# UNIVERSITY OF CALIFORNIA <br> Los Angeles 

## A Partial Grammar of Simplex and Complex Sentences <br> in Luiseño

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in Linguistics
by

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The dissertation of John Frederick Davis is approved, and it is acceptable in quality for publication on microfilm.


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| ACC | accusative |
| :---: | :---: |
| ABL | ablative |
| ADJ | adjective |
| ADV | adverb |
| ADVL | adverbial |
| ALIEN | alienable |
| ANIM | animate |
| COMP | complementizer |
| CONT | continuous |
| Cotemp. | cotemporal |
| DAT | dative |
| DEF | definitizer |
| DET | detorminer |
| ENC | enclitic |
| EXCL | exclamation |
| FUT | future |
| HAB | habitual |
| HYP | hypothetical |
| I | first-person |
| II | second person |
| III | third perbon |
| IMP | imperative |
| INSTR | instrumental |
| INT | interrogative |
| LOC | locative |
| MOM | momentary |
| N | noun |
| NOM | nominative |
| NP | noun phrase |
| NUM | number |
| 0 | object |
| PERS | person |
| PL, pl | plural |
| P PR | past present |
| PRED RSG | predicate raising |
| PRES | present |
| Pres | pre-sentence |
| Pron | pronoun |
| PST | past |
| REC | recent past |
| REL | relativizer |
| REM | remoter past |
| REP (ORT) | reportive |
| S | sentence, subject |
| SG, 8 g | aingular |
| SUB(ORD) | subordinator |
| T/A | tense/aspect |
| V | verb |

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# ABSTRACT OF THE DISSERTATION 

A Partial Grammar<br>of Simplex and Complex Sentences<br>In Luiseño<br>by<br>John Frederick Davis<br>Doctor of Philosophy in Linguistics University of California, Los Angeles, 1973<br>Profeasor William Bright, Chairman

The primary aim of this study is to illustrate and explain the structure of the commonest types of simplex and complex sentences in Luiseño, a Uto-Aztecan languge still spoken by few elderly Indians in Southern California (Riverside and San Diego Counties). The data are drawn from three dialecta and wherever possible comparative notes are supplied.

The secondary aim is to try to account for the details of these sentence types within a transformational gramatical model incorporating abstract performatives and other higher verbs. The adoption of this approach is nothing more than an experiment to see how well this model can cope with some aspects of the syntax of an Amerindian language. As far as possible the two aims have been kept separate for the convenience of readers who are principally interested in atructural detaile.

The first part of the study examines and classifies various kinds of simplex statements, questions, commands and exclamations,
paying particular attention to the manifestation of tense and aspect in the enclitics and verbal suffixes that characterize each sentence type. Tense and aspect are posited as a hierarchy of abstract higher verbs and it is shown how the members of one class of enclitic (syntactic) can be generated as the reflexes of these verbs in particular configurations. Subsequently the four major simplex sentence types are accounted for by positing a different topmost performative sentence for each in underlying structure. It is then demonatrated that the members of a second class of enclitic (semantic) can be generated as the reflexes of these porformative sentences. The discussion of simplex sentences concludes with an appraisal of the application of the performative analysis to Luiseño and points out that the principal weakness is that abstract performatives must be posited with different syntactic behaviour from that of their overt counterparts.

The final part of the study is devoted to a description and classification of three kinds of complex sentence: (a) conditional sentences, (b) sentences containing relative clauses, and (c) sontences containing indirect speech. Simple transformations are provided for the generation of most of these.

## 1. Introduction

The primary aim of this study will be to set out in as clear a fashion as possible the principal details of the most representative types of simplex and complex sentences in Luiseño, a UtoAztecan language spoken now by only a bandful of elderly Indians living on several small reservations in Riverside and San Diego counties in Southern California. As the language is clearly on the verge of extinction, whatever value this study may have will lie mainly in the preservation of a detailed record of the various sentence types before these become lost for ever. I have therefore attempted to go beyond what is presented in Kroeber/ Grace (1960), Malécot (1963, 1964) and Hyde (1971), and wherever possible to provide the reader with notes on the differences and similarities between the speech recorded in these books and that of my own informants.

The secondary aim of this study will be to attempt to account for the details of simplex and complex sentences within a transformational model incorporating abstract performatives and other higher verbs. The treatment must necessarily be sketchy and imperfect, since as a non-native speaker I am not in possession of all the details and, furthermore, this study was written in Europe when I no longer had access to firsthand information from my informants. The reader's indulgence is therefore requested for the occasional gaps in the details and for the occasional inability to reach a decision for want of further information. It should also be stressed that the use of the performative/higher
verb approach should be considered merely as an experiment to see whether this model can cope adequately with some of the aspects of the syntax of an exotic Amerindian language like Luiseño. Little attempt has been made to show that it jielda better explanations than other types of analysis.

Wherever posaible $I$ have tried to keep these two aims separate so that readers who are unsympathetic towards this approach or who are primarily interested in the details of the language can pass rapidly over the sections dealing with the generation of the particular constructions under discussion.

The data on which this study is basedwere collected over an eighteen-month period stretching from late 1969 tosearly 1971. I worked principally with Jim Martinez, a native speaker of Luiseño, who lives on the LaJolla reservation at the foot of Mount Palomar and who was then over eighty but still physically and mentally very robust. He is an excellent informant, and it is to his patience and careful correction that $I$ owe much of my present knowledge of the language. I am also greatly indebted to UCLA Iinguistics Department for providing me with the opportunity to visit him regularly every week over this entire period. My second informant was another native speaker, Reginaldo Pachito, who is slightly older than Jim Martinez and lives at the Indian reservation at Palma, a few miles to the west of Mount Palomar. I worked with him once a week from late July until the end of 1970 and he too proved to be a very willing and competent informant with an excellent command of the language. My debt to him is also con-

Biderable.
2. Notation

The following table shows the symbols 1 shall use for the phonological representation of Luiseño words and assigns them articulatory labels.

Consonants:

| Occlusives | Fricativea |  | Nabals | Liquids | Glides |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | v1 | vd |  |  |  |  |
| p |  | $v$ | m |  |  | Bilabial |
|  | f |  |  |  |  | Labio-dental |
| t |  | d | n | 1 |  | Dental |
|  |  |  |  | $r$ |  | Alveolar |
| $\stackrel{\square}{c}$ | $\stackrel{H}{8}$ |  |  |  | y | Alveo-palatal |
|  | $\beta$ |  |  |  |  | Retroflex |
| $k$ | x | g | $\square$ |  |  | Velar |
| ${ }^{\text {w }}$ | $\mathrm{x}^{\mathbf{w}}$ |  |  |  | w | Labio-velar |
| q |  |  |  |  |  | Uvular |
| $q^{\text {w }}$ |  |  |  |  |  | Labio-uvular |
| ? | h |  |  |  |  | Laryngeal |

## Yowels:

|  | Front |  |  | Back |
| :--- | :---: | :---: | :---: | :---: |
| Hi | i |  |  | u |
| Mid |  | e |  | 0 |
| Lo |  |  | $a$ |  |

An acute accent over a vowel is used to indicate the syllable bearing primary stress in a word, A raised dot after a vowel indicates that the vowel is long. For further details of the phonology of Luiseño see Harrington (1933), Kroeber/Grace (1960),

Malécot (1963, 1964), Bright (1965a,b; 1968), Munro/Benson (1973) and Davis (forthcoming).

## 3. Grammatical Framework

As already stated in the Introduction, the grammatical framework of this study will be a transformational one incorporating the performative analysis and the treatment of Tense/Aspect as higher verbs. These will be considered in detail as they occur. At this stage it is necessary only to supply the reader with a set of phrase structure rules ao as to make explicit some of the assumptions on which the later discussion of the transformational generation of structures is based. The phrase structure rules can in fact be very simple if grammatical case is left out of ;account. The assignment of case is a complicated chapter in Luiseño grammar which $I$ do not wish to discuss in detail in this study, since my principal concern will be with verbal and not with nominal constructions. However, I ahall hint below at a way case assignment could be accomplished.

For the moment the reader should note that $I$ am adopting the position taken by McCa=ley (1970), which claims that in eemantically based underlying atructures there is no need for the node VP. The phrase structure rules we need can be written thus: 1. $S \longrightarrow\left\{\begin{array}{llll}\text { EXCL } & & \\ S^{*} & & & \\ N P & (N P) & (N P) & (A D V L)\end{array}\right\}$
2. $A D V L \longrightarrow\left\{\begin{array}{l}N P \\ 5 \\ A D V\end{array}\right\}$
3. $N P \longrightarrow\left\{\begin{array}{ll}N P * \\ (N P) & 8 \\ (D E T) & (A D J)\end{array}\right\}$

Rule 1 claims that Luiseño is a SOV language. In fact, as the examples in this study will show, there is a great deal of positional mobility especially of the categories NOUN and ADVERB. However, SOV seems to be the most neutral word order in the language. Rule 1 also states that a sentence can consist of an exclamation. As we shall see in 4.6 , this will account for what $I$ shall loosely call 'single-word' exclamations. Exclamatory sentences will be generated like all other sentence types from the third option in Rule 1.

The $S$ in the second option in Rule 1 is intended to provide for sentence conjunction; i.e., when one $S$ is generated the rule can apply again and again to produce a atring of as many Ss as one requires. These will later be joined transformationally by conjunctions like pi 'and, but'. This is obviously too simple a representation since the conjunctions themselves sometimes have some semantic content and cannot therefore always be generated by transformation. This is, however, the practice I have adopted in the generation of conditional sentences in 4.1.1.5.

The third option in Rule 1 asserts that every Luiseño sentence has a NP subject, where NP should be understood as possibly standing also for PRONOUN, thus leaving open the question of whether pronouns are in fact generated by the base rules or by transformation. This statement about NP subjects will also cover the small group of Luiseño verbs, mostly referring to meteoro-
logical phenomena, like xílaq 'it is raining', which in surface main clauses never appear with a noun or pronoun subject. It tis, however, clear that an underlying subject is nevertheless presont since in embedded clauses where these verbs assume non-finite forms they always carry a third person singular pronominal prefix pu_, e.g. pu-xila-qala 'while it is, was raining'.

The optional second NP in Rule 1 stands for the direct object of transitive verbs, and the optional third NP for the dative or benefactive object of such verbs as have one. In Luigeino, if I give something to John or do something for John, the dative is used in both cases to indicate this relationship. There is also a separate benefactive case which is sometimes employed instead. If it is possible to have Luiseño sentences of the type 'I gave it to John for Bill', then we shall need another optional $N P$ in Rule 1 , maybe even more if further NP relationships are possible.

One way of assigning case to these NPs would be on the basis of their position in Rule 1 . We could have a rule which makes the first NP nominative, the second accusative, the third dative, etc. There may, of course, be other ways to do this within our framework but a discussion of them here is out of place.

ADVL in Rule 1 is an abbreviation for any one of a number of optional adverbial phrases, e.g. of PLACE, TIME, MANNER, PURPOSE, CONDITION, DEGREE and maybe a few more. Each of these may be expanded as in Rule 2.

The first option in Rule 2 states that the adverbial expres-
sion can consist merely of a noun phrase; this accounts for such Luiseño adverbial modifications as mandena ('river')locative) 'in, at, by the river'. One possibility for case assignment here is on the basis of the type of adverbial node: thus under PLACE, for example, we could find locative; under REASON ablative, the Luiseño case for both 'from' and 'on account of'. Again this is probably too simple, but nevertheless adequate for our present needs.

The second option in Rule 2 expands ADVL into adverbial clauses of PLACE, TIME, MANNER, etc., depending on the label of the adverbial node. These will usually be later extraposed to the beginning or end of the matrix $S$. The third option allows the adverbial to be a simple adverb.

NPF in the first expansion of Rule 3 is intended to allow phrasal conjunction. The same convention is here used as with S*: when one NP has been generated, any number of further NPs can be produced by the same rule to form a string of NP , which an optional transformation may later join together by means of conjunctions. Frequently, however, Luiseño does not bother with conjunctions between nouns, and uses similar constructions to 'my father, my brother shot deer, rabbits'.

The full expansion of the second option in Rule 3 provides

structure which I have adopted for the generation of relative clauses in 4.2. If NP is expanded as only $S$, this is the structure necessary for noun phrases consisting of a noun alone or accompanied by either a deictic determiner or an adjec-
tive, or both. It may be that the node ADJ ought alao to carry a star to provide for the possiblity of more than one adjective before the noun. My data suggest, however, that Luiseño has an aversion to multiple adjectival expressions.

It will be noted that the three phrase structure rules that
I have written contain no formatives for Tense/Aspect, nor for Question, Imperative, etc. These are unnecessary if we adopt the performative approach and analyse Tense/Aspect as higher verbs.

I shall assume that abstract Luiseño performative sentences like 'I NP DECLARE' and the hierarchy of Tense/Aspect verbs to be given in 4.1 .2 can all be generated by these rules just as well as any other $S$. There will need to be rather powerful selection restrictions to permit only certain combinations, but these constraints must be contained in the lexicon and need no consideration here in the phrase structure rules.
4. Simplex Sentences

Let us begin by considering a typical Luiseño simplex declarative sentence as it appears in the surface structure.


The most interesting portions of the tree are the enclitic and the Tense/Aspect marker, which are functionally very closely connected. My treatment of simplex sentences will consist first of a detailed exposition of tense and aspect and an attempt to generate these as higher verbs. Then I shall go on to describe the enclitics and to show how some of these can be generated as the reflexes of the higher $T / A$ verbs and others as the reflexes of the performative verbs. The way will then be clear for an analysis of the four simplex sentence types: declarative, interrogative, imperative and exclamatory.

### 4.1 Tense/Aspect

The Luiseño language appears to divide time up into five distinct periods (but see 7 below for dialect differences). With reference to what Reichenbach (1947) in his logical analysis of tense calls 'the point of speech', it recognizes (1) a past time which extends from the day before yesterday backwards (REMoter past), (2) yesterday (RECent past), (3) last night and any part of today which is not over when the speech act takes place (Past PResent), (4) today or any part of today which is not over when the speech act takes place (PRESent), and (5) tomorrow and beyond (FUTure). This is, however, not the only parameter along which the action of the verb may be considered: it may be looked on as continuous (CONT) or momentary (MOM), habitual (HAB) or non-habitual (NONHAB), hypothetical (HYP) or non-hypothetical (NON-HYP). These parameters are ordered hierarchicallyas in ll below. It should be emphasized that this hierarchy is a semantic one and also
that not all the possibilities are realized with overt Luiseño morphemes. Before discussing the latter, I shall demonstrate with a chart the way in which the parameters interact. If we take just the third person singular of 'shout' in the period of time I have called REM, the meaning of each interaction is shown in the appropriate box.

|  | MOM |  | CONT |
| :---: | :---: | :---: | :---: |
| NONHYP | NON-HAB <br> HAB | he shouted <br> he always shouted | he was shouting <br> he was always shouting |
| HYP | $\mathrm{NON}-\mathrm{HAB}$ <br> HAB | he would have shouted he would always have shouted | he would have been shouting he would always have been shouting |

Compare now the corresponding Luiseño forms for the five tenses FUT, PRES, P PR, REC, REM. The Luiseño verbal stem géwi- 'shout' is used throughout. Note the Luiseño verb has no marking for person. The reader should impose the labels for 2 on each of the charts below.
(3) FUT

| qéwi-n 'will shout' qéwi-n puyá•mani 'will always shout' | $\begin{aligned} & \text { qéwi-ma-n } \quad \text { 'will be shouting' } \\ & \text { qéwi-ma-n p. 'will always be shout- } \\ & \end{aligned}$ |
| :---: | :---: |
| qéwi- $\varnothing$ 'would shout' <br> qéwi- $\varnothing$ p. 'mould always <br> shout' | qówi-ma 'would be shouting' <br> qéwi-ma p. 'would always be shout- <br> ing'  |

## (4) PRES

|  | qéwi-q 'is, has been, shouting' qéwi-ma 'is always, has always been shouting' |
| :---: | :---: |
| qéwi- $\varnothing$ ' 'would shout' | qéwi-ma 'would be ghouting' $\qquad$ |
| (5) P PR |  |
|  | qéwi-qat 'was shouting' <br> 事。 $\qquad$ |
| $\begin{array}{rr} \hline \text { qéwi- } \varnothing \quad \begin{array}{r} \text { 'would have } \\ \text { shouted' } \end{array} \end{array}$ | qéwi-ma 'would have been shouting' |

(6) REC

| qéw-ax 'shouted' | qéwi-muk 'was shouting' $\qquad$ $\qquad$ |
| :---: | :---: |
| qéwi- $\varnothing$ 'would have $\begin{array}{r}\text { shouted' }\end{array}$ | qéwi-ma 'would have been shouting' |

## (7) REM

| qéw-ax 'shouted' qéwi-k 'used to shout' | $\begin{aligned} & \text { qéwi-quf } \\ & \text { qéwi-k } \end{aligned}$ | 'was shouting' <br> 'used to be shouting' |
| :---: | :---: | :---: |
| $\begin{gathered} \text { qéwi- } \varnothing \text { 'would have } \\ \text { shouted' } \\ \text { qéwi- } \varnothing \text { p. 'would have } \\ \text { always shouted' } \end{gathered}$ | qéwi-ma qéwi-ma p. | 'would have been ahouting' <br> 'would have always been shouting' |

The following facts about $3-7$ should be noted:
(1) HYP forms are not marked for tense; they are however marked
for MOM and CONT.
(2) In $P$ PR and REC, since these refer to a period no farther back than yesterday, the time span is too short for HAB to have any semantic relevance. They have therefore been marked in the charts with a atar to show that they are semantically imposeible. (3) In PRES, on the other hand, a NON-HYP form for HAB has been entered. This is perhaps a little arbitrary since in some contexts there may be no notion of tense present with the habitual form. It may, however, be justified on the grounds that it does always include the present and can often be distinguished from a future habitual and a past habitual.
(4) The suffix -ma occurring in the PRES HAB NON-HYP form appears to be a different form from the -ma that characterizes the CONT forms. Note that there is no special form to mark CONT in PRES NON-HAB NON-HYP: qéwi-q has to do service for both.
(5) Separate NON-HAB and HAB forms are available for CONT in PRES and REM, as also for MOM. In FUT and REM Luiseño can distinguish HAB from NON-HAB by the addition of the adverb puyánapi 'alwayb'. This has been abbreviated to 'p.' in the charts and is found with both HYP and NON-HYP forme.
(6) A question mark has been placed against the form at P PR MOM NON-HAB NON-HYP since the forms with -gat which I have collected from my informants all seem to be continuous. Furthermore, both Kroeber/Grace and Malécot refer to -gat forms as "progressive". It may therefore be that the form géw-ax has to do service not only for REC as well as REM when the parameters MOM NON-

HYP NON-HAB intersect, but also for $P$ PR at this same intersection.
(7) In his own speech my LaJolla informant does not use the separate -muk suffix to mark the period of time I have referred to as REC. When it was suggested to him, he said it was possible but "we don't use it here". ${ }^{l}$ On the other hand, it was freely employed by my Pauma informant and his explanation of its use (which I have get out above) was corroborated by the data I collected from him. This explanation does not agree with that given by Sparikman and recorded in Kroeber/Grace (151):
"-muk recent past.
Described by Sparkman as including from (day before) yesterday to about a month ('two to three weeks') ago."

It is obvious that more data need to be collected from other Luiseño speakers to clear this point up.

Whatever the period covered by the -muk tense, however, it is interesting that there appears to have developed a difference in the division of the time continuum between the LaJolla speakers who use only four divisions and the Pauma speakers who use five.

Let us now consider how the Tense/Aspect suffixes can be incorporated into the deep structure of the sentence. Two analyses are possible: (a) a feature analysis, and (b) a higher verb analysis.
4.1.1 Feature Analysis

The suffixes could fairly easily be introduced by positing fea-
tures on the verb for each of the $T / A$ parameters discussed above and by then having a segmentation transformation (similar to that postulated by Postal (1966) for pronouns in English) which would detach them and adjoin them to the right of the verb stem. We could write the base rules so that a $T / A$ node is generated to the right of $V$ for these features to be attached to, or the node could be created by the segmentalization trangformation itself. Thue for géwi-n 'will shout' we might have the following derivation:
(8)

The features under the $T / A$ node would then be replaced from the hexicon by the lexical suffix -an, and subsequently a phonological rule woula adjust this to $-n$.

This type of analysis has been seriously criticized by a number of linguists who consider that the $T / A$ distinctions are best accounted for if they are represented as higher verbs.
4.1.2 Tense/Aspect as Higher Verbe

Hudidestone (1969) has presented a good case for abandoning the analysis of English tense, modals, etc. given in Chomsky (1957), i.e. AUX $\longrightarrow$ Tense (Modal) (have EN) (be ING), and for representing these as higher verbs. His data and his arguments are intricate, but his principal reason concerns the choices of temporal adverb
that can be used with the tenses. He points out such sentences as:
(9) Yesterday he was coming today.
(10) Now he leaves tomorrow.
whers two incompatible temporal specifiers are associated with the same verb. Huddestone justifiably claims that these sentences involve two tense selections and that therefore they must contain two deep structure tense verbs even though there is only one verb in surface structure. A similar analysis was put fors ward by Ross (1967a). Whereas both Ross and Huddlestone produced convincing reasons for considering Chomsky's 'have' and 'be' to be higher verbs, McCawley (197la) goes further and shows that all underlying 'have's may be taken as underlying past tenses. His argumenta, like those of Huddlestone and Ross, also depend on the logical assumption that there can be only one time adverb per clause. Langacker (1970) acknowledges the force of these arguments and in his discussion of evidence for predicate raising in Uto-Aztecan posits tense as a predicate in the remote structure of the Luiseño sentence. Although my elicitation of data in Luiseño has not been directed towards finding sentences with temporal or other specifications that would corroborate the proposals of Huddlestone, Ross and McCawley, I have no doubt that they exist since all the evidence up to date seems to suggest that this is a universal phenomenon among languages. In tho rest of this study I shall therefore not attempt to represent Tense/Aspect as features on the verb, but instead explore the advantages and disad-
vantages of representing the whole of the Tense/Aspect ayater as
a series of hierarchically ordered predicates (for convenience labelled V) of arguments (labelled NP) in a semantic tree as seen in 11:
(11)


Note that this tree contains principally aspect verbs. If these are subcategorized for the kind of verb that can appear in the clause immediately below them, then their hierarchy can be preserved. For expository reasons the pure tense verbs (in the $V$ immediately dominated by $S_{1}$ ) are shown as alternative predicates. McCamley shows convincingly that the tenses themselves should be
recursive predicates that can be embedied in one another and generated as often as one likes. There must, however, be constraints preventing many combinations, especially beyond a certain depth. There does seem to be some evidence for this in Luiseño, although I have not attempted to incorporate this recursivity into my analysis as my data are too scanty. Thus the alternative future enclitics ending in -ku (see 22 below) seem to place the action farther in the future beyond a point of reference that is itself in the future, i.e. they seem to denote a future of a future, whereas the normal future enclitics without -ku denote a future with relation to the present. Similarly, in one sentence $I$ collected from the Pauma informant, although the period under consideration is yesterday, the action of the second conjunct takes the action of the first conjunct as its point of reference. We thus have a past of yesterday (which it will be rememberod is a separate tense period in Luiseño). The sentence is:
$\begin{array}{llllll}\text { (12) } \text { ?umóm wé waxám wi?ékla-muk } & \text { ?um-tá'x } & \text { pi qáy } \\ \text { you both yest. argue-REC } & \text { your-selves but not }\end{array}$ PL
ló•vi-quf $\quad$ qu-wultú?ax-pi
be good-REM your-be angry-FUT SUBORDINATOR
'you were both arguing with each other yeaterday, but it wasn't right for you to get mad (i.e. before you started arguing)'

The intereating thing here is that the -qua suffix (RDM CONT) is used to indicate the period before they were arguing although

## yesterday.

Let us now take a closer look at the tree in ll. By the application of prelexical transformations all of the combinations shown in charts 3-7 can be generated. This can be seen more clearly if we perform a typical derivation up to the point at which lexical insertion can take place. Suppose we want to generate géw-ax 'he shouted (e.g. last week)'. For the correct analysis of the Tense/Aspect required we must postulate two transformations, SUBJECT RAISING and PREDICATE RAISING, operating alternately and cyclically throughout the tree in 11. On the first cycle, for instance, SUB RGG will operate first, raising the lowest $N$ to $S_{4}$; then PRED RSG will adjoin the lowest $V$ to the V immediately dominated by $S_{4}$, producing:
(13)


The application of the two transformations will continue to proceed cyclically up the tree until the following configuration is reached:
(14)


The dotted lines show the lexical forms which can now be inserted from the lexicon for each of the nodes (CRE) and (( ( (SHOUT) NON-HYP) NON-HAB) MOM) REM). In the lexicon the entry for each of the $T / A$ suffixes will include bracketings of the kind used in the last sentence, or alternatively semantic trees similar to the configuration of $V_{s}$ in 14. These entries will correspond in meaning to the various selections that can be made from the choices shown in the tree in 11. Thus the lexical entries for the -an suffix (using bracketinge) will include:
(15) a. ((( $($ NON-HYP) NON-HAB) MOM) REC)
b. ((( $(N O N-H Y P)$ NON-HAB) MOM) REM)
and also
c. (( ( $N O N-H Y P)$ NON-HAB) MOM) $P$ PR)
if the -qat suffix cannot be used for momentary 'action'
(see 4.1, Note 6).
4.1.3 The Shape of the Tense/Aspect Suffixes

Before we go on to examine the connection between Tense/Aspect
and the enclitics, it will be convenient to set out all the forms of the $T / A$ suffixes and to comment on their final phonological shape. Luiaeño verbs fall into at least four classes, Malécot postulates eight, but four of these seem to me to be subclasses of (b) and (c) below. For our purposea we need to differentiate only four (as Sparkman did):
(a) stems with thematic zia (usually trangitive), e.g. géw-i= 'shout';
(b) stems with thematic - ?ax (usually intransitive), e.g. pél-7ax= "dance';
(NB Many stems may belong to both classes (a) and (b), e.g. hán-i= 'to hang (momething)', hán-?ax- 'to be hanging'.)
(c) stems with final -u- and -an, e.g. kícu-kiocan to build a house' ( $<$ kíča 'house'), kúnlu-/kínla ${ }^{\prime}$ 'to marry a husband' ( $\kappa-k u ́ n$ 'husband'); ${ }^{2}$
(d) atems with final consonant, e.g. ?uhó?van= 'believe'.

The Tense/Aspect suffixes for each of these four classes are shown in chart 16 below. The superposed numbers refer to the notes in 4.1.3.1 below.

| (16) |  | qéw-i | pél-3ax- | kí•ču | ?uhó?van- |
| :---: | :---: | :---: | :---: | :---: | :---: |
| FUT | $\begin{aligned} & \mathrm{MOM} \\ & \mathrm{sg}, \mathrm{pl} \end{aligned}$ | -n | $\begin{aligned} & \operatorname{lan}^{1}\left(>\text { péla*n }^{1}\right) \end{aligned}$ | -n | -an |
|  | $\begin{aligned} & \mathrm{CONT} \\ & \mathrm{sg}, \mathrm{pl} \end{aligned}$ | $\begin{aligned} & -\max -a n \\ & (>\operatorname{ma} \cdot n) \end{aligned}$ | $\begin{aligned} & -\max -a n \\ & (>\operatorname{ma} \cdot n) \end{aligned}$ | $\begin{aligned} & -\max -a n \\ & (>\operatorname{ma} \cdot n) \end{aligned}$ | $\begin{aligned} & -\max -a n^{2} \\ & (>\operatorname{ma} \cdot n) \end{aligned}$ |
| PRES | $\begin{aligned} & \text { MOM \& } \\ & \text { CONT } \\ & \text { NON-HAB } \\ & \text { Bg } \\ & \text { pl } . \end{aligned}$ | $\left\lvert\, \begin{aligned} & -q \\ & -w u n \end{aligned}\right.$ | $-q(>p e ́ l a q)^{3}$ <br> -wun (> péla•n) ${ }^{4}$ | $\begin{aligned} & -q \\ & -w u n \end{aligned}$ | $\begin{aligned} & -q^{5} \\ & -w u n \end{aligned}$ |
|  | MOM \& CONT <br> HAB <br> sg,pl | -ma | -ma | -mia | -ma |
| P PR | MOM ? CONT Bg p1 | $\begin{aligned} & \text {-qat } \\ & \text {-qat-um } \end{aligned}$ | $\begin{aligned} & \text {-qat }^{3} \\ & \text { (> pélaqat) } \\ & \text {-qat-um } \\ & \text { () pélaqatum) } \end{aligned}$ | $\begin{aligned} & \text {-qat } \\ & \text {-qat-um } \end{aligned}$ | -qat <br> -qat-um |
| REC | $\begin{aligned} & \text { CONT } \\ & \text { sg,pl } \end{aligned}$ | -muk | -muk | -muk | -muk |
| REC \& REM | $\begin{aligned} & \text { MOM } \\ & \text { NON-HAB } \\ & \text { eg;pl } \end{aligned}$ | $\begin{aligned} & -\mathrm{ax}{ }^{7} \\ & \text { ( qéwax) } \end{aligned}$ |  | irregular, often reduplicated | irregular, ${ }^{9}$ often reduplicated |
| REM | $\begin{aligned} & \text { CONT } \\ & \text { NON-HAB } \\ & B g, \mathrm{pl} \end{aligned}$ | -qus | $\begin{aligned} & \text {-quf }{ }^{10}(>\text { pelaqu }) \end{aligned}$ | -qua | -quo |
| REM |  <br> CONT <br> HAB <br> sg,pl | -k | $\begin{aligned} & -k^{3} \\ & \text { (k pélak) } \end{aligned}$ | -k | -uk/-ók ${ }^{11}$ |
| HYP <br> all <br> tenses | $\begin{aligned} & \text { MOM } \\ & \text { sg, pI } \end{aligned}$ | $-\varnothing$ | $-\varnothing$ | $-\varnothing$ | $-\infty$ |
|  | $\begin{aligned} & \mathrm{CONT} \\ & \mathrm{sg}, \mathrm{pl} \end{aligned}$ | -ma-ø | -ma-ø | -ma-ø | -ma- $\varnothing$ |

4.2.3.1 Notes on Underlying Forms and Comparative Morphology
(1) The future suffix can be entered in the lexicon as an. In the case of stems ending in vowels a phonological rule is needed to delete the stem-final vowel after the suffix has been added. When -an is added to stems with thematic - ?ax, a general phonological rule reduces the sequence - ?ax-an to - ?ana. For the formulation of this rule see Davis (forthcoming). The resulting form pél?a'n when spoken rapidly losses the glottal stop and has characteristically geminated 1 after a short stressed vowel. In slow, careful speech, however, it is pronounced pélia•n. Malécot (200) places a glottal stop before the a of thematic -ax in every form in which -ax is found. Except in the contracted FUT and PRES forms, in the REC and REM forms and in one kind of imperative (see 4.5.1.1), my own data show no evidence for a glottal stop on the surface; however, by postulating an underlying thematic increment - fax the correct lento form for these tenses and the imperative can be generated. For all other forms it vill then need to be deleted by a phonological rule. When citing forms I shall write them with and without the glottal stop according as the word was collected.
(2) The underlying form for CONT -ma must be posited as -max. The form -max-an resulting from the addition of FUT -an is attested in Kroeber/Grace (145), but in the speech of my informants is always reduced by the firat phonological rule referred to in (1) above, giving the form -mann. Occasionally, however, I recorded -man. I have no explanation for thie form, unless coNT
-ma has optionally also underlying -ma.
(3) In all the forms where the $\mathbb{T} / \mathrm{A}$ suffix begins with a velat or uvular plosive a rule is needed to delete the velar fricative of thematic -2ax. There appears to be a constraint in Luiseño phono $\operatorname{logy}$ forbidding the sequences $x q$ and $x k$ in surface structure. (4) When the plural suffix = Wun follows thematic - 7 ax in PRES, the deletion rule referred to in (1) reduces the sequence - ?ax-wun to - $2 a \cdot \mathrm{n}$, which is homonymous with the FUT form.
(5) The underlying form of m must be postulated as -ga. When the syllable immediately preceding the suffix is stressed, the long form is usually preferred, e;ge gá-ga 'is weeping'. Optionally immediately after a stresged oyllable and obligatorily elseWhere, the a of the suffix is deleted (but cf. 4.2.1.4, Note 4). (6) Note that except for PRES NON-HAB, the $P$ PR forms are the only ones differentiated for singular and plural. Furthermore, unlike -Wun the form -gat-um clearly bears the -um normally used to form the plural of nominal forms. There is in fact a relativized form of the verb with just this ending: géwi-gat '(the one) who is shouting', géwi-gat-um '(the ones) who are shouting'. But note that these forms with the meanings as shown refer to a period of time that is excluded from P PR, i.e. in addition to last night and any part of today which is now over, they can also refer to a part of today which is not yet over. 3 (7) The REC and REM morpheme zax when added to the etem géwishould result in the form gewyax. This is in fact the form most often used by my Pauma informant. However, he sometimes uses the
form géwax with no diatinction of meaning. The latter is the only form used by my LaJolla informant, although he recognizes the -yax ending. This does not agree with Malécot(1964), who calls the -ax form preterite and the -yax form remote preterite, suggesting that the latter refers to a period farther back in time. Judging by Hyde (1971), Rincón Luiseño agrees with Pauna in preferring the -yax ending.
(8) REC and RBM forms from stems with thematic - ?ax require a deletion rule to eliminate ax before the $T / A$ suffix, i.e.
$a x \longrightarrow \varnothing / \exists_{\mathrm{v}}$ ? $\qquad$
Here, as in (5), there may optionally be a rule deleting y. The resulting form, e.g. péla, was occasionally used by my Pauma informant, never by my Lajolla informant. Malécot calls the -ya form preterite and the -a form remote preterite, but again my informants sensed no time diatinction between the two.

In careful slow speech the glottal stop can clearly be heard before the $Y$, e.g. in pél?ya; in normal speech, however, it is not present.
(9) The MOM NON-HAB forms for REC and REM of stems with final -u/-a or a final consonant are all irregular, many being formed by reduplication. Further details of these can be found in Kroeber/Grace, Malécot and Hyde.
(10) REM CONT NON-HAB has been entered in 16 with the form -que. This is the only form accepted by my Ladolla informant and also the only form given in Hyde. The pronunciation of my Pauma informant vacillated between -gaf and -que, the former being
recorded more often than the latter. This is interesting since Tac's form from the middle of last century is -quas. Furthermore, -quet is the only syllable in Luiseño in which 9 is followed by the high vowel $u$. If we take Tac's -qad as historically underlying both forms, it then appears that Pauma has deleted the labial element, where Lajolla nd Rincón have surprisingly deleted the a and vocalized the labial element to produce the only gu sequence in the language.
(11) The underlying form of the RBM HAB suffix may be posited as -ok. When immediately preceded by a vowel, o is deleted, e.g. in géwi-k, ki•ču-k/kíč"a-k. After a consonant it will remain as ok if stressed, e.g. yaxók 'used to say', ya?ok 'used to run'; in unstressed syllables in Luiseño of and fall together. Since $I$ am writing this vowel as $u$, the unstressed form of the suffix will appear as -uk.
4.1.4 -1ut/-k(a)tum or -k(u)tum

Several periphrastic tenses are available in Luiseño consistig of a tense of the root mí? produced by adding the suffix -1ut to $-i=$ and $=$ ?ax- sten verbs or -lowut (Pauma)/-lo"t (LaJolla) to consonant-final verb stems; and by adding -katum or mutum to all stems for the plural (for an explanation of the syncope see Davis, forthcoming). I have recorded the plural suffix both with and without lip rounding of the first vowel (i.e. [u]and[e]) in the speech of my LaJolla informant, but in careful lento style he uses ag Hyde writes
only $\underline{u}$, and although $I$ have only a handful of words with the nonsyncopated plural suffix in the data $I$ collected from my Parma informant, these also all contain $u$ as the first vowel in the plural suffix.

The periphrastic forms are as follows:
(17) a. nó•-n sá•mba-lut $\varnothing$
b. " $" 1$ mí? -qt (? Pauma/LaJolla)
c. nó*-nil it míx-muk (? Pauma)
d. 11 " mí•?-quj
e. nó-xunpu $"$ mix
a. = I am going to buy
b. $=I$ was $"$ " (this morning)
$c .=I{ }^{\prime} \quad " \quad " \quad$ (yesterday)
d. $=1$ " 1 " " (some time ago)
e. = I would be going to buy

As the question marks indicate, there is some uncertainty about these forms, and more checking needs to be done. Note that the present tense of 'be' (mi"?-qa) is not used. The -rut form in these constructions is probably indentical with, or at least related to, the -hut form which is used in the Luiseño equivalent of subordinate clauses of purpose such as the following:
(18) wunál-pil wukó•?-ya sámaa-lut
he -ENC arrive-REM buy-PURPOSE
'he came in order to buy'

Another example will be seen in 508. Unfortunately we shall have no time to consider the detailed syntax of these constructions nor to explore this relationship further. I should add, however,
that $I$ am inclined to think that sentences containing periphrastic -hut should also be analysed as complex rather than simplex. However, in the rest of this study the -hut suffix will be handled as if it were a higher $T / A$ verb, although it has not been included among them.

### 4.2 Enclitics

In every Luiseño surface sentence there may be an enclitic elem meat after the first word or less frequently after the last of the elements dominated by the first branching node in the surface phrase marker, ie.
(19) a.



Examples of 19a are:
$\begin{array}{cll}\text { (20) a. } \begin{array}{cl}{[\text { muyikum-pum }} & \text { ?atáxum] } \\ \text { many -ENC } & \text { people }\end{array} \begin{array}{ll}\text { pél?a*n }\end{array} & \text { are dancing }\end{array}$
b. [wunál-up ya?ás $]_{N P}$ pu-ná? $=$ 'that man is his father'
that -ENC man
c. $\begin{array}{cll}{[\text { čó*?un-nupua }} & \text { timét }]_{\text {ADV }} & \text { kúpma*n } \\ \text { all -ENC day } & \text { be sleeping }\end{array}$
'I'll be sleeping all day"

Examples of 19 b are:
(21) a. [múyikum. Tatar mum $]_{N p}-p u m$ pél?a*n (cf. 20a)
(21) a. [múyikum• 7atáxum] $\operatorname{mp}$-pun pélia*n (cf. 20a)
b. $[\text { cóo?un timét }]_{A D V}$-nupu kúpma*n (cf. 20c)
c. [tumáa supúl só•ra kulá•wut čór?i•qanik] $S$-kun Thomas one hour wood having been ENC cutting
wám? wéhmali hó•waxlut
now a little is going to lie down
'Thomas has been chopping wood for one hour (he says) and now he's going to lie down for a while.'

The enclitics are of two kinds: (a) those that confirm the sentence as a statement but add no further semantic information, and (b) those that mark other kinds of sentences, conveying particular attitudes towards the liatener, e.g. of command, query, surprise, and containing additional attitudinal or semantic information, e.g. of impatience, encouragement, unwilifngness to vouch for the truth of one's statement, etc. The former I propose to call syntactic enclitics, and the latter semantic enclitics. 4.2.1 Syntactic Enclitice
4.2.1.1 General Remarks

The non-semantic enclitics cross-refer to the Tense/Aspect suffix on the verb and the person of the subject, and therefore repat grammatical information already present in the sentence. It may be for this reason that, as Kroeber/Grace (163) observe, with the exception of the HYP forms the use of the syntactic enclitics is becoming less frequent. My LaJolla informant almost always used them when giving isolated sentences, but in narrative sequences they tended to be absent. The same tendency was observed in the
speech of my Pauma informant. Both agreed, however, that sentences with the enclitics were "better". Chart 22 shows all the persons of the enclitics that refer to NON-HYP tenses. Chart 23 shows the HYP forme, which, as we noted above, are undifferentiated for tense. (Notice the marked difference between LaJolla usage and that of Pauma/Rincón.) The raised numbers refer to the Notes in 4.2.1.4 below.

|  | Singular | Plural |
| :---: | :---: | :---: |
| FUT | 1. -nupu, $(-n u(p) k u)^{1}$ <br> 2. $-u p /-p u^{2}$ (-upku) <br> 3. -pu (-puku) | $\begin{align*} & \text {-cupu/-capu }{ }^{2}(\text { ču }(p) k u)  \tag{22}\\ & -u m /- \text { mu }^{3}(-u m k u) \\ & - \text { mu }(-m u k u) \end{align*}$ |
| $\begin{aligned} & \text { PRES } \\ & \mathrm{P} \text { PR } \end{aligned}$ | 1. $-n(a)^{4}$ <br> 2. $-(u) p$ <br> 3. $-(u) p^{5}$ | -ča <br> -um <br> -pum |
| $\begin{aligned} & \text { REC, } \\ & \text { REMM } \end{aligned}$ | 1. -nil <br> 2. -(a)pil/-upil <br> 3. -(a)pil/-upil ${ }^{6}$ | $\begin{aligned} & - \text { čil/-camil }^{7} \\ & - \text { mil } \\ & \text {-mil } \end{aligned}$ |

For another set of enclitics used in exclamatory sentences see 305 below.

| (23) | Singular |  | Plural |  |
| :---: | :---: | :---: | :---: | :---: |
|  | Pauma/Rincón | LaJolla | Pauma/Rincón | Lajolla |
| HYP | 1. -xunpu(ku) ${ }^{8}$ <br> 2. -xupu(ku) <br> 3. -xupu(ku) | $\begin{aligned} & -x u n(p u 『 k u)^{9} \\ & -x u k u \\ & -x u k u \end{aligned}$ | $\begin{aligned} & -x u(s) p u(k u) \\ & -x u(m) p u(k u) \\ & -x u(m) p u(k u) \end{aligned}$ | -xuku <br> -xuku <br> -xuku |

4.2.1.2 Examples

Before discussing some of the peculiarities of these enclitics and how the enclitics themselves are to be generated, let me illustrate their use with a number of examples.

(32)

$$
\begin{aligned}
& \text { héla-qa-p } \\
& \text { sing-PRES-ENC } \\
& \text { PRES } \\
& \text { you/he, she }
\end{aligned}
$$

'you (sg) are ainging'
'he, she, is singing'
(33) nó-xunku pitó-? pélax-ma- $\varnothing$ 'I should be dancing now'
-xunpu
-xunpuku

$$
\begin{array}{rrr}
\text { I -ENC } & \text { now } & \text { dance-HYP } \\
\text { HYP } & & \text { CONT } \\
& & \text { PRES }
\end{array}
$$

(34) čá-m-xǔ̌pu

| maxá•m | pélax-ma-ø |
| :---: | :---: |
| yest. | dancemPY |
|  | CONT |
|  | REC |

> 'we should have been daneing yesterday'
we -ENC
HYP
4.2.1.3 Shape of the Syntactic Enclitics

Most of the forms in 22 and 23 seem to be capable of segmentation into one element reflecting the person and another reflecting Tense/Aspect. Thus most of the FUT forms contain the syllable -pu; all the REC and REM forms -il ${ }^{4}$; and all the HYP forms axu amalgamated with either the entire FUT enclitic -npu(ku) or only part of it -nku, depending on the dialect. First person singular forms all contain a segment $\underline{n}$, corresponding to the free pronoun nó* 'I'; second and third person singular usually fall together and contain a segment $p$, which was probably deleted historically before another $p$, as in the HYP forms; first person plural con-
 free pronoun čám 'we'; second and third persons plural both contain a segment min FUT, REC, RBM and HYP, but whereas PRES and P PR second person plural also have $\underline{\underline{M}}$, third person plural has

- pum, corresponding to pumám 'they'.

On the basis of what has just been said, it would seen possible to posit underlying forms for all the enclitics, although some will be problematif. Rather than put forward a detailed derivation, I shall mention a few possible underiying forms in 4.2.1.4, but thereafter treat the gyatactic enclitics as if they were unanalysable units.
4.2.1.4 Comparative and Other Notes

The following notes comment on some of the peculiarities of the enclitics in 22 and 23. They also point out some of the dialect differences and resemblances between my own data and Tac (written in the first half of last century), Kroeber/Grace (based largely on data collected by Sparkman before he was murdered in 1907), Malécot (LaJolla dialect) and Hyde (Rincón dialect).
(1) The longer FUT forms were explained in 4.1.2. They occur in both simplex and complex sentences (see 342-343 and Footnote 36). (2) FUT first person plural -čupu is the IaJolla pronunciation; -čapu is that of Pauma and Rincón, and also of Tac.
(3) FUT second person singular -up and the plural mum are the enclitics used at LaJolla and Pauma. Tac has mupu for the singular but agrees in having -um for the plural. Hyde writes - pu singular and -mu plural, which were also accepted by my Pauma informant although they do not occur in his own speech. It should be noted that, in contrast to -ku, whenever -pu and -mu are the final segmeat of an enclitic, they sound phonetically much more like -po and -mo. This may be because they bear some degree of

## stress.

(4) The -na form of the first person singular enclitic for PRES and P PR may be taken as the underlying form. When it immediately follows a vowel as in the first alternative of 27 , the final vowel of the enclitic is always deleted. This clearly indicates that the underlying form of the PRES NON-\#AB singular suffix should be -qa, for although this is always reduced to $\rightarrow q$ except immediately before a stressed syllable, the underlying form is everywhere retained before the enclitic -na, the final vowel of the enclitic being then deleted, i.e. géwi-ga $\longrightarrow$ géwi-q, but géwi-ga-na $\longrightarrow$ géwi-ga-n (see also the second alternative of 27 ). (5) Immediately after a vowel the $u$ of the second and third person singular PRES and P PR enclitic zup is deleted by a general phonological rule which prevents two vowels from being adjacent on the surface in Luiseño.
(6) The -apil form of the REC and REM enclitic was rejected by my LaJolla informant, who always uses -pil. Malécot's personal data also show only -pil. My Pauma informant seems to prefer -apil to -pil, but uses either indiscriminately. The Rincón form in Hyde is -upil.
(7) The REC and REM first person plural enclitic is always gilil at LaJolla, and usually meamil at Pauma. Both Hyde and Tac have -čamil.
(8) In the Pauma/Rincón HYP enclitics the syllable -ku can optionally be added, apparently without change or addition of meaning. Note that in all the dialects the first person singular

HYP enclitic always contains the person segment $\underline{n}$ (see 4.2.1.3), and the second and third person singular enclitica have zero marking. In all the plural forms, however, the person segment may be optionally deleted in the Pauma/Rincón dialects, but is obligatorily deleted in the LaJolla dialect.

There is also a longer form of the first person enclitic: -xuno'?pu, which I obtained from my Pauma informant. It is also quoted by Kroeber/Grace (62) from Sparkman. An example of its use will be found in 5.l.2.2, when $I$ deal with HYP conditions. See also the discussion of lok in 4.6.3. Note the o in the second syllable, which carries some degree of stress.
(9) The only form in which the syllable opu occurs in the speech of my LaJolla informant is the first person singuiar: -xunpu, which may alternatively be -xunku. If we take the long form xu-(PERSON SEGMENP) =pu-ku as underlying, then except for first peraon singular the Pauma/Rincón dialects have optional rulea deleting PERSON SEGMENT and -ku, whereas the Lajolla dialect obligatorily deletes PERSON SEGMENT and -pu.
4.2.1.5 Generation of the Syntactic Enclitics

Since the syntactic enclitics merely repeat grammatical information already present in the sentence, it might at first sight seem beat to generate them by transformation fairly late in the derivation of the sentence. We could assume that PERSON and NUMBER are ultimately represented as features on NPs and Tense/ Aspect by features on the verb. Then it would be a simple matter to have a transformation copy these features from the NP subject
and from the verb and attach them to a node ENC generated by the base rules. Thus:
(35)


From the lexicon the enclitic with the feature specification matching that under ENC in the right-hand tree of 35 could now be inserted. This transformation would have to precede two others. One is optional and deletes the subject pronoun from any sentence which does not have a noun subject. Note that if this deletion transformation operates after syntactic enclitic formation, the person and number information contained in the enclitic cease to be redundant and the enclitic takes over the role of the personal pronoun (see $24,25,27,32$ ). The other transformation obligatorily deletes verbs of 'being' and 'going' in PRES under certain circumstances, e.g.
(36) čá•m-ča wám? pá•l-ik
we-ENC now Pala-DAT
PRES $\quad$ 'we are going to Pala now'
(37) wunál-up ya?ás nu-ná? 'that man is my father' that-ENC man my-father PRES

In 36 the enclitic -ča would have to pick up the feature PRES from the verb hatif-(?)ann, which would subsequently be deleted. Similarly in 37 the enclitic -up would need to pick up the same feature from the verb $\mathrm{m} \cdot \mathrm{f-q}$, which would also be later deleted.

We shall see below in the discussion of declarative sentences that a very different kind of generation of the ayntactic enclitics is possible if we analyse $T / A$ not as features but as abstract higher verbs. The enclitic then functions more or less as a complementizer and introduces the sentence below them. It is not necessary to give any more details now, since this analysis will receive a full treatment below. We can, however, notice that even if the enclitics are introduced in this way (i.e. by transformations sensitive to the higher T/A verb), they must still appear in a fairly abstract form which at first can take no account of the number and person of the subject of the sentence. Thus we still need a rule similar to that in 35 to copy these features from the subject NP. Similarly we btill need a lexical look-up (in this case the second) to find the correct lexical form of the enclitic to be inserted now that it has features of person and number.
4.2.1.6 Peculiarities of Person and Number Agreement

Peculiarities of agreement arise in Luiseño when the subject NP consists of conjoined nouns or pronouns for different grammatical persons. Usually the number and person of the first subject noun or pronoun are copied, e.g.


'my father and my mother are both sick'

However, when the first person singular pronoun is conjoined with another pronoun it is replaced by the first person plural pronoun, the second conjunct being retained and wee placed after it. This rule must precede the transformation spreading the number and person features of the subject NP, since the enclitic found in second place in these combinations is always the first person plural enclitic, egg.
(40) čám-ča ?óm wé móy-?a•n

'you and I are (both) tired'

The morpheme wé. is clearly related to wéh 'two'. This probably explains why the pronoun conjoined to 'I' must always be singular. Thus 41, which we would expect to mean 'you (pl) and I are tired' is ungrammatical.
(41) čá•m-ča ?umóm wé• móy-Ta•n $\left[\begin{array}{l}\mathrm{YOL} \\ +\mathrm{II} \\ +\mathrm{PL}\end{array}\right]$

Undoubtedly wé: is semantically deviant here since at least three people are involved. Unfortunately my data do not show the correct Luiseño equivalent of 'you (pl) and I are tired', if such a
sentence is possible. It seems clear, however, that when čá'm is conjoined with another plural pronoun it is itself understood as plural and no longer as a special conjoined variety of nó 'I'. This is an area where more research is necessary. 4.2.2 Semantic Enclitics

Apart from the syntactic enclitics Luiseño also has another series which I would like to claim cannot be generated by transformations copying syntactic information found elsewhere in the sentence at some point in its derivation. Wales/Marshall (1966), in a discussion of an idealized speaker/listener's competence, state (29)
"A theory of linguistic knowledge is idealized in the sense that it must disregard paychological and pragmatic aspects of actual or potential utterances."

It seems to me that Luiseño presents a good case of a language where psychological and pragmatic abpects of the utterance are actually incorporated into the gramar, namely in the shape of the semantic enclitics. I shall discuss these fully below, but it will help to make my argument clearer if I give one example here. In its simplest form a Luiseño command consists usually of the bare stem of the verb optionally accompanied by a second person pronoun. If the speaker has been trying to persuade the hearer not to do something, he may finally lose patience and reluctantly consent. This change of attitude towards the hearer can be expressed by uttering the positive command with the encli= tic -ku attached to the first word. The resulting sentence is roughly equivalent to 'Oh well, do it then' (see 4.2.2.2.2). This is only one of a number of enclitics of this kind.

Within the framework of Chomsky's Standard Theory the :
generation of these enclitics presents a problem. If we are to generate an ordinary command by positing a 'trigger' morpheme IMP under a Pre-s node in the deep structure, then for -ku commands we shall need another trigger morpheme since this type of command has another meaning. As we shall see, the problem becomes even clearer with relation to Luiseño "question" sentences, where in the Aspects model we should need a whole battery of trigger morphemes to produce the appropriate enclitics. A number of linguists have questioned the use of morphemes like IMP, Q, etc., and suggested that they should be replaced by higher verbs. For example, Ross (1970) adopts a distinction made first by Austin (1962) and suggests that a 'performative' verb with first person singular subject and second person object should be posited as the topmost $s$ in any sentence. He produces fourteen arguments in support of 'I' and 'you' in the deleted performative sentence, but leaves the way open for a 'pragmatic' analysis of these aame facts. Fraser (1971) attempts to show that each of Ross' arguments is faulty and comes to the conclusion that
"the evidence is far too weak and scattered to justify such a significant theoretical innovation as the Performative Analysis." (p.28)

In other words te does not rule the performative analysis out, but merely questions the 'evidence' produced up to date. He goes on to bay that
"various linguists would argue today.... that the Aspects framenork or anything remotely resembling it is unacceptable, They maintain that there is a more acceptable alternative, namely Generative Semantics.... the PA falls

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easily within the Generative Semantics framework, the issue is simply this: how are the generalizations between sentence sense and sentence force best capturedi"
In the rest of this study I shall attempt to show how the PA can capture some of these generalizations in relation to Luiseño enclitics and I shall discuss some of the advantages and problems connected with it. But first it is necessary for the reader to take a detailed look at the characteristics of the semantic enclitics. There are two kinds: (a) those that are declinable, i.e. that agree in number alone, or in both number and person, with the subject of the sentence they are found in, and (b) those that are indeclinable.
4.2.2.1 Declinable Enclitice
4.2.2.1.1 -kun
In the LaJolla dialect this enclitic agrees only in number with the subject of the sentence. In the Pauma dialect it agrees in number and person, as the special first person plural form shows. (42)
\begin{tabular}{|l|l|}
\hline \multicolumn{1}{|c|}{ Singular } & \multicolumn{1}{|c|}{ Plural } \\
\hline 1. -kun & -kunué/-kunum \\
2. -kun & -kunum \\
3. -kun & -kunum \\
\hline
\end{tabular}
Sparkman's data agree with those I gathered from my Pauma informant. Kroeber/Grace call -kun the 'quotative' enclitic, and ite basic function does indeed seem to be that of indicating that the sentence is a quotation or report. Thus it is found in indirect speech after the first word of an indirect atatement, e.g.
```

(43) muál-up fupá-l yaqá wunál-kun ŋé-lo-t that-ENC woman easy he -ENC leave-going to
PRES
'that woman says that he is going to leave'
(44) wuná•lum-mil yá• puné•yi-kunum ya?áči mó•makan they-ENC say that -ENC man kill
'they said that they had killed that man'

The enclitic has the same function in main clauses, ie. to indiacate that someone, not the speaker, uttered the clause in which the enclitic is found. The utterer may be identical with the subject of the sentence as in 43 and 44, or not, as in 45-47.
(45) wunál-kun móya-q she-INC be tired-PRES
pi. nó• qáy póy ?uhó?van-q
but I not her believe-PRES ACC
'she says she is tired but I don't believe her'
(46) wunál-kun бuøa•l Tó?na-q John mi•kipa pu-ŋé-pi that-ENC woman know-PRES when his-go-SUBORD FUT
'that woman says she knows when John will go'
(47) čám-kunuš ?á•čičum 'they bay we are crazy' we-ENC crazy
(48) nó•-kun nu-sínavuki mi •?-q

I-ENC my-money be-PRES
'they (or people) say I have money'
(49) wuná•1um-kunum mí•xanis sá•msa-ktum
they-ENC clothes buy-going to
'it is said that they are going to buy clothes'

```
There is, however, another use of the enclitic where the speaker
is not differentiated form the utterer of the sentence. In these
cases -kun seemb to have a purely narrative function and can be
interchanged with the syntactic enclitics. In fact it is often
used in narrations.
(50) wéh-kunum ?ó`ra pá`?kilǐs pá·?-qatum pumómi
    -pum
    two-ENC hours whisky drink-P PR them
                                    ACC
cum-tuló-wi-qala
our-find-SUBORD.
                co-temp
'when we found them they had been drinking whisky for two hours'
(51) ?ó•nu-kun néy qíiča-q pi nó- 2i.-q
he-ENC me feel sorry-PRES and I also
póy q"íča-q
him
ACC
'he feels sorry for me and I feel sorry for him too'
(52) pol? ?-kun yúm?piš John pu-máti•-vo'5 yumáyk -up
that-ENC hat his-lose-REL long ago
'that is the hat John lost a long time ago'
```



```
that-ENC Juan his-back humped
```

> 'Juan has a hump back'

In addition to the above forms of this enclitic there is an Indeclinable form -kuna, which Sparkman assigns to a more distant past. My data do not support this. There is usually no semantic difference between the -kun and -kuna forms. The latter is, however, more common with past tenses, as we shall see in the discussion of indirect speech in 5.3.1.1. There is also one usage where -kuna cannot be replaced by -kun. This occurs when two or more persons are watching an action in progress and one describes the action and its completion, e.g.
(54) wám?-up hulúqa-q. hulủuuuq-ya-tuna
already-ENC stagger-PRES stagger-REM-ENC
'he's staggering. Now he's fallen'
(said while watching a shot mountain lion)
(55) tów, wunál ?i•k muná. pi wám? wunál yóvax-lut. look he there go-PRES and now descendgoing to
yóv-ya-kuna
descend-REM-ENC
'look, there he goes and now he's going to go down (the other side of the hill). Now he's gone.'

Note the REM tense in a present context! I have no explanation for this. It suggests that my analysis above may be a little too simple. This is another area in which more research is undoubtedly called for.
4.2.2.1.2-8u

This is the interrogative enclitic used in both Yes/No questions
and in question-word questions. It is declined for both person and number.
(56)

| Singular | Plural |
| :---: | :---: |
| 1. -bun |  |
| 2. $-\phi u /-\beta$ | - ¢um |
| 3. $-\boxed{\sim} /-\infty$ | -tum |

Note that in the speech of my LaJolla informant - fu and -\& for second and third person singular are in complementary distribution: My Pauma informant also used them in the same way, but occasionally employed the longer form also after vowela. Hyde (20-25) seems not to use the shorter form at all. Note further that -太us is the regular first person plural form at Pauma, whereas -\&is is the regular form at LaJolla. All the forms in 56 also occur with $s$ instead of $E$ when the syllable preceding them contains a front vowel (see 59, 60). This alternation occurs in all the other enclitics containing the interrogative segment - $\quad$ uu(see 4.2.2.1.3-4.2.2.1.6).

A simple statement becomes a question when the syntactic enclitic is replaced by the interrogative enclitic. Note that there is only one form of the interrogative enclitic no matter what tense of the verb accompanies it. (I shall return to this point below.)
$\begin{array}{cll}\text { (57) wunái-fu } & \text { hís } & \text { ló?xa-q } \\ \text { he } & \text { thing } & \text { do-PRES }\end{array}$
'what is he doing?' or 'is he doing something?'
$\begin{array}{lll}\text { (58) nó-tonn } & \text { ?éskutal } & \text { tilá-?-ya } \\ \text { I } & \text { loudly } & \text { speak-REM }\end{array}$
'did I speak loudly?'
(59) アóy-siš čá•m ?éxpi tími-n
you we tomor see-FUT ACC
'shall we see you tomorrow?'
(60) hí•ทi-s fóm yá*qa $O R:$ ?óm-tu híni gá*-qa why you cry-PRES
'why are you crying?'
(61) hík-ŋa-gum yá•yičum ?éxŋay wukó•?ax-kutum how-LOC man-PL tomor arrive-going to many
' what time are the men going to come tomorrow?'
4.2.2.1.3 - бukun

This enclitic combines the interrogative enclitic with the -kun of main clauses in the meaning I gave in 4.2.2.1.1 (45-49). Only the -kun element is declined.
(62)

| Singular | Plural |
| :---: | :---: |
| 1. -fukun | - ¢икıunus/-反иkunum |
| 2. - ¢ukun | - ¢иkunum |
| 3. -dukun | -¢иkunum |

(63) cá•m-fukunušs yixéyxičum
we rich
'do they say we are rich?'
(64) nó•-\&ukun póy néči-lut

I him pay-going to ACC
(65) micás-\&ukunum qál-wun pitọ•?
where be-PRES now
'where are they said to be now?'

There is also an alternative form of this enclitic which is indeclinable, viz. - 反ukuna. It appeara to have the same meaning and function.
4.2.2.1.4 - कupil

This enclitic and the next two below (-фupu 4.2.2.1.5, -fuku 4.2.2.1.6) present a number of problems with regard to their meanings and their morphology. The -fupil enclitic appears to be a welding together of the interrogative and the REM enclitic (see 22), but note the deviant first person plural forms: (66)

| Singular | Plural |
| :---: | :---: |
| 1. -funil, -fil | -filis, -/Bumil |
| 2. - Kupil, -6il | - ¢umil |
| 3. -fupil, -fil | - dumil |

All the longer singular forms were supplied by my LaJolla informant; in speech, however, he regularly uses the shorter -fil form for all singular persons, but occasionally -funil for the first person singular. My Pauma informant regularly uses - funil for the first person singular but only -fil for the other two persons. He accepts the longer -fupil form, however. In the plural both dialects use the same second and third person form, but LaJolla has -filis, while Pauma has -fumil. Again the Pauma informant accepte the LaJolla form.

My informants volunteer three different translations for
this enclitic, as seen in 67-70, 71-72 and 73-74.
(67) nó- ${ }^{-\not \subset i l}$ ?ahúyaxi múyiki néč-ax I very much pay-REM
'I must have paid a great deal for it'
(68) nó-fonil póy puptí?
it dream
ACC REM
'I guess I dreamed about it' or 'I must have dreamed ...'
(69) (Listen, our cows are bawling somewhere.) čá•m-反́filis marópa•n pó•mik far mut čum?-7ó•vi we forget-PRES them hay our-give
'I guenon we've forgotten to give them some hay'
(70) nó-funil qáy wuná•lum ?ánkiš I not they like
'I guess I'm not like they are ${ }^{\text {r }}$
(71) pilék-sil múyiki hé•y-ax very much dig-REM ACC
'gee, he sure dug a lot!'
(72) ?ó•nu-fill pu-xardí•n-ki čó•?un hé•y-ax
he his-garden-ALIEN all dig-REM
'gee, he dug up all his garden:'
(73) ?óm- $6 i l$ póyk té•tila-quø you him talk-REM CONT DAT
'so you were talking to him?'
(74) (A says that he is going shooting and B remarks:)

$$
\begin{aligned}
& \text { ?atóman-pil ?u-pátkila qála } \\
& \text { really(?) your-gun be } \\
& \text { PRES }
\end{aligned}
$$

Kroeber/Grace follow Sparkman and give this enclitic only with the 'so .....?' translation (pp. 66-67).
4.2.2.1.5 -бири

This enclitic has roughly the same meaning as -fupil but seems to be more emphatic. It appears to be a combination of the interrogative and the FUT enclitics (see 22). However, the first vowel of the FUT segment is here sytematically deleted:
(75)

| Singular | Plural |
| :---: | :---: |
| 1. -бипри | -\&išu |
| 2. -биири | - ¢umpu |
| 3. -supu | - ¢имpu |

 -fišpu. Note, however, that whereas the second and third person plural forms of the FUT enclitic contain no - pu, it is present here. The following illustrate how the enclitic is used.
(76) (Listen, my cow is bawling somewhere.)
nó- бunpu maróp-ya póyk \&á•mut nu-?ó•vi I forget-REM her hay my-give 'I must have forgotten to give her some hay'
 I cold catch-PRES because my-body my-chest

following forms:
(81)

| Singular | Plural |
| :---: | :---: |
| 1. -fuku, -siku |  |
| 2. -\&uku, -siku | -真umku, -sumku or as |
| 3. -¢uku, -siku | -sumku, -sumku ${ }^{\text {ctingular }}$ |

Note that the alternate singular forms with $s$ have backward: assimilation of the vowel $\underline{u}$, giving $i$ after dental $\underline{s}^{6}$ My informant prefers the indeclinable form -fuku/-siku for all persons, but also uses the declinable ones. (Compare his usage of -xuku for all the forms of the HYP enclitic, 4.2.1.4 Note 8).
(82) ?á: pilék-siku múyik pu-néčax very much his-pay 'boy, he must have paid a lot for it!'
(83) čá•m-fisku có•?un timét waxá•m hé•y-ax we all day yest. dig-REM
'we must have dug all day yesterday'
(84) pilék-siku čá•m čó•?un timét waxá•m hé•y-ax very

Same meaning as 83 , but probably more emphatic.

Morphologically this enclitic seems to stand in the same relationship to -gupu as the LaJolla form -xuku to -xupu(ku). In each case the LaJolla dialect has a rule not shared by the others whereby the middle segment -pu- may be deleted.

Semantically the difference between -supil, -gupu and -反uku is not at all obvious from the translations offered for sentences containing them. I shall rather hesitantly attempt to provide an
explanation based on their morphology in 4.4 .8 below.
4.2.2.1.7 -xukun

Although this enclitic does not contain the interrogative segment - $\delta \mathbf{d u}$, it is the interrogative counterpart of the HYP enclitic -xupu(ku) (see 23). It appears to be an amalgam of the HYP segment -xu- and the quotative enclitic -kun. It is declined as follows:
(85)

| Singular | Plural |
| :--- | :---: |
| 1. -xu(n)kun | -xiškun(um) |
| 2. -xukun | -xumkun(um) |
| 3. -xukun | or |

It can be found in sentences without accompanying subordinate clauses, but it usually forms one half of an interrogative conditional sentence. As such it will be considered in detail when I come to describe complex sentences. For the moment I will illustrate its use by the following examples:
(86) ?óm-xukun póy ?íxWuna ?unáni- $\varnothing$ mán té• qáy you him immediately recognize-HYP or INT not
'would you recognize him immediately or not?'
(87) wuná•lum-xumkunum nu-kí sá•msa-ø pumó•mi
they my-house buy-HYP them ACC ACC
nu-tuvyúpi-qala
my-ask-SUBORD
co-temp
'would they have bought my house, if I had asked them?'

As with all the enclitics ending with -kun, there is an alternative form with final a, viz. -xukuna, which seems to have the same meaning. Sparkman suggests that this conditional interrogative is "remoter", but my data are insufficient to corroborate this.
4.2.2.2 Indeclinable Enclitics

We have seen that some of the declinable enclitics also have declinable forms, but there are a number of the latter which stand alone. These are -kam, -ku and tan.
4.2.2.2.1 -kam

A sentence with this enclitic appears to be an invitation to the hearer to bring one of his senses into play (very often sight). It thus has a deictic function. It is found in two environments: (a) with the imperative form of verbs of sensual perception, and (b) with declarative sentences where an accompanying 'look' imperative is also possible. The sentences in 88 illustrate environment (a), those in 89 environment (i).
(88) a. tów-kam wunál nawítmal pá-qa look that girl cry-PRES
TMP IMP
'look, that girl is crying!'
b. náqma-kam vá*ka mičá? já*-qa
listen cow somewhere IMP
'listen, the cow is bawling somewhere!'

$$
\begin{array}{ll}
\text { c. } \quad \text { hú• fi-kam } & \text { nu-pí•vi } \\
\text { smell } & \text { my-tobacco } \\
\text { IMP } &
\end{array}
$$

'smell (or smoke) my tobacco!'
(89) a. wunál-kam nawítmal ná-qa
'look, that girl is crying' (cf. 88a)
b. ?á* pú•ta, pu-tá•x-kam páli-q (Spanish his-self draw attention-PRES expletive)
'...., look, he's trying to make himself noticed' (said of a jealous dog)

Sometimes the imperative is also present, as in 90:
(90) tów, wunál-kam tó-na máhinik lîčax-muna-ø look he stone-LOC slowly slip-come-PRES IMP
'look, he's slowly slipping down the rock'

When explicit imperatives are present, we should expect a new $S$ after the imperative and, as a result, one of the syntactic enclitics after the first word of the second S. A second enclitic is however unacceptable here:
(91) a. tów-kam wunál-*up nawítmal yá-qa
b. tóm-kam wuná-lum-*pum pésli-ŋa sínaval fú•li-wun they dish-LOC money pour-PRES 'look, they are putting money in the dish'

This suggests that the imperative has been incorporated into the second $S$, with the special enclitic -kam coming in the expected second position in the sentence. We can thus generate sentences
of the type seen in 89 from sentences like 88 , if we consider the deep structure of both to be a conjunction of sentences. A devi.vation for 88 a and 89 a would be as follows (substituting English morphemes for the sake of clarity):
(92) a. $\left[_{S}\left[S_{S}\right.\right.$ look $]\left[_{S}\right.$ that girl is-crying $] . \xrightarrow{\text { by -kan INSERTION }}$
b. $\left[_{S}\left[_{S}\right.\right.$ look] $\left[_{S}\right.$ that-kam girl is-crying $] \stackrel{\text { by INCORPORATION }}{\Longrightarrow}$
c. $\left[_{S}\right.$ look that-kam girl is-crying] $\xrightarrow{\text { by look-DELETION }}$
d. $\left[_{S} \varnothing\right.$ that-kam girl is-crying $]=89 a$
(93) a. $\left[L_{S}[\right.$ look $][$ that girl is-crying $] \xrightarrow{\text { by -mam INSERTION }}$
b. $L_{S}\left[{ }_{S}\right.$ look-kam $[$ that girl is crying $] \stackrel{\text { by INCORPORATION }}{\Longrightarrow}$
c. $\left[_{S}\right.$ look-kam that girl is-crying $]=88 a$

This derivation is to some extent strengthened by 90 , which is in fact the sentence generated in 92b. That INCORPORATION has not yet taken place is supported by the break after tow (indicated by a comma) in 90 , whereas in the sentences of 88 there is no pause


For some discussion of the details of -gam INSERTION see 4.5 .3 below.
4.2.2.2.2 -kn

This enclitic only appears with imperatives. It conveys the idea of impatience or slight annoyance with the hearer, or of reluctthant consent (see also 4.5.2). In the following examples 'context' sentences are given in English for the sake of simplicity.


Sentence 98 could also be asked by $A$ instead of $B$, if $A$ turns to a third person and agks his age.
(99) (A: Are you going thrasking beans this year? B: Yes,) ?óm-fan 'what about you?'

For a suggested derivation of this enclitic, see 260 in 4.5.2. 4.2.2.3 Generation of the Semantic Enclitics

In the following sections I shall put forward an analysis of the Luiseño semantic enclitics which is based on semantic structures containing abstract 'performative' verbs and 'higher' verbs of a non-performative kind. It will be easiest to discuss these if we look at individual kinds of simplex sentences and at the enclitics and other particles that are contained in them. I shall therefore make some preliminary remarks here about performatives and higher verbs and take up the detailed analysis in the appropriate section devoted to each kind of simplex sentence.

As we mentioned above in 4.2.2, the notion of the performative verb was first put forward by the philosopher Austin and a detailed account is given in his first lecture in the book 'How to Do Things with Words' (1962). For our present purposes we need only note that a sentence containing a performative verb is not a statement but an example of the action that the performative verb refers to. Thus, to say: 'I accept your offer' is an act of acceptance. Further, Austin points out that performative sentences have no truth value, but can only be considered 'felicitous' or 'infelicitous'. The performative idea was later taken
up by tranaformational grammarians, in particular by Ross (1970)
in the article on declarative sentences in which he produces fourteen arguments in favour of what he calls the Performative Analysis'. This claims that every English sentence is dominated in the deep structure by one performative verb of communication with a first person subject and possibly a second person object, and that this verb marks the illocutionary force (see Searle, 1965) of the utterance. Austin's performative/constative (= non-performative) distinction was analysed by Anderson (1970); he also tries to show that Ross' arguments
"are not amenable to explanation in syntactic terms and that where explanation seems possible, it is in terms of semantic structure." (p.2)

A comparable theory of higher or abstract verbs, which unlike performatives are not restricted as to subject and object, was first put forward by G. Lakoff (1970a). A thorough-going use of this approach was later made by R. Lakoff (1968) in her analysis of Latin complementation, where she posits a number of different abstract verbs, some performative and some not, in order to account for complementation involving the accusative and infinitive construction or subjunctives with various introducers, and for different kinds of imperative.

In the sections below I shall suggest a similar analysis for Luiseño and endeavour to describe its strengths and weaknesses.

## 4. 3 Declarative and Interrogative Sentences

### 4.3.1. Usefulness of Higher Verbs

It is easiest to demonstrate the usefulness of higher verbs in Luiseño by considering the sentences 45-53 in 4.2.2.1.1 with the quotative enclitie -kun. It will be remembered that the simplex sentence fupá' I móyaq means 'the woman is tired'. By the addition of the enclitic -kun, three pieces of meaning are added, namely (a) I say (the woman is tired), (b) the woman herself says (she is tired), and (c) they (= people) say (the woman is tired). If we postulate an abstract verb dominating 'the woman is tired', it is a simple matter to represent the three meanings by introducing different persons as subject into the superordinate $S$. If we call the abstract ver REPORT, we get the following tree:
(100)


Whichever of the three alternatives in subject position under $S_{1}$ has been selected in the semantic representation, it may be deleted with the whole of $S_{1}$ after -kun has been introduced into $S_{2}$
W. Bright has pointed out to me that there may not be three specific meanings associated with -kun. He prefers an analysis

Which requires only one, fairly general meaning and supports his preference by observing that this concept is expressed by a aingle morpheme in many Amerindian languages and also elsewhere; e.g. some Spanish dialects use dizque, Kanarese uses ante, etc. Now the most non-committal rendering of -kun I can think of is 'it is said', where the sayer is left fully unspecified, but $I$ can see no way of making use of this in a higher verb analysis. And in any case Luiseño possesses no passive constructions. Another possibility is that the higher verb is active but has a neutral subject like 'somebody'. One objection to this is that it is rather curious for 'somebody' to include the subject of the sentence as in the (b) translation of dunál-kun moyaq 'the woman (herself) says she is tired'. An entirely different analysis was proposed to me by G. Bedell, who suggested that -kun may be equivalent to an adverb like the English 'reportedly'. The snag here is that £uiseño has no adverbs at all of this kind; in fact, it has extremely few adverbs of any kind, English adverbial modifications usually being rendered by Luiseño verbal constructions which clearly have sentences underlying them. This being so, in the case of reportedly we are back again to the higher verb.

The first analysis I offered above seems to avoid all these problems and in my opinion is therefore preferable. However, even if $I$ am wrong, the language itself does present some syntactical justification for an analysis with a higher verb of saying such as REPORT.

In one kind of indirect speech (see 5.3.1.1) we find sentences of the following kind, where -kun introduces subordinate clauses after overt verbs of saying:

'they say that the woman is tired'
(102) [S nó:n yaqá•[S funá•1-kun móya-q]]

I-ENC say
'I say that the woman is tired'
(103) $[$ s вирá•1-up yaqá• $[S$ móya-q-kun $]$ ]
woman-ENC say
'the woman says she is tired"
Underlying 103 we can postulate 104:

If we forget for the moment about the syntactic enclitic in the top sentence, and simplify Tense/Aspect, 103 can be generated by the following transformations: (1) -kun INSERTION introduces -kun as first element in a $S$ immediately dominated by a verb of saying, (2) EQUI-NP DELETION deletes a subject NP in a $S$ under identity with the subject NP in the next higher $S$, (3) ENCLITIC ADJUSTMENT makes the enclitic hop over the first word to the right of its own $S$, (4) OBJーVERB PERMUTAFION switches around a verb and its object when the latter is also a $S$. Thus:
(l05) a.

> 'they (= people) say the woman is tired'

Of course we must now have a DELENION rule to remove the whole of the superordinate $S$ with its abstract argument and predicate. In this respect the higher verb analysis $I$ am suggesting here resembles the performative analysis. DELETION rules of this kind are open to two criticisms: (1) they are peculiar in their virtual wholesale destruction of a dominating $S$ leaving only the subordinate $S$ behind, and (2) they seem to be necessary only in performing operations on semantic structures.

Bach (1971) claims that the recent research of Ritchie and Peters into the mathematical properties of transformational grammars has shown that they are
"too powerful to qualify as theories of natural language. ...... Yet a major part of the research of the years since Aspects has gone into the development of theories that are even more powerful ... than the standard theory." (p.5)

He points out that the theory has been extended since Aspects by the addition of pre-cyclic (G. Lakoff 1970a), post-cyclic (Ross 1967b) and 'anywhere' rules (Ross 1967c), by deep-structure and surface-structure constraints (Perlmutter 1968), and more recent-
ly by Lakoff's claim that
"transformations are just the limiting case of much more general (and more powerful) derivational and even transderivational constraints." (Bach, p.5)
(See G. Lakoff 1970b, 1972).
DELETION rules of the kind I suggested above also fit into the category of these ever more powerful rules that recent trans-
formational research has introduced. Yet the fact that Luiseño -kun appears in main clauses with exactly the same force as when it introduces a subordinate clause dependent on a verio of aying suggestis strongly that a higher verb of saying has indeed been deleted.

### 4.3.2 Abstract Performative Verb

Let us now go further and explore the consequences of proposing that the structure in 100 is not the final analysis, but that above the higher $S$ shown there an even higher $S$ of the performat tive kind can be postulated. Before we look at the details of this, consider the following sentence with the gfukun enclitic (described in 4.2.2.1.3):
(107) رuná•1-fukun móya-q
'do they say the woman is tired?'7
Here the enclitic adds two additional semantic ideas to the original sentence: (1) the utterer of the sentence is asking the hearer for information, but (2) the required information is not about the truth of the original sentence but about the truth of a report of the original sentence. This complicated semantic structure can easily be represented in a tree:
(108)


Sentence 107 can now be generated cyclically as follows. On the lowest cycle no transformation applies. On the $S_{2}$ cycle, -kun INSERIION places -kun before the next lowest $S$ (i.e. $S_{3}$ ) by being sensitive to a rule feature on the verb REPORT. A DELEIION transformation now deletes REPORT and its abstract subject in $S_{2}$ giving 109.
(109)


The $S_{2}$ now becomes redundant and is pruned; as a result the NP that was dominated by $S_{2}$ also becomes redundant and is also pruned, giving 110.
(110)


On the last cycle 2 gu INSERTION, which will need to be sensitive to a rule feature on ASK, now applies and places -ku to the left of the next lower $S$ (i.e. $S_{3}$ ). Again a DELETION transformation operates and removes the abstract subject, indirect object and verb of $S_{1}$, producing 111.
(111)


The NP between $S_{1}$ and $S_{3}$ is now redundant and will be pruned, Whereby $S_{1}$ also becomes redundant and is pruned. Finally ENCIITIC ADJUSTMENT causes the two enclitics to hop over the next nonenclitic word to the right (maybe we need a rule to fuse them into one unit before they hop) and then we reach 107.
4.3.3 An Alternative Proposal

One criticism that can be levelled against the above analysis is that the introduction of the enclitics by transformation violates a universal constraint on transformations proposed by Chomsky
(1965:146) and claimed by Bresnan (1970) to have received additional confirmation in Dougherty (1968), Kayne (1969) and Helke (1971). This states that no transformation be allowed to introduce morphological material into a
"configuration dominated by $S$ once the cycle of transformational rules has already completed its application to this configuration."

This is, of course, exactly what -kun INSERTION and - fu INSERTION do, since it is on the cycle of the $S$ containing the verbs REPORT and ASK that an enclitic is prefixed to the next lower $S$.

Bresnan has raised just this same objection to the transformational introdcution of complementizers in English. She goes on to point out that the complementizers that, for-to, ${ }^{\text {seing }}$ are not semantically devoid of function as many grammarians have hitherto assumed and that this provides additional evidence for a new node COMP in a configuration of the following type: (112)


Under various circumstances this configuration may be dominated by NP or VP, e.g. depending on whether it is the complement of a factive or non-factive verb, etc. In the introduction of complementizers by transformation the rule has to be sensitive to a rule feature on the verb above the $S$ complement. Bresnan's analysis has the advantage that no rule feature and no insertion transformation are now needed, since the verb can be subcategorized for the type of complement it takes.
4.3.4 Enclitics as Complementizers?

It is interesting that all Bresnan's remarks about English complementizers seem to apply equally well to the Luiseño enclitics; indeed we may justifiably ask whether the enclitics are not in fact complementizers. First, if they are so analysed, note that without the higher verb analysis Luiseño has overt complementizers introducing most kinds of non-embedded sentences. Bresnan also envisages this possibility for English and suggests that all nonembedded sentences have complementizers introducing them, though some must be obligatorily deleted: she means non-deletable ones like $+W H$ and deletable ones like $Q$. The case for enclitics as complementizers in Luiseño becomes even stronger if we accept the higher verb analysis, for now the 'unattached' complementizers in non-embedded sentences become the complementizers for which the superordinate abstract verbs are categorized; or, put in another way, they now introduce the complements of these verbs. This will become clear if we apply this new analysis to 107. Note that I am assuming the position taken by G. Lakoff (1971) that the base rules directly generate semantic representations as phrasemarkers. Thus Bresnan's innovation in the base rules:
(113) $\mathrm{NP} \longrightarrow \mathrm{N} \overline{\mathrm{S}}$
$\mathrm{VP} \longrightarrow \mathrm{V} \overline{\mathbf{S}}$
$\bar{s} \longrightarrow \operatorname{COMP} \mathrm{~S}$
must also apply to semantic structures, and in particular the $\overline{\mathbf{S}}$ and the COMP nodes must also be generated in phrase-markers to introduce the complements of abstract verbs. I shall also assume
for the moment that Chomsky's universal does in fact hold, though this is far from having been proved despite Bresnan's claims, I shall also assume that it applies to transformations on semantic structures, i.e. prelexical transformations as well as postlexical transformations. This is in keeping with the demands of Bach (1971) discussed above for severe restrictions on transformations and a much more heavily constrained transformational model than either the interpretivist or the generative semantic school at present envisage.
4.3.5 A Sample Derivation Incorporating Bresnan's Proposal

We can postulate for 107 a remote structure such as 114 , where $I$ have for the moment left Tense/Aspect out of account:
(114)


Operating on this we need no enclitic insertion transformation at all, only DELETION transformations with subsequent tree pruning. Thus 114 is the starting point for the following derivation:


With the configuration in ll5d we now need some means of obtaining a structure like:
(116)


This could be achieved by an ad hoc transformation raising $\operatorname{COMP}_{2}$ and adjoining it to $S_{1}$ to the right of $\operatorname{COMP}_{1} . S_{2}$ would now become redundant and be pruned. Then SUBJECT RAISING mould attach NP to $S_{1}$, and PREDICATE RAISING would attach $V$ to $S_{1}$.
4.3.6 For and Against the Two Proposals

There are two things that can be said against incorporating Bresnan's proposal into a performative analysis. First, if Bresnan is right that every $S$ must have a complementizer, we must also posit a COMP node for the performative $S$ at the top of the trea. This would cancel out the one big advantage that the performative analysis has over other approaches, viz, that every COMP node must depend on a superordinate verb. Second, Bresnan's propoaal springs from the desire to stand by Chomsky's universal constraint but as I intimated above, it is by no means certain that this constraint holds universally. This being so, her inventing a new COMP node to avoid introducing morphological material into a tree where the constraint forbids it may be nothing more than a vain exercise.

Two criticisms can also be levelled against the introduction of the complementizers by transformation. The first concerns the DELETION transformation required to remove most of the performaItive $S$. Fraser (1971) in his critique of Ross' arguments for the Performative analysis says that he agrees with Ross that the rule for performative deletion faces a number of difficulties. These consist mainly in so restricting the DELETION transformation that overt performatives are not alao deleted. It seems to me that a fairly simple, though maybe ad hoe, way to overcome this problem Would be to make the DELETION rule sensitive to a feature [+Abstract] on the higher verb. This would ensure that only abstract verbs would self-destruct, while overt performativea,
marked with the feature [-Abatract], will not.
The second criticism is that we need a separate transformation to introduce each enclitic, each transformation being sensitive to the higher verb on which the enclitic depends. This seems awkward and wasteful, but on the other hand it leads to simpler lexical entries for the higher verb, which no longer needs to be subcategorized for the enclitic (complementizer) it takes.

On balance the disadvantages of enclitic introduction by transformation seem to be far less serious than those attaching to Bresnan's analysis. Furthermore, in the transformational approach the problem of the complementizer in the top performative $S$ doea not arise. For these reasons I shall reject Bresnan's proposal and in the rest of this study generate the enclitics by transformation.

Before we go on to take a look at the various Luiseño gentence types, let me make one observation on the consequence of the performative/higher verb analysis on the distinction $I$ have hitherto made between semantic and syntactic enclitics. This analysis with the enclitics introduced as the complementizers of abstract higher verbs seems to remove most, if not all of their semantic force. They now come to look much more like the syntactic enclitics from which they were carefully held apart. Indeed the only characteristic. which can now differentiate the syntactic enclitics from the semantic enclitics, viz. the apparent sensitivity of the former to the $T / A$ suffix on the verb in their own $S$, owes its existence to the analysis of $T / A$ that one adopts. This
sensitivity would be a distinguighing faotor if we were to adopt the feature analysis mentioned in 4.1 .1 above, but when $T / A$ is analysed as a series of higher verbs the syntactic enclitics become the complementizers of these higher verbs in exactly the same way as the semantic enclitics are the complementizers of thejr higher verbs.
4.3.7 Derivation of Declarative Sentences

In the discussion above we concentrated principally on one type of interrogative sentence in order to make our arguments clear. Before I go on to analyse interrogative sentences in detail, it will be more convenient to deal first with declarative sentences. Theae are of two kinds: Simple Declaratives and Declarative Reportives.

### 4.3.7.1 Simple Declaratives

For simple declarative sentences we can postulate an abstract per-
formative ver DECLARE with first person singular subject and second person indirect object, as in 118 , and with a node NP dominating the $T / A$ higher verbs. Thus underlying
(117) fuŋá•l-up móya-q 'the woman is tired'
we have the remote structure:


It will be remembered (see 4.1.2) that the node I have ringed is the only one of the $T / A$ higher verbs that represents Tense; the three lower nodes represent Aspect. Another way of deacribing 118 is to say that the simple declarative sentence consista of a predicate DECLARE and three arguments, namely the first person singular pronoun, a second person pronoun and a sentence whose predicate must be one of the verbs of Tense. The final T/A enclitic will be atomically generated by ENCLITIC INSERTION as the cycles proceed up the tree. On the topmost cycle a transformation sensitive to the performative verb (here DECLARE) will attach the appropriate enclitic (in this case $\varnothing$ ) to the front of the $S$ dominated by one of the NP arguments. If the $T / A$ verbs have meantime been raised and lexically replaced by the correct $T / A$
suffix we get:
(119)


A PERFORMATIVE DELETION transformation will now eliminate $I$, YOU and DECLARE, pruning will remove $S_{1}$ and $N P_{1}$, and móyax= will be raised to immediately precede -g . Finally, in the enclitic sequence[tDeclare] -up, the zero element must be deleted, and, in the verb sequence, móyax- and $\rightarrow q$ must be welded together with subsequent phonological deletion of the $x$.

### 4.3.7.2 Declarative Reportives

The other type of declarative sentence is the one $I$ described in 4.3.2 but now with the abstract performative added. It will be remembered that this was the type of sentence with a higher verb REPORT which $I$ suggested could have $I$, THEY or $x_{1}$ as subject, where $x_{1}$ is the same person as the subject of the lowest $S$. $A$ glance at the tree below, in which the performative DECLAPE and its arguments have been inserted, will make this clear. This is the tree for 106, repeated here for convenience as 120. (120) fupál-kun móya-q $\quad=$ "the woman is tired'
"the woman says she is tired"
'they say the woman is tired'
(120) ctd.


The cyclical applications of the transformations will proceed up the tree as before, and again the $T / A$ verbs will be replaced by -q and the abstract enclitics by mp. On the cycle of $S_{2}$ a transformation sensitive to REPORT will add the enclitic -kun to the front of $S_{3}$, and on the $S_{1}$ cycle the transformation sensitive to DECLARE will attach the $\left[\begin{array}{c}\varnothing \\ \text { DDeclare }\end{array}\right]$ enclitic to the front of $S_{2}$, as for simple declaratives. Ultimately we shall obtain the enclitic sequence $\left[\begin{array}{c}\varnothing \\ + \text { Declare }\end{array}\right]$-kun -up. As before, the $\left[\begin{array}{c}\varnothing \\ + \text { Declare }\end{array}\right]$ enclitic must be deleted; -up must also be deleted since -kun does not tolerate the company of any Tense onclitic. With the final operad
tions described in 4.3 .7 .1 we finally arrive at 120.
Two things should be noticed about this tree. First, I have posited no $T / A$ verbs above REPORT, although it might be semantically more accurate to consider performatives and other abstract verbs as being in the present tense. Perhaps a case could be made for them not to be marked for tense, or, put in another way, for the Luiseño $T / A$ verbs to be restricted to a position below the lowest $S$ containing an abstract verb which must later be dele.ted. Although this strikes me as a weakness, i shall adopt this praes tice for simplicity's sake and in all the sections below introduce no $T / A$ with abstract verbs.

The second thing to be noticed is that if the subject of the verb REPORT is in fact 'I', then REPORT also functions as a performative, in fact as an embedded performative. Although Ross (1970:261) claims that
"every deep structure contains one and only one performative aentence as its highest clausel',
and thus implies that performatives may not be embedded, fraser (1971) produces a number of counterexamples disproving this. He points out that the sentence
(121) I admit that $I$ concede the election
"is simultaneously an admission and a concession". Similarly, in (122) I announce that $I$ hereby promise to be timely there is both an act of announcing and an act of promising. If one performative can appear embedded below another when they are both overt, there should be no objection to positing this same relationship when they are both abatract.

### 4.3.8 Other Higher Verbs

Before we turn from declarative sentences to questions, it is necessary for the reader to become acquainted with one characteriatic feature of the Luiseño verb that clearly shows the need for higher verb analysis. This is the attachment of certain affixes to the verbal roots or atems so as to add an extra verbal notion. The examples below show that the resulting verbal forms have usum ally to be translated into English by means of two verbs, one being the complement of the other. For clarity of exposition I shall provide some morphological notes on each suffix first and then in a final subsection show how they can be accounted for as higher verbs in underlying structure.
$4,3,8,1$-muna

This suffix adds to the sense of the verbal sten the notion that the action is performed while the actor is approaching the apeaker as in 123, or that one state is changing to another as in 124b. The suffix is clearly related to the verb muná 'come'.

'look, he's riding up on his horse'
(124) a. nu-yú?-up wám? píwa-q my-hair-ENC already be grey-PRES PRES
'my hair is already grey'


```
4.3.8.3 -vuta/-luta
```

These suffixes are synonymous and correspond to English 'can, be able', e.g.

$$
\begin{gathered}
\text { (128) wunál-up pu-hé•li-\{l} \left.\begin{array}{l}
\text { vute } \\
\text { luta }
\end{array}\right\} \text {-q 'he can sing' } \\
\text { his-sing-can-PRES }
\end{gathered}
$$

Here too the thematic increment $-(?)$ ax may be converted to $-\boldsymbol{i =}$, but it often remains unchanged; thus pu-hélax-vuta-q or pu-hé•lax-luta-g are acceptable variants alongside those in 128. Note that the verb forms with this suffix are extremely odd syntactically when compared with all other Luiseño verb forms. They are the only ones that take the same range of $T / A$ suffixes as a finite verb, yet they have possessive prefixes attached to them as if they were non-finite (i.e. nominals). It may be that this one construction is the only fossilized survival in Luiseño of the mechanism well developed in Cupeq̃o and Cahuilla of attaching * subject pronouns as prefixes to finite verbs. In spite (or maybe because) of its frequency, this Luiseño construction today seems to be vacillating between a verbal and a nominal position. This can be seen from the enclitic forms used in the sentence when the English translation has a non-third person subject. Consider the enclitic in the following two sentences:


```
        \(\left[\begin{array}{l}\text { ENC } \\ \text { +PRES } \\ \text { +III } \\ -\mathrm{PL}\end{array}\right]\)
    'I can sing'
```

$$
\begin{gathered}
\text { (130) nó•-n } \\
{\left[\begin{array}{l}
\text { ENC } \\
+P R E S \\
+I \\
-P L
\end{array}\right]} \\
\\
\text { 'I can sing' }
\end{gathered}
$$

According to my informants the correct form of the sentence is 129 with the third person singular enclitic indicating that the verbal form is also construed as third person singular, i.e. as a nominalization. All the examples quoted in Kroeber/Grace (145-6) have third person singular enclitics no matter what the person of the prefix on the verb is. On the other hand, in Hyde (107-8) all the examples are constructed like 130 with the person of the enclitic matching the person of the prefix on the verb, e.g.
(131) chaam-cha chamwayaxvotawun
(: čća-m-ča čum-ẃa*yax-vuta-ซun
\(\left[\begin{array}{lr}ENC <br>
+P R E S <br>
+I <br>

+P L\end{array}\right] \quad\)| our-swim-can-PRES |
| ---: |
| $[+P L]$ |

'we can Bwim'
Compare this with:
(132) ča•m-p čam-nečilutoq (Kroeber/Grace: 145)

$$
\begin{array}{r}
(=\text { čám-up } \quad \text { cum-néci-luta-q } \\
{\left[\begin{array}{l}
\text { ENC } \\
{\left[\begin{array}{l}
\text { PRES } \\
+I \\
+P L
\end{array}\right]}
\end{array} \quad\right. \text { our-pay-can-PRES }}
\end{array}
$$

Hyde 's usage also agrees with the colloquial speech of my own informante, who employ the matching enclitic at least as often as the non-matching one.

Examples 131 and 132 point up another peculiarity about this construction. Whereas Hyde has only plural T/A suffixes on the verb when the personal prefix is plural, Kroeber/Grace always have singular $T / A$ suffixes regardless of whether the prefixes are singular or plural. The plural suffix was consistently rejected by my Pauma informant, who always uses the singular. On the other hand, in LaJolla usage the singular $T / A$ suffix with non-matching enclitic is frequent, but the plural with matching enclitic also occurs at times, e.g.

| (133) uná•lum-pum |  |
| ---: | :---: |
| they | -PNC qáy |
|  | $\left[\begin{array}{l}+P R E S \\ +I I I \\ +P L\end{array}\right]$ |

Very rarely a plural enclitic may be found with a singular $T / A$ suffix as in 536.

We may note finally that -vuta is the only suffix used in the speech of my LaJolla informant, who rejects =luta, although according to Malécot's personal notes it was recognized by his sister. On the other hand, -luta is used just as often as -vuta by my Pauma informant. Hyde gives only -vuta; Tac has examples of neither.
4.3.8.4 -ni

This is the Luiseño causative suffix.
(134) nó-n póy néci-ni-q
I-ENC hím pay-cause-PRES
PRES ACC $\quad$ 'I'm making him pay'

In the REM tense -ni is replaced by -max, and for the FUT tense -nixan is used:
$\begin{array}{rcc}\text { (135) nó•-nil póy néči-nax } & \text { cause } & \text { 'I made him pay' } \\ \text { ENC } & \text { REM } & \end{array}$
(136) nó•-nupu póy néči-nixan 'I shall make him pay' $\begin{array}{ll}\text { ENC } & \text { cause } \\ \text { FUT } & \text { FUT }\end{array}$
$4.3 .8 .5-1 a$
The most common use of this suffix is to indicate that an action is repeatedly or continually performed. Compare 137 with 138.
(137) ?óm néy čáni-q 'you are contradicting me' you me contradict-PRES

ACC
(138) ?óm néy čáy-la-q 'you keep contradicting me'

Notice that the verb loses its thematic increment when -la is added. (For other uses see Kroeber/Grace: 143)
$4.3 .8 .6-i(m)$

This is another very common suffix. It adds to the verb the notion that the action is accompanied by movement from one place to another, egg.
(139) a. nó:-n čé •ni-q
shear-PRES $\quad$ 'I'm shearing sheep'
b. nó•-n čé•ni•-q ( čé•ni-i-q)
'I'm going from one flock to another shearing'

The final appears in the REM tense; whenever another suffix
follows (as in 139), the $m$ is dropped.
(140) nó•-nil waxá•m waní*pa wá•ya-ym

I-ENC yest. river-LOC REM REM
'I swam across the river yesterday'
$4.3 .8 .7-n i$
This suffix may occur both alone and in conjunction with -ism).
In the latter case it seems to suggest that the movement is not directed to any particular goal, egg.
$\begin{array}{ccllll}\text { (141) nó-nil kihá•t mí•?-qanik puyá-mani fúßnalum } \\ & \text { I-ENC } & \text { little be-SUBORD always } & \text { women }\end{array}$
 with them run REM HAB
'when I was young I was always running around with the women'
 Juan-ENC always cigar chew-SUBORD come RES
'Juan is always walking around chewing a cigar'
For two other uses of -nํ see the discussion of commands with higher verbs in 4.5.4.
4.3.8.8 Derivation of the Suffixes from Higher Verbs

Within the framework I am using we can easily account for the $-n i$ and -viča suffixes by positing each as a higher verb in the underlying structure in just the way proposed by Langacker (1970).

Thus for 134 we would need a structure:
(143)

and for 125b we would need:
(144)


It should be noted that in postulating trees like 143 and 144 we are claiming that for forms like néci-ni- a relationship of noun phrase complementation obtains between the higher verb and its
complement although the former winds up as a suffix on the latter in surface structure. Despite its structural peculiarity, maybe the -vuta/-luta auffix can be dealt with in the same way. There are certainly precedents in other languages for construing 'can' as taking a NP complement (e.g. French: je le peux, German: ich Kann es, etc.). In the case of -la, however, we can find no support for NP complementation. Similarly for the other suffixes illustrated above, which all involve motion, NP complementation is clearly impossible, since verbs of motion do not take noun phrase objects. If we wish to posit higher verbs as underlying these suffixes, we must use underlying structures where a relationship corresponding to what Rosenbaum (1967) calls 'verb phrase' complementation obtains between the higher verb and its complement. Thus underlying wunál galí?-muna in 123 we should have: (145)


This tree is intended to be nothing more than suggestive.
Before we leave these suffixes, let me quickly survey the advantages and disadvantages of analysing then as higher verbs. We have just seen that in some cases we shall have to postulate

NP complements and in other cases complements of a different kind. This is a drawback as we shall now require two different sets of transformations to convert the verbs into suffixes. On the other hand, the higher verb approach can very competently account for the fact that a Luiseño sentence such as
(146) wunál-pil hé•li-viča-quø ?éxni

| he-ENC |  |
| ---: | ---: |
| REM | sing-want-REM |
| CONT |  | tomorrow

CONT
'he wanted to sing tomorrow'
can contain a temporal adverb that is irreconcilable with the $T / A$ ending on the verb. In 146 it is clear that the 'wanting' is past and the 'singing' future. The higher verb approach can accommodate both these temporal relations quite comfortably since it postulates two separate verbs in underlying structure. finally, further support is lent to this analysis by the fact that the shape of some of the suffixes discussed above suggeats that historically they may well have been free verbs: alongside -muna- we have the free verb muná 'come' and alongside $\quad$ ni- we have the free verb né. 'leave'.

## 4. 4 Questions

4.4.1 Two Proposals for Abstract Performatives

In 4.3 .2 when $I$ began the discussion of abstract performative verbs in general, I illustrated my argument with an example from Luiseño containing an abstract performative $S$ : $I$ YOU NP ASK, where NP immediately dominates a $S$ containing the elements that ultimately appear in the surface question. It should be pointed out that this is not the only approach within this model. Some linguists have attempted to account for the illocutionary force of interrogative sentences not by positing a higher verb ASK but by considering questions to be requests or commands to the listener to provide information. This is the analysis referred to by Ross (1970:258) when he suggests that
"questions are to be derived from structures roughly paraphrasable by I request of you that you tell me S".

This topic is apparently discussed in detail in a forthcoming paper by G. Lakoff and Ross entitled 'Abstract Syntax', of which I have not been able to obtain a preview.

Although this approach does away with the necessity for positing one higher verb, namely ASK, it is at the expense of additional structure. It seems to me that nothing is thereby gained; so I shall continue with the structurally simpler approach mentioned above with the performative $S$ containing ASK.

Whenever I use the terms 'direct question' and 'direct speech' below, it should be borne in mind that I am borrowing the traditional names for surface atructures merely as convenience
labels. The presence of the higher abstract verb means, of course, that in the performative analysis 'direct' structures are really indirect in the underlying trees, i.e. complex not simplex.
4.4.2 Structure and Intonation

At first sight Luiseño questions seem quite uncomplicated. There are, however, one or two problems connected with them. Before we consider these, let us first take a careful look at the structures involved. As we saw in 4.2.2.1.2, direct questions differ from declarative sentences by having the $T / A$ enclitic replaced by the interrogative enclitic -su declined appropriately for person and number. They also differ in intonation. In the most usual kind of declarative sentence the pitch remains more or less level at mid and falls on the last strongly stressed syllable in the sentence to low: in most questions the pitch begins as for declaratives but jumps to high at the beginning of the last strongly stressed syllable and then falls immediately to low. The question is thus characterized by a greater pitch interval on the last stressed syllable than is found in declaratives. 8 Graphic examples are given below. Each dash shows the height or change in height of a single syllable, a single acute accent represents stress, and a double accent the last strong stress.


'your son has a big head'
b. ?u-ká:mi-s pu-yú? yót

$$
-1-1
$$

ENC INT
'does your son have a big head?'
(148) a. pu-qé•sum-pum
róma.n his-elder-ENC not be-PRES
 sisters PRES

PL PL
'he has no elder sisters'
b. pu-qé•sum-fum róma•n

ENC


INT
PL
'doesn't he have any sisters?'
(149) a. Tóm-pil pu-pú•k-i héd-ax
you-ENC door-ACC open-REM REM
'you opened the door'
b. $\frac{\text { óm-ku }}{}$ pu-pú•k-i héd-ax

ENC INT
'did you open the door?'

## 4.4 .3 Yes/ No Questions

Apart from the absence of a question word, the principal difference between Yes/No questions and $Q$-word questions is that every Yes/ No question is the first member of a potential disjunction where the second member (when it occurs) is a negative form of the first. Disjunctions of this kind are never found in $Q$-word questions. Consider the following Yes/No questions:

```
(150) ?u-\beta\etaáki-s górdu (mán qáy)
    your-wife-ENC fat or not
        INT
    'is your wife fat (or not)?'
```



```
    sir and-ENC that well be-PRES
    (mán qáy)
    or not
    'and is Olivares getting along well (or not), sir?'
(152) pó•?-&u зoliváris pu-pá&bum pu-pétum qál-wun
        Mis-elder his-younger be-PRES
    (mán qáy)
    'does Olivares have older and younger brothers (or not)?'
(lit. = do that Olivares's older and younger brothers
                                    exist (or not)?)
```

In each of the above sentences the second member of the disjunctlion is included in brackets. Henceforth I shall refer to each of the two members as 'disjuncts'. It will be noticed that exactly the same type of gapping occurs in Luiseño as in English in the second disjunct: everything but the negative particle is deleted. There is, however, an alternative form of 152 which shows a diffferent kind of gapping:
(153) pó•?-\&u Zolivá•ris pu-pá•\&um pu-pé•tum qál-wun (mán Póma•n )
or not be-PRES

Here everything is deleted but the lexical verb and its $T / A$ supfix. ${ }^{10}$

The important thing to observe in 150-152 is that there is no occurrence of the interrogative enclitic in the second disjunct. If we look at indirect questions, however, the situation is different. After an overt verb of asking, telling, knowing, etc., where the dependent $S$ contains no question word, an lor not' disjunction is again possible, but in this case both disjuncts are always introduced by the particle té., e.g.
(154) wunál-up tóvyaŋ-q té. ?u-pé•t pu-?yá•li-vuta-qala he-ENC ask-PRES your-ygr his-mend-can-SUBORD brother
(mán té• qáy)
'he is asking whether your brother can fix it (or not)'

This presents a problem for the performative analysis of direct Yes/No questions. I suggested earlier that a neat way of account ing for direct questions in general would be to posit an abstract performative sentence $\left(S_{1}\right)$ above the question ( $S_{2}$ ), i.e.


Whis analysis claims that 'direct' questions are indirect in underlying structure, i.e. embedded. This being so, we would expect the abstract performative ASK to behave in the bame way as the overt verb ask, but my examples show that this is not the case. Direct questions have one occurrence of the enclitic ofu in
them (whether there is a disjunction or not), whereas indirect questions have both disjuncts introduced by té. One way to explain this difference would be to make - $\not \mathbf{d u}$ dependent on a feature [tAbstract] which would differentiate ASK from ask, and to have -Ku generated in each disjunct and subsequently deleted from the second. When the higher verb has the feature [-Abatract], each disjunct would be introduced by té. This generation of te. can be expressed in the following two rules where $X$ equals the $T / A$ segments of the enclitic.
(156) ENCLITIC GENERATION (provisional)

SD: $\begin{array}{lllllll}\mathrm{X} & \mathrm{S} & \mathrm{Y} & \mathrm{NP} & \mathrm{V} & \mathrm{Z} & \left.\begin{array}{c}\mathrm{V} \\ + \text { Ask } \\ + \text { Absiract }\end{array}\right] \\ - & & & & & & \end{array}$
1
2


SC: $1-A u+2$
(157) té - GENERATION (provisional)

SD: $\begin{array}{llllll}\mathbf{X} & \mathbf{S} & \mathrm{NP} \quad \mathrm{V} \quad \mathrm{Z} & \mathrm{V}\end{array}$


SC: 1 té +2

However, this seems a somewhat ad hoc analysis, and when one looks at the semantics of té in other occurrences, one begins to wonder whether the té in indirect questions really is just a substitute for - \&u. The particle also occurs in non-embedded sentences at surface level with question intonation. My Pauma informant sometimes gave such sentences as the Luiseño equivalent of direct questions, but when pressed, he translated them with 'I wonder..'.

Unfortunately all the examples $I$ have of this type are questionword questions, but they will do as illustrations. Consider the following:
(158) míkipa-f kí* camn

when build-FUT
'when will he build?'
(159) míkiŋa té kí*ca-n

(OR: té* míkipa kíča-n)
'I wonder when he will build?'

Semantically these two sentences seem very close: they elicit the same responses from the hearer, e.g. qáy na ?aýalig 'I don't know ! táwpana 'in the summer', etc., but there is clearly a different feel about them though my informants could not express this in words.

The syntax and semantics of té. seem particularly complicated (e.8. 159 with declarative intonation means 'I don't know when he will build'); so rather than interrupt the discussion of Yes/No questions any further, I prefer to devote a special section to tée (4.4.10) at the end of this chapter.

Let us now return to the underlying structure $I$ proposed in 154 and attempt a full derivation of a Yes/No question. For a simple sentence like:
(160) wunál-дu wukó*?-ya 'did he come?' her BNC arrive-REM INT
we may provibionally posit the following underlying structure
(but see 4.4 .5 below):
(161)


As the cycles proceed up the tree, wukó•?ax- will be raised each time by PRED RSG, ultimately fusing with -ya to produce mukó? ?ya; and the $T / A$ enclitic - pil will be generated by ENCLITIC INSERTION. On the $S_{1}$ cycle - fu will be inserted by the transformation formulated in 156, then the PERFORMATIVE DELETION transformation will remove $I$, YOU and $A S K$, and pruning will delete $S_{1}$ and $N P_{1}$. We shall then be left with:
(162)


At this stage we shall need a rule to delete any $T / A$ enclitic that is found after - fux (e.g. apil in 162), just as we needed aimilar rules at the end of 4.3.7.1 for declarative sentences and of 4.3.7.2 for declarative reportives. (I shall return to the formulation of these rules in the next paragraph.) Finally, an ENCLITIC ADJUSTMENT rule of the kind described in 4.2 .1 .5 will spread
the person and number features from the subject NP (wunál 'he') to - $\mathrm{f}_{\mathrm{u}}$, and the appropriate form of the enclitic will then be inserted from the lexicon. It now only remains for a very late transformation (ENCLITIC PLACEMENT) to make the enclitic hop over the NP that follows it, and then 160 has been generated in all its details except for case.

Note that under this analysis several enclitics may be generated, and at some stage in the generation appear side by side. Moat of these do not tolerate the presence of another; so we need ENCLITIC DELETION rules to remove those that are not wanted. As we discuss more and more types of sentences, these ENCLITIC DELETION rules will need to be collapsed and simplified. 163 is the rule required so far for Yes/No questions, declaratives and declarative reportives.
(163) ENCLITIC DELETION (provisional)

$$
\begin{array}{cc}
\text { a. SD: } \begin{array}{cc}
\varnothing & \text { ENC } \\
\text { +Declare] } & \\
1 & 2 \\
\text { SC: } \begin{array}{c}
\varnothing \\
\text { b. }
\end{array} & \begin{array}{c}
\text { SD: }
\end{array} \\
& \left.\begin{array}{c}
-k u n \\
-\varnothing u
\end{array}\right\}
\end{array} & \text { ENC } \\
1 & 2
\end{array}
$$

ENC in the above is an abbreviation for all the various enclitics we have discussed in preceding sections. This means, of course, that in the full rule they would all have to be listed, which seems a very clumsy procedure. The only way to avoid this would
be to consider ENC a category node generated by the phrase structure rules as the first element in the expansion of $S$, i.e. some.. thing like: $S \longrightarrow E N C$ NP (NP) (NP) (ADVL) V. However, there seems to be no justification for positing a new node of this kind. In the approach I am adopting, the enclitics have no semantic independence; each is merely a reflection of a higher verb. On the other hand, the introduction of a node ENC to which to attach them suggeats that they do have some independence. Furthermore, to introduce ENC as a category in the PS rules speaks against the universality of these rules and this is undesirable.

After we have looked at $Q$-word questions and their relation to declarative sentences with indefinite adverbs and indefinite pronouns, we shall see that the above derivation of Yes/No questions is unsatisfactory and that there are good reasons for them to be derived from the 'or not' type of disjunction I talked about above. A similar kind of argumentation can be found in Stockwell (1968: INTERROGATIVE 7-10), but I shall leave the arguments for the Luiseño derivation until 4.4 .5 when we shall have a better overall picture.

For the moment I will just outline the rules and structure required for the generation of 164 , i.e. the 'or not' disjunctive question of which 161 is only a part.
(164) wunál-fu wukó? ?-ya mán qáy 'did he come or not?' Underlying 164 we can now postulate the tree 165. A number of Dinguists treat 'not' as a predicate (higher verb) whose argument js the $S$ it negates (e.g. McCawley:1968b, Postal: 1970). Although
this is consonant with the approach I am taking here, it will only produce additional structure irrelevant to my argument. For simplicity I have therefore entered qáy 'not' in the lowest $S$ of the second disjunct.
(165)


The same transformations will apply to 165 as applied to 161, until on the topmost cycle we obtain:
(166)


Additional traneformations are now needed to delete all but gáy Of $S_{3}$ before ENCLITIC DELETION, EHCLITIC ADJUSTMENT and ENCLITIC PLACEMENT apply to $S_{2}$, and to shift mán to between $S_{2}$ and what is left of $S_{3}$. We then have the following surface structure:
(167)


I shall suggest below in 4.4 .5 that the generation of Yes/No questions without the disjunction can easily be accomplished by deleting CONJ and $S_{4}$ in 165.
4.4.4 Question-Word Questions

Structurally, Q-word questions in Luiseño do not differ greatly fron $\Psi e s / N o$ questions. As we saw in 4.4 .3 , apart from containing a question word they differ in not allowing the disjunction which is permissible in Yes/No questions. On the other hand they are formed in exactly the same way as Yes/No questions by the insertion of gu in direct questions and of té in indirect questions. The latter will be discussed in full in 4.4 .10 ; so let us limit our attention here to direct Q-word questions. They can be classified structurally into two groups: (1) those that contain an adverbial Q-word (see 4.4.4.1) and (2) those that contain nominal Q-words (see 4.4.4.2).
4.4.4.1 With Adverbial Question-Words

There are two common forms of this type of question: one with the Q-word in the usual mid-sentence position for adverbs, and the other with the Q-word at the beginning. In both cases the interrogative enclitic - $\phi \mathbf{u}$ is also present and follows the first word
unit in the sentence. My informants could find no meaning diff= ference between these forms. They will be amply illustrated in the sections which follow, where $I$ deal with each $Q$ word individually.
4.4.4.1.1 mi kina 'when'
(168) ya?ás-fu míkina wukó*?-a•n
man arrive-FUT
'When will the man arrive?'
(169) mífina-f wunál lóluxa he make REM
'when did he make it?'
4.4.4.1.2 mičaxáninik 'how, in what way'
(170) pó•?-tu mičxánintk 3 ayáli-ma•n
he know-HAB FUT
"how will he know?'
(171) mičaxáninik-su ?óm kuléewut córi-ma you wood cut-HAB PRES ${ }^{11}$
'how do you cut wood?'

Although it is rarer there is an alternative to 171 which clearly shows that mičaxáninik is a fusion of two forms: micá? (? 'where') and ? axáninik ('thus, in this way').
(172) mićá?- fou Taxáninik ?óm kuláwut córi-ma 'how do you cut wood? ${ }^{1}$

The combination of 'where' and 'thus' is puzzling; one might have
expected ?axáninik alone with the interrogative enclitic but not with micá?. In the fused form (which is the regular morpheme for 'how') the firat two syllables mica- bear no stress at all, which seems to indicate that whatever meaning mićá originally had in this combination has probably been lost, i.e. that this is an idiom.
4.4 .4 .1 .3 mićá? 'where:

'where shall we look for you?'

Juan be -PRES sit
'where is Juan (sitting)?'

Kroeber/Grace (106) say that mićá? is the constrpat form of micá-t 'which one' (see 4.4.4.2.3). Since by definition the construct form ia the form a nominal bears when accompanied by a posbessive prefix, e.g. the construot of kí="ca 'house' is (nu)-kí? (my) 'house', I can see no justification for such a claim: mičá? is not in construct with a possessive prefix, and it is impossible to see how such a construct could come to mean 'where'. Undoubtedly the two mords have a root in common (see also 4.4.4.1.4 and 4.4.4.1.5) but that is as far as we can go.
4.4.4.1.4 mici.k to where"

This word contains finally the dative suffix mik and is therefore
probably a fuaion of micáa + ik (cf. paradigm 196 below).
(175) Tóm-pu mičík
'where are you going?'
(176) mičík-su ?óm wukála-q walk-PRES
'Where are you walking to?'

### 4.4.4.1.5 micéy(?)/micácay "from where"

This word is curious. It also appears to contain the same root as micá? but instead of the usual ablative suffix $-n a y /-n i$ we find the unique suifix -y at Rincón and Pauma and -y? at LaJolla. 12 Furthermore both Pauma and LaJolla replace the stressed vowel é by é.
(177) LJ: ?óm-fu micéy? muná• come-PRES
'Where are you coming from?'
(178) R: mičáy-su ya?ás póswa-q (Hyde:100, with alter$\operatorname{man}$ runmPRES ed transcription)
'where is the man running to?'
4.4.4.1.6 hi:nay/hi-ni 'why'

Here we have the root hif- (see also hí•-ča 'what', 4.4.4.2.2) followed by the ablative suffix, one of whose meanings is 'on account of'. The semantics of this word are thus quite clear. The first form is that in use at Pauma; the second is that of Lajolla where final -ay is regularly reduced to -i․


We may guess that this word also has some connection with the root hi.-. Despite Kroeber/Grace (106), it seems unlikely that the final $k$ is the regular Luiseño dative ending -(i)k, as it is retained in the compound hik-kun 'how many times, how often' and is even followed by what looks like the plural absolutive suffix in the animate plural form hikcum, and by the locative suffix in hik-na 'at what time' (lit. 'at how many'). Furthermore, the vowel in hik is short, whereas in the dative of híca it is long (see 192).


(185) hik-ŋa-øum yá•yi-čum Téxŋay wukó*ax-kutum man-PL tomor. arrivengoing to PL
'what time are the men going to arrive tomorrow?'
4.4.4.2 With Nominal Question-Words

Since nouns can occur in a number of different syntactic cases in a Luiseño sentence, it is not surprising that when these nouns are questioned the interrogative proforms by which they are replaced also occur in the same syntactic cases. There are three such proforma in Luiaeño: háx 'who', hí--ča 'what' and micá-t 'which (one)', and each has the full paradigm of cases that any other noun has. There is one curious feature about háx and hí--ča, however, that differentiates them from all other nominal forms. The latter fall into two categories according to the case endings they carry; put more accurately, they are subcategorized for the feature [ $\pm$ Animate] where [tAnimate] covers human beings and animals but not plants. Nominal forms that are [tAnimate] have only two case endings, nominative and accusative; for all other cases the nominal form remains uninflected but is followed by the third person pronoun pó? inflected for the appropriate case (see 186). All nominal forms with the feature [-Animate] have suffixes attached to their stems for all the cases. In the case of háx and hí-ča, this is the only place in the language where a mor-
pheme distinction is made between different kinds of animateness: thus had requires a feature [+Human] in addition to [Animate]; hi .-cia on the other hand can have either the feature [Animate] or [-Animate] depending on whether it refers to an animal or not. 4.4.4.2.1 Max 'who'

The case paradigm for had is shown in part in 186.
(186)

|  | Singular | Plural |
| :--- | :--- | :--- |
| NOM | háx | ?axí-m |
| ACC | ?axí•-yi | ?axí-m-i |
| DAT | háx póyk | ?axiom pó•mik |
| LDC | " pó•tu | " pó•muta |
|  | etc. | etc. |

Since the subject NP is usually found first in a Luiseño sentence, this is also the usual position for the nominative form hap, egg.
(187) háx-fu té-tila-q 'who ib talking?' talk-PRES

With the other cases, however, both initial and medial positions are found for the same form with no change of meaning, egg.
(188) nawítmal-øu ?axi•-yi ?ári-q girl ACC kick-PRES
'who is the girl kicking?'
$\begin{array}{lll}\text { (189) ?áxi*-yi-sum } & \text { ?umóm } & \text { ti•w-ax } \\ & & \text { you } \\ & \text { PL } & \end{array}$
'who did you see?'

## （190）？axi•mi－sum ？umóm tí＊－ax <br> ＇who（pl）did you see？＇

In the oblique cases other than accusative，the elements in the question have usual declarative word order，or just háx may be brought to the front，or both háx and the declined form of pó？ In the latter case háx may be considered the first element in the sentence for the purpose of fu insertion，or else háx and the declined form of pó？may be taken together．The following examples will make this scrambling process clear．
$\begin{aligned} & \text {（191）a．Tóm－fu pésliš háx } \\ & \begin{array}{l}\text { fóv－ax } \\ \text { dish }\end{array} \\ & \text { give－REM } \begin{array}{c}\text {（declarative }\end{array} \\ & \text { word order）}\end{aligned}$
＇who did you give the dish to？＇
b．háx－ди zóm péšlǐs póyk 子ó－vax
c．háx－ди póyk ？óm pésliľ 子ó•vax
d．háx póyk－дu Póm péălis 子ó•vax

Of the above the most common types are 191a and 191b．
4．4．4．2．2 hí•ča＇what＇
The case paradigm for híce is as follows：
（192）

| Singular | Plural |  |
| :--- | :--- | :--- |
| NOM hi•－ča | ？hi＊－ča－m | （Hyde：99） |
| ACC hí－šhi－s／hi－t | ？hi－s－m－i | （Kroeber／Grace：106） |
| DAT hí－k |  |  |
| LOC hi．－－pa |  |  |
|  | etc． |  |

Of the three accusative singular forms，his is the regular form in careful lento speech in Pauma，LaJolla and Rincón．In allegro
speech both my informants at Pauma and Lajolla assimilate the
 the Pauma informant used an alternative form with $t$, which is also recorded in Kroeber/Grace (106). Hyde makes no mention of any alternative forms, but there is no mention either of the $\boldsymbol{f} \sim \underline{B}$ alternation which would give rise to auch forms. All the interrogative examples are written with - fu irrespective of the quality of the preceding vowel.

Both plural forms, presumably meaning 'what things', 'what animals', are quoted by Kroeber/Grace and hí*cam is also given by Hyde but with no example. I have included them for the sake of completeness although they do not occur in my own data.

The following examples illustrate the use of hisca.
(193) hí•ča-f ?u-k"ép-qat your-eat-RELATIVIZER PRES
'What are you eating?' (lit. = what (is it) that you are eating)
(194) ?óm-øu hiš té•tila-q $\begin{aligned} \text { talk-PRES }\end{aligned} \quad$ OR: $\left\{\begin{array}{l}\text { hís-su } \\ \text { hít-su }\end{array}\right\}$ ?óm té:tila-q
'what are you talking about?'
(195) wunál-丈u hípa wi•ta-q stand-PRES
'what is he standing on?'
4.4.4.2.3 mića-t 'which (one)'

This word shows the regular difference in declension between animates and inanimates. When referring to or accompanying an inanimate noun it is declined as in 196. The dative is irregular cf. 4.4.4.1.4 above). I have collected no examples with plural inanimates.
(196)

|  | Singular | Plural |
| :--- | :--- | :---: |
| NOM | mičá-t | $?$ |
| ACC | mičá-t | $?$ |
| DAT | mičí-k |  |
| LOC | mičá--Da |  |
|  | etc. |  |

When referring to or accompanying an animate noun, micát has the following case forms:
(197)

|  | Singular | Plural |
| :--- | :--- | :--- |
| NOM | mičéa-t | mičéa--t-um |
| ACC | mičá•-t-i | mičá-t-m-i |
| DAT | mičáa-t póyk | mičá•-t-um pó*mik |
| LOC | mičáat pótu | mičá--t-um pó-muta |
|  | edc. | etc. |

Examples of the use of mičát [-Animate] are:

your animal.
'which animal is yours?'
(199) 7óm-fu mičá-t kí--s sásamsa
house buy-REM ACC
'Which house did you buy?'
(200) mičf:-k-su 3 óm kí*-k muná. house go-PRES DAT
'which house are you going to?'
 INT

OR: mičá-- ŋay-su hú•-ŋi ${ }^{13}$ róm néč-ax (Pauma)
'which arrow did you pay for?'
(202) mičá-tal-fu hú-tal ?óm húnwut-i fé?i-lut INSTR-ENC INSTR bear-ACC shoot-going to INT

OR: mičá-tal hú--tal-Au ...
'which arrow are you going to shoot the bear with?'
The following sentences contain mičát [tAnimate]:
 CONT
'which boys were in church on Sunday?'
$\begin{aligned} & \text { (204) mičá-t-i-s hiné•malri oóm tíw-ax } \\ & \text { boy-ACC }\end{aligned}$
(LaJolla)

'which boy did you see?'
(205) ?óm-fu mičá-t nawítmal pá-
girl ABL take-REM
'which girl did you take it from?'

'Which boy did you pay for (= on behalf of)?'
We also find mičát combined with the adjective ?ánkǐs 'like' in the sense of 'what kind of', e.g.
(207) mičá-t-бu ?ánkiš ?ó•nu kulá•wut that wood

OR: mičát ?ánkiš-su zó•nu kulá•wut
'what kind of wood is that?'
(208)
pó•?-ди pu-pús mǐcá-t ?ankǐs
he his-face
'what does he look like?' (lit. = of what kind is his face)
4.4.4.3 'how' by Circumlocution

Luiseño has no single word for 'how' in expressions like 'how big, small, etc.' and has to resort to various circumlocutions. There are two principal ways of getting around 'how' questions: one uses hik or mičát fánkǐ̌ and the other uses a Yes/No question about the quality concerned. Let us take the last of these firat.
4.4.4.3.1 With Appropriate Yes/No Question

If I want to ask how stupid a person is, I can say:
(209) wunál-ku pilék $\quad$ fá•čǐ̌ $\quad$ 'is he very stupid?' very stupid
and if the answer is ?uhó 'yes', I have received the same information as if I had asked an English 'how' question and received
the answer '(he is) very stupid'. The situation is similar where the sentence contains an adverb instead of an adjective. Thus:
(210) Tóm-fu zá-wi-lowut ćámuta wá-m stay-going to we long LOC
'are you going to stay with us long?'
(for: 'how long ....)
(2ll) ?óm-fúu qiléq ?u-lví?i-vuta-q
quickly your-make-can-PRES
'can you make it quickly?'
(for: 'how quickly .....)
4.4.4.3.2 With hík and mićát Zánkiô

This second alternative is only open if an abstract noun is available in Luiaeño correaponding to the adjective in English. Unfortunately there are only a handful of these nouns in the language and there is some uncertainty even about the form of those that do exiat, hence the variants for 'bigness' in 212 and 215.

$$
\begin{array}{ll}
\text { hík-su pu-yótka (LaJolla) }  \tag{212}\\
& \text { its-bigness }
\end{array}
$$

'how big is it?' (= how much is its bigness) OR: hík-Bu 7á-q pu-yótka
be like-PRES ( $=$ how much is its bigness like)
(213) ?ó*nu-f kulá*wut hik pu-tvúlvu that stick its-length
'how long is that stick?' ( $=$ how much is that wood's



As we saw in the preceding sections, it is the replacement of the T/A enclitic by the interrogative enclitic that turns these sentences into questions. Since no fronting of the indefinite proinoun or adverb is necessary to form the question, there is in each case a curious ambiguity. For example, when -čupu in 217 is replaced by -fum, the sentence can mean either 'will we go sometime?' or 'when will we got'. Similarly, with -fun ingtead of -nil, 218 becomes 'did $I$ see it somewhere?' or 'where did 1 see it?'; with - fu instead of -up, 219 becomes 'is the man going to bring something?' or 'what is the man going to bring?'; and with the addition of - fum after híkcum, 220 becomes 'are just a few digging?' or 'about how many are digging?'.

This is so surprising that I took great pains to check on the accuracy of this observation. My informants agreed that the sentences with the non-fronted indefinite are ambiguous: they can be answered either by ?uhó* 'yes', qáy 'no', or else by an informative sentence such as féxpay 'tomorrow', kína 'in the house', etc. When the indefinite is fronted, the question is most likely to be understood as a Q-word question, but my data show that

Q-word questions are formed just as frequently without fronting even though ambiguity may arise. It should be noted that with or without fronting the interrogative intonation pattern remains the same. 16

We now see that what in the preceding sections I have been calling Q-word questions can structurally also be Yes/No questions and we may justifiably ask whether the diatinction can now be upheld. I think it can. Yes/No questions containing an indefinite can add a mán gáy 'or not' diajunct, whereas Q-word questions cannot. A question like 'will we go sometime?' carries no presupposition that we will in fact go, hence the liberty of the answerer to choose "yes' or 'no'. It is as if the questioner is asking about a 'going-sometime'. On the other hand the question 'when will we go?' does carry a prosupposition that we will go. It is not the 'going' that is now being questioned but the indefi= nite time. From the different kind of answer that each question elicits it ia clear that this difference in presupposition also exists in the Luiseño sentences. As both types have the same surface structure, this poses a problem for the generation of Luiseño questions. At the moment $I$ do not know how to accommodate the different presuppoaitions in the model I am using, but in the following section $I$ shall consider two deep structureg that can keep the two types of question apart.
4.4.5 Generation of Questions

In 4.4 .3 I suggested that Yes/No questions should be generated from an underlying structure of the kind seen in 165 with an

I YOU NP ASK sentence at the top of the tree and a disjunction of Ss dominated by the NP. For convenience this structure is repeated in schematic form as 221:
(221)


The disjunction in the underlying tree for the question explains why the answerer can respond with either an affirmative or a negative sentence.

On the other hand since a disjunction of answers is not Qvailable to the answerer of a Q-word question, it seems logical to posit an underlying structure containing no disjunction, e.g. (222)


The tree here differs from 221 only in lacking the righthand disjunct. This fits well with the fact that the two types are structurally identical at surface level when the righthand disjunct of 221 has been transformationally deleted. Now if the underlying form in 221 carries one presupposition and that in 222 another, and if I am right in assuming that the presupposition of aentence is part of its meaning, then these different presuppositions
will be retained by each structure even when transformations have rendered them identical.

I therefore propose to posit a tree like 221 as underiying all Yeb/No questions and a tree like 222 all Q-word questions. The operation of transformations on these trees will be as described above in 4.4.3.
4.4.6 Generation of Interrogative Reportives

The details of the generation of sentences with -fukun were discussed in full using the sentence:
(223) funa•1-fukun móya-q ${ }^{\text {do }}$ they say the woman is tiredf" One revision is now necessary in the underlying structure. Since this question can be answered by either of the responses:
(224) a. móya-q-kun 'they say she is'
b. qáy-kun 'they say she is not'
the underlying tree poaited in 4.3 .2 muat now be revised to contain the two disjuncts with reversed polarity typical of Yes/No questions, i.e.
(225)


The transformational details will remain as described in 4.4 .3 except that the righthand disjunct $S_{5}$ may be optionally deleted. When no deletion takes place, $S_{5}$ must be obligatorily gapped and then appears on the surface as:
(226) dupá•l-\&ukun móya-q mán qáy
'do they say the woman is tired or not?'
The ENCLITIC DELETION rule 163 does not need to be revised since both -fu and -kun are retained at the surface.
4.4.7 há Questions without -fu

There is one variant of the question in Luiseño in which the interrogative enclitic is omitted, although the sentence has the characteristic question intonation pattern. The salient feature of such questions is considerable gapping. Let us consider q-word questions first.

Usually when a gapped question consisting just of the Q-word is uttered in context, the sentence has the following form:
(227) (A: I killed it in the forest yesterday)

B: hí'gi-s 'why?'
OR: hi•čal- $\beta$ u 'with what?'

Sometimes, however, the queation is introduced by há, in which case the -du is absent. I collected the following contexts from my LaJolla informant:
(228) A: nó*-nil sú•kat-i mó-makan
I deer-ACC kill-RMM
'I killed a deer'


This same omission of -fu when há is present also occurs in Yes/No questions.
(231) A: gayi•na-p pá-pa $\begin{array}{lll}\text { chicken water-LOC } & \text { be in-PRE }\end{array}$
'the chicken is in the water'
B: há Zatkº́yax '(and) dead?'
I have been unable to determine either the true force of hácor the rules determining its occurrence. It may well be that it is used in sentences that are merely stylistic variants of the sentences with - fu or its presence may indicate that the question is more
insistent. This is, however, pure speculation at the moment.
In my data these há sentences consist of only one word other than há. If this is a general characteristic and if there is no difference in meaning between them and the corresponding sentences with - fu, they can easily be generated by a simple tranaformation deleting -fu in a oneword question and adding há to the beginning Before anything more definite can be said, however, more data are needed to clarify the force of há and the conditions of its occurrence.
4.4.8 Conãitional Questions

Examples of conditional questions were given in 4.2.2.1.7. Let me repeat 86 as:

'would you recognize him straight away or not?'

There are two oddities about questions like 232: first, the enclitic does not contain the interrogative segment -du; and second, in the gapped righthand diajunct we find té where in other Yes/No questions we have nothing. I shall discuss the enclitic and its generation first and return to té later.

It will be recalled that the non-interrogative hypothetical enclitics seem to be composed of three elements in their longest form (see 23), e.g. for the first person singular: -xu-npu-ku, where the first is characteristic of conditions, the second appoars to be the future enclitic and the third an element that
can be added to the future enclitic to indicate an even remoter period (see 4.1.2). How in the conditional question it seems that both the future elements are replaced by a new element -kun which is in shape identical with the reportive enclitic (see 4.2.1.1) and like the latter can also take a final -a more commonly found with the past tense. Thus while 232 can in the appropriate context also mean 'would you have recognized him atraight away or not?', this meaning would usually be indicated by the preaence of the enclitic -xukuna instead of -xukun. If the final segment of the shorter form is indeed related to the reportive enclitic, the the semantics of the interrogative hypothetical enclitic are very mysterious.

The generation of the enclitic in the first disjunct presents no problem. We merely require an addition to the ENCIITIC GENERATION rule 156 as shown below:
(233) ENCLITIC GENERATION (provibional)
a. SD: $X\left[\begin{array}{llll}S^{-x u} & X & N P & V\end{array}\right] \quad Z \quad V$ $\left[\begin{array}{l}\text { +Ask } \\ \text { 4Abstract }\end{array}\right]$



Sc: $1-\alpha u+2$
(where $Y=a n y T / A$ segments not already mentioned in the rule)

An example will make clear the operation of 233a. If we were to generate 232 by the method $I$ suggested earlier in this study, we should at one stage obtain the following tree (where for simplicity I have included only the relevant Luiseño morphemes):
(234)

(235) ENCLITIC DELETION (provisional)

## b. SD: $X\left\{\begin{array}{l}-k u n \\ -\nless u\end{array}\right\}$ ENC $Y$

|  | 1 | 2 | 3 | 4 |
| ---: | :--- | :--- | :--- | :--- |
| 1 | 2 | $\varnothing$ | 4 |  |

When this rule has applied and ENCLITIC PLACEMENT has made the reaulting enclitic hop over the word that follows it, $S_{3}$ has now reached ita surface level form ?óm-xu-kun ?unáni-g.

Let us now go back and examine $S_{4}$ in 234. As the righthand disjunct of a Yes/No question it differs from $S_{3}$ in structure only by containing gáy 'not'. However, whereas the righthand disjuncts of all the $Y e s /$ No questions we have seen so far reduce by gapping just to qáy, the righthand disjunct of the conditional question has also to contain the particle té. How is this té. to be genu erated? The té GENERATION rule we wrote in 157 will not help us, since we there made the insertion of téo dependent on the presence of a non-abstract verb of asking. It may well be that its presm ence in this type of question is due to the absence of fu in the first disjunct, i.e. it may be a signal to the hearer that he is to understand the sentence as a question although he has not heard the characteristic interrogative segment - fu in the first disjunct. Since the conditional question is the only disjunctive interrogative type we have met without - 允 (há questions seem never to be diajunctive), we can add another part to the té GENERATION rule atating that when both disjuncts contain the enclitic segments -xu-kun, the second occurrence must be replaced by tée. If this addition to the rule is ordered before ENCLITIC PLACMENT, the
enclitics will still be in initial position. The following rule can now replace 157:
(236) té GENERATION

b. $S D: X\left[{ }_{S} Y \quad N P \quad V\right]$


$$
\Longrightarrow
$$

SC: 1 te +2

After the operation of 236 the question 232 can now be easily generated by applying the ENCLITIC PLACEMENT rule to awitch the enclitic to second position in $S_{3}$, by placing mán between the two disjuncts and finally by eliminating $S_{1}$ by means of PERFORMATIVE DELETION.
4.4.9 Sentences with - fupil, -fupu and - duku

In 4.2.2.1.4 through 4.2.2.1.6 we looked at the paradigme for the three enclitics -fupil, -Éupu and -fuku, and aaw examples of their usage. Since each contains the interrogative segment - ofu, we may feel tempted to posit the performative ASK in the top $S$ of the trees underlying the sentences containing them. There are, however, a number of difficulties associated with this. In the first place it is not immociately obvious that a question does under lie sentences containing these enclitics; in fact, the translations given by my informants suggest that they have more the character of exclamations: 'I guess $I$ dreamed about it' 68, '(gee,) he sure
dug a lot!' 71 , 'so you have a gun!' 74 , '(boy, ) he must have paid a lot for it' 82. The presuppositions attaching to them suggest that the 'action' of the verb is assumed by the speaker to have occurred, i.e. he will be surprised if the hearer contradicts him. This is the characteristic of declarative sentences and not of Yes/No questions, where the speaker asks for either corroboration or contradiction.

Suppose, however, for the moment that we do posit in the tree that underlies sentences with these enclitics the usual performative $S$ with ASK. Clearly we are then forced to posit another abstract higher verb intervening between the performative $S$ and the $S$ that appears at the aurface level, otherwiae the latter will be a simple Yes/No question. In other words we must postulate a tree like the following:
(237)


Now the problem is even worse. Apart from the question of the meaning of this abstract verb, unlike all the other abstract verbs postulated so far it will need its own system of higher $T / A$ verbs, since the presence of $=$ pil ( $=$ past), -pu ( $=$ future), -ku ( $=$ remote future) has no connection with the tense of the verb in $S_{3}$. For
example in 74 the enclitic contains the segment for past whereas the surface verb refers to present; similarly in 82 the enclitic contains the segment for remote future while the surface verb refers to past.

No matter how hard we try, there seems to be no satisfactory way of generating these enclitics atomically, as we have so far generated all the others. I shall therefore treat them as unanailyable units and tentatively suggest that their introduction be imade to depend on the presence of a higher performative verb with a meaning something like SUPPOSE or for cases like 74 REGISTER WITH SURPRISE. I shall not, however; go any farther, since a lot more data need to be collected to determine the exact meaning of these enclitics and whether there are semantic differences between them.

### 4.4.10 Sentences with té.

In 4.4 .3 above $I$ mentioned the semantic and syntactic complexity surrounding the particle té, which occurs in both interrogatives and declaratives. In this section $I$ hope to throw a little light on this problem, but $I$ must again warn the reader that consider-i, able additions need to be made to my data before a definitive analy

It will help if the construction types in which $I$ have recorced té are set out in the following schema:


Starting on the left side, we see first the interrogative constructions in which tee plays a role (Branches 1 and 2). The first branch indicates the 'I wonder ... ' type of sentence discussed in 4.4 .3 and illustrated in 159. We may note that apart from the intonation there is no structural difference between 159 and 239:
(159) mi•kipa té. ki•ča-n when build-FUT
(239) míkipa té ki ča-n

'I wonder when he will build' $[\leq-\ldots$
'I don't know when he will build'

As 'I wonder' in some languages is translated by the equivalent of 'I ask myself' (egg. French: joe me demander, German: inch frage mich), it seems quite reasonable to suggest that in the Luiseño sentence 159 it is translated by the equivalent of 'do 1 know?'. Within the performative model it is now easy to account for the difference between 159 and 239 by postulating the following underlying trees:
(240)

(241)


The particle té. can be inserted by a transformation taking account of the presence of NOT KNOW in $S_{2}$, a similar procedure to that used for introducing the enclitics. After PERFORMATIVE DELETION has removed $S_{1}$ and $S_{2}$ in each tree, both 240 and 241 will emerge on the surface as structurally identical. Note that with this derivation it is now necessary that for the correct assignment of intonation the phonological rule be somehow aware of whether it was ASK or DECLARE that was originally in the tree. In all the declaratives and questions we have so far discussed there has always been either a particle, e.g. há, or an enclitic aegment, e.g. - fu or -kun(a), at the surface syntactic level (i.e. at the input level for the phonological component) for the phonoHogical rule assigning intonation to take note of. Here there is
nothing, since té does not tolerate the presence of the interrogative enclitic - 6 and the declarative enclitic is $\varnothing$ in any case. In other words a new rule deleting the enclitic whenever té: is present must now be added to $163 a$ and 235 .
(242) ENCLITIC DELETION (provisional)

```
c. SD: \(X\) ENC té. \(Y\)
```

123
SC: $1 \not \square 3$

This means one of two things. Either the phonological rule must apply before the syntactic rule ENCLITIC DELETION operates, i.e. there is no clear demarcation line between the syntactic and phonological components (at the periphery structures may be shuttled to and fro between the two); or, some phonological rules must be global, in the sense that they must be sensitive to nonadjacent rules (in our case syntactic) which occurred in an earlier part of the derivation. This is an interesting theoretLeal issue, but time and space prevent me from taking it up here. If we look at the second branch of the schema, we see two other constructions with question intonation in which té is found. The first we have already discussed in 4.4 .8 when we dealt with conditional questions. The particle is here found in the second disjunct of the 'or not' disjunction in a direct Yes/ No question whenever the interrogative segment -fu is missing from the first disjunct. The second construction is also a direct Yea/ No question but contains within it what I wish to refer to as phrasal disjunction, i.e. a disjunction of words from any category
except Verb. A Luiseño example will make this clear:
(243) só*nu-ß supúl mán té. wéh timét pu-ló?xa that-ENC one or two day its-making INT
'was that made one or two days ago?'

The disjunction in this sentence is clearly of a different kind, or at least on a different level, from the 'or not' disjunction which I have suggested is the source of all Yes/No questions. In accordance with this derivation, 243 ought to have a longer form with mán qáy 'or not' finally. Unfortunately I have had no opportunity to test the accuracy of this prediction, and furthermore 243 is the only example $I$ have recorded with phrasal disjunction. On auch scant material it is rash to put forward a detailed theory, but if the data are correct the presence of té may depend on the same phenomenon we have just discussed. If the underlying structure for 243 can be represented as
(244)

then it will be observed that the principal disjunction is at $S_{2}$, with $S_{3}$ and $S_{4}$ as the disjuncts. We would therefore expect the interrogative enclitic - fu to be attached to $S_{3}$ and $S_{4^{*}}$. This leaves each of the lower disjunctions in $S_{3}$ and $S_{4}$ without the
interrogative enclitic, which $1 s$ just the environment for the rule we discussed above. This would then operate to insert tée into the second disjunct of each disjunction, viz $S_{6}$ and $S_{8}$. The té. in $S_{8}$ would of course not reach the surface, as $S_{4}$ would be reduced by gapping to mán gáy 'or not'.

All the remaining types of té: in schema 238, i.e. branchea 3-6, are found with declarative intonation. Branch 3 shows the té. that introduces indirect questions of the Yes/No type. These will be fully dealt with in 5.3 .3 .2 but an example or two can be given here:

'I an asking you whether his father is digging"

Note that in 245 in addition to the té. introducing the indirect Yes/No question another té is found in the second disjunct if this is allowed to reach the surface. It will be recalled that no té. is present in the second disjunct of direct Yes/No questions. The second té. in 245 presents no problem, however, since it can be introduced by the same rule that introduced the particle into the second disjunct of conditional questions and into $S_{6}$ in 244, provided we make the rule sensitive not only to an abstract
higher verb of 'asking' but also to an overt one. The first tex is more problematic, It can easily be generated by an ad hoc rule which requires tee to be inserted instead of - Gu as the first word in the NP object of a non-abstract verb of 'asking', but it is puzzling why - ${ }^{\text {du }}$ should be excluded from this position. If we delete the non-abstract verb of 'asking' from 246 and make the other verb finite, the result
(247) té• hi•gi pu-ná? hé•yi-q
means 'I don't know why his father is digging' with declarative intonation, or 'I wonder why his father is digging' with question intonation. It may be that historically 246 consisted of two separate sentences, viz. 'I am asking you' followed by the origfinal words 'I wonder (or even: I don't know) why his father is digging'. In the course of time such paratactic expressions may have come to be considered as one construction. This does not explain, however, why tex instead of -bu occurs in this type of sentence.

The fourth branch of schema 238 indicates the 'I don't know' kind of sentence I referred to above. It should be added here that this construction appears to have no tense restrictions. I have recorded it with future, present and past tenses, egg.
(248) té póy má?ma•n mán té qáy him like-FUT ACC
'I don't know whether I'll like him or not'
(249) te po? mičá? ?á-w?-q(a) he where be-PRES

```
    'I don't know where he is'
(250) té* nó* hí`\i póyk ?ók-ya
    I why her marry-RBM
    DAT
```

'I don't know why I married her'
The tée here is differentiated from the té. in sentences with question intonation (i.e. branches 1 and 2 in schema 238) by sometimes occurring with the $T / A$ enclitics. My data contain examplea only with FUT enclitics but it is poseible that others may also occur. Both the simple FUT enclitic and the remote FUT enclitic with -ku (see 22) are found, e.g.
$\begin{array}{cc}\text { (251) té*-nupu sá-msa-n (mán té• qáy) } \\ \text { ENC } & \text { buy-FUT } \\ \text { FUT } \\ +I & \\ \text {-PL }\end{array}$
'I don't know whether I'II buy it (or not)'
(252) té•-nupku sá.msa-n (mán té qáy)

Same meaning as 251 , but the possibility is remoter?

The particle also appears with - 反upu (see 4.2.2.1.5). This construction is given two translations: (1) 'I don't know' and (2) 'probably'. The sentences with the first translation seem not to differ from those we have just been discussing, but $I$ suspect there are subtle semantic differences which my informants could not explain to me. Two examples follow:

| (253) A: waxá•m-nil | hǐs | tuló-w-ax |  |
| ---: | ---: | :--- | :--- |
|  | yest. -ENC | something | find-REM |

'I found something yesterday'
B: há hís 'what?'
A: té--spu (híca) OR: té--spuku
what NOM
'I don't know what'

The alternative second utterance of $A$ contains the only example $I$ have collected of a longer form of the -fupu enclitic with the additional segment -ku (cf. -pu-ku 22, and -xu-ku 23 ).
(254) té-spu ?ó-nu hik timét pu-?éy pu-pidi-vò
he how time his-leg his-having broken
'I don't know how long his leg has been broken'

Sentence 254 is structurally very similar to B's reply in 255:


B: té•-spu ró•nu wám? hik timét pu-lórxa-vò that already several day its-having been made
'it was probably made several days ago'
Note that my informant gave the translation in B instead of the expected 'I don't know how many days ago it was made'. Further examples must be collected before we can be certain that this difference in translation corresponds to a difference in meaning.

The final branch in schema 238 shows té. in an idiomatic expression which can be translated by 'perhaps, maybe'. Consider the following:

mán té yaláni-n maybe run away-FUT 'if Bill sees the mountain lion, I don't know what he'll do. Maybe he'll run away.'
(= Bill will bee the mt lion and I don't know what...)

The utterance in 256 is said as if it were two distinct sentences. The double bar represents the pause. Clearly mán in this construction cannot have its usual meaning 'or' as this makes no sense in this environment.

The reader will have observed that the analyais of té constructions above has become more indecisive the farther we have gone. I became fully aware of the difficulties surrounding this particle only after I had returned to Europe and was unable to do any more field work. However, I consider it of value to have set out the somewhat confusing findings that $I$ have, as these may serve as guide posts for further inquiry.

### 4.5 Imperatives

If we use the term 'imperative' to cover various kinds of commands and advisory constructions, we can distinguish at least three different structural types of imperative in Luiseño depending on the form of the verb used. In the first type the verb has no $T / A$ suffixes (4.5.1-4.5.4), in the second we find PRES tense suffixes (4.5.5) and in the third FUT tense suffixes (4.5.6). 4.5.1 Simple Commands

I shall reserve the term 'simple command for those constructions where a command is oxpressed by a verb form consisting of a stem with no $T / A$ suffix and where no enclitic is attached to the first constituent in the sentence.

### 4.5.1.1 Affirmative

In the affirmative variety of simple commands the verb forms of the singular are the bare stems of each of the four verb classes I discussed in 4.1.3 in connection with the $T / A$ suffixes, viz.
(257) a. qéw-i-(?) (root + thematic increment i) 'shout!'
b. pél-(2)ax- (") " 2ax) 'dance!'
c. kíču-/kíče
d. ?uhó? van-

The most accurate form for commands in the class of verbs represented by 257 a should probably have a final glottal stop after thematic 1 . This accords with Malécot's findings (200). I recorded it only rarely, however, when various forms of the same command rere repeated in different ways (see 266). The absence of
the glottal stop in more rapid speech is not aurprising. I have already drawn attention in 4.1 .3 to its disappearance from the beginning of the thematic incrament $-3 a x$ in verbs of the type aeen in 257 b wen they are spoken rapidly.

For the plural of simple commands both my LaJolla and my Pauma informant use -um after the thematic increment $\boldsymbol{a}$ ax but -yam elsewhere. Thus the plural equivalents of 257 are:
(258) a. qéw-i-(3)yam
b. pél-(? ) ax-um
c. kíču-yam/ki・ど $\mathrm{c}-\mathrm{yam}$
d. Tuhó? van-yam
'shout (pl):'
'dance (pl)!'
'build (pl)!'
'believe (pl):"

We find a number of disagreements about the quality of the vowel in the two plural endings when we look at Tac, Kroeber/Grace, Malécot and Hyde. In the following chart I give the cited forms first in my own transcription and then, where applicable, in that of the original.

|  | Page | - ?ax | elsewhere |  |
| :--- | :--- | :--- | :--- | :--- |
| Tac: | (184, 174) | -um (-om) | -yam |  |
| Kroeber/Grace: | (153) |  |  |  |
| Hyde: | (184) | -am | -yam |  |
| Malécot: | $(200)$ | -un | $(-u m)$ | -yum (-jum) |

It will be noted that my own informanta agree with Tac, whereas Hyde agrees with Kroeber/Grace, i.e. Felix Calac, a Rincón speaker, and Sparicman's informanta who were aleo largely from Rincón. It may well be that there is a difference between Rincón and Pawna/IaJolla, Malécot's findinge are aurprising, hofever,
aince he worked with the sister of my LaJolla informant.
The verb may be accompanied by the pronouns ?óm and ?umóm 'you (sg and pl)', which are found both before and after it. The pronoun seems regularly to be omitted in the aingular but is usually present in the plural. Perhaps the presence of the pronoun lends more emphasis, but my informants gave no hint of this. 17 Commands are subject to a much greater degree of word order scrambling than declarative sentences, probably because the very nature of this kind of utterance necessitates emphasizing certain elements in the sentence, and the principal mechanigm for effecting this in Luiseño is by shifting words out of their usual sov order to sentence-initial or sentence-final position. The following examples will make this clear:

| (260) | $\begin{aligned} & \text { haq"áači } \\ & \text { haq"a•čiyam } \end{aligned}$ | 'come (sg) here!' <br> 'come (pl) here!' |
| :---: | :---: | :---: |
| (261) | kupú?ax són nupana | 'lie (sg) down |
| b | kupú?axum | 'lie (pl) down |
| (262) a | $\underset{\text { there-dat }}{\operatorname{munf}} \quad \text { hágax }$ | 'move (sg) over (e |
| b | wunik há•yaxum | 'move (pl) over!' |
| (263) | némi 18 pitó. (?óm) | 'leave (sg) now!' |
|  | Øe.yam " (?umom) | 'leave (pl) now!' |
| c | gé-yam "I tamá•yum | 'leave now, boys!' |

(264) čéyk maríqax, $3 u-m a ́ \cdot c ̌-i \quad$ nó hú•pi-lut
here-DAT turn your-back-ACC I grease-going to 'turn back this way, I'm going to rub your back!'

| (265) | 3ó-nupital tó-tal <br> that-INSTR rock-INSTR | $\begin{aligned} & \text { poy } \\ & \text { him } \\ & \text { ACC } \end{aligned}$ | pégi <br> throw |
| :---: | :---: | :---: | :---: |
| 'throw that stone at him!' |  |  |  |
| (266) |  | 'keick | (eg) it!' |
|  | d. péli?yam 7 umóm | 'kick | (pl) it!' |
| (267) | 3 umóm kíč̌uyam | 'build | (pl) a house!' |
| 4.5 .1 .2 | Negative |  |  |

Negative commands are introduced not by gáy as one would expect but by a special negative particle which has a singular form tufu and a plural form tífu-m. These are uaually followed immediately by fóm and ?umám respectively, but the pronoun may be omitted. The verb forms are the same as those for the affirmative. In the plural command, concord between the particle and the verb is not necessary though it is usual. Thus all the following are possible forms of the singular and plural negative command, but 268a and 268b are the commonest.
(268)
\(\left.\begin{array}{l}a. túfu (?om) hé•lax <br>
b. tufum (?umóm) hé•laxum <br>
c. túfu (?umóm) hé•laxum <br>

d. túfum (?umóm) hé:lax\end{array}\right\} \quad\)| 'don't (gg) sing!' |
| :--- |

(269) a. túfu (2óm) čípi 'don't (sg) break it!'
b. túfum (?umóm) čipiyam
c. túáu ( (umóm) čípiyam $\} \quad$ 'don't (pl) break it!' d. túfum (?umóm) čípi

After I had collected my own data, I discoyered that the surprising disregard for concord illustrated in $268 \mathrm{c}, \mathrm{d}$ and $269 \mathrm{c}, \mathrm{d}$ is corroborated in $\# y d e(284)$. In the papere held in the Bancroft Library Archives at Berkeley, Sparkman also noted that, in a group of words between which a relationship of concord obtains, the iplural ending need occur only once. He was, however, talking about concord within noun phrases and was concerned in particular with concord between adjectives and nouns. My own data bear this observation out, but it should be added that, except in these negative commands, concord between subject and verb is almays rigidly observed. One is therefore tempted to wonder whether the verb forms in commands may not in fact be adjectival or mominal. Certainly in other constructions the bare aten is a nominal, since it can take both possessive prefixss and case suffixes, as the following example shows:
(270) fuwó*?-quó-pi1 pu-púk-ŋูa pu-wtáz-ax-i be afraid-PBM-ENC door-LOC his-stand-THEM-ACC REM

INCR
'he was afraid to stand at the door' (iit. = he feared his (own) standing at the door)

However, it i.s difficult to see how either structurally or semantically a nominal form could serve as a command imperative. I shall therefore not consider this possibility further. 4.5.1.3 Generation of Simple Commands

Within the performative analysis the generation of ainple commands presents a few problems. The most serious of these is that,
as with questions, we have to posit an abstract performative verb that has different syntactic behaviour from that of its overt counterpart. The Luiseño verb tóspa- 'command' does not take as its complement a clause with a finite verb, but rather a phrase containing a non-finite form of the verb, e.g.
(271) nó*-n tóy tóšna-q ?u-kpú?ax-pi

I-ENC you order-PRES your-lie down-SUBORD PRES ACC FUT
'I order you to lie down!'
(272) pó-?-pil néy tótušga nu-ŋée-pi $\begin{array}{cccc}\text { he-ENC me } & \text { merder } & \text { my-leave-SUBORD } \\ \text { REM } & \text { ACC } & \text { REM } & \text { FUT }\end{array}$
'he ordered me to leave!'

It is only fair to point out, however, that with the exception of one kind of indirect speech and the apodosis of conditional sentences, there are no other subordinate clauses indigenous to Iuiseño. Where other types of subordinate clause occur in English, Luiseño has counterparts containing only non-finite verb forms, though occasionally non-indigenous clauses with finite verbs are found introduced by Spanish conjunctions like $k^{w}$ ándu ( $=$ cuando), dispwés ( $=$ después), etc.

If we are willing to accept this syntactic difference between the abstract performative and its overt counterpart, then we can postulate the following underlying structure with the abstract performative verb COMMAND in the top $s$ :


The next question that has to be decided is what $T / A$ verbs, if any, should be generated between $S_{2}$ and the sentence that emerges at the surface as the actual command. It will help if we first take a look at commands in English. The first transformational analysis (Katz/Postal, 1964:74-79) considered all commands to be future. It was noticed that tage with 'will you' frequently occur after this type of sentence, and therefore an underlying form was posited containing both the second person pronoun and the modal 'will'. Bolinger (1967) levels serious criticism against this analysis and demonstrates quite convincingly that the 'will' in the command tag cannot be taken as evidence for a deleted 'will' in the command sentence, since other modals than 'will' can also occur in the tag. Furthermore, he produces evidence to show that commands are not limited to future tense, but may also be present or even past. For example,
"a person holding a lottery ticket not yet examined, and hearing the announcement of the winning number, might say before turning the ticket over: 'pleqse be the right number!' " (348-9)

Although the verb is stative here, there is clearly a command and equally clearly present time. As an example of a past imperative he gives among others 'please, Neale, don't have read it yetl' said by a girl who is hurrying to retrieve a rashly written letter
from her boyfriend's mantelpiece. I have no examples of past commands in Luiseño, but they may exist. PRES and FOT commands are certainly possible, since the forms we have been examining can occur both with ?ézni 'tomorrow' and with pitó•? (timónn) 'today'. An even botter reason for positing the $T / A$ higher verbs is that, though no tense endinge are found on the verbs at the surface level, at least one aspect ending, viz. -ma (see 16 and 4.1.3.1 (2)), does appear in the surface form of the verb. Consider the following sentence:
(274) tú丸u ?óm humáhmiči yá?-ni*-ma $(=\text { Já?-ni-i-ma })^{19}$ carelessly run HAB pórki zóm ?u-?éy yú?pan pídi-n because you your-foot again break-FUT
ACC 'don't go running around carelessly because you'll break your foot again!'

We can in fact be pleased that there are good reasons for positing T/A verbs in command sentences, for it would necessitate an awkward complication in the grammar if they had to be excluded. As I do not have enough data to state whether the fuli range of $T / A$ verbs is possible in the underlying structure, I shall not attempt to formulate any rules. It is clear, however, that if the grammar selects HYP (see 16), the command must not be allowed to reach the surface. This may be ensured by precluding COMMAND from any of the selectional features that make up the lexical entry for HYP. If thie is done, HYP may be generated below a command performative sentence, but the sentence will be blocked because no lexical
entry for HYP will be possible. This same technique can be used for whatever other $T / A$ verbs are incompatible with COMMAND. The derivation of commands will now proceed as for declarative sentences, with the atomic generation of $T / A$ suffixes and enclitics by the various raising transformations considered in previous of this study. At the stage where lexical insertion is to occur, zero suffixes and zero enclitics can be entered in the tree if the lexical entries for $T / A$ suffixes and enclitics are so rritten that the performative COMMAND occurs in the selection features; for example, a zero will be entered for (( (NON-HYP) NON-HAB) MOM) PRES ${ }^{20}$ when it has the selectional feature

but the suffix -g will be entered for the same combination when it has the selectional feature

$$
\left.\left[\begin{array}{l}
+
\end{array}\right]_{S}\left[\begin{array}{l}
+V \\
+ \text { Abstract } \\
+ \text { Declare }
\end{array}\right]\right]
$$

i.e. when it is generated in a tree below the performative verb DECLARE.

The zero enclitics can be generated in a similar manner, at the cycle immediately below the $S$ containing COMMAND, however, special rules will be needed to introduce a zero particle when the command is affirmative, and túpu when the command is negative. Finally PERFORMATIVE DELETION will eliminate the topmost $s$ on the last cycle.
4.5.2 "Oh well ..... then!"

In 4.2.2.2.2 I deacribed the use of the enclitic -ku in sentences like:
(275) sá•mba-ku 'oh well, buy it then!' buy-ENC
where the ma indicates impatience or reluctant consent. We now have to decide on how to generate this enclitic. In my analysis so far, I have treated all the aemantic enclitics as reflexes of higher abstract verbs. There seems no good reason for making an exception here. The problem is how to introduce the notions of impatience and reluctant consent into the performative analysis. There are two possible ways: (1) we can make the phrase structure rules generate a manner adverbial node in the performative sentence and this would be able to dominate such adverbial expressions as 'impatiently' or 'with reluctant consent', or (2) we can posit two (or more) coordinate performative sentences at the top of the tree.

Let us consider the introduction of an adverbial node first. If we look at English we find that manner adverbials can occur in overt performative sentences, though as Schreiber (1972) notes, certain cooccurrence restrictions must be observed (aee 276e,f).
(276) a. I solemnly declare that no harm shall come to them. b. I gladly invite you all to the ball.
c. I announce with trepidation that the photos will be published tomorrow.
d. I reluctantly demand my pound of flesi.
0. 2 I blasphemously pronounce you man and wife. f. ?I arrogantly admit that $I$ am a little confused.

If overt performative sentences can contain manner adverbials, there seems no reason at first wh abstract performative sentences should not also contain them. However, a certain amount of mystery atill shrouds the category of adverb in transformational grammar, and arguments have been put formard by Katz/Poatal (1964) Lakoff (1970a) and Kuroda (1970) in which they dispute the need for a distinct manner adverb category in underlying structure and suggeat that adverbs of this kind should be derived from adjectives. For example, Kuroda proposes two alternative derivations 277b, c for 277a.
(277) a. John dressed happily.
b. The manner [John dressed in some manner] $]_{S}$ was happy. c. John was happy [John dressed.] $]_{S}$

Now it will be remembered that Lakoff (133) also notes "at least ten very general rules of English in which adjectives and verbs 'are treated identically' and goes on to posit a single category VERB to cover them both.

If we now turn back to Luiseño, we find considerable support for Lakoff's analysis. There is a startling absence of true manner adverbs in this language. I know of only one underived (i.e. unanalysable) word: qilég/galéq 'quickly', but even this is not a true manner adverb as it is also used for 'soon'; other adverbial expressions of manner are clearly all derived from verb forms or in a small number of cases from nominal forms. An
example of the latter is ? ésku-tal 'loudly' where a nominal stem (probably meaning 'height') is followed by the instrumental case suffix. The adverbials derived from verbs fall into two clasges, and often the English manner adverbial has a translation equivalent in each class. The first is structurally one of several adjectival forms of the verb with the onding -i added (probably the same -i as in the accusative case onding). Examples are:
 'straight' (< táka- 'to be straight'), múyi-k-i 'much, fully' (< mú'ya- "to be full'). The second class of manner adverbials is structurally non-adjectival though it corresponds closely to English participial forms in -ing. It is formed by adding -nik/ -nuk directiy to the verb stem, e.g.

b. táki-nik 'straight' (cf. táka*nti above)
c. máhi-nik 'slowly' (< máha- 'to slow down, stop work')

Compare these forms with the following:
(279) ?ó:nu-pil néy núli-nik ya?án-ax
$\begin{array}{cl}\text { he-ENC me push ran away-REM } \\ \text { RDM } & \text { mCC }\end{array}$
'he pushed me and ran away' (lit. = pushing me he ran away)
$\begin{array}{cll}\text { (280) ya?ás súplis } & \text { híq"i-nik witás-ya } \\ \text { man } & \text { once run } & \text { stop-REM }\end{array}$
'the man ran once and stopped'

ture like the following:
(283)

where $S_{2}{ }^{i s}$ certainly not performative. For the notion of reluctant consent we would need a more complicated underlying atructure containing both a performative and a non-performative verb, perhaps something like:
(284)

which after suitable transformations could be paraphrased as I RELUCTANTLY CONSENTING COMMAND YOU [S] ${ }_{N P}$. Maybe from the point of view of Luiseño semantics, there is a simple generalization covering $S_{2}$ in both 283 and 284 , but if so, it is not really important for my argument. All $I$ wish to suggest at the moment is that the -ku enclitic is a reflex both of whatever structure is at the $S_{2}$ node and of the performative sentence $S_{3}$. As many aspects of this solution are rather hypothetical, I shall not attempt to write a rule for the lexical insertion of -ku. However, my case is strengthened by the observation that this type of derivation,
where attitudinal information posited as semantic underlying otructure finds a syntactic reflex in derived structure, is needed in other places in Luiseñ. The reader will recall the enclitic -fan, described in 4.2.2.2.3 as indicating that one's question follows on from what another speaker has already said. This idea could be captured (rather erudely) by a structure of the following kind:
(285)


Fhich in English would be equivalent to: I CONSBNTINGLY ASK YOU $[\mathrm{S}]_{\mathrm{NP}}$.

The arguments above are intended to be auggestive rather than definitive. If enclitics like -fan with attitudinal content can justifiably be generated by positing extra structure in the underlying trees for the surface sentences to which they belong, it is only a small step to positing other similar structure to account for other features of aurface sentences that express the attitude of the speaker to his subject or to his hearer, for example different patterns of intonation or various particles. Unfortunately this is another theoretical issue of some interest which I shall have no time to discuss.

### 4.5.3 -kam

A slightly different kind of problem is posed by the enclitic -kam, which is found only in commands containing verbs of sensual perception. In 4.2.2.2.1 I discussed fully the transformations needed to generate the three different kinds of sentences in which it occurs. I did not, however, consider the details of the transformation wich introduces -kam itself. So far as I can judge, the enclitic adds no extra meaning to the imperative, i.e. there is no semantic difference between 286 and 287:


It would therefore be simple to make its generation obligatory in any sentence where a verb with the feature [+ Sensual Perception] is dominated by the performative sentence: I YOU NP COMMAND. Sentences like 286 can then very easily be produced by deleting the enclitic optionally.

On the other hand, if there is an attitudinal difference between 286 and 287, we can follow the policy I suggested above and introduce this as additional structure in the topmost $s$ of the underlying tree for 287. We would then have a tree like 282 but with a different verb under $S_{2}$. In the derivation the enclitic would now be a reflex of both $S_{2}$ and the performative sentence $S_{3}$.

Whichever way wo generate -kam, once it has been lexically inserted the three types of sentence it occurs in can still be produced by the transformations 92 and 93 as described in 4.2.2.2.1.

### 4.5.4 Commands with Higher Verbs

In this section $I$ wish to deal with the imperatives of those verb forms we saw in 4.3 .8 which have suffixes derived from higher verbs. The first thing to notice is that the semantics of some of them precludea the formation of commands: thus there are none for verbs bearing the suffixes -vuta/-luta, -vica, or -la with the meaning given in 138. For others it is difficult to think of credible situations in which they could be used, e.g. -muna. Three of them, however, I have recorded with command forms: -ni, -i(m) and -ni.

Since there is no difficulty with the higher verb analysis for the first of these, I will use this suffix to demonstrate that we are dealing with a different type of command here from those we have seen so far. If we take the sentences (288) néči-ni ?óm póy '(you (sg)) make him pay!' pay-cause you him -PI ACC

OR:
fíči-ni-yam ?umóm póy '(you (pI)) make him pay!' IMP you $+\mathrm{PL} \quad+\mathrm{PL}$
we can posit the following underlying structure:


In this type of command the verb expressing the action whose performance is being commanded (e.g. CAUSE in 289) is present only in underlying structure, whereas in all other simple commands it is present on the surface. However we analyse -i (m) and min, the same must be true of commands containing them.

For the rest of this section $I$ wish to consider a few of the latter types of command. The following examples show how win is used:

| (290) | $\begin{array}{ll} \text { yax-ni } & \text { póy } \\ \text { say-go } & \text { him } \\ & A C C \end{array}$ | 'go (8g) and tell himi' |
| :---: | :---: | :---: |
| (291) | a. há*l-ŋi kulá*wut Beek-go wood | 'go (8g) and look for mome woodl' |
|  | $\begin{gathered} \text { b. há•I-ทi-yam kulá•wut } \\ \text { go-PL } \end{gathered}$ | ${ }^{\text {'go (pl) and look for mome }}$ ( woodl' |

Although the suffix $-n i$ in itself is sufficient to express the
idea 'go and ... ', the verb hatifa- 'go' may also occur reduxdankly in the command. Thus with the same meaning as 291 we have:
(292) a. hatílax há•1-ŋi kulá-wut
b. hatí?axum há•l-ŋi-yam kulá•wut

There is one further usage of gi which I should mention at this point. The suffix may also be attached to (apparent) noun stems and it then forms a command to go and fetch the object denoted by the noun. So we can also have:
(293) a. kuláw-ŋi 'go (sg) and fetch some wood!'
b. kuláw-ŋi-yam 'go (pl) and fetch some wood!'

Here again hatifax and hatifaxum may be redundantly added to 293a and 293 b respectively. This usage of -qi seems to be restricted to a few common household items like 'wood', 'water', 'cactus fruit', 'Indian hemp', etc. So it is probably best to have a minor rule in the lexicon to form such verbs from their respectfive nouns and then treat them in the syntax as if they were unanalysable.

The last usage of -ni I wish to discuss is when it occurs together with $-i(m)$. When this combination ia used in commands, the scope of the movement indicated by the two suffixes seems to be more restricted:
(294) wuní-k yáw?ni•m (< yáw?-ŋi-im) zóm21
thither you (ag)
'take it (to) over there!'

This combination, $-7 i_{i}+i m>-\eta i \cdot m$, is doubtless what Kroober/

Grace (141) are referring to when in their section on -ni they say :
"The /gim/ alternant occurs in the past punctual [= RMM] and sometimes in the imperative under undetermined circumstances."

They obviously failed to hear the lengthening of the vowel resulting from the coalescence of the $i$ in each suffix.
4.5.5 Advisory Imperatives

So far I have discussed only those types of imperative for which an abstract performative sentence containing COMMAND can be postu-
lated. There are a number of other cases where this cannot be done. One of the clearest of these is the situation in which speaker A asks speaker B how a particular thing is made, and B gives him the necessary instructions. B.'s utterances will probably resemble the language of cookbook recipes and contain a series of quasi-commands, e.g. "take a plank, cut it in half and smooth the faces and the edges." It is clear, however, that such sentences are not true commands, since $B$ is not requiring A to do anything but merely giving him advice on now to perform a particular task. In situations of this kind the Luiseño language uses a sentence of the same shape as a FUT declarative. For example, the following are instructions on how to make acorn mush:


| qWáyi-n | pás pu-wáxa-qala | sóm póy páqi-n |
| :--- | :--- | :--- |
| spread-FUT | its-dry-S甘BORD |  |
|  |  | erack-FUT |

```
PFirst pick the acorns, then spread them out. Then
when they are dry, crack them.'
```

Sometimes Luiseño uses a future sentence of this type even when a real command would be expected, e.g.
(296) nó•li-n-up nu-náwki 'iron my dress!' iron-FUT-ENC my-dress
(297) mímčapan-up mičá? taváni-n 'just put it anywhere!' any ENC. where put-FOT

Such sentences seem to be more polite than straight commands, and the use of the FUT is probably the Luiaeño way of making up for the lack of any mord for 'please'. Note that they usually lack an overt subject pronoun.

We can conveniently account for the semantics of both the: instruction sentence and the polite command if in the underlying structure of each we posit performative sentence in which COMMAND is replaced by RECOMMEND. We can now write our rules so that whenever RECOMMEND appears in the topmost $S$ of the underlying structure, the derivation to the surface structure will block unless RECOMMEND has FUT in its NP complement. Thus for the correct derivation of 296 we need:


### 4.5.5.1 "let him, her .......!"

One advantage of the performative analysis with RECOMMEND is that it also neatly covers the type of imperative which in English is translated by 'let him, her (do something)!', where 'let' does not mean 'allow' (Luiseño uses a construction with the imperative of xáli- 'permit' for the latter). These sentences, like the instructions and polite commands, are identical in surface structure with future declaratives. As in the polite commands there is no overt subject pronoun.

| (299) | sá-msa-n-pu. pó-xa-pu 7ufáni-n sá-mea-nik  <br> buy-FUT-ENC herself-ENC find out-FOT buy-SUBORD |
| :---: | :---: |
|  | 'Let her buy it! She'll find out when she doesl' <br> (said to himself by father with an insistent daughter, who wants to buy something he does not approve of) |
| (300) | Pá-ma-n-pu pu-?́a-ma-viča-qala <br> hunt-FUT-FNC his-hunt-want-SUBORD <br> FUT  |
|  | 'Let him hunt if he wants to (I don't care!)' |

For sentence 299 the underlying tree will be:
(301)

i.e. basically the same tree as 298 except for the different person in the pronoun aubject of the lowest $S$.
4.5.6 "Let's" Imperatives

The final kind of imperative $I$ shall deal with is translated into English by 'let us (do somethłng)!' In Luiseño it is identical in surface structure with the PRES declaratives and again the overt subject pronoun is missing, e.g.

| (302) | wá•ya•n-ča | (<wá-yax-wun-ča ) | 'let's swim!' |
| :---: | :---: | :---: | :---: |
|  |  | $\begin{gathered} \text { swim-PRES } \\ \text { PL } \end{gathered} \begin{aligned} & \text {-BMC } \\ & {\left[\begin{array}{l} +P R E S \\ +I \\ +P L \end{array}\right]} \end{aligned}$ |  |



```
(304) qáy-ča hatíza-n (< hatí?ax-wun) 'don't let's gol'
    not-ENC 'let$s not go'
```

If we examine the semantics of this construction, it is obvious that we are concerned here just as little with a true command as we were in the case of the advisory imperatives; but it is clear, I think, that there is a semantic distinction between them and the construction in 302-4. The latter sentences seem to be less a recommendation than a auggestion. If this standpoint is accepted, the semantic difference can be accommodated by positing a different performative, viz. SUGGEST, in the underlying structure of these sentences, and by requiring that the derivation block unless the complement of SUGGEST contains PRES. Thus the underlying tree for 302 would be:
(305)


However, I do not wish to press this analysis. If the postulation of two different performatives (one for the 'let's ...' construction and one for the 'let him ...' construction) is rejected, then both types could be accommodated under one performative (? SUGGEST) and the rules would have to be rewritten to allow both FUT and PRES in the complement of the performative verb. The choice of pne of these tenses could then be made dependent on the person of
the subject pronoun of the lowest $S_{\text {. }}$
4.6 Exclamations

In this section $I$ wish to deal with a fen 'single-word" exclamam tions and with two kinds of exclamatory sentence. In the tradetional sense of 'simplex', this is the last kind of simplex senfence $I$ shall examine. In the performative analysis, of course, such sentences must in underlying structure be complex. We shall, however, see below that exclamations present a serious challenge to the performative analysis. Before we consider their generation, it will make the picture clearer if $I$ explain and illustrate the three types of sentence first.

### 4.6.1 Single-Word Exclamations

I am using 'single-word' to characterize those exclamations that either form sentences with no internal structure or, as in 306 , sentences that do have structure but that are unanalysable into subject and predicate. Not all, though most, of the exclamatory words in both types of exclamation are single words, hence my use of the term is a little loose.

Some aingle-word exclamations may stand by themselves, egg.
(306) A: wunál-up tak'áyax-lut 'he's going to die'

$$
\begin{aligned}
& \text { he-BNC die-going to } \\
& \text { PRES }
\end{aligned}
$$

B: wá*x (OR: wáax ?utá*x) 'Oh dear!'

$$
\begin{aligned}
2= & 2 u-t a ́ \cdot x \\
& y o u r-s e l f
\end{aligned}
$$

Or they may be accompanied by another sentence, erg.
(307) A: wunál-up péw-kat
marry-one who
'he is married'
B: hičúux, qáy-na nó. Payáli-qat (Puma)
not-ENC I know-P PR
'oh, I didn't know'
OR

(LaJolla)
'oh, I forgot'
(308) ha?á•m, John-kun féxni pótm-i kúli-lut $\begin{array}{lll}\text { alas } & \text { ENC } \\ & \text { REPORT }\end{array}$ tomor. his tooth pull-going to 'poor John, he's going to have a tooth pulled tomorrow'
(309) a: yóx, wunál-up pu-iyáli pu-ná*wi fayá•linuk ?gee he-ENC his-know his write well PRES

OR: b: wunál-up ........... ?ayá•linuk, yóx
'gee, he's a real (li) good writer!'

'gee, we sure dug a lot yesterday!'
The two exclamatory words in 310 occur in my data only in connerlion with the - pupil enclitic (see 4.2.2.1.4, 4.4.9). Both were collected from the LaJolla informant. It should be noted that ? ̄́tsm is the only word in Luiseño which has strong nasalization.

Elsewhere the nasalization of vowels when a neighbouring consonant
is nasal is negligible or nonexistent.
4.6.2 "how ... !", "what (a) ... 1"

The construction I shall now deal with contains the exclamatory particle log. When this occurs with verbs bearing NON-HYP T/A suffixes, it may be roughly translated by 'how ... !' or 'what
(a) ... !'. In the speech of my LaJolla informant there is no enclitic in these cases and the particle is usually preceded by the exclamation ?ar, egg.
(3I1) Pá lók ja?ás Pahikya 'what a clever guy he is!' man smart
(312) アá• lók pu-pús mómkat 'what big eyes she has!' her-eye big (of plural things)
(313) ?ad blok mákina pu-sá•mba-vo
car his-buy-REL
REM
(314) ?á. lók ?ahúyaxi yawáywís 'how pretty she is!' very pretty
(315) Tá. lók waxá•m póminik táq-ax yest. very be hot-REM
'how awfully hot it was yesterday!'

My Pauma informant on the other hand usually adds enclitics. At least in the PRES tense, these are not the same as those we saw in PRES tense declarative sentences. In fact they resemble the FUT enclitic more than the PRES ones. The following paradigm may be
compared with that shown in 22:
(316)

|  | Singular | Plural |
| :--- | :--- | :--- |
| PRES | 1. - numu, -na | -čumpu (? cummu) |
|  | 2. - (u)pu | -mu 23 |
|  | 3. -(u)pu | -mu |

It will be observed that the first person plural forms and the longer form of the first person singular are neither the regular FUT nor PRES enclitics. The shorter first person singular form (also quoted in Sparkman's personal papers but in the shape no ) is identical with the PRES enclitic, whereas the second and third person plural forms and the shorter second and third person aingular forms are identical with the FUT enclitics of the Rincón dialect. I shall discuss the alternative first person plural forms below. The longer forms for the aecond and third persons singular are unique. Finally we may note that this series of enclitics occurs only accompanied by lók:
(317) Lók-numu ?óy hikáci-q thow I am bothering you!" ENC you bother-PRES ACC
(318) lók-čumpu ?óy hikǎci-wun 'how we are bothering youl' PRES PL
(319) lók-upu 2ahíyya ?atáx 'what a smart guy!'

My data contain only three examples of past tense exclamations, again from the Pauma informant:
(320) lók-numu tó-ya maxá•m 'how I laughed yesterday!' laugh jest. 'what a laugh I had yost.i'
(321) lók-čummu tó•ya waxá•m 'how we laughed yesterday l' (322) lók-upu tó-ya waxá-m 'how he laughed yesterday!' It will be observed that the three enclitics used here are the same as the PRES ones seen in the paradigm 316 except that the syllable after -cum is now -mu, not -pu. Probably -mu is the more reliable of the two forms, if we take the data quoted in Sparkman's unpublished papers into consideration: his PRES tense exclamations with first person plural subject begin with lōk-cha-ma.

On the other hand, his past tense exclamations are always given with past enclitics and not with those $I$ have just discussed:
 ENC him I whip-REM REM ACC HAB
'how I used to whip him!'
(324) lōkanil pol no shēkwah $=$ lók-anil póy nó• Ai $\cdot q^{\mathbf{m}}$-ax $?$ REM
'how I whipped him!'
Similarly Sparkman gives one example of a FUT tense after lók where the enclitic has the longer form (with -ka ( $=-\mathrm{ku}$ ) ) of the regular FUT enclitic:
(325) löknupka pos no shēkwin tēwy auk
$=$ lók-nupku posy no. Ai•q"i-n tí*wi-nuk ENC whip-FUT see-SUBORD FUT
'how I shall whip him when I see him!'

Unfortunately I have no examples in my own data of lok sentences containing FUT tense verbs. The whole question of whether the enclitics given in 316 have been generalized to cover all the NONHYP T/A forms of the verb and whether past and future enclitics can also be used, and in what form, has still to be investigated.
4.6.3 "mould that ... ! ! ", "if only ... $1^{11}$

When the exclamatory particle lok occurs in a sentence where the verb has HYP aspect (see 16,23 ), the following paradigm is found:

| (326) | Singular | Plural |
| :---: | :---: | :---: |
| HYP |  Pauma ${ }^{24}$ <br> 1. Lók-xunpu lóxolla <br> 2. lók-xupu lóxxupu <br> 3. lók-xupu lóxxupu | Pauma LaJolla <br> lók-xišpu lóxxupu <br> lók-xumpu lóxxupu <br> lók-xumpu lóxxupu |

If we compare the forms of the enclitic in 326 with those in 23, we notice that Pauma uees the game set in each with the minor difference of $\underline{i}$ in -xispu in 326 and $\underline{u}$ in -xuspu in 23. As unaccented vowels frequently vacillate in Luiseño between two tongue positions, it is quite possible that both $\underline{i}$ and $\underline{u}$ are acceptable In either case in the Pauma dialect. I have already pointed out that $\underset{\text { B }}{ }$ is a more palatal consonant in Luiseño than in English; it is therefore not surprising that an underlying u can be fronted when occurring inmediately before this consonant.

If we now turn to the LaJolla forms, we notice first that there is assimilation of the final $k$ of lok to the initial $x$ of the enclitic; alternative forms with $k$ restored or replaced by a glottal stop were consistently rejected. Second, except in the
first person singular the LaJolla dialect has again only one form throughout the paradigm, but curiously this is now the form that the Pauma/Rincón dialect generalized in 23, i.e with - pu and not with -ku.

Sentences containing lók and the above HXP forms of the enclitic express unfulfilled wishes, as we see in the following examples from the Pauma dialect:

| (327) | Iók-xupu | 208m | $\begin{aligned} & \text { ?uyó*k } \\ & \text { silent } \end{aligned}$ |
| :---: | :---: | :---: | :---: |
|  | 1 I wish y | Wor | d kee |
| (328) | lók-xispu | čácm | hat 3 |
|  |  | Te | go-Hy |

'would that we were going, had gone:'
(329) lók-xunpu nó* ri•ku míx-ma

I rich be-HYP CONT
'if only I were rich!'
(330) lók-xunpu nó ?ayáli-ma I know-HYP CONT
'if only I knew, had known!'

Sparkman's unpublished papers contain an alternative 'past' form of 330 with a longer enclitic which we examined in 4.2.1.4 (8). It will be remembered that this past HYP enclitic occurs only in the first person singular:
(331) Lok-hun-of-po no a-yal-y-ma = lók-xunơ?pu nó* Tayálima 'I wish I had knownl'

This almost certainly corresponds to the usage of my Pam informmane, but I was unable to check.

The following sentences were elicited from my Ladolla informane:

| (332) ?af. lóxxupu wuná tamáwut pótmi | yáq"i |
| ---: | :--- |
|  | that chatterbox his mouth shut-HYp |
|  |  |

'I wish that chatterbox would, had, shut up!'

[pi qáy nó* 3ayáli-q $]_{2}$ but not $I$ know-PRES
'I wish I knew what to say, but I don'tl'
(334) Tá• lóxxunpu pu-tú‘刀-i móli his-name-ACC remember
'if only $I$ could remember, could have remembered, his name!'

It is now time to make a few general remarks about the forms in 327-334. First, with the exception of 331 and 333 the time reference may be PRES, PST or in some cases even FUT with no change in the outward form of the sentence. It is the context alone which decides. Sentence 333 can only have PRES reference since there ts an overt PRES in clause 2. Sparkman's 331 is diffferent, since past is formally marked in the enclitic.

Second, in the traditional use of the term these sentences may not be simplex. We have already noted that 'simplex' and 'complex' really need redefinition within the performative/
abstract higher verb framework. Perhaps I may be permitted to remind the reader that in this study $I$ have been using 'simplex' to describe those sentences whose surface structure conaists of a single clause containing reflexes (in the form of enclitics and/or particles) left behind after the obligatory deletion of abstract higher verbs and/or an abstract performative from their underlying structure. 'Complex' on the other hand I am using to refer to those sentences whose surface structure contains (a) two clauses or more connected by dependency relations of some kind, or (b) one clause which stands in a dependency relation to any optionally deleted non-abstract clause. It is the latter case which is represented in some of the sentences above. Thus 334 could be just half of the sentence:
(335) [If only I could remember his name] [I would be able to send it to him] $]_{2}$

It should be noted that the relationship between 1 and 2 in 335 is different from that betweon 1 and 2 in 333. In 335 clause 2 follows on logically from clause 1, whereas in 333 clause 2 resembles an afterthought. This difference is made clear in Luiseño by the use of different clause introducers: the type of clause 2 seen in 333 is introduced by pi 'and, but', whereas that in 335 takes either pá? 'then' or pá pi. We shall see the latter illustrated immediately in the next section.
4.6.4 hani(3)ku

There is an alternative construction to blok + the HYP enclitic which seems to have the same meaning. Here the introductory word is haní(?)ku. In contrast to the low sentences in 4.6.3, all the hani(3)ku sentences in my data contain a second clause that logially follows on from the first. This is probably mere coincidence, but conveniently demonstrates the use of par (pi) as clause
introducer. Consider the following:
(336) haníku fóm kíáati pá? (pi) ( Room) má•s múyiki you wait-HYP more much-ACC tí*i see-HYP 'if only you would wait, then you would see much morel'
(337) haniku čá•m payáli-ma pá? (pi) (čá•m) pumó*m-i we know-HYP CONT ther-ACC ? ayudár $r$ help-HYP 'if only we knew, then we could help them!'
(338) haniku ${ }^{25}$ nó• wuná*1-i ya?á•č-i qáni pá? čá•m I that-ACC man-ACC meet-KYP we ?ayá-linik čó? 3 un hiss čuró?i properly all thing settle-HYP ACC
'if only I could meet that man, then we would straighten everything out properly!'

Attention is drawn to the absence of HYP enclitics. We should note, however, that the morpheme hand? does occur with these en-
clitics in true conditions (see 5.1.2.1). Sentences 336-8 differ from true conditions in that they express wishes rather than conditions; indeed, my informants always translate hani(3)ku sentences with 'if only ... !' or 'I wish ... !'.

As I pointed out at the end of 4.6 .3 , these sentences expressing unfulfilled wishes should really be considered as complex in the sense I defined. I have described them here, however, as (1) they seem to belong together with exclamations, and (2) it is clearer to treat all the sentence types beginning with lok together, and consequentiy also hani(?)ku sentences, which are equivalent to one of these types.
4.6.5 Goneration of Exclamations

When we try to generate exclamations within the performative analysis a number of problems arise. The most serious of these is that no verb of exclamation can be used as an overt performative. This is true of all the languages $I$ have so far examined and may indeed be universal. Thus in English, for example, there is no exclamation *'I exclaim ouch!' nor *'I exclaim that she is beautiful!'. The gomewhat antiquated expression 'I declare' in aentences like 'I declare, she's very pretty' cannot be performative, since the second sentence is not the complement of 'declare'. This is shown clearly by the comma, and by the fact that the two sentences can be reversed with no change of meaning: 'she's very pretty, I declare'. In Luiseño the situation is even worse, as there are not even any overt verbs of exclamation.

At this stage we may well ask ourselves whether we really
need another abotract performative verb to account for exclamationa. Can we not get by with what we have already? I do not think we can. Consider the two English sentences:
(339) a. She is beautiful. b. How beautiful she is.

I find them semantically identical except in illocutionary force, i.e. the difference $I$ find corresponds exactly to the difference between 340 a and 340 b , although, as I pointed out above, 340 b is not a well-formed surface atructure exclamation.
(340) a. I DECLARE she is beautiful.
b. I EXCLAIM she is beautiful.

If we are willing to accept this as 'evidence' for the need for a higher performative verb of exclamation, then deapite the lack of any overt verbs of this kind in Luiseño we can now posit that all the exclamations with NON-HYP T/A suffixes on the verb have the following underlying structure:
(341)


In the next section $I$ shall attempt an appraisal of the streagths and weaknesses of the performative analysis as ugod so far in this study and consider especially the problems connected with it in the analysis seen in 341 . For the moment let us accept it without question and examine how it can be uged to generate exclamations
and exclamatory sentences of the kind described in 4.6.1 and 4.6.2 above.

The first problem is with what $I$ loosely called 'single-word' exclamations. I defined them all as sentences, usually singleword sentences without internal structure, or occasionally combinations of exclamatory words with other categories but not in a subject-predicate relationship. I have very little empirical support for defining them as sentences except that (a) many can stand alone as complete utterances just as any other kind of sontence can, and (b) the syntax of Luiseño precludes them from belonging to another sentence. If the reader looks at 307 through 310, he will observe that, in the sentence which follows each exclamatory word, the enclitic is attached to the first word of this sentence and not to the exclamatory word itself. This is clear evidence that the exclamatory word is outside that sentence. Furthermore, there is often a perceptible pause between them.

Now, for the correct generation of the sentence accompanying the exclamatory word, the analysis I have developed in this study forces me to poait a performative sentence (I YOU NP DECLARE) as dominating it, in order to account for the declarative $T / A$ enclitic on the first word. This leaves the exclamatory word high and dry. If we consider it to be a sentence in its own right, we must account for its illocutionary force by positing the structure 341 above it. In most cases $S_{j}$ will consist simply of the category EXCL. Where the aingle-word exclamation has some internal structure as in:

3alalá \&upa•1, lók-pu yawáywis
woman how-ENC pretty
'my, what a pretty woman!'
provision for this must be made in the phrase structure rules, e.g. $S \longrightarrow$ EXCL (NP). In idiomatic cases like máx fu-tá*x, where the internal structure is unanalysable, the exclamation can be treated as a single unit in the lexicon and inserted into the tree as a unit under EXCL.

The structure in 341 can also be used to generate the two types of exclamatory sentence described in 4.6 .2 with lók alone and with lok accompanied by NON-HYP enclitics. In this case $s_{j}$ will have a full clause as its expansion, i.e. will be generated by the phrase structure rule: $S \longrightarrow N P$ (NP) (ADVL) V. The exclamatory particle lók can be introduced by a transformation sensitive to the presence of EXCLAIM in the performative $S$, e.g.


Since the enclitics are automatically generated as the transformations proceed up the tree, the simplest way of accounting for both the presence and absence of NON-HYP enclitics in lok sentences is to retain them for the usual Pauma construction and subsequently to delete them for the LaJolla type. This enclitic deletion transformation would thus be optional for the Pauma dialect but obligatory for the LaJolla. For want of a better solution, this is the one I shall adopt. Nevertheless, I should point out
that the deletion of the enclitics here in the LaJolla dialect is problematic since it does not parallel the deletion of the enclitics in declarative sentences. In the latter they were potential-

Iy present, $i, e$ e a sentence from which they were lacking could always be reformulated with the appropriate enclitice inserted. In other words there is empirical motivation for generating them first and deleting them later. In the case of lok sentences in the LaJolla dialect, however, this motivation is lacking, since no enclitic is possible when there are NON-HYP T/A suffixes on the verb. In other words, to generate the enclitics first, for them then to be obligatorily deleted, does not seem to tally with the LaJolla speaker's competence, although this procedure no doubt represents the historical development (witness the Pauma alternatives with and without enclitics).

There is no problem with the insertion of the slightly different forms of the PRES enclitic seen in 316, since their final phonetic shape can be made dependent on the presence of lok. Thus if the normal PRES forms of the enclitic are introduced before lók itself is inserted, a rule will be needed to modify their shape in its presence. On the other hand, if they were introduced after the insertion of lok, the forms in 316 can be provided with subcategorization features in the lexicon to ensure that they are inserted only when lók is present.

Let us now turn to the sentences in which lók and hani(?)ku are followed by the EYP enclitics. As we saw in 4.6.3 and 4.6.4, these are wishes rather than exclamations. I therefore propose to
capture the illocutionary force of this type of sentence by postulating a performative topmost $S$ of the following kind:


As far as the HYP enclitics are concerned, their proper insertion can be ensured by making one of the subcategorization features in their specification in the lexicon contain WISH, so that only they, and not NON-HYP enclitics, can be inserted in this environment. Since lók and haní(?)ku appear to be fully interchangeable, they can be introduced by the same transformation, e.g.
(344) SD: $\frac{x}{1} \frac{[s]_{\mathrm{NP}}}{3} \quad \frac{\text { WISH }}{4} \Longrightarrow$

SC: $12\left\{\begin{array}{l}\text { lók } \\ \text { hani (3)ku }\end{array}\right\}+34$

We again have the problem of the enclitics although now in a slightly different form: here lók must obligatorily take HXP enclitics whereas hani(?)ku can not; in other words the absence or presence of the enclitics depends on which morpheme is used, whereas above their absence or presence occurred with only one morpheme. Since the HYP enclitics will be generated anyway by the transformations $I$ discussed in 4.2.1.5, lók 4 HYP enclitics are automatically accounted for. In the case of hani(?)ku, however, the onclitics will also be automatically generated, but will then have to be deleted to produce the correct surface form of the aen-
tence. I am, of course, taking hani(?)ku to be unanalyaable; but as we saw in Footnote 25 this is not at all certain, since the root hani? occurs in other constructions, for example even with HYP enclitics in conditional sentences (see 5.1.2.1). This would auggest that the final -ku may itself be an enclitic. There is only one enclitic -ku that $I$ know of and this we discussed in 4.5.2 in connection with 'reluctant' imperatives. The final byllable of hani (?)ku seems to have no connection with this. The only other place in which -ku occurs is as the final syllable of the longer form of the HYP enclitic in the Pama/Rincón dialects, i.e. always after -xupu, or as the final syllable of the Lajolla HYP enclitic, i.e. always after -xu. If the final syllable of hanf(?)ku is indeed a reduced form of the HYP enclitic, then it is uniquely so used in this combination. This suggests an alternative derivation where the full form of the enclitic with final -ku is generated first and where the preceaing -xu(pu) must then be deleted in the presence of the morpheme hani?. Whichever derivation we choose, an ad hoc deletion transformation mast be used to account for the idiosyncratic behaviour of hani?. 4.7 An Appraiaal of the Performative Analysis

Since we have now come to the end of the discussion of simplex sentences (as defined in the final paragraphs of 4.6.3) and since We now have a general view of how the performative analysie can be used to generate these sentences in Luiseño, this is a good time to look back and weigh up the merits and disadvantages of this | approach.

Probably the atrongest argument in favour of the performative analysis is that it neatly accounts for the illocutionary forco of any utterance; in other words, it is semantically well-motivated. Indeed, it is difficult to imagine any other device which would enable this information to be incorporated into the sentence, since in some cases it has no perceptible reflex in the gurface structure of Luiseño.

Secondly, where the surface structure does contain perceptible reflexes (frequently in the enclitics, but sometimes also in the verb forms), the performative analysis provides a very plauBible way for these various enclitics and verb forms to be generated. Against this it might be argued that the same offect could be obtained by employing a whole battery of formatives like $Q$, IMP, etc. in the phrase structure rules. This is of course trueq but such formatives can represent only part of the illocutionary force of the utterance: the fact that 'I' is speaking to 'YOU' is totally ignored. Syntactically the evidence for the performative analysis is strong: we need higher verbs anyway for notions like 'can', 'mant', 'cause', etc., which are not expressed by independent finite verbs but by suffixes on the verbs; so the performative analysis becomes a very natural part of this systen of higher verbs and is thus preferable to syntactic formatives like $Q$.

These are strong arguments, but the advantages of this approach have to be bought at a certain price. In the first place, I have sometimes been forced to posit two kinds of performative verb which are difficult to justify except by saying that they
produce the right results. In one kind the abstract performative has different syntactic behaviour from that of its overt counterpart, and in the other it has no overt counterpart at all.

Lot us look first at those with different syntactic behaviour. In eimple questions, $I$ posited the performative ASK, which has a Luiseño counterpart tuvyúni- in overt clauses, but whereas the abstract verb takes both -fu and té in its complement $s$, only té is found after tuvyúni= Parallel, but not quite the same, is the postulation of DECLARE for declarative sentences, Although there is no overt verb with exactly this meaning in Luiseño, we could overcome this difficulty by substituting SAY for DECLARP; nevertheless, whichever verb of saying we choose there will always be considerable syntactic differences between the abstract and the overt verb, as none of the Luiseño verbs of smying can take Tense/ Aspect enclitics in their complements. Only nominalized (nonfinite) forms or clauses introduced by -kun (see 5.3.1.1) are permiasible. To account for the different illocutionary force of various enclitics, $I$ have proposed the performatives REPORI, SUGGEST, REGISTER, etc. Once again there are no exact overt counterparts of these in Luiseño, the language usually contenting itaelf with lese specific words. Thus 'Bay' would be used for 'report'; thhink' for 'auggest'; and 'se , hear' for 'register'. Here we immediately notice another difference: whereas DECLARE requires One set of enclitics in its complement and REPORI another, the overt verb 'say' can take both series. The shades of meaning that are conveyed by the use of different verbs in English are
thus indicated in Luiseño by the use of different enclitics.
Let us now turn to the second kind of performative, the one which has no overt counterpart at all. We considered two of these in the section on exclamations. I proposed the abstract performatives WISH and EXCLAIM. In Luiseño there is no overt verb of wishing as there is in English ('I wish I were rich'). We saw that such wishes can only be expressed with the aid of lók and hani(?)ku along with the HYP enclitics. In non-performative sentences Luiseño has to uee the verib 'want', e.g. 'he wished she would be quiet' $=$ 'he wanted her-being-quiet'. The case of 'exclaim' is even more curious. Again there is no overt Luiseño equivalent of the abstract performative, but here we have the added peculiarity that although verbs of exclamation do exist in other languages, they are not used performatively. We saw that corresponding to 'ouch!' there is no performative sentence like 'I exclaim (cry, ejaculate, etc.) ouch!', although this in itself ought to be an exclamation. I suggested that this may be a language universal. Of course, it could now be objected that since verbs of exclamation cannot be overtly performative in those languages in which they exist, the positing of an abstract performative of exclamation is totally unjustified. I would, however, challenge this objection on two grounds. First, exclamations seem to me to have a quite different illocutionary force from that of declaratives: they are not used as vehicles for the communication of facts to other people, but rather for the expression of subjective reactions to exterior happenings or phenomena, and as such
they may well not be intended for the ears of other people. This is particularly the case with profane or obscene "aingle-word" exclamations. Second, in Luiseño, if we leave out of account the slight difference in the PRES enclitics (these may in any case be omitted), declaratives and all exclamations other than singleword exclamations are identical except for the presence of lók. If now we agree that declaratives and exclamations have different illocutionary force and if we observe that this different illocutionary force can be determined only by the presence or abaence of lok, then it is quite logical to posit two different abstract performative verbs, one of which after deletion leaves lók behind as a surface reflex.

Before $I$ come to my concluding remarks, there is one problem With the performative analysis that we cannot leave undiscussed. This is the question of whether overt performative sentences themselves have any illocutionary force, in other words whether there Ls an illocutionary difference between such sentences as:
(345) lie down!
(346) I order you to lie down!

To account for the first person singular PRES enclitic that accompanies the Luiseño equivalent of 'I order' in 346, my analysis constrains me to posit above it the abstract performative sentence I YOU NP DECLARE. Thus the underlying structure for 345 and 346 will differ insofar as the first has a topmost abstract clause I YOU NP COMMAND, while the second has I YOU NP DECIARE. Since the underlying structures are different, the analysis allows no other
claim but that the $11 l o c u t i o n a r y$ force in each is different. Is this justifiable? I think it is. It seemb to me that 345 and 346 do indeed differ. Whereas 345 is nothing but a command, 346 is both a command and expressly a statement. As performatives may be embedded (see 121. and 122 above), none of the performative force of 346 is lost by positing I YOU NP DECLARE above it and the analysis is therefore justified.

In the preceding paragraphs of this section $I$ have attempted to point out some of the strengths and some of the weaknesses of the performative analysis as $I$ have used it in this study. On balance I think that that the arguments in favour of it weigh more heavily than those against it, but it cannot be denied that it is an extremely powerful mechanism and at least in its present form may be worthy of some mistrust, since it can neither be proved right nor wrong.

## 5. Complex Sentences

In the following sections of this study I intend to submit three types of 'complex' sentence (see 4.6.3) to a detailed treatment, though in the course of the diacussion I shall have occasion to refer briefly to other types of construction which employ similar or related grammatical mechanisms. The three types are: (a) conditional sentences, (b) sentences containing relative clauses, and (c) sentences containing indirect speech.

### 5.1 Conditional Sentencea

In 4.5.1.3 the reader's attention was drawn to the fact that conditional sentences and one kind of indirect speech are unique in Luiseño in containing subordinate clauses which make use of finite verb forms. As we shall see below, this statement needs to be slightly modified as there are a few types of conditional sentence in which the protasis contains only non-finite verb forms. Traditional grammar has always classified conditional sentences as containing either fulfilled or unfulfilled conditions. These two classes are also present in Luiseño, and within the framework $I$ am using they can be distinguished by the presence of NON-HYP or HYP in remote structure. It will be convenient to look at the NON-HYP class of conditional sentence first.

### 5.1.1 NON-HYP Conditions

The most usual order for the two clauses in this type of sentence in Luiseño is protasis (if-clause) followed by apodosis (resultclause). The reverse order is, however, not infrequent especially
when the if-clause containg a non-finite verb form. The characteristic difference between the surface verb forms in NON-HYP conditions and in HYP conditions is that the former usually carry tense suffixes whereas the latter never do. It will be seen in the examples below that the majority of result-clauses in NON-HYP conditions are declaratives and their verbs carry FUT tense suffixes. A few have result-clauses that are imperatives or questions, and a few have verbs with PRES suffixes. The absence of other tense endings is probably just an accident of my data. The apodosis in Luiseño is commonly introduced by the sentence connector pi (usually = 'and, but') or pá? (= 'then') or both, and may sometimes take enclitics. If the apodosis precedes the if-clause (the usual case when the verb of the latter is non-finite), no connector is found. Illustrations of this general principle will be seen in the following subsections.
5.1.1.1 Conditions with tówili

The most common type of NON-HYP condition consists of (1) an ifclause introduced by tó*wili in the LaJolla dialect, or tó•vili ${ }^{26}$ in the Pauma dialect, and containing a verb with FUT suffix; and (2) an apodosis introduced by pá?, pi, pá? pí, or occasionally by no connector at all. Most apodoses of this kind are declarative and also contain a verb with FUT suffix. Consider the following:
(347) tó-wili fóm pisá-qa

and give it to me'
That tenses other than FUT can occur in the tóvili clause is shown by the following version of 350:
(351) tó•wili ?u-ki•ŋa nóli•-m pá? fóm nu-ki•k leave-REM
yáw? 刀i•nik néyk ?ó•vin
'if he left it at your house, then bring it to my house and give it to me'

The tó•wili clause may also be followed by a question, in which case the connector is pi and is accompanied by the reduced form of the interrogative enclitic - bu:

'if you go there, what will you do?'
5.1.1.2 Conditions with -(qa)nik/-(qa)nuk and -gala

The morpheme tó•wili also occurs in another type of conditional sentence which contains an if-clause whose verb is non-finite: (353) tó-wili pu-néči-viča-qala póyk nu-vindé•r-vuta-q his-pay-want-SUBORD $\underset{\text { him }}{\text { DAT }}$ my-sell-can-PRES 'if he wants to pay for it, I can sell it to him'

With the same meaning we can also have:
(354) tó•wili wunál néči-viča-q pi póyk nu-vindé•rvutaq he pay-want-PRES
which belongs to the construction type discussed in 5.1.1.1.

On the other hand tóvili can also be omitted from 353 and the conditional meaning is still preserved. In fact this is the next most common type of conditional sentence in Luiseño, although in surface structure the protasis often follows the apodosis when tó•wili í omitted, e.g.

| (355) ?ári-n-up | póy | ?óy pu-?ári-qala |
| ---: | :--- | :--- | :--- | :--- |
| kick-FUT-ENC | him | you his-kick-SUBORD |

'kick him if he kicks you'

It will be seen that the if-clause consists of (I) a verb stem, with (2) the subordinating suffix -qala, which is always accompanied by (3) a personal prefix attached to the verb stem, showing the person and number of the underlying subject of the clause. This construction must be used when the subject of the if-clause is not coreferential with the subject of the apodosis.

If both clauses have coreferential subjects, the protasis consists of a verb stem bearing just the subordinating suffix -(qa)nik/-(qa)nuk. The first form is used at Rincón, Lajolla and sometimes at Pauma, but the more usual Pauma form is - (ga)nuk. This is the only one given by Tac and the most frequent in Kroeber /Grace. The bracketed syllable -ga appears when the Aspect verb CONTINUOUS (see 4.1.2) was present in underlying structure and also when the verb to which the suffix is attached is one of perception or mental attitude. Thus it is found with the Luiseño equivalents of 'know, want, be afraid, be ashamed', etc. It seems likely that Luiseño prefers to treat the 'action' of such verbs as
not punctual but continuous, in which case there is really only one environment for the use of ma and not two as suggested above.

The following sentences exemplify conditions containing this suffix:
(356)
nu-htí?ax-vuta-q má?ma-qanik
my-go-can-PRES want-SUBORD
'I can go if I want'
(357) nó-nupu ?éxpi pé•-n pitó? pu-?á"č-i

I-ENC tomor leave-FUT now hib-animal-ACC
FUT
sá-msa-nik
buy-SUBORD
'if I buy his horse now, I' ll go tomorrow'

Sometimes - (ga)nik is used where the subjects of protasis and apodosis are semantically but not grammatically the same:
 you with us go-SUBORD your-heart be good-CONT FUT "if you go with us, you'li be glad" (lit. = your heart will be good)

We may perhaps want to ascribe the use of - (ga)nik in this sentence to the influence of English, but 359 shows that such influxonce is usually not present:
(359) nu-sínavuki pu-mí?-qala nó néči-n my-money its-be-SUBORD I pay-FUT 'if I have come money, I'll pay for it' (lit. $=$ if my money exists)

The English protasis and apodasis have the same nubject, but this has not influenced the Luiseño construction.

It is important to notice that all the sentences 355-9 are identical in surface structure with temporal constructions where the English equivalents have a clause introduced by 'while' or 'when ${ }^{1}$ :
(360) xílax-lut-up čum-wukó•?a-qala rain-going to-ENC our-arrive-SUBORD 'it's going to rain when we arrive'
(361) nó* kihátt mí?-qanik pélaxiśs nu-má?max mi-?-quß7 I young be-SUBORD dancing my-like be-REM CONT
 now-CONTRASTIVE $I$ old man just they-ACC Particle
tów-ma pum-péla-qala
look-PRES HAB their-dance-SUBORD
'when $I$ was young, I liked dancing; now that I'm old I just watch them while they are dancing'

In many cases there seems to be little difference between an ifclause and a when-clause in the English translation when the main verb is PRES or FUT. The same ambiguity, or rather lack of differentiation, occurs of course in other languages, e, $g$. in modern German wenn-clauses under identical circumstances:
(362) wenn er kommt, gehe ich nach Hause
'if, when, he comes, I'm going home'

On the other hand there are also clear-cut cases like 360 where the condition is ruled out and the construction can only be tem-
poral.
The simplest way to account for the convergence of temporal and conditional clauses at surface level is to have them dominated by different adverbial nodes in underlying structure, e.g. ADVL and ADV (see the phrase structure rules in section (CONDITION) (TIME)

3 above). Then one and the same set of transformations can be used to attach -(qa)nik or -qala to the appropriate verb stem in each case. The burden of indicating the difference in function will thus be carried entirely by the adverbial node.

In fact the convergence at surface level is far greater than
what I have written above suggests: other types of adverbial clause are also rendered in Luiseño by the -(qa)nik and -qala constructions, e.g.
(363) MANNER:

| pá? pi nó- pá-tal | póyk fíli-qanik pu-cílvi |  |  |  |
| :--- | :--- | :--- | :--- | :--- |
| then and $I$ | water-INSTR | it | pour-SUBORD | its-be bitter |

3in-ax
remove-REM
'then I removed the bitterness by pouring water over it (= the acorns)'
(from a description of how acorn mush was made)
(364) MANNER or REASON:
?ó•nu-kun pu-pú•č-i giná•li-q túkvu nó•li-qanik 28
he-ENC his-eye-ACC ruin-PRES night read-SUBORD REP
'he is ruining his eyes by reading at night'
(365) TTME or REASON:

| fó•nu-pil | néy wultú?-ya | fi-k nu-htí?a-qala |  |
| :---: | :--- | :--- | :--- |
| he-ENC | me get angry-REM | there my-go-SUBORD |  |
| REM | ACC |  | DAT |

'he got mad at me when, because, I went there'
All these can be treated in exactly the same way by making the $S$ in which -(ga)nik or gala later appear be dominated by one of the ADVL nodes of MANNER, REASON or TIME. Both -(qa)nik and -gala will be introduced by the same transformation in each case (see 375 below).

Before we consider the main transformations needed to generate NON-HYP conditional sentences, there are a few more structure types that we need to have looked at.
5.1.1.3 Conditions with té.

Conditions of this kind resemble the tó•wili conditions we examined in 5.1.1.2 in that the if-clause has a finite verb (usually FUT) but is introduced by té instead of tówili. Furthermore, both protasis and apodosis may take FUT enclitics in the Pauma dialect, though in LaJolla they are not used in the apodosis. The following sentences will illustrate these differences:

'if you kick him, he will cry'
It should be noticed that 366 looks as if it should mean something like 'maybe you will kick him and he will cry', but this is not the translation given by my informants (cf. also Hyde, 160, where
the same observation is made).

'if you drink this water you'll get sick'
(368) té•?-upku ?óm hatí?a*n pí-nupku 30 pá? nó hatí?a•n ENC you go-FIT I go~FUT FUT
'if you go, then I' ll go'
(369) té*-puku yawáywǐs 31 pá?-nupliz sá*msa-n ENC then-ENC buy-FUT
'if it's pretty, I'll buy it'

In 366 and 367 it will be seen that only the if-clause has enclitics and that these are the regular FUT ones (see 22); in 368 and 369, on the other hand, both protasis and apodosis have enclitics and these are the 'remoter' FUT ones described in 4.1 .2 (see also 22).
5.1.1.4 Conditions with neither té. nor tó-wili

There is one kind of conditional sentence which is similar to those with tee. and tó*ili but which has no special morpheme introducing the if-clause. In all my examples it has no enclitic In either clause, though this may be an accident of my data. As in the other two types of NON-HYP conditions the verbs are finite and the apodosis is introduced by pá? or pi or both:
(370) ?óm qáy qamíri-n ?u-nó•li túkvu pi fóm ?u-púč-i you not quit-FUT your-read night your-aye-ACC
qiná•1i-n
ruin-FUT
'if you don't quit reading at night, you'll ruin your eyes'
(371) ?óm póy fári-ma•n pi pó•? ča•qax-ma•n
kick-FUT he cry-FUT
CONI CONT
'if you keep kicking him, he'll keep crying'
Observe that in 371 the sense comes cloae to 'whenever you (will)
Kick him, he will cry', which is one translation given by Hyde
(160). However, Hyde's examples all lack the FUT suffix on the verb in the first clause, e.g. ?ári-ma instead of fári-masn, and these non-future forms were all rejected by my informants when the verb in the second clause was CONT FUT.

### 5.1.1.5 Generation of NON-HYP Conditione

It is evident that the clause type we examined in the last subsection is really a subtype of either the tówili or té construction. It can easily be generated from one of these by the deletion of the introductory morpheme. The queation is whether there is any motivation for choosing one construction in preference to the other. I think there is the justification of economy for postulating the tówili construction as underlying, As we saw in 5.1.1.2, tówili also occurs in if-clauses with non-finite verbs and may also be omitted from these. The simplest way to account for both is to propose an underlying tówili for each, which can optionally be deleted. If we do this for protases with non-finite Verib, it is logical to do it also for those with finite verbs.

Furthermore, we then need only one transformation to accomplish the deletion of tó mili optionally from both protasis types.

It will be helpful to see first the underlying tree for the S containing the conditional adverbial.
(372)

$S_{x}$ may immediately dominate more nodes than $N P, A D V L$ and $V$, hence the dotted lines in the top $S$. Similarly between the NP of $S_{y}$ and $S_{z}$ there will be several other $S a$ containing $T / A$ verbs. These have also been indicated by a dotted line. If we recall the analysis of $T / A$ made in 4.1.2, the transformational cycle will operate first on the lowest $S$ in the tree $\left(S_{z}\right)$, and PREDICATE RAISING will produce a configuration of $T / A$ verbs for which a $T / A$ suffix can be substituted from the lexicon. It will be at thia stage, f.e. after the lexical insertion of these suffixes, that tówili and té are introduced. If we use the symbol T/A for any T/A guffix, the transformation that inserts the protasis introducers can be written as follows:
(373) tó•wili and té. INSERTION (obligatory)
$\left[\begin{array}{lll}{\left[\begin{array}{lll}\mathrm{NP} & \mathrm{x} & \mathrm{V}+\mathrm{T} / \mathrm{A}\end{array}\right]_{\mathrm{S}}}\end{array}\right]_{\mathrm{ADVL}}$
(CONDITION)
SD: 1
$2 \quad \Longrightarrow$
SC: 1

$$
\left\{\begin{array}{l}
\text { to } \cdot w i l i \\
\text { té } \cdot
\end{array}\right\}+2
$$

If no now abbreviate the features of the lexical entry (i.e. tree configuration, etc.) of $T / A$ by $F$, then the transformation for the introduction of $-(q a) n i k$ will have the following form:
(374) -(qa)nik INSERTION


$$
\begin{aligned}
& \text { Conditions: } \text { 1. } \mathrm{NP}_{1}=\mathrm{NP}_{2} \\
& \text { 2. } \mathrm{I} \neq \mathrm{te} \cdot \\
& \text { 3. Application is } \\
& \text { optional if } \\
& Y=\text { to } w i l i
\end{aligned}
$$

Angle brackets have been used to show that if the $1 / A$ verb conT occurs in the tree configuration for the $T / A$ suffix, the syllable -qa- must be added as well as -nick. It will be observed that the second right-hand bracket has been labelled simply ADVL and not limited to conditional adverbials. This is because the same transformation can be used to generate the correct surface form for most other types of adverbial clause in Luiseño, egg. those of

MANNER, REASON, etc. I mentioned in 5.1.1.2.
The same is true of the transformation needed to insert -gala into the adverbial clause. In fact, as the structural description for this transformation is identical with that in 374, we need only to introduce the two alternatives into the structural change and restrict their use by writing two conditions.
(375) INSERTION of - (qa)nik and -ala

$$
\begin{align*}
& {\left[\begin{array}{llll}
N P_{1} & x\left[\begin{array}{lll}
Y & N P_{2} & 2 \\
& V+T / A & ]_{S}
\end{array}\right]_{A D V L} V+T / A
\end{array}\right]_{S}} \\
& {[\alpha F]} \\
& \text { SD: } \\
& \text { SC: } \\
& 1 \\
& \left\{\begin{array}{rc}
2 & \langle q a\rangle \text { oik } \\
p u+2 & \text { bala }
\end{array}\right\}  \tag{b}\\
& 4 \\
& \text { (a) }
\end{align*}
$$

Conditions: 1. Application optional if $Y=$ tó•wili
2. $Y \neq t \dot{e}$.
3. if $\mathrm{NP}_{1}=\mathrm{NP} \mathrm{C}_{2}$ only (a) applicable 4. if $\mathrm{NP}_{1} \nmid \mathrm{NP}_{2}$ only (b) applicable

In the formalism used in this transformation pu has been written as a mnemonic for the possessive prefix attached to the verb stem when -gala is present. (This mnemonic will also be used in later transformations.) Another transformation will be needed to spread the features of person and number of $\mathrm{NP}_{2}$ to pu so that, after a second lexical look-up, the appropriate cross-referring form of the prefix will be inserted.

We saw at the beginning of this subsection that tósili can be omitted from conditional sentences containing either finite or
non-finite verb forms. This can be effected by a very simple transformation:
(376) tó*wili DELETION (optional)


Here again ADVL does not need to be specified more closely as CONDITION, since tó*ili is not found outside conditional sentences.

It now remains for us to move the adverbial clause to the beginning or end of the matrix sentence. Since the choice of position makes no difference to the meaning and, both positions are equally common, we can build this choice into the transformation. It should be noticed, however, that no choice is possible if the adverbial clause is introduced by té*.
(377) EXTRAPOSITION OF ADVL


SC: $\left\{\begin{array}{lll}3 & \left(\left\{\begin{array}{ll}\text { pi }(p a ́ ?) \\ p a ́ ?(p i)\end{array}\right\}\right) & 1\end{array} 22\right\}$

(a)
(b)

Condition: (a) is obligatory if ADVL $=$ tée $+S$

Notice that this transformation is equally applicable if ADVL is not a clause but one of the few Luiseño true adverbs or a nominal form with a case ending (e.g. ?ésku-tal 'loudly', sínavu-ni on
account of the money', etc.). However, in this case the particles pi and pá? may not be used if case (a) is chosen.

The formalism used in (a) is intended to represent the fact that when ADVL is preposed, either pi or pá? intervenea, or both in either order, or neither pi nor pá?. 32

Finally there is the question of the enclitics. We saw above that whereas té. is usually followed by an enclitic, tó*wili never is. We also saw that the 'conditional clauses with neither té. nor tówili' also have no enclitics. The latter fact follows quite logically if we derive such clauses by deleting tówili from their underlying structure, as $I$ have done above. In other words, if we preclude enclitics from tótwili clauses, they will be automatically precluded from the clauses derived from them. The suffixes - (ga)nik and -qala resemble tówili in not tolerating lenclitice within their own S. Since the enclitics will be automatically generated as the cycle progresses up the tree (see 4.2.1.5), we shall need a transformation to delete them again obligatorily after tówili, - (ga)nik and -gala (and alao after a number of other particles and verbal suffixes) in the protasis and optionally after pi or pá? in the apodosis. The details of these transformations need not, however, concern us here.

### 5.1.2 HYP Conditions

The second major class of conditional sentences consists of those which have the $T / A$ verb HYP in their underlying structure, $i$. e. those which contain what are traditionally called 'unfulfilled conditions'. Here Luiseño has fewer constructions at its disposal than for ivON-HYP conditions, but there are pronounced diffferences between the declarative and interrogative structures. 5.1.2.1 Conditions with tó*wili, to and haní?

Conditions of this kind have a finite verb with a zero suffix for HYP MOM and -ma for HYP CONT (see 16). The morpheme tó*wili again figures as the introducer of the protasis, but its place can be taken by bani? or to with no change of meaning. The latter are always accompanied by the HYP enclitics (see 23), whereas tówili usually occurs without. In my data the apodosis is always introduce by pi, pá?, or a combination of both after tóbili and hanif, but $I$ collected one case with no connector after too. Note that HYP conditional sentences with protasis introduces are not discussed in Kroeber/Grace, Tace, and Hyde. In the following example $I$ have for clarity's sake included the zero Hyp suffix.
(378) tó*wili čá"m póyk ?amúlu yáx-ø pá? pi qáy
We him first tell-HYP not ACC
čám-i wultú?ax- $\varnothing$
we-ACC get angry-HYP
'if we $\left\{\begin{array}{l}\text { told } \\ \text { had told }\end{array}\right\}$ him first he would $\left\{\begin{array}{l}\text { get } \\ \text { have got }\end{array}\right\}$ mad at us'


It will be observed that with the exception of 380 and 382 the time reference of the verbs in these sentences is either present or past, i.e. in isolation they have two English translations. In fact the context will usually make clear which time reference is intended, as in 380 . In 382 present reference is ruled out by the form of the enclitic. The use of these past HYP enclitics seems to be rare. I was unable to elicit any example from my LaJolla informant.

### 5.1.2.2 Conditions Juat With HYP Enclitics

More common than the RYP conditional constructions just described are those which resemble them in every other way structurally except that the protasis introducer is absent. Again the protasis always contains the HYP MOM zero suffix or the HYP CONT suffix ma- $\varnothing$, and the apodosis is introduced by pi, pá?, or a combination of both. However, in this type of construction I have collected no examples without one or both of these connectors.


'if they $\left\{\begin{array}{l}\text { come } \\ \text { had come }\end{array}\right\}$ they would $\left\{\begin{array}{l}\text { know } \\ \text { have known }\end{array}\right\}$ '
(385) čá•m-xuku póy tí•wi-ø pu-ná*la-qala
we \(\left[\begin{array}{l}ENC <br>
+H Y P <br>
+I <br>

+P L\end{array}\right]_{LaJolla} \quad\)| him see-HYP |
| :---: |
| ACC |

pá? pi pó•? sigúru hamó•yax-ma-ø
he surely be ashamed-CONT-HYP
'if we $\left\{\begin{array}{l}\text { were to see } \\ \text { had seen }\end{array}\right\}$ him when he was scared, he would
surely $\left\{\begin{array}{l}\text { be } \\ \text { have been }\end{array}\right\}$ ashamed'
(386) ?umóm-xumpu póyk $2 a m i ́ \cdot l u$ yáx- $\varnothing$ pá? pi ló•vi-ma-ф
you
PL \(\left[\begin{array}{l}ENC <br>
+H Y P <br>
+I I <br>

+P L\end{array}\right]_{Parma}\)| him | first | tell-HYP |
| :--- | :--- | :--- |

'if you $\left\{\begin{array}{l}\text { told } \\ \text { had told }\end{array}\right\}$ him first, it would $\left\{\begin{array}{l}\text { be } \\ \text { have been }\end{array}\right\}$ all right'
(387) nó-xunò?pu póy til twi- $\varnothing$ pá?-xunò?pu póyk wá•?iš
$\left[\begin{array}{l}\mathrm{ENC} \\ +\mathrm{HYP} \\ +\mathrm{PST} \\ +\mathrm{I} \\ -\mathrm{PL}\end{array}\right]_{\text {Parma }}$
him meat DAT
?ó• vi- $\varnothing$
give-HYP
'if I had seen him I would have given him the meat'
Notice that, as in the examples in 5.1.2.1, an enclitic may accompang the connector of the apodosis in the Parma dialect, whereas

In the LaJolla dialect the enclities are invariably absent. Again, when no context is given, the time reference can be either present or past, except in 387.34

As we shall see below, very few adjustments to the rules
presented in 5.1.1.5 are needed to generate the above sentences and those in 5.1.2.1. Before we consider theae adjustmenta, however, it is necessary for us to examine one other type of HYP conditional sentence.
5.1.2.3 Conditional Questions Again

In 4.2.2.1.7 We looked at the paradigm of conditional HYP enclitics and saw two examples of their use, 86 and 87. In 4.4.8 I dealt with the generation of the enclitics in the first disjunct and of té in the second disjunct of an interrogative apodosis. It remains for me now to give a few more examples and to examine more closely the characteristics of the protasis. Consider the following:
(388) ?óm-xukuna 2ayáa-li-ø pu-má-kina-ki tó-vili wunál

ENC repair-HYP his-car-ALIEN if he +H YP
$\dagger$ INP
+II
$-\mathrm{PL}$
Pauma
Tóyk pu-néči-qala
you his-pay-SUBORD DAT
'would you have mended his car if he'd paid you?'

'would I have won a lot of money if Juan had been there?'

It will be seen that in these two examples the apodosis is structurally. identical with that in the declarative sentences described in 5.1.1.2: it may be introduced by tówili as in 388 or there may be no introducer as in 389. Similarly, the non-finite verb form carries the mik suffix when the subject of both protasis and apodosis has the same reference, or the -gala suffix with a matching personal prefix when the two subjects have different reference.

I am uncertain whether the protasis in an interrogative conditional sentence must always contain a non-finite verb form. This is certainly the case in all the examples I elicited from my two informants, but it is conceivable that enclitics ${ }^{35}$ and finite verb forms may also be used at times. It should also be noted that I have no examples of an if-clause introduced by haní? or tó in such sentences.
5.1.2.4 Generation of HYP Conditions

In the two foregoing subsections we have seen that the most marked differences between $H Y P$ and NON-HYP conditional sentences are (1) the use of different sets of enclitics for each type, (2) the use of different protasis introducers (té. for NON-HYP and tó•, hani?
for HYP), and (3) different conditions on the use of finite and non-finite forms in the protasis. On the other hand both types have in common (l) that some if-clauses may be introduced by tówili, and (2) that some have no introducer at all although the verb is finite.

Let us deal first with the differences. The use of different sets of enclitics will not necessitate any change in the transformations proposed in 5.1.1.5 for NON-HYP conditions. I suggeated there that the enclitics will already have been lexically inserted before the morphemes tówili and té are introduced by 373. This will of course also be true of HYP conditions; i.e. when HYP occurs in the $T / A$ superstructure of the protasis and apodosis, the appropriate enclitics and the appropriate forms of the verb will automatically be generated by the transformational cycle as outlined in 4.1.2, before tó-wili, tó* or haní? are inserted. SimiTarly, the difference between the enclitics used in interrogative and non-interrogative apodoses will also be previously taken care of by the performative verb at the top of the underlying tree.

For the insertion of the different apodosis introducers, however, 373 will need to be modified so as to take into account whether NON-HYP or HYP enclitics are present. This can be accompiished as follows:
(390) INSERTION OF APODOSIS INPRODUCERS (Obligatory)
$\left[\begin{array}{lll}{\left[\begin{array}{lll}\mathrm{NP} & \mathrm{X} & \mathrm{v}+\left\{\begin{array}{l}\mathrm{y} \\ \mathrm{z}\end{array}\right\}_{1}\end{array} \quad\right]_{S}} & ]_{\mathrm{ADVL}}\end{array}\right.$
(CONDITION)
SD: 1
SC: 1

$$
\left\{\begin{array}{l}
\left\{\begin{array}{l}
\text { tó*wili } \\
\text { té: }
\end{array}\right. \\
\left\{\begin{array}{l}
\text { tó } \cdot w i l i \\
\text { tó } \\
\text { haní? }
\end{array}\right\}
\end{array}\right\}_{1}^{2}
$$

where $Y=$ any NON-HYP enclitic, and $Z=$ any HYP enclitic, and the subscript 1 on two sets of parentheses allows the top member of the first set to go only with the top member of the second, and the bottom member of the first set to go only with the bottom member of the second.

The reader will notice that 390 also allows the insertion of tó or hani? as the introducer of the if-clause in an interrogative conditional. I mentioned that my data do not contain examples of structures of this type, though they may exist. For simplicity I have here assumed that they are possible. Should this prove to be wrong, 390 would have to be reatrictedrby a condition oxcluding them when $Z$ is the interrogative HYP suffix.

The third difference between NON-HYP and HYP conditions, viz, in the use of finite or non-finite verb forms, can easily be accommodated by extending the conditions on 375, INSERTION OF (ga)nik and -qala. If it is true that HYp protases in declarative conditions always contain finite verbs, whereas in interrogative conditions they always contain non-finite verbs, we must add the following two conditions on the transformation:

## (391) Further Conditions on 375

5. T/A $\neq$ declarative HYP suffix
6. Application obligatory if $T / A=\begin{array}{r}\text { interrogative } \\ \text { HYP suffix }\end{array}$

All that now remains is to see whether the other two transformations in 5.1 .1 .5 will also account for the resemblances between NON-HYP and HYP conditional sentences. By analogy with NON-HYP structures, we can propose that $H Y P$ protases without clause introm ducers are also produced by the deletion of an underlying tóvili. As formulated in 376 , tó•wili DELETION satisfies the structural description of both NON-HYP and HYP protases and thus produces the required effect. Similarly, EXTRAPOSITION OF ADVERBIAL as formulated in 377 also produces the correct results for both types of structure, providing we make the total omission of_pi, pá? combinations in SC(a) inadmissible after HYP protases without clause introducers.

### 5.2 Relative Clauses

The most intricate of Luiseño embedded structures is the relative clause. Characteristically it contains only non-finite verb. forms which behave like adjectival modifications of the head noun and which usually can be inflected for number and case depending on the function of the head noun in the matrix sentence. Luiseño relative constructions are always restrictive; $I$ have found no evidence at all for the existence of the non-restrictive kind. Altogether the language has thirteen non-finite relative verb forms at its disposal, if we count the two specifically animate forms 'V+kat' and 'V+wut', about whose role as true relative structures $I$ have some doubt (see 5.2.6 and 5.2.7). The factors determining the shape of the relative forms are: (a) whether the head noun (HN) is animate or inanimate, (b) whether the head noun has the same reference as the subject noun (SN) of the relative $S$ Or as some noun other than the subject noun, (c) what T/A higher verbs are in the underlying tree configuration dominating the verb in the relative $S$ (see 5.2 .1 below for a more detailed account of this the most important factor). So that the reader can quickly obtain a first orientation through this welter of forms, 1 shall first present a chart showing the interaction of the three determining factors, and then in the subsequent sections discuss and Hllustrate each form and provide a transformation for its generation. It should be noted that there are more than thirteen entries in the chart since some of the forms overlap.

| (392) | HN $\mathrm{SN}^{\text {d }}$ |  | HN $\neq$ SN |
| :---: | :---: | :---: | :---: |
|  | ANIMATE | INANIMATE | ANIMATE ${ }^{\text {a }}$ INANIMATE |
| PRES HAB | V + kat |  | $\left\{\begin{array}{c}p u+v \\ p u+v+1 a\end{array}\right\}$ |
| PRES, P PR | $v+$ qat |  | pu $+\mathrm{V}+\mathrm{qat}$ |
| BEM CONT |  |  | $\left\{\begin{array}{r\|r} \\ p u+v+q a t \\ p u+v+q a l\end{array}\right\}$ |
| REM | $V+$ mukus |  | $\left\{\begin{array}{c}p u+V+v \grave{~} \\ p u+V\end{array}\right\}$ |
| FUT CONT | $?\left\{\begin{array}{c}v+l u t \\ p u+v+q a l+p i\end{array}\right\}$ |  | $? \mathrm{pu}+\mathrm{v}+\mathrm{qal}+\mathrm{pi}$ |
| FUT | $\left\{\begin{array}{l}v+1 u t \\ p u+v+p i\end{array}\right\}$ |  | $\mathrm{pu}+\mathrm{V}+\mathrm{pi}$ |
| 'likes to' | $\mathrm{V}+$ wut |  |  |

With the exception of the two specifically animate forms 'V+kat' and 'Vtwut', which I shall treat together later, the relatives will be analysed in the order in which they are seen in 392.

The usual word order is for the relative to follow immediately after the noun it qualifies; but as a considerable amount of scrambling of the elements in a Luiseño sentence is possible, other word orders are also found, e.g. preceding the head noun, following the head noun but separated from it by the verb of the matrix sentence, etc. Examples of these varying orders will be seen in the illustrations given below.
5.2.1 pu + v

One of the aimplest relatives as far as structure is concerned consists of the bare verb stem (i.e. root $f$ thematic increment)
with a possessive prefix. For simplicity of reference $I$ shall allow pua (third person aingular) to stand for any member of the paradigm of personal prefixes, and name each relative construction by means of a structural formula. Hence the one we are here considering can be referred to as ${ }^{1} p u V^{\prime}$. Its most common usage is in relative constructions which make a general statement about the head noun, i.e. whose remote structure contains the aspect verb HAB (see $393 a$ ) and for whose $T / A$ tree configuration the suffix -ma has been inserted from the lexicon (see 393b).



In the above diagrams the dotted lines are used to indicate the parts of the tree that have been omitted. Henceforth, in this subsection and in those that follow, I ahall take it that PRED RSG has applied in each case before the relativizing transformations can operate, i.e. that trees similar to 393 a have been converted to trees like 393b. In accordance with the cyclical principle, the relativization transformations will not need to take NP ${ }_{1}$, the head noun, into account until the $S$ governing NP ${ }_{j}$ is reached, by
which time PRED RSG will have operated on all the Ss below $\mathrm{NP}_{j}{ }^{\text {. }}$ I shall asaume that lexical insertion will. apply as soon as a configuration is generated which matches one in the lexicon. Hence the structural description of the relativizing transformations will nead to refer only to the $T / A$ suffix and not to the tree configuration for which it was inserted. It will also be noted that I have adopted the $\mathrm{NP}_{\mathrm{S}}^{\mathrm{NP}}$ analysis of relative clauses, which is adequate for our present purposes but which is not the only possible approach (see Stockwell 1968:445-6).

In the relative construction we are here considering, the head noun mast have different reference from that of the subject noun in the relative clause, but the same reference as some other noun (e.g. $\mathrm{NP}_{3}$ ) in that clause. This and the other characteristics mentioned above are illustrated in the following sentences.

'all the food you prepare is very delicious'
$\begin{array}{lllll}\text { (395) có•?un-um } & \text { lí•vri-m } & \text { (pumóm) } & \text { pumá•wi(-m) pópliv-um } \\ \text { all-PL } & \text { book-PL } & \text { DEF } & \text { his-write(-PL) good-PL }\end{array}$
'all the books he writes are good'
(396) čó?un-um Tatá•x-um (pumóm) nu-?ó?na-m Tóma•n all-PL person-PL $\begin{aligned} & \text { DEF my-know-PL be absent-PRES } \\ & \text { PL }\end{aligned}$
'all the people I know are not here'

In 394-6 the head noun is in subject position in the matrix sentence and is accompanied by a DETERMINER (čó-?un). Optionally the
deictic pó? ? which is declined differently from the pronoun pó? 'he,she,it, ${ }^{36}$ can be used as a DEFINITIZER, i.e. if the definiteness of the head noun neads to be stressed. It can, however, equally well be omitted. In cases like the above where a DET is present, the DEF can appear immediately before or immediately after the head noun, i.e. in addition to the order shown
 pumóm ?atá•xum are equally acceptable and have just the same meaning. In most of the examples that follow it will be seen that the DEF usually precedes the head noun, especially when no DET is used. This analysis does not accord with Hyde (169) where the morpheme is taken to be a clause marker and always made to stand at the beginning of the relative clause.

Let us now turn our attention to the relativized verb. In the construction under consideration, the bare verb stem carries a personal prefix reflecting the person and number of the subject NP in the underlying relative $S$. If we steal a glance at the other Cupan languages, we shall see that in Cahuilla and Cupeño the verbe regularly carry subject prefixes, and we might at first be tempted to claim that we have the same phenomenon in Luiseño but restricted to embedded sentences. However, a closer examination of the Luiseño verb forms will show quite clearly that they are nominalizations, in which case it is only logical to consider the person prefixes as possessive, the function they have everywhere else in Luiseño grammar. It is for this reason that $I$ am glossing them as possessives in the exemplary sentences. Evidence
that the verb forms are nominal (I am using this term to cover both noun and adjective) is given by the fact that they can be inflected for both number and case. It will be seen from the examples below that the rules for number agreement differ between Lajolla and Palma. 37 In both dialects when the head noun is plusrale and animate, the relativized verb also carries the plural suffix as in 396 nu-?ó?na-m; however, when the head noun is plural but inanimate, the relativized verb is regularly inflected for plural by my Lajolla informant but very rarely by my Pauma inform mant, hence the parenthesis in 395. We shall see further examples of agreement discrepancies between the dialects in ensuing seclions.

In my treatment of relative constructions $I$ shall not give any rules for case and number agreement, as a detailed discussion of this area of Luiseño grammar would take me far beyond the limeits I have set myself. However, a few general remarks about case and number in these structures are in place. In the examples 394-6 it is not obvious that the relative nominals are inflected, as there is no special marking for NOMINATIVE in Luiseño. When the head noun has a function other than as subject in the matrix $S$, it will usually carry an overt case ending corresponding to
 that function, and the same case ending is then found on the relativized form form, egg.
 'yesterday I saw the (person) I'm afraid of'


'they found the money that the boy left behind'

In 400-2 it is noteworthy that the $T / A$ of the underlying verb in the relative $S$ cannot be PRES HAB as in 394-9. In each case the 'action' of the underlying relative verb precedes that of the matrix verb. In such clauses as this Luiseño normally uses the specifically 'past' construction 'putvt vo'' (see 5.2.4.1), and in fact this is a perfectly acceptable alternative in 400-2.

It is tempting to think that the 'pu+V' construction may perhaps not be marked for Tense/Aspect at all: all the relative forms In all the sentences above are similar to the English construction 'of his V-ing'. For example, 394 might be translated by 'all the food of your making ...', 399 by ${ }^{\text {ball the people of my knowing... ' }, ~}$ 400 by 'something of his stealing ...', etc. Although some of these translations may sound odd, they capture the same meaning as the Luiseño without any explicit time reference. We may note further that this interpretation would cover annuber of other uses of 'putV'. 40 For example, the construction is used often where English has a passive and a past tense, though the Luiseño enclitic when used indicates PRES time:

| (403) | 3ónu-p | nu-tá ? $\mathrm{aj}^{\text {g }}$ | néyk | pu-?ó•vi |
| :---: | :---: | :---: | :---: | :---: |
|  | this-ENC | my-uncle | me | his-give |
|  | PRES |  | DAT |  |

'this was given to me by my uncle'
(this is of my uncle's giving)
(404) co'?un fivi fata'xum pum-purána
all this people their-plant
'all this was planted by people'
(.... is of people's planting)
Although this 'tenseless' approach seems attractive, never-
theless within the framework I am using I can see no alternative
to positing $T / A$ higher verbs as underlying these constructions.
In the first place my analysis requires each relative nominal to
be dominated by $S, ~ a n d ~ t h e ~ g r a m m a r ~ a s ~ n o w ~ s e t ~ u p ~ r e q u i r e s ~ a l s o ~ a ~$
(405) GENERATION OF RELATIVE pu \& V


Condition: 1. $\mathrm{NP}_{1}=\mathrm{NP}_{2}$
2. $X$ must contain

NP

Condition 2 prevents $\mathrm{NP}_{2}$ from being the subject NP of the relative S, which will always be generated as the first NP in each sentence. $X$ or $Y$ may of course contain more than one NP. This notation is therefore intended to represent $N_{2}$ as any $N P$ other than the subject of the relative $S$.
5.2.2 pu + V + 1a

There is another relative similar in meaning and construction to 'putV' but carrying the suffix -la. In one of its uses it seems to be identical with 'putV' in indicating an action which is habitually or continually performed. Here again the head noun in the matrix sentence must have the same reference as some noun in the relative $S$ other than the subject. As we can see from 408 below where the case suffix is overt, 'pu+V+la' is usually inflected for the same case as that of the head noun it modifies. I have no evidence in my data, however, to show that it may also agree in number.



One of these is particularly interesting. In suitable environments its meaning may be narrowed down to the place where the action of the verb is performed, eeg.
(410) nu-náf pu-hé•lax-la pilék wá•m
my-father his-sing-REL very far
'where my father sings is a long way off'
( 4il) nu-ná? pu-hé•lax-la-na pilék síta•t his-bing-REL-LOC very cold
'(at) where my father sings it's very cold'

this-ENC here his-lose-REL his-hat
'this is where Juan always loses his hat'
(413) ?ivi-p x ${ }^{\text {Wad }}$ in pu-hé•yi-la his-dig-REL
'this is where Juan always digs'

No doubt the deictic adverb is preferred because sentences like 413 are ambiguous without it. The same construction is found in equative sentences of this type indicating the purpose for which an object is used (414), and it is only a short step further for 'pu+V+la' to stand for this object itself (415):
(414) wunál-up kulá•wut ?é•xil pu-hé•yi-la
that-ENC stick earth its-dig-REL ACC
'that stick is for digging the ground'
 woman her-sweep very bad
'that oman's broom is very bad'

Hence without the deictic adverb sentence 413 could also mean 'this is Juan's digging implement'.

A little consideration will show that all but the first use of 'putVtla' described above involve considerable problems of generation within the present framework. As I am only concerned with relatives, I shall not consider further the constructions seen in 414 and 415 since they seem to me to be only distantly related to relatives. We can, however, take a second look at the 'general' "putV+la' which appears to be synonymous with 'put' and at the "where' kind of 'pu+V+la'.

The first of these, if it really is a mere alternative to 'put', can be generated by amending 405 to 416:
(416) GENERATION OF RELATIVE pu \&V+ $\varnothing$ AND pu+V+la

$$
\left.W \quad \mathrm{NP}_{1}\left[\begin{array}{llll}
\mathrm{X} & \mathrm{NP}_{2} \quad \mathrm{Y} & V+\{-\operatorname{ma} \\
-\mathrm{ax}
\end{array}\right\}_{1}\right]_{\mathrm{S}} \quad \mathrm{Z}
$$



Condition: 1. $\mathrm{NP}_{1}=\mathrm{NP}_{2}$
2. $X$ must contain NP

Since a real contrast between the absence of any suffix and the presence of a suffix ( $-1 a$ ) becomes obvious when tputv: and 'pu+V+la' are treated as alternative constructions, I have posited a zero suffix in 416 and amended 'puts' to 'pu+V+ø'.

```
For the generation of the 'where' kind of 'putVtla', the main problem is the reatriction of the meaning to location. One solution which immediately springs to mind is to consider the construction as a 'generai' 'pu\&V+la' modifying the noun 'place', e.g. 'the place at which my father sings'. There is, however, little support for this interpretation from the language itself. First, there are very few words for abstractions in Luiseño, and a word for 'place' is entirely absent. Maybe one could posit an abstract PLACE here, in the same sense of 'abstract' as was used in connection with the performative and higher verbs. Nevertheless, even supposing this were acceptable, one would expect "pufV+la" to be always in the locative case (the PLACE at which...) and in 410,412 and 413 it is clearly not Another alternative Which seems more attractive is to consider the construction as something like a gerund, i.e. not as a relative at all. More data are required before a decision can be made, however, and \(I\) will therefore not speculate any further.
```


## 5.2 .3 V + qat

When (a) the head noun is modified by an underlying $S$ that contains a verb with the PRES suffix -qa, and (b) the subject NP of this $S$ is coreferential. with the head noun, i.e. when we have a tree configuration of the following kind (417)


Where $\mathrm{NP}_{1}=\mathrm{NP}_{2}$, Luiseño deletes $\mathrm{NP}_{2}$ and replaces gqa by -gat. As with the other relative constructions described above, 'V+qat' usually carries the same case and number suffix as $\mathrm{NP}_{1}$; or, more accurately, when -gat has been introduced, the case of $N P_{j}$ (determined by its function in the sentence) is usually spread to both $\mathrm{NP}_{2}$ and ${ }^{\prime} \mathrm{V}+q$ at'.
(418) wunál-up ya?ás híš qéwi-qat $\quad$ atá•x-um pómik that-FNC man sth shout-REL person-PL them ACC PRES DAT
nu-pé•t
my-younger brother
'that man who is announcing something to the people is my younger brother'
(419) Taxím-sum wuná•l-um nánitmal-um John pu-7és who that-PL girl-PL with him PL
món-qat-um
come-REL- PL
PRES
'who are those girls coming with John?'
(420) ?iví $\mathrm{k}^{W} i$ i.la móna-qat ?u-k"́a•n 42
this acorn pile up-REL for you
'this pile of acorns is for you'
( $=$ these acorns which are piling up ...)

wá•qi-qat-um-i
sweep-REL -PL-ACC
PRES
'I know those people who are sweeping the house'
Sometimes the relative 'Vtqat' has the same time reference as the PAST PRESENT -qat, e.g.
(422) pó? y yaiás néy núli-qat ya?áni-q

DEF man $\begin{array}{ll}\text { me } \\ \text { ACC }\end{array} \begin{array}{r}\text { push-REL } \\ P \mathrm{PR}\end{array}$ run away-PRES
'the man who (just) pushed me has run away'
In 4.1.3.1 (6) and in Footnote 3 I have pointed out that I am unable to find any generalizations covering both of these -qat forms, since the relative 'Vłqat' can also have PRES tense reference. I shall therefore treat them as separate, despite the identity of shape, and consider relative gat to be substituted for both PRES -qa and $P$ PR gat. In fact the situation is even more complicated than this. When the head noun is inanimate, the time reference of 'Vtqat' may be extended to REM CONT (see 16), and probably to other past tenses though I have no data for these. The following two sentences illustrate this usage with inanimate nouns:

| (423) | $\begin{gathered} \text { wuná• lum-mil } \\ \text { they-ENC } \\ \text { REM } \end{gathered}$ | $\begin{aligned} & \text { tó vaøal } \\ & \text { oak } \end{aligned}$ | $\begin{aligned} & \text { waní- -ŋa } \\ & \text { river-LOC } \end{aligned}$ | néskin <br> near | $\begin{aligned} & \text { fér-qat }(-i) \\ & \text { grow-REL (-ACC) } \\ & \text { REM } \\ & \text { CONT } \end{aligned}$ |
| :---: | :---: | :---: | :---: | :---: | :---: |

čóx-ax
fell-REM
'they cut down the oak that was growing by the river'


The transformation necessary for generating this relative can now be written:
(426) GENERATION OF RELATIVE Vtqat


$$
\text { Condition: } N P_{1}=N P_{2}
$$

I have again taken the angle brackets from transformational phonlogy to indicate that relative gat can be substituted for $=$ que
only when the head noun is inanimate. On the other hand, the head noun can be either inanimate or animate when relative mat is substituted for the tense suffixes -qa or -gat. I think I am justified in writing the rule this way, since this shows clearly the relatedness of these three uses of relative -gat.

There is one final observation to make before we leave this construction. Sentence 423 illustrates that case spreading is optional, not obligatory, when the head noun is inanimate. Both versions of 423 , i.e. with and without the ACC suffix $-\mathbf{i}$, were |volunteered by my Lajolla Informant and pronounced to be equally Grammatical. This usage accords with that of my Pauma informant, who gave the same information. We shall see that the optional use of the ACC suffix on a relative nominal qualifying an inanimate noun is not limited to 'Vtqat'. Where the ACC was actually used (as in 424), I shall not place it in parentheses; parentheses will be used, however, when both alternatives were given,

Unfortunately I have no data to show what happens when a case other than ACC is required on a head noun. This awaits further reaearch.
15.2.3.1 pu $+\mathrm{V}+\mathrm{qat}$

Exactly parallel to relative 'Vqqat' is another construction differing only in that it carries a prefix which picks up the number and person of the subject of the underlying clause when this has different reference from that of the head noun. In other words, underlying 'pu+V+qat' is the same tree as 425 ; but in this case $\mathrm{NP}_{1}$ does not equal $\mathrm{NP}_{2}$ but some other NP (e.g. NP $)_{3}$.


Sentences 429 and 432 show 'pu\&V+qat' modifying the object NP of the matrix sentence, and therefore carrying the ACC suffix $-i$ (see also 433). The case relations in 429 are more complicated and will be taken up in 5.2.8.

Just like 'Vtqat' this relative construction may also be used to refer to REM CONT time when the head noun is inanimate:
(433) nó•-n waxá•m hatitin-nik fó•num-um-i yúm?pis-m-i I-ENC yest. go-SUBORD that-PL-ACC hat-PL-ACC
?u-ló? xa-qat-m-i qáy tifew-ax
your-make-REL-PL-ACC not see-REM
REM
CONT
'when I went yesterday, I didn't see those hats you were making'

For the generation of 'pu+Vłqat' we need the following transformation, which contains the same formalism as 426:
(434) GENERATION OF pu+V+qat


$$
\text { Condition: 1. } \mathrm{NP}_{1}=\mathrm{NP}_{2}
$$

2. $X$ must contain NP

### 5.2.4 $\mathrm{V}+(\mathrm{gal}+$ ) mukus

When the verb in the underlying $S$ bears the REM $T / A$ suffix - ?ax and the head noun has the same reference as some noun other than
the subject of the relative $s$, we have the correct underlying structure for the generation of ${ }^{\prime} V+m u k u{ }^{\prime}$ '. Certain aspects of the phonology of -mukur are discussed in Davis (forthcoming). Here it needs to be added that alongside this form (the only one used at LaJolla) my Pauma informant equally often employed -muk ${ }^{W}{ }^{*}$; the Rincón version given in Hyde (169) is mok ${ }^{W}$ is, the form also quoted in the Sparkman materials in the Bancroft Library, UC Berkeley.

Occasionally the head noun which 'Vtmukus' modifies is inanimate, as in the following two sentences:
(435) wunál sá•ku waxám pófax-mukǔs pilék hafáhfíg that sack yest. burst-REL very threadbare REM
mí• ? - qué
be-REM CONT
'that sack that burst yesterday was very threadbare'
(436) pó•? wilá•fal néskin waní-na waxám hulúqax-mukǔ̌ DEF live-oak near river-LOC yest. fall-REL REM
fúnyax čó: ?un Tapí:sa mí- ?-quó
inside all rotten be-REM CONT
'that live-oak that fell by the river yesterday was all rotten inside'

Most often, however, the head noun ie inanimate:
$\begin{array}{cccccc}\text { (437) pó? ya?ás néyk ?ó*vi-mukus tównavi足 tómavis } \\ \text { DEF } & \text { man me give-REL } & \text { basket } & \text { blind }\end{array}$ m1- ?-qus
be-REM CONT
'the man who gave te the basket was blind'

As with the other relatives we have seen so far, 'Vtmukus' usually carries the same case endings as the noun it modifies.
(438) wuná•lum-kunum puné-yi ramáyamal-i sínaval
they-BNC DEF-ACC boy-ACC money
REP
tulówi-mukuči yé•xi-wun
find-REL-ACC boast about-PRES
REM PL
'they are bragging about the boy who found the money'

In all three dialects for which I have data (LaJolla, Rincón and Pauma), "V+muku"' also agrees in number with the head noun, as we see in the following sentence:

| (439) | ya?ás-kun | ti-w-?yax | هúfıal-m-i | wi*wis |
| :---: | :---: | :---: | :---: | :---: |
|  | man-ENC | see-R.IM | woman-PL-ACC | acorn |
|  | REP |  |  | mush |

1uví?i-mukus-m-i
make-REL-PI-ACC
REM
'the man aaw the women who made the acorn muah'

This last sentence was collected from the Pauma informant. Occa-  sionally he produced similar sentences where the relative nominals agree in number but not in case.


Here we should have expected the ACC mórnamuk' usmi. For the following sentence, both the form showing case agreement and the form lacking it were given as synonymous and grammatical:
(441) Tóm-to Tó?na-q puné--yi nawf́tmal-i néy
you-ENC
INT
xéči-mukứ waxá•m (OR: xéči-mukuč-i waxá•m)
hit-REL
REM yesterday $\underset{\text { REM }}{\text { REL-ACC }}$
'do you know the girl who hit me yesterday?'

In the speech of my LaJolla informant and in Hyde (169 et seq.), $V+(q a l+$ ) mukus' always takes $A C C$ endings when the noun it modifies Is the object of the matrix verb.

For cases other than ACC my data contain only sentences where the head noun is animate. As explained in 4.4.4.2, in all the oblique cases other than $A C C$, animate nouns remain uninflected and are followed by the pronoun por? 'he, she,it' inflected for the appropriate grammatical case. The relative construction usually stands immediately after the head noun and before pó? like any other adjectival expression. In 442 pu-?és is what Kroeber/Grace call the COMITATIVE case of pó??:

pá-?-qa1 ${ }^{45}$
drink-SUBORD
'I saw him drinking with a Mexican who had been gambling'

In addition to 'Vtmukus' there is a relative structure 'Vtqal+mukus'. Whereas the verb underlying the former carries the REM suffix - -2ax, that underlying 'V+qal+mukus' bears the REM CONT suffix -quef. This new relative nominal partially overlaps with 'Vfqat'; but whilst the latter always modifies an inanimate noun when it has REM reference, 'Vtqal+mukus' may modify both animate and inanimate nouns:
(443) pó•? yafás waxá•m ?ivá? có? ?un timét hé•yi-qal-mukus DEF man yest. here all day dig-REL REM CONT
futá•vit mí?-qud
Mexican be-REM CONT
'the man who was digging here all day yesterday was a Mexican'
(444) punéy-kunum tó•vafal waní-ya néskin fé?-qal-mukuč-i DEF -ENC
ACC
REP
(OR: Aér-qat(-i) ) cór-ax
REL -ACC fell-REM
REM
CONT
'they cut down the white oak that was growing by the river' The generation of 'V+qaltmukus' can be achieved by the following transformation:
(445) GENERATION OF Vt (quit) makuta

$$
\begin{aligned}
& X \quad N P_{1}\left[N_{2} \quad Y \quad V+\left\{\begin{array}{l}
- \text {-max } \\
-q u d
\end{array}\right\}_{1}\right]_{S} Z
\end{aligned}
$$

$$
\begin{aligned}
& \text { Condition: } \mathrm{NP}_{1}=\mathrm{NP}_{2}
\end{aligned}
$$

As in 405 - ?ax in the structural description of 445 is intended as the first lexical insertion to replace the higher verb tree configuration which $I$ have called REM. In a non-embedded $S$, of course, it would later be replaced by one of the various morphologically conditioned allomorphs of REM which were discussed in 4.1.3.1 (7-9).
5.2.4.1 put v $+(\mathrm{gal}$ t) vo

Whereas 'Vtmukus' is used when the head noun is coreferential with the subject $N P$ of the underlying relative $S$, another construction, viz. 'putV+vo', 46 is required when the head noun has the same reference as some NP other than the subject in the underlying $S$; ie., in the following tree, $\mathrm{NP}_{1}$ must not equal $\mathrm{NP}_{2}$ but another $N P\left(\mathrm{e} . \mathrm{g} \cdot \mathrm{NP}_{3}\right)$ :
(446)


In place of REM -?ax, the underlying relative $S$ may have REM CONT -que. Here, under the same NP identity conditions as for the generation of 'pu+V+vo', the suffix -gal- must be genesated between the verb stem and the final -vo, thus producing 'putV+qal+vo'. This relationship is exactly parallel to that we saw between 'Vtmukus' and 'Vtqaltmukus' in 5.2.4.

The following sentences show how these two new constructions are used:
(447) pó•?-up kí•ča nu-sá•msa-vò wám? yá•wa-q

DEF-ENG house my-buy-REL already be absent-PRES
'the house I bought is no longer there'
(448) nawítmal-up waxám nu-qáni-vó pilék yawáywíg girl-ENC gest. my-meet-REL very pretty
'tine girl I met yesterday is very pretty'
(449) hiŋémal-pil pumóti-qal-vò póminik pá•qúa boy-ENC his-hit-REL very much cry-REM CONT REM CONT REM CONT
'the boy he was hitting was crying very hard'

When the head noun is given the plural suffix -um, the rules of number agreement seem to differ between the dialects. In all such cases in Hyde and in the speech of my Pauma informant, the relative is inflected for case where necessary but uninflected for number. In the speech of my LaJolla informant, on the other hand, it is usually inflected for both number and case. This can be seen from the following examples.

```
(450) a. Hyde (175, rewritten):
                ya?áycum pumóm waxá•m ?u-ti`wi-vò cuišpómkatum
                men DEF yest. your-see-REL liars
                        PL REM
    b. Pauma:
                            pumóm yáyčum waxá·m ?u-ti`wi-vò čuspómkatum
    c. LaJolla:
    pumóm yá·yičum waxám ?u-tí`wi-vum čipómkatum47
        'the men you saw yesterday are liars'
(451) a. Hyde (177, rewritten):
nó. tí·m-?yax tó*&axitmum-i puné--m-i
I see-REM rabbit-PL-ACC DEF-PL-ACC
?u-qi?é-vò-y
your-kill-REL-ACC
    REM
b. Pauma:
        nó•-nil tí*w-?yax puné•-m-i tó·自ixat-m-i qu-qiqé--vò-y
        I-ENC
    c. Lavolla (without number agreement):
        nó\cdot-nil tí·w-ax puné·-m-i tó·&ixat-m-i ?u-qi?é:-vi}4
        'I saw the rabbits you killed'
(452) a. Hyde (176, rewritten):
        ?óm-øu tí•w-?yax húnwut-um-i puné•-m~i waxá\cdotm
        you-ENC bear-PL-ACC DEF-PL-ACC yeat.
            INT
        pum?-qi?é.-vò-y
        their-kill-REL-ACC
            REM
```


it were grammatically singular:

'all the dishes he painted are pretty'

Plural inflection does occur sometimes, however, and again the agreement rules differ between the dialects. This time Rincón is the odd man out: whereas Lajolla and Pauma usually inflect the DEFINITIZER pó:? for plural when it accompanies a head noun, Rincón has singular. Nevertheless Rincón still agrees with Pauma in keeping the relative construction in the singular whereas LaJolla has plural. Compare the following:
(456) Hyde (176, rewritten):

| Tóm-gu | tíw-?yax | ná-wa-m-i. | punéy | maríya |
| :---: | :--- | :--- | :--- | :--- |
| you-ENC | see-REM | dress-PL-ACC | DEF | Maria |
| INT |  |  | ACC |  |


| pu-ló?xa-vóy | pu-yó? póyk |  |
| :---: | :---: | :---: |
| her-make-REI-ACC her- | her |  |
| REM | mother | DAT |

Pauma: ... puné*-m-i .... pu-ló3xa-vò-y ...
Lajolla: ... puné.-m-i.... pu-ló?xa-vu-m-i ... her-make-REL-PL-ACC
'did you see the dresses that Maria made for her mother?'

Just as there is a partial semantic overlap between 'Vtqat" and 'V+qal+mukus', so there is also between 'pu+V+qat' and 'pu+V+qai+vo'. Whereas 'pu+V+qat' can modify only an inanimate noun when its underlying relative verb has REM CONT reference,
'pu+V+qai+vo' can modify both inanimate and animate nouns. The transformation needed for the generation of this renafive can be written as follows:
(457) GENERATION OF pu +V $+(q a l+$ ) vo

$$
\begin{aligned}
& \begin{array}{llll}
W & \mathrm{NP}_{1}
\end{array}\left[\begin{array}{lll}
\mathrm{X} & \mathrm{NP}_{2} & \mathrm{I} \\
\mathrm{~V} & +\left\{\begin{array}{l}
- \text {-max } \\
- \text { que }
\end{array}\right\}_{1}
\end{array}\right]_{\mathrm{S}} \mathrm{Z} \\
& \text { SD: } \quad \begin{array}{llll}
2 & - & 4 & 5
\end{array} \\
& \text { SC: } 1 \quad \varnothing \quad 3 \mathrm{pu}+4\left\{\begin{array}{l}
\text {-vol } \\
- \text { qaivò }
\end{array}\right\}_{1} 6 \\
& \text { Condition: 1. } \mathrm{NP}_{1}=\mathrm{NP}_{2} \\
& \text { 2. } X \text { must contain NP }
\end{aligned}
$$

## $5.2 .5 v+1 u t$ and $p u+V+p i$

Perhaps the most puzzling of the Luiseño relative constructions is that in which the underlying relative verb has FUT time reference. Hyde (178) uses the form 'Vtlut' when the head noun is singular and has the same reference as the subject of the underlying rena'five $S$, and 'Vikutum' (unsyncopated) under the same conditions when the head noun is plural. This usage agrees with that of my informants so long as the head noun is nominative, ie. subject of the matrix $S$ :
(458) a. Hyde (18i, rewritten):

b. Pauma, LaJolla:
pumóm sá-?avi-ktum fúgłalum qáy pélax-viča-wun 'the women who will, are going to, tell stories don't want to dance'
(459) a. Hyde (180, rewritten):

| yazés pó? ?éxpay hé-lax-lut hú-?unikat |  |  |
| :--- | :--- | :--- | :--- |
| man | DEF tomor. sing-REL | teacher |

b. Pauma:
pó•? ? ?éxyay hé•lax-lut ya?às hú? ?unikat
c. LaJolla:
pó•? ya?ás ?éxyi hé•lax-lut hú•?anikat
'the man who will, is going to, sing tomorrow is a teacher'

Similarly:
(460) munál-up ya?ás qéwi-lut ?atá-xum pó•mik nu-pé•t that-ENC man shout-REL people them my-younger
$\begin{aligned} \text { FUT }\end{aligned} \quad$ DAT
'the man who will, is going to, announce something to the people is my younger brother"
(461) Aufgalum wi•wǐs luví?i-ktum wuná? purú-wun women acorn make-REL there stand-PRES mush FUT PL PL
'the women who will, are going to, make acorn mush are standing over there'

On the other hand, when the head noun is ACC, Hyde uses an inflected form of 'V+lut' which was either rejected outright by my Pama informant or only grudgingly accepted by my LaJolla informant.

For the ACC both speakers consistently use the form 'putV+pi', which surprisingly is also the nominal that all three speakers use when the head noun is not coreferential with the subject noun of the underlying relative $S$ but with some other noun in that $S$. The latter situation $I$ shall return to immediately below. To make the difference between the dialects clear the following sentences are quoted:
(462) a. Hyde (171, rewritten):
cám ?ayáli-wun ya?á*či puné-yi ?éxray
we know-PRES man-ACC DEF-ACC tomorrow
hé•lax-lut-i
sing-REL-ACC
b. Pauma, JaJolla:
ćám-ča puné-yi ya?áč-i ?ó?na-wun ?éxıi
We-ENC DEF-ACC man-ACC know-PRES tomorrow
pu-hé• lax-pi
his-sing-REL
FUT
'we know the man who will, is going to, sing tomorrow'
(463) a. Hyde (180, rewritten):
?óm-gu tíw-?yax ?awá-l-i puné--yi pélax-lut-i you-ENC see-REM dog-ACC DEF-ACC dance-REI-ACC
b. Pauma:
 dog-ACC his-dance-REI FUT
'did you see the dog that will, is going to, dance?'

When the noun with the same reference as the head noun is not the subject of the underlying relative $S$, we have sentences such as these:
(464) nawítmal ?éxni ?u-qáni-pi pilék yawáywiv̌ girl tomor. your-meet-REL very pretty FUT
'the girl you will, are going to, meet tomorrow is very pretty'
(465) ?ivíp pó•? ?ixí?wut John pu-sá:msa-pi nó•-ŋi this-ENC DEF sheep his-buy-REL me-ABL
'this is the sheep that John is going to buy from me'

In these last two sentences the head noun is of course nominative, and the relative nominal therefore carries no overt case suffix. If the forms given in Hyde (178-81) are reliable, the Rincón dialect adds the accusative suffix - - to 'putV+pi' producing the final syllable -pi. (written in Hyde as -pig):
(466) Hyde (181, rewritten):

$$
\begin{array}{rlrl}
\text { ?óm-gu tíw- ?yax kulá•wut puné-y cum-pídi-pi. } \\
\text { wood } & & \text { our-break-REL-ACC } \\
& & \text { FUT }
\end{array}
$$

'did you see the wood we shall, are going to, break?'

In the LaJolla and Pauma dialects, on the other hand, either there is no agreement or, more likely, a common rule which reduces final unstressed $i+i$ to $i$ operates. Thus, when the ACC suffix $-i$ is added to $\boldsymbol{m p}$, the long final syllable that results is then reduced to -pi again. Hence in the following example from the Parma da-
lect we find -pi, not -pi. Notice also that this sentence illustrates that there is no number agreement between the relative nominal and the noun it modifies, i.e. there is no *-pi-m-i:
(467) nó*-nil tíw-?yax puné•-m-i péstiliš-m-i ?éxpay I-ENC see-REM DEF-PL-ACC dish-PI-ACC tomorrow hiŋé?mal-um pum?-sá•msa-pi
boy-PL their-buy-REL
FUT
'I saw the dishes that the boys are going to buy tomorrow'

It is possible that there may also be a FUT CONT relative nominal 'pu+V+qal+pi', since this form also occurs in several other constructions in which 'putV+pi' is found. 49 This possibility was unfortunately discovered too late for me to obtain further information from my informants. The form has therefore been entered in the chart 392 with a question mark.

The formulation of the transformation generating relative structures from an underlying $S$ containing a verb with the FUT tense suffix -an is complicated by the fact that in this case the difference between the dialects is rather greater than usual. Rincón requires two separate transformations, one for the generation of 'Vtlut' and the other for 'putVtpi'. Since Pauma and La Jolla also have 'putV+pi' where Rincón has 'V+lut', it would be elegant if we could generate the two kinds of 'putV+pi' by only one transformation. Since, however, 'pu+V+pi' can replace 'V+lut' only when the relative is not nominative, I can see no easy way in which the transformations can be collapsed. LaJolla and Pauma will thus also require two.

The Rincón rules can be written:
(468) GENERATION OF V+lut (Rincón)

(469) GENERATION OF pu+V+pi (Rincón)

$$
\begin{aligned}
& \text { W } \quad \mathrm{NP}_{1}\left[\begin{array}{lllll}
\mathrm{X} & \mathrm{NP}_{2} & \mathrm{Y} & \mathrm{~V}+-\mathrm{an}
\end{array}\right]_{\mathrm{S}} \mathrm{Z}
\end{aligned}
$$

$$
\begin{aligned}
& \text { SC: } 1 \quad \emptyset \quad 3 \quad \text { pu+4 } \quad \text { pi } 6 \\
& \text { Condition: 1. } \mathrm{NP}_{1}=\mathrm{NP}_{2} \\
& \text { 2. } X \text { must contain } \\
& \text { NP }
\end{aligned}
$$

The latter rule is also valid for LaJolla and Parma. Rule 468 must be replaced by 470, however, so that both 'V+lut' and 'pu+V+pi' can be appropriately generated when $\mathrm{NP}_{2}$ is the subject of the relative $S$ :
(470) GENERATION OF Vtlut AND pu+V+pi (LaJolla, Pauma) $\mathrm{X} \quad \mathrm{NP}_{1}\left[\mathrm{NP}_{2} \mathrm{Y} \quad \mathrm{V} 4-\operatorname{an}\right]_{5} \quad \mathrm{Z}$ $\left\{\begin{array}{l}{[\mathrm{SNOM}]} \\ {[-\mathrm{NOM}]}\end{array}\right]_{1}$
$S D:-\frac{2}{3}-\frac{}{5}=$ SC: $\quad 1 \quad \varnothing \quad 3\left\{\begin{array}{cc}4 & \text { nut } \\ p u+4 & \text { pi }\end{array}\right\}_{1} \quad 6$

$$
\text { Condition: } \mathrm{NP}_{1}=\mathrm{NP}_{2}
$$

The notation in 470 Ls intended to state that 'Vflut' must be generated when the relative $s$ is $[+N O M I N A T I V E]$ and 'putV+pi' when it is some other case. In fact my data give evidence only for accusative; further research is thus necessary to determine whether other cases are possible.
$5.2 .6 \mathrm{~V}+\mathrm{kat}$

Let us now turn to the two specifically animate constructions 'V+kat' and 'V+wut'. The first of these has a plural form 'Vtvuktum" (< vu-kat-um). It is described by Kroeber/Grace (80, 94) as 'habitual or professional agent', i.e. one who habitually or professionally does something. This description accords exactIy with ny own data. Since the Luiseño suffix gkat seems very much like the English agentive suffix mer which derives substantives from verbs, it may justifiably be asked why $I$ wish to discuss 'Vtkat' in a treatment of relative clauses. The answer is that apart from being used as a noun in its own right, it is also iused to modify other nouns in exactly the same way as a restrictive relative clause. In fact, if we look at chart 392, we see that in this function it serves as the relative nominal for the PRES HAB tense when the head noun is animate and coreferential With the subject noun of the underlying relative clause. Thus alongside such sentences as 471 and 472 where 'Vtkat' can be considered as an independent noun:
(471) wunál-up hú-?uni-kat póyk téetila-q he-ENG teach -er him speak-PRES

```
    'he is talking to the teacher'
(472) kári-kat-up pilék ?aláwis
    play-er-ENC very bad
    'the musician (instrument player) is very bad'
we also find others where 'V&kat' is a restrictive modifier:
(473) pó?? ya?ás hú??uni-kat ?éxnay hé-lax-lut
    DEF man teach tomor. sing-going to
    'the man who is a teacher is going to sing tomorrow'
(474) ya?ás ?uwó?i-kat sínaval pu-pnáki póyk
    man work money his-wife her
                                    DAT
pu-?ó•vi-pi mí??-qa
his-give-OBLIGATION be-PRES
    'a man who works must give money to his wife'
```

If, as I suggested above, 'V+kat' has much more the feel of a sub-
stantive about it than the relative constructions we have consid-
ered so far, then its use as a restrictive modifier is parallel to
the restrictive use of nouns as modifiers in English expressions such as:
(475) This is a photo of my brother the doctor and that one is my brother the teacher.

However, one theory claims that English nouns of this kind are derived from relative clauses, egg. here by the deletion of 'who is'. We could therefore look at the Luiseño 'Vikat' not as the substantive that is left behind after deletion but as the equivaLent of the whole relative clause, the practice $I$ have adopted in
dealing with the relatives in the sections preceding this. Perhaps in support of this I may add that there is no relative form of the verb mí? ${ }^{-}$'be', the verb that would be required for example if the underlying structure in 473 were
(476) the man [the man is a teacher]. must give money ... ....... [ya?ấs hú•?unikat mí•?-qa]

But this is not a convincing argument, since even non-deverbal nouns can be used as restrictive modifiers of other nouns in certain circumstances. Thus we may have:
(477) pó•? hipé•mal fuøfávit waxám né•ni DEF boy Mexican yest. leave REM

$$
\begin{array}{lll}
\text { pó? } & \text { mómpa-ta } & \text { yá•m-ya } \\
\text { DEF-ADVERSATIVE } & \text { whiteman } & \text { stay-REM } \\
\text { Particle } & &
\end{array}
$$

'the boy who is a Mexican left yesterday, but the one who is a whiteman remained'

Thus here too, if we posit a relative $S$ underlying duǵa-vit or móma•* for the verb mí? - 'be'. This suggests that either the postulation of an underlying relative $S$ containing 'be' must be abandoned, or else that Luiseño has a curious rule which operates uniquely on mí? - in relative clauses, deleting both it and its $T / A$ suffixes. The latter seems very ad hoc, for in main clauses mín? may be deleted only when it carries the PRES tense suffix; with other tenses it is retained. Further research into this area of Luiseño syntax may throw interesting light on the derivation of adjectival
constructions and may perhaps disconfirm Lakoff's proposal (1970a: 122) that attributive adjectives be derived from relative clauses of the type ${ }^{\text {rwho, which, }}$ is ADJ'. For the moment $I$ will content myself with the hunch that 'Vikat' is not a true relative which can be derived by transformation, but a derived nominal which happens to fill the gap in the relative system and is maybe produced in the lexicon by some lexical rule of derivation.

### 5.2.7 V + wut

A similarly peripheral role among relative structures is played by the other derived nominal 'Vtwut', which I mentioned in the previous section. Like 'Vłkat', it also may be an animate noun in its own right or a restrictive modification of another noun. Kroeber/Grace (80) call it the 'occasional agent' (OA), i.e. 'one who sometimes does something, one who likes to do something'. The following sentence shows how this structure is used as a restrictive modifier.
(478) qáy háx má?max-ma ya?áč-i $\quad$ ná-win-wut-i
not someone like-PRES HAB man-ACC be jealous-OA-ACC

'nobody likes a man who is (sometimes) jealous'
$(?=a \operatorname{man}, ~ a ~ j e a l o u s ~ b e-e r) ~$

It does not seem to be so purely nominal as 'V+kat' since it may have adverbials accompanying it, as for example túkvu 'at night' in 479:
(479) hinémal túkvu nóli-wut pu-pú-č-i gináli-ma
boy night read-OA his-eye-ACC ruin-PRES HAB
'a boy who likes reading at night ruins his eyes'

This construction is mentioned here for the sake of completeness; before venturing to postulate any details for its derivation, I have need of rather more data than I at present possess.

### 2.2.8 Prepositional Phrase Relatives

In the transformations above that generate most of the relatives with pu- prefix, it will have been observed that I was careful to specify the noun that is coreferential with the head noun as 'some other noun in the relative S'. In almost all the examples we have so far seen it was either subject or object. It may, how ever, be a noun in an oblique case such as locative, dative, comitative, etc., i.e. in what is the equivalent of an English prepositional phrase. Structures of this kind I shall refer to as prepositional phrase relatives. In this section I wish merely to describe how Luiseño deals with this type of clause. This will necessitate my talking informally about case and a rule of case shifting. I shall not try to present the rule formally, however, as the details of this kind of relative are not all clear to me at the moment.

I have referred a number of times already to the fact that animate nouns are morphologically distinct from inanimate nouns so far as case inflection is concerned. The reader will remember that inanimate nouns usually carry suffixes for all the Luisep̈o gramatical cases, whereas animate nouns carry an overt suffix only in the accusative. All the other oblique cases are realized by placing the correctly inflected case of the pronoun pó? after the absolutive form of the noun (see Kroeber/Grace:68), which
serves also as nominative. The distinction is preserved in propositional phrase relatives. Consider the following underlying structure where the head noun is animate:

If the bracketed sentence were not embedded, it would have a surface form:
(481) no ya?ás póyk té•tila-q

I man to him am speaking
'I am speaking to the man'

When the bracketed $S$ is embedded in a NP, however, and when the embedded ya?ás is coreferential with the head noun ya?ás, rule 434 will apply. The pronoun becomes the possessive prefix on the verb, the PRES tense suffix -ga is changed to -gat, and yafás is deleted. It is easy to account for what happens to the case ending if we consider case as a separate category. When ya?ás is deleted, case is left behind but later switched to a position immediately after the relative nominal. This we can represent schematically as follows:


DAT now follows an inanimate nominal and so requires po? support. It therefore appears on the surface as posy. The following senfence illustrates this construction:
(483) ?iví ya?ás nu-tétila-qat póyk ?u-ná-yi
this man my-talk-REL him your-father-ACC
?ó ?na-q
know-PRES
'this man ISm talking to knows your father'
Similarly, in 484 pu-?é.E is the comitative case of the pronoun po? ?
(484) wunál-up pó•? nawítmal nu-péli-vò pu-?é•各 waxám that-ENC DEF girl my-dance-REL $\underset{\text { REM }}{\substack{\text { REM }}}$ with her yest.
'that's the girl I danced with yesterday'
For inanimate the same case shifting rule applies but this time, after an inanimate relative nominal, the case suffix is as usual added to the nominal itself. Consider the following underlying structure:
 If the bracketed $S$ here were not embedded, it would have a surface form:
(486) рó•? kí•-ŋа ?á•w?-quғ
'he was living in the house'
To generate the surface form of 485 , rule 457 and the case shifting rule must apply. We can represent this schematically as follows:


Here is a sentence containing this particular prepositional phrase relative:
(488) wunál-pil ki•s pu-?áab?-qal-vu-pa vindé•r he-ENC house his-live-REL-LOC sell REM ACC REM REM
'he sold the house he was living in'
In 489 we have a further example of LOC as the case shifted.
(489) nó•-nupu qáy néči-n sirvé•sa-هi ku?áll

I-ENC not pay-FUT beer-ABL fly
FUT
pu-hlúqax-vu-ŋa OR: pu-hlúqax-ŋa
its-fall-REL-LOC its-fall-LOC
REM
'I shall not pay for (= on account of) the beer the fly fell in'

So far, so good. However, case is not always retained in the Luiseño prepositional phrase relative. Both my informants agree that 483 is just as acceptable without póyk; and although I have not checked this, I suspect that pu-?és can also be omitted in 484 with no harm done to sense or acceptability. Similarly, corre sponding to 488 we can also have:
(490) wunál-up pó•? kí•ča nu-?á•w?-vò kihá•t mí•?-qanik
that-ENC DEF house my-live-REL little be-SUBORD
'that's the house I lived in when $I$ was little'
where the relative suffix for REM does not carry the expected LOC suffix -na. In the following sentence one would have expected the DATIVE suffix in the same position but it too is absent.
(491) ?ivíp pó? tyénda pu-htílax-vò sirvé•aa this-ENC DEF store his-go-REL beer REM sá•msa-1ut 50 buy -PURPOSE
'this is the store he went to in order to buy beer"

What is not clear from 490 and 491 is that the case of the head noun is spread to the coreferential noun after it has lost its own case. Since the head noun in both sentences is nominative, a case for which Luiseño has no overt morpheme, the case spreading is not observable. If we look at other examples where the head noun is in an oblique case, it becomes readily apparent, e.g.
(492) nó-n ?ó?na-q wunál-m-i čúču-m-i maríya

I-ENC know-PRES that-PL-ACC dog-PL-ACC Maria
pu-yi?yi-qat-m-i
her-play-REL -PL-ACC
PRES
'I know those dogs that Maria is playing with:
Fere both case and number have been spread to the relative nominal.

Further, we may compare 493 with 490, and 494 with 489:
$\begin{array}{rlrl}\text { (493) Wunál-up } & \text { kí•品 } & \text { pu-7á-w?-qat-i } & \text { sá-mBa-q } \\ \text { he-ENC } & \text { hoube his-live-REL-ACC } & \text { buy-PRES } \\ & \text { ACC } & \text { PRES } & \end{array}$
'he is buying the house that he lives in'


In 493 the $A C C$ of kís has been spread to pu-?á•w?-qat, and in 489 the $A B I$ of sirvésa-ni to pu-hlúgax (-vo').

What is not clear to me is the principle which determines Whether case shifting or case deletion is to operate in the underlying s. Sentences 489 and 494 were offered as synonymous alternatives; and, as we saw, 483 both with and without póyk has the same meaning and is equally acceptable. For some sentences, however, only one choice is possible. Thus in 495 the alternative with case deletion was rejected by my informant.
(495) pó-?-pil wanís pu-wá-yax-vu-ga ("pu-wá-yax-vò)

DEF-ENC
REM river his-swim-REL-LOC
pilék ?íta•t mi•?-quf
very cold be-REM CONT
'the river he swam in was very cold'

In the data $I$ have presented above the following facts should be noted. In relative clauses modifying inanimate head nouns I have examples of case shifting only with 'putV' and 'putv+vo'. Second, it seems always to be LOC which is shifted in these constructions. Third, it is only in connection with "putV+vo' that $I$ have evidence of constraints on case deletion (as in 495). Fourth it may well be that the other inanimate relative nominals
'putV+qat' and 'putV+pi' have no available inflections for oblique cases other than the $A C C$-i (with 'pu+V+pi' even this $-i$ is not obvious in view of the already mentioned rule which reduces a vowel plus $i$ to $\dot{I})$. Fifth, in the case of animate head nouns the possibilities for case shifting are necessarily different, since the whole paradigm of the case inflections of pó? is available and the relative nominal remains unchanged (nominative) like the head noun it modifies.

From these observations we may tentatively conclude that with inanimates LOC is perhaps the only case that may be shifted, and that case deletion is obligatory with all inanimate relative nominals except 'pu+V' and 'pu+V+vo'. For animate nominals, case shifting and case deletion seem to be optional, and maybe there are no restrictions on what cases can be shifted. For the moment that is as far as $I$ can go.

Let me conclude with one general remark. Iuiseño is not alone in permitting case deletion in prepositional phrase relatives; relative structures of this kind are found in a number of other languages, e.g. Turkish, Mandarin Chinese, etc.

### 5.2.9 Circumlocutions for Relatives

In the preceding subsections I have tried to present as clear a summary as possible of all the Luiseño relative constructions for which $I$ have evidence in ny data. In this subsection $I$ wish to add a few complementary remarks on circumlocutions for relatives.

I was unable to elicit any Luiseño equivalents for English relatives containing 'of whom, of which, whose', e.g. 'the woman

Whose husband ...'. When my informants could think of any translation at all, they always got round the problem by using parataxis. For example, as a rendering of 'yesterday I saw that woman whose husband bought John's car' sentence 496 was givent
(496) waxám nóm funá•1-i tí•wーax pi pu-kún John yest. I woman-ACC see-REM and her-husband pu-má-kina-ki. sásamsa his-car-ALIEN buy

REM
'yesterday $I$ saw a woman and her husband bought John's car'

Similarly, for the police officers have just arrested the man Whose son was going to buy my house' I obtained
(497) yúlivuktum-kunum pitó*? ya?á*c-i yúli-wun pi officers-ENC now man-ACC arrest-PRES
REPORT and pu-ká•mi nu-kí. sá•msa-lut mí? ? quá his-son my-house buy-going to be-REM CONT ACC
the police have just arrested a man and his son was going to buy my house*

Another paratactic rendering is with túm, which always stands first in the sentence and is used to recall to the listener's memory something that he already knows about. Thus in place of 496 we can also say:
$\begin{array}{cccccc}\text { (498) túm pó*? ya?ás sásamsa John } & \text { pu-má-kina-ki, nó* } \\ & \text { DEF } & \text { man } & \text { buy } & \text { his-car-ALIEN } \\ & & \text { REM } & \end{array}$

# waxá•m pu-\&́náki tí•w-ax 

yest. his-wife see-REM ACC
'you remember the man bought John's car; I saw his wife yesterday'
and in place of 497:
(499) túm pó•? ya?âs nu-ki. sá•msa-lut mí•?-quǿ; yúlivuktu-kunum pu-ná•-yi pitó•? yúli-wun his-father-ACC
'you remember the man was going to buy my house; the police have just arrested his father'

It is worth pointing out that, in the speech of my LaJolla informanta, túm circumlocutions were not limited to situations like the above where no relative nominal is available. In situations where past tense relatives could have been used, the circumlocutions were more frequent than the rather cumbersome 'V $+(q a l+$ )mucus' construction. For the latter he often needed some prodding. Thus a spontaneous translation of 'the man who was sitting on that chair yesterday has just broken his leg' was:
(500) túm ya?ášs sí•ya-na waxá*m ?á•w?-qứ; pitó•?-kun chair-LOC yest. sit-REM CONT now-ENC REPORT
pu-?é-y pídi-q
his-leg-ACC break-PRES
'you remember a (the?) man was sitting on the chair yesterday; he has just broken his leg'
although the sentence could just as well have taken the form:
(501) pó•? ya?áš sí•ya-na waxám ?á•w?-qalmukus pitó•? DEF man chair-LOC yest. sit-REL now REM CONT
pu-?é-y pídi-q
his-leg-ACC break-PRES

In the case of my Pauma informant there seemed to be no particular preference for túm circumlocutions, although they did at times occur.
5.2.10 Some Concluding Remarks

Before leaving relative constructions I wish to repair one omission and then make a few critical remarks about the approach I have adopted here. First the omission.

In all the relative constructions that I have labelled with initial pu-, the prefix can, as I explained in 5.2.1, stand for any member of the paradigm of personal prefixes. What I failed to mention was that the pronoun subject of the underlying relative $S$ may be retained in surface structure together with the matching prefix on the relative nominal. Thus as well as 394 it is also possible to have:

> (502) có•?un ná-ča•niš fóm ?u-ló?xa pilék ?áxa•t all food you your-make very delicious 'all the food you make is very delicious'

This is, of course, not really surprising since a noun subject in these clauses is also retained on the surface. However, in the illustrative sentences that $I$ have given there is only one example (455) of a retained subject pronoun (wunál). When the pronouns
are used it is probably for the sake of emphasis. If so, this creates a problem for the generation of these relatives.

The easiest and most economical way to account for the presence and the absence of the subject pronouns in the surface relative construction is to generate them in underlying structure and then to have them optionally deleted by transformation. This is also the usual procedure suggested for the generation of subject pronouns in languages like Spanish or Latin where the verbal inflection is usually enough to indicate the person. It seems curious, however, that emphasis should result from the inoperation of a deletion transformation, and lack of emphasis from its operation. One would expect that, if the pronouns are there in the first place (i.e. in the underiying structure), the unmarked situation would be for them to remain, and the marked situation for them to be deleted. Put another way, if we consider lack of emphasis (i.e. absence of pronouns) as the normal situation, it would seem more logical for that to be in the underlying structure and for emphasis to be produced by a transformation which inserts the pronouns. It strikes me as odd for lack of emphasis to be generated out of emphasis and not vice versa. However, if we adopt the position that the pronouns are inserted later, the rules for the generation of the personal prefixes on the relative nominal are almost impossible to write. This is a paradox to which I have no answer.

Another criticism can be levelled against the approach I have adopted in the preceding sections. I claimed that the $T / A$ suf-..
fixes will have been inserted into the relative $S$ from the lexicon before the various relativization transformations take effect. Given the cyclical application of transformations, this is perfectly possible and in this case necessary, since the lexical suffix replaces a hierarchy of higher $T / A$ verbs, what $I$ have referred to several times as a 'tree configuration'. If this is not done, the relativization transformations will have to refer to this hierarchy itself, instead of to the lexical suffix, in order to generate the correct relative nominal, and this would mean evolving a completely new formalism. As $I$ have chosen to introduce the lexical suffixes into the structural description instead, this means that $I$ am unable to capture the quite obvious generalization that, when CONT was in the $T / A$ hierarchy, the syllable -qal- appears in the relative suffix. This cannot be done in my analysis because the $\quad$ uffix inserted from the lexicon replaces the Whole tree configuration so that we no longer have separate branches of it like CONT to refer to.

The situation becomes even worse if Luiseño does indeed have a FUT CONT relative nominal 'pu+V+qaltpi', which I hinted at in 5.2.5. Since the lexical suffix -an replaces the tree configuration for both FUT CONT and FUT NON-CONT, there is nothing in the structural description of the relativizing transformation to determine whether 'putV+qaltpir should be generated or merely 'putV+pi'. So far I have no examples of the former, but should they be possible, this would speak strongly against the approach

I have adopted. On the other hand, in its favour we can claim that it permits us to set out the details of each relative in a reasonably clear fashion and to write plausible, easily readable transformations to account for them.

### 5.3 Indirect Speech

I am using the teril 'indirect speech' in the loosest sense to cover embedding after not only 'say' and 'ask' but also after such verbs as 'know, think, forget, etc.'. In this final section of the study of Luiseño sentence types I shall be concerned with three kinds of embedding: (1) indirect statements, (2) indirect commands, and (3) indirect questions. The problem presented by the fact that each of these clause types is structurally different from the clause types found after the performative verbs DECLARE, COMMAND and ASK has already been commented on in 4.7 and needs no further discussion here. As there are a number of gaps in the data on which this section is based, I shall content myself with setting out the details of the various structures I have collected and merely hinting at ways in which they could be generated. However, so that the reader can form some idea of what the transformations involved would look like, I have put forward a simplified version of the one needed to generate indirect statements.

### 5.3.1 Indirect Statements

Indirect statements in Luiseño fall into two categories: (1) those that contain the enclitic -kun and a finite verb, and (2) those that contain a non-finite verb and no enclitic.

### 5.3.1.1 With -kun and Finite Verb

This type of sentence was dealt with briefly in 4.3 .1 and illustrated with the examples 101-4. A sample derivation was also given in l05a-e. There are, however, some features of this con-
struction which need further explication. In 4.2.1.I I mentioned the indeclinable form of the quotative enclitic, -kuna. This form of the enclitic is possible when the tense of the verb in the embedded $S$ is REM. Not infrequently the same form of the enclitic appears in the matrix sentence when its verb is also REM, e.g.

| (503) ?óm-kuna yá• nó•-kuna | nu-nó\& pu-wí*wi |  |  |
| :--- | :--- | :---: | :--- |
| you | Bay | I | my-aunt her-acorn-ACC |
|  | REM |  |  |

fál-ya pi qáy ?afún dislike-REM but not true
'you said I didn't like my aunt's acorn mush, but it's not true'
(504) John-kuna Joe póyk yá póy-kuna pu-?é•-ga say him his-foot-LOC REM ACC
fó•wut kó?-ax
rattlesnake bite-REM
'John told Joe that a rattlesnake had bitten him in the foot'

However, in neither the matrix nor the embedded $S$ is the -kuna form of the enclitic obligatory. In the embedded $S$ it can be replaced by -kun with no apparent change of meaning; and in the matrix $S$ by either -kun or - pil when the verb is REM or REM CONT, e.g.

| (505) | கuற̣á•1-kun woman | mól-ax <br> remember-REM | $\begin{aligned} & \text { ya?ás̆-kun } \\ & \text { man } \end{aligned}$ | waxá•m yest. | wukó•?-ya arrive-REM |
| :---: | :---: | :---: | :---: | :---: | :---: |
|  | 'the woman | membered th | the man | me ye | rday ${ }^{\prime}$ |


'they said they had killed him'

In fact when both verbs are past, any combination of -kun, -kuna or gpil in the matrix $S$ with -kun or -kuna in the embedded $S$ is permissible. My informant suggested that when -kun or -kuna is used in the matrix $S$ it indicates that the person making the inw direct statement is not present (e.g. in 505 the woman is absent at the moment the statement about her remembering is made); on the other hand, -pil suggests that the person making the indirect statement is now present (e.g. 'they' in 507 would be the men I can now see as I utter 507). I am not sure whether this is in fact always true, since at other times I collected similar sentences from my informant where mkun seemed to be used without this distinction.

When the main verb is not past, -kuna is not permissible in the matrix $S$; and similarly, when the embedded verb is not past, -kuna is not permissible in the embedded $S$. In this case the main verb is usually PRES, but the embedded verb may be in a variety of
tenses. Here the embedded $S$ is always introduced by -kun, and the matrix S either by -kun or -up:

'that woman says he is going to leave today'

| (509) yaqá--p | pu-pá\&um-kunum | pum-?ayá-li-vuta-q |
| ---: | ---: | ---: |
| say |  |  |
| PRES | his-elder -ENC | their-mend-can-PRES |
|  | brothers REP | SG |

'he says that his brothers can mend it'

Another interesting point connected with this type of indirect statement is the question of reference when both matrix and embedded verbs have third person pronoun subjects with the same number. Indirect statements with -kun(a) have subjects which are unambiguously non-coreferential with the subject of the matrix $S$. Thus in 510 'he' cannot be 'Juan':

$$
\begin{aligned}
& \text { (510) x }{ }^{\text {wá }} \text {-n-up yaqá kulá•wut-kun(a) páv-ax } \\
& \text { wood chop-REM }
\end{aligned}
$$

'Juan says that he ( $\neq$ Juan) chopped the wood:

### 2.3.1.2 With Non-Finite Verb and No Enclitic

There is an alternative construction to that we have just examined which is perhaps even more common. Here the embedded $S$ has no introducer or enclitic and contains one of three non-finite verb forms that we have seen already: 'pułVtqala', 'putVt(qalt) vò' and 'pu+V+pi'.

### 5.3.2.2.1 With pu + V + qala

The first of these $I$ have not described systematically, but we have met it a number of times in temporal constructions usually translated by 'when ...' or 'while...'. With this temporal sense it can be used only when the action of the matrix verb falls within the time span of the embedded verb or is simultaneous with it. Furthermore, the two NP subjects must not be coreferential, otherwise 'Vt(qat)nik' must be employed. For comparison I give first an example of this temporal use of 'putV+qala', which I shall call 'cotemporal'.
(511) wunál-pil néč-ax nu-ŋé-qala
he-ENC pay-REM my-leave-SUBORD
REM Cotemp.
'he paid when I left'

In indirect statements this same verb form is used when in the words that were originally spoken the verb has PRES tense reference. Thus in 512 the original words were 'I am leaving':
(512) wunál-pil yá- pu-né-qala
he-ENC say his-leave-SUBORD
REBM REM
'he said he was leaving'

In contrast to the cotemporal use of 'putV+qala', sentences like 512 are ambiguous since the 'he' in the embedded $S$ can be either coreferential with the 'he' in the matrix $S$ or non-coreferential. Another clear difference between this use and the cotemporal use is that the verb form in the indirect atatement may be de-
clined. Since the embedded clause is the object of the matrix verb, it may take the accusative suffix -i. Here again ore have a dialect difference. My LaJolla informant rejects the declined form of the construction in any context, whereas my Pauma informant uses it regularly after any 'statement' verb except yagá'say', and even here it occurs occasionally. Thus in the Pauma dialect we find sentences such as the following:
(513) maríya qáy ?uhó?van-q $x^{w} a ́ \cdot n(-i)$ pu-kúp-qala-y Maria not believe-PRES Juan(-ACC) his-sleep-SUBORD-ACC 'Maria doesn't believe that Juan is sleeping'
(514) wunál-up wiŋfé?-q ná•wa pu-kwán pu-mí? ? -qala-y he think-PRES dress for him its-be-SUBORD-ACC 'he thinks the dress is for him'

That the declension of 'pu+V+qala' is optional was made clear when my informant offered both versions of 515 as perfectly acceptable and synonymous:
(515) wunál-up ?ayá̇i-q manwél pu-né-qala
he know-PRES Manuel his-leave-SUBORD
OR: pu-yé-qala-y
ACC
'he knows that Manuel is going'

### 2.3.1.2.2 With pu $+v+$ vò

When the verb in the 'original words' of the indirect statement Was in the past tense, the construction 'pu+V+vo' is used in the embedded $S$ (cf. 5.2.4.1 where the same verb form is used in relative clauses). Here both the LaJolla and the Pauma dialects are
alike, and the declined form in the accusative occurs more often then the undeclined form. Thus alongside sentences like 516-9 we have others like 520I.
(516) nó*-nil maróp-ya nu-hti?ax-vi (くnu-hatí?ax-vò-i)

I-ENC forget-REM my-go-SUBORD
REM ACC
'I forgot that I had gone'
(517) fuøá•l-pil yá•pu-mé-vi pu-kí*-k
woman-ENC say her-leave-SUBORD her-house-DAT REM REM ACC
'the woman said that she went home'
(518) nó•-n hamó•ya-q ?u-yáx-vi

I-ENC be ashamed-PRES your-say-SUBORD
PRES
'I'm ashamed that you said it'
 Juan-ENC know-PRES his-elder wood his-cut-SUBORD

OR: pu-čóri-vó-y
ACC
'Juan knows his brother cut the wood'
(520) ?ayáli-qa-p kulá-wut čum?-pávi-vò
know-PRES-ENC wood our-chop-SUBORD PRES
'he knows that we chopped the wood'
(521) wuná•lum-mil yá• pum?-hé•yi-vò
$\begin{aligned} \text { they-ENC } & \text { say } \\ \text { REM } & \text { REM }\end{aligned}$
'they said they had dug it'

Sentence 519 was offered in both forms by the Pauma informant. In 516-8 we have further examples of the LaJolla rule which deletes a vowel occurring immediately before instressed -i.

## 5.3 .1 .2 .3 With pu $+\mathrm{V}+\mathrm{pi}$

The last non-finite verb form we need to examine is 'putVtpi' (cf. 5.2.5 and Footnote 49). This occurs in indirect statements when the 'original words' contained a verb with FUT tense reference. With this construction it is difficult to tell whether there is inflection for accusative or not. Probably the vowel reduction rule just mentioned in 5.3.1.2.2 operates here in both dialects and the final short $-\mathbf{i}$ is in fact the accusative suffix.
(522) nó*n winé?-qat tó*wut pu-wkó•?ax-pi ?amu?éxŋi

I-ENC think-P PR mist its-arrive-SUBORD this morning
'I thought the mist would come this morning (but it didn't)'
(523) pó-?-pil póy yá tó-wut póy pu-kó?i-pi
he-ENC him say rattler him its-bite-SUBORD REM ACC REM ACC
'he told him that a rattlesnake would bite him'
$\begin{array}{rlll}\text { (524) nó-n } & \text { ?ayáli-q } & \text { pu-lvi?i-pi } \\ \text { I-ENC } & \text { know-PRES } & \text { his-make-SUBORD }\end{array}$
'I know he will make it'
5.3.1.3 Generation of Indirect Statements

Both types of statement (with finite and with non-finite verb forms) can be generated with a transformation of the following kind:


The reader will remember that the phrase structure rules that $I$ proposed in section 3 generate the NP object so that it precedes the verb. Hence the position of the embedded $s$ in front of the verb of saying in 525. This is, however, not the position of the indirect statement in surface structure, where it always follows. Another transformation will therefore be required to move the embedded $S$ to its correct surface position.

For rule 525 to operate on structures containing verbs like ?ayáli- 'know', móli- 'forget', etc. these must be entered in the lexicon as bearing a feature characterizing them as verbs of 'saying', i.e. as capable of having a complement which is an indirect statement. I have labelled this feature [4DECLARE].

As in the transformations for the generation of relative clauses, I have here too presumed that the T/A suffixes will already have been inserted in the embedded $S$ before the cycle on which 525 applies. Hence in the first set of brackets with subscript 1 the three suffixes - qa, -an and $\because$ : $2 a x$ will have replaced the tree configuration for what $I$ have been referring to in abbre-
vited form as PRES, FUT and REM tenses respectively. In the first option in the structural change in 525, these are themselves replaced by the suffixes -qala, -pi and -vo respectively in indirect statements.

The transformation in 525 is, of course, too simple, since other tenses than PRES, FUT and REM are probably possible in the -kun type of indirect statement. Furthermore, no allowance has been made for the optional use of -kuna when the REM suffix (-?ax) appears in the underlying $S$. This latter option is particularly difficult to work in to the transformation as set up in 525, but it can easily be written separately.

### 5.3.2 Indirect Commands

Structurally, indirect commands in Luiseño do not differ from the indirect statements with FUT time reference which I discussed in 5.3.1.2.3. They are, of course, usually embedded as the complement of a verb of commanding, e.g.
(526) wuná•lum-mil čá•m-i tótư̌ya kulá•wut čum-pávi-pi they-ENC we-ACC order wood our-chop-SUBORD
REM
REM 'they ordered us to chop the wood'
(527) pó•?-pil póy tótư̌ga pu-né- -pi
$\begin{array}{ccc}\text { he-ENC } & \text { him order his-leave-SUBORD } \\ \text { REM } & \text { ACC } & \text { REM }\end{array}$
'he ordered him to go'

Note the accusative pronoun in each sentence. Maybe this is the subject pronoun of the embedded $S$, raised to become object of tóša- 'order', but I have no evidence to support this.

Comparable to 526 and 527 is a similar construction with yagá: 'say, tell', which perhaps throws some light on the nature of the verb form in the embedded S. Consider the following:
(528) néy-pil yá. póyk hís nu-sá•msa-pi pwévla-na me -ENC say him sth my-buy-SUBORD town-LOC ACC REM REM DAT ACC
'she told, asked, me to buy something for her in the town'

(529) Bill yaqá: John \begin{tabular}{l}
say <br>
PRES

$\quad$

pu-hú•gi-pi <br>
his-smoke-SUBORD
\end{tabular}

'Bill has told John to smoke'

Both of these sentences can also be translated as indirect statements with FUT reference, i.e.
(528a) 'she told me that. I would buy something for her in the town', and
(529a) 'Bill said that John would smoke'.
At first sight it is difficult to see a connection between 528-9 and 528a-9a, but two possibilities present themselves. One is that 528 and 529 are genuine indirect statements where the original words contained an example of what $I$ called in 4.5 .5 advisory imperatives, which are structurally identical with FUT declaratives. It will be remembered that, in addition to being used when advice on how to perform a particular task is given, this type of imperative is also employed in polite commands. The trouble with this analysis is that 528-9 contain nothing to suggest that the indirect command is polite. A more plausible analysis is that the two sentences are genuine indirect statements where the original words contained the 'putV+pi' of OBLIGATION mentioned in Footnote 49a. This is corroborated by the fact that there is a third translation of these two sentences:
(528b) 'she told me that I was, had, to buy something for her in the town', and
(529b) 'Bill has said that John is, has, to smoke'.
Nevertheless, there is one thing that makes me uncertain whether this analysis is correct. The 'pu+V+pi' of OBLIGATION is always accompanied in main clauses by a form of the verb mí? $-/ \mathrm{mi}^{\prime} \cdot x$ - 'be' inflected for $T / A$, even in the PRES tense, e.g.
(530) nu-hé•yi-pi mí?-qa 'I must, have to, am to, dig' my-dig-OBLIG be-PRES

If the 'putV+pi' of indirect commands is the same construction as this, we should expect the verb mi*?-/míx- also to appear in the embedded $S$, but my data provide no evidence of this. It might be argued that here, as in many other cases, 'be' is deleted, but
 direct equative sentences where in the 'original words' it is always missing. Compare 531 with 532.
(531)

| X'á•n-up | ?á•čiš |
| :---: | :---: |
| Juan-ENC | stupid |

(532) háx mímčapan ?óyk pu-yáx-vuta-q xª́n ?á•čis some any you his-say-can-PRES -one DAT
pu-mí•?-qala
his-be-SUBORD
'anybody can tell you that Juan is stupid'

Thus if 529 is really an indirect statement that 'Juan has to smoke' and not an indirect command, we should expect the full form of the sentence to be:


Unfortunately I am at present unable to say whether 529a is a possible synonym for 529. If it is, then we can analyse sentences with tóspa- 'command' in exactly the same way, i.e. as being structurally statements with the 'putVtpi' of OBLIGATION in the
complement. If not, we are faced with the problem of what to posit as the underlying structure for sentences such as 528 and 529, which can be interpreted as both indirect commands and indirect statements, although there is nothing in the surface structure to indicate this difference. One solution would be to give yaqá two entries in the lexicon, one with the feature [tDECLARE] and the other with the feature [ E COMMAND]. The different interpretations of sentences like 528 and 529 could then be made to depend on the feature composition of yaqa in each particular case.

### 5.3.3 Indirect Questions

Indirect questions also present a number of problems. They fall into two classes just like direct questions: (1) those that can take an 'or not' disjunction, and (2) those that contain question words. Let us look at the latter first.

### 5.3.3.1 With Question Words

My data contain no examples of indirect questions with finite verbs in the embedded $S$. They all have the same set of verb forms that we found in indirect statements without -kun, e.g.
(533) nu-ф́ún-ni pó? maróp-ya hís pu-hi•x-vi

'I think (lit. = in my heart) she forgot what she had said'
(534) wunál-kun tuná•l tóvyaŋ-q xáa•n míkiŋa pu-né•-pi that-ENC woman ask-PRES Juan when his-leave-SUB FUT
'that woman is asking when Juan will leave'
(535) wunál-up yaqá 2ayáli-q-kun háx kulá•wut pu-čóri-qala he-ENC $\begin{aligned} & \text { say know-PRES-ENC who wood his-cut-SUBORD } \\ & \text { PRES } \text { Cotemp. }\end{aligned}$
'he says he knows who is cutting the wood'

Notice that in 533 the verb form carries an accusative guffix whereas in 535 there is none. In the unpublished Berkeley Archive Papers Sparkman has recorded numbers of indirect questions with and without accusative inflection and suggests that the verbal nominal takes an accusative ending when there is an object pronoun
or noun in the embedded clause. Thus he compares sentences like '536 (which happens to be an indirect statement) with others like 537:
 true-ENC you your-buy-want-SUBORD-ACC blanket-PL-ACC INT
'is it true that you want to buy blankets?'
(537) qáy-фu ?óm ?ayáli-q mićá? pu-2q-w?-qala
not-ENC you know-PRES where his-be-SUBORD
INT
'do you know there he ig?'

However, many of Sparkman's own examples speak against this clain, e.g.

| (538) nó•-n | ?ayáli-q | hisis | ?u-bá•msa-vò |
| ---: | :--- | :--- | :--- |
| I-ENC | know-PRES | what | your-buy-SUBORD |
|  |  | ACC | REM |

'I know what you bought' (cf. 533 above)

Furthermore, when I checked Sparkman's sentences with my Pauma informant, he spontaneously offered both the declined and the undeclined verbal form in the same sentence as being idontical in meaning and acceptability. Thus in 537 pu-?áw?-gala-y is just as good as pu-?áw?-qala. We can therefore abide by the analysis I suggested in 5.3.1.2.1, i.e. that the inflection of the verbal nominal is optional. Nevertheless, we must not altogether rule out the possibility that there may be some contexts where constraints are in operation.

One of the most interesting features in indirect questions
is the question word itself. It will be remembered that in direct questions there is a surprising ambiguity in Luiseño since all the question words can also be used as indeterminate pronouns or adverbs. Hence there is no difference in surface structure between 'who is coming?' and 'is somebody coming?'. Expectedly this ambiguity reappears in indirect speech. Thus 533-5 and 538 all have alternative translations:
(533a) 'I think she forgot that she had said something' (534a) 'that woman knows that Juan is going to leave some time' (535a) 'he says he knows that somebody is cutting the wood' (538a) 'I know that you bought something'

Notice, however, that now the ambiguity is between an indirect Btatement (containing an indeterminate pronoun or adverb) and an indirect question (containing a question word), whereas in 4.4.4.4 the ambiguity was between two types of question. In that section I was able to keep the two typer of sentence apart by positing an 'or not' disjunction in the case of the question with the indeterminate pronoun or adverb and none in the case of the question with the question word. For the two constructions we are now considering this solution is ruled out by the fact that no 'or not' disjunction is possible with either of them. (As we shall see in the next subsection, indirect questions with an 'or not' disjunction are always introduced by té..) That a statement and a question can become confused is a much more serious problem than that I discussed in 4.4.4.4, since here I do not have the possibility of positing different higher verbs to diaambiguate them. Of course,
there are some contexts where the ambiguity does not arise. Thus when the matrix verb is tuyyúni- 'ask' as in 534, the statement interpretation is precluded, as the verb itself makes it clear that the embedded $S$ is a question. But with a verb like ?ayali'know', both the statement and the question interpretation are possible. One way to differentiate between the structure underlying the indirect statement and that underlying the indirect question would be to require ?ayáli= to be entered in the lexicon with two different feature specifications, one containing $[+D E C L A R E]$, and the other $[4 A S K]$. Of course, if we require this for ?ayali-, we must require the same thing for all the other verbs that can have embedded questions as complementa, like mólia 'remember', marópa- 'forget', etc. I surpect that we are misbing a generalization if we adopt this solution, but for the moment I can see no other alternative within this model.

Before we leave this topic $I$ should like to point out that in the ppeech of my Ladolla informant there seems to be a preference for the '-kun with finite verb' construction when the indeterminate pronoun or adverb is intended, and for the 'non-finite verb without enclitic' when the question word is intended. I collected froil him such sentences as:
(539) wunál-up sunál yaqá háx-kun ?ó?na-q háx
that-ENC woman say EOme-FNC know-PRES who PRES -one
kulá*wut pu-córi-qala
wood his-cut-sJBORD
Cotemp.
'that woman says that somebody knows who is cutting wood' This does not appear to be a necessary differentiation, however. My Pauma informant quite readily gave similar sentences where both the indeterminate and the question word are found in 'pu+V+qala' constructions, e.g.
(540) nó•-n 2ayáli-q háx kulá•wt pu-pávi-qala-y I-ENC know-PRES some wood his-chop-SUBORD-ACC pi qáy nó- ?ayáli-q háx pu-mí? ${ }^{\text {-quala-y }}$ but not $I$. know-PRES who his-be-SUBORD-ACC
'I knos somebody is chopping wood, but I don't know who (it, he, is)'

### 5.3.3.2 With té

The final type of indirect question $I$ wish to deal with is the kind which corresponds to a direct question with 'or not' disjunction. Indirect questions of this sort are always introduced by té (for other uses of this particie see 4.4.10) and usually the verb in the embedded $S$ is non-finite. Again the three constructions 'pu+V+qala', 'pu+V+vo' and pu+V+pi' are used when the 'original words' of the question were PRES, REM or FUT respectively.
(541) néy-up tuvyúpi-q (OR: tóvyan-q) té ${ }^{\text {( }}$ ) pu-púck-i
me-ENC ask-PRES ask-PRES door-ACC ACC
nu-hédi-viča-qala
my-open-want-SUBORD

Cotemp.
'he has asked me whether I want to open the door'

'I don't know whether his brother mended it'
 mán té quáy
or not
'he asked whether I would go with him or not'
Alongside these embedded sentences with non-finite verbs there are occasionally some with finite verb forms. All the examples $I$ have of this variety contain 'higher verb' suffixes of the kind I deacribed in 4.5 .4 , viz. -viča- 'want' and -ruta- 'can', e.g. (544) qáy-na nó* ?ayáli-q té. pu-pé•t pu-pú•k-i zéxpi not-ENC I know-PRES $\begin{aligned} & \text { his-ygr } \\ & \text { brother }\end{aligned}$ door-ACC tomor.
?ayá-1i-viča-q
mend-want-PRES
'I don't know whether his brother wants to mend the door tomorrow' (cf. 542)

 | I-ENC Juan-ACC ask-FUT |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| FUT |  | $\begin{array}{l}\text { his-ygr } \\ \text { brother }\end{array}$ | $p u-p u ́ \cdot k-i \quad p u-3 y a ́ \cdot l i-v u t a-q$ ( $O R$ : pu-?yá-li-vuta-qala) door-ACC his-mend-can-PRES his-mend-can-SUBORD

'I:ll ask Juan if his brother can fix the door tomorrow'

I was unfortunately unable to check whether finite verb forms can occur after té elsewhere in embedded questions. I did, however, collect one example of a sentence where the original queation contained a HYP condition. Here none of the three subordinating verb forms was used; instead, the HYP form was retained and the particle té: was followed by either the declarative or the interrogative HYP enclitic, apparently with no change of meaning:
(546) tuvyúgi póy té•-xuku (OR: té•-xukun) sá•msa-ø

| ask | him | ENC | BNC | buy-HYP |
| :--- | :--- | :--- | :--- | :--- |
| IMP | ACC | HYP | HYP |  |
|  |  | DECLAR. | INT |  |

pu-sínavu-ki ?ahúyaxi pu-mí?-qala his-money-ALIEN enough its-be-SUBORD
'ask him whether he would buy it if he had enough money!' (lit. = his money being enough, if his money were onough)

As 542 suggests, we can posit a disjunction in the underlying structure of all embedded questions of this type and make the generation of té. dependent on the presence of this disjunction. In 4.4.10 I proposed that té could be inserted transformationally after an abstract or an overt verb of asking. If we can be content with the analysis I offered above whereby verbs such as 'know, forget, remember, etc.' can carry a feature [+ASK], then this derivation of té. will still hold. If not, we can say that the 'or not' disjunction itself implies a question, or, put another way, is consonant only with an interrogative interpretation, since we do not find disjunctions of this kind after declarative verbs. There are no sentences *he knew that his brother
could fix it or not' or 'he remembered that I would go with him or not'. We might then suggest that when a disjunction of this kind appears in an underlying structure it is automatically interpreted as an indirect question. The matrix verb which dominates it must be marked with a feature in the lexicon subcategorizing it as capable of taking this construction. The transformation introducing the particle té and the appropriate verb forms can then be given a structural description which contains an embedded or not disjunction as the complement of a verb carrying this feature, and whenever this atructural desoription is satisfied, tée will be inserted at the beginning of each disjunct and the verb form will be given its appropriate subordinating suffix. In view of the uncertainty about the conditions determining the use of finite and nonfinite verbs in disjunctive embedded questions, I shall not attempt to formulate this transformation.

In the final sections of this study, which were devoted to an examination of some of the most characteristic Luiseño complex sentence types, there has of necessity been little discussion of the performative/higher verb analysis, oince the objects of my investigation were clauses dependent on verbs that are overt in surface structure. It was for this reason that $I$ attempted an appraisal of the performative analysis at the end of my discussion of simplex sentences. However, now that the reader has become acquainted with some of the indirect clauses that correspond to direct statements, questions and commands, the main weakness of the performative analysis in a description of Luiseño will have become apparent. There is very little connection between the structures occurring in 'direct' speech as the complements of abstract performative verbs and those occurring in indirect speech as the complements of their overt counterparts. If we are to uphold this analysis, there is no way to avoid ascribing to the abstract performative verbs features and behaviour that are quite different from those of the corresponding overt verbs in surface structure. Againgt this we can aet the quite obvious need for the higher verb analysis to account for the fact that Luiseño uses a whole battery of verbal suffixes to express such notions as 'want; 'can', 'cause', 'go', 'come', etc. (see 4.3.8). If higher verbs have to be postulated in this part of the grammar, it is logical and economical to make use of them elsowhere.

In conclusion $I$ should like to repeat what $I$ said in the
introduction. The primary object of this study has been to aet out systematically the data I have collected on the principal Luiseño sentence types. The description of these within the performative/higher verb analysis is secondary and ahould be considered as an experiment to see how far this approach can be applied to an Amerindian language. It has necessarily been somewhat defective and incomplete, as I have had only a limited corpus at my disposal and no opportunity to seek further information from my informants since my return to Europe.

NOTES

1. (p.13) Tac makes no reference to the muk tense at all. This is a little surprising, but no doubt due to the fact that he tries to press Luiseño grammar into a Latin mould. There is also no mention of the -muk tense in Hyde; either it is not used at Rincón or Langacker and his students did not collect it. Malécot apparently elicited it from, or had it corroborated by, the aister of my Lajolla informant, but he gives no information about its frequency in her speech.
2. ( $p .20$ ) There seem to be dialect differences with regard to the quality of the final vowel in this class of verbs: all the verbs which Sparkman (UC Berkeley Archives), Kroeber/Grace and Bright (1968) write with final 름 are spoken with final a at Lajolla (Malécot records only final -a, thus agreeing with my own findinga). On the other hand, my Pauma informant has -a everywhere except in FUT (e.g. kí•ču-n, kúplu-n) and REM HAB (e.g. kí•ču-k, kínlu-k). Hyde apparently pronounces -u everywhere.
3. (p.23) There seems to be a clear connection between RELative -qat and $P$ PR gat, although $I$ am at present unable to generalize the two. Examples of the use of this relative, which refers to both PRES and P PR time, can be found in 5.2 .3 and 5.2.3.1.
4. (p.31) All the enclitic forms containing il may alao take the final vowel -a: thus -nila, -pila, -čila/-čamila, -mila. Sparkman (as quoted in Kroeber/Grace: 63) calls these forms indefinite and
gives as an example:

| hís-nil-a? | nó | sámsalut | món-qat |
| :---: | :---: | :---: | :---: |
| $\begin{aligned} & \text { sth-ENC } \\ & \text { ACC } \end{aligned}$ | I | to buy | come-P PR |
| 'there was | me | ing I can | to buy' |
| (said wh |  | nnot ren | er what |

Unfortunately I have insufficient data to corroborate this claim. I collected only one of these forms from my LaJolla informant and he felt no difference between the longer and the shorter form:

$$
\begin{array}{lll}
\text { čá•m-čil(a) waxá•m } & \text { wukó•?-ya } \\
\text { we-ENC } & \text { yest. } & \text { arrive-REM } \\
\text { 'we came yesterday' }
\end{array}
$$

5. (p.42) The reader is referred to 4.2 .1 .4 (3), where I remarked on the quality of the vowel in gu and -mu when word-final. The same is also true of the PST RELATIVIZER. With the accusative suffix the LaJolla form is =vi, but in the Pama dialect the combination is clearly -voy, not -vuy. This is further evidonce that there is some degree of stress present. To recall this to the reader's mind I shall transcribe the PST RELATIVIZER as -vò throughout this study.
6. (p.50) It will be observed that the LaJolla first person plural forms for all the enclitics containing interrogative feu have i in the environment f_s. I have just suggested that backward assimilation to $B$ accounts for the $i$ in the singular alternative form -aiku. This explanation is ruled out, of course, for the LJ - finch $^{2}$ forms. A possible explanation is that forward assimilation
is stronger in this case and that the vowel $\underline{u}$ is raised to $i$ before the palatal s. This is a very general rule in the LJ dialect: all nominal/adjectival forms which in Rincón and Pauma have differentiated vowels before the absolutive suffix $\underset{-6}{-6}$ have uniformiy it in IJ, e.g.

| R/P: kunóknu-B | LJ : kunókni-y | 'green' |
| :---: | :---: | :---: |
| hasáhsa-¢̆ | hasáhri-g | 'threadbare' |
| \&иwó¢wи-s | かuwóßтi-¢ | 'frightening, dangerous' |
| tavúlvu-s | tavúlvi-s | 'long, tall' |

I have however no explanation for this change in direction of 'assimilation.
7. (p.63) Note that the other two meanings of -kun are absent when the element -fu- is present in this enclitic, i.e. 107 does not mean:
*Do I bay the woman is tired?

* Does the woman say she is tired?

The first of these is clearly anomalous, since under normal circumstances I would not ask whether I myself had made a report iz about the woman. However, I have no explanation for why the second meaning is not possible in Luiseño.
8. (p.88) In another question pattern (which seems to suggest more urgency) all the syllables before the final fall on the last stressed syllable are spoken on high pitch. The characteristically greater pitch change for questiona is thus maintained.
9. (p.89) For an explanation of the variant forms of -fu here and in the following sections, seo 4.2.2.1.2 and Davis (forthcoming).
10. (p.90) I have one other example in my data of a disjunctive question where there are different verbs in each disjunct: pó-2-fu tak'áya-q mán pitówili hakwía-q he-ENC be dead-PRES or still breathe-PRES INT
'is he dead or atill breathing?'
11. (p.99) PRES should more accurately be represented by a zero morpheme, i.e. córi-ma-g, but as I am trying to keep my examples in an 'orthographic' script that is close to the actual pronunciation, I shall write zero morphemes only where there is risk of confusion.
12. (p.101) It may very well be that I failed to hear the glottal stop from my Pauma informant, and Langacker and his students from Mrs. Hyde. In allegro speech the glottal stop is frequently omitted.
13. (p.108) Note the two forms of the ablative auffix in the same sentence. Hyde uses only -nay and my LaJolla informant only ant. My Pauma informant used either indescriminately but nay was the more frequent form. That $y$ is treated as a consonant in Luiseño phonology is shown by the non-reduction of - fu after ghey and the reduction after -ni . From the Pauma informant the following variants were collected:

| micáa - qay-bu | ki-pay | pó? | mahán-ax |
| :---: | :---: | :---: | :---: |
| mičá--ni-s | kí-ni | 1 | " |
| $\begin{array}{r} \text { which-ABL-ENC } \\ \text { INT } \end{array}$ | house-ABL | he | bring-REM |

14. (p.108) This is one of the few instances where the Pauma informant used the non-reduced form of the enclitic after a vowel (see 4.2.2.1.2).
15. (p.109) One of the words for 'boy' shows a dialect difference LJ and $R$ : hiné-mal, $P:$ hipésmal.
16. (p.113) Nots that when the sentence is not a question the indefinite can alao be fronted (in accordance with one of the general scrambling rules of the language).
17. (p.136) It is interesting to note that in the two classes of verb that rac treats, viz. those with thematic -i- and those with thematic - ?ax-, he writes the imperative thus (with his Spanish spelling):
(a) sg. ayáli om (= ?ayáli ?óm 'know!')
pl. ayáliyam (= ?ayáliyam ")
(b) 8g. uocalaj (= wukálax 'walk!')
pl. uocalajom omom (= mukálaxum ?umóm ")

The presence and absence of the pronoun being reversed in each class suggests that Tac too felt little or no difference between commands with the pronoun and without.
18. (p.136) This verb is irregular. The underlying form of the root must be postulated as nésm, and a unique rule is needed to delete the final ㄸ whenever any suffix is adied.
19. ( p .141 ) For an explanation of -qi-i-, see 4.3.8.6. In 4.1.3.1 (2) I posited -max as the underlying form of the HAB suffix because of the shape of the FUT ending. We should therefore
have expected max in the command here. That the form -man occurs may be considered as additional support for the suggestion made in 4.1.3.1 (2) that two underlying forms, namely -ma and -max may need to be posited for this suffix. In the case of the command, however, they are not optional variants.
20. (p.142) See 4.1.2 above and cf. 15.
21. (p.152) I have recorded no plural command with this suffix, and none is given in Kroeber/Grace. The latter eite one example of a command with $-i(m)$ attached dirsctly to the verb stem: sá-mba-ym ?ón 'buy and take it with you!' (p.143). This was, however, rejected by Malécot's informant. In my own data the imperative of -i(m) occurs only in combination with -ni as in 349. 22. ( $p .160$ ) For a phonological explanation of the sufitix, see Note 5 above.
23. (p.161) For the phonetic value of -mu and -pu in final position, see 4.2.1.1.4 (3).
24. (p.163) Eyde contains no information on exclamatory expressions with lók.
25. (p.167) The semantics of haní (?)ku are obscure. The root hani? occurs in hani?-na 'I'm going now' and in three forms hani?, haní?-ča, haní?-ku all meaning 'let's go'. The last of those three is usually pronounced haniku by my Lajolla informant, while my Pauma informant has both hani?-ku and hani?-kwa. In this latter form it was rendered into English as '0.K.' in reply to the statement: 'I'm going to give you some money.' It also appears in
haní?ku 3 áw?ma 'goodbye', where the second word is the imperative CONTINUOUS form of the verb fáw?: 'to be, sit (of one perBon)'. I have been unable to establish any connection between these meanings and that of the hani(?)ku in 336-8, though the latter is undoubtedly related to the conditional haní?-xupu (see 5.1.2.1 below).
26. (p.18I) tó•mili/tó-vili is an unanalysable morpheme, though the first syllable may be identical with tón, which introduces the protasis of one type of conditional sentence (see 5.1.2.1). 27. (p:186) It should be noted that the -qanily suffix here is strictly apeaking ungrammatical, since the subject of the main clause is pélaxīn, a nominalized form of the verb stem pélax'dance'. This is another case like 358 where the semantic (or Logical) subject does not coincide with the grammatical subject. That both types of agreement are possible is shown by the following variants of 361 collected at a later period from the same informant:
(a) nó• kihá•t mí? -q-qanik nu-pélax nu-má?max míx-uk I little be-SUBORD my-dance my-like be-REM HAB
(b) nó•kihá•t nu-mí?-qala nu-pélax nu-má?max míx-uk my-be-SUBORD
both $=$ 'when I was young, $I$ used to like dancing' (土.e. ... my liking of dancing was)
28. (p.187) In some sentences the reason may be made explicit by the use of grammatical case, e.g.
maríya-kun puyá-mani náw?kís má?max-ma pi sinaval
Maria-ENC always dress want-PRES but money
REP
'Maria has always wanted a dress but because she has no money she cannot buy one'
N. B. This is one of the very rare cases where an inanimate noun is not given a case ending of its own but is followed by an inflected form of pó?
29. ( $p .188$ ) Note that té. here and in the two sentences that follow has a final glottal stop. Since the enclitic -up always loses ite $\underline{\underline{u}}$ after another vowel (cf. ?ivimp) but does not do so here, this auggests that the underlying form of té is really té? ? However, as $I$ never heard a final glottal stop in any other contexts that this morpheme occurs in, I have for convenience always written it without the glottal stop except in these three sentences.
30. (p.189) For an explanation of the stress on pi, see Note 33 below.
31. (p.189) Usually in Luiseño the verb 'to be' is omitted only in the present tense. In 369 the enclitic shows that the form mifx-man'n 'will be' has been omitted. It therefore beems likely that the verb $\underline{m i \cdot ?-/ \underline{m} \cdot x-b e ' ~ c a n ~ b e ~ d e l e t e d ~ w h e r e v e r ~ i t s ~ t e n s e ~}$ ia predictable.
32. (p.195) In some NON-HYP conditional sentences when the pro-
tasis precedes the apodosis, the latter is not introduced by pi, pá? but by mán té. 'maybe'. Hyde (160) equates them with those conditional sentences in which the protasis is introduced by té and the apodosis by pi (5.1.1.3). My own data are very sparse here, but they suggest that there is a semantic difference between these two types. Compare the following:

'if you kick him he will cry'
(b) Tóm póy rári-n mán té wunál čáqa•n maybe
'if you kick him he may cry'

If the translations are accurate, conditional sentences like (b) constitute a different structure from those I have examined so far and cannot be generated by the transformations propounded in this subsection.
33. (p.197) The morpheme pi never carries stress except where enclitics are attached to it as in HYP or NON-HYP conditions. When it is used to introduce a simple coordinate clause, it takes no enclitics and is always short. When stressed in the Pauma dialect, it always seems to have a long vowel (as in 379). In La Jolla I recorded it as both short and long when accompanied by 'remote' future enclitics (see 22), e.g.
 Juan tomor. Pala-DAT go-going to with him

# hati?a•n <br> go-FUT 

'Juan is going to Pala tomorrow, so I'll go with him' Where pi-nuku is phonetically [pinnuku].
(b) nó•-n ?éxgi pá•l-ik hatí?ax-lut pí-puku John nu-Ré•*s I-ENC with me hati?a•n
'I'm going to Pala tomorrow, so John will go with me' $\begin{array}{llll}\text { (c) nó-n néma-y-lut pír-upku } & \text { livá? néy k'éti-n } \\ \text { I-ENC return-going to } & \text { here me wait-FUT }\end{array}$
'I'm going to come back, so you wait for me hera!'
Note the final glottal stop in (c). This occurs only before the second person enclitic -up(ku). In other contexts my informant was careful to correct me when I pronounced a final glottal atop after pi. Pauma has a long vowel here no matter what the person of the attached enclitic.
34. (p.200) Clearly related to this type of conditional sentences is another construction which translates obligation or duty, and resembles structurally the HYP apodosis:


Here again, in the apeech of both my informants, present or past time reference muat be decided from the context. Hyde (159)
claims that past reference is indicated by the optional use of the longer form of the HYP enclitic with -ku (see 4.2.1.4 (8)) and by the addition of ma to the verb root, as in (b) above. My Pauna informant, who uses the same HYP paradigm as Hyde, could find no difference in time reference between the longer and the shorter forms of the enclitic. Furthermore, in both Pauma and LaJolla the verbal suffix -ma is used (1) automatically with verbs denoting mental or emotional attitudes (e.g. 395), and (2) to denote continuous action with other verbs, cf. (a) and (b) above, and in both cases the time reference is determined by the context.

It should be added that the usual way of expressing obligation and duty is by means of the verb ló-vi- 'be good, right', where present and past time reference can be explicitly marked by the PRES and REM CONT suffixes respectively:

$$
\begin{array}{rrrr}
\text { (c) qáy ló•vi-q } \quad \text { ?u-hú-kapi-tal } & \text { 2u-péni-pi } & \text { póy } \\
\text { not } & \text { PRES your-pipe-INSTR } & \text { your-throw-SUBORD him } & \text { FUT } \\
& & \text { ACC }
\end{array}
$$

'you shouldn't throw your pipe at him'
(= for you to throw your pipe at him is not right)
$\begin{array}{rlll}\text { (d) ló•vi-quf } & \text { pu-pláci-pi } & \text { pu-wá-yax-i kihát } \\ \text { REM } & \text { his-learn-SUBORD } & \text { his-Bwim-ACC } & \text { little } \\ \text { CONT } & \text { FOT } & & \end{array}$
mí?-qanik
be-SUBORD
'he should have learnt to swim when he was littie'
(= for him to learn to swim when he was little was right)
35. (p.201) Notice that the enclitics are used with the interrogative substitute té. 'I wonder' in conditional sentences:

| $x^{\text {¹áa }}$-n-xapu | néy | tíwi-ø | pá? -xupku | téo | néyk | elnaval |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Juan-ENC | me | see-HYP | ENC |  | me | money |
| HYP | ACC |  | HYP |  | DAT |  |

?6**i- $\varnothing$
give-HYP
'if Juan had seen me, would he have given me the money
(I wonder)?'
36. (p.209) The declension of deictic pó*? (inflected only for nominative and accusative, singular and plural) which I obtained from my informants corroborates the paradigm given by Hyde (171). Kroeber/Grace (102) seem not to have heard the animate and inanimate accusatives accurately, as they give no indication of vowel length and final $Z$. My data also agree with Hyde $(32,94)$ on the declension of the pronoun pó?. For comparison the two morphenes are declined side by side in the following table:

|  |  | pronoun pó? | deictic pó? |
| :---: | :---: | :---: | :---: |
| SG | NOM <br> ACC, Animate <br> Inanimate | pó•? <br> póy <br> usually $\not \subset$, <br> rarely póy | pó? <br> puné•yi <br> punéy |
| PL | NOM <br> ACC, Animate Inanimate | pumór. <br> pumó-mi <br> usually $\varnothing$, rarely pumómi | pumón <br> punérmi |

The inanimate plurals are rare (i.è both pumó•mi and punémi) since inanimate nominals are not usually declined for plural, the singular being used instead, e.g. pu-pú•č-i $364, \mathrm{k}^{\mathbf{m}} \mathrm{i} \cdot \mathrm{la}$ a 420 , mangá•na 427, but cf. 1í•vri-m 395 and yúmpipis-m-i 433.
37. (p.210) The discropancios in numbor agreement which we see here and shall see later in subsequent sections are not so surprising as they may at first sight appear. In the Barkeley Archives papers, Sparkman noted that the Luiseño NP need be marked only once for plurality irrespective of the number of determiners, adjectives, otc. which may accompany the noun. My own data corroborate this observation, but auggest that the spaaker may mark for plurality more than once if he wishes (see also 268 and 269). It is noticeable that my LaJolla informant usually marks every element in the $N P$, whereas my Pauma informant contents himeelf with a smaller number of markings. I am not sure whether this reflects a dialectal or an idiolectal difference between these two speakers.

Perhaps I may be permitted here to draw the reader's attention to the fact that in view of the limited number of my informants the tems 'dialect' and 'dialectal' throughout this study may sometimes be being used to refer also to what may be iidiolect' and 'idiolectal'. The reader will have observed, however, that wherever possible I have sought support for my data from Tac, Sparkman, Kroober/Grace and Hyde, and also pointed out the differ ences.
38. (p.211) An alternative stem - ?ó?nana- is regularly used at LaJolla in these constructions and sometimea at Pauma. I was unable to determine whether this is peculiar to relative constructions or whether it can be used elsewhere with T/A suffixes just 2. ?órna- can.
39. (p.211) The underlying form for this word is put?uyótati, With syncope of the firat root syllable of the verb and the rem duction of unstressed V+i finally to $i$, a characteristic of the Lajolla dialect, cf. Pauma, Rincón: -ká-may 'son', LaJolla: "ká•mí; $P, R:$ puyá-manay 'always', LJ: puyá•mani; P: píypuy 'roadrunner', LJ: púypi. This rule also accounte for the reduction of i+i聿 to $i$, as in 414 pu-nóli 〈pu-nóli-i. Here, however, the rule applies also in the Pauma dialect. Hyde, on the other hand, writes forms of this kind with -iy.
40. (p.212) 'putV' is not restricted to relative constructions. It occurs in a variety of other constructions of which the following are a fair sample:
(a) Predication 'a good V-er'
$\begin{array}{cl}\text { (1) wunal-up nawítmal pilék mansána pu-čé•vax } \\ \text { that-ENC girl } & \text { very apple her-pick }\end{array}$
'that girl is a very good apple picker'
(2) nó kihátt mi•?-qanik nu-yí? mi•?-qús I little be-SUBORD my-run be-REM CONT
'when I was young, I was a very fast runner'
Note that even without the INTENSIFIER pilek, the 'action' of the verb is always intensified in this use of 'putV'.
(b) Gerund (?)

> nu-pélax-up pulóv $\quad$ 'my dancing is good'
> my-dance-nNC good
(c) Complementation

| (1) nó•-n hamó•ya~q | pu-pú•k-i nu-hédi |
| ---: | :--- | :--- | :--- |
| I-ENC be ashamed-PRES door-ACC my-open |  |

(2) nó*-n piláči-q nu-wáa'yax-i

I-ENC learn-PRES my-swim-ACC
'I'm learning to swim'
(d) 'come from V-ing'
nó-n muná nu-dé•v-i nu-néči-ni
I-ENC come my-debt-ACC my-pay-ABL
PRES
'I'm coming from paying my debt, $I$ have just paid my debt'
(e) Reason
(1) qáy nó pá-?i-viča-qúf pu-kósax-ni not I drink-want-RBM $\underset{\text { CONT }}{ }$ its-be sweet-ABL
'I didn't want to drink it because it was (too) sweet'
(2) Tó*nu-p nég néči-ma nu-ná*wi-gi li•vri-m-i he-ENC me may-PRES my-writo-ABL book-PL-ACC
'he pays me because I write, for writing, books'
(f) 'have already V-ed'
(1) ?u-kí pu-gé-qala pu-vintáa*na-ki
your-house his-leave-SUBORD his-window-ALIEN ACC
nu-čipi mí?-qús
my-break be-RBM CONT
'when he left your house, I had already broken his window'
(2) 7 u-fyáki nu-ti•wi mi-?-qa your-wife my-bee be-PRES ACC
'I've already seen your wife'
41. (p.215) See Note 39 for an explanation of the LaJolla ending. Note alao that máti.- is a combination of the verbal stem máti'throw away' with the suffix -i(m) (see 4.3.8.6), which usually refers to movement from one place to another but sometimes indicates that the action is done accidentally, e.g.
(a) nu-máy-na wóqi•-q (< wóqi-i-q)
my-hand-ENC cut-PRES ACC
'I've just cut my hand (accidentally)
(b) pu-tá•x-kun páti•m (< páti-im) his-self-ENC shoot-REM REP
'they say he shot himself by accident'
ef. pi.-kun faxána pó•? pu-tá*x pát-ax and-ENC also he his-self shoot-REM RESP
'(he shot inis wife) and he shot himself too'
42. (p.219) Kroeber/Grace say of this form:
"According to Sparkman, the 'dative' case -kwán itself adde final objective -i to express action or motion.' (99)

They themselves give no other explanation. I think Sparkman ie wrong here. My data clearly show that $-\mathrm{jm}_{\mathrm{m}} \mathrm{a}$ n is a predicate form, i.e. used only as the predicate of verbs of 'being'. In all other syntactic environments -k"áni is employed.
(a) sivi-p ná•wa nu-fwá•may pu-kwín
this-BNC dress my-daughter for her
'this dress is for my daughter'
 barley horse-PL our-aninal-PL for them be-RBM CONT 'the barley was for our horses'
(c) fámut-up nu-3ázčum pum?-k"éa n yá'wa-q hay-ENC my-cattle for them be absent-PRES 'there is no hay for my cattle'

Compare:
 take this money and for you sth buy ACC
'take this money and buy yourself something'
 my-wife dress-ACC make-PRES my-daughter for her 'my wife is making a dress for my daughter'
(f) wunál-up łuŋág1-i tuló•wi-q pu-fóáki pu-kwáni he-ENC woman-ACC find-PRES his-wife for her 'he has found a woman for his wife (i.e. to be his wife) it
43. (p.223) This is another 'pu+V' form, here from piláci- 'to learn'. It differs from the construction illustrated in 403-4 in that what is there the aubject of 'putV' (e.g. in 404 có.?un Tiví is nominative) is here the object (in 430 čó-? un hís is accusative). This means, of course, that we cannot translate 430 as 'everything $I$ know is of my learning from father', since 'everything' would then have to be nominative, i.e. čó? ?un híeča. The type of 'pu+V' seen in 430 is used in Luiseño to expresa an Finglish present perfect and replaces PRES under conditions which $I$ have been unable to isolate. For further examples, see Note 40 (f)
44. (p.226) In the LaJolla dialect the plural of garay man? is always yáyicum; the form used by my Pauma informant has no long vowel, and in fact even the first 1 may be elided to produce yáyčum. Hyde (230) writes ya?aychum ( $x$ ya?áyčum), a form which was recognized by my Pauma informant but not used by him. 45. (p.227) The suffix -qal attached to a verb stem is used to render the English -ing complemgnt after verbs of perception ('see, hear, smell, etc.'): 'I heard him talking', 'I saw him running', 'I smelt it burning', etc. An alternative in all these cases, though less preferable, is 'pu+V+qala' (see also Kroeber/ Grace: 146-7).
46. (p.229) For an explanation of the use of this accent, see Note 5.
47. (p.231) cipómat/Eupómkat is the singular form for 'liar'. In the LaJolla dialect it has a regular plural with -um. At Pauma and Rincón it has an irregular plural with reduplication of the first CV of the root, in addition to the suffix -um. Note the different vowel in the first syllaole. The older form is probebly with $u$; the fronting to $\underline{i}$ is no doubt due to assimilation to the ć and $\underset{\text { g }}{ }$ on either side of it. These two consonants are rather more palatal in Luiseño than in English (see also Note 6).
48. (p.231) For the use of the accent see Note 5. The LaJolla accusative singular form is yet another example of that dialect's rule:

$$
v \longrightarrow \phi / \ldots \ldots \text { i } \# \text { (see Note 39) }
$$

49. (p.238) There are at least four other constructions in which 'pu+V+pi' is omployad:
(a) OBLIGATION

| ?óm-up | ?u-wá qi-(qal-)pi | mí•?-qa | дu-wkó?a-qala |
| :---: | :---: | :---: | :---: |
| you-ENC <br> PRES | your-bweep-OBLIG | be-PRES | my-arrive-SUBORD |
| +III |  |  |  |

'you must (be) sweep(ing), when I arrive'
(b) VERBAL COMPLEMENT

| duwór-qua-pil | pu-púk-na pu-wtá?ax-(qal-)pi |  |
| ---: | :--- | :--- |
| be afraid-REM - ENC | door-LOC | his-stand |
| CONT REM |  |  |

'he was afraid to (be) stand(ing) ath the door'
(c) PURPOSE

man leave wowin house her-sweep-PURPOSE
REM
ACC
'the man left in order for the woman to sweep the house'
(d) INDIRECT SPEECH (see also 5.3.1.2.3 below)
nó-n $? a y a ́ l i-q$ pu-lví?i-pi
I-ENC know-PRES his-make-SUBORD FUT
'I know that he will make it'
50. (p.248) Note that whereas 'pu+Vtpi' is used to denote purpose when the underlying subject of the purpose clause is not coreferontial with the subject of the surface main clause (see Note 49c),
'Vtlut' must be used when the two subjects do have the same refence.
51. ( $p .260$ ) For the discrepancy between the number of the reportive enclitic and that of the $T / A$ auffix after -vuta, see 4.3.8.3.

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