

## A Semantic Study of Tsou Case Markers\*

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Tsou (also known as Northern Tsou) differs from the other Formosan languages in having developed a complex system of case markers — divided into two sets: nominative (ʔe, si, ta, na) and oblique (ta, to, no) — which "localize" an object in relation to the speaker/hearer. Traditionally, they are classified according to the following parameters: proximity, visibility and definiteness.

It is our purpose to examine in the present paper the system of Tsou case markers, focalizing our attention on the semantic level.

We first present briefly the structure of the language as well as the syntactic properties of case markers. After having shown the limits of Tung's (1964) analysis, we argue that the speaker adjusts or calculates the position of the object (referred to) in relation to the "here-me-now" of the speech situation. Such an analysis enables us to account for a large range of data. It also enables us to account for (1) the possible and impossible substitutions of case markers with one another and (2) the permissible and non-permissible co-occurrences of case markers with aspectual particles.

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## Introduction

Tsou<sup>1</sup> is an Austronesian<sup>2</sup> language spoken in the Southwest of Taiwan. It includes three dialects that are geographically distributed as follows: the Tapangu and the Tfuca<sup>3</sup> dialects are spoken in villages situated in the district of Alishan (Chia-yi county); the Duhtu dialect is spoken in only one village, located in the district of Hsin-yi (Nantou county).<sup>4</sup>

While Tsou phonology has been well studied (see Tung, 1964; Ho, 1976; Tsuchida, 1976), many syntactic and semantic aspects of the language are still poorly understood and it is still widely acknowledged that Tung's descriptive study (op.cit.) represents by far the most comprehensive grammar of the language.

Tsou patterns like other Formosan and extra-Formosan languages (e.g. Atayal, Amis, Bunun, Tagalog) in having a nominal case marking system cross-referenced on the verb, i.e., full NPs are preceded by case markers; the semantic role of the NP selected as the subject of the sentence is (morphologically) marked on the verb by means of an affix. It differs from these languages, however, in having developed a complex (and interrelated) system of auxiliaries and case markers which do not only encode syntactic relations but also contain semantic information.

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1 Tsou is also known as Northern Tsou, by opposition to Saaroa and Kanakanavu referred to as Southern Tsou.

2 The Austronesian family includes a variety of languages spoken not only in Taiwan but also in inland southern Vietnam, Madagascar, Malaysia, the Philippines, Indonesia, Melanesia, Micronesia and Polynesia.

3 Our data is based on this dialect. It was collected at different times in 1991-1992.

4 See Li (1979) for a study of the phonological variations found in these dialects.

In this paper, we will examine the nominal case marking system of Tsou. More specifically, we will show how a semantic study can account for the syntactic distribution of case markers in that language. For the sake of clarity, we will first present a brief account of the structure of the language.

## 1. Preliminary remarks

We will first deal with Tsou sentential word order before examining the structure of clauses as well as that of noun phrases.

### 1.1. Word order

Tsou is a verb-initial language. Though word order is relatively free in ditransitive sentences, the permutation of two NPs in monotransitive sentences may either lead to the reinterpretation of the sentence in question as in (2b) or to its ungrammaticality as in (2a). A comparison of (1) and (2) shows that as a rule, the subject (or so-called focused NP<sup>5</sup>) occurs clause-finally, except when followed by spatio-temporal adjuncts.

- (1) a. [mo bonɪ]v [to taci mɪ] o [ʔo amo]s (maitanʔe)<sup>6</sup>  
           AF eat       Obl banana Nm father (today)  
           ‘Father ate a banana (today)’

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5 We follow the conventional usage in using the term ‘focus’ instead of ‘topic’ as others do. It must be understood (here) as referring to the syntactic and semantic relationship established between a predicate and the NP which surfaces as the subject of the sentence (see our discussion below).

6 In our examples, b and d stand for the implosives [ɓ] and [ɗ] respectively. The following abbreviations are used in the glosses: Adv: Adverb, AF: Agent Focus, Asp: Aspectual particle, Itr: Iterative, NAF: Non-Agent Focus, Neg: Negation, Nm: Nominative, Obl: Oblique.

- b. [i-si ana]v [to amo]o [ʔo tacɪ mɪ]s (maitanʔe)  
 NAF eat Obl father Nm banana (today)  
 'The banana has been eaten by father (today)'

- (2) a. \* [mo bonɪ]v [ʔo amo]s [to tacɪ mɪ]o  
 AF eat Obl father Nm banana

- b. [i-si ana]v [ʔo tacɪ mɪ to amo]s  
 NAF eat Nom banana Obl father  
 'Father's banana has been eaten'

Besides word order, two major syntactic devices — the morphological case marking on the verb and on the noun — fulfill the grammatical coding of the subject in Tsou: the semantic role of the NP selected as the focus of the clause is (morphologically) marked on the verb by means of an affix. The peculiarity of this 'focus system' lies in the fact that any NP, whatever its semantic role (e.g. agent, theme, locative, instrument ...) or its syntactic function, may be promoted to subject position. On that basis, we can roughly distinguish two kinds of constructions: in the first, the agent is viewed as the focus of the clause (A(gent) F(ocus) construction). In the second, any other NP can be promoted as subject (N(on)-A(gent) F(ocus) construction), the affix on the verb determining its semantic role (either theme/patient, source/goal/locative or instrument...). This dichotomy is illustrated in (1a)-(1b) above. In Tsou, nominal case marking is obligatory, in other (Formosan) languages it is either optional or non-existent.

## 1.2. The clause

Tsou differs from the other Formosan languages in that it has developed a complex system of preverbs. The term 'preverb' actually refers to different types of particles (e.g. aspectual markers, modal adverbs and auxiliaries) which occur before the verb in a determined word order. A comparison of

(3a-c) shows that only auxiliaries are obligatory. They usually occur clause-initially.

- (3) a. oʔa moso sʔa da etamaku ʔo ohaeva  
Neg AF Adv Asp smoke Nm younger sibling  
'My younger brother/sister never smoked'
- b. \* oʔa Ø sʔa da etamaku ʔo ohaeva  
Neg Adv Asp smoke Nm younger sibling
- c. moso etamaku ʔo ohaeva  
AF smoke Nm younger sibling  
'My younger brother smoked/was smoking'

Auxiliaries fall into two distinct classes:

- (1) some occur only in AF constructions (*mio*, *moso*, *mi-*, *mo(h)-*), or NAF constructions (*i-*, *o(h)-*), while
- (2) others occur either in AF or NAF constructions (*te*, *tena*, *ta*, *nte*, *nto*, *da*).

We will first state briefly their syntactic distribution before turning our attention to their semantic function.

From a syntactic point of view, we follow Starosta (1988) in assuming that auxiliaries represent the head of their clause: they can be followed by aspectual markers (*cʔu/cu* 'already', *nʔa* 'still' etc ...) and various adverbs; they can be negated and pronominal clitics must be attached to them. As an illustration, consider (4).

- (4) oʔa moh-ta sʔa da ahtu<sup>7</sup> etamaku  
Neg AF-3sg Adv Asp never smoke  
'He never smoked'

From a semantic point of view, auxiliaries can be divided according to

7 Note that constituents translated as durative and frequentative time adverbs in English function as verbs in Tsou. For a detailed discussion, see Zeitoun (1992: 188-89).

whether they carry temporal/aspectual or modal information. Those belonging to the first group (see the distinction made above) carry temporal and aspectual information. Temporally, *mi-* and *i-* indicate that the events they determine have (still) a certain relevance at Speech time (Immediacy) whereas *mo(h)-* and *o(h)-* locate them in the past (Remoteness), i.e., there is a disconnection (or rupture) between the Event time and the Speech time. Aspectually, with *mi-* and *mo(h)-* situations are viewed as on going at Speech time/Reference time (Imperfective aspect) while with *i-*, *o(h)-* they are envisaged as completed (Perfective aspect). (5) and (6) illustrate this contrast.

- (5) a. *mi-ta mimo ta emi*  
AF-3sg drink Obl wine  
'He is drinking wine'

- b. *i-ta ima si emi*  
NAF-3sg drink Nm wine  
'He has drunk wine'

- (6) a. *moh-ta mimo to emi*  
AF- 3sg drink Obl wine  
'He drank/was drinking wine ...'

- b. *oh-ta ima ?o emi*  
NAF-3sg drink Nm wine  
'He had drunk wine'

*Da* refers to the scanning of a class of situations (Iterative/Generic) and by extension to the characteristic of the agent/actor of the sentence (7) while *te*, *tena*, *n-te* and *n-to* can be respectively analysed as deontic and epistemic modals.

- (7) *da-ta etamaku*  
Itr-3sg smoke  
'He smokes'

### 1.3. The noun phrase

As mentioned above, Tsou case markers fall into two distinct classes: the nominative case markers (*ʔe*, *si*, *ta*, *ʔo*, *na*) precede the focused NP, while the oblique case markers (*ta*, *to*, *no*) precede any other NP. They present the following characteristics:

(1) They occur before any simple (8a) or complex (8b) NPs.

(8) a. *i-si eobaka ta ino si avʔu*  
 NAF-3sg beat Obl mother Nm dog  
 'The dog has (just) been beaten by mother'

b. *mo eɣhova ʔe psoevohɣu ci mcoo ta ino-ʔu*  
 AF blue Nm beautiful Rel eyes Obl mother-1sgGen  
 'The beautiful eyes of my mother are blue'

As a rule, they are obligatory, though with a very restricted class of verbs (*ea* 'have', *mihia*<sup>8</sup> 'buy'), the presence of a case marker produces an ungrammatical sentence. Compare (9)-(10):

(9) a. *oʔa te-ʔo mihino to tpost*  
 Neg will-1sg buy Obl books  
 'I don't want to/won't buy books'

b. \* *oʔa te-ʔo mihino Ø tpost*  
 Neg will-1sg buy Ø books

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8 The verb 'buy' has the following three inflections:

*mihino*, used in AF constructions; *mihina* and *mihia*, both used in NAF constructions. A Comparison of (a) and (b) below shows that it is only when a noun follows *mihia* that it cannot be preceded by a case marker. This syntactic constraint is still ill-understood.

(i) a. *i-ʔo mihia Ø tpost*  
 NAF-1sg buy Ø book  
 I have bought book

b. \**i-ʔo mihia si tpost*  
 NAF-1sg buy Obl book

- (10) a. oʔa mi-ʔo sʔa eaa Ø oko  
 Neg AF-1sg Adv have Ø child  
 'I don't have any child'

- b. \* oʔa mi-ʔo sʔa eaa si oko  
 Neg AF-1sg Adv have Nm child

(2) In complex NPs, oblique case markers occur in complementary distribution with the nominalizer *ci*: *ta*, *to* or *no* occur between two nouns while *ci* occurs between a predicate and a noun. Compare (11a)-(11b):

- (11) a. mcoo to ino  
 eye Obl mother  
 'the eyes of mother'

- b. ephova ci mcoo  
 blue Rel eye  
 'blue eyes'

Having outlined the structure of Tsou, let us now concentrate on the semantic functions of the case markers just mentioned above.

## 2. Tsou case markers: a semantic approach

We first review Tung's analysis and show that though it is fundamentally correct, it misses a number of generalizations. We then argue that the (whole) speech act situation (which includes three parameters, Speech location, Speech time and Speech act participants) must be taken into account to explain the distribution of Tsou case markers.

### 2.1. Comments on Tung's (1964) analysis

In his (1964) publication, Tung suggests that (1) Tsou case markers localize the objects referred to with respect to the speaker and the addressee, (2) they should be classified according to the following parameters:



proximity, visibility and definiteness. Below, we reproduce partially the table proposed by Tung (p. 147).

Table 1: A classification of Tsou case markers

| Function<br>Characteristics  | Nominative   | Oblique      |
|--|--------------|--------------|
| Being seen by the speaker<br>and the hearer  |              |              |
| near   | ?e           | ta           |
| middle   | si           | ta           |
| distant  | ta           | ta           |
| Not being seen by both<br>but having been seen<br>by the speaker<br>and having not been<br>seen by the speaker | ?o<br><br>na | to<br><br>no |

The following examples illustrate the above table:

- (12) a. mo boni ta taci mi ?e oko  
AF eat Obl banana Nm child  
'This child is eating a banana'
- b. mo boni ta taci mi si oko  
AF eat Obl banana Nm child  
'That child is eating a banana'
- c. mo boni ta taci mi ta oko  
AF eat Obl banana Nm child  
'That child (over there) is eating a banana'
- d. mo boni to taci mi ?o oko  
AF eat Obl banana Nm child  
'The child (unseen) is/was eating a banana'
- e. mo boni no taci mi na oko  
AF eat Obl banana Nm child  
'A child is/was eating a banana'

(1) A brief comparison of (12a-e) shows that the co-occurrence of

different case markers with the same auxiliary infers on the meaning of the whole utterance. Compare (12a-c)-(12d) and (12d)-(12e).

(2) Table 1 suggests that there exists an agreement in ‘visibility’ and/or ‘definiteness’ between the nominative and oblique case markers (e.g. if the focused NP is marked by *xe*, *si* or *ta* then it seems that the non-focused NP should be preceded by *ta*).

In complex NPs, there exists such an agreement; however, two distinct NPs may be followed by different case markers (e.g. *æ* and *to*). Compare the (13b) and (14b).

- (13) a. mo eɲhova ʔe psoevohɲu ci mcoo ta ino-ʔu  
[+visible] [+visible]  
AF blue Nm beautiful Rel eyes Obl mother-1sg-Gen  
'The beautiful eyes of my mother are blue'
- b. \* mo eɲhova ʔe psoevohɲu ci mcoo to ino-ʔu  
[+visible] [- visible]  
AF blue Nm beautiful Rel eyes Obl mother-1sg-Gen
- (14) a. moso eobako ta oko ʔe ino  
[+visible] [+visible]  
AF beat Obl child Nm mother  
'This mother/Mother beat the child'
- b. moso eobako to oko ʔe ino  
[- visible] [+visible]  
AF beat Obl child Nm mother  
'The mother (seen) beat the child (unseen)'

(3) Tung argues that (a) if an NP is preceded by *æ*, *si* or *ta*, it indicates that the object referred to is being 'seen' by both the speaker and the addressee — note that his analysis presupposes that they are standing side by side and face the object in question — and that (b) if an NP is preceded by *æo*, *to*, it has not been 'seen' by the addressee (i.e. it is thus 'unknown' to him). His analysis cannot account for the following examples, though. It

incorrectly predicts that (15b) is grammatical and (16) ill-formed.

- (15) a. *os-ʔo*<sup>9</sup>    *tadɿ a*    *ʔe ino-ʔu*  
           NAF-1sg think about Nm mother-1sgGen  
           'I have thought about my mother'
- b. \* *i-su*                    *tadɿ a*    *ʔe ino-su*  
           NAF-2sg think about Nm mother-2sgGen

- (16) *os-ʔo*                *aiti ʔo oko-su*  
           NAF-1sg see Nm child-2sgGen  
           'I have seen your child'

In order to give a unified treatment of Tsou case markers, it seems that we first have to resolve the apparent contradiction lying in the use of 'only' three oblique case markers (*ta*, *to*, *no*) while nominative case markers are 'so' numerous (*ʔe*, *si*, *ta*, *ʔo*, *na*).

Below, we will try to show that:

(1) there exists a dichotomy between *ʔe*, *si*, *ta*, *ʔo*, *ta*, *to* on the one hand and *na* and *no* on the other. The former may be characterized as referential, the latter as non-referential.

(2) with the exception of *na* and *no*, nominative and oblique case markers can be (semantically) divided into a binary system: *ʔe*, *si*, *ta* (Nm), *ta* (Obl) 'here (visible)' are opposed to *ʔo*, *to* 'there (invisible)'. This correlates the deictic system of Tsou (cf. *tanʔe* here, this' vs. *taʔe* 'there, that (± vis)') and corresponds respectively to the internal/external sphere of the speaker.

(3) *ʔe*, *si*, *ta* (Nm, Obl) can be further divided into two subgroups: *ʔe* (Nm), *ta* (Obl) vs. *si/ta* (Nm). To fully understand this dichotomy, the location of the speaker with regard to the addressee must be taken into account.

9 In the first person (singular), *os-* is another variant of *i-*.

If our analysis is correct, it implies that the concept of Time (Immediacy vs. Remoteness) parallels that of Space (Internal vs. External sphere of the speaker).

## 2.2. Referential case markers

Based on the syntactic distribution of the case markers, i.e., their (non)-permissible permutation with one another and their (im)possible co-occurrence with various kinds of preverbs, we will try to prove in this section the validity of the assumptions just mentioned above.

### 2.2.1. Internal sphere of the speaker: *ʔe(Nm)*, *ta (Obl)* vs. *si(Nm)/ta (Nm, Obl)*

Let us first consider the following examples ((17a-c)=(12a-c)) in which *ʔe*, *si* and *ta* can substitute for each other.

(17) a. mo boni ta    taci mi ʔe    oko  
         AF eat    Obl banana Nm child  
         ‘This child is eating a banana’

         b. mo boni ta    taci mi si    oko  
         AF eat    Obl banana Nm child  
         ‘That child is eating a banana’

         c. mo boni ta    taci mi ta    oko  
         AF eat    Obl banana Nm child  
         ‘That child (over there) is eating a banana’

These sentences slightly differ in meaning: in (17a), the speaker points to a child who is located near him; while in (17b-c), he designates a child located at a further distance. The speaker and the addressee may stand side by side, in which case the relation just mentioned holds true; they may face each other or be away from one another, in which case the child in question will be located near the addressee (by opposition to the speaker), as in (21b) or away from both as in (21c).

Based on our foregoing discussion, it seems that the system of definite case markers function according to a four way distinction, i.e. according to the proximal, medial, distal (but still visible), distal (and invisible) location of the object referred to with respect to the Speech act participants. Such an analysis would lead us to make incorrect predictions, however.

Consider first the following pairs of examples:

- (18) a.  $i-?o$        $tad\dot{t}a$        $?e$   $ino-?u$   
           NAF-1sg think about Nm mother-1sgGen  
           'I have thought about my mother'
- b. \*  $i-?o$        $tad\dot{t}a$        $si$   $ino-?u$   
           NAF-1sg think about Nm mother-1sgGen
- c. \*  $i-?o$        $tad\dot{t}a$        $ta$   $ino-?u$   
           NAF-1sg think about Nm mother-1sgGen
- d.  $i-?o$        $tad\dot{t}a$        $?o$   $ino-?u$   
           NAF-1sg think about Nm mother-1sgGen  
           'I have thought about my mother'

If the above mentioned analysis was correct, how could we account for the occurrence of  $?e$  with the verb  $tad\dot{t}a$  'think of/think about' which entails the absence of the object referred to at Speech time while  $si$  and  $ta$  yields ungrammatical utterances ?

A comparison of (19)-(20) shows that when the speaker and the addressee are viewed as a disjoint reference (i.e. they are not identified one with the other either spatially or metaphorically), the use of  $?e$  renders the sentence ungrammatical.

- (19) a.  $i-?o$        $tad\dot{t}a$        $?e$   $ino-?u$   
           NAF-1sg think about Nm mother-1sgGen  
           'I have thought about my mother'
- b. \*  $i-su$        $tad\dot{t}a$        $?e$   $ino-su$   
           NAF-2sg think about Nm mother-2sgGen

- (20) a. i-su      tadɪa      ʔo ino-su  
           NAF-2sg think about Nm mother-2sgGen  
           ‘You have thought about your mother’

- b. i-su      tadɪa      ʔe ino-ʔu  
           NAF-2sg think about Nm mother-1sgGen  
           ‘You have thought about my mother’

In (19b), the possessive pronoun *su* ‘your’ indicates a disconnection between the speaker and the NP *ino* (speaker vs. addressee), while the use of *ʔe* points toward their identification; as a consequence, the utterance is ungrammatical. Only *ʔo* — which marks a rupture between the referent and the speaker — can occur in the sentence. In (20b), the use of the possessive pronoun *ʔu* ‘my’ gives back its well-formedness to the utterance because the addressee is identified with the speaker.

In (21), the use of the oblique case marker *ta* is ambiguous in that it may either refer to an object belonging to the speaker (by opposition to the addressee) or located somewhere around the speaker and the addressee.

- (21) mi-ko    mihino ta    tposɪ  
       AF-2sg buy    Obl book  
       ‘Have you bought this/that book?’

We have shown that the speaker and the addressee may or may not be identified spatially/metaphorically. Their location with respect to one another infers on the use of *ʔe*, *si* and *ta* (Nm/Obl): if the speaker and the addressee are viewed as a conjoint reference, then *ʔe*, *si*, *ta* (Nm/Obl) can be substituted and refer to the Spatial location of the referent with respect to the speech participants. If the speaker and the addressee are regarded as a disjoint reference, *ʔe* — which refer to the location of the speaker — will be used by opposition to *si* and *ta* (Nm).

We turn now to a brief account of *ʔo* and *to*, in contrast with *ʔe*, *si* and *ta*.

### 2.2.2. *ʔo* (Nm) and *to* (Obl): external sphere of /to the speaker

It has been observed that both *ʔo* and *to* belong to a sphere external to that of the speaker. They indicate a rupture in terms of space and time. Our analysis is further supported by the following pairs of examples:

- (22) a. da-ta huhucmasi boni to taci mi  
 Itr-3sg everyday eat Obl banana  
 'He eats a banana everyday'

- b. \* da-ta huhucmasi boni ta taci mi  
 Itr-3sg everyday eat Obl banana

- (23) a. da-ta kaebi boni to huvʔo  
 Frq-3sg happy eat Obl orange  
 'He likes eating oranges'

- b. \* da-ta kaebi boni ta huvʔo  
 Frq-3sg happy eat Obl orange

- (24) a. oʔa moh-ta sʔa da ahtu etamaku to tamaku  
 Neg AF-3sg Adv Asp never smoke Obl cigarette  
 'He never smoked cigarettes'

- b. \* oʔa moh-ta sʔa da ahtu etamaku ta tamaku  
 Neg AF-3sg Adv Asp never smoke Obl cigarette

*da* functions as an auxiliary in (22)-(23), and as an aspectual marker in (24). Both<sup>10</sup> *da*<sub>1</sub> and *da*<sub>2</sub> indicate a rupture with the Speech time: *da*<sub>1</sub> refers to the scanning of a class of occurrences or by implication to the characteristic of the agent of a given sentence while *da*<sub>2</sub> locates events in the past. However, both have aoristic proprieties (i.e. they indicate a rupture with Speech time). As a consequence, in each example, *to* (but not *ta*)

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10 For a justification of this dichotomy, see Zeitoun (1992: 51-56)

can co-occur with *da*.

Our analysis accounts also for the ungrammaticality of (25b) and for the semantic variation yielded by the substitution of *ta* by *to* in (26b).

- (25) a. *mi-ʔo nʔa boni ta taci mi*  
 AF-1sg Asp eat Obl banana  
 'I'm eating a banana'
- b. \* *mi-ʔo nʔa boni to taci mi*  
 AF-1sg Asp eat Obl banana  
 'I'm eating a banana'
- (26) a. *mi-ʔo cu boni ta taci mi*  
 AF-1sg Asp eat Obl banana  
 'I have been eating a banana'
- b. *mi-ʔo cu boni to taci mi*  
 AF-1sg Asp eat Obl banana  
 'I have eaten a banana'

In (25), the aspectual marker *nʔa* refers to an on-going action. *To* cannot co-occur with *nʔa* because it refers to an object located outside the (spatial/communicative) sphere of the speaker.

In (26b), both *ta* and *to* can co-occur with *cu*. *Cu* is a marker of perfect: it indicates an anteriority (i.e. the event referred to is prior to the time of Speech or to the point taken as Referent time). It also indicates that the event in question (or its result) is still relevant at that time (i.e. Resultant state). It doesn't enable us to determine whether the situation is past and completed or still on-going. Such an interpretation is implied by the presence of other constituents (e.g. case markers). In (26a), the use of *ta* indicates that the banana is still being eaten at Speech time while that of *to* makes the addressee understand that it has already been eaten (Resultant state) in (26b).



Our analysis further accounts for the semantic variations found in the following pair of examples.

- (27) a. *moso eobako ta oko ?e/si/ta ino*  
 AF beat Obl child Nm mother  
 'The mother beat the child' (Both are seen at speech time)
- b. *moso eobako to oko ?o ino*  
 AF beat Obl child Nm mother  
 'The mother beat the child' (Both are unseen at speech time)

In both examples, *moso* indicates a disconnection between Speech time and the Event time. However, we are able to (correctly) predict that the use of *?e, si, ta* (Obl, Nm) in (27a) entails the presence of both the mother and the child at Speech time while the use of *?o* and *to* in (27b) implies their absence.

Let's turn now to a treatment of *no* and *na*.

### 2.3. A unified treatment of *no* and *na*

In this section, we demonstrate that both *no* and *na* carry the same semantic function: they both refer to the scanning of a class of elements, the speaker refusing or being unable to pick up any element of this class, by opposition to *?o* and *to*, which indicate that an element of the class has been extracted (i.e., it is identified at least by the speaker). This hypothesis is supported by the following arguments:

- (1) A comparison of (28)-(29) and (30)-(31) shows that *na* and *no* do refer to the extraction of (at least) one element of a class but that this element is not / cannot be identified by the speaker. Hence, *no* and *na* cannot co-occur with the possessive pronouns *?u* 'my' and *su* 'your'.

- (28) a. *mo moŋsi ʔe oko*  
 AF cry Nm child  
 'This child is crying'
- b. *mo moŋsi ʔe oko-su*  
 AF cry Nm child-2sgGen  
 'Your child is crying'
- (29) a. *mo moŋsi na oko*  
 AF cry Nm child  
 'A child is crying'
- b. \* *mo moŋsi na oko-su*  
 AF cry Nm child-2sgGen
- (30) a. *mcoo ta ino*  
 eye Obl mother  
 'the mother's (seen by the speaker/addressee) eyes'
- b. *mcoo ta ino-ʔu*  
 eye Obl mother-1sgGen  
 'my mother's eyes'
- (31) a. *mcoo no ino*  
 eye Obl mother  
 'a(ny) mother's eyes'
- b. \* *mcoo no ino-ʔu*  
 eye Obl mother-1sgGen

In (32), however, *no* can co-occur with the possessive pronoun *si* 'his' because the NP *amo* 'father' is contextually left undetermined, the father in question being unknown to the speaker.

- (32) *i-si aiti no amo-si*  
 NAF-3sg see Obl father-3sgGen  
 'He is seen (=looked at) by his father'

(2) both *no* and *na* are used in interrogative sentences (i.e. the speaker scans a whole class of elements but being unable to pick up any element, he then asks the addressee to designate the right element), their substitution

with other case markers yielding ungrammatical sentences. Compare (33)-(34). They occur in complementary distribution: *na* appears in NAF constructions (33a) whereas *no* occurs in AF constructions (34b).

- (33) a. *cuma na i-si ana ta oko*  
what Nm NAF-3sg eat Obl child  
'What has the child (just) eaten ?'
- b. *mo boni no cuma si oko*  
AF eat Obl what Nm child  
'What is that child eating ?'
- (34) a. \* *cuma ?e/si/ta/?o i-si ana ta oko*  
what Nm NAF-3sg eat Obl child  
'What has the child (just) eaten ?'
- b. \* *mo boni ta/to cuma si oko*  
AF eat Obl what Nm child  
'What is that child eating ?'

## Conclusion

In this paper, we have tried to show that case markers in Tsou not only fulfill a grammatical function but also function as deictics. We argued that in order to give a unified account of this system different factors (Speech time, Speech place and Speech act participants) had to be taken into consideration.

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## References

- Culioli, A. 1970. 'La formalisation en linguistique. Considérations théorique à propos du traitement formel du langage'. *Documents de Linguistique Quantitative*. Saint Sulpice de Favière: Association Jean Favard.
- Greenberg, J. 1963. 'Some universals of grammar with particular reference to the order of meaningful elements'. In Greenberg, J. (ed.) *Universals of language*, 73-115. Cambridge, MA: MIT Press.
- Ho, Dah-an. 1976. 'Tsou phonology'. *Bulletin of the Institute of History and Philology*, 47: 245-274. (In Chinese)
- Li, Jen-kuei. 1979. 'Variations in the Tsou dialects'. *Bulletin of the Institute of History and Philology*, 50.2: 273-297.
- Morel, M-A, and Danon-Boileau, L. 1992. *La deixis, Colloque en Sorbonne (8-9 juin 1990)*. Paris: PUF
- Starosta, S. 1988. 'A grammatical typology of Formosan languages'. *Bulletin of the Institute of History and Philology*, 59.2: 541-576.
- Starosta, S. 1991. 'Ergativity, transitivity, and clitic coreference in four Western Austronesian languages', Paper presented to the Sixth International Conference on Austronesian Linguistics, Honolulu, May 20-24.
- Tsuchida, S. 1976. *Reconstruction of Proto-Tsouic phonology*. Tokyo: Study of languages and cultures of Asia and Africa, Monograph series, No.5.
- Tung, T'ung-ho. 1964. *A descriptive study of the Tsou language, Formosa*. Taipei: Institute of History and Philology, Academia Sinica, Special publications, No. 48.
- Weissenborn, J. and Klein, W. (eds). 1982. *Here and there: Cross-linguistic studies on deixis and demonstration*. Amsterdam: John Benjamins Publ. Co.

Zeitoun, E. 1992. *A syntactic and semantic study of Tsou focus system*. M.A Thesis, Tsing Hua University, Hsinchu, Taiwan.