CASE, VERB TYPE AND ERGATIVITY IN TRUMAI

Raquel Guirardello

Museu Paraense Emílio Goeldi (Pará - Brazil)

1. Introduction

This paper will present a short study of the Trumai verbal case-marking system.

In a first approach to the data, it would be possible to say that Trumai has four types of verbs: intransitive, transitive, ditransitive, and a fourth type which is our main interest in this paper, for although it seems to be transitive (it basically has two participants), it is morphosyntactically distinct from prototype transitive verbs. We will show that (a) this fourth type is in reality intransitive, with one participant the subject and the other an oblique NP; we will label these verbs extended intransitives; (b) these four verbal types collapse into only two basic types, intransitive and transitive.

The lexical category of extended intransitive verb is motivated by both semantic features of the verbs themselves - i.e. the actions which these verbs express take a location rather than a patient for a second participant - and by pragmatic features of the second participant for those verbs which do take patients as second participants - i.e. they are stereotypical or otherwise of little importance. Such pragmatic factors are also important in the choice of when to use an extended intransitive verb versus a transitive verb when either is available, e.g. for pairs of the type *fa* 'kill, hit' and *disi* 'kill, hit', one of which is transitive and the other extended intransitive. In essence, the speaker chooses which verb to use depending upon the topicality of the patient/locative second participant.
2. Description: the verb types and the case-marking frames in Trumai

First, we will illustrate the four verb types of Trumai, showing how the morphosyntactic system is organized.

The object of a transitive verb (O) receives the same treatment as the subject of an intransitive verb (S), that is: the same case-marking (unmarked); the same position in the clause (in adjacency with the verb); occurrence of the third person clitic -m when the overt nominal does not occur; and a certain control of the position of these functions in the case of lexical item deletion, through the i (or ii) morpheme. In contrast, the subject of a transitive verb (A) receives a distinct case-marker (the suffix -L), can vary in position in the clause and, when omitted, leaves behind neither a marker on the verb nor another morpheme anaphorically (such as the i/ii of absolutive). Since S and O pattern together morphosyntactically, and since A receives its own unique morphosyntax, this language is clearly ergative-absolutive. There are other ways in which ergativity manifests itself, as for instance the imperative construction, which we will treat later. We now offer illustrative examples of the four verb types in Trumai.

Type 1 - Intransitive verbs: Absolutive S (unmarked); verbal cross-reference to Abs (V-m '3 Abs')

The intransitive subject can be expressed by a lexical NP (examples 1,2) or, if that is deleted, by means of the third person enclitic -m (example 3). In the case of first and second persons, the use of pronouns is obligatory, that is, these pronouns cannot be deleted. The third person enclitic also presents the allomorph -e for verbs which end with a consonant. Examples:
S    V
(1) ha-Ø pita
    1-Abs go.out
    'I go out'

S    V
(2) hine-Ø pita
    3-Abs go.out
    'He goes out'

V-n
(3) pita-n
    go.out-3Abs
    'He goes out'

(4) Dative marking goal of action

GOAL    S    V
ole-Ø    ka in    ha-Ø    kawa
manioc-dat  ?  1-Abs  go
'I'm going to get manioc (right now)'
(lit. 'I'm going for manioc')

(5) Dative as mark of locative

S    V    LOC
ha-Ø    axa'tsi    ka in    tehnes-ki
    1-Abs    sit.down  ?  ?  floor-dat
'I sat down in the floor'

Type 2 - Transitive verbs: Ergative A (-k/-ts),
Absolutive  O (-Ø;V-n)

The subject of a transitive verb is marked with the suffix
-Ø (cf. examples 6,8) which is preceded by epenthetic vowel e or a
when attached to words which end in a consonant; the first person
singular allomorph of the ergative marker is -ts (cf. examples 7
a-b). The third person object (absolutive) nominal (or free
pronoun) can be deleted; in this case, the clitic -n/-e occurs
(cf. 7 a-b). It is possible to find some variation in the word
order (AOV, OVA - cf. 8 a-b) but the order AVO is not allowed (cf. 8c) and the orders OAV, VAO and VOA are not attested. We see then that the sequence OV is not broken.

A O V
(6) hine-k atlat-∅ mapa
   3-Erg pan-Abs break
   'He broke the pan'

A [ O ] V
(7) a. hai-ts kasoro mud-∅ husa
    1 -Erg dog neck-Abs chain
    'I chained the dog (by the neck)'§
    (lit. 'I chained the dog's neck')

          V-n
b. hai-ts ka in husa-n
    1 -Erg ? ? chain-3Abs
    'I am chaining it'

O V A
(8) a. wirix ma'may ka in Yaka-k
    manioc-pap mix ? ? proper name-erg
    'Yaka is mixing the manioc pap'

A O V
b. Yaka-k ka in wirix ma'may

A V O
c. *Yaka-k ka in ma'may wirix

Type 3 - Ditransitive verbs: Erg A (-k/-ts), Abs O (-∅;v-n), Postverbal Dat IO (-tl/ -ki/ -s)

In the few verbs of this type, we can also see that the order OV is preserved. The indirect object (IO) is not obligatory; unlike O (but like the A), the IO nominal (or free pronoun) can be omitted with no resultant marker on the verb. For instance:
(9) kiki-k ści atlāt-Ø kiti hai-tl
man-Erg  ? pan.-Abs give 1-Dat
 'The man gave me the pan'

(10) kiki-k ści kiti-n ha wan-ki
man-Erg  ? give-3Abs 1 pl-Dat
 'The man gave it to us'

(11) hai-te ści aros-Ø kiti kasoro-s
1 -Erg  ? rice-Abs give dog-Dat
 'I gave rice to the dog'

(12) hai-te ści de pan-Ø kiti
1 -Erg  ? already food-Abs give
 'I already gave food'

Type 4 - Extended Intransitive:  Abs Agent (-Ø; V-n),
postverbal Dat Patient (-tl/ -ki/ -s)

The extended intransitive verb class is interesting because
semantically such verbs seem to be transitives, for they can
present two participants, with one of them the agent and the other
one the presumed patient of the action. The problem is that,
unlike what we found for other transitive verbs, the agent here is
treated as the absolutive and the 'patient' as an indirect object.
See the examples below:

AGT V PAT
(13) kiki-Ø fa hine-tl
man-Abs hit/kill 3 - Dat
 'The man hit/killed him'

AGT V PAT
(14) kiki-Ø fa kodesiš-es
man-Abs hit/kill snake -Dat
 'The man hit/killed the snake'
AGT V PAT
(15) ha-wone cafe-a
    l-Abs drink coffee-Dat
    'I drank coffee (a lot)'

AGT V PAT
(16) ha-wone cafe-ki
    l-Abs drink coffee-Dat
    'I drank coffee (a little)'

V-n PAT
(17) ma-n human-ki
    eat-3Abs bean-Dat
    'He ate beans'

The dative marker varies according to the kind of NP which occurs in this position: singular pronouns and human nouns receive the suffix -tl (with an epenthetic vowel added to the forms which end in a consonant); plural pronouns and human nouns receive the suffix -ki. Non-human nouns can receive two kinds of marking, -tl or -s, according to the verb: for instance, fa 'hit/kill' requires the marker -s, while make 'bite' requires -tl. Thus, extended intransitive verbs can be subcategorized into two classes on the basis of which dative marker they choose for non-human patients. These classes are lexically determined and are mutually exclusive, that is, verbs which require one suffix do not accept the other. Either -tl or -s, however, can alternate with -ki, when the patient consists of a small quantity of something (see examples 15 and 16 above). The following table summarizes the allomorphy of the dative marker:

<table>
<thead>
<tr>
<th>PRON - HUMAN NOUN</th>
<th>NON-HUMAN NOUN</th>
</tr>
</thead>
<tbody>
<tr>
<td>SG</td>
<td>Verb Class I</td>
</tr>
<tr>
<td></td>
<td></td>
</tr>
<tr>
<td>PL</td>
<td>-ki</td>
</tr>
</tbody>
</table>
3. Analysis: Verb type 4 as morphosyntactically intransitive

When we look more carefully at the entire system of the Trumai language and its morphosyntactic elements, we are forced to conclude that verb type 4 is actually intransitive. Only one of the participants is essential, the subject; the second participant is not obligatory and can be omitted without troubles. This is prima facie evidence that we are dealing with a syntactically intransitive verb type, albeit one which can be extended by taking the 'Patient' NP as a syntactically IO. Thus the label extended intransitive, which emphasizes that the verb in question is basically intransitive, rather than transitive.

The arguments in support of this analysis are: constituent order, verbal person marking, case-marking, and the morphosyntax of the imperative construction. Observe the following table:

a) Basic Word Order

<table>
<thead>
<tr>
<th>Type</th>
<th>Order</th>
</tr>
</thead>
<tbody>
<tr>
<td>INTRANSITIVE</td>
<td>S V (LOC) or (LOC) S V</td>
</tr>
<tr>
<td>TRANSITIVE</td>
<td>A O V</td>
</tr>
<tr>
<td>DITRANSITIVE</td>
<td>A O V (IO)</td>
</tr>
<tr>
<td>EXTENDED INTRANSITIVE</td>
<td>S V (IO)</td>
</tr>
</tbody>
</table>

We see from clause types 2 and 3 that the position of O is preverbal, whereas in type 3, the IO (and the oblique LOC in type 1) comes after the verb and is optional (it can vary its position, occurring before the subject, but not before the verb - cf. note 7). In type 4, the erstwhile patient occurs postverbally and is optional, hence it patterns with IO and Loc rather than O.

b) Verbal person marking

<table>
<thead>
<tr>
<th>Type</th>
<th>Marking</th>
</tr>
</thead>
<tbody>
<tr>
<td>INTRANSITIVE</td>
<td>[ ] V-n</td>
</tr>
<tr>
<td>TRANSITIVE</td>
<td>A [ ] V-n</td>
</tr>
<tr>
<td>DITRANSITIVE</td>
<td>A [ ] V-n IO</td>
</tr>
<tr>
<td>EXTENDED TRANSITIVE</td>
<td>[ ] V-n IO</td>
</tr>
</tbody>
</table>

As we said before, when the third person S or O nominal (or free pronoun) is omitted, the enclitic -n/-e occurs. If verb type
4 were transitive, the enclitic should refer to the O, as it does in type 2; but on the contrary, it refers to the S.

c) Case System

<table>
<thead>
<tr>
<th>Type</th>
<th>Structure</th>
</tr>
</thead>
<tbody>
<tr>
<td>INTRANSITIVE</td>
<td>S-Ø V Goal-s/ -ki</td>
</tr>
<tr>
<td>TRANSITIVE</td>
<td>A-k O-Ø V</td>
</tr>
<tr>
<td>DITRANSITIVE</td>
<td>A-k O-Ø V IO-s / -t1 / -ki</td>
</tr>
<tr>
<td>EXTENDED INTRANSITIVE</td>
<td>S-Ø V IO-s / -t1 / -ki</td>
</tr>
</tbody>
</table>

Looking at the case system, it is clear that the second participant of the extended intransitive is not an O, for it presents exactly the same case-markers as the indirect object of a ditransitive verb.

d) Imperative

The final argument, which confirms that type 4 verbs are intransitive, is the morphosyntax of the imperative mood in Trumai. The imperative particle wana is employed to mark imperatives for intransitive verbs, while transitive and ditransitives verbs use the particle waki. The extended intransitive verbs pattern with intransitive verbs, taking the particle wana.

<table>
<thead>
<tr>
<th>Type</th>
<th>Impersonal Form</th>
</tr>
</thead>
<tbody>
<tr>
<td>INTRANSITIVE</td>
<td>wana</td>
</tr>
<tr>
<td>TRANSITIVE</td>
<td>waki</td>
</tr>
<tr>
<td>DITRANSITIVE</td>
<td>waki</td>
</tr>
<tr>
<td>EXTENDED INTRANSITIVE</td>
<td>wana</td>
</tr>
</tbody>
</table>
(18) **wana pita**
    *Imp* go.out
    'Go out!'

(19) **wana pes hen**
    *Imp* run then
    'Run, then!'

(20) **waki husa hen**
    *Imp* chain then
    'Chain (it), then!'

(21) **hine-tl waki kiti**
    3 - *Dat* *Imp* give
    'Give (it) to him!'

(22) **wana sone**
    *Imp* drink
    'Drink (it)!'

(23) **wirix-ki wana sone**
    manioc.pap-Dat *Imp* drink
    'Drink the manioc pap!'

As this final test indicates most clearly, Trumai basically has not four different morphosyntactic verb types, but only two, TRANSITIVE and INTRANSITIVE, with some transitives (type 3) and some intransitives (type 4) extended by means of the adjunction of an optional indirect object. Although the morphosyntax is clear, we are left with a puzzle: why would semantically transitive (i.e. two-participant) verbs be obligatory codified in morphosyntax as intransitive?
4. A possible explanation: semantically and pragmatically reduced transitivity

The fact that an action involves two participants doesn't necessarily mean it has high transitivity. As shown by Hopper and Thompson (1980), transitivity involves not only the number of participants, but an entire set of components, such as volitionality of the agent, punctuality and telicity of the action, the degree of affectedness of the patient, individualization of the patient, etc. The relevance of these components can vary from language to language in determining how a given action will be codified in morphosyntax.

The Trumai language codifies as intransitive verbs those two-participant verbs which have inherently reduced transitivity, due to either semantic features of the verb (section 4.1) or pragmatic features of the second participant, the erstwhile patient (section 4.2).

4.1. The semantic factor: locative object verbs (eg. 'bite', 'hit', etc)

In some actions, the second participant (i.e. the non-agent) is not a true patient (which is completely affected by the action), but rather is a kind of location. That is, while contact is made with the second participant, the effect of the contact may or may not be transferred to it (cf. Hopper and Thompson's 1980 conclusion that 'transferral' of the action is the most basic component of transitivity). It is thus more basically a location where the action occurs than a patient affected by the action. Some languages, such as Trumai, mark the difference between patient-objects and locative-objects in surface morphosyntax. Other languages, such as English, mark this difference only in syntactic variation (cf. Fillmore 1970). Observe the following examples:

(24) (a) I hit him (he may be affected)
(b) I hit at him (he is not affected)
(c) I killed him (he is affected)
(d) * I killed at him
(25) (a) I gave him a hit
(b) * I gave him a kill

From such examples, Fillmore (1970) argues that the erstwhile patient of hit is a location (in example 25, in reality, it is a recipient, which is a kind of metaphorical location). In (24a), the blow arrives at the second participant, but the second participant may or may not be affected. In (24b) the blow is aimed at the second participant, but either the blow does not connect or it has no effect; the use of a locative preposition to mark the second participant argues for a semantic case role of location rather than patient.

The second participant of kill, in contrast, is necessarily affected; therefore it is a patient to whom the action is transferred (and, for this reason, the use of a locative preposition here is impossible). In the case of hit the actual patient is the blow which is created through the action, and the erstwhile patient him is a kind of location where the 'real' patient is created. Example (25) shows this more clearly: it is possible to give a hit (the patient which is invisible in 24a-b) to the second participant (who is recipient), but is impossible to give a kill to the second participant, precisely because he IS the patient.

Different languages treat the lexical category of locative object verbs differently. Where English uses syntactic variation, Lhasa Tibetan allows only the syntax of (25) above for such verbs (DeLancey - p.c. with Gildea), and in Trumai, type 4 verbs allow only the syntax of (24b) above. A brief list of the semantically conditioned type 4 verbs includes:

**The Trumai Extended Intransitive Locative Object Verbs**

```
make   'bite'     ;  fa      'hit/kill'
xom    'suck'     ;  laxod   'smell (action/perception)'
xu'tsa  'look/see' ;  fa'tsa  'listen/hear'
lax    'hunt'
```

Verbs like 'hunt' also have a locative object, for the object need not be necessarily present to conduct the action (we can hunt
all day and at the end of hunting have never even encountered a likely patient).

4.2. The pragmatic factor: the non-topical patient

With some verbs the patients are habitual, very predictable, often indefinite and unindividuated. Most of the remaining extended intransitive verbs in Trumai are of this type. While the agent is topical, the patient has little importance or individuation and is often stereotypical. The Agents of 'eat' and 'drink', for example, are affected by these actions in a way that is likely to be more salient to a speaker than the effect on the thing eaten. Hopper and Thompson (1980) note that lowered topicality in a patient is likely to lead to less transitive morphosyntax, such as antipassives, etc. A subclass of type 4 verbs in Trumai are of this type, where stereotypically non-topical patients obligatorily occur as indirect, rather than direct, objects:

The Trumai Extended Intransitive Verbs with non-topical patients

xoxan 'wash'; sone 'drink'
ma 'eat'; maska 'sew'

At this point, we should point out some potential problems for our analysis: most troubling is the verb suda 'make (something)' which in Trumai is an extended intransitive. This verb is a problem for the explanation given above because the object of the action falls into neither of the categories above: it is not predictable nor it is semantically a locative, but rather a patient. It is hard to understand why the language would codify this apparently fully transitive action with intransitive morphosyntax. In another way as well, the Trumai system is not totally coherent. Like lax 'hunt', padi 'wait' is neither a telic action nor must its object be necessarily present. But while 'hunt' in Trumai is extended intransitive, 'to wait' receives fully transitive morphosyntax.
5. The pragmatic uses of transitive/extended intransitive pairs

In Trumpi, some pairs of verbs are semantically equivalent (that is, they express the same action), but belong to different morphosyntactic categories. For each of these verbs it is possible to obtain a paradigm with all persons of subject and object (1st, 2nd, 3rd) and with nouns. These verbs are the followings:

<table>
<thead>
<tr>
<th>EXTENDED INTRANSITIVE</th>
<th>TRANSITIVE</th>
<th>GLOSS</th>
</tr>
</thead>
<tbody>
<tr>
<td>fa</td>
<td>disi</td>
<td>'hit/kill'</td>
</tr>
<tr>
<td>make</td>
<td>tako</td>
<td>'bite'</td>
</tr>
<tr>
<td>dama</td>
<td>tuxa'tsi</td>
<td>'pull'</td>
</tr>
</tbody>
</table>

These verbs alternate with one another in actual use: it is possible to use either the extended intransitive or the transitive forms any time the basic concept needs expression. What is interesting to see is that speakers seem to select which category of verb to use based on the persons of agent and patient. When first person acts on third, speakers prefer the extended intransitive form; when third acts on first, the preferred verb used is the transitive.

This preference was observed in two kinds of data:

1. In elicitation of paradigms from various consultants; e.g., when the paradigm was requested for 'hit', the consultants systematically selected the verb type depending on the person of A and O: 1A -> 30, 1A -> 20 and 2A -> 30 were most commonly expressed with extended intransitive verbs, whereas 3A -> 10, and 2A -> 10 were most commonly expressed with transitive verbs. When only third person was involved, the changes were not so systematic;

2. Texts. For example, Monod-Becquelin (1976) observes that in a text where a Trumpi person tells about the killing of an uncle by the Kayabi Indians, the transitive verb ('form ergatif' in her terminology) occurs very frequently when the consultant speaks about the actions of the aggressors (Kayabi) on the victims (Trumpi). While telling of the revenge (Trumpi on Kayabi - the Trumpi Indian speaks of the Kayabi people) the intransitive
('construction Sujet-Objet' in her analysis) occurs. Here we have again the difference between NPs:

attack: Kayabi (3rd pl) on Trumai (1st pl) = transitive

revenge: Trumai (1st pl) on Kayabi (2nd pl) = intransitive

But sometimes the selection does not occur in the expected way (that is, it is a tendency rather than a rigid rule).

This new pattern can be explained by the difference in topicality in objects: first person is inherently more topical than third person, for the speaker will always consider himself to be the center of speech. Morphosyntactically, first person is given a topical position, as the object. As third person has inherently lower topicality, it tends to hold the less topical position of indirect object. From this follows the selection of verbal forms:

(26) 3Agt -> 1Pat = inherently topical object uses the transitive verb.

O       V       A

ha-Ø disi-tke    ka in hinak wan-ek
1-Abs hit/kill-Desid ? ? 3 pl -Erg
'They want to kill/hit me'

(27) 1Agt -> 3Pat = inherently less topical object uses the extended intransitive verb

A       V       IO

ha-Ø fa-tke    ka in hine-t1
1-Abs hit/kill-Desid ? ? 3 -Dat
'I want to hit/kill him'

It is interesting also to observe that, in the case of fa and disi, there are two possible meanings for these verbs: 'hit' and 'kill'. Since 'hit' takes a locative object and 'kill' does not, one might ask how it is that (a) a single verb can mean both and (b) one verb with both meanings ends up as transitive and another as extended intransitive. We can make the hypothesis that in old Trumai there might have been one verb to one meaning, i.e. probably the extended intransitive verb fa meant only 'hit' and
the transitive verb *disi* meant only 'kill'. We would then assume that the semantics of these historically distinct verbs evolved closer to one another (i.e. *fa* developed the meaning 'kill' and *disi* the meaning 'hit'), while the morphosyntactic category of each remained constant.

6. Conclusion

These are the results obtained by our analysis. There are other facts we intend to investigate in the future, such as the following:

* the selection when, in the use of *fa/dis* and other pairs, the involved NPs are third person nouns (i.e. pronoun versus common noun; human noun versus non-human noun, etc.)

* If the choice of dative markers (-s/-t1/-ki) is partially conditioned by other characteristics of the NP-Indirect object, e.g. degree of individuation; degree of affectedness (total/partial); animacy; human versus non-human in relation to pronouns (3rd pronoun refferring to human versus 3rd pronoun non-human), etc.

* It was suggested to us that, although the choice of verb from pairs (like those shown in section 5 above) is essentially lexical rather than morphological, the syntactic effect greatly resembles that of an antipassive: for one verb, the second participant is an O (cf. the active in a language with a morphological anti-passive); for the other verb, the second participant is an oblique, the IO (cf. antipassive construction which denotes the O to oblique). The difference is that in Trumai this is a nonproductive lexical pair rather than a morphosyntactic process (reminiscent of the distinction between so-called 'lexical causatives' like the pair *die/passive* and truly productive morphological causatives).

That is an interesting idea to be discussed; the question is if such pairs do function as anti-passives, and if so, how productive this system would be. As we need more information about these pairs and the entire system of the Trumai language (i.e. about the possibility of a morphological anti-passive
construction in Trumai), we prefer to reserve this discussion until another paper.

NOTES

1. My research on Trumai has been conducted since 1989 in the Xingu Reserve in Mato Grosso, Brazil. The data used here were given by the consultants Kumaru, Amati and other persons from Terra Preta Village. Past research was funded by Brazilian foundations: CNPq (Conselho Nacional de Pesquisa), FAPESP (Fundação de Amparo à Pesquisa do Estado de São Paulo), FAEP (Fundação de Apoio à Pesquisa), CAPES (Coordenadoria de Aperfeiçoamento ao Pessoal de Ensino Superior); current research is funded by CNPq and FINEP (Fundaçao Nacional de Ensino e Pesquisa). A previous analysis of the Trumai verbal case-marking system benefitted from comments by Dr. R. Dixon. An earlier version of this paper was presented at the 1993 Summer Meeting of the Society for the Study of Indigenous Languages of the Americas (SSILA); financial support for participation in this meeting was given by CNPq (Brazil), the Linguistic Society of America and the AID SUNY/Training Program. Thanks to Denny Moore for encouragement and Spike Gildea for detailed comments and discussion; some ideas presented here were suggested by Scott DeLancey. Thanks also for comments received during the SSILA meeting presentation. Remaining mistakes are my own responsibility.

2. Trumai is an isolated indigenous language spoken in the Xingu Reserve, in the central region of Brazil. The Trumai people live distributed in four different places (three villages and near the P.I. Pavuru, an administrative post). While there are between 100 and 109 inhabitants in Trumai communities, due to intermarriage with indians of other Xingu tribes, the actual number of speakers is between fifty five and sixty.

3. We adopt in this paper the abbreviations used in Dixon (1979), adding also the term IO:

- S: intransitive subject
- A: transitive subject
- O: transitive direct object
- IO: indirect object
4. As the analysis of the i/i ꞌ ꞌ morpheme is complex, we will not treat it in this paper. In brief, this morpheme optionally marks overt NPs. When A or IO NPs are deleted, the i/i ꞌ ꞌ morpheme is also deleted; in contrast, when the S or O NP is deleted, the i/i ꞌ ꞌ morpheme can remain.

5. The following abbreviations are used in examples:

Abs    absolutive case
Dat    dative case
Erg    ergative case
AGT    agent
PAT    patient
SG     singular
PL     plural
Imp    imperative

6. The words kasoro, aros and cafe are borrowings from Portuguese ('cachorro, arroz and café', respectively).

7. In reality, as LOC, IO can present variations in position:
Extended Intransitive : (IO) S V
Ditransitive : (IO) A O V

8. Perhaps there would be other pairs. At the moment (at this stage of our knowledge about the language) these are the pairs attested by us.

9. This is reminiscent of Dixon's (1979) proposed hierarchy for person-based split ergativity, and of Gildea's (to appear) discussion of a similar hierarchy for inverse systems. In both, the 1 > 3 is a basic part of the hierarchy. Other kinds of NPs are considered. Dixon's hierarchy is the following:

1 > 2 > 3 pronouns > 3 proper nouns > nouns

/  /  /
/  /  /
/  /  /

human > animate > inanimate
While in some languages it is obligatory to follow this hierarchy, in Trumai is not, although as yet we have no evidence for the rest of hierarchy (human > animate > inanimate).

REFERENCES


REPORT 8

SURVEY OF CALIFORNIA AND
OTHER INDIAN LANGUAGES

Proceedings of the Meeting of
the Society for the Study of the
Indigenous languages of the Americas
July 2-4, 1993
and the Hokan-Penutian Workshop
July 3, 1993

both held at the 1993 Linguistic Institute at Ohio State University in Columbus, Ohio

Margaret Langdon, Volume Editor
Leanne Hinton, Series Editor
REPORT 8

SURVEY OF CALIFORNIA AND OTHER INDIAN LANGUAGES

Proceedings of the Meeting of the Society for the Study of the Indigenous languages of the Americas
July 2-4, 1993

and the Hokan-Penutian Workshop
July 3, 1993

Both held at the 1993 Linguistic Institute at Ohio State University in Columbus, Ohio

Margaret Langdon
Volume Editor

Leanne Hinton
Series Editor
This volume is dedicated to

JAMES E. REDDEN

on the occasion of his retirement

for his enduring commitment to the publication

of the results of research on Yuman, Hokan, Penutian and

other American Indian languages

and also

for his contributions to the

documentation of the Hualapai language
INTRODUCTION

This volume includes a number of papers presented in conjunction with the 1993 Linguistic Institute at Ohio State University in Columbus, Ohio, at two conferences on American Indian Languages: the meeting of the Society for the Study of the Indigenous languages of the Americas, held July 2-4, 1993, and the meeting of the Hokan-Penutian Workshop, held on the morning of July 3, 1993.

This continues a tradition initiated during the Linguistic Institute at the University of Arizona in 1988, of offering conferences on American Indian languages during the summer Linguistic Institute of the Linguistic Society of America, which is held every two years on the campus of the host institution. The interaction thus afforded between students and faculty of the Institute and specialists in American Indian languages has proved mutually profitable.

We gratefully acknowledge the dedication of Catherine Callaghan in making these meetings thoroughly enjoyable, as well as the hospitality of Ohio State University.

The Hokan-Penutian Conference has a tradition of meetings dating as far back as 1970, when the first Hokan Conference was hosted by Margaret Langdon at UCSD. Since 1976, the Hokan (and later Hokan-Penutian) Conference proceedings were published most years by James Redden, as part of the series *Occasional Papers on Linguistics*, out of the department of Linguistics at Southern Illinois University at Carbondale. Beginning this year, with James Redden's retirement, the reports of these conferences are being published as part of the *Survey Reports* out of the Survey of California and Other Indian Languages at the University of California at Berkeley.

Margaret Langdon  
Volume Editor

Leanne Hinton  
Series Editor
## CONTENTS

### GENERAL

<table>
<thead>
<tr>
<th>Title</th>
<th>Page</th>
</tr>
</thead>
<tbody>
<tr>
<td>Putting pronouns in proper perspective in proposals of remote relationships among Native American languages</td>
<td>1</td>
</tr>
<tr>
<td>CAMPBELL, LYLE</td>
<td></td>
</tr>
<tr>
<td>S- prefixation on Upper Chehalis (Salish) imperfective predicates</td>
<td>21</td>
</tr>
<tr>
<td>KINKADE, M. DALE</td>
<td></td>
</tr>
<tr>
<td>Comparative difficulties of the &quot;Gulf&quot; languages</td>
<td>31</td>
</tr>
<tr>
<td>KIMBALL, GEOFFREY</td>
<td></td>
</tr>
<tr>
<td>Like hair, or trees: Semantic analysis of the Coeur d'Alene prefix ne' 'amidst'</td>
<td>40</td>
</tr>
<tr>
<td>OCCHI, DEBRA J., GARY B. PALMER, AND ROY H. OGAWA</td>
<td></td>
</tr>
</tbody>
</table>

### SOUTH AMERICA

<table>
<thead>
<tr>
<th>Title</th>
<th>Page</th>
</tr>
</thead>
<tbody>
<tr>
<td>Constituent order variation in Apurinã</td>
<td>59</td>
</tr>
<tr>
<td>FACUNDES, SIDNEY</td>
<td></td>
</tr>
<tr>
<td>Case, verb type, and ergativity in Trumai</td>
<td>75</td>
</tr>
<tr>
<td>GUIRARDELLO, RAQUEL</td>
<td></td>
</tr>
<tr>
<td>Nheengatu (Língua Geral Amazonica), its history, and the effects of language contact</td>
<td>93</td>
</tr>
<tr>
<td>MOORE, DENNY, SIDNEY FACUNDES, AND NADIA PIRES</td>
<td></td>
</tr>
<tr>
<td>Reconstruction of Proto-Tupari consonants and vowels</td>
<td>119</td>
</tr>
<tr>
<td>MOORE, DENNY, AND VILACY GALUCIO</td>
<td></td>
</tr>
<tr>
<td>Basic word order in Karitiana (Akirem family, Tupi stock)</td>
<td>138</td>
</tr>
<tr>
<td>STORTO, LUCIANA R.</td>
<td></td>
</tr>
</tbody>
</table>

### HOKAN-PENUTIAN WORKSHOP

<table>
<thead>
<tr>
<th>Title</th>
<th>Page</th>
</tr>
</thead>
<tbody>
<tr>
<td>'How', and 'thus' in UA Cupan and Yuman: A case of areal influence</td>
<td>145</td>
</tr>
<tr>
<td>ELLIOTT, ERIC</td>
<td></td>
</tr>
<tr>
<td>Kroeber and Harrington on Mesa Grande Diegueño (lipay)</td>
<td>170</td>
</tr>
<tr>
<td>LANGDON, MARGARET</td>
<td></td>
</tr>
<tr>
<td>Conjunctions and reference tracking in Yuma</td>
<td>183</td>
</tr>
<tr>
<td>MILLER, AMY</td>
<td></td>
</tr>
<tr>
<td>The shifting status of initial glottal stop in Barbareño Chumash</td>
<td>199</td>
</tr>
<tr>
<td>MITHUN, MARIANNE, TSUYOSHI ONO, AND SUZANNE WASH</td>
<td></td>
</tr>
<tr>
<td>Final glottalization in Barbareño Chumash and its neighbors</td>
<td>208</td>
</tr>
<tr>
<td>ONO, TSUYOSHI, SUZANNE WASH, AND MARIANNE MITHUN</td>
<td></td>
</tr>
</tbody>
</table>