final nominals need not be the only reference to a participant within the sentence. Final position is sometimes used to further elaborate the identification of a referent overtly identified preverbally. As the ladies were discussing Central Pomo words for various animals, Mrs. Jack made the remark in (22). Each intonation unit after the initial clause served to further identify the referent of mei 'that stuff'.

(22) Successive elaboration

\(?\text{ʃa}\)\(\text{• mei}\) \(\text{ʃe}d\)\(\text{u}\)\(\text{-} ʃ\)\(\text{a}d\)\(\text{-} ʃ\)\(\text{a}\)\(\text{•} 3\)\(\text{-}d\)\(\text{-w}\)
\(\text{1.agt such lots knowledge-sense-refl-imprf-prf} \text{-neg} \text{- guess}\)
'I don't know that stuff too well,'

loq\(\text{• mei}\)
thing such
that kind of thing
2.2. Final dependent clauses

Dependent clauses exhibit similar alternations in position. The pragmatically unmarked position of dependent clauses in Central Pomo is before main clauses. Mrs. Jack remarked that a certain man in the Coast community was a spiritual doctor who gave ceremonial speeches. Her statement in (25) illustrates the basic initial position of adverbial clauses.

(25) Basic clause order: adverbial clause - main clause FJ 19.101

\[
\begin{array}{llllll}
\text{[cá} & \text{?bú-ya-w=da]} \\
\text{person & bury-defocus-prf=when} \\
\text{[When they bury a person],} \\
\text{matú- & ma- & yhé-n.} \\
\text{speech & thing & do-imprf} \\
\text{he makes a speech.}
\end{array}
\]

Mrs. Paoli responded with the comment in (26). In her response, the adverbial clause appears sentence-finally. The adverbial contributes little newsworthy information, since it is identical to that of the previous sentence.

(26) Main clause - adverbial clause FP 19.103

\[
\begin{array}{llllll}
\text{[cá} & \text{?bú-ya-w=da]} \\
\text{person & bury-defocus-prf=when} \\
\text{[when a person was buried].}
\end{array}
\]

Similar alternations can be seen with purpose clauses. In (27), which followed (24) above in the bear story, the dependent clause appears in unmarked position, before the main clause.

(27) Purpose clause - main clause FJ 6.68

\[
\begin{array}{llllllll}
\text{bal} & \text{?=doma} & \text{[ma?á} & \text{hvel-ma-w=?k'e]}, \\
\text{this & quot & food & seek-coop-prf=fut} \\
\text{qó-} & \text{hlw.} \\
\text{wild=to & go.pl-prf} \\
\text{So they went out [to hunt for food].}
\end{array}
\]

As can be seen from examples (20) - (24), final nominals generally function to confirm established information, occurring most often when there is potential for confusion among various participants under discussion. These constructions sometimes serve stylistic functions as well. Often they are used to reinforce a statement, as in (22). They can also structure discourse, frequently closing a turn in conversation or an episode in narrative.

Similar constructions are not uncommon cross-linguistically, with generally similar functions, although details of use may differ slightly, as in French as described by Ashby (1988).
On another occasion, Mrs. Paoli was discussing the death of an old man in her community. In (28), the purpose clause follows the main clause. The fact that the man was taken to town was newsworthy. The information that he was buried was not.

(28) Main - Purpose clause: FP 22.93

\[\text{mu:} \quad \text{mu:} \quad \text{peo:} \quad \text{lu:} = \text{il} \quad \text{\$-di-} \quad \text{ya-w} \]

\[\text{that} \quad \text{3-PAT} \quad \text{town=at=to} \quad \text{dragging-carry-DEFOCUS-PRF} \]

‘Then they took him to town

\[\text{[?}= \text{mi=-} \quad \text{?hu-w=}\text{?} e]. \]

\[\text{cop=that} = \text{at} \quad \text{bury-PRF}\text{=FUT} \]

[to bury him].’

The two Central Pomo constructions, those with final nominals and those with final dependent clauses, resemble each other both functionally and formally. Information that is less newsworthy appears last in the sentence.

3. Some explanations

The syntactic constructions described so far exhibit a variety of constituent orders. There is a basic, pragmatically unmarked SOV order within clauses, with the expected dependent-main clause order in complex sentences. At the same time, constituents that are pragmatically newsworthy, whether because they are generally significant, they represent a focus of constrast, the focus of a question, or shift in topic, may appear initially, often disturbing the basic order. Constituents that are pragmatically less newsworthy, because they represent previously identified participants or established information, may appear finally. The variety of patterns is understandable in terms of two kinds of factors: one cognitive, the other physiological.

3.1. Basic SOV order: a cognitive motivation

The basic SOV order exhibited by Central Pomo is shared by large numbers of languages. As is well known, subject-object orders are strikingly more common cross-linguistically than object-subject orders. Motivation for them can be seen in basic cognitive processes.

Prague School linguists and others have observed that the normal pragmatic ordering of constituents (in European languages) seems to be theme-rheme. In 1939, Mathesius defined the theme as ‘that which is known or at least obvious in the given situation’. In a large sample of spoken English, for example, Chafe discovered that 99% of the subjects were identifiable, that is, definite nouns, pronouns, or proper names (Chafe to appear: Chapter 8). Objects contrast sharply in newness. Givón (1979) finds that English objects are roughly evenly divided between identifiable and new. He notes, furthermore, that indefinite objects constitute ‘the bulk of the indefinite nouns in the text ... The accusative or direct object position is thus the major avenue for introducing new referential arguments into discourse, at least in English’ (1979:52).

The predominance of subject-object order is thus understandable in terms of general cognitive principles, a tendency to move from the familiar to the new. As Lyons remarks, ‘to many scholars it has seemed natural that the cognitive point of departure and the communicative point of departure should coincide’ (1977:508).

3.2. Pragmatically marked constructions: a physiological motivation

The identification of a tendency to position established information before new raises questions about the form of the other constructions discussed here. In these, sentence-initial position is used to highlight important constituents, those that convey the most significant information of the sentence, while final position is used to background unimportant ones, those that contribute little. The structures appear less unmotivated, however, when another dimension is considered: that of prosody.

We know that natural speech is not usually produced in a steady, homogeneous stream. Rather, prosodic phrases or intonation units (also referred to as intonation groups or tone units) can be distinguished on the basis of several features. They are generally characterized by an overall decline in pitch. In addition, there may be a progressive decrease in the size of individual pitch movements within the phrase. Central Pomo intonation units are typically characterized by a decrease in volume as well. Intonation units may also exhibit an initial acceleration and/or final deceleration. Certain other characteristics may appear at the ends of phrases, such as creakiness. Although all of these features are characteristic of intonation units, all are not necessarily present in every one, nor do they always coincide exactly.

Of all the features, pitch appears to be the most central. Cruttenden (1986:167-8) points out that a general fall in pitch, or declination, seems to be a language universal. He cites physiological motivations for the phenomenon.

The explanation for declination has often been related to the decline in transglottal pressure as the speaker uses up the breath in his lungs. A more recent explanation suggests that an upward change of pitch involves a physical adjustment which is more difficult than a downward change of pitch, the evidence being that a rise takes longer to achieve than a fall of a similar interval in fundamental frequency.
Of course speakers are not incapable of raising pitch at the middle or end of an intonation unit. It simply requires special effort.

A sample pitch contour of a Central Pomo intonation unit can be seen in Figure (1), produced with CECIL, a speech analysis system. The pitch (of $F_0$) of the stressed syllables decreases steadily, as does the size of the pitch change in each: 208-161 ('she'), 177-149 ('her mother’s'), 162-132 ('place'), 125-118 ('there'), 108 ('now'), 96-92 ('lives'). The creakiness and lower tone at the end of the phrase is reflected in the diminishing clarity of the pitch trace in the right third of the figure.

![Figure 1: A basic intonation contour](image)

The general fall in pitch is not limited to single intonation units; a global contour may extend over a group of several intonation units. Each unit in a group begins on a lower pitch than the preceding one. A global contour of this kind can be seen in Figure 2, which represents a sentence consisting of three intonation units. The comma and semi-colon mark the boundaries of the units.

![Figure 2: Global contour](image)

<table>
<thead>
<tr>
<th>163-138</th>
<th>155-148</th>
<th>147</th>
<th>145-125</th>
<th>124</th>
<th>138-1</th>
<th>111</th>
</tr>
</thead>
<tbody>
<tr>
<td>Kd-ka</td>
<td>ḳika</td>
<td>mu·l</td>
<td>ṁd-paqo</td>
<td>ṣqo·ṯi</td>
<td>ṣd-dw</td>
<td>ṭi’n;</td>
</tr>
<tr>
<td>M’s:M actually</td>
<td>papa at all like not hate say</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>‘Grandma actually, didn’t like Papa at all; she said she hated him.’</td>
<td></td>
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<td></td>
</tr>
</tbody>
</table>

The pitch level is reset with the next group of intonation units.

It might be wondered whether these decreases in pitch are actually perceived. Pierrehumbert 1979 found, for example, that when speakers of English were asked to compare the pitch of stressed syllables in a nonsense sentence, they corrected for the expected declination. There is evidence that the downtrend and accompanying pitch reset at boundaries are not disregarded in interpreting intonation, however. Schuetze-Coburn, Shapley, and Weiner 1991 compared acoustic measurements of declination units with auditory perceptions of intonation units in American English conversation. In virtually all cases, the acoustic cue of $F_0$ reset corresponded to the auditory perception of global intonation unit boundaries.

Clearly, the acoustic facts of declination units are directly related to their perceptual equivalents in intonation units. We can point to a specific acoustic measure which correlates with intonation unit boundaries; that is, we may infer that $F_0$ reset is a salient cue to an auditory identification of boundaries. (Schuetze-Coburn, Shapley, and Weber 1991:225)

The general decline in pitch, typically accompanied by a decline in volume in Central Pomo and by a decrease in the size of pitch change, provides a reasonable motivation for the converging forms of the syntactic patterns described in sections 1 and 2 above. Pragmatic importance is matched by
prosodic salience. In the following sections, the intonation contours characteristic of each of these constructions is examined.

3.3. Initial position
Each of the first four constructions described, general pragmatic ordering, focus of contrast, question formation, and topic shift is characterized by a distinct prosodic contour. All, however, share a common prosodic feature. In each, a pragmatically significant constituent is positioned at the prosodic peak of the intonation unit, where pitch, volume, and pitch change are the greatest. Important elements are pronounced with extra vigor.

3.3.1. General pragmatic ordering
The contour characterizing the OSV sentence in example (5) above can be seen in Figure 3. The newsworthy object ‘lots of acorns’ precedes the given subject ‘we’ and consequently appears at the height of pitch and volume.

3.3.2. Focus of contrast
Like the basic pragmatic ordering of Figure 3, constructions highlighting a contrast position the focus of the contrast initially, at the prosodic peak of the intonation unit. While the basic pragmatic ordering constructions show a relatively smooth descending contour, however, the focus of contrast constructions are characterized by extra high pitch and volume on the initial constituent, and, significantly, a more dramatic pitch change. As noted by Cruttenden, a large rise in pitch is easiest physiologically in initial position.

3.3.3. Question formation
Questions resemble general prosodic ordering and focus constructions in positioning an important constituent initially, at the prosodic peak. In addition, they show a special final rise, as might be expected. Figure 5 shows the intonation contour of the yes-no question of example (9). Figure 6 shows the contour of the question-word question of example (13).

Figure 5: Yes-no question
198-186 rēdu-wa má-k'[t]?
children lots=Q she has
‘Does she have a lot of children?’

Figure 6: Question-word question
205-181 Bā-j[a] = wa nap'łow, Falles?
whom=Q marry
‘Who did she marry, Falles?’

3.3.4. Topic shift
Like the simple pragmatic ordering, focus, and question constructions, topicalization positions an important constituent initially, at the point of greatest prosodic salience. Unlike the others, however, topicalization shows a pitch reset for what follows. An accessible participant is (re)introduced in the first intonation unit, then something is said about it in a second. The contour of the topic shift construction in example (17) can be seen in Figure 7. (The second intonation unit appears to begin with an even higher pitch than the first, here, but the apparent difference is actually due to the aspiration at the beginning of the first word rēdu· ‘lots’.)
3.4.1. Postverbal nominals

The prosodic contour of a sentence with a postverbal nominal, example (24) above, can be seen in Figure 8. The final nominal ‘those (guys)’, represented by the right third of the figure, is low in pitch and monotonous, showing very little pitch change.

3.4.2. Final dependent clauses

The effect of altering the position of dependent clauses can be seen by comparing Figures 9 and 10. In Figure 9 (example (27)), the purpose clause appears in its pragmatically unmarked position, before the main predicate. In Figure 10 (example (28)), the purpose clause, predictable information, appears finally, at the point of lowest prosodic prominence.
4. Conclusion

Constituent order has often been dismissed as an arbitrary variable of language structure, since it varies both across and within languages. An alternative approach is to hypothesize that the multiplicty of orders we find is the result of the multiplicity of forces that shape word order. Different languages may show the effects of different forces. Even within a single language, different constructions may show the effects of different motivations.

The basic SOV order of so many languages, including Central Pomo, is easily understood in terms of general cognitive processes. The often noted prevalence of subject-object orders over object-subject orders can be explained as a reflection of a more general cognitive tendency to proceed from the familiar to the new.

Yet many syntactic constructions in Central Pomo and other languages appear to violate this principle. (Dik 1978, Prince 1978, 1981, Lambrecht 1981, Ashby 1988, Gelyaksens 1988, Ward 1988, Aisien 1992, Dahlstrom 1993 among others describe similar patterns elsewhere.) In these constructions, constituents representing especially newsworthly information appear sentence-initially, and constituents reiterating established information appear sentence-finally. Another quite different kind of factor may lie behind all of the constructions: that of prosody. In the general pragmatic ordering, focus of contrast, question, and topic shift constructions of Central Pomo, a pragmatically important constituent is positioned at that portion of the intonation unit that is naturally the most salient prosodically. In constructions with sentence-final nominals or dependent clauses, constituents conveying less important information are relegated to the prosodically least salient portion of the intonation unit, at the point of least pitch, volume, and pitch change.

Central Pomo thus shows the effects of at least two different kinds of motivations in the shape of its syntactic constructions. Its basic, unmarked SOV word order reflects a cognitive tendency for speakers to begin with the familiar as a point of departure. Its marked ordering, focus, question, and topicalization constructions, as well as sentence-final nominals and dependent clauses mirrors natural prosodic salience, the result of physiological factors, for expressing relative pragmatic importance.

Abbreviations

| AGT | agent case | NEG | negative |
| CAUS | causative | PAT | patient case |
| COOP | cooperative agency | PL | plural |
| COP | copula | POSS | possessive |
| DEF | definite article | PRF | perfective aspect |
| DISTR | distributive | Q | interrogative marker |
| FUT | future | QUOT | quotative evidential |
| HAB | past habitual | RFL | reflexive |
| IMM | immediate | SG | singular |
| IMPRF | imperfective aspect | SML | semelfactive |
| INCH | inchoative | | first person |
| INDEF | indefinite patient | 2 | second person |
| M.E | multiple event | 3 | third person |

References


Dahlstrom, Amy 1993. The syntax of discourse functions in Fox. This volume.


1. Introduction.

The formal properties of pronominal clitics in Coastal Carib reflect a relation between person markers and the tense/mood environment in which they are found. Under standard approaches to bound pronominal morphology this relation is unexpected; person values are not generally analyzed as relating to tense or mood in any systematic way. However, from the point of view that inflectional morphology is information increasing (Steele 1992), the properties of the Carib clitics can be seen as a natural consequence of the grammatical organization of Carib. That is the position taken in this discussion.

Carib grammar is proposed to be organized in part by the epistemic contrast Certain/Not Certain. The relative certainty of an utterance reflects an evidential distinction defined by whether or not speaker and hearer can evaluate the facts described by the utterance. The following semantic distinctions provide the parameters along which expressions can be evaluated: i) whether an expression refers to events in This world or to Possible worlds, ii) whether an expression is a Proposition or a Nonproposition, iii) whether an expression refers to Nonpast or Past time and iv) whether an expression refers to Non3rd person or 3rd person agent, or Affector. The linguistic information associated with Carib tense/mood morphology is proposed to reflect the Certain/Not Certain contrast, and the representation and distribution of Carib clitics are not accidentally related to tense and mood, but in fact derive from the role of the Non3rd/3rd contrast within the larger system.

In the discussion that follows I adopt Steele's (1990, 1992) model of the relationship between features and category labels. I take feature: value pairs to comprise categorial distinctions; they are not simply additions to more basic categories. I also assume that inflectional operations are one-place processes which apply to representations and return modified representations (e.g., Steele 1992, Stump 1991, Anderson 1992, Matthews 1991). I assume, following Steele (1992), that the modification is an increase in the representation's morphosyntactic information. An information increasing process is schematized in (1):

(1) \textsc{FORM}:[F_{1:a} F_{2:b}] \rightarrow \textsc{FORM}:[F_{1:a} F_{2:b} F_{3:e}] \\

Under Steele's approach, lexical entries are proposed to be impoverished feature structures, which are enriched by morphological operations. An operation may add a feature:value pair, or fill in a value for an existing feature that does not have a specified value.
PROCEEDINGS OF THE NINETEENTH ANNUAL MEETING
OF THE
BERKELEY LINGUISTICS SOCIETY
February 12-15, 1993

SPECIAL SESSION
ON
SYNTACTIC ISSUES
IN
NATIVE AMERICAN LANGUAGES

edited by

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Berkeley Linguistics Society