Studies of case systems usually focus on the morphological character of the marking and on the semantics of the cases. That is, we ask how a case is manifested and what it means (perhaps in a particular context). The assumption is that when the relation appropriate to a case marker exists, then that marker will appear. My own investigation of the Diegueño system also focussed on semantics and surface morphology, but in so doing, it ran into an unexpected problem: case was often not marked when I expected it — i.e., where the semantic or grammatical relation appropriate to some case held between a particular noun phrase and its predicate.

At first, this seemed only a minor annoyance, an inconvenient obstacle to data-gathering to be resolved mainly by patience and better communication of the linguistic problems that concerned me. Curiously, however, optionality as an obstacle to understanding case semantics and morphology disappeared (of course other obstacles remained!), but it became a worthwhile problem in its own right.

If case is sometimes marked and sometimes not, what governs the choice, apart from whim or "style"? This question begs another: whether there are significant syntactic or semantic generalizations about when case is marked. The remainder of this paper will discuss some such generalizations and suggest that conditions on optionality lead down some interesting theoretical paths.

Briefly, the morphology and semantics of the cases are as follows. The six surface cases appear as suffixes on the noun (or, more generally, noun phrase) to which they apply; they are the last such suffix on the word. The SUBJECT case is marked by -c and denotes the surface subject, except in predicate nominal constructions, where it marks the predicate. The OBJECT case is marked by Ø (i.e., is unmarked) and indicates direct and indirect objects, the "subject" of predicate nominals, possessors, and temporal nouns. The COMITATIVE case, marked by -m, is used for accompaniment, motion towards the referent of the marked NP, and instrumental. The ABLATIVE -k marks motion away from the referent of the marked NP. LOCATIVE -i indicates general location, something like English at. The INESSIVE/ILLATIVE -LV (a voiceless alveopalatal lateral fricative) marks motion or position inside the referent.

As noted, case is sometimes not marked when a case role is clearly filled by some noun (phrase). Consider (1):

(1) ṭan-čin nγwayp t+wä: ɨ:ty+pu+1
    man one live PROD+be-sitting forest+DEM+LOC

'there was a man who lived alone in the forest'
Two NP's in (1) have case roles: *[iːkʰic] 'man' and *[iːtay] 'forest', but only the latter bears the morphological mark of its role. Sentence (2), on the other hand, is not acceptable:

(2) * [iːkʰic+c] ?xin n̥wayp t+wa: [man+SUBJ (live) PROG+be-sitting] [iːtay(+pu) (forest(+DEM))]

Thus some combinations of marked and unmarked cases are permitted and others are not. I note below some conditions which seem to govern case marking "optionality".

The first condition is

CONDITION 1: CASE IS OBLIGATORY ON PERSONAL PRONOUNS

Since the Diegueño verb is marked for the person of its subject (and object, if transitive) and neither subject nor object pronouns need appear on the surface, we may suppose that the surfacing of pronouns indicates some degree of emphasis and that an emphasized element has greater need to have its role clearly indicated. That is, I assume that if an element is emphasized, then the "cost" of uncertainty about its role will be greater.

A similar argument could be made for

CONDITION 2: CASE IS OBLIGATORY ON RELATIVE CLAUSES

as exemplified in

(3) [tanay ?wa:(+∅) ?+wu:w]+pu+LV ?+ciyaw+x [yesterday house(+OBJ) 1+see]+DEM+IN 1+sing+IRREAL

'I'll sing in the house I saw yesterday'

(4) * tanay ?wa: ?wó:w(pu) ?ciyawx

On the other hand, the obligatory marking of relative clauses may merely reflect

CONDITION 3: CASE IS OBLIGATORY WHEN THE DEMONSTRATIVE SUFFIX -pu IS PRESENT

This condition applies to nouns as well as relative clauses (which are possibly always restrictive in Diegueño and hence marked with -pu), so that when a noun (phrase) ends with -pu, we can infer that it is of the form

(5) N + pu + ∅ = N + DEM + OBJ

For example,

(6) xatapä:pu+∅ w+wó:w 'he (she or it) saw the coyote'

coyote+DEM+OBJ 3+see
cannot be taken to mean 'the coyote saw it (or her or him)'. This condition may also relate to Condition 1, that on personal pronouns, since the latter are redundantly definite, the necessary condition for the appearance of -pu on nouns.6

Another condition, with an obvious functional basis, is

**CONDITION 4: CASE IS OBLIGATORY WHEN "UNUSUAL" WORD ORDER IS USED**

Diegueño basic word order is SOV, so any non-SOV order may be regarded as "unusual"; so may an order that deviates from the norm for ordering the constituents subsumed under the "0" of "SOV" (see (19) below). Such orders arise in two principal ways. The first is the (re-)ordering of simple noun phrases for emphatic purposes.7 For example, there are sentences like

(7) \(xat+pu+∅ \quad sin+c \quad a:jap \quad \text{hit}\)
    \(\text{dog+DEM+OBJ} \quad \text{woman+SUBJ} \quad \text{hit}\)

(8) \(w+wu:i:pac+c \quad sin+c+pu+∅ \quad \text{the man saw the lady}\)
    \(3+\text{see} \quad \text{man+SUBJ} \quad \text{woman+DEM+OBJ}\)

(9) \(^{wa:piva:} \quad ^{+ta:t} \quad w+cuw \quad \text{this is the house my}\)
    \(\text{house this} \quad l+\text{father} \quad 3+\text{build} \quad \text{father built}\)

The second source of non-SOV order is "complex NP movements". These include relative clause preposing, extraposition, and right dislocation. Their function is the clearer demarcation of embedded clauses and the facilitation of matrix clause processing. Preposing is exemplified by

(10) \(^{wa:}+(∅) \quad m+um+pu+∅ \quad n+ta+ta:t+c \quad w+cuw+s\)
    \(\text{house}(+\text{OBJ}) \quad 2+\text{see}+\text{DEM+OBJ} \quad l+\text{father+SUBJ} \quad 3+\text{build}+\text{EMPH}\)

    'my father built the house you see'

(11) \(i:pac \quad xat+cok \quad sin+k+1; n+c+pu+∅ \quad n+c + wu:w\)
    \(\text{man} \quad \text{dog} \quad \text{woman} \quad 1er+gIVE+\text{DEM+OBJ} \quad 1+\text{SUBJ} \quad 1+\text{see}\)

    'I saw the man who gave the dog to the woman'

Extraposition of the object complement and the indirect question, respectively, occurs in

(12) \(n+c + s \quad puy \quad ta+n+way+pu+∅\)
    \(l+\text{SUBJ} \quad 1+\text{remember}+\text{EMPH} \quad \text{there we-be-there}+\text{DEM+OBJ}\)

    'I remember that we were there'
Right dislocation is exemplified in

(13) n\textsuperscript{\textcircled{i}}a:+c \ ?+uyaw+x \ ?+maw \ pu:+c \ ciyaw+Lv
\begin{tabular}{ll}
1+SUBJ & 1+know+IRREAL & 1+NEG & 3+SUBJ & sing+IN & \\
\end{tabular}
\begin{tabular}{l}
w+ar+pu+Ø \ \\
\end{tabular}
'I don't remember whether
\begin{tabular}{l}
3+want+DEM+OBJ \ he wants to sing'
\end{tabular}

(14) kw\textsuperscript{\textcircled{i}}siya:y+pu+c \ ?wil\textsuperscript{\textcircled{i}}+pu+Ø \ wu:w, \ ?wil\textsuperscript{\textcircled{i}}(Ø) \ ?i:k\textsuperscript{\textcircled{i}}wic
\begin{tabular}{ll}
doctor+DEM+SUBJ & rock+DEM+OBJ \ see & rock(Ø) \ man
\end{tabular}
\begin{tabular}{l}
\end{tabular}
\begin{tabular}{l}
?l\textsuperscript{\textcircled{i}}ma:m \ tu:yiw+pu+Ø \ 'the doctor looked at the rock
\end{tabular}
\begin{tabular}{l}
small & bring+DEM+OBJ \ that the boy had brought'
\end{tabular}
\begin{tabular}{l}
\end{tabular}
\begin{tabular}{l}
(= 'the doctor looked at the rock, the rock that the
\end{tabular}
\begin{tabular}{l}
boy had brought')
\end{tabular}

In either type of unusual word order, rigid case marking encodes information about nominal roles ordinarily present in linear order. Case marking also, of course, augments the demarcation of clause boundaries achieved by the special word order of "complex NP movements".

The final condition on case marking is a hierarchical or implicational one. The cases can be partially ordered as a

(15) CASE OPTIONALITY HIERARCHY:

\begin{align*}
\text{SUBJ} > \text{OBJ} > \text{COMIT} > & \text{LOC} \\
& \text{ABL} \\
& \text{IN}
\end{align*}

so that if any case in a sentence is marked, then all cases in that sentence to the right of the marked case on (15) must also be marked; schematically:

(16)

\begin{align*}
\text{IF:} & \quad A > B \\
\text{AND:} & \quad A \text{ is marked} \\
\text{THEN:} & \quad B \text{ must be marked}
\end{align*}

Thus, for example, one cannot have sentences like

(17) * ?i:k\textsuperscript{\textcircled{i}}wic+pu+c \ ?wil\textsuperscript{\textcircled{i}} ?wa:+m \ w+\text{a:}
\begin{tabular}{ll}
man+DEM+SUBJ & rock \ house+COMIT \ 3+go
\end{tabular}

'the man went from the rock to the house'

where, for example, SUBJ is marked but ABL (to the right of SUBJ on (15)) is not. In contrast, those like (18) are fine:

(18) ?i:k\textsuperscript{\textcircled{i}}wic \ ?wa:+m \ w+a: \ 'the man went to the
\begin{tabular}{ll}
man & house+COMIT \ 3+go \ house'
\end{tabular}

since the marked case (here, COMIT) is to the left of the unmarked case (here, SUBJ) on (15).
Given the facts as described, two obvious questions arise: why should a language allow some cases to be unmarked while others in the same sentence are marked; and why should the hierarchy (15) have the particular ordering it does? To the first, I can offer no very likely answer. Before considering the second, we should note some striking correspondences between the Case Optionality Hierarchy (15) and some other orderings of case systems. First, within Diegueño, it corresponds closely to the unmarked linear order of cases:

(19) LINEAR ORDER OF DIEGUEÑO CASES:

SUBJ - DIR OBJ - INDIR OBJ - INSTR - "Locatives"

Second, the Optionality Hierarchy is consistent with other (possibly universal) rankings such as Keenan and Comrie's (1972) "NP Accessibility Hierarchy" and the traditional opposition between "grammatical" and "local" cases. These additional correspondences within and beyond Diegueño grammar add to what needs to be explained and, I believe, provide useful clues as to the likely explanation.

A crucial datum is the relative orientation of the Optionality Hierarchy and the grammatical vs. local opposition -- grammatical cases are the most optional, local cases are the most obligatory. The term "grammatical" reflects two tendencies of the surface cases to which it refers: (a) they are often required by surface grammatical conditions and (b) they often result from grammatical processes (e.g. various "raising" rules) which alter relations among predicates and their arguments. Furthermore, the grammatical cases, even where transparently syntactic processes are less evident, are more prone to neutralize several different deep cases (e.g. subject case for agent and exper cencer) than are the local cases. Because of this variable parentage, the markings themselves of grammatical cases are less informative. Given that an NP is marked SUBJ, we know less that we didn't already know than if it were marked, say, ABL. The shallower and less semantic position of grammatical cases does not, of course, mean that when we hear sentences with subjects and objects, we are necessarily uncertain as to the role played by those arguments. Rather, it means that grammatical cases will place greater demands on pragmatic knowledge, discourse context, and semantic/syntactic constraints such as the arguments required by the particular predicates with which they are associated. The presence of case marking on local cases more transparently conveys their semantics. The Case Optionality Hierarchy, then, maximizes the information-per-marking when only some cases are marked.

Recognizing that syntactic processes generally are di-semantic -- that they increase the disparity between the structures to which they apply and the semantic sources
of those structures -- it is apparent that other facts besides the case hierarchies noted so far reflect similar tendencies. The general principle seems to be

(20) STRUCTURES MOST DISTANT FROM THEIR SOURCES ARE MOST SUBJECT TO FURTHER MUTATION

Ross' (1973) "Penthouse Principle", that processes which apply to subordinate clauses also apply to main clauses, is one instance of (20), since main clauses will, ceteris paribus, involve more (primarily vertical) conflation of structure than lower clauses and hence will be more distant from their sources. Note further that in Diegueño, case marking is optional only on nouns. Nouns are significantly more derived, using predicational material (which has been typically lexicalized internally) to refer, than the obligatorily case-marked pronouns, which have much less predicational content, and relative clauses, which are more semantically transparent.

The tendency noted in (20) increases the superficial differences between syntactic categories, since differentiation at an "earlier" stage contributes to further differentiation -- in contrast to the possibility that "later" processes would apply nondifferentially or even undo earlier differentiation. Such "expansion" of category differences may have a direct basis in the need to increase surface discrimination. More likely, I suspect, is that, as with the optionality of cases, it acts so that when dis-semantic processes apply for independently motivated functional reasons (e.g. to facilitate parsing or to maintain the coherence of discourse), they apply where they do the least damage to semantic transparency.

NOTES

* I am grateful for helpful comments on the problems I discuss here by Ricky Jacobs, Judy Joel, Ron Langacker, Margaret Langdon, and Pam Munro, among others. Pam Munro and Judy Joel have made me aware that other Yuman languages differ significantly from Diegueño in various aspects of their case systems, including non-trivial differences in case optionality. Hopefully, further investigation will permit clearer views of the synchronic and diachronic case systems than presented here for Diegueño.

I use several abbreviations in this paper; some of the less transparent are: ABL 'ablative'; COMIT 'comitative'; DEM 'demonstrative (= definite) suffix'; EMPH 'emphatic'; IN 'inessive/illative'; IRREAL 'irrealis suffix'; 1 'first person'; 2 'second person'; 3 'third person'.


2. More specifically, the case markers are suffixes on the
last word of the noun phrase bearing the case relation. When the NP is complex (e.g. a relative clause or sentential complement), this last word will always be a verb, since SOV order is strict in subordinate clauses. Examples in this paper include (3) and (10)-(13). For further discussion, see Gorbet 1974:13, 43-44.

3. Though OBJECT case is unmarked (directly), it is possible in some instances to unambiguously infer its presence; see (5) below and the discussion preceding it.

4. Not all accompaniment is marked by placing the "companion" in the COMITATIVE case. More common is the use of various complex constructions using a subordinate clause whose main verb is 'be two', 'be mixed', or a similar predicate.

5. By "uncertainty" I do not refer merely to doubt remaining after the sentence has been processed. I strongly suspect that the disruption of processing itself will be greater when an emphasized element is less transparently marked for its role.

6. Unlike English the, however, -pu seems quite optional, at least on nouns. That is, there are English sentences with the used in a clearly definite sense which are commonly translated into Diegueño without -pu. The term "optional" is a cop-out, of course, meaning that I have been unable to find any even fuzzily-cut conditions requiring (or forbidding) -pu on nouns. The optionality of -pu, incidentally, extends to proper nouns.

7. By "emphatic", I subsume and oversimplify notions like topic and focus. My theoretical prejudice is that linear order is first determined very near surface structure and that such "subjective" factors as topic and focus play a direct role in its determination.

8. One could appeal to notions of "economy" like "lazy tongue" (cf. Ross 1975), but given the degree of redundancy endemic to human language, it is hard to imagine a language skimming on a case marking in a sentence where other cases are marked just to save a consonant or two. I am also uncomfortable with the power of so undifferentiated an explanatory principle. For an even more skeptical viewpoint, see Fodor's discussion of Ross 1975 immediately following in the same volume.

9. This coincidence of the Optionality Hierarchy (15) and the linear order (19) has the corollary in simple sentences that all unmarked cases will precede all marked cases. It is tempting to try to base an explanation of the Optionality Hierarchy itself on this corollary. At this time, I can only
offer preliminary observations and speculation. The degree of choice the speaker has in deciding whether or not to mark the case of an NP is greatest for the first NP -- all NP's may be marked and the first is most readily not marked. Thus the fact that a marking appears (as opposed to the identity of the marking) is most informative for the first NP. The question is, what does this information mean, how is it used? A plausible psycholinguistic approach and a sociolinguistic one occur to me.

The former is that non-marking (of the first NP) alerts the hearer to the possibility of more unmarked NP's and, more importantly, to the extra attention to be paid to the linear order, semantic content, etc. of succeeding NP's in order to determine their roles. Marking of the first NP, on the other hand, guarantees case marking of remaining NP arguments and thus permits (requires?) less attention to be paid to word order as a factor in deciding NP roles. So the marking or not of the first NP is a clue to better processing strategy for the sentence.

The sociolinguistic hypothesis is that, since semantic (structural) functional load on case marking is less for the first NP, its marking may be available as a (binary) sociolinguistic cue (e.g. to indicate degree of "formality"). Since I am ignorant of any relevant Diegueño sociolinguistic facts, this is pure speculation. If, as seems likely a priori, marking is more "formal" than not marking, then the linear order of unmarked, then marked NP's within sentences runs counter to the general case (in discourse, conversation, and human interaction generally) that the expected temporal course is from more formal to less formal. Someone, however, (I believe Allen Munro) has suggested (personal communication) that the latter consideration may be irrelevant due to the (sociolinguistically) insignificant time span of a sentence. The psycholinguistic and sociolinguistic functions suggested easily could coexist, since the former is a consequence of the "monotonic" directionality of unmarking/marking uninfluenced by any hypothesized sociolinguistic basis for making the initial choice to mark or not mark the first NP.

10. This is not to say that which deep cases are grammatical is determinate universally. While the case that typically includes the agent is likely to be grammatical and that which indicates position inside is less likely to be grammatical, there is ample evidence that probably any case may acquire some grammatical role in some language. Note, for example, the English locative by used for passive agents.

11. For discussion of functional motivation for such "clause scrunching", see Langacker 1974 and Ross 1975.
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by

James E. Redden, Editor

University Museum Studies
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Number 7

PROCEEDINGS
OF THE

FIRST YUMAN LANGUAGES WORKSHOP

James E. Redden, Editor

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PREFACE

The study and analysis of Yuman languages in the last decade have drawn many researchers into a field where previously there had been only a half-dozen active workers. Much of the credit for encouraging the study of these languages must go to Margaret Langdon. Her efforts in finding funding for the Yuman Archives and two conferences on Hokan and Yuman languages have spurred many researchers to put forth determined efforts to describe these languages while speakers who really control these languages are still available for consultation. These conferences have been especially fruitful in permitting face-to-face study and discussion of mutual problems, and many insights into the analysis of Yuman languages have resulted from these discussions. All of us in the study of Hokan and Yuman languages are especially grateful to her for all she has done for the study of these languages.

Unfortunately, everyone who presented a paper at the First Yuman Languages Workshop was not able to prepare a final version for inclusion in this volume before it went to press. All the papers in this volume were presented in an earlier version at the Yuman workshop except the one by Yamamoto, who was unable to attend the workshop.

The papers are presented according to the groups of languages presented at the Yuman workshop. Since there were some last minute changes in the program, I must plead faulty memory if I inadvertently placed some papers in an order different from that of the workshop presentation.

James E. Redden
Carbondale, March 1976
INTRODUCTION

The papers in this volume represent revised versions of presentations made at the First Workshop on Yuman Languages held on the campus of the University of California, San Diego, June 17-21, 1975. The specific aim of the Workshop was to allow for close interaction between all linguists interested in the structure of Yuman languages and exchange of data. The focus was on the area of syntax, where the least amount of published information had previously been available, with emphasis more on the discussion of interesting problems than on theoretical agreement. New data were presented for all Yuman languages still spoken. The decision to make the results of the Workshop more generally available was unanimously supported by the participants. This volume then is offered in the hope that the syntactic patterns illustrated and described will be interest not only to other Hokanists but to students of syntax in general.

Thanks are due to James Redden for arranging the publication of this volume and assuming responsibility for all editorial details, and to the National Science Foundation for including support for consultants in Grant G5OC-7418043 (Yuman Languages of the Southwest--Margaret Langdon, Principal Investigator).

Margaret Langdon
La Jolla, January 1976.
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