Coding of Grammatical Relations in Mantauran (Rukai) [1]

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The position of Mantauran in the Rukai family remains controversial because the structure of this dialect has been obscured by drastic phonological and syntactic changes. Phonologically, it has undergone a process of spirantization, PR * b > Mt v; PR * ḍ and d > Mt ð; PR * g > Mt h. Syntactically, it differs from the other Rukai dialects and the Formosan languages as a whole: (1) it lacks the nominal case marking commonly found in most of these languages, (2) it has bound pronouns which tend to coalesce with the verb stem, (3) the third person pronoun has been reanalyzed as a "non-agent" agreement marker.

The present paper investigates the nature of grammatical relations in Mantauran and analyzes the syntactic and semantic properties of subjects and objects in this language. I try to account for the development of the "verb-object" agreement in this

dialect from a historical perspective. I show that in order to understand the synchronic variations mentioned above, we should take into account the development of the language and argue that (1) the third-person pronoun has taken on an important role in the coding of grammatical relations as a result of grammaticalization and reanalysis, (2) word order -- largely determined by pragmatic factors -- can be accounted for if we take into consideration the syntactic changes undergone, i.e., Mantauran is turning into a head-marking language, (3) grammatical relations are semantically-based. The pronominal agreement of Mantauran is further illustrated by a text given in the appendix.

keywords: Formosan, Rukai, Mantauran, pronominal agreement

Introduction

The present paper is part of ongoing research into the nature of grammatical relations in the Rukai dialects[2] in an attempt to reconstruct the pronominal and nominal case marking system of Proto Rukai and to redefine the internal relationships of this linguistic group (see Zeitoun, 1995a and 1995b).[3]   I will concentrate here on some synchronic and, to a less extent, some diachronic aspects of the grammar of Mantauran and examine the coding of grammatical relations in this language.

The choice of this topic is not arbitrary.   The position of Mantauran in the Rukai family remains controversial (see Li, 1977 and 1995; Tu and Cheng 1991; Starosta, 1994) because the structure of this dialect has been obscured by various phonological and morpho-syntactic changes.   Li (1977) showed that Mantauran has undergone drastic phonological changes.   Among other things, it lacks the following series of voiced stops /b, d, ɖ and g/ which have been spirantized: PR * b > Mt v; PR * ɖ and d >

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[2] Rukai includes six main dialects which stretch across the South of Taiwan: the Tanan dialect is spoken in the East (Taitung prefecture); the Budai and the Labuan dialects are both found in the South (Wutai county, Pingtung prefecture); the Maga, Mantauran and Tona dialects of the so-called "Lower three villages" are spoken in the North (Maolin county, Kaoshiung prefecture).

[3] Li ,1996 has also proposed a reconstruction of the pronominal system of Proto Rukai.

Mt ð; PR * g > Mt h.[4]   Syntactically, though it shares some structural resemblances with the Formosan languages and the Rukai dialects as a whole, it also displays a number of morpho-syntactic features not found elsewhere:

(a) Mantauran behaves like the other Formosan languages in that it is a verb-initial language, where two kinds of constructions -- the first verbal and the second equational -- can be distinguished.

(b) like the other Rukai dialects, it lacks the focus system commonly found in the (other) Formosan languages and has developed an active/passive dichotomy.

(c) NPs are rarely preceded by a nominal case marker,

(d) it has bound pronouns which tend to coalesce with the verb stem,

(e) the third person pronoun has been reanalysed as a "non-agent" agreement marker.[5]

In what follows, I will first present a sketch of the clause structure of Mantauran. I will then examine the coding of grammatical relations in this language and finally try to account for the development of the third person pronoun as an agreement marker.

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[4] Mantauran has 15 consonants /p, t, k, ʔ, c, s, h, v, ð, m, n, ŋ, l, ļ, r/ and four vowels /a, i, o, ə/. /l/ is a lateral fricative, /ļ/ a lateral flap retroflex and /r/ a trill. There is no phonemic distinction between [i] and [e], [o] and [u]. The abbreviations used in the glosses include: Act: Active, AF: Agent Focus, BG: Bound Genitive, BN: Bound Nominative, BO: Bound Oblique, Caus: Causative, E: Exclusive, Fut: Future, FN: Free Nominative, FO: Free Oblique, I: Inclusive, Loc: Locative, NAF: Non Agent-Focus, Neg: Negation, Nom: Nominative, Obl: Oblique, P: Plural, Pass: Passive, Prf: Perfective, PF: Patient Focus, Real: Realis, Red: Reduplication, S: Singular. Clitics are indicated by a equal sign = and bound morphemes by a hyphen -.

[5] This syntactic feature (first reported by Li, p.c. in July 1992) has become well-known because it has been mentioned in various talks/publications (see Zeitoun, 1993; Li, 1994, 1995 and 1996; Starosta, 1994) but it has never been described extensively. It is one of the purposes of the present paper to fill this gap.

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1. The clause structure of Mantauran

In this section, I will examine the major syntactic characteristics of Mantauran. I will focus my attention on word order and deal with the verbal and nominal marking of case in this language. I will show that in certain respects, Mantauran resembles the (other) Rukai dialects and the Formosan languages as a whole, while in other respects it differs quite drastically from them.

1.1. Word order

Mantauran patterns like most of the Formosan languages in that two kinds of sentential constructions must be distinguished: the first is verbal, the second is equational. In both constructions, the predicate -- either verbal or nominal -- occurs clause-initially. As an illustration, consider the following examples.

(1) amoa   tamatama   kətəkətə   ʔaəɭəŋə

    [go   father   cut   flower]

    'Father went to cut a flower'

(2) lalakə-li=nomi[6]

    [child-1S.BG=2P.BN]

    'You are my children'

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[6] Li (forthcoming) argues that nominative pronouns in Mantauran are free in nature because: (i) they receive primary stress and (ii) a (verbal) element can be inserted between the sentence-initial predicate and the pronoun. However, these two arguments are not really convincing: (i) stress in Mantauran is not phonemic (though it usually falls on the first syllable of a word) and (ii) a pronoun can attach to the first or the second verb when the two occur successively. I do not exclude the fact, however, that nominative pronouns may behave as clitics rather than suffixes. Lacking any further evidence to support Li's claim, I will go on assuming here that Mantauran has bound nominative, oblique and genitive pronouns. Mantauran has a set of free pronouns but since they only occur sentence-initially and exhibit a very restricted distribution, they won't be discussed further here, (cf. Appendix 1).

A comparison of (1)-(3) and (2)-(4) reveals that a noun phrase can only function as a predicate in an equational sentence whereas a verb phrase may constitute in itself a complete sentence, i.e., there is no 'dummy' subject as in English and noun phrases are often deleted in topic chains.

(3) kətəkətə-ŋa !

  [cut   -Prf]

  '(I/you/(s)he cut (it) !'

(4) lalakə-li

  [child-1S.BG]

  'my children'

As illustrated in (5), the order of full lexical NPs is free in postverbal position. Though both examples are grammatically correct, however, only (5a) can be uttered as an answer to (6). This indicates that in terms of discourse, the NP which occurs in sentence-final position is topical and that the relative position of lexical arguments is largely determined by pragmatic factors.

(5) a. okanə   vələvələ   tamatama

    [eat   banana   father]

    'Father is eating/ate a banana'

  b. okanə   tamatama   vələvələ

    [eat   father   banana]

    'Father is eating/ate a banana'

(6) kana-ni   piʔa-ni   tamatama ?

  [what-3S.BG   do-3S.BG   father]

  'What is/was father doing ?'

As in the other Rukai dialects, e.g., Tanan (see Li, 1973: 71), only the agent of the sentence can be raised in initial position, so that while (7a) is well-formed, (7b) is semantically anomalous. The object can occur in initial position only if it is definite, as illustrated in (7c).

(7) a. tamatama   ʔa   okanə   vələvələ

       [father   Top   eat   banana]

       'Father ate a banana'

    b. * vələvələ   ʔa   okanə   tamatama

       [banana   Top   eat   father]

       * 'The banana ate father'

    c. ðonaʔi   vələvələ   ʔa   okanə   tamatama

       [that   banana   Top   eat   father]

       'That banana, father ate it'

I have just observed that the order of NPs is (i) free postverbally -- this relative freedom depending on pragmatic factors -- and (ii) subject to some semantic constraints preverbally. Pronouns differ from full NP arguments in that postverbally they occur in a fixed order. As illustrated in (8), in active sentences, pronominal suffixes denoting the agent/actor always precede those denoting the patient/undergoer.

(8) a. o-kəʟakəʟaŋə=ʟa-imiaʔə

       [Act/Real-beat=1S.BN-2S.BO]

       'I beat you'

    b. * o-kəʟakəʟaŋ-imiaʔə=ʟao

       [Act/Real-beat -2S.BO=1S.BN]

Note that:

     (i) the agent/actor is marked as nominative in affirmative clauses but as genitive in negative, interrogative (yes-no questions) or subordinate clauses,[7] compare (8a) and (9a) ;

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[7] The reason for the occurrence of a genitive pronoun in these different types of constructions is only partly understood: (i) yes-no questions are constructed like their declarative negative counterparts, i.e., the negative marker -ka (to which the genitive pronoun is attached) is suffixed to the verb; (ii) subordinate clauses are indeed nominalized clauses (For details, see Zeitoun, 1995a).

(ii) oblique and genitive pronouns tend to merge phonologically with the verb phrase or the nominative pronoun to which they are attached and to occur as (phonological) clusters: in (9a), the genitive pronoun -li 'my' is reduced to l- and in (9b), -ʔo 'your' to -ʔ.[8]

(9) a. o-kəɭakəɭaŋə-ka-l-imiaʔə

[Act/Real-beat-Neg-1S.BG-2S.BO]

'I did not beat you'

b. "kani   ki-patoʔo-ʔ-inamə   ni-papaicoŋo=moʔo   ohaʔa"

[why   Neg-tell-2S.BG-1PE.BO   would-separate=2S.BN   cook]

mani   ia   tamatama

then   so   father]

'Why didn't you tell us and cook your meal separately ? said the father'

1.2. Verbal and nominal marking of case in the Formosan languages

In most of the Formosan languages, two major syntactic devices -- the morphological marking on the verb and/or the noun -- fulfill the grammatical coding of the subject:

(i) The semantic role of the NP (agent, theme/patient, locative, instrument) selected as subject (or so-called focused NP) is morphologically marked on the verb by means of an affix.   Two main constructions are found.   In the first one, the agent is viewed as the focus of the clause (A(gent) F(ocus) construction).   In the second, an NP other than the agent can function as subject (N(on)-A(gent) F(ocus) construction), (see Yeh et al. forthcoming).

(ii) The syntactic role of each NP argument may be determined by a preceding

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[8] A list of Mantauran pronouns is given in the first appendix. It differs from those given in Li (1977 and to appear).

case marker. In Tsou, for instance, case markers are obligatory. In Atayal (Wulai), full lexical NPs are usually not marked for case. In this language, word order has become fixed: the subject must occur in clause-final position, (see Zeitoun 1993; Huang 1993 and 1995).

1.3. Verbal and nominal marking of case in Mantauran

Mantauran differs from these two languages in a number of respects. Some of these syntactic variations characterize the Rukai dialects as a linguistic group while others are only found in Mantauran.

(i) Like the other Rukai dialects, Mantauran lacks the focus system commonly found in the other Formosan languages. Hence, there is no morphological marking of the subject on the verb, as exemplified in (10).

(10) a. ʔoɭaʔa   ʔa   o-kaʔacə   taʔoɭo

      [snake   Top   Act/Real-bite   dog]

      'The snake bit the dog'

    b. o-laŋai=ɭao   ʔiða   solatə

      [Act/Real-buy=1S.BN   yesterday   book]

      'I bought a book yesterday'

On the other hand, it has developed (either through contact with the other Rukai dialects or shared innovation) an active/passive dichotomy. The active is marked by o- and the passive by ʔi-.[9] Compare (10)-(11).

(11) a. ʔi-kaʔacə   taʔoɭo   ʔoɭaʔa

      [Pass/Real-bite   dog   snake]

      'The dog was bitten by the snake'

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[9] I first thought that there was no passive in Mantauran. This structure -- and its equivalent in the other Rukai dialects -- deserves further investigation.

b. <u>ʔi</u>-laŋaɭ-aə ʔiða solatə

[Pass/Real-buy-1S.BO yesterday book]

'A book was sold to me yesterday'

(ii) Nominal case marking in Mantauran distinguishes grammatical relations in only very few instances. With the exception of ʔi,[10] no (pre-nominal) case marker is found in Mantauran and word order does not usually indicate, as in Wulai Atayal, which of the postverbal NPs functions as subject. Note that in (12a), a distinction is established between the subject, unmarked and the direct object, suffixed with -inə. The ungrammaticality of (12b) and (13b) shows moreover that nominal case marking is sensitive to the categorial nature of the referent: oblique common nouns are unmarked for case while oblique personal nouns (including kinship terms such as 'father', 'mother' etc.) must be case-marked.

(12) a. maðalamə <u>ðipol-inə</u> taotao

[like ðipolo-Obl Taotao]

'Taotao likes ðipolo'

b. * maðalamə <u>ðipolo- Ø</u> taotao

[like ðipolo-Obl Taotao]

(13) a. oʔoŋolo <u>vavaa- Ø</u> taotao

[drink wine Taotao]

'Taotao drank wine'

b. * oʔoŋolo <u>vavaa-inə</u> taotao

[drink wine-Obl Taotao]

In distinguishing personal from non-personal nouns, Mantauran behaves like the other Rukai dialects as well as most other Formosan languages.[11] As an illustration,

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[10] As mentioned in Li (1994: 279), both its use and frequency are very restricted.

[11] Tsou exhibits quite a different nominal case marking system, as shown in Tung (1964) and Zeitoun (1993).

consider the following pairs of examples in Tanan and Maga. In both examples, the case marker ki -- it functions as accusative in Tanan but as nominative in Maga -- must precede personal nouns.

(14) Rukai (Tanan)   [Li, 1973: 107]

    a. koani   ababay   wadamək   <u>ki</u>   maləŋa

      [that   woman   beat   Acc   Maɭeŋa]

      'That woman beat Maɭeŋa'

    b. * koani   ababay   wadamək   <u>sa/ka</u>   maləŋa

      [that   woman   beat   Acc   Maɭeŋa]

(15) Rukai (Maga)

    a. ustiti   ŋkua   <u>ki</u>   toto

      [beat   1S.FO   Nom   toto]

      'Toto beat me'

    b. * ustiti   ŋkua   <u>na</u>   toto

      [beat   1S.FO   Nom   toto]

At first glance, Mantauran should not be regarded as a peculiar language. In lacking a system of case markers, it does not differ that much from other languages. In Wulai Atayal, for instance, full lexical NPs are usually not case-marked (see Huang 1993). In having oblique proper nouns suffixed with -inə, it behaves (to some extent) like other two Rukai dialects (Maga and Tona). In Maga, for instance, oblique proper nouns and kinship terms must be suffixed with -a(na).[12] Compare (12) and (16).

(16) Rukai (Maga)

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[12] Though -inə in Mantauran and -a(na) /-anə in Maga/Tona do not show cognacity, I have shown in Zeitoun (1995a:231) that -inə is a locative form, used to case-mark an oblique personal NP and contrasts with two other (locative) forms -aə and -anə, which are suffixed to different roots: locative/place nouns (as in Ɂiviɭi-aə 'behind') and locative nouns referring to a person or a group of people (as in Ɂavai-anə 'the girl's family' < Ɂavai 'girl'). In Maga or Tona, the same form -a(na) /-anə is found in all locative (argument or non-argument) NPs.

a. pa-ŋulu   kɨkɨ   bvaa   ipul-a

[Caus-drink   1S.FN   wine   Ipulo-Obl]

'I let Ipulo drink wine'

b. * pa-ŋulu   kɨkɨ   bvaa   ipulo-Ø

[Caus-drink   1S.FN   wine   Ipulo-Ø

(iii) It differs quite drastically from all these languages, however, in that it has developed a "verb-object" agreement marking: third person (oblique) participants are cross-referenced on the verb by means of a pronominal clitic which is identical in form and use to the suffix found on the noun in (12a). As shown in the following examples, the cross-referencing on the verb is sensitive to the categorial nature of the "object": it is obligatory if the object NP refers to a "human", as in (17) but optional if only indirectly related to a "human", as in (19b). It cannot apply if the object NP refers to an inanimate entity.[13]   Compare (18a-b).

(17)   maðalam-inə   ðipolo   taotao

[like-3S.BO   ðipolo   Taotao]

i.'ðipolo likes Taotao'

ii.'Taotao likes ðipolo'

(18) a. ʔaoɭai   ʔa   ʔilapə-Ø   apoto

[boy   Top   look for-Ø   stone]

'The boy is looking for stones'

b. * ʔaoɭai   ʔa   ʔilap-inə   apoto

[boy   Top   look for-3S.BO   stone]

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[13] Hence, the following example is ungrammatical because 'father' and not 'banana' will be interpreted as the object of the clause:

(i) * okan-inə   tamatama   vələvələ

[eat-3S.BO   father   banana]

* 'The banana ate father'

(19) a. ʔaoḻai   ʔa   ʔilapə-Ø   <u>apoto-ni</u>

     [boy   Top   look for-Ø   stone-3S.BG]

     'The boy is looking for his stone(s)'

   b. ʔaoḻai   ʔa   ʔilap-<u>inə</u>   <u>apoto-ni</u>

     boy   Top   look for-3S.BO stone-3S.BG

     'The boy is looking for his stone(s)'

Below, I will examine in some details the syntactic use and semantic function of this "verb-object" agreement marking.

2. Behavorial properties of subjects and objects in Mantauran

The pair of examples given in (20) clearly indicates that the lexical NP with which the suffix <u>-inə</u> co-refers is an "object", a fact correlated by a number of syntactic and semantic properties that will be enumerated below.

(20) a. maravəravərə-Ø   <u>ina</u>   amo-ʔacakəlaə   lalakə-ni

     [happy-Ø   mother   will-get married   child-3S.BG]

     'Mother is happy that her child is going to marry'

   b. maravəravər-<u>inə</u>   <u>ina</u>   amo-ʔacakəlaə   lalakə-ni

     [happy-3S.BO   mother   will-marry   child-3S.BG]

     '(People are) happy for mother that her child is going to marry'

In section 2.1, I will compare the syntactic and semantic properties of "(non-prenominal) subjects" and (human) "objects" in Mantauran.   In section 2.2, I will try to determine the inherent meaning of the non-nominative nominals marked with <u>-inə</u>.

2.1. Syntactic and semantic properties of subjects and objects

In this section, I will examine the coding (case marking, agreement, obligatoriness, word order, degrees of agency/control/volitonality) of subjects and objects in Mantauran.

2.1.1. Case marking

As already mentioned above, subjects are not marked for case in Mantauran. Since subjects and non-human objects are not overtly marked, ambiguous interpretations may result if two potential agents occur in postverbal position. Compare (21a-b).

(21) a. olaŋai   <u>taotao</u>   ðaʔanə

        [buy   Taotao   house]

        'Taotao bought a house'

    b. okaʔacə   taʔoɭo   ʔoɭaʔa

        [bite   dog   snake]

        i.   'The dog bit the snake'

        ii.   'The snake bit the dog'

Human non-subjects, on the other hand, must be marked. The suffixation of <u>-inə</u> is usually on the noun or the verb but not on the noun and the verb simultaneously, as shown by the ungrammaticality of (22c).

(22) a. olaŋa-<u>inə</u>   <u>ðaʔanə</u>   <u>taotao</u>

        [buy-3S.BO   house   Taotao

        'Someone bought a house for Taotao'

    b. olaŋai   ðaʔanə   <u>taotao-inə</u>

        [buy   house   Taotao-Obl

        'Someone bought a house for Taotao'

    c. * olaŋa-inə   ðaʔanə   <u>taotao-inə</u>

        [buy-3S.BO   house   Taotao

There are three points to notice concerning (human) "objects" in Mantauran.

Note, first, that if two potential agents occur in the sentence, the utterance will be interpreted ambiguously if the suffix occurs on the verb, but not if it occurs on the noun. Consider (23a-c).

(23) a. maðalam-inə   taotao   ðipolo

    [love-3S.BO   Taotao   ðipolo

    i. 'Taotao loves ðipolo'

    ii. 'ðipolo loves Taotao'

   b. maðalamə   taotao   ðipolo-inə

    [love   Taotao   ðipolo-Obl

    i.   'Taotao loves ðipolo'

    ii. *'ðipolo loves Taotao'

   c. maðalamə   ðipolo   taotao-inə

    [love   ðipolo   Taotao-Obl

    i. *'Taotao loves ðipolo'

    ii. 'ðipolo loves Taotao'

Second, if two nouns are coordinated, the suffix only occurs on the verb but not on each nominal.   Compare the grammaticality of (24a-b).

(24) a. olaŋa-ilinə   ðaʔanə   taotao   la   ðipolo

    [buy-3P.BO   house   Taotao   and   ðipolo]

    'Someone bought a house for Taotao and ðipolo'

   b. * olaŋai   ðaʔanə   taotao-inə   la   ðipol-inə

    [buy   house   Taotao-Obl   and   ðipolo-Obl]

Third, there is an unrestricted neutralization in that any NP, whatever its semantic role -- whether it is a patient, as in (25a), a beneficiary, as in (25b), a goal, as in (25c), or a locative, as in (25e) -- or its syntactic function -- whether it functions as a Direct Object, as in (25a), an Indirect Object, as in (25b-c) or an Oblique, as in (25d-e) -- is marked with the suffix -inə, when it occurs in non-subject position.   As will be shown below, only the NP denoting the agent/actor of the sentence can be marked as nominative.

(25) a. mani   ðaacə movaļio,   mani   kahaʔaoc-<u>iðə</u>   <u>titina</u>,

      [then   leave come back   then   scold-3S.BO   mother

      mani   pa-ðaac-<u>iðə</u>   <u>titina</u>   poa-ðaʔanə-liða

      then   Caus-leave-3S.BO   mother make go-home-3P.BG]

      'Then (they) went back home and (they) scolded the mother and made her leave

      and return to their (=her own family's) home'

    b. titina   amo-irak-<u>inə</u>   <u>ʔaoļai</u> ohaʔa   pa-kanə

      [mother   will-for-3S.BO   child   cook   Caus-eat]

      'Mother will cook for the child'

    c. ovaʔa-<u>inə</u>   <u>taotao</u>   paiso   ðipolo

      [give-3S.BO   Taotao   money   ðipolo]

      'ðipolo gave money to Taotao'

    d. oļaļamə-ŋ-<u>inə</u>   lalakə-ða   (<u>tamatama</u>)

      [run-Prf-3S.BO   child-3S.BG   father]

      '(Father) had his children run away'

      (Lit: 'His children ran away on him (father)')

    e. omik-<u>inə</u>   ʔaļəhələ <u>lalakə-ni</u>   vototoloʔo-ni

      [exist-3S.BO   fly   child-3S.BG   body-3S.BG]

      'There is a fly on the body of the child'

2.1.2. Agreement

There is usually no agreement between the verb and the subject (but cf. (42) below) while there is an agreement in visibility and plurality between the verb and the NP marked as oblique.   Compare the grammaticality of the following pairs of examples:

(26) a. mani   ðaacə ʔilap-<u>iðə</u>   votoloʔo-<u>ða</u>

      [then   leave fetch-3S.BO (-vis)   body-Obl (-vis)]

      'Then (they) looked for his body'

b. * mani   ðaacə   ʔilap-<u>inə</u>   votoloʔo-<u>ða</u>

    [then   leave   fetch-3S.BO (+ vis)   body-Obl (-vis)]

(27) a. maðalam-<u>ilinə</u>   [taotao   la   anao]   ðipolo

    [love-3P.BO   Taotao   and   Anao   ðipolo

    'ðipolo loves Taotao and Anao'

    b. * <u>ðipolo</u>   ʔa   maðalam-<u>inə</u>   [taotao   la   anao]

    [ðipolo   Top   love-3S.BO   Taotao   and   Anao]

    c. maðalam-<u>inə</u>   [taotao la   anao]   <u>ðipolo</u>

    [love-3S.BO   Taotao and   Anao   ðipolo]

    i.   * 'ðipolo loves Taotao and Anao'

    ii. 'Taotao and Anao love ðipolo'

Though <u>-inə</u> [+vis] co-occurs with -ða [-vis] in (28), the utterance is well-formed because <u>-inə</u> does not co-refer with *paiso* money but with *Taotao*.

(28) ovaʔa-<u>inə</u>   paiso-ða   ðipolo   <u>taotao</u>

    [give-3S.BO   money-3S.BG   ðipolo   Taotao]

    'Someone gave ðipolo's money to Taotao'

2.1.3. Obligatoriness

As mentioned in section 1.1, NPs -- either subjects or non-human objects -- can be deleted in topic chains, i.e., they are not obligatory.   As an illustration, consider (29).   I have observed no example where the suffix <u>-inə</u> occurring on the verb is not co-referential to an anaphoric or a cataphoric oblique NP.   However, I have found an example (see (30)) where (i) the two co-referential NPs do not appear in the clause and (ii) agreement does not take place.

(29) okanə-ŋa !

    [eat -Prf]

    '(I/you/(s)he ate (it)!'.

(30) 'kani pi?a-?o   lalakə-ta   apa?akaəla ?   maðalamə-∅ᵢ ∅_Npi

    [why do-2S.BG   child-1PI.BG   difference   like

    ma?amaðə-∅ⱼ ∅_Npj'

    dislike]

    'Why did you make (such) difference between our children ? (Why did you) like

    (one and) dislike (the other one) ?'

2.1.4. Word order

In the foregoing discussion, I have shown that word order does not play a crucial role in the determination of syntactic functions in post-verbal position.   Full lexical NPs may occur in any order, VOS or VSO, knowing that if two potential agents occur in the sentence, any of them may be interpreted as subject.   Compare (31a-b).   The parentheses and brackets in (31b) are used to indicate the two possible readings, cf. 'Taotao's banana' or 'Father's banana'.

(31) a. oka?acə   ta?oḷo   ?oḷa?a

    [bite   dog   snake]

    i. 'The dog bit the snake'

    ii. 'The snake bit the dog'

  b. maka-kanə-ŋ-inə   (taotao   [vələvələ-ni)   tamatama]

    [finish-eat-Prf-3S.BO   Taotao   banana-3S.BG   father]

    i. 'Taotao ate father's banana'

    ii. 'Father ate Taotao's banana'

As shown above, usually only agents can occur in pre-verbal positions.   Human and non-human objects may be raised in initial position only if they are definite.   As an illustration, consider (32a-b).

(32) a. ǒonaʔi   vələvələ   ʔa   okanə   tamatama

    [that   banana   Top   eat   father]

    'That banana, father ate it'

  b. ǒonaʔi   ʔavai   ka-pa   ki-kaavaʔ-iðə   laməŋaə-ða

    [that   woman   Neg-come-3S.BO   husband-3S.BG][14]

    'That woman, her husband did not come to her'

2.1.5. Semantic properties: degrees of agency, volitionality and control

Subjects are characterized by the following features: [+agent, +volitional, +control]. Oblique NPs are neither agentive, nor are they volitional and the participants to which they refer do not have any control on the action being performed. They can be defined as [-agent, - volitional, -control]. This distinction is reflected in the following pairs of examples.

(33) a. omiki   taotao   lataðə   i-pa-ðaðaʔolo

    [exist   Taotao   outside   Caus-rain]

    'Taotao was rained on outside (on purpose)'

  b. * omiki   taotao   lataðə   i-pa-ðaðaʔol-inə

    [exist   Taotao   outside   Caus-rain-3S.BO]

(34) a. * omiki   taotao   lataðə   oðaʔolo

    [exist   Taotao   outside   rain]

  b. omiki   taotao   lataðə   oðaʔol-inə

    [exist   Taotao   outside   rain-3S.BO]

    'Taotao was rained on outside (accidentally)'

(35) a. oɭaɭamə-ŋa   lalakə-ni

    [run-Prf   child-3S.BG]

    'His/her child/children ran'

---

[14] At this stage, we are unable to provide a morphemic gloss for ka-pa-.

b. oḷaḷamə-ŋa-<u>inə</u>   <u>lalakə-ni</u>

  [run-Perf-3S.BO   child-3S.BG]

  'His/her child/children ran away <u>on him/on her</u>'

These examples indicate that in Mantauran, the agent/non-agent distinction is correlated by the degree of syntactic and semantic transitivity of the clause: (i) syntactically, an intransitive verb, as in (35a), can become transitive by means of the suffixation of ·<u>inə</u> (see (35b)); (ii) semantically, (34b)-(35b) can both be regarded as higher in Transitivity, according to the definition given of this concept by Hopper and Thompson (1980).

Table 1: Syntactic and semantic properties of subjects and objects in Mantauran

Properties	Subject	Object
1. Case marking	Usually no overt nominative case marking	Oblique case on the verb or the noun
2. Agreement	No agreement	Agreement in visibility and plurality
3. Obligatoriness	Not obligatory	Obligatory
4. Word order	Free (VOS/VSO)	Free (VOS/VSO)
5. Degrees of agency, volitionality and control	+ agent, + volitional,+ control	- agent, - volitional,- control

2.2. Inherent meaning of non-agent/oblique arguments

I have shown above that there is an unrestricted neutralization of both semantic roles and syntactic functions in the co-referencing of a "human object" with -<u>inə</u>. Following the argumentation developed by Verma and Mohanan (1990: 3-11) Mohanan and Mohanan (1990: 43-57), I will try to show that two basic and related

semantic constructs, goal and possession, trigger the agreement of non-agent/oblique arguments, i.e., in other words, that grammatical relations in Mantauran are semantically-based.

I have shown that pronominal agreement in Mantauran only applies when the oblique NP refers or is related to a "human/non-agent" participant. As shown in the following examples, it is always the "target of movement", that is the recipient/goal which is marked with the -inə suffix.

(36) a. maavaʔi   tamatama   mo-<u>inə</u>   <u>taotao</u>

    [come   father   go-3S.BO   Taotao]

    'Father came to Taotao's place'

    b. ovaʔai=[a-<u>inə</u>   <u>ðipolo</u>   paiso

    [give=1.BN-3S.BO   ðipolo   money]

    'I gave money to ðipolo'

The movement may be realized towards a concrete entity/participant as in (36a-b) or towards a more abstract one, as in (37a-b). In both cases, it is always the argument that receives the oblique case and is marked with -<u>inə</u> which is the target of this concrete or abstract movement.

(37) a. maətə-ŋ-<u>inə</u>   <u>taotao</u>   lamənaə-ni

    [die-Prf-3S.BO   Taotao   wife-3S.BG]

    'Taotao's wife died on him'

    b. omik-<u>inə</u>   <u>ʔiðəmə-ni</u>   <u>ama-li</u>   matako[a

    [exist-3S.BO   heart-3S.BG   father-1S.BG   sad]

    'My father is sad' (or 'Sadness came to my father's heart')

An NP will also be marked by the oblique case if it refers to "a complex unit which is at once the goal of a moving entity and the possessor of the entity as a result of the transfer" (Verma et al.: 1990: 9), as in (36b) and (38).

(38) omik-inə   paiso   taotao

[eixst-3S.BO   money   Taotao]

'Taotao has got money' (or 'Money came to the possession of Taotao')

In this section, I have tried to give a synchronic account of the pronominal agreement of Mantauran.   In the following, I will try to account for it in a historical perspective.

3. Historical development of pronominal agreement in Mantauran: toward an explanation

My aim is to show that I can account for the peculiar syntactic features of Mantauran language-internally (against the alternative hypothesis proposed by Starosta, 1994).[15]

In Zeitoun (1995a), I argued that the suffix -inə found in oblique NPs in Mantauran moved onto the verb as a result of a series of syntactic changes, which are summarized in section 3.1.   In section 3.2, I will show that this claim is further supported by the research independently carried out by Nichols (1986), who demonstrates that variations in the morphological marking of grammatical relations (either on the head or the dependent/modifiee) account for certain aspects of grammar, word order and historical changes.

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[15] Starosta's (1994) hypothesis mainly lies on the belief that (i) Proto-Rukai is the primary branch of the Austronesian family (i.e., put in other words, "Proto Rukai = Proto Formosan = Proto Austronesian" and (ii) Mantauran -- which according to him has retained the major syntactic features of PAN (e.g., he describes Mantauran as an 'ergative' language) -- represents its first offshoot. Since it is based on a number of theoretical and historical assumptions that would lead us too far away from the present topic, it will not be further discussed here. His analysis is summarized in Zeitoun (1995: 232-236).

3.1. Mantauran is turning into a head-marking language

A number of pieces of evidence -- marking of syntactic relations, agreement between the head and the modifier, sentential position of the negator -- are discussed below. They tend to show that Mantauran is turning into a head marking language while the other Rukai dialects (Budai and Tanan in particular) behave like dependent-marking languages.

As shown in Nichols (1986), in head-marking languages, syntactic relations are morphologically marked on the modifiee while in dependent-marking languages, syntactic relations are marked on the modifier.

Note, first, that Mantauran exhibits a head-marking pattern in possessive constructions: the genitive -ni must be attached to the head noun, as in (44). In Budai, which patterns like dependent-marking languages, the oblique case marker ki occurs between the modifier and the modifiee, as in (45).

(39) Mantauran

    [taotao $_M$ Ø   ðaʔanə-<u>ni</u> $_H$]$_{NP}$

    [Taotao   Ø   house-3S.BG]

    'Taotao's house' (Lit: Taotao his-house)

(40) Budai

    [daanə $_H$ [<u>ki</u>   taotao]$_M$]$_{NP}$

    [house   Obl   Taotao]

    'Taotao's house' (Lit: The house of Taotao)

Second, Mantauran shows an agreement in number between the head and its modifier in examples such as (41) and (42): in co-occurrence with a noun/demonstrative marked as plural, the nominal/verbal predicate is partly reduplicated. So far, such an agreement pattern has not be found or reported in the other Rukai dialects.

(41) a. ðona   ŋiao   mavoti?i /   * ma-voti-voti?i

       [that   cat   blind   /   Stat-Red-blind]

       'That cat is blind'

   b. ðona   kapa-ŋiao-na-li   iðopolə   ma-voti-voti?i /   * mavoti?i

       [that   all-cat-1S.BG   all   Stat-Red-blind /   blind]

       'All my cats are blind'

(42) a. ana   ?a   ?avai

       [that   Top   girl]

       'She is a girl'

   b. ana-lo   ?a   ?aivivai

       [that-Plur   Top   Red-girl]

       'They are girls'

Third, the negator in Mantauran is suffixed to the verb while in the other Rukai dialects (e.g., Tanan, Budai, Labuan) as well as most other Formosan languages, the negator shows the same distribution as verbs and occurs in sentence-initial position. As an illustration, compare the grammaticality of (43) and (44). This structural difference between Mantauran and the other Formosan languages can also be understood as a head-marking manifestation: the verb having become the head of the clause, it attracts the negator.

(43) Mantauran

   a. apəcə=ɭao

     [sleep=1S.BN]

     'I slept'

   b. apəcə-ka-li

     [sleep-Neg-1S.BG]

     'I did not sleep'

(44) Tanan (Li, 1973: 227)

    a. w-a-aʔəc-ako

      [Act-Real-sleep-1S.BN]

      'I slept'

    b. <u>kay</u>-nako   o-aʔəcə

      [Neg-1S.BN   sleep]

      'I do not want to sleep'

In summary, these structural manifestations may help us understand why Mantauran allows an agreement between the third person oblique pronoun occurring on the verb and its co-referential NP. The arguments presented by Nichols (1986) on the development of head-marking languages further support the claim that the suffix -inə may have migrated from the noun onto the verb.

3.2. Migration and cliticization

Nichols (1986: 88) argues that head-marking patterns may "arise as isolating languages become agglutinating, and pronouns are cliticized to verbs ... or they may develop from dependent-marking languages, through migration and clisis." There has been a phonological restructuring of the oblique pronominal set (see Zeitoun, 1995a: 141-144) that may lead us to the conclusion that the second process (migration, restructuration and clisis) may have occured in Mantauran recently. We have shown, moreover, that in this dialect, oblique pronouns tend to merge with the verb stem or the nominative pronoun to which they are suffixed, as a consequence of phonological attrition. In other words, the third person pronoun has taken an important role in the marking of grammatical relations as a result of a grammaticalization process and reanalysis.[16] Nichols (ibid: 114) also suggests that "head-marked patterns contribute

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[16] Following Lehman (1985: 307) and Heine and Reh (1984: 15ff), the term 'grammaticalization' is understood here as referring to the gradual loss of the phonological integrity, syntactic autonomy and semantic complexity of a linguistic unit.

to a flat syntax which minimizes intra-clause and inter-clause structure, freeing a language to concentrate on the grammaticalization of discourse prominence and cohesion.   In fact it turns out that it is precisely for head-marking languages that a number of traditional grammatical questions prove to be somewhat moot, because pragmatic and discourse relations (rather than strictly syntactic relations) are being grammaticalized".   I have shown that in Mantauran (i) word order is largely determined by pragmatic factors and (ii) grammatical relations are semantically-based.

Concluding remarks

As mentioned above, the position of Mantauran among the other Rukai dialects remains controversial because this dialects exhibits a number of morphosyntactic features not found elsewhere.   Li's (1977) phonological reconstruction of Proto-Rukai showed that Tanan, Labuan and Budai on the one hand and Maga and Tona on the other, form two distinct subgroups.   Li first argued that Mantauran subgroups immediately with Maga and Tona but following Tu and Cheng (1991), he (see Li, 1995 and to appear) now believes that Mantauran should be regarded as the first offshoot of the Rukai family.

By analyzing the coding of grammatical relations in this language, I have tried to show in what respects it resembles or differs from the other Rukai dialects and the other Formosan languages.   The fact that Mantauran exhibits a number of innovative features has led a number of linguists to conclude that it is the first offshoot of the Rukai family.   However, from a synchronic point of view, we should keep in mind that though Mantauran and Maga differ from one another in certain respects -- they have, for instance, undergone different sound changes -- they share (to some extent) the same syntax and differ quite drastically from the other Rukai dialects (Tanan,

Labuan and Budai) in having (human) oblique arguments marked by suffixation. It remains to be proven whether the affix -a(na)/-inə found on the noun/verb in Maga and Mantauran respectively represents a retention, a borrowing or a parallel innovation.[17]

Appendix 1: Mantauran pronominal system

	Topic	Nominative	Oblique	Genitive
1S	iḷaə	=ḷao	-iaə	-li
2S	imiaʔə	=moʔo	-imiaʔə	-ʔo
3S (+ vis)	ana	--	-inə	-ni
3S (- vis)	ðona	--	-iðə	-ða
1PI	imitə	=mita	-imitə	-ta
1PE	inamə	=nai	-inamə	-nai
2P	inomə	=nomi	-inomə	-nomi
3P (+ vis)	ana-lo	--	-ilinə	-ilini
3P (- vis)	ðona-lo	--	-iliðə	-iliða

Appendix 2: Illustration of pronominal agreement in Mantauran with a text

In what follows, we provide relevant sections of a Mantauran text illustrating the pronominal agreement discussed above.

The story concerns a boy, who turns into a leopard after having realized that his mother does not love him and later dies.

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[17] In fact, the whole picture is complicated by the fact that Mantauran seems closer to Budai and Tanan morphologically while it shares a number of syntactic features with Maga and Tona.

(1) om-iki ðonaʔi tamatama la titina, toalakə toðoʔa aoɭolai [...]

[exist that father and mother give birth two children]

There were a father and a mother, (who) gave birth to two children [...]

Grown up, they decide to go hunting and ask for their mother to prepare a lunch box.

(5) ðonaʔi titina maʔamað-<u>iðə</u> <u>ðona</u> <u>takataka</u>.

[that mother dislike-3S.BO that elder sibling]

The mother disliked the elder brother.

(6) mani po-<u>iðə</u> ðona asəpəŋə poʔivo

[then make-3S.BO that cockroach excrement put together

liŋopoə poa-lipoco.

taro skin make-roll]

For him, she took cockroach excrement and mix it with taro skin (and)
rolled it.

(7) ðonaʔi aiði poa aoðoɭoʔo-ða mani valitoro,

[that younger brother make lunch -3S.BG then rice cake]

(For the lunch of) the younger brother, she (took) rice cake.

(8) poa-lipoco votolo, mani poa-ohaʔa.

[make-roll pork then make-cook]

Then she rolled it with (some) pork and had it cook.

(9) ðonaʔi maəɭənaə-ŋa ʔa mani vaaʔiɭ-<u>iðə</u> <u>takataka,</u>

[that morning Top then give-3S.BO elder sibling

'ʔinaʔi aoðoɭoʔo-ʔo',

this lunch-2S.BG]

'That morning, (she) gave (it) to the elder brother, Here is your lunch'

(10) ðona ta-kaəaəa mani vaaʔiɭ-<u>iðə</u> <u>ʔaiði</u>.

[that one then give-3S.BO younger sibling]

The (other) one, (she) gave it to the younger brother

(11) mani   ðaacə   paivoko-liða [...]

     [Then   leave   brothers-3P.BG]

     Then the two brothers left   [...]

The two brothers are about to eat their lunch when the eldest finds out that his mother
has prepared something disgusting for him.

(12) 'mani   kani   piʔa-ð-imitə   ʔinaʔi   apaʔakaəla ?

     [then   why   do-3S.BG-1PI.BO   this   difference

     maʔamað-iaə   inaə   [...]

     dislike-1S.BO   mother (voc)]

     'Then why did she make this difference between us ? Mother dislikes me'   [...]

Having realized that his mother does not love him, he decides to turn into a leopard.

(13) mani   aḷopəŋ-iðə   ʔapo   <u>ovalə</u>   [...]

     [then   finish-3S.BO   get out   (body) hair]

     Then his body hair went out   [...]

He then asks his brother to go back home and return to the forest with his father to
look for the game he will have caught and explains that if the game is still hot, then it
means that he is alive; if it is cold, then it means he will be dead. His father and his
brother find the game he has left twice. The first time, it is hot, the second time, it is
cold.

(14) mani   ðaacə   ʔilap-<u>iðə</u>   <u>ðonaʔi</u>   <u>votoḷoʔo-ða</u> [...]

     [then   leave   look for-3S.BO   that   body-3S.BG]

     Then they left and looked for his corpse   [...]

(15) mani   aḷa   ʔi   orao   po-iðə   ovoʔovo.

     [then   take   this   big leaf   make-3S.BO   bury]

     Then they took a big leaf and buried him.

(16) mani   ðaacə   movaḷio   mani   kahaʔaoc-<u>iðə</u>   <u>titina</u>.

     [then   leave   return   then   scold-3S.BO   mother]

     Then they came back home and scolded the mother.

(17) mani   pa-ðaac-<u>iðə</u>   <u>titina</u>   poa-ðaʔanə-liða.

      [then   Caus-leave-3S.BO   mother   make-house-3P.BG]

      Then they made the mother leave and return to her family.

Before the mother leaves, the father asks:

(18) 'kani   piʔa-ʔo   lalakə-ta   apaʔakaəla ?   maðalamə   maʔamaðə'

      [why   do-2S.BG   child-1PI.BG   difference   like   dislike]

      Why did you make (such) difference between our children, (why did you) like (one and) dislike (the other one)?

(19) mani   ia   tamatama.   mani   ðaacə   titina.

      [then   so   father   then   leave   mother]

      said the father.   Then the mother left.

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魯凱語萬山方言句法關係的表示

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　　魯凱語包括六個主要方言，分佈於南台灣。依方言的地理位置來看可區分為東邊的大南(Tanan)方言，位於台東縣，南邊的霧台(Budai)、大武(Labuan)，位於屏東縣；還有北邊的茂林(Maga)、萬山(Mantauran)、多納(Tona)等方言，位於高雄縣，合稱「下三社」。依方言的詞彙、語音、構詞以及句法比較，可把魯凱方言分為兩個支群；霧台、大武及大南屬於一支，茂林及多納另成一支。萬山方言在魯凱族語中的定位則有些困難，因為本方言經過了不少語音及語法變化。在語音上，萬山的擦音 /v、z、h/ 對應其他魯凱方言的濁塞音 /b、d/ð、g/（見Li, 1977）。在語法上，萬山方言(i) 缺一般南島語所具有的格位標記，(ii) 只有附著式代名詞，(iii) 另外，又發展出種「動詞及賓語的相呼應關係」。

　　本文主要探討萬山方言所展現的句法關係，特別是主語和賓語彼此間的語法和語意的特色，並由歷史的演變的角度來解釋該方言的「動詞與賓語的呼應關係」。我們發現: (i) 第三人稱代詞乃經過虛化和再分析，成為句法功能標記，(ii) 詞序自由是成為中心有標語言的結構，(iii) 句法關係由語意來決定。文末附一篇故事說明萬山中的「動詞與賓語的呼應關係」。