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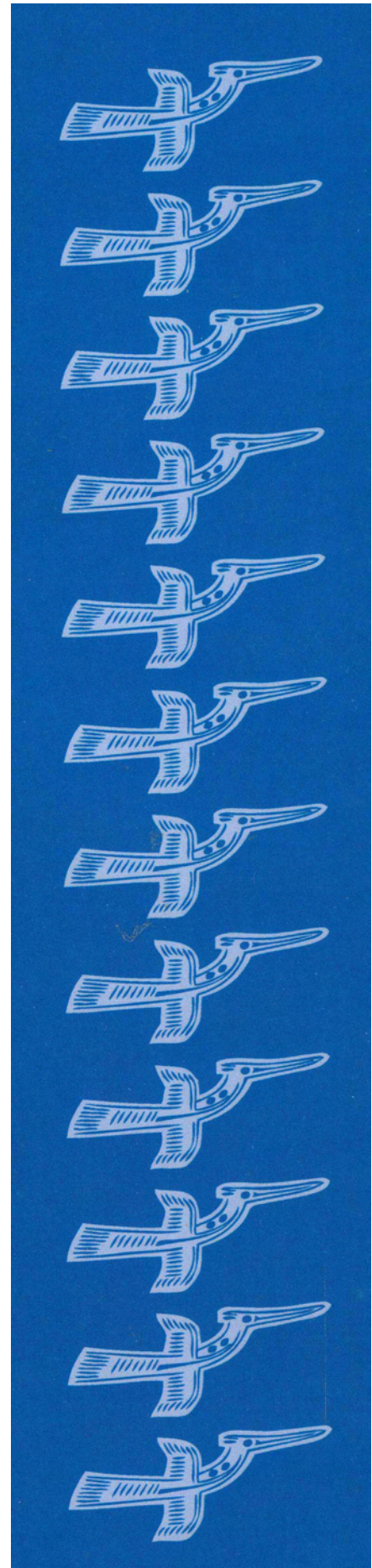


Table of Contents

Articles

P. K. CHOUDHARY	
<i>Clause Structure in Ho</i>	1
(received: 17/1/2012, revised text accepted: 15/7/2012)	
Michel FERLUS	
<i>Linguistic evidence of the trans-peninsular trade route from North Vietnam to the Gulf of Thailand (3rd-8th centuries)</i>	10
(received: 25/10/2012, revised text accepted: 12/12/2012)	
Anna PUCILOWSKI	
<i>Complementation in Ho (North Munda)</i>	20
(received: 22/5/2012, revised text accepted: 5/12/2012)	
Geoffrey BENJAMIN	
<i>The Temiar causative (and related features)</i>	32
(received: 25/10/2012, revised text accepted: 5/12/2012)	
V. R. RAJASINGH	
<i>Negators in Muöt</i>	46
(received: 9/11/2012, revised text accepted: 22/2/2013)	

Clause Structure of Ho

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Abstract

It has generally been assumed within generative approaches that the clause should be interpreted as an AgrP. The TP projection being the complement of Agr with Subject NP filling the position of Spec-AgrP and the first lexical projections are being the VP, complement of T. In languages like Ho, where the occurrence of Agr are not constant throughout, it is difficult to determine the clause structure as it varies in different types of structures. In this paper, I have tried to explain clause structure of Ho where inconsistency of occurrence of constituents plays major role in determining its structure.

Key words: Clause, Agreement, Syntax.

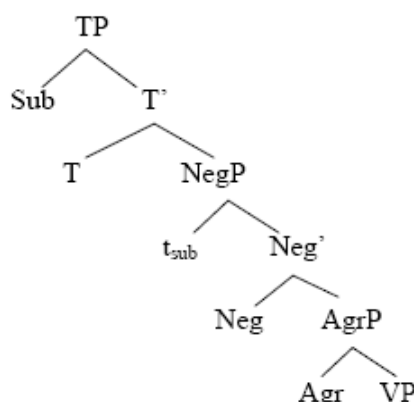
ISO 639-3 language codes: hoc

1. Introduction

Study of Clause Structure begun within a new paradigm with the advent of Chomsky's (1957) *Syntactic Structures*. In this model, a position is generated between the Subject (NP) and Predicate (VP) to accommodate models, auxiliaries and verbal affixes. In 1960s and 1970s the common practice of representing Clause Structure was Subject-Predicate as in the standard re-writing rule $S \rightarrow NP VP$. In Principle and Parameter (P&P) theory the assumption was taken to the Universal Grammar (UG). According to UG approach, models may be visible in one language and may not be visible in other. In Government and Binding (GB) theory Subject-Predicate relation is systematically mediated by a functional node labeled as Inflection (Infl), assumed to collect grammatical information normally associated with the verb such as tense, mood and agreement features.

Pollock (1989) proposed the 'Split-Infl' hypothesis. The basic line of the Pollock's argument was to differentiate between languages with rich morphology like French and languages with poor morphology like English. In a finite tensed clause the verb moves out of VP in French but not in English due to Agr which is transparent in French but opaque in English. As far as non-finite tense is concerned that is opaque universally. Chomsky and Lasnik (1993) have modified Pollock's work suggesting that structural Nominative case is licensed in the Spec-head relation with AgrP of finite tensed clause under the agreement relation so that Accusative is licensed with Spec-head relation with AgroP of a clause containing a transitive verb.

1. Structure assumed by Pollock



2. Structure assumed by Chomsky and Lasnik

$[Agrs_{+Ti} [TP \ t_i [Agr_{+vj}] [AgrP \ t_j [VP \ t_j]]]$

Kayne (1989) has proposed that the phi-feature of gender and number appearing on the past-participial should be considered as an established agreement relation between the past-participial

and the moved noun phrase. On this basis the assumption was made that an Agr projection is among the functional projection which surrounds the past participial, and the moved constituent triggers agreement in passing through its Spec. Thus, an additional Agr projection is present in the clause structure which can be labeled as Agr pst prtP. In Chomsky (1995) the idea is generalized that the phi-features case is checked within an agreement configuration of an Agr head.

Clause structure has thus been enriched with three Agr-type projections: AgrS, AgrO and Agr pst prt. All three Agr-heads have phi-features as common property which undergoes checking with an NP filling the Spec of the relevant Agr-head at LF. There are other AgrPs which are present in a language as Agr heads: AspP, ModP, NegP and AuxP; as per the morphology of the concerned language.

In this paper, we will discuss these Agr projections and their functions in different types of sentences in *Ho*. I have used the Minimalist model as it is a good, explanatory theory. Notice that generative linguistic theories (thus, the Minimalist model too) have always been concerned with the questions of specifying both what is universal and what is language specific about language structure. It describes languages and relates it with theory. If some theory is not working in the data of a particular language then we may try to come up with alternate. This study is part of my PhD. For this I have collected data from Mr. Kaira Singh 'Bandia' of Mayurbhanj, Orissa. Along with this several other topics of syntax has been covered in the thesis. Data for the same can be traced in the thesis.

2. Simple sentences of Ho

A simple sentence of *Ho* consists of a subject NP, a verb, an aspect, a finite marker and a subject agreement marker. If we consider the constituents of the sentence (3) and draw a tree for that it will be like presented at 4 (below):

3. (am) *seno-tan-a-m*
 you go-prog-fm-2sg
 'you are going'

In the tree at (4), there are two aspects¹ one is progressive aspect *-tan* and another is finite marker *-a*. *Ho* does not have tense² marker as such but we can draw it from progressive aspect in the case above. Below we will check the structure of transitive verb construction which has subject as well as object.

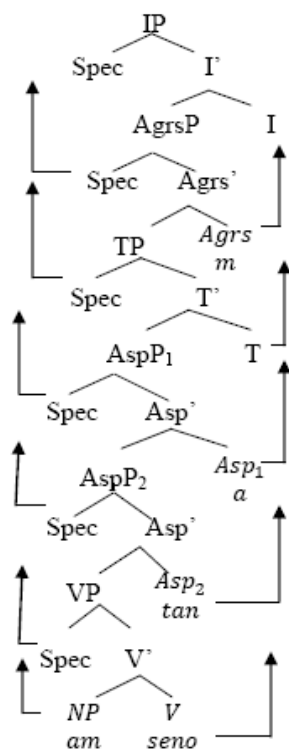
5. *añ am-ke uli-ñ ama-mi-a*
I you-acc mango-1sg give-pst/2sg-fm
 'I gave a mango to you'.
6. *sītā tebal-re puti-i ema-kaD-a*
Sita table-pp book-3sg put-pst-fm
 'Sita put the book on the table'.

A negative sentence has NegP as head of negation. It generally occurs at post-subject/pre-verbal position and hostS subject agreement in Munda languages. Below we will see the case of a negative sentence. In such scenario it will be obligatory to have different tree structure as negation has to collect THE subject agreement marker when subject NPs move up for case checking.

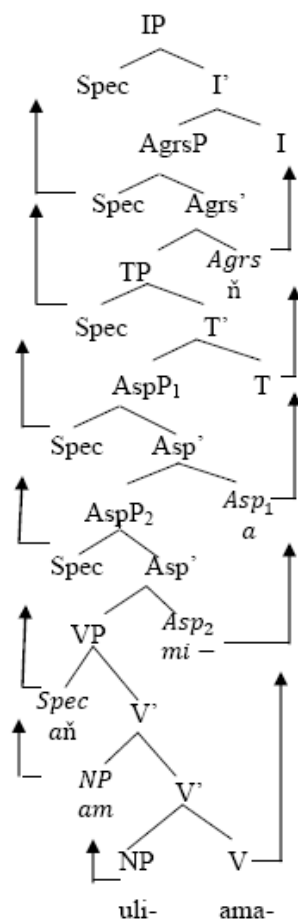
8. *am kiteb ka-m paRaw-tan-a*
 You book not-2sg read-prog-fm
 'You are not reading a book'.

1 There is option between FinP and AspP for Finite marker. I have gone in favour of second because I do not know any other language having finite marker of same type. Moreover, its place of occurrence is either before Agr or after Agr.

2 *Ho* has several Aspects; it does not have tense marker for details see Choudhary, P.K. 2012, ms, paper presented at 1st International Conference on TAM, February, 3-5, CIIL, Mysore.

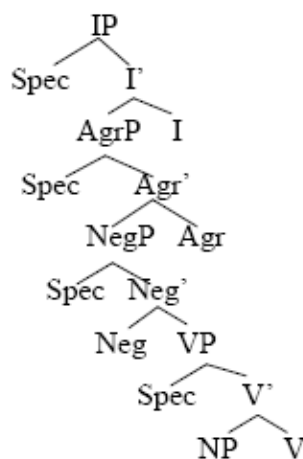


4. Clause structure of Example 3



7. Clause structure of Example 5

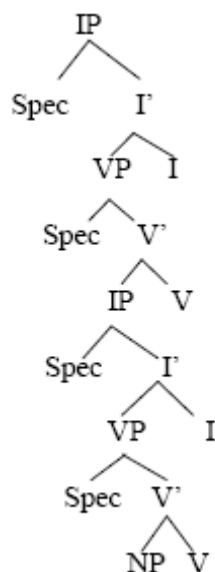
9. Clause structure of negatives



3. Small clauses

These types of sentences have two clauses; one is matrix clause which has a verb and that verb needs an embedded clause which may or may not have a verb. As in the case of examples (11&12), the embedded clause has an adjective.

10. Biclausal structure



11. [añ [ini seyā-ñ] manatiñ -tai-^y e -a]
 I he intelligent-1sg believe pres 3sg fm
 'I believe [him to be intelligent]]'.
12. [añ [am na-joŋ muRku- mente] ka-ñ manatiñ-te-m-tan-a]
 I you yet stupid-pp not-1sg believe-pp-2sg-prog-fm
 'I do not believe [you stupid yet]]'.

In the tree above we can have one Adjective phrase instead of two VPs to accommodate embedded adjective in the Small clause above. Since the adjective *seyāñ* 'intelligent' has been used here as a verb forming VP rather than AdjP even though it has adjectival meaning, we are using here VP instead of AdjP.

4.Coordinating Conjunctions

The coordinating construction has three ways coordination as shown below. In example (13), we have NP coordination; two NPs are conjoined with a conjuncture in a sentence with one VP. In example (15), we have coordinated VP with a single subject. And in example (17), we have an example of sentence coordination.

13. *miDo kowa- hon onDo mieD bīlāi bābagān-re-kiñ nir-keD-a*
 One boy-child and one cat park -pp-dual run-pst-fm
 'The boy and the cat ran in the park' (NP conjoined)
14. [_{IP} [[_{DP} *miDo kowa hon*][_{CP} **onDo**][_{DP} *mieD bilai*]][_{VP} [_{PP} *bābagān-re-kiñ* [_V *nir-keD-a*]]]]
15. *miDo kui -hon bābagān- bitur-te nir-bolo-yan-a onDo Diluen-re inuñ-yan-a*
 one girl- child park -inside-pp run-start-pst-fm and swing-pp play-pst-fm
 'The girl [ran into the park] and [played on the swings]]'. (VP conjoined)
16. [_{IP} [[_{DP} *miDo kui hon bābagān bitur-te*] [_{VP} *nir-bolo-yan-a*]]][_{CP} **onDo** [_{VP} [_{DP} *Diluen-re*] [_V *inun-yan-a*]]]
17. *.kowa-hon paRāw-keD-a onDo kui-hon āyur-yan-a*
 boy-child read-pst-fm and girl-child swim-pst-fm
 'The boy read a book] and [the girl swam]'. (Sentence conjoined)

18. [IP [DP kowa hon] [VP [V paRaw-keD-a]] [CP **onDo**] [IP [DP kui hon]
[VP [V ayur-yan-a]]]

5. Subordinating Conjunctions

This type of subordinate clause is often referred to as an adverbial clause, because its function is like an adverb modifying the main clause of the sentence. Like in examples (19) & (20), main clause is modified by adverbial clause ‘although it was raining’ in example (19) and ‘without any warning’ in (20). The function of subordinating clause is modifying the situation when something happened.

In Ho it can be formed in two ways; in one you can have separate structure like in example (19) and in other embedded like in example (20). A morpheme *-o* has been added with post-position/case marker *-re* in the subordinating verb which imparts progressive meaning and works as a linker of the two clauses. It can also be interpreted that *tan* is progressive marker in Ho and *-reo* is attached with it to form subordination.

19. [mungri honor-te seno-yan-a] [gamaya-tanreyo]
Mungari walk-pp go-pst-fm rain-although
‘[Mungari went for a walk [although it was raining]]’.
20. [mungari [jānāy-o kaʔ-e (kaji) kāte] seno-yen-a]
Mungari any-emp not-3sg tell without go-pst-fm
‘Mungari left without any warning’.

6. Conditional Clauses

The term ‘conditional’ is being used in the literature to refer to constructions involving an adverbial clause merged to a particular position in a main clause. One logically possible analysis of conditional sentences is that the two clauses are combined syntactically, with *if* functioning as a conjunction.

Conditionals are formed through a variety of means across languages. They share a basic bi-clausal structure, with the antecedent adjoined to the main clause. The internal syntax of the antecedent clause involves the CP-domain, where most probably clause-typing features are lexicalized by special complementizers or they trigger verb movement. A particularly interesting question arises regarding the structure of conditionals: how, in the absence of a specialized marker, such as a conditional complementizer or conditional inflection can a clausal adjunct receive the interpretation of a conditional? Note that I to C movement in English is clearly not limited to conditionals, but also found in matrix questions and in certain focus constructions.

In *Ho*, a conditional clause is formed with the use of *jāmente* ‘if’ in the beginning of the sentence and *reDo* ‘then’ is an antecedent clause which is headed by a conditional complementizer as in the examples (21) & (22). In such cases imperative (22) and permissive³ (23) markers occur in the sentence. In example (23), there is no *jāmente* ‘if’. In *Ho*, it may be the case that *jāmente*⁴ is optional even in (21) & (22).

21. *jāmente* āye janā-ge suku **redo** kāji-eñ-me
If he any-emp like cond tell-1sg-2sg
‘If he likes anything, tell me.’
22. *jāmente* meri jāna-re-o nel-am **redo** kaji-e-bu-ke
If Mary any-pp-emp see-2sg cond tell-3sg-2pl-fut
‘If Mary saw anyone she will let us know’.
23. *añ* intai seno **reDo** añ-ge paiTi-e
I there go cond I-emp work-3sg
‘If I will come there I will do it’.

3 -ke is basically a mood marker in any future tense either simple or having an aspect marker. It can be translated in to English as *May* or *Let* (Deeney, 2002:103).

4 Actually ‘mente’ then is the word but it is a bound morpheme for example ‘muRku- mente’ in example (12) above where it functions like a post-position.

24. [[_{CP} jāmente [_{IP} āye [_{VP} janage suku]]] [_{CP} redo [_{IP} (añ) [_{VP} kājī-eñ-me]]]

In the case of (23), we may have structure like below:

25. [_{IP} [_{DP} añ [_{VP} intai seno]]] [_{CP} redo [_{IP} añ-ge paiTi-e]]

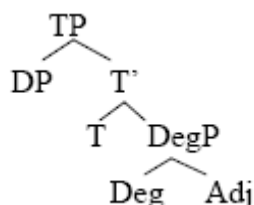
7. Comparative Clauses

Comparative clauses in Ho can be formed by suffixing *-ta*, a possessive form, before a case marker in the noun phrase with which we are comparing something. Technically, Ho does not have comparative marker like Hindi. In every case, the Standard Phrase is marked with a location/path marker (case, preposition, and postposition). Adjectives like ‘less’ or ‘more’ are optional in Ho; it has *-ete* ‘with’ a postposition as a comparing instrument. Therefore, in tree we may not have DegP as its head as of the case in English rather we can have Postpositional phrase as its head in Ho.

English

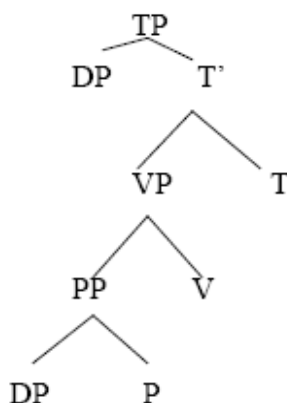
26. ‘Mohan is more beautiful’

27. Clause structure of comparatives



28. *pawan pradiṭp-ta-ete salaṅ-gi-e*
 Pawan Pradeep-pp-com tall-emp-fm
 ‘Pawan is taller than Pradeep’.
29. *mungari masuri-ta-ete sayana-a*
 Mungari Masuri-pp-comp intelligent-fm
 ‘Mungari is more intelligent than Masuri’.
30. [_{IP} [_{DP} pawan] [_{VP} [_{DP} [_{PP} pradip-ta-ete]] [_V salangi-e]]]

31. Clause structure of comparatives in Ho



8. Superlative Clauses

Superlative degree formation in Ho is not a very complex phenomena. While forming superlative degree Ho speakers put universal quantifier *saben* ‘all’ with plural marker *-ko* and attach case marker *-te* along with these *-ye* is coming between plural marker and case marker as some sort of sandhi assimilation. For example:

32. *bamie saben-ko-yete salingi-ye*
 Bamai all-pl-comp tall-fm
 ‘Bamai is taller than all in a class’.
33. *mangari saben-ko-yete cehra*
 Mangari all-pl-com beautiful
 ‘Mangari is smarter than all’.
34. [_{IP} [_{DP} bamie] [_{VP} [_{DP} [_{PP} saben-ko-yete]] [_V salingi-ye]]]

The structure of Ho superlative degree can be described syntactically as in (34) above. In superlative too we may not have DegP as its head rather we may have PP as a head of that DP.

9. Relative Clauses

There are Relative-Correlative constructions in Ho like in example (35) as well as externally headed relative clause constructions as in example (36). It has been said that Munda has externally headed relative clauses like English in the past. It had SVO word-order but due to contact and convergence its syntax converges with SOV⁵ language and it has now different word order; and relative-correlative constructions come into being. Anyway here, we are not concerned about historical changes rather we will talk about its syntactic structure. Relative pronoun is homophonous with the question words as *okon*⁶ ‘which’ has been used for question formation as well as relative pronoun.

35. [*okon katu-te am uli-ñ geT-ken-a ana isu leser-a*]
 rel knife-pp you mango-1sg cut-pst-fm corr very sharp-fm
 ‘[The knife [with which you are cutting the mango] is very sharp].’
36. [*an sepeD [okoe kiteb paRaw-tan-a] (ini) isu murku-e*]
 that boy who book read-prog-fm he very stupid-fm
 ‘[That boy [who is reading a book] is very stupid].’

Deeney (2002) claims that when Ho properly spoken there are no relative clauses, and what we would express by the use of a relative clause in English or Hindi is expressed in Ho by the use of a participle.

37. *ho huju-tan-a*
 man come-prog-fm
 ‘The man is coming.’ (Deeney, 2002: 89)
38. *huju-tan ho (aña) apu-ŋ*
 come-prog man my father-1sg
 ‘[The man [who is coming] is my father].’ (Deeney, 2002:89)

In Ho, the use of participial is more common than in languages like English and Hindi. It is easy to form participial in Ho. We can form participial in Ho by merely dropping *-a* a finite marker from any verb. Therefore, one may say that relative clauses are not formed in Ho in the past and even now in general speech but we are merely translating sentences of English and other languages. Thus, Ho has both relative correlative constructions as well as externally headed relative clause constructions.

10. Conclusion

As we have seen in the example (5) above, second person agreement marker occurs on the verb but in example (8) agreement⁷ is occurring on Negation. When it occurs on the negation it will

5 As commented by one of the reviewer, except Munda languages all other Austro-Asiatic languages have either verb-medial or verb-initial word order which compels us to reconstruct SVO order for Proto-Munda at some stage. Khasi too has SVO word order which belongs to Asiatic family spoken in North-East India.

6 Ho makes distinction of Animate and Inanimate of relative pronoun as well as question word as if it is the case of animate noun it occurs as *okoe* and in the case of inanimate it is *okon*.

7 Worth noting that one in example (5) is IO agreement marker where as in (8) it is subject agreement marker.

be difficult to accommodate it in the tree. There is also inconsistency of agreement occurrence⁸ in the Kherwarian languages in general and Ho in particular. It has been said that the morphology of a language determines the structure of clause in a given language. The question to be asked is: is there a rule where one language has different types of structure in different sentences?

There is no degree marker in Kerwarian languages as we have seen in the case of superlative and comparative degree phrases. Therefore, Degree phrase may not be required in this language. One can say that language specific morphological elements and its order of occurrence in a sentence determine the phrase structure of a particular language. There cannot be a universal phrasal construction for languages.

In the case of Kherwarian languages in general and Ho in particular, if a subject pronominal clitic which occurs usually as an agreement marker on just following entity of the subject and the subject can be dropped i.e. (5). In such cases, where pronominal can be dropped and the place of the agreement clitic is also not constant⁹, it is difficult to determine the structure of clauses in such cases particularly if we have to go back to construct the structure.

In Ho language, an Indirect Object can be dropped if it does not contain an agreement clitic for subject or object; and at the same time agreement for IO is occurring somewhere else in the sentence. Similarly, a Direct Object can be dropped if its agreement clitic is occurring somewhere in the sentence and DO does not contain any agreement clitic either of subject or object. All pronominal clitics can occur on the verb and that is sufficient to give the intended meaning of the clause. The most problematic thing in Ho is inconsistency of place of occurrence which is not allowing us to have a particular type of clause structure rule.

Abbreviations

1sg- first person singular	pst-past tense	Q- question	dat- dative
2sg- second person singular	fm- finite marker	Agr- Agreement	fut- future tense
3sg- third person singular	pp- post position	Acc- accusative	prog- progressive
corr- correlative clause	rel – relative marker	cond – conditional	com- comparative
emp –emphatic	comp- complementizer	DP-determiner phrase	

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⁸ Agreement clitic for a subject can occur at following entity of the subject. If there is no following entity in the sentence it will occur on the verb; may be before aspect, after aspect or after finite marker as in example (3).

⁹ As in example 3, 5 and 8, in example (3) subject agreement clitic occur after finite marker whereas in (5) it occurs on IO and in (8) on Negation.

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Linguistic evidence of the trans-peninsular trade route from North Vietnam to the Gulf of Thailand (3rd-8th centuries)*

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Abstract

By the period of 3rd-8th centuries, an ancient land trade route linked North Vietnam to the Gulf of Thailand. The circulation of traders and travelers along this route has left cultural and linguistic influences of Ancient China as well as Ancient Vietnam (under Chinese rule) through the Khmer area. (1) Some Chinese words, few but highly significant, were borrowed into Khmer, and later passed in Thai, (2) The names of animals of the duodenary cycle in Ancient Vietnamese were borrowed by the Khmer and are still used today, and (3) The syllabic contrast /Tense ~ Lax/ of Middle Chinese was transferred, with various effects, in Vietic, and thence in Katuic and Pearic. This study is yet another example of the fruitfulness of interdisciplinary cooperation in the social science fields, here between linguistics and history.

Keywords: phonetic history, borrowing, language contact

ISO 639 Language codes: cmn, cog, khm, tha, pcb

1. Introduction

Ancient Chinese texts that tell us about the period from the 3rd to the 8th century led to suppose the existence of a land route joining the Chinese protectorate of Chiao-chih (*Giao Chi*, Northern Vietnam) to the Gulf of Thailand, a route which avoided the dangers of the maritime route. During this period, China paid special attention, particularly in the 7th and 8th centuries, to a region located in the North-East of today's Thailand, corresponding to the Land Chen-la in ancient Cambodian history. It seems that there has been in this region a kind of dependency of the Chinese Empire. This situation suddenly ceased with the reunification of the Khmer lands by Jayavarman II who was enthroned universal sovereign in 802 CE. However, research has revealed some traces of ancient linguistic and cultural influences of Chinese in the languages of the region, such as Khmer and Thai.

We will first provide details about some loans of vocabulary from Middle Chinese to Khmer and Thai. Then we will explain how the Khmer cycle of twelve animals has been borrowed from ancient Vietnamese. Finally, we will develop the crucial problem of transfer of the syllabic contrast /Tense ~ Lax/ from Middle Chinese to the languages of the Vietic, (East-)Katuic and Pearic groups.

An historical overview will complete this study.

Abbreviations:

OC: Old Chinese; OC(B): Baxter 1992; OC(B-S): Old Chinese according to the Baxter-Sagart system (2011); OC(F): Old Chinese reconstructed by Ferlus (occasionally); MC: Middle Chinese (Baxter); EMC: Early Middle Chinese (Pulleyblank definition). Karlgren series are designated by 'K.' followed by the serial number in *Grammata Serica Recensa*.

MK: Mon-Khmer; PMK: Proto Mon-Khmer; AA: Austroasiatic; VM: Viet-Muong (or Vietic); PVM: Proto Viet-Muong (or Proto Vietic).

T: Tense (voice, syllable); L: Lax (voice, syllable); /T ~ L/: /Tense vs Lax/ contrast.

For the phonetics history of Chinese language, the trickiest part of the demonstration, I used the works of Karlgren *Grammata Serica Recensa* (1957), Pulleyblank *Lexicon of Reconstructed Pronunciation...* (1991), Baxter *A Handbook of Old Chinese Phonology* (1992), and sometimes *Baxter-Sagart Old Chinese Reconstruction, Version 1.00* (2011).

* I thank Alexis Michaud who kindly read this text, and Paul Sidwell for further copyediting.

2. The loanwords from Old/Middle Chinese

The phonetic developments of the Chinese language since the beginning of our era (mono-syllabization, lenition of medial **-r-**, registrogenesis, tonogenesis, loss of final plosives) have obscured the correspondences between Chinese borrowings in Khmer and the original words in Chinese. Khmer is a language which remained relatively conservative. It is therefore necessary to compare the Chinese borrowings with their reconstructions in OC and MC. Despite great progress in this field, the historical phonetics of Chinese is far from being definitively established. Sometimes I had to bring in my own interpretations, for which I take full responsibility.

Two of the four words considered below, “protect, defend, soldier” (§. 2.3) and “eat, food (for monks)” (§. 2.4), involve the phenomenon of fricativization of medial ***k** within sesqui-syllables. That is **C.kV(C)** > **C.xV(C)**, then **C.hV(C)**. This shift has had to occur in the last stage of OC. It should be noted that this phenomenon is still a matter of discussion, the process proposed here is different from that of Sagart & Baxter (2009).

2.1 “Country, principality, province, *encircled village”

Chinese *yuè* 越 :: Khmer **c^hvat** *chvā't* ឆ្នាំត្រ :: Thai **caṇwat**^{D1} จังหวัด

Chinese: *yuè* 越 (K.303e) < MC *hjwot*/EMC *wuat* < OC(B) *wjat*/OC(B-S) “cross over, exceed”, interpretable by “cross the enclosure (of the village), the boundaries (of the country)”. A sesqui-syllabic form ***C.wat** must have existed.

Khmer: *chvā't* ឆ្នាំត្រ **c^hvat**; Old Khmer (9th-10th cent.) *chvāt(t)* ***c^hwat** “to circumscribe, delimit”, and *caivāt(t)*/*caivāt(t)* ***cəṇwat** “delimited territory” (Jenner & Pou 1980-81: 343-344). Proto Khmer ***c.wat** and its derivative ***cṇ.wat** (< **c-ṇ-wat**).

Thai: **caṇwat**^{D1} จังหวัด “province, township”.

How to link Chinese *yuè* 越 “cross over, exceed” to Modern Khmer **c^hvat** “to circumscribe, delimit” and Old Khmer ***cəṇwat** “delimited territory”? In the *Book of Han* (*hànshū* 漢書/汉书) which covers the period of Earlier Han (206-25 BCE), the character *yuè* 越 was used as a phonogram in expressions naming southern populations: Luòyuè 雒越 (Sino-Vietnamese: *Lạc Việt*), Shānyuè 山越, Dōngyuè 東越/东越, and specially Bǎiyuè 百越. In all these expressions the sinogram *yuè* 越 suggest the meaning of “country, principality”. The Chinese lexicon contains words built on a root ***wat** and likely to participate in a single family of words on a semantic basis involving the idea of circularity, circular boundary. I suppose – that is my hypothesis – that *yuè* 越 ***wat** originally designated a circular defensive protection surrounding the primitive village. Some examples in the same word family:

yuè 越 (K.303e) < OC(B) *wjat*/OC(F) ***wat** “cross over, exceed”, interpretable by “cross the enclosure of the village”.

wài 外 (K.322a) < OC(B) *ng^wats*/OC(F) ***ṇ.wat-s** “outside”, interpretable by “out of the enclosure of the village”.

yuè 月 (K.306a) < OC(B) *ng^wat*/OC(F) ***ṇ.wat** “moon”, by reference to its round shape.

It follows from these considerations that the meaning of ***wat** “enclosure, circular boundary (around the village)” emerged in the Chinese language from a Pan-Asiatic root whose meaning could be “to hunt slingshot, twirl the sling (for launching a bola?)”, then “twirl the battle-axe”, of which *yuè* 戣 (K.303a) “battle-axe” is another derivative. Security generated by the formation of major states has marginalized the use of ***wat** “defensive circular boundary” to the southern areas which preserved socio-political structures at the village level. The semantic relationship between the Chinese and Khmer forms is self-evident.

2.2 “Inspect, examine, guard, police”

Chinese *wèi* 衛 :: Old Khmer *trvac/trvāc* :: Thai **truat**^{D1} ตรวจ

Chinese: *wèi* 衛 (K.342a) “to guard” < MC *hjwejH/EMC wiaj^h* < OC(B) *wrjats/OC(B-S) *[G]w(r)at-s/OC(F) *Cr.wat-s* (C is any consonant).

Old Khmer: *trvac/trvāc* (Jenner & Pou 1980-81: 256) “to inspect, examine, check, verify”; *tamrvac/tamrvāc* “police, guard”. I reconstruct **truac* and **tmruac* (< *t-m-ruac*). Modern Khmer forms **truət** and **dəmruət** are re-borrowings from Thai (Uraisi 1984).

Thai: **truət^{D1}** ตรวจ “To inspect, examine” and **tamruət^{D1}** ตำรวจ “policeman”. The etymological palatal final of Khmer is preserved in Thai spelling by *-c* (-จ) while pronounced *-t*. The regular form **truət^{D1}** was corrupted in **kuat^{D1}** กวด through a popular pronunciation and became the current word in Lao, **kuat^{D1}** ກວດ “to test, examine”.

Note: Vietnamese *soát* “to check, inspect” is an ancient Chinese borrowing before the 5th century. The initial *s-* originate in an ancient initial cluster **Cr-** (C is a plosive initial). One can reconstruct OC **Cr.wat-s* with the change *r.wat-s* (simplification of first syllable) then *wrat-s* by metathesis of *r* (for examples of metathesis in Chinese, see Coblin 1986: 68). These words belong to the same word family as OC **wat* (*yuè* 越) by the intermediate meaning “keep the fortified village, protect the country”.

2.3 “Protect, defend, soldier”

Chinese *hàn* 扞 :: (Khmer **tiəhion** ទាហាន) :: Thai **t^haham^{A1}** ทหาร

Chinese: *hàn* 扞 (K.139q)/捍 (K.139i) “to ward off, protect, guard” < MC *han^H/EMC yan^h* < OC(B-S) **m-k^har-s/OC(F) *C.kan-s* (C is any consonant). Sino-vietnamese *cán*. The reasons for choosing the final *-r* by Baxter-Sagart are unknown.

Khmer: **tiəhion** *dāhān* ទាហាន, probably borrowed from Thai.

Thai: **t^haha:n^{A1}** *dahār* ทหาร (graph *-r* -ร is hypercorrective) “soldier”. Lao **t^haha:n^{A1}** *dahhān* ທະຫານ.

Note: Chinese *hàn* 扞 “to ward off, protect, guard” derived from an original base currently represented by *gān* 干 (K.139a) “shield” < MC/EMC *kan* < OC(B) *kan/OC(B-S) *k^har*. I propose the changes OC(F) **C.kan* > (fricativization) **C.xan* > **C.han* from which Thai and Lao modern forms are derived. Reconstruction of a pre-syllable **C-* is required to explain the feature /tense/, noted by *-ʰ* in the Baxter-Sagart system. This pre-syllable is preserved in the first syllable of Thai and Lao forms.

Here, unlike the other examples, OC **a* is interpreted as a long vowel. The original for *gān* 干 “shield” is attested in Lao by **kan^{A1}** ການ “protect, defend, obstruct, bar”. In dictionaries this word is drowned in the many pages of examples of its namesake **kan^{A1}** (sanskrit *kāra*), a nominalizer term.

2.4 “Eat, food (for monks)”

Chinese *zhān* 饊 :: Khmer **c^han** ឆាន់ :: Thai **c^han^{A1}** ฉาน

Chinese: *zhān* 饊 “congee, thick gruel” (K148m) < MC *tsyen/EMC teian* < OC(B-S) **t-qan/OC(F) *c.kan*. Note: a doublet MC *tsyenX* < OC(B-S) **t-qan?* is reconstructed by these authors.

Khmer: **c^han** *chān* ឆាន់ “to eat, drink (for monks)”, and **cəŋhan** *cānhān* ចង្ហាន់ “food of monks”. Although these words are not attested in Khmer inscriptions, the presence of the infix *-ŋ-* is a good evidence of their existence in Old Khmer.

Thai: **c^han** *chān* ฉาน “to eat (for monks)”, and **cəŋhan** *cānhān* จังหัน “food (for monks)”.

Note: I propose the changes **c.kan* > (fricativization) **c.xan* > **c.han* > (monosyllabization) **c^han**. A rapprochement is possible with *kan* and *makan*, widespread in the Austronesian languages.

3. The duodecimal cycle of twelve animals in Khmer

Since the remotest antiquity, China has counted time on the basis of the sexagesimal cycle, combining decimal cycle of the ten heavenly stems (*tiāngān* 天干) and duodecimal cycle of the

twelve earthly branches (*dizhi* 地支). In fact, China was the center of dispersion of this system that was originally developed by a population located towards the center of China and speaking a language akin to Austroasiatic (Norman 1985), early absorbed by the Chinese expansion. During Hàn times, the terms of the cycle, that had become opaque for Chinese speakers, have been associated with the names of animals involved. The list is: *RAT*, *BUFFALO* (or *OX*), *TIGER*, *HARE* (or *RABBIT*, or *CAT*), *DRAGON* (originally a crocodile), *SNAKE*, *HORSE*, *GOAT*, *MONKEY*, *ROOSTER*, *DOG*, *PIG*. The Chinese duodecimal cycle is widespread in Asia. It was particularly borrowed by the historical peoples of Southeast Asia, Vietnamese, Khmer and Mon. It is important to follow the evolution of the cycle of twelve animals and its adaptation to receptor languages.

Curiously, the names in the Khmer cycle do not belong to the lexical funds of Khmer. Cœdès (1935) found that ten out of twelve terms of the cycle corresponded to names of animals in Muong, the only Vietic language known at the time outside Vietnamese. The today linguistic knowledge shows that the twelve words, to which *YEAR* must be added, have correspondances in the Vietic languages (Ferlus 2010). In fact, the Chinese names were translated into Vietnamese and transmitted to Ancient Khmer before the Vietnamese abandoned their old nomenclature to adopt the Chinese cycle, today pronounced in Sino-Vietnamese.

Table 1: 1 Names of animals; 2 Khmer (phonetic); 3 Khmer (script); 4 proto Khmer; 5 proto Viet-Muong; 6 *Vietnamese*; 7 examples in Vietic languages (M. Muong; Mk. Maleng Kari; Th. Thavung; R. Rục; P. Pong; Mb. Maleng brô); 8 Chinese.

1	2	3	4	5	6	7	8
Name	Khmer			Viet-Muong / Vietic			Chinese
	modern Kh.		proto Kh.	PVM	Việt	Vietic languages	
Rat	cu:t	ជូត	*juot	*juot	chuot (M.)	cuot ⁸ 'squirrel'	子 zǐ
Ox	c ^h lou	ឆ្កែ	*c.lu:	*c.lu:	trâu (Mk.)	sălu: ²	丑 chǒu
Tiger	k ^h a:l	ខាល	*k ^h a:l	*k.ha:l ²	khái (Th.)	kăha:l ³	寅 yín
Hare	t ^h ah	តា	*t ^h ah	*t ^h ah	thỏ (M.)	t ^h o: ⁵	卯 mǎo
Dragon	ro:ŋ	រោង	*m.ro:ŋ	*m.ro:ŋ	rông (R.)	măro:ŋ ¹	辰 chén
Snake	măsap	ម្សាញ	*m.sap	*m.səp ²	rắn (R.)	păsip ³	巳 sǐ
Horse	mămi:	មី	*m.ŋia	*m.ŋə: ²	ngựa (Mk.)	măŋə: ⁴	午 wǔ
Goat	măme:	មែម	*m.bɛ:	*m.6ɛ: ²	-	(Mk.) 6ɛ: ³	未 wèi
Monkey	və:k	វ៉ក	*və:k	*və:k	-	(P.) vək ⁸	申 shēn
Rooster	răka:	រកា	*r.ka:	*r.ka:	gà (R.)	răka: ¹	酉 yǒu
Dog	ca:	ច	*cə:	*ʔ.cə: ²	chó (R.)	ăcə: ³	戌 xū
Pig	kol	កុរ	*kur	*g/ku:r ²	cúi (Mb.)	kù:r ²	亥 hài
Year	c ^h nam	ឆ្នាំ	*c.nam	*c.nəm	năm (Mb.)	sănam ¹	

The term *YEAR* is attested in the Khmer inscriptions of 6th-7th centuries, most of the other terms are only from the 13th. However, the presence of one term among the twelve (+ one) of the cycle is sufficient to assume the use of the full cycle.

The Vietnamese origin of the terms in the Khmer cycle shows that the inhabitants of Chiao-chih (the ancient Vietnam, Chinese protectorate) have played the role of intermediary between the Empire and the areas towards the Gulf of Thailand.

5. Middle Chinese /T ~ L/ contrast, and its transfert to Vietic, (East-)Katuic, and Pearic.

Reminder: The general syllabic type in OldChinese was (Cv)CV(C), i.e. a part of vocabulary was made up of monosyllables CV(C), the other part of sesqui-syllables CvCV(C). The coalescence of initials in sesqui-syllables developed a tenseness /T/, while monosyllables became lax /L/. Thus syllabic contrast between CvCV(C) and CV(C) was coupled with contrast /T ~ L/. The evolution was continued by the monosyllabization and the formation of a syllabic contrast CV(C)/T vs CV(C)/L in MC, associated with modifications of vocalic aperture, vowel lowering in T-syllables and vowel raising in L-syllables. At this stage, MC was a voice type register language (Ferlus 2009). These findings result from the linguistic analysis of the *Qièyùn*, a rime book elaborated in the early 7th century. However it should be noted that these ideas are far from being accepted by specialists in phonetic history of Chinese.

Table 2: Development of voice type register phenomenons in Chinese

Old Chinese	Middle Chinese	Divisions of <i>Qièyùn</i>	<i>transferred to Vietic, Katuic and Pearic</i>
CvCV(C) (tenseness)	CV(C)/T (v. lowering)	I/IV and II	T (ense)
CV(C) (laxness)	CV(C)/L (v. raising)	III	L (ax)

In languages of Vietic, (East-)Katuic and Pearic groups, vowels can be pronounced with a feature of tenseness realized as a glottalization, or changed into tone. Diffloth Gérard (1989) proposed the reconstruction of a proto AA creaky voice to explain this feature. If this theory explains in a satisfactory manner the situation in these three language groups, however it remains inoperative about the reasons for the absence of this feature in numerous other AA languages. Moreover, if we note that these languages are located (or were located) on the ancient road linking the North Vietnam to the Gulf of Thailand, one is led to consider the emergence of this feature of creakiness as the result of the propagation of MC contrast /T ~ L/. This brings us to distinguish two levels of proto languages in these three groups: a first stage, *Early Proto language*, directly derived proto AA, and a second stage, *Late Proto language*, characterized by the intrusion of contrast /T ~ L/.

We will briefly state the effect of the transfer of /T ~ L/ on Vietic, (East-)Katuic and Pearic syllables. For a better understanding of these phenomena, which should not underestimate the difficulty, it is necessary to refer to the reference studies.

5.1 The effects of /T ~ L/ in Vietic (Ferlus 2004)

	Early Proto Vietic	Late Proto Vietic: shift of finals			
	Early Proto Vietic finals	*-/p -t -c -k/	*-/m -n -ɲ -ŋ -r -l -w -j /	*-/ʔ/	*-/s -h/
T	sesqui-syllable CvCVC	-p -t -c -k (not affected)	-m ¹ -n ² ... ⁽²⁾ (glottalization)	*-ʔ > # ⁽¹⁾	-s -h (not affected)
L	monosyllable CVC	-p -t -c -k (not affected)	-m -n ... ⁽¹⁾ (not affected)	-ʔ ⁽²⁾	-s -h (not affected)
	<i>tones in vietnamese</i>	sắc-nặng	¹ ngang-huyền ² sắc-nặng	¹ ngang-huyền ² sắc-nặng	hỏi-ngã

The most outstanding fact of Vietic is the creation of open syllables in Late Proto Vietic. This fact created conditions for the formation of the three fundamental tones represented by *ngang-huyền*, *sắc-nặng* and *hỏi-ngã* in Vietnamese. Of note: the feature /T/ is strong enough to cause the loss of final -ʔ, but not enough to affect the voiceless final plosives. The voiced finals were glottalized and have *sắc-nặng* tones in Vietnamese.

5.2 The effects of /T ~ L/ in (East-)Katuic (Diffloth 1989)

	Early Proto Katuic	Late Proto (East-)Katuic: shift of finals			
	Early Proto Katuic finals	*/-p -t -c -k/	*/-m -n -ɲ -ŋ/	*/-r -l -s -h -w -j/	*v
T	sesqui-syllable CvCVC	-mʔ -nʔ -jʔ -ʔ (glottalization)	-mʔ -nʔ -ɲʔ -ŋʔ (glottalization)	-rʔ -lʔ -sʔ -hʔ -wʔ -jʔ (glottalization)	vʔ
L	monosyllable CVC	-p -t -c -k (not affected)	-m -n -ɲ -ŋ (not affected)	-r -l -s -h -w -j (not affected)	v

Contrast /T ~ L/ has affected only some dialects (Katang, Yir/Ong, and here Talan) in the East of Katuic group. Other Katuic languages (Suoy, Kuy/Kuoy, Sô/Bru, ...) were not affected. To simplify, I did not take account of the vocalic length in the development of /T/. The effect of tenseness is more important in Katuic than in Vietic. All finals in the T-series are affected by a glottal feature (also characterised as creakiness), plosives changed into nasals, while in L-series finals remains unchanged (for an overview on Katuic, see Sidwell 2006).

5.3 The effects of /T ~ L/ in Pearic (Ferlus 2011a)

	Early Proto Pearic	Late Proto Pearic: shift of finals				
	Early Proto Pearic finals	*/-p -t -c -k/	*/-m -n -ɲ -ŋ/	*/-r -l -s -w -j/	*/-h/	*v
T	sesqui-syll. CvCVC	-pʔ -tʔ -cʔ -kʔ (glottalization)	-mʔ -nʔ -ɲʔ -ŋʔ (glottalization)	-rʔ -lʔ -sʔ -wʔ -jʔ (glottalization)	-h	vʔ > vʔ
L	monosyllable CVC	-p -t -c -k (not affected)	-m -n -ɲ -ŋ (not affected)	-r -l -s -w -j (not affected)	-h	v

Except for the final **-h**, all the others were glottalized under the effect of the tenseness in the T-series. One can observe the re-creation of syllables ending in **-ʔ**. The Pearic languages are those where the effects of tenseness are generalized the most, but where the finals are the least corrupted.

Today, Pearic dialects are scattered in the Cardamom Mountains, but some centuries ago Pearic was still spoken north of the Great Lake. By the end of the 13rd century, Chou Ta-kuan reported the presence of the *Chuang* (today **coŋʔ**, a Pearic language) in the mount Kulen (Martin 1997: 65-71).

6. Historical conclusions

One has highlighted three categories of linguistic facts which suggest traces left by a Chinese presence along this trans-peninsular route.

Of the four words of Chinese origin present in Khmer and Thai, three are highly significant, (1) “country, principality”, (2) “to inspect, examine, guard”, and (3) “to protect, defend” then “soldier”. These words are good evidence of Chinese military and administrative presence.

The origin of terms in the Khmer duodecimal cycle shows that Chinese influence may have been conveyed by former Vietnamese incorporated into the Empire, as well as by Chinese themselves.

Finally, an influence more subtle to identify, the syllabic contrast /T ~ L/ highlighted in MC, but that has formed early in the hinge of OC and MC, was transferred to Vietic languages, then (East-)Katuic and Pearic.

Here is an inventory of passages in Chinese historical texts that might indicate a Chinese presence southwest of the Great Cordillera, somewhere north of present-day Cambodia.

During the 3rd-8th centuries, Chinese texts reveal the existence of dependencies of the Chinese Empire located between the Middle Mekong and the north of Cambodia.

The Records of the Three Kingdoms (*sānguózhì* 三國志) tell us that to the 3rd century, a state named T'ang-ming (*táng míng* 堂明), located north of present Cambodia, sent embassies to the emperor of China (Pelliot 1903: 251). This practice indicates a nominal authority of China over this area.

In his *Great Treatise of Geography* (*shídào zhì* 十道志), 8th century, the author Kia Tan (*Jiān* 賈耽), details the land route from the Chinese protectorate of Chiao-chih (*jiāo zhǐ* 交趾; Sino-Vietnamese: *Giao chi*), the today North of Vietnam, and leading to the dependency of Wen-tan (*wén dān* 文單) (Pelliot 1904: 210).

In *The New History of Tang* (*xīntāngshū* 新唐書), it is reported that Chen-la (*zhēn là* 真臘) successor of Fu-nan (*fú nán* 扶南), split into two states, the Land Chen-la and the Water Chen-la by the early 8th century. It is thought that Wen-tan was just one of the names of Land Chen-la, in other words the part of Ancient Cambodia which extended farther north than present day Cambodia.

Tatsuo Hoshino (1986: 31-32), more precisely, considers Wen-tan as the capital of of Po-lou kingdom, another name of Land Chen-la. The documents mentions several embassies from Wen-tan to the imperial court during the 8th century: the first in 717 shortly afterwards the split of Chen-la, then in 753 when a son of the king of Wen-tan accompanied the embassy; also 771, the viceroy of Wen-tan and his wife went to China.

The location of Wen-tan remains a problem to solve. Some ancient authors suggested identifying with Vieng Chan, the today capital of Laos, an idea taken in *The Historical Atlas of China* (1986, 5: 72-73), which shows us the southernly boundaries of the empire at the time of Tang (618-907). The course of the frontier roughly follows the level of the 19th parallel forming a projection to the Mekong valley (*see* map 1). At the site of Vieng Chan, one can read 文單城 (*wén dān chéng*) “City of Wen-tan”. This interpretation is obviously erroneous, firstly Vieng Chan did not yet exist at that time, on the other hand Wen-tan must be reconstructed **mun tan** in MC. In a recent study, I proposed the interpretation by Sanskrit *mūla tāla* “City of palm sugar” (Ferlus 2011b). The best hypothesis seems to be that of Hoshino (1986: 27) who proposed to identify Wen-tan with Muong Fa Daet (Kalasin Province, Thailand).

In 802, Jayavarman II was proclaimed cakravartin (universal sovereign) on Mount Mahendra (Phnom Kulen), after having reunified the Khmer lands. At the beginning of the 9th century, Chinese documents no longer refer to this region. Which brings us to the conclusion that Land Chen-la, capital Wen-tan, must be some kind of Chinese dependency. This finding is of great interest for the history of ancient Cambodia, particularly in the area of today Northeastern Thailand. A territory originally of Mon culture, but whose limits remain to be clarified, fell under Chinese rule, and then was reunified with the Khmer lands by Jayavarman II.

What would be the reason of the existence of these dependencies in an outlying region from China and linked to Chiao-chih (presently Northern Vietnam) by roads cut through geographical obstacles? It is clear that the roads described in the texts were only those controlled by the Chinese, of the great trans-peninsular trade route connecting southernmost China to the Gulf of Thailand, and becoming a sea route toward India by a portage through the Isthmus of Kra. This land route, a priori difficult, was essential to avoid the Cham whose navy controlled the sea route from China to India by the Strait of Malacca. Tatsuo Hoshino (2002) remarkably studied the trans-Mekong route to the Wen-tan, despite various difficulties of locating the places quoted in the Chinese sources.

We will like to call the part of the trans-peninsular trade route located between Chiao-chih and the Gulf of Thailand the « Han Trail » (*see* map 2).

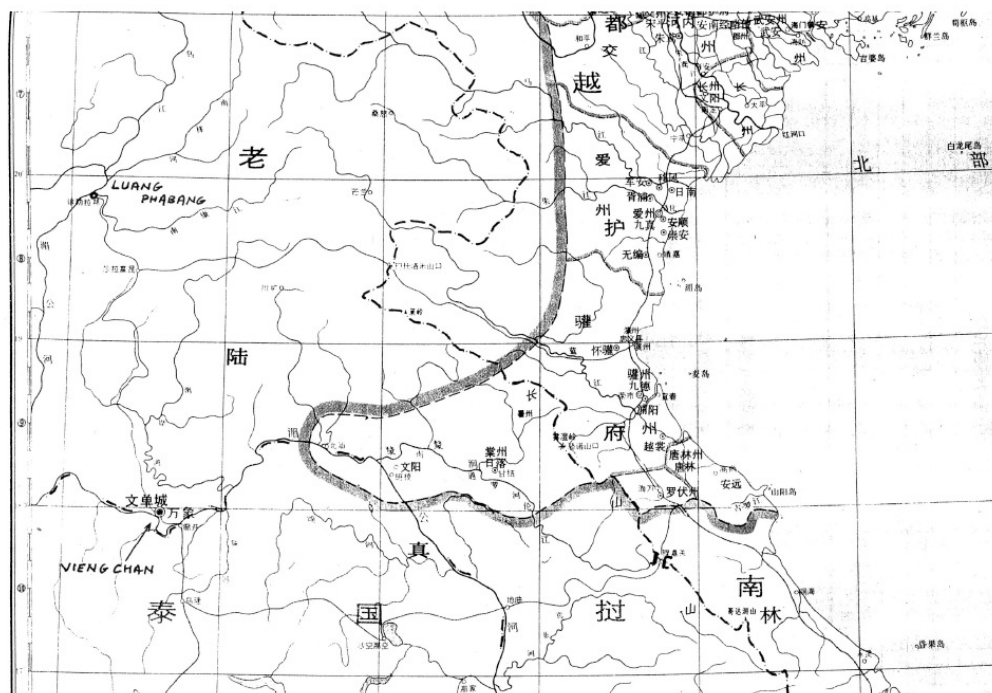


Figure 1: Map showing the location of the supposed Chinese dependency according to the misidentification of Wen-tan with Vieng Chan (*The Historical Atlas of China*, 1986, 5: 72-73).

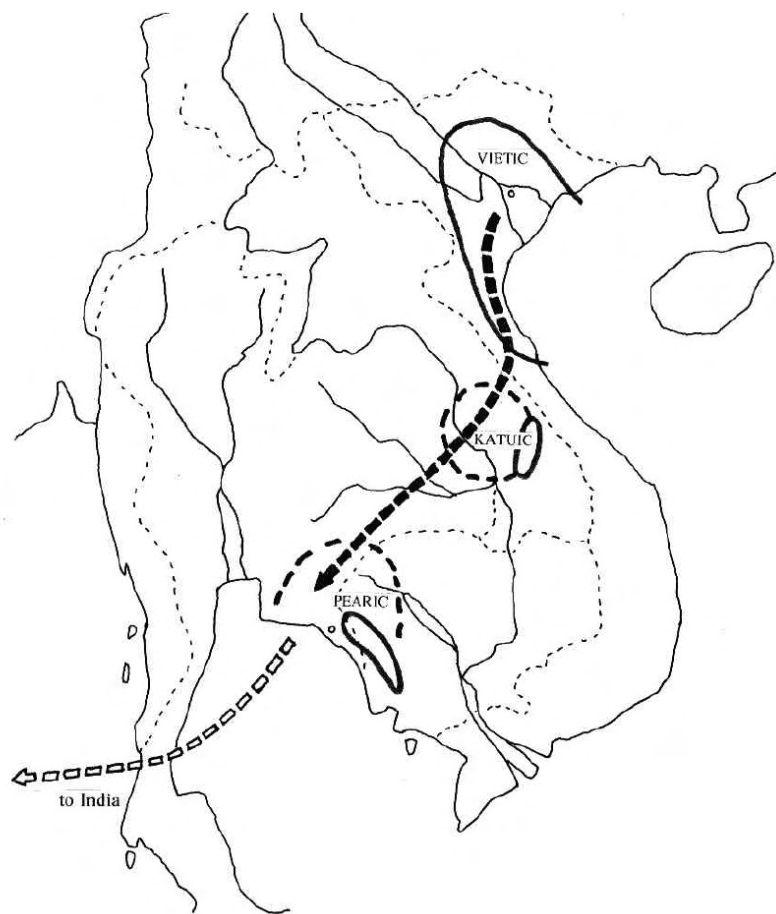


Figure 2: Map showing the trans-peninsular trade route linking the Chiao-chih (North Vietnam) and the Gulf of Thailand, and continuing towards India.

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Complementation in Ho (North Munda)

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Abstract

Evidence to date shows that Ho (North Munda) bears out claims about the isomorphism that appears in nearly all languages between the semantic and syntactic dimensions of complementation (e.g., Givón 2001). In this paper, we will look at the various constructions of a complement-taking matrix verb with a complement in Ho. We see that verbs of saying typically take a fully finite complement, while perception-cognition verbs take some kind of reduced complement such as a nominalization, infinitive or bare verb.¹

Keywords: Munda, Syntax, Complementation

ISO 639-3 language codes: hoc

1. Introduction

Givón hypothesizes that the greater the semantic bond between the two events (as expressed in the matrix and complement verb), the more syntactically integrated the two clauses should be (2001:39-40; cf. Haiman 1985, Noonan 2007:101). A tight semantic bond means that the two events are co-temporal and have co-referential agents. If the two events share agents and time-reference, a fully finite complement verb with tense marking would be redundant (Noonan 2007:111). Instead we expect to see some kind of reduced complement verb, e.g., nominalization or infinitive, where tense, aspect and grammatical relations are primarily marked on the matrix verb.

The complements of perception-cognition-utterance verbs often reference a time that is independent of the time reference of the matrix verb. These complements are therefore the most likely to be finite. In Ho, we will see that two verbs of saying, *men* ‘say’ and *meta* ‘say to’, have fully finite complements.

The time reference of complements of modality and manipulation verbs such as ‘try’ or ‘want’ is normally the same as that of the matrix verb. They are furthermore more likely to have the same subject. In section 3 we will look at the complements of modality and manipulation verbs in Ho and we will see nominalizations, infinitives and bare verbs.

In the rest of section 1, I will introduce some basic facts about the Ho language, in particular subject and object marking, in order to better understand example sentences.

1.1 Basic clauses in Ho

Ho is an agglutinating language and the word order is predominately SOV, although various NPs do sometimes appear after the verb for discourse functions. It has nominative/accusative alignment throughout the grammar. Both subject and object NPs are traditionally unmarked for grammatical relation. However, there is a type of accusative marker *-ke*, as in (1), which younger speakers are using to a certain degree on animate objects.

- (1) *Dobro=do seta-ke hapa-n-me meta-i-ten-e*
Dobro=FOC dog-ACC quiet-RFLX-2SG.IMP say.to-3SG-IPFV-FIN
‘Dobro says to his dog, be quiet’ (20110222MB:51)

-Ke is a recent borrowing from neighboring Indo-Aryan languages, such as Sadani/Sadri (Osada 1999:53). The use of *-ke* is not frequent in texts but was used often in my elicitation work with young, educated and bilingual students. It is not considered grammatical by older speakers.

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1.2 Subject marking in basic clauses

All personal pronouns in Ho have two forms, a free full form and a short, bound form. Except for the third person singular marker, the pronouns do not change to indicate different grammatical relations or semantic roles.² The short forms appear as both object suffixes and subject enclitics, as well as for certain types of possession.

Table 1: Pronouns in Ho

	Full Form			Short form		
	Singular	Dual	Plural	Singular	Dual	Plural
1(inclusive)	<i>aŋ</i>	<i>alaŋ</i>	<i>abu</i>	<i>-ŋ/-eŋ/-iŋ</i>	<i>-laŋ</i>	<i>-bu</i>
(exclusive)		<i>aliŋ</i>	<i>ale</i>		<i>-liŋ</i>	<i>-le</i>
2	<i>am</i>	<i>aben</i>	<i>ape</i>	<i>-m/-me/-em</i>	<i>-ben</i>	<i>pe</i>
3	<i>ae?</i>	<i>akiŋ</i>	<i>ako</i>	<i>-e?/-i:/-e</i>	<i>-kiŋ</i>	<i>-ko</i>

In Ho, the subject NP can be omitted if it is recoverable from the discourse. There is however a pronominal subject clitic that attaches either to the word immediately before the verb as in example (2), and on the word *na?* ‘now’ in example (3), or to the end of the verb as in both verbs in example (3). The clitic is the short or bound form (see table 1).

- (2) *en dudulum-ko aja? baba jawge=ko jom-e-ja*
 that pigeon-PL 3SG:GEN paddy always=3PL eat-INAN.OBJ-FIN
 ‘those pigeons always eat his paddy’ (20081107AB:4)

- (3) *na?=*m* kaji-ke-q-a=*m* jom-me-ja=*ŋ**
 now=2SG say-PFV-TR-FIN=2SG eat-2SG-FIN=1SG
 ‘now you said it, “I’m going to eat you”’ (20110210BCc:23)

As we see with the second person singular clitic in example (3), the subject clitic sometimes appears simultaneously before the verb and at the end of it. Anderson et al. suggest that the double marking of subjects happens in “contrastive or expressive discourse” (2008:219). Both the preverbal and postverbal patterns of pronominal subject marking are attested and acceptable to speakers; however the preverbal pattern as in example (2) is more frequent (cf. Anderson et al. 2008:217).

The subject clitic does not appear when the subject is inanimate. There are also instances where an animate subject clitic is omitted, as we see in (4).

- (4) *ente ae?-o: o:ʔl-eja-n-a*
 then 3SG-also go.out-PST-ITR-FIN
 ‘then she went out too’ (20110524RPP:86)

The conditions under which animate subject clitics are omitted are not clear, however it seems to be more common with third person singular subjects.

1.3 Transitive verbs and object marking in basic clauses

Transitivity and object marking in Ho are complex. The transitive verb root is followed by a tense/aspect suffix and the transitive suffix *-q* (Anderson et al. 2008; Deeney 2002). If there is a past tense or perfective aspect suffix and if the object is animate, an object suffix agreeing with person and number follows the transitivity suffix. The transitive suffix does not appear in present tense or imperfective clauses. If the verb is the main verb of the clause, there is a finite suffix *-a* (or its allomorph *-e*³).

- (5) *hola Soba aŋ=e? nel-ki-q-iŋ-e*
 yesterday Soba 1SG=3SG see-PFV-TR-1SG-FIN
 ‘yesterday Soba saw me/looked at me’ (1.67.23)

² For the third person singular, *-eP* is the subject form, while *-i:* is the object form.

³ Ho has vowel harmony based on height: mid-vowels become high after high vowels, and [a] raises to /e/ after a high vowel. High vowels do not normally lower.

If the third person object marker *-i-* comes together with the transitive marker *-q*, the result is pronounced as a glottal stop, as in (6).

- (6) *cike-te ni esu muruku p̣ɛjae=ko nutum-ki-ʔ-je*
 how-all this very foolish weaver=3PL name-PFV-TR:3SG-FIN
 ‘how they named this very foolish weaver’ (20110429JoBa:6)

The imperfective aspect marker *-tan* requires a different verb construction than do the other tense/aspect markers. In the *-tan*-construction, the animate object suffix comes immediately after the verb root and before *-tan*, instead of after the aspect marker as in the verb forms with perfective suffixes.

- (7) *Soba aɲ=eʔ nel-ɲn-ten-e*
 Soba 1sg=3SG see-1SG-IPFV-FIN
 ‘Soba is looking at/seeing me’ (1.66.22)

For object marking, animate NPs are marked in the verb:

- (8) *kule-ko=ko goeʔ-ko-wa*
 tiger-PL=3PL kill-3PL-FIN
 ‘they kill tigers’ (201105NTPSc:12)

Now we move to consider what happens if an object is inanimate. In non-past or imperfective clauses with an inanimate object, the bound object suffix is *-e* (or its harmonic equivalent *-i*), as in (9). This is invariable for number, as we see by comparing (9) and (10). Dual and plural marking on the inanimate NP itself is optional.

- (9) *Dobro=do en ro: daru nel-e-tan-a*
 Dobro=FOC that dry tree see-INAN.OBJ-IPFV-FIN
 ‘Dobro is looking at that tree trunk’ (20110222MB:49)
- (10) *ako-waʔ gaw-ko gotaʔ-e-tan-a*
 3pl-GEN wound-PL scratch-INAN.OBJ-IPFV-FIN
 ‘they are scratching their wounds’ (1.200.32)

The inanimate object suffix can also appear with some ostensibly intransitive verbs, such as *nir* ‘run’, *raʔ* ‘cry’, *durəŋ* ‘sing’ when they are in non-past or imperfective clauses i.e., with *-tan* or zero-marking for generic aspect.

- (11) *Soba durəŋ-e-tan-a*
 Soba sing-INAN.OBJ-IPFV-FIN
 ‘Soba is singing’ (1.60.37)

In past and perfective aspect, the inanimate suffix does not appear, as seen in example (12). Only the transitive *-q* is present.

- (12) *tisɲ esu pureʔ ba:-ko akariɲ-ke-q-a*
 today very many flower-PL buy-PFV-TR-FIN
 ‘today she sold a lot of flowers’ (1.12.26)

Animate recipients and beneficiaries are treated as objects and indexed in the verb with one of the bound pronominal elements from table 1. The verb must take the applicative suffix *-a*.

- (13) *en=do en basi maŋɗi saben tuju-ko em-a-q-ko-wa*
 that=FOC that leftover rice all jackal-PL give-APP-TR-3PL-FIN
 ‘then he gave that leftover rice to all the jackals’ (20081029RCBb:27)

The applicative suffix appears in the same slot as the perfective aspect suffixes; therefore it cannot co-occur with a perfective aspect suffix. When the transitivity suffix *-q* appears after *-a*, the default interpretation is perfective or past.

2. Finite complements and complementizers

Perception-cognition-utterance matrix verbs tend to have the most finite complement clauses, because of the relative semantic independence of the matrix event from the complement event or situation (Givón 2001:41). We will see that two utterance verbs in Ho, *meta* ‘say to’ and *men* ‘say’

both take finite complements. Two other perception-cognition verbs *nel* ‘see’ and *ada* ‘know’ also take finite complements, which are sometimes introduced with a complementizer.

2.1 *meta* and *men*

The two most frequent verbs of saying in Ho are *meta* ‘say to’ and *men* ‘say’, which take fully finite direct quote complements. Both are syntactically transitive, taking the transitivity marker in perfective aspects, and an inanimate object marker with *-tan* ‘imperfective’.

With *meta*, the grammatical direct object is the person who is being talked to. In example (14), we see *meta* with the third person animate object marker *-i*.

- (14) “*an=do gaɾa-re joka=n oɾa-le:-n-oʔ-wa*” *meta-i-ten-e*
 1SG=FOC river-LOC little=1SG bathe-ANT-ITR-MID-FIN say.to-3SG-IPFV-FIN
 “‘I will bathe a little in the river’, he says to him’ (20081108AB:38)

Men ‘say’ is also always syntactically transitive and appears with an inanimate object marker in non-past or imperfective clauses (15) and the transitive suffix *-ɖ* in perfective aspect (16).

- (15) “*am bacaw-ɛn-te=ge=m hoba-oʔ-wa*” *men-e-tan-a*
 2SG save-1SG-ALL=EMPH=2SG must-MID-FIN say-INAN.OBJ-IPFV-FIN
 “‘you must save me,’ he says’ (20110210BCb:33)
- (16) *ente mid-ɖ-te?* “*daru=n maʔ-ja*” *nen bugi-leka-n daru*”
 then one-place tree=1SG chop.w.swinging.motion-FIN this good-like-ITR tree
men-ke-ɖ-a
 say-PFV-TR-FIN
 ‘then in one place, “I’ll cut down the tree, this is a good tree”, he said’ (20110210BCc:12)

The complements of both *meta* and *men* are fully finite as we might expect of the complements of utterance verbs. In the complement clauses we see that the complement verb can appear with an aspect marker, and the finite suffix *-a*. There is also a subject clitic.

2.2 The complementizer *ci*

Two PCU verbs that express epistemic certainty are *nel* ‘see’ and *ada* ‘know’. As with the verbs of speaking, the complements of *nel* ‘see’ and *ada* ‘know’ are also finite. However they differ from the complements of *meta* ‘say to’ and *men* ‘say’ because they are most commonly introduced by the complementizer *ci*.

First, we will look at three examples of *nel* with no complementizer. The first thing to notice is that the word order can vary; the matrix verb with *nel* ‘see’ may precede or follow the complement clause. Although both orders are possible, the order shown in (18) and (19), with the matrix verb preceding the complement, is preferred.

- (17) *ente bin ondo? ka:ʔ=kɪn goeʔ-ka-n-a nel-ke-ɖ-kɪn-e=?*
 then snake and crow=3DL die-PRF-ITR-FIN see-PFV-TR-3DL-FIN=3SG
 ‘then he saw that the snake and the crow were dead’ (20110521SD:59)
- (18) *ene:te=kɪn nel-ko-tan-a daru sube-re esu sange coke-ko menaʔ-ko-wa*
 then=3DL see-3PL-IPFV-FIN tree under-LOC very many frog-PL COP-3PL-FIN
 ‘then they saw that there were many frogs under the tree’ (20110222MB:54)
- (19) *Dobro nel-ko-tan-a=? hon-ko unuɲ-ten-e=ko*
 Dobro see-3PL-IPFV-FIN=3SG child-PL play-IPFV-FIN=3PL
 ‘Dobro is watching the boys playing’ (2.178.10)

The second interesting point about sentences (17)-(19) is that the subject of the complement clause is copied and marked on the matrix verb as the object of *nel* ‘see’. For example, in sentence (17), the object that is marked on *nel* is dual, referring to the snake and the crow, who are the subject of the complement clause. Example (18) has a locative copula construction in the complement clause. The single argument of a locative copula is always marked on the copula verb, close to the root, in the same way that objects are marked. And in sentence (18), it is that single argument of the copula that is copied and marked on the matrix verb.

Complements of *nel* are commonly introduced with the complementizer *ci*. In this case, *nel* always precedes the complement clause, followed by *ci* and the finite complement clause.

- (20) *ente canab=do nel-e-tan-a ci en daru=do dirij-ten-e*
 then after=FOC see-INAN.OBJ-IPFV-FIN COMP that tree=FOC horn-IPFV-FIN
 ‘then, after, he sees that that tree has horns’ (20081219JT:51)

- (21) *nel-e-tan-a=kij ci bojam-re=do coke ban-gaja?*
 see-INAN.OBJ-IPFV-FIN=3DL comp jar-LOC=FOC frog NEG.COP-3SG:FIN
 ‘they see that the frog isn’t in the jar’ (20081219JT:9)

Note that in both (20) and (21), *nel* has an inanimate object marker, as in the pattern of *men* ‘say’ above. This fact distinguishes these clauses with *ci* from those without *ci* above (e.g., (18)) where the complement subject was marked as object of *nel* ‘see’. In example (21) the complement subject is third person animate; however, the object marker of *nel* ‘see’ is inanimate. Note though that a sentence with a copied object suffix (for the subject of the complement clause) and *ci* was acceptable to my consultant (22).

- (22) *Dobro nel-ke-q-ko-wa ci hon-ko unuj-ten-e*
 Dobro see-PFV-TR-PL-FIN COMP child-PL play-IPFV-FIN
 ‘Dobro sees that the children are playing’ (2.178.15)

Despite the acceptability of a sentence like (22), there are no examples of copied objects with *ci* in the narrative texts in my corpus. Complements of *nel* with *ci* are normally different from those without *ci*. The inanimate object marker in sentences like (20) and (21) most likely encodes the complement clause itself.

Another verb which expresses epistemic certainty and can take complement clauses introduced by *ci* is *ada* ‘know’. *Ada* can also mean ‘experience, feel’ but when it carries the applicative marker *-a* and reflexive *-n*, then it means ‘know’, as we see in example (23).

- (23) *Dobro ada-a-n-a ci am gapa=m huy-2-we*
 Dobro know-APP-RFLX-FIN COMP 2SG tomorrow=2SG come-FIN
 ‘Dobro knows that you’re coming tomorrow’ (2.179.18)

The complement of *ada* does not always appear with *ci*, as we see in (24) and (25). In the versions without *ci*, we do not see any evidence of the complement clause subject being copied with *ada*.

- (24) *ka=kij ada-a-n-a cauli-te mandj bai-u-2-wa*
 NEG=3DL know-APP-RFLX-FIN uncooked.rice cooked.rice make-MID-FIN
 ‘they didn’t know that food could be make from uncooked rice’ (20081029RCBa:14)

- (25) *Dobro ada-a-n-a am gapa=m huy-2-we*
 Dobro know-APP-RFLX-FIN 2SG tomorrow=2SG come-FIN
 ‘Dobro knows that you’re coming tomorrow’ (2.179.19)

In this section we have seen that *nel* ‘see’ and *ada* ‘know’ can take finite complements both with and without the complementizer *ci*. The verb in the complement clause is fully inflected: we see aspect suffixes, the transitivity suffix, object markers and the finite suffix *-a*. *Nel* is a transitive verb; the subject of the complement verb is copied as object of *nel* ‘see’ when there is no complementizer. With the complementizer *ci*, *nel* ‘see’ takes an inanimate object marker and the complement subject is not copied. *Ada* appears with the applicative and reflexive suffixes and therefore the complement subject cannot be copied into the object slot, with or without *ci*.

Both with and without *ci*, the complement clause tends to follow both *nel* ‘see’ and *ada* ‘know’. (But see example (17) for an exception to this tendency.) In the following section, we will see the opposite word order with another type of complementizer, *mente*.

2.3. Mente

The complementizer or quotative *mente* comes from *men* ‘say’ plus the allative/infinite marker *-te*.⁴ In this construction type, a finite complement clause is followed by *mente* and then the matrix verb, the opposite order from what we saw in section 2.2 with *ci*. Matrix verbs that take *mente* include *ri:n* ‘forget’ and *uru?* ‘think’.

- (26) *cilika=n budi-re ne-ko nen dudelum-ko=n har-nir-ko-wa mente*
 how=1SG idea-LOC this-PL this pigeon-PL=1SG drive-run-PL-FIN
uru?-ke-q-a
 COMP think-PFV-TR-FIN
 ‘“how can I run these pigeons away?” he thought’ (20081107AB:3)
- (27) *an kiteb em-a-mi-ja=n mente=n ri:n-ke-q-a*
 1sg book give-APP-2SG-FIN=1SG comp=1SG forget-PFV-TR-FIN
 ‘I forgot to give you the book’ (2.15.49)
- (28) *an lije?=en haka-ja=n mente=n ri:n-ke-q-a*
 1sg clothing=1SG hang-fin=1SG comp=1SG forget-PFV-TR-FIN
 ‘I forgot to hang clothes’ (2.15.53)⁵

All of the matrix verbs above are transitive, with an inanimate object, evidenced by the transitivity marker *-q* after the perfective aspect marker. The object in these cases is most likely the complement clause itself. As we saw in section 2.2 with the complements with *ci*, the complement subject is not also copied as object of the matrix clause.

It is also possible for *mente* to appear on its own, without an overt matrix verb:

- (29) *okon-re-m-a coke? okon-re-m-a coke? mente*
 where-LOC-2SG-FIN frog? where-LOC-2SG-FIN frog? COMP
 ‘Where are you frog? where are you frog? (20081219JT:22)

In examples like (29), *mente* seems to be acting as the matrix verb itself, as there is no finite verb in these clauses. We might call it a quotative in these examples.

Both *mente* and *ci* function as complementizers in Ho. Both appear with finite complement clauses. The most striking difference, however, is in word order. *Ci* precedes the complement clause while *mente* follows it. Throughout India and other parts of South Asia, many languages, particularly Indo-Aryan languages, have two complementizers that follow these same two patterns.

Complementizers (like *mente*) that follow the complement usually come from a word meaning ‘say’, e.g., *bole* in Bengali or *ani* in Telugu (Bayer 2001). Bayer notes that these are traditionally called quotatives because they set the preceding discourse in quotes (2001:13).

The second type of complementizer always precedes the complement clause, and follows the matrix verb. Bayer calls these “initial complementizers”. Ho *ci* and its Hindi equivalent *ki* are of this type. Bayer notes that across the Indo-European family, the initial complementizers are often lexically identical with a demonstrative pronoun such as ‘what’ or a relativizer such as ‘which’ (2001:13). The lexical origins of the initial complementizer in South Asian languages are less clear but Bayer suggests that they also come from what he calls “operators”. Both Hindi *ki* and Bengali *je* are also relativizers. The Ho complementizer *ci* is likely a loan from the Hindi *ki* and it is also used as a question particle in Ho. (Deeney also reports some use of *ci* as a relativizer among bilingual speakers (2002:92.))

Bayer finds that for Bengali, there is some functional overlap in the initial and final complementizers. However, the final complementizer (*bole* in Bengali) has more uses than the initial complementizer. As we will see in the next section, the final complementizer *mente* in Ho can also be used with reason adverbials.

⁴ In section 3.2 below I will argue that the allative suffix *-te* is becoming an infinitive marker in Ho.

⁵ *Ri:n* ‘forget’ can also take a bare verb construction; see section 3.3.

3.2.1. *Mente as a reason adverbial*

In addition to its use as a complementizer, *mente* can also be used with a cause phrase. As we see in example (30), *mente* follows the cause phrase, in this case *enko buginteko taiu?kako* ‘that they stay well’.

- (30) *gōwa-bonga* *bonga-i-je=bu,* *gōwa-re* *uri?*
 cow.shed-spirit worship-3SG-FIN=1PL.INCL cow.shed-LOC cow
merom-ko *ciken-ko=bu* *em-ko-wa* *enko*
 goat-PL what-PL=1PL.INCL put-3PL-FIN that.ANIM:3PL
bugin-te=ko *tai-u?ka=ko* *mente*
 good-ALL=3PL stay-MID-OPT=3PL COMP

‘we worship to the cattle shed god, so that the cows and goats and whatever we put in the cow shed will be healthy’ (20110301KB:38)

- (31) *alij* *da?=lij* *agu-le-q-a* *aben=lij* *em-a-ben-a*
 1DL.EXCL water=1DL.EXCL bring-PFV-TR-FIN 2DL=1DL.EXCL give-APP-2DL-FIN
mente *mendo* *ka=lij* *em-a-q-ben-a*
 COMP but neg=2DL.EXC give-APP-TR-2DL-FIN
 ‘we brought the water to give to you but we haven’t given it yet’ (2.7.32)

In examples (30) and (31) *mente* functions to link an adverbial clause to the main clause as a kind of reason marker (like because).

The grammaticalization of quotative verbs into both complementizers and reason markers has been noted in many languages across the world (e.g., Lord 1976; Saxena 1988; Hopper and Traugott 2003:13-15; Klammer 2000). Saxena (1995) argues for a four stage process wherein a quotative verb first grammaticalizes to a complementizer, then to a reason/purpose marker, then to a conditional, and finally to a comparative marker. Ho seems to be at stage two of this process; *mente* is only used as a complementizer and a reason marker.

3. Non-finite complement clauses

We saw in section 2 that the finite complement clauses of perception-cognition-utterance verbs take the same form as regular finite main clauses in Ho. The tense/aspect marking, object marking and finite marker all appear as they would in a basic clause without a matrix verb. In this section we look at the structure of reduced complements i.e., non-finite complement clauses.

In Ho, the matrix verbs which take some type of non-finite complements are all (so-called) modality verbs. As predicted by Givón’s scale of event integration (2001:55), modality verbs, because they code the aspect or mode of the event or state encoded in the complement clause, typically have a close semantic bond with the complement predication. The matrix and complement verbs together refer to a single event, i.e., they refer to the same place and time. In addition, the subject of the complement verb is normally co-referential with the subject of the modality verb. Givón predicts that this semantic closeness will be reflected in the syntax and that the matrix verbs of this type will be more likely to have non-finite or nominalized complements. We will see that, in Ho, non-finite complements of modality verbs can be nominalizations, infinitives or bare verbs.

3.1 Nominalization

Five matrix verbs in Ho take a nominalized complement: these are *ete?* ‘begin’, *nam* ‘try’, *dorkar* ‘need’, *ajum* ‘hear’ and *paisela* ‘decide’. In the nominalized complement construction, the nominalizing suffix *-teja?* is simply suffixed to the complement verb. No tense/aspect or transitivity suffixes appear in the nominalized complement; but an object suffix can follow a transitive complement verb, and precede *-teja?*.

First, I will show that *-teja?* is in fact a nominalizer. *-Teja?* suffixes to a variety of lexemes which then function as nouns. In the following examples, we see *-teja?* suffixed to a property concept (32), to an action (33), and to a kind of incorporated action-object compound (34).

- (32) ...ro:-teja?=*do* *ka=ge* *berel* *ru:m* *sakam-re* *ro:-teja?=*do**
 ...dry-NMLZ=FOC NEG=EMPH unripe rum leaf-LOC dry-NMLZ=FOC
ka=ge *bai-u?-wa*
 neg=EMPH make-MID-FIN
 ‘...not the dry ones, [put it] on an unripe rum leaf, the dry ones don’t work’
 (lit. ‘aren’t made’) (20081107NB:20)
- (33) *ente* *kiteb* *bai-je-n-re=*do** *ondo?* *eto-ko-teja?*
 then book make-PST.ITR-ITR-LOC=FOC and teach-3PL-NMLZ
ondo? *suvide* *bai-je-n-e,* *ajer=*do** *kiteb*
 and easy make-PST.ITR-ITR-FIN, before=FOC book
ka *taiken-re=*do** *joke* *muskil* *taikena*
 NEG PST.COP-LOC=FOC little difficult PST.COP
 ‘after the book was made, teaching them was made easier, before, when there was no book,
 it was a little difficult’ (20110413DSP:139)
- (34) *ginil-re* *lije?-ko-haka-teja?* *kilum-eke-n-a*
 wall-LOC cloth-PL-hang-NMLZ nail-PRF-ITR-FIN
 ‘the clothes hooks are nailed on the wall’ (2.121.50)

In all cases, the *-teja?* word has the pragmatic function of referring to some entity, which is the prototypical function of a noun.

As we will see in the following examples, a verb nominalized with *-teja?* can function as a complement to certain modality verbs, chiefly *nam* ‘try’ and *dorkar* ‘need, necessary’. In examples (35) and (36) the subject of both the matrix verb and the complement verb is the same and the complement verb is intransitive.

- (35) *Soba* *paɾaw-teja?* *nam-tan-a*
 Soba study-NMLZ try-IPFV-FIN
 ‘Soba is trying to study’ (1.214.21)
- (36) *aɲ* *owa?-te* *huɲu?-teja?* *dorkar-a*
 1SG house-ALL come-NMLZ need-FIN
 ‘I need to come home’ (1.223.29)

If the complement verb has an object (and the subjects of both verbs are the same), the object suffix appears between the complement verb root and the nominalizing suffix. This is true for both animate (37) and inanimate (38) objects.

- (37) *ente* *kule=*do** *jom-iɲ-teja?* *nam-tan-a*
 then tiger=FOC eat-1SG-NMLZ try-IPFV-FIN
 ‘then the tiger is trying to eat me’ (20110210BCc:52)
- (38) *Dobro* *kiteb=*e?** *paɾaw-e-teja?=*e?** *nam-tan-a*
 Dobro book=3SG read-INAN.OBJ-NMLZ=3SG try-IPFV-FIN
 ‘He is trying to read a book’ (1.226.6)

If the subject of the complement verb is different from the subject of the matrix verb, there are two possible constructions. The first is the same as we saw above. The subject of the complement verb is simply inserted before the complement verb:

- (39) *aɲ* *akiɲ=*kiɲ** *huɲu?-teja?=*ɲ** *dorkar-o?-tan-a=*ɲ**
 1SG 3DL=3DL come-NMLZ=1SGL need-MID-IPFV-FIN=1SG
 ‘I need them two to come’ (1.225.35)

Note that the subject clitics are more likely to appear in clauses where the complement and the matrix verb have different subjects, as in (39). In example (37) above, when we see the same subject in matrix and complement clauses, the subject clitic was omitted.

The second option is to mark the subject of the complement verb as a kind of possessor, with the place suffix *-taʔ*.⁶

- (40) *an am-taʔ=n hujuʔ-tejaʔ=n dorkar-oʔ-tan-a=n*
 1SG 2SG-place=3PL come-NMLZ=1SG need-MID-IPFV-FIN=1SG
 ‘I need you to come’ (1.225.40)

Both alternatives are considered grammatical by native speakers. With different subjects and a transitive complement verb, the causative suffix *-ici* must be introduced into the nominalized verbal complement:

- (41) *ako am-ke lijeʔ-ko=ko haka-ici-m-tejaʔ=ko dorkar-oʔ-tan-a*
 3PL 2SG-ACC cloth-PL=3PL hang-CAUS-2SG-NMLZ=3PL need-MID-IPFV-FIN
 ‘they need you to hang the clothes’ (1.228.4)

In sentence (41) we see that the (second person singular) subject of the complement verb, which is also object of the matrix verb (here marked with *-ke*), is marked as the causee inside the nominalization. A suffix referencing the animate causee goes into the object slot.

If there is a transitive complement verb, different subjects and an animate object, then the subject of the complement clause is marked as possessor and the animate NP object of the complement verb is marked with the object case suffix (by those who use it, see section 1.3).

- (42) *ako am-ke Dobro joton-ici-m-tejaʔ-ko=ko dorkar-oʔ-tan-a*
 3PL 2SG-ACC Dobro look.after-CAUS-2SG-NMLZ-PL=3PL need-MID-IPFV-FIN
 ‘they need Dobro to look after you (more than once)’ (2.229.7)

It is interesting that when there is an animate object of the complement verb, that object gets marked as the causee in the nominalized complement verb, rather than the agent, as we saw above in (41).

In sum, in this section we have seen that a nominalized complement clause can take an object suffix, but tense and aspect is usually marked on the matrix verb. We also saw that when the complement subject is different from the matrix subject, the causative suffix *-ici* follows the complement verb root.

3.2 Infinitives with *-te*

Another type of reduced complement construction in Ho is the infinitive construction. The infinitive construction seems to be modeled on a purposive construction that is used with *hujuʔ* ‘come’ and *sen* ‘go’ as matrix verbs (illustrated in (47)). I will argue below that the allative marker *-te* which is used in such purposive clauses is further developing into an infinitive marker, and is used with certain complement taking verbs.

The *-te* infinitive construction is mainly used with one verb, *hoba* ‘happen, take place’. When *hoba* appears in a middle construction and with an infinitive complement, it takes on an obligation sense and is usually translated with something like ‘must’, as in the following examples. It seems that speakers have reanalyzed the *-te hoba-oʔ* construction so that synchronically it functions more like an auxiliary construction.

- (43) *ka, ka=eʔ jom-ipn-te hoba-oʔ-wa*
 NEG NEG=3SG eat-1SG-ALL must-MID-FIN
 ‘no, he mustn’t eat me’ (20110210BCc:34)

Note that, as we saw in nominalized complements above, the object of the complement clause appears between the verb root and *-te*. We can also insert a recipient object if there is an applicative marker (44) or an inanimate object marker *-e* (45) (whether it refers to an actual object or not, see section 1.3 and example (11) above).

⁶ To indicate possession, the *-taʔ* suffix is affixed to a possessor with the locative *-re* as in:
Dobro-taʔ-re miyaq kiteb menaʔ
 Dobro-place-LOC one book LOC.COP
 ‘Dobro has a book’ (3.49.68)

- (44) *nama lije? nama sutui=do kirin-e-i-te hoba-o?-wa*
 new clothes new shirt=FOC buy-APP-3SG-ALL must-MID-FIN
 ‘new clothes and shirts must be bought for him/we must buy new clothes and shirts for him’
 (20081213MSc:95)
- (45) *alij=do=n ra?-e-te=ge hoba-o?-wa*
 1DL.EXCL=FOC=1SG cry-INAN.OBJ-ALL=EMPH must-MID-FIN
 ‘I must cry’ (20081108AB:17)⁷

In contrast to the nominalized complement construction (section 3.1), the subject clitic in an infinitive complement just occurs once, before the complement verb, suggesting that the complement and matrix verb are treated as a single unit. More evidence for treating the infinitive and matrix predications as a single unit is the fact that the negative particle *ka* appears before the complement verb in (43). If the infinitive verb with *hoba-o?* has been reanalyzed as a single unit, it may be better synchronically to treat the construction as an auxiliary formation with *hoba-o?* meaning ‘must’.

Haspelmath (1989) shows that a shift from allative to purposive and then to infinitive function is a common grammaticalization path. Sentence (46) shows the original, allative use of *-te* in Ho, while sentence (47) shows how it has come to be used in purposive clauses.⁸

- (46) *an gara-te idi-atu:-n-pe*
 1SG river-ALL take-leave-1SG-IMP.2PL
 ‘take me to the river and leave me’ (20081107RCBb:38)
- (47) *ol-te research-no?-leka-te hyu?-le-n-taikena*
 write-ALL research-little-like-ALL come-PFV-ITR-PST.COP
 ‘he came to write, to do like a little research’ (20110413DSP:49)

In Ho, only purposives with ‘come’ and ‘go’ use *-te*, as in (47), thus preserving a sense of direction in these sentences.

The next step in the grammaticalization of an allative to an infinitive is for the purposive adposition to be used with complements. Haspelmath (1989) shows that purposive clauses are first used as irrealis complement clauses, and then as what he calls ‘realis-non-factive’, and finally ‘realis-factive’ complements. In many languages, the original allative has not grammaticalized to be used for all types of complements.

In Ho, the purposive *-te* has only weakly grammaticalized to an infinitive. It is primarily used with *hoba* ‘must’, a deontic modality, which takes irrealis and non-implicative complements.

The second interesting fact about the construction involving *hoba* plus the infinitive is that *hoba* always appears with the middle suffix *-o?*. Due to the fact that obligation is normally ‘externally imposed’, source constructions for obligation modals are often passive-like in structure (Bybee, Perkins and Pagliuca 1994:185).

In this section we have seen that Ho is developing an infinitive construction which is used to mark complements of *hoba-o?-wa* ‘must’. The fact that the infinitive verb with *hoba-o?* is treated as a single unit suggests that it is being further reanalyzed as an auxiliary construction. As in many languages, the infinitive suffix comes from the allative marker.

3.3 Bare verb

The last type of non-finite complement is the bare verb strategy. In these clauses, the complement verb is simply bare, i.e., there is no infinitive or nominalization marker. The verb is also not inflected for tense or aspect and the transitive verbs have no object suffixes. The following examples show the bare verb complements with matrix *ada* ‘know’ (48), *ri:n* ‘forget’ (49) and *ete?* ‘begin’ (50).

⁷ The first person dual pronoun is often used in place of the singular pronoun as an expression of politeness.

⁸ Note that there are other uses of *-te* in Ho, such as a manner adverbial and instrumental marker.

- (48) *aŋ ojaɾ=ɛŋ ada-a-n-a*
 1SG SWIM=1SG know-APP-RFLX-FIN
 ‘I know how to swim’ (1.15.60)
- (49) *aŋ sim-ko goeɽ=ŋ ri:n-te-q-a*
 1SG chicken-PL kill=1SG forget-PFV-TR-FIN
 ‘I forgot to kill the chickens’ (2.21.15)
- (50) *baba-ko jom=ko eteɽ-ke-q-a*
 paddy-PL eat=PL begin-PFV-TR-FIN
 ‘they began to eat the paddy’ (186.7)

The fact that the subject marker must precede the matrix verb, as in the above examples, is evidence that the matrix verb is in fact the main verb. Note, however, that there is no object marker on the complement verb, even when there is an animate object (as in (49)). All of the matrix verbs that take the bare verb strategy share subjects with their complement verb. The fact that the two verbs share subjects seems to allow the reduced, non-finite complement in this case.

4. Summary & conclusions

Table 2 summarizes the complementation constructions co-occurring with matrix complement taking verbs in Ho.

The matrix verbs at the top of the table (‘say’, ‘know’, ‘see’, ‘think’) all express semantics of perception, cognition and utterance. As might be expected their complements are fully finite i.e., the complements take the same form as regular non-embedded clauses. Some are introduced by the complementizers *ci* and *mente*, but neither verb of saying (*meta* or *men*) needs a complementizer.

In section 2, we saw that Ho has both types of complementizers found across South Asia. *Ci* is the Indo-Aryan-type complementizer. It is homophonous with the question particle *ci* and precedes the complement clause. We saw that *ada* ‘know’ and *nel* ‘see’ can both take *ci* with a finite complement. The second complementizer is *mente*, which is from the verb *men* ‘say’ with the allative/infinitive marker *-te*. Complementizers that come from a word for ‘say’ like *mente* are sometimes also called quotatives; these are especially common in the Dravidian languages of South Asia, but they also exist in many Indo-Aryan languages. *Mente* follows the finite complement clause and is used with the complements of *uɾu?* ‘think’ and *ri:n* ‘forget’.

Table 2: Summary of complementation strategies in Ho

Matrix Verb	English	Complement type			NMLZ	-te infin.	bare verb
		finite	ci+	+mente			
meta	‘say to’	X					
men	‘say’	X					
ada	‘know’	X	X				
nel	‘see’	X	X				
uɾu?	‘think’			X			
ri:n	‘forget’			X (ditr)			X
paisela	‘decide’				X		
ayum	‘hear’				X		
nam	‘try’				X		
dorkar	‘need’				X		
eɽe?	‘start’				X		
hoba	‘must’					X	
ada-a	‘know how’						X

There are three types of reduced, non-finite complement constructions in Ho. In section 3 we saw complements that are nominalized, complements with infinitive marker *-te* and those that are simply a bare verb. All the matrix verbs that take this type of reduced complement describe some kind of modal or aspectual notion, such as ‘try’ or ‘need’. As Givón predicts, modality verbs, with their close semantic bond to the complement verb, are also more syntactically integrated with the complement verb (Givón 2001).

We can conclude that complement taking verbs in Ho support Givón’s claims about the isomorphism between the syntax and semantics of complement taking verbs. PCU verbs, such as

men ‘say’ tend to take fully finite complements while modal, aspectual and manipulation verbs take non-finite complements.

Abbreviations

1	1st person	EMPH	emphatic	MID	middle
2	2nd person	EXCL	exclusive	NEG	negative
3	3rd person	FIN	finite	NMLZ	nominalizer
ACC	accusative	FOC	focus	OBJ	object
ALL	allative	GEN	genitive	OPT	optative
ANIM	animate	IMP	imperative	PFV	perfective
CAUS	causative	INAN	inanimate	PL	plural
COMP	complementizer	INCL	inclusive	PRF	perfect
COP	copula	IPFV	imperfective	RFLX	reflexive
DL	dual	ITR	intransitive	SG	singular
		LOC	locative	TR	transitive

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The Temiar causative (and related features)

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Abstract:

The productive causative inflection of the Temiar verb is formed by the affixation of *-r-*, either alone or as *tr-* and *br-*. This formative has no obvious Mon-Khmer source (which usually forms causatives with *p-*), and it may therefore be an Aslian innovation. In Temiar, *r* is a phonestheme with the notional meaning ‘REPLICATION (OF SELF)’, found also in the reflexive intensifier *ri:*², the relative pronoun *rə-* and the preposition *rɛ*² ‘like’. In the causative, *r* is iconic of the replicative verb’s valency-increase. The causative inflection has high productivity as a true causative with inanimate secondary subjects and as the transitivizer of intransitive verbs. However, there are syntactic and semantic limitations on its use with various kinds of animate secondary subject. In particular, cultural inhibitions against imposing one’s will on someone else suggests that Temiar ‘causatives’ are frequently better thought of as permissives. The paper also discusses a set of verbs that retain a recognizably Mon-Khmer-like ‘causative’ shape but which no longer behave productively or semantically as causatives in Temiar.

Key words: causative, reduplication, morphology

ISO 639 language codes: tea, mly, jah, kns, mnq,

In a series of papers on the Aslian language Temiar and the Austronesian language Malay I have argued that certain grammatical and lexical features are related, *via* iconic expression, to the social and cultural context in which the languages are spoken.¹ The iconicity involved is not a simple matter of speech-sounds imitating reality. Rather, it is based variously on (i) oral-articulatory gesture rather than on speech-sounds as such,² and (ii) *a posteriori* (secondary) rather than *a priori* (primary) iconicity.³

By ‘oral-articulatory gesture’ I refer mainly to the following opposition, which applies in varying degrees to both Temiar and Malay:

- Opening the mouth wide, as if addressing oneself to the rest of the world
- Closing the mouth in self-contemplation, as if in temporary retreat from the world.

The relatively open mouth position, which signifies the directing of one’s attention to the ‘objective’ realm of OTHER is expressed phonically in Temiar by the low vowel *a*, the back consonants ² and *h*, and velic opening (i.e. vowel nasality). The relatively closed mouth position, which conversely signifies the more ‘subjective’ SELF-focused, ‘I’-deixis realm, is expressed phonically by the high vowel *i* and the front consonants *m*, *j*, *c* and *r*.⁴ In this paper, I deal mainly with the iconicity of *r*, with some brief attention to *i*.

¹ The theoretical justification for the argument is elaborated in Benjamin 2012a (for Temiar, and language more generally) and Benjamin 1993: 344–356 (for Malay). For further discussion, see Benjamin 2011, 2012b on Temiar and Benjamin 2009 on Malay.

² This approach overrides the oft-assumed necessity when discussing iconicity to dissect the phonemes into separate distinctive features in favor (as here) of examining entire phonemes (cf. Jakobson & Waugh 1979:181–182). Similarly, Gafos (1999:99–100) gives primacy to vocal gesture over feature analysis in his examination of the phonology of reduplication in Temiar.

³ In Temiar, the *a priori* iconicity additionally involves the inflectional morphology of the verb (Tables 2 and 3), which employs a variety of complex reduplicative patterns to model non-punctiliar patterns of temporality (Benjamin 2012a).

⁴ To accord with the preference of *Mon-Khmer Studies* for IPA transcription, changes have been made to the author’s regular phonemization for Temiar: *j* is the palatal approximant (usually written as *y*); *j* is

The ‘social and cultural context’ just mentioned refers specifically to the various ‘modes of orientation’ maintained by the ‘cultural regimes’ associated with particular ‘polities’ (Benjamin 1993: 349–350, 2005: 262, 2011: 176,). In the Temiar case, the preferred mode of orientation has been dialectical (Benjamin 1994, 2011, 2012a), and this is directly reflected not only in their music, interactional patterns, religion, food behavior and so on, but also in the iconically expressed semantic underpinnings of Temiar grammar.

Iconicity: the affix *-r-* ‘REPLICATION (OF SELF)’

The special iconic properties of the phoneme /r/ are widely exhibited in the languages of Malaysia and beyond. In the Northern Aslian languages that abut on Temiar to the north and east, the *-ra-* infix forms the collective-plural inflection of human nouns: Jahai *babo* ‘woman’ → *brabo* ‘young women’ (Burenhult 2005: 74). In some Semai expressives (Diffloth 1976a: 253) it serves as a largely productive element with the meaning ‘simultaneous plural’. In Jah Hut,⁵ a *ra*²- prefix forms the superlative (a kind of intensification-through-plurality) of some verbs and nouns: *num* ‘ripe’ → *ra’num* ‘very ripe’ (Diffloth 1976b: 97). In Semelai, the same prefix indicates ‘a comparative relationship between two or more entities’ (Kruspe 2004: 146). See also Kruspe’s notes (2004: 148–149) on *ra*²- and *-r-* as pluralizers and replicatives in Aslian. In the Austronesian languages too, *-r-* widely indicates ‘plurality’ and it very likely derives from the Proto Austronesian infix **-r-* (or perhaps Wolff’s reconstructed **D*) ‘human pluralizer’.⁶ Malay in particular seems in its earlier stages to have employed *-r-* to express duration, intensity, plurality, reciprocity, confusion and so on (Benjamin 2009: 304). The Temiar clitic *bar-* ‘progressive’ (probably an early Malayic borrowing) also incorporates the REPLICATIVE *r*, in this case as an indication of progressive or continuative *Aktionsart*.

To what then are the apparently iconic properties of /r/ due? Prototypically, /r/ is a trilled consonant [r] or a (velar) continuant [ɣ], which would lend it the inherent potential to express a ‘repetitive’ or ‘durative’ meaning in an *a priori* manner. But given the variation in the pronunciation of /r/ in Aslian (cf. Diffloth 1975: 4), an *a posteriori* iconic motivation is more likely. In the Maniq (Northern Aslian) of Southern Thailand /r/ is pronounced in a variety of manners, but never as a trill (Wnuk 2010: 14). In the Kensiw (Northern Aslian) of Southern Thailand (Bishop 1996: 234) /r/ is pronounced as a trill in only one word. Some Menriq and Batek Dèq (Northern Aslian) speakers employ uvular or velar fricatives for /r/ (Niclas Burenhult, p.c.). In the Sabūm dialect of Lanoh (Central Aslian) an original /r/ has become /j/ (Diffloth 1975: 11). In most varieties of Temiar, /r/ is an apico-alveolar flap (Benjamin 1976b: 135); but in some Temiar dialects, such as that spoken in the Ber valley (Kelantan) in the 1960s, /r/ was (is?) a retroflex flap or labialized vocoid.⁷

The ‘related features’

This paper is concerned primarily with the causative-voice inflection of the Temiar verb.⁸ But first I take a brief look at the ‘related features’ mentioned in the title. In addition to the iconically expressed ‘REPLICATION’ meanings just discussed, the element *r* as a phonetically high and (usually) front consonant is well suited to express a variety of SELF-referring subject-orientation meanings. This is especially apparent in the forms *ri:* ‘the selfsame’, *rə-* ‘who’ and *rɛ*²- ‘like’ (Table 1 and sentences (1)–(6)).

the voiced palatal stop (usually written as *j*); and the length mark (:) indicates phonemically long vowels (usually written doubled).

⁵ Jah Hut was formerly placed in the Central Aslian division (Diffloth 1975, Benjamin 1976a), but Diffloth (in Diffloth & Zide 2005) and others (Burenhult, Kruspe & Dunn 2011) now regard it as forming a separate Aslian division on its own, alongside the Northern, Central and Southern divisions.

⁶ The uncertainty as to the Proto-Austronesian form is discussed in Benjamin 2009: 309. For Wolff’s most recent views on the various mergers that overtook Proto-Austronesian **D* in Malay, see Wolff 2010: 484–485, footnote 27.

⁷ In Temiar the *a posteriori* character of its iconicity is further reinforced by the ‘two, dual’ meaning expressed by *-r*: *na:r* ‘two’, *ja:r* ‘we two (exclusive)’ and *ʔa:r* ‘we two (inclusive)’ all contain the same component, *-aar*.

⁸ On the reasons for referring to the causative as a ‘voice’ of the verb rather than as a derivation, see Benjamin 2011: 23.

Table 1: Forms in (-)r-

<i>ri:</i> [?]	the pronoun-intensifier ‘self(same)’ (emphatic, free-standing, stressed)
<i>re</i> [?]	the preposition ‘like, in the manner of’
<i>rə-</i>	REL, the relative-pronoun ‘who’, anaphoric to agentive topics (proclitic to verb)
<i>rə-</i>	the pronoun-intensifier ‘self(same)’ (proclitic, unstressed)
<i>-r- / tər-</i>	CAUS, the causative, valency-raising verbal affix

The Reflexive intensifier *ri:*[?]

Ri:[?] is not a reflexive pronoun; it is, rather, a participant adjunct meaning ‘the person in focus’ or ‘the aforementioned, the selfsame’. In (1) for example, *ri:*[?] is obviously not the object of the verb *ko*[?] ‘vomit’ but an intensifier (Moravcsik 1972) of the focused-on broad subject, *ʔalɯj*. (In all examples *ri:*[?] takes an emphatic sentence-stress.)⁹

- (1) *Na-ko*[?] *ri:*[?] *ʔi-ʔalɯj* *na*[?], *na-kəbɯs*.
 3SG-vomit.PFV self NOM-ʔalɯj that, 3SG-die.PFV.
 ‘ʔalɯj himself vomited, he died.’

It may be that *ri:*[?] originated as an Austronesian loan. In Malay the so-called reflexive pronoun is *diri*. This, like *ri:*[?], also behaves like a noun. Winstedt remarks (1927: 116), without giving his evidence, that the Malay word originally meant ‘body’. Some relevant Austronesian forms are given by Blust under Proto-Austronesian **diri* ‘to stand’ (Blust & Trussel 2010), with polysemous extensions in some branches to ‘person’ and ‘self’ (see also Wurm & Wilson (1975: 150), under ‘person, human being’). Blust thinks that these may be due to ‘borrowing from Malay, in which the senses of “self” and “erect posture” evidently have become intertwined’ – presumably via the connecting idea of bipedalism. Malay *diri* is probably also related to the Temiar forms *dəri:*[?], *dəʔri:*[?] ‘alone, by oneself’.

Thus, if Temiar did indeed borrow *ri:*[?] from early Malay or some other Austronesian source, that would explain some of the meanings the word appears to have retained, despite having been reanalyzed *a posteriori* for other purposes by Temiar speakers. In (2), for example, *ri:*[?] is the noun-possessee of a possessing pronoun (‘his self’) as well as the affected noun-object (the ‘presentee’) in *ha-ri:*[?] (‘ACC-self’). The gloss is in less than comfortable English, but it represents the literal meaning of the original quite closely:

- (2) *Na-ʔog* *ʔi-Tata:*[?] *ʔɛŋkã:j* *ha-ri:*[?] *nej*, *ha-ʔalɯj* *nej* –
 3SG-give.PFV NOM-Tata:[?] ʔɛŋkã:j ACC-self one, ACC-ʔalɯj one –
kədə:g *ʔabi:r* *ma-ʔalɯj*, *ri:*[?] *ʔəh* *kədə:g* *ʔagə:c*.
 squirrel ʔabi:r to-ʔalɯj, self 3SG squirrel ʔagə:c.
 ‘Tata:[?] ʔɛŋkã:j presented his self with one and ʔalɯj with one – an ʔabi:r squirrel to ʔalɯj, and an ʔagə:c squirrel to his (own) self.’

The pronoun-anaphor *rə-*

The pronoun-anaphor *rə-* behaves much like a relative pronoun, in that it refers back to the subject of the verb in a replicative manner. Its usage varies. In the easterly Temiar speech with which I am more familiar *rə-* seems to occur only as an anaphor to the interrogative pronoun *cə:*[?] ‘who?’, as in (3a) and (3b). The latter is taken from Schebesta (1931: 646), where it is written as

⁹ The following abbreviations are used in the glosses: 1 ‘first-person’, 2 ‘second-person’, 3 ‘third-person’, ACC ‘accusative’, CAUS ‘causative’, CTRS ‘contrastive’, DET ‘determiner’, DU ‘dual’, EMP ‘emphatic’, EXCL ‘exclusive’, IMP ‘imperative (irrealis)’, INT ‘intensive (irrealis)’, IPFV ‘imperfective’, IRR ‘irrealis’, MID ‘middle voice’, NOM ‘nominative’, PFV ‘perfective’, PL ‘plural’, PROG ‘progressive’, PSTV ‘presentative’, Q ‘interrogative’, REL ‘relative’, SG ‘singular’, VET ‘vetative’.

cɔ(r) tæɛl a naʔʔ and translated as ‘who did this?’. In (3c) the character of *rə-* as a proclitic pronoun is confirmed through its ability to take the irrealis clitic *-m-* (as *rum-*):¹⁰

- (3) a. *Cɔ:ʔ rə-tɛŋlək jehʔ*
Who REL-teach.IPFV 1SG?
‘Who is it who taught me?’ (implying that the skill in question was self-taught)
- b. *Cɔ:ʔ rə-təʔɛl ʔa-naʔ.*
Who REL-do.PFV DET-there?
‘Who did it just there?’
- c. *Cə-babo:ʔ, cɔ:ʔ rum-həwɔʔʔ*
CTRS-woman, who REL.IRR-desire?
‘As for the woman, who might have fallen for her?’

But in the north-westerly Temiar speech-area near Gerik in Upper Perak I observed that *rə-* was also used freely as an anaphor to ordinary personal pronouns, as in (4):

- (4) *Nɔb rə-tɛŋlək kaneh.*
2PL REL-teach.IPFV 1PL.EXCL.
‘It is you who teach us.’

It is possible that *rə-* ‘relative’ and *ri:ʔ* ‘self(same)’ are more closely related than the above remarks suggest. In (5), for example, it is likely that the two occurrences of *rə-* are a reduced procliticized form of *ri:ʔ*, equivalent therefore to *ri:ʔ bə:h ri:ʔ kəwā:s*:

- (5) *ʔe-loʔ wɛ-ʔejʔ Tɔʔ wɛ-mɛʔma:ʔ, rə-bə:h rə-kəwā:s.*
What 3DU-happen.to? Not 3DU-return.IPFV, REL-father / REL-child. /
self-father self-child.
‘What happened to them that they’ve not returned – [the one] who is father,
[the one] who is child?’
Or?:
‘What happened to them that they’ve not returned – the father himself, the child
himself?’

The preposition *wab* ‘with’ and the verb *rəwab*

A seemingly related form is *rəwab* ‘to accompany’, the verbal form of the preposition *wab* ‘along with, accompanied by’. At first sight it looks as if the initial *rə-* might be a prefixal version of the ‘causative’ *r* (just as the nominalizing infix *-n-* also occurs as a prefix, *n-*, especially in Perak and increasingly in Kelantan). Etymologically, however, *rəwab* is the fuller form, related to the proposed Proto-Mon-Khmer series **rum*; **ru:m*; **ruəm*; **ruəp* ‘to assemble’, under which Shorto (2006: 379, no. 1389) lists a large number of cognates from all branches of the family. In the Temiar case, therefore, it is the preposition *wab* that has been derived from the verb *rəwab*. But would this have happened if *rə-* was not already thinkable-of as a formative with causative connotations? The most common occurrence of *rəwab* is in the utterance *cɔ:ʔ rəwabʔ* ‘who went along (as company)?’, which could easily be re-construed as *cɔ:ʔ rə-wabʔ* ‘who REL-with?’. However, a transparently causative derivative of this verb is also found: *pərwab*, *pəərbwab* ‘to get someone to accompany someone’ (employing the non-productive *pə-* rather than *ter-*).

The preposition *rɛʔ* ‘like’

With the preposition *rɛʔ* ‘like’, on the other hand, the idea of REPLICATION is expressed at its simplest, as in (6):

¹⁰ The form *rum-* is very rare, occurring only once in my own data. Consequently, this analysis must be taken as tentative.

- (6) *ʔi-bə-cəmcap* *tɛːʔ*, *bukan* *rɛʔ-hǎːʔ*.
 1SG-PROG-pack.IPFV earlier, not like-2SG.
 ‘I was packing up earlier, not like you.’

It seems likely, then, that *riːʔ* ‘self(same)’ has become a purely iconic form consisting solely of the components REPLICATION and SELF, signaled by the front consonant *r* and the closed vowel *i*, respectively. If so, the forms *rə-* ‘relative’ and especially *rɛʔ-* ‘like’ would appear to have somewhat downplayed the SELF component signaled by the high vowel, retaining primarily the REPLICATION component indicated by the *r*. The forms *rə-* and *rɛʔ-* are probably etymologically cognate with (or just possibly borrowed from) equivalent Mon words: cf. Old Mon *row* /*rɔw*/, Middle Mon *rau*, Spoken Mon *rɛa* ‘manner, like, as’ (Shorto 1971: 323).

Productive causatives in *-r-*

The productive causative inflections of the Temiar verb (Tables 2 and 3)¹¹ incorporate the formative *-r-*, indicating that the causee REPLICATES in some sense whatever has been set in process by the causer.¹² This may be a peculiarly Aslian feature: Shorto (2006) lists no *-r-* causatives at all in his wide-ranging survey of Mon-Khmer, but Burenhult (2005: 108) and Kruspe (2004: 124, and in her ‘comparative notes’ on p.134) report that *-r-* causatives are found in Jahai (Northern Aslian) and Semelai (Southern Aslian), respectively. This suggests that the productive Temiar (Central Aslian) form, as well as cognate forms in Semai (also Central Aslian), might result from an innovation at the Proto-Aslian level. On the other hand, as a prefix, alone or in combination, *r-* is occasionally found elsewhere in Mon-Khmer, but not with an obviously causative meaning (Shorto 1963); it also occurs as an infix in Old Mon (Jacob 1963).

As Comrie (1985: 323) puts it, causative verbs indicate that the causer ‘brings about (or, more weakly, fails to prevent) the situation described by the sentence containing the basic verb’. More ‘weakly’ still, Temiar causatives, especially with an animate causee, often indicate a mere *permitting* or *making-possible* of the situation. From a semantic point of view an animate causee in such cases retains a degree of agentivity, thereby becoming what Palmer (1994: 237) describes as a ‘secondary agent’. The causer will almost always be animate and agentive, although non-agentive causers (i.e. material ‘things’) may also occur under certain restricted circumstances. But I have yet to find any examples of non-material forces in that role (cf. Comrie 1985: 332ff.). Perhaps this is because ‘rain’ *tɛhtəːh*, ‘flood’ *bɛgʔaːg*, ‘storm’ *dɛŋdɔk*, ‘wind’ *hɛnhül* etc are verbal (imperfective) or deverbal (*-n-*) forms, rather than simple nouns.

¹¹ To simplify the presentation, Tables 2 and 3 omit two other forms of the Temiar verb, namely the inflected middle voice with infixed *-a-* (*salɔg*, *gagəl*) and the derived progressive aspect with proclitic *bar-*, which are not directly relevant to the present discussion. The valency-reducing middle voice is of course incompatible with the valency-increasing causative. Consequently, middle-causative forms in **-ra-* do not occur in the normal inflectional pattern of the verb. The morphology is found elsewhere in the language, however, in certain lexical items and (especially) in expressives (Benjamin, 2012a). On the other hand, the progressive *bar-* is completely compatible with the imperfective causative (*bar-tərelgəl*, *bar-sərelgəl*). But it is hardly ever found with the unreduplicated perfective – (**)bar-tərgəl*, (**)bar-serlgəl*) – with which it would appear to be semantically somewhat incompatible.

¹² As discussed in the final section of this paper, non-productive causative-like forms, lacking the formative *-r-*, also occur.

Table 2: Verbal inflection (sesquisyllabic): *səɔŋ* ‘to lie down, sleep’Prefinal *ə* and *ɛ* are wholly determined: phonemic in *italics*

VOICE	ASPECT		VERBAL NOUN
	Perfective	Imperfective	
Base	<i>sɔŋ</i> [səɔŋ] ‘sleep’ (completed act)	<i>sgɔŋ</i> [sɛŋɔŋ] ‘sleep’ (incomplete act)	<i>snɔŋ</i> [sənɔŋ] ~ <i>sngɔŋ</i> [sənɛŋɔŋ] ‘a sleeping’
Causative	<i>srlɔŋ</i> [sərɔŋ] ‘put to sleep’ (completed act)	<i>srgɔŋ</i> [sərəŋɔŋ] ‘put to sleep’ (incomplete act)	<i>srnɔŋ</i> [sərənɔŋ] ‘a putting to sleep’

Table 3: Verbal inflection (monosyllabic): *gəl* ‘to sit’Prefinal *ə* and *ɛ* are wholly determined: phonemic in *italics*

VOICE	ASPECT		VERBAL NOUN
	Perfective	Imperfective	
Base	<i>gəl</i> [gəl] ‘sit’ (completed act)	<i>glgəl</i> [gɛlgəl] ‘sit’ (incomplete act)	<i>glnəl</i> [gɛlnəl] ~ <i>nlgəl</i> [nɛlgəl] ‘a sitting’
Causative	<i>trgəl</i> [tɛrgəl] ‘set down’ [completed act]	<i>trlgəl</i> [tərəlgəl] ‘set down’ [incomplete act]	<i>trngəl</i> [təreŋgəl] ‘a setting down’

In sesquisyllabic verbs (Table 2) the causative inflection is *-r-* unaltered: *sɔŋ* [səɔŋ] ‘to lie down’ → *srlɔŋ* [sərɔŋ] ‘to lay down’.¹³ With monosyllabic verbs (Table 3) the causative is formed by prefixing the affix *tr-* [tɛr- ~ tər-]: *gəl* ‘to sit’ → *trgəl* [tɛrgəl] ‘to set down’. This regularly dissimilates to *br-* [bɛr- ~ bər-] before stems with an initial *c-* or *t-*: *ci:b* ‘to go’ → *brci:b* [bɛrci:b] ‘to cause to go’, *tu:k* ‘to fear’ → *brtu:k* [bɛrtu:k] ‘to instill fear’. The *-r-* affix is retained when the causative verb stem undergoes incopifixation to produce the imperfective-causative and verbal-noun forms (with *-n-*):

sgɔŋ → *srgɔŋ* → *srnɔŋ* [sɛŋɔŋ → sərəŋɔŋ → sərənɔŋ]
trgəl → *trlgəl* → *trngəl* [tɛrgəl → tərəlgəl → təreŋgəl]
brci:b → *brbci:b* → *brnci:b* [bɛrci:b → bərəbci:b → bərənci:b].

The prefixes *tr-* and *br-* are also found in Malay (as *tər-*, *bər-*), from which the Temiar forms are likely to have been borrowed.¹⁴ If so, an interesting semantic reversal took place, for the Malay prefixes express (non-agentive) passive or (agentive) middle-voice ‘undergoer’ meanings respectively (Benjamin 1993: 383–384; 2009: 306–314), while the Temiar ones are clearly causative in meaning. In a dialectical cultural regime like that of the Temiars, however, such a switch would be relatively easy to effect, on the grounds that what happens to oneself necessarily

¹³ Some apparently irregular verbs diverge from this paradigm in one or more respects. The causative of *həwal* ‘to emerge’, for example, is not **herwal* but *terhəwal*, *tərelhəwal*. The ‘irregularity’ here, however, is not in the reduplicative pattern employed (it is a frequent means of forming expressives), but in the use to which it is put. The explanation in this particular case lies in an earlier vocalic shift from the diphthongal but monosyllabic **hual* to the reanalyzed sesquisyllabic *həwal* (Cf. Diffloth 1975:11).

¹⁴ However, according to the Gérard Diffloth (p.c.), the Semai and Temiar *br-* causatives derive from *pr-*, in accordance with the general Central Aslian rule that such unvoiced stops become voiced under certain conditions. This suggests that at least some of the *bər-* causatives of Temiar are possibly ‘ancient’ Mon-Khmer forms that for some obscure reason have been preserved before *c-* and *t-*, but not in other positions.

also happens to one's salient others. This applies especially to the structure of Temiar sanctions controlling interpersonal behavior (Benjamin 1967b: 336–340), where it is the 'doee', not the doer, who is expected to suffer the automatic consequences of the doer's misdeeds.

Semai shares something of this orientation – but with a twist. There, a common use of causatives with statives is to express the meaning 'to pretend to': *bɔːr* 'good', *pərbɔːr* 'to pretend to be good', which Gérard Diffloth (p.c.) explains as implying that the subject is being good *for others*, not that he is *in himself* good. The reference has shifted from self to others, and the causative meaning applies only to those others. Semelai (Southern Aslian), on the other hand, retained the original middle-voice meaning when it borrowed the Malay *ber-* (Kruspe 2004: 117–123). This accords with my suggestion in other contexts (Benjamin 1985, 2002) that the 'Malayic' societal pattern which the Semelais but not the Temiars have adhered to evinces a non-dialectical (specifically, a 'transcendental') rather than a dialectical mode of orientation. They would therefore be much less likely to have engaged in the kinds of semantic switch that the Temiars and Semais have taken up.

A straightforward example of the causative occurs in (7), which employs both the causative form *terʔɔɰ* 'to raise, carry up' and its underlying base form *ʔɔɰ* 'to ascend, climb up'. Here, there is no secondary agency, for this is not a permissive but a true ('make') causative governing an inanimate causee.

- (7) *Kɔːd, na-ʔɔɰ, hamɛʔ deh, na-terʔɔɰ*
 Take, 3SG-ascend.PFV PSTV PSTV, 3SG-CAUS.ascend.PFV
lamuːŋ ʔəh, terʔɔɰ ha-wɛl ʔə-naʔ.
 springy.sapling 3SG CAUS.ascend.PFV ACC-coil 3SG-that.
 'Then he climbed up, he brought up his springy sapling, he brought up his coiled [sapling].'

Less straightforward examples of the causative also occur. In (8) for example, the base form of the verb *səg* 'to get caught' carries an inherently passive meaning, but the active meaning 'to catch' is expressed by its causative form, *tersəg*.¹⁵

- (8) *Nam ʔames na-səg bakɔːʔ jeːʔ Ma-ʔalɯ*
 Animal small 3SG-get.caught.PFV springtrap 1SG To-ʔalɯ
na-tersəg nam rajaːʔ.
 3SG-CAUS.catch.PFV animal large.
 'A small animal got caught in my trap. But ʔalɯ's trap caught him a large animal.'

OR, more explicitly:

'A small animal got caught (in the) trap. The trap caused a large animal to get caught for the benefit of (ma-) ʔalɯ.'

The causative is also employed to generate the transitive form of semi-deponent verbs (Benjamin 2011: 20–22) that otherwise appear only in the intransitive middle-voice form. In (9b), for example, the middle-voice *catək* is clearly the anticausative transform of *certək* in (9a) (cf. Comrie 1985: 322–333); there is no base form **cətək*.

- (9) a. *Na-certək rɛŋkaːʔ.*
 3SG-close.CAUS.PFV door.
 'She closed the door.'

¹⁵ In (8), and probably also in (10b) and (11b), the causative inflection should more strictly be considered as indicating the 'applicative' voice (Aikhenvald 2011: 93–97). Languages sometimes employ different surface constructions for the two voices, but Temiar would appear to be one of the many languages in which the two voices are expressed in the same way morphologically, typically as the 'causative'.

- b. *Rɛŋkaːʔ na-catək.*
 Door 3SG-close.MID.
 ‘The door closed.’

Occasionally, the causative is employed to derive active verbs from stative verbs (adjectives), as with *mɛj* ‘good’ → *tɛrmɛj*, *tərmɛmɛj* ‘to repair, improve’, or (from a Malay loan) *bətul* ‘correct’ → *bərtul* ‘to correct’.

Causatives can also be generated from nominal roots, as in (10), where the noun *kəlɔːj* ‘interior, insides’ (10a) is inflected to produce the idiomatic factitive ‘to turn inside out’ (10b):

- (10) a. *kəlɔːj de:k*
 interior house
 ‘inside (of) the house’
 b. *Ham-kərlɔːj ʔabat doh!*
 2SG.IMP-inside.CAUS.PFV sarong this!
 ‘Turn this sarong inside out!’

A further example (11) is *tərcɔb*, here further nominalized with *-n-* as *tərencɔb*, from the noun *cɔb* ‘position between’:

- (11) a. *ʔɛn-cɔb*
 in-between
 ‘in between’
 b. *tərencɔb*
 CAUS.NMLZ.between.PFV.
 ‘the hem of a plaited object, made by interweaving the unwoven strands’

As exemplified in (10b) and (11b), the resultant meaning of a derived causative is sometimes idiomatic rather than predictable. A further example is presented in (12), taken from the lyric of a commercial pop-song recording,¹⁶ where the causative (*kərdɯʔ*) of *kəduʔ* ‘to remain, stay’ is used to refer to the girl’s silence:

- (12) *Kəmɯn kah cə-hãːʔ hɔj ha-jeʔ ma-jeːʔ?*
 True Q CTRS-2SG PAST 2SG-reject.PFV to-1SG?
Ham-tuh, ham-tuh, ʔagɔʔ kərdɯʔ.
 2SG.IMP-say.PFV, 2SG.IMP-say.PFV, VET stay.CAUS.PFV.
 ‘Is it true that you have rejected me? Say, say, don’t make it stay [i.e. don’t keep it to yourself].’

Note that the ostensibly ‘causative’ *kərdɯʔ* in (12) is an example of what Aikhenvald (2011: 86) refers to as ‘causatives which do not cause’. These are morphological ‘causatives’ in which, instead of an expected valency-increase, the construction adds an extra meaning to the verb, typically ‘to

¹⁶ From track 3 (‘Menhapekik’ = *Mɔn ha-pəkiʔ*, ‘Why do you ignore me?’) of the video karaoke CD *Yang Lain Tetap Lain* (Warisan Sound 0607) performed by the Temiar pop-group Seniroi (i.e. *Sənirɔy* ‘Echoes’), Kuala Lumpur: Power Records. However, Diffloth (1977: 484) reconstructs the Proto-Semai cognate as **krdiʔ* ‘to remain silent, quiet’ on the basis of several modern Semai forms that all contain the *kr-* element, which he interprets as ‘malevolent causative’. It is possible, therefore, that Temiar *kəduʔ* ‘to remain, stay’ was originally a back-formation from *kərdɯʔ*, which may therefore have originally meant ‘to cause offence by keeping silent’. A parallel but non-productive example is *gertu:h* ‘to be carried along in a current’, cf. *tɯ:h* ‘to let drop’. (The change of voicing from **kr-* to *gr-* is regular in both Temiar and Semai.)

do with manipulative effort, forceful and intensive action, complete involvement of the object’ – all of which happen to suit the song-lyric at this point.

Although the causative inflection is highly productive in Temiar, there are nevertheless some restrictions. Causatives appear to be derivable only from intransitive verbs or from verbs that can be employed both intransitively and transitively. Examples of the latter are *ca:ʔ* ‘to eat (intrans); to consume (trans)’ or *səɓɔg* ‘to lie down, sleep (intrans); to marry (trans)’; *tu:k* ‘to be afraid (intrans); to fear (trans)’. Forming a causative from an intransitive verb produces a transitive verb, such as *terʔɔj* ‘to raise’ from *ʔɔj* ‘to ascend’, as in (7). Forming a causative from an already transitive verb, such as *berca:ʔ* ‘to feed’ from *ca:ʔ* ‘to eat (consume)’, produces a ditransitive verb. But in the latter case, one of the causees usually appears as the indirect object, indicated by the proclitic *ma-* ‘to’: *na-berca:ʔ kebə:ʔ ma-sajɛ:d* (she-eat.CAUS.PFV fruit to-child) ‘she feeds fruit to the child’. A further example occurs in (17), below.

This is as far as it goes, for I have found no instances of a ditransitive causative like *berca:ʔ* being further raised to a tritransitive verb (‘to make someone feed someone else’). Accordingly, the ditransitive verb *ʔog* ‘to give’ appears not to occur in the causative (**terʔog* ‘*to cause to give’). This restriction applies even to such ‘fully’ monotransitive verbs as *təʔel* ‘to make’ or *səluh* ‘to shoot (something with a blowgun)’. Such potential ‘double causative’ forms as **terʔel* ‘to make someone make something’ or **sərluh* ‘to make someone shoot at something’ would be morphologically well-formed, but they are semantically proscribed. To express such constructions, periphrasis would be employed, with *ʔo:r* ‘to order’ (13a) or *ʔog* ‘to give (i.e. permit, let)’ (13b):

- (13) a. *ʔi-ʔo:r* *nam-təʔel* *de:k*.
 1SG-order.PFV 3SG.INT-build.PFV house.
 ‘I ordered him to build a house’
- b. *Na-ʔog* *ʔim-təʔel* *de:k*.
 3SG-give.PFV 1SG.INT-build.PFV house.
 ‘He let me build a house.’

Cultural issues: control v. permission

In Temiar there appears to be no way of saying ‘to make’ someone do something, whether inflectionally, periphrastically or lexically. As Alves (2001: 118) remarks in his subtle study of Mon-Khmer causatives, ‘perhaps more interesting than what causative verbs can do is what they cannot since that would be the real testing ground for lexically inherent syntactic constraints.’ With inanimate non-agentive causees, as in (7), (9), (10) and (11), the causative carries the meaning ‘bring about’ or ‘make’. But with human (and other animate?) causees, as already noted, the causative is usually *permissive*: the primary actor’s action merely makes it possible or sets the conditions for the secondary actor to do what he or she wishes. This would avoid the suggestion that one person’s will is being imposed on another’s. Thus *berca:ʔ* ‘feed’, the causative of *ca:ʔ* ‘eat’, would normally mean not ‘force someone to eat’, but ‘get someone to eat’ or ‘provide food so that someone might eat’, with ‘food’ rather than the eater as the direct-object causee of the verb. (In former times *berca:ʔ* ‘feed’ was the regular way of referring to the custom by which a man would support a pre-pubertal girl in the hope that she would eventually marry him. This was not thought of as a formal agreement or contract, and the girl could later refuse.)

Similarly, with the causative *terbət* ‘to provide the breast, get the baby to suck’, from *bət*, *benbət* ‘to suck at the breast’ (*bət* also means ‘breast’, and sometimes ‘milk’), the actor is not seen as forcing the baby to suck, but simply as providing the means for it to do so if it wishes. The reciprocal expression is not ‘the child was forced to suck’ – a true agentive passive for which there is no equivalent in Temiar – but ‘the child sucks’, a straightforward active expression implying that the child is in control of its own actions. In any case, Temiar parents have no means to impose their will on their children, as it would clash with the strong value they place on individual personal autonomy (Benjamin 1967a: 14, 1994: 51). Similarly, *terʔɔŋ*, the causative of *ʔɔŋ* ‘to drink’, is a permissive with the meaning ‘to get someone to take their medicine’ rather than an example of one person controlling another.

I suggest that this reluctance to use the causative to express control over a secondary actor's actions is one reason why the Temiars have not developed the middle voice into a true agentive passive – a transition that has occurred in other languages. 'Control' in Temiar can be expressed only in relation to the primary causer's own actions or effects; it cannot be imposed or extended further. (A similar pattern also applies to the syntax of the 'irrealis' clitic *-m-*, discussed in Benjamin 2012b.) Animate causees ('secondary agents') are understood as retaining their own independent agency.

In some cases, however, this stricture appears at first glance to be waived; but closer inspection shows that this is because special circumstances hold. In (14), for example, the causee's will had been put aside by the altered state of consciousness induced in her by the shaman. (Or perhaps the shamanic blowing merely *permitted* her to sit down, still agentively.)

- (14) *Təho:l ?i-pəʔ ?əh, tɛrgəl ?ə-ma-tɛʔ.*
 Blow.PFV NOM-younger.sibling 3SG, CAUS.sit.PFV 3SG-to-ground.
 'Her younger brother blew (shamanically) on her, and set her down.'

In (15), the accusative marker *ha-* is attached to the causee ('wife'), presumably to indicate a more direct degree of causation, though physical manipulation. (The verb *səŋi:l*, *sɛŋi:l* is inceptive in meaning: 'to wake up', whereas *wəg* means 'to get up (from sleep)').

- (15) *Na-sɛŋi:l lah ha-ləh ?ə-naʔ, na-wəg hameʔ.*
 3SG-wake.CAUS.PFV EMP ACC-wife 3SG-that, 3SG-woke PRSTV.
 'He woke his wife up, and she got up.'

In (16), the death of ?aləŋ's wife was the unintended result of his brother Karey's excessive sex with her. In other words, this was a case of manslaughter rather than murder, and therefore a kind of permissive – 'he let her die' / 'he did nothing to stop her dying'.

- (16) *Kəbus ?ə-lah, na-kerbus ?ə-lah.*
 Die.pfv 3SG-EMP, 3SG-DIE.CAUS.PFV 3SG-EMP.
 'She died, he had killed her.'

In (17) there is a contrast between *gəp*, *gəmgəp* 'to paint one's own face' and its causative *tərgəp*. Rather than 'cause someone to paint his/her face', the latter means 'to cause paint to be applied to someone's face', with *sumba:ʔ* (red annatto) as the direct object of the verb. Semantically, therefore, it is an applicative rather than a simple causative. The indirect object here, *ma-babə:h* [to-man], is somewhat 'passive/undergoer' in character, in apparent accordance with the 'causee hierarchy' of Comrie (1985: 342): direct object > indirect object > oblique object.

- (17) *Habis pəhpə:h, jemjap ?ə-lah, gəmgəp sumba:ʔ –*
 Finish trance.IPV, prepare.IPFV 3SG-EMP, paint.IPFV annatto –
babo:ʔ tərgəp ma-babə:h, bə-kəŋi:ʔ.
 woman paint.CAUS.PFV, to-man, PROG-flirt.
 'After they trance, then they prepare, paint their faces with annatto – women painting the men, flirting.'

Since causation from the Temiar point of view prototypically has its source in some animate being's will, it may therefore be impossible or at least difficult to employ a causative verb non-metaphorically in such expressions as 'The tree fell and made the house collapse' or 'The car killed the man'. (The appropriate verb-forms exist: *tərkəl* (also *təkəl*) 'to cause a collapse' from *kəl* 'to collapse', and *kerbus* 'to kill', from *kəbus* 'to die'.) Such expressions could perhaps be realized with a causative verb if the tree or car were being deliberately personified, as they just might be in a typical Temiar story involving the transmogrifying of plants and animals into human beings, or in

the animistic ascription of a controlling soul to the tree or car.¹⁷ But I have yet to discover a clear example of such a construction.¹⁸

Non-productive ‘causatives’

As noted earlier, there are also non-productive ‘causatives’ with formatives other than *-r-*. These include: *tilek*, *teŋlek* ‘to teach’ (cf. *lek*, *leŋlek* ‘to know’); *təgɔːs*, *təsgɔːs* ‘to hunt for food’ (cf. *gɔːs*, *gesgɔːs* ‘to be alive’); *pəneːh*, *pəhneːh* ‘to show’ (cf. *nəːh*, *nehneːh* ‘to see’); *pəjɯl*, *pəljɯl* ‘to hunt with dogs’ (cf. *jɯl*, *jəljɯl* ‘to bark’); *pədoʔ*, *pəʔdoʔ* ‘to drive fish’ (cf. *doʔ*, *dəʔdoʔ* ‘to run, flee’, and the contrasting ‘regular’ causative *terdoʔ*, *təreʔdoʔ* ‘to cause to flee’). There is also a set of transparently causative words with *pi-* ‘to utter a ... sound’: *piʔeːw* ‘to say “don’t know”’, from *ʔeːw* ‘dunno’; *pihəːʔ* ‘to say “yes”’, from *həːʔ* ‘yes’;¹⁹ *piced* ‘to suck one’s teeth’, from *cəd* ‘the sound of sucking’. However, these are non-inflecting verbs, with no imperfective form.

Since the most common causative formative in Mon-Khmer is *p-* (Gérard Diffloth, p.c.; Alves 2001: 109), at least some of these forms may be ancient. *Pədoʔ*, for example, has *p-* cognates elsewhere in Mon-Khmer (see Shorto 2006, item 84a: **p[d]uːʔ* ‘to carry, transport’, ~ 81 **duːʔ* ‘to run away’). In one of my texts, *terdoʔ* and *pəʔdoʔ* occur in the same utterance (18). But here, the first occurrence is a productive permissive-causative (‘to let run away’), while the second is a non-productive lexical item (‘to fish-drive’) in itself, with a simple transitive semantic:

- (18) *Na-ʔaŋked* *ha-kēʔ* *naʔ*, *na-terdoʔ* *la-kēʔ* *naʔ*.
 3SG-take.PFV ACC-fish that, 3SG-CAUS.flee.PFV EMP-fish that.
ʔun-maːʔ *un-pəʔdoʔ* *naʔ*.
 3PL-return.PFV, 3PL-drive.IPFV that.

‘He took the fish, and let it get away. Then they who had been driving fish returned home.’

However, Temiar-speakers probably do not regard the non-productive forms as causatives. For example, they also employ the verbs *pəjɯl* and *pədoʔ* in the ‘collective, all-together’ middle-voice forms *pəjɯl* ‘to go hunting together’ and *pədoʔ* ‘to go fish-driving together’ (Benjamin 2011: 15–16). As already noted, the combination of valency-increasing causative with valency-reducing middle-voice is a semantic impossibility, and these forms therefore must lack any ‘causative’ component.²⁰ These and the other such words lack the *-r-* affix that marks the morphologically productive causatives, demonstrating that they are lexical rather than morphological causatives. It is nevertheless likely that at least some of the very common words just listed formerly contained the *-r-* affix: *(*)terlek*, *(*)perneːh* (but perhaps not **perjɯl*). That this still sometimes occurs is evidenced by the following extant alternative forms, in which the *-r-* is optional: *termuh*, *tərehmuh*,

¹⁷ As long ago as the 1930s, according to Noone (1955: 4), at least one Temiar spirit-medium had Outboard Motor as his personal spirit-guide. See also footnote 18 for a possible recent development in this area of the language, involving an implied non-animate causer.

¹⁸ This restriction may no longer apply in all circumstances. In 2006 I heard some Temiars employ the word *taseʔ* for ‘continue, restart’ when they were operating a video player. Normally, this verb shows two forms, the causative *terseʔ* ‘to release, set free’ and the middle *saseʔ* ‘to get away’. The base form **seʔ* seems not to occur. If the *t-* of *taseʔ* carries a causative meaning (by reduction of *ter-*) and, if the *-a-* carries a middle-voice meaning, *taseʔ* would indeed be an example of the middle-voice form of an embeddedly permissive-causative verb. Accordingly, I suggest that *taseʔ* is best understood as meaning ‘to cause it to restart itself’, in a new formation that extends the verbal morphology to deal with the apparently self-controlling ‘auto’ characteristics of modern technology.

¹⁹ To proceed properly, Temiar story-telling requires that someone else should regularly agree to *pihəːʔ*, in a chorus-role.

²⁰ This did not prevent a Temiar child in 1964 from inventing the related but ‘impossible’ form *werwɔːg*. In saying to me *helhūl na-werwɔːg* [wind 3SG-open.CAUS] ‘the wind turned over [my notebook’s page]’, he appears to have causativized the (normally) intransitive middle-voice form *wawɔːg* ‘to open up’ in a manner not acceptable in adult speech. In other words, he took *wawɔːg* as the transitive base form, where an adult would have started with *wɔːg* and then produced *wawɔːg* when required to express the (anticausative) intransitive. To my mind, this illustrates that the child already understood *-r-* to be ‘causative’, but that he had not yet fully appreciated the force of *-a-* as an optional ‘middle-voice’ infix.

alongside *təmuḥ*, *təhmuḥ* ‘to bathe (someone else)’, from *muḥ* ‘to bathe (oneself)’; *təbət*, *tənbət*, alongside *terbət*, *tərenbət* ‘to let suckle’, from *bət* ‘to suckle’; *təgɛːs*, *təsgɛːs* ‘to get someone to commit incest’ (alongside the reciprocal *bar-gɛːs* ‘to mutually commit incest’), from *gɛːs* ‘incest’; *pədɔg*, *pəgdɔg* alongside *perdɔg*, *pəregdɔg* all meaning ‘to lean (transitive), set in place’. In one of my texts, both *perdɔg* and *pəgdɔg* occur close together in the same utterance (19), with no discernible difference in meaning (except that the latter is imperfective in aspect, for which *pəregdɔg* could also have served).

- (19) *Na-təʔel* *lah* *de:k* *ʔəh*, *ni:s* *ʔəh* *na-perdɔg*.
 3SG-build.PFV EMP house 3SG, floor 3SG 3SG-lean.CAUS.PFV.
Lapas *na-pəgdɔg*, *na-gəl*, *na-səlɔg* *lah*.
 After 3SG-lean.CAUS.IPFV, 3SG-sit.PFV, 3SG-lie.down.PFV EMP.

‘Then he built his house, fitted the flooring into place. After he had fitted it, he sat and lay down/slept.’

‘Deponent-causative’ verbs

Just as there are non-inflecting ‘deponent’ verbs in Temiar that possess a middle-voice shape (with *-a-* in the presyllable) but a superficially active meaning (Benjamin 2011), there are also a few verbs that appear to exist only in a causative shape but without an explicitly ‘causative’ meaning. Some of these contain *tə-* or *pə-* as frozen prefixes but no *-r-*, while others contain the normal ‘causative’ elements *-r-* or *ter-*, except that in these instances they are non-productive.

I have no record of any base or middle-voice forms for the following ‘deponent-causative’ verbs, and their meaning appears to be simply transitive rather than causative:

- perhej*, *pərejhej*: ‘to magic something into existence’
serpa:g, *səregpa:g*: ‘to parcel up food (for cooking)’
cərlə:j, *cərejlə:j*: ‘to serve food out onto mats’ (cf. *lə:j* ‘to spread mats out’)
terpuk, *tərejnpuk*: ‘to ceremonially terminate a mourning period’

There is also a small set of permissive-causatives formed with *ber-* (rather than *ter-* or *-r-*), that indicate a somewhat reflexive meaning. An example is *berkeːʔ*, *bəreʔkeːʔ* ‘to search one’s mind’, from *keːʔ* ‘to search’. (This is not a case of the regular dissimilatory employment of *ber-* in stems with initial *t-* or *c-* mentioned earlier.) These refer to internal psychic events, of the kind also indicated by *berlə:k* ‘remind’, from *bələ:k* ‘to have something come to one’s mind’, a passive-like spontaneous happening rather than the result of deliberate ratiocination – which, through a morphological coincidence, also happens to begin with *ber-*. The productive causative form *berlə:k* therefore means ‘to allow something to come to (the secondary subject’s) mind’. This differs significantly from the meaning that underlies the English ‘remind’, which is more like ‘to *make* someone remember’. A more subtle example is *bertuh*, the verb sometimes used to indicate that one’s heart-soul (*hup*, the seat of agency) is internally ‘telling’ its possessor to act in a certain way. The normal, externally-directed verb for ‘to tell’ is simply *tuh*, as in (12).

Although these *berkeːʔ* type of causatives do not belong to a productive class, they are nevertheless of some interest, both semantically and historically, as implying internally-directed, ‘subjective’, permissive-causation. There is no space to pursue the issue further here, except to note that *gerʔə:b*, *gərebʔə:b* ‘to belch’ and *bəhup*, *bəmhup* ‘to fart’, both of which possess ‘causative’-like shapes, may belong here too.

Concluding remarks

Elsewhere (Benjamin 2011, 2012a), I have argued that the Temiars’ dialectical psychocentrism, well evidenced in other domains of the culture, is also reflected in the patterning of their language. This is apparent in the peculiar manner in which the polarity of the Temiar middle and causative voices in the valency schema is given expression. (There is no inflectional passive voice in Temiar.) The middle voice carries a SELF-directed meaning through the iconically expressed incorporation of a virtual *object* into the verb, as *-a-* (Benjamin 2011: 22–23), while the

causative voice expresses the OTHER-directed meaning of getting someone *else* to do something through the iconically-expressed incorporation into the verb of the *subjective* and ‘replicative’ marker *-r-*. Thus, the dialectical SELF–OTHER deixis, exhibited in the Temiar cultural regime more generally, also pervades the semantic and grammatical organisation of the Temiar verb, where it is given phonic expression through the iconicity of oral gesture (closed/open mouth), as presented in the opening section of this paper.

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Negators in Muöt

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Abstract

Muöt refers here to that variety of Nicobarese language spoken by the ethnic Nicobarese presently inhabiting the three Central Nicobar Islands, namely, Nancowry, Katchal and Kamorta of Nicobar Archipelago, India. Negators in Muöt are found to be particles with morphological and syntactic levels as their scope of functioning. Defining, identifying and classifying the so called negators of Muöt and attempting for a description, to the extent possible, covering their various roles in the day to day communication of its speakers would be the aim of this paper. In an attempt to get the view of earlier authors on the topic, the paper makes a survey of the negators as documented in those works. Also, it makes a departure from them enunciating the relevance of the work in the context of documentation and description of minor languages.

Keywords: Nicobarese, Muöt, syntax

ISO 639 language codes: ncb

1. Aim

Defining, identifying and classifying the so called negators in Muöt and providing a statement on their various roles in the day to day communication of its speakers is the aim of this paper. The data for the purpose are drawn from the Andaman Commissioned Project data base collected from the Nancowry Island between September and December of 2004 just before the tsunami.

2. Muöt

Muöt here refers to that variety of Nicobarese language spoken by the ethnic Nicobarese presently inhabiting the three Central Nicobar Islands, namely, Nancowry, Katchal and Kamorta of Nicobar archipelago, India.¹ As per the 2001 census, the population of the islands together is 10,083.² The language is said to belong to the major Austroasiatic family of languages through its Mon-Khmer sub-family (Lewis 2009). Morphologically, it is believed to be agglutinative and syntactically of VOS pattern.³

3. Negator defined

In its discussion on negation, Brown (2006) discusses a term 'negative operator', the application of which to a sentence would result in the denying of the truth value of a sentence or of a part of a sentence (p560). It explains the concept with the help of following two pairs of sentences listed in 1 and 2:

- 1 (a) John likes to work
(b) John does not like to work
- 2 (a) John likes beer at lunch
(b) John does not like beer at lunch

Through sentences 1(b) and 2 (b) the work seems to project 'not' as the negative operator. Later, while discussing the typology of negation across languages, the work speaks about three terms, viz., 'negative mark', 'negative auxiliary' and 'negative particle' as referring to certain

¹ Till 2004, just prior to the tsunami, the speakers of the language were spread across four islands, the fourth one being the Trinket. After the tsunamic devastation, the Indian Administration had to declare the island as inhospitable and the surviving inhabitants thereof have been settled down in the neighboring Kamorta Island. The Administration has named their new habitation in Kamorta Island as Vikas Nagar.

² The population figure includes a certain percentage of non-tribal population who resides in these islands due to various reasons.

³ Linguistic description of the data is in progress for arriving at a definite statement.

linguistic forms that effect negation in sentences. And, it says that these linguistic forms would carry out the process of negation in three different ways. The form referred to as negative mark does it by getting itself integrated in the verb, while that referred to as negative auxiliary by being a part of a verbal cluster and the third one referred to as negative particle by being a separate lexeme. To explain the three modes of negation, the work cites three pairs of examples each from Russian, English and German languages and they are reproduced below as 3(a) and (b), 4(a) and (b) and 5(a) and (b) respectively:

3(a) *Ivan est rybu*
John eats fish
'John eats fish'

3(b) *Ivan ne est rybu*
John NEG eats fish
'John does not eat fish'

4(a) John eats fish

4(b) John does *not* eat fish

5(a) *Hans ißt fisch*
John eats fish
'John eats fish'

5(b) *Hans ißt keinen fisch*
John eats no: adj fish
'John does not eat fish'

Through the sentences 3(b), 4(b) and 5(b) the work seems to highlight '*ne*' in Russian, '*not*' in English and '*keinen*' in German as the negative mark, negative auxiliary and negative particle respectively (p562). Further, the work goes on to say that those languages which display the typology of negation with negative particle, do it by taking the same in seven different positions in their syntax (ibid.). Those seven patterns are the following:

- (a) Pre-verbal position
- (b) Pre-auxiliary position
- (c) Before verbal group
- (d) Post-verbal position
- (e) Post-auxiliary position
- (f) Sentence initial position
- (g) Sentence final position

Crystal (2008) in its definition of negation, uses the term negative particle, but its usage is to refer to the English '*not*' which is referred to in Brown (2006) with the terms negative operator (ibid.p560) and negative auxiliary (ibid.p562). Irrespective of their nomenclature, all the four terms, the negative operator, the negative mark, the negative auxiliary and the negative particle seem performing the same semantic function of denying or negating the meaning of sentences. Muöt, the language of current discussion seems to display the concept of negation by means of a set of separate lexemes that correspond to what is referred to as negative particle in Brown (ibid.). But, it performs the function by taking them in two of the above mentioned seven syntactic patterns, namely, the pre-verbal and the sentence initial. According to Gove, et al (1971) and COD (2000) such items that perform a negative function are negators. Moreover, in Muöt, it is the verb which can be considered as the sole contributor of meaning to a sentence or to a part of it. Hence, the present paper prefers to call the negative particles of Muöt as negators and defines them as 'a class of linguistic items that negate the action identified by verbs being in the pre-verbal or sentence initial position'.

4. Negators identified

The paper intends to start identification by reviewing earlier literatures on Muöt with a focus on negators and the concept of negation in depth and breadth.

4.1. Negators of earlier works

Four works, which can be considered as pioneers in the field have been taken for the purpose.

4.1.1. Negators of (De Röepstorff (1875)

This work does not seem to make any formal reference to the terms negation or negator. But, in its vocabulary on Nancowry dialect, the work list among others, eight lexical forms that seem to convey the negative meaning. They are:⁴

Ha-a, Hat, Wat, Watshe, Watme, Tjit, Tit, Kit

These forms are found listed in the work with their possible glosses in English. A comparison of these forms with their respective glosses leads to make out the following observations:

Ha-a might be a variant of *Hat*, and *Watshe* and *Watme* as that of *Wat* because the work does not ascribe any specific glosses to them.

Tjit seems to take sentence as its scope of function because for the formation of this negative form, a sentence with the first person singular pronoun as its subject seems indispensable. The following instance from the list can be reproduced as example for such a phenomenon:

Tjit *akah*
I do not know
'I do not know'

Wat seems to convey the negative meaning in the imperative mood and the form *me* occurring with *Wat* seems to be the pronoun for the second person singular. The following instance from the list can be taken as proof for such an observation:

Watme pohoa 'be not afraid'

The forms *Hat*, *Wat* and *Kit* seem to function as negative quantifiers also. The following instances from the list can be drawn as examples for such a function:

Hat ôt 'nothing'
Watme njañggato 'never mind'
Kitma 'never'

Hat seems to convey antonyms of lexical items. The following forms from the list can be taken as proof for such an inference:⁵

Hat long-an 'light' (x of heavy)
Hat kōnye 'barren' (x of fertile)

Tit seems to carry out the negation in reality and such a function is shared by the forms *Hat*, *Kit* and *Tjit* also in addition to their above mentioned ones. The following instances from the list are reproduced below as proof for such an observation:

Tit jo 'needless'
Hat hew 'blind'

⁴ Note that the data of De Röepstorff (and Mann, below) are transcribed according to the original, no attempt has been made to rewrite into IPA values as the understanding of Müot phonetics and phonology remain incomplete.

⁵ The contents within the brackets are inferred by author.

Kit yanatau 'unhappy'
Tjit jang 'deaf'

4.1.2. Negators of (De Röepstorff(1884)

The work, in its introduction to the grammar of the Nancowry dialect of the Nicobarese language, deals with six forms under the sub-heading negative adverbs of the major heading, the adverb. They are:

Hat, Hæt, Wat, Tiüt, Dit, Hā-ă

Regarding *Hæt*, the work is of in two opinions. It says the form would either be an obsolete one of *Hat* or a form signifying a negative meaning different from that conveyed by *Hat*. It further adds that *Hat* can be taken as conveying the negation of a fact and *Hæt* as that of a conception. About *Tiüt*, the work says the form is generally used with the pronoun of the first person, and might be a contracted form of first person pronoun *Tiüe* and the negative form *Hat* when they are in the phrasal structure of first person pronoun followed by *Hat* as shown below:

<i>Tiüe</i>	<i>hat</i>
1st person pronoun	Negative form

About *Dit*, the work says, it is another form of *Hat* and gives the following as the illustration:

Io dit iāng hat dök
 'Should they not hear (of it), they will not come'

On *Wat*, the work says, it is the regular form of negation in use with the imperative mood. As illustration of such a phenomenon, it gives the following sentence:

Watme loā
 'Do not be in a hurry'

It further says that *Wat* can be used as a strong prohibitive too.

With respect to *Hā-ă*, the work says, it is the negative answer to a question.

4.1.3. Negators of (Man (1889)

In its notes on the grammar of the Central Nicobarese Language, the work discusses what is termed in the paper as negators under the three major headings, viz., adverbs, negative sentences and auxiliaries.

4.1.3.1. Adverbs

Under the heading adverbs, through the sub-heading, affirmative and negative, the work deals with twelve forms which convey a negative meaning. They are listed below along with their glosses.

<i>Hat</i>	'not'
<i>Hat-hēang</i>	'no, not one'
<i>Hat-ôt</i>	'no, have not, not here, not at home'
<i>Chit</i>	'(abbrev for <i>chiia-hat</i>) I-not'
<i>Met</i>	'(abbrev for <i>meñ-hat</i>) thou-not'
<i>Net</i>	'(abbrev for <i>an-hat</i>) he-not'
<i>Het</i>	'(abbrev for <i>hē-hat</i>) we all-not'
<i>Inât</i>	'(abbrev for <i>inâ-hat</i>) you two-not'
<i>Ifēt</i>	'(abbrev for <i>ifē-hat</i>) you all-not'
<i>Onât</i>	'(abbrev for <i>onâ-hat</i>) they two-not'
<i>Ofēt</i>	'(abbrev for <i>ofē-bat</i>) they all-not'
<i>Wôt</i>	'(abbrev for <i>wī-hat</i>) don't, be-not'

Of these, the work says, *Hat* is extensively used to signify the contrary of the word to which it is prefixed. The following of the instance which the work cites as example for such a phenomenon is reproduced here:

Hat imòng ‘Unripe (fruit)’

On *Hat-hēang*, the work says it is employed in reply to an inquiry that involves countable objects, and illustrates the phenomenon with the following question-answer pair involving an English interrogative sentence as the question ‘Have you caught any fish?’:

Hat-hēang
‘No, (not one)’

But, *Hat-ôt*, the work says, is employed in a more general signification and illustrates the phenomenon with the following question-answer pair involving an English interrogative sentence as the question ‘Have you any shells?’:

Hat-ôt
‘No, (I have not)’

Regarding the remaining nine forms, the work says, they are the contracted forms of the negative adverbs with the respective pronouns.

4.1.3.2. Negative sentences

Under the negative sentences, the work lists eleven forms that are significant in the formation of negative sentences. The list includes a few forms which were earlier discussed under the heading adverbs also. The eleven forms are:

<i>Hat</i>	‘not’
<i>Hat-hēang, hat-ôt</i>	‘none, not any’
<i>Ngong</i>	‘none, nothing, empty’
<i>Wòt</i>	‘don’t, be-not’
<i>Hat-mah</i>	‘never’
<i>Hat-manâ (k) nga-tô-hē</i>	‘never more’
<i>Hañañ</i>	‘no’
<i>Añya-pa, Añya chü</i>	‘no’
<i>Kâhà-tôre</i>	‘never mind, no matter’
<i>Chit-mah</i>	‘I never’
<i>Chit manâ (k) nga-tôhē</i>	‘I never more’

The negative sentences which the work attests to illustrate the role of these forms are the following:

An hat kōan meñ
‘He is not your child’

Oal düe meñ hat-hēang miàn
‘There is no spear in your canoe’

Hat-hēang yūang ta-akâh yô-at-chün en an
‘No one knows where he has gone’

Oal ñĩ an hat-ôt toak
‘There is no toddy in his hut’

Oal hoptēp meñ tap-ngong
‘There is nothing in your box’

Wòt meñ mong hàng
‘Don’t be angry’

Añya-pa katōm leāt kapâh
‘There is no knowing how many died’

Chit-mah hēu hibūt
‘I have never seen a dugong’

Chit manâ (k) nga-tôhē itūa Tatāt
‘I shall never more visit Chowra’

4.1.3.3. Auxiliaries

Under the heading, auxiliaries, the work among others, discusses about the form *Wòt*. It says that the form is a contraction of *Wī-hat* ‘make-not’ and it is used as a prohibitive negative form with the second person pronouns in the imperative mood. The work enlists the following sentences to illustrate the phenomenon:

Wòt iñ chūh ‘Don’t go!’
Wòt meñ lēang-tai ‘Don’t make noise!’

4.1.4. Negators of (Radhakrishnan 1981)

The work doesn’t provide any explicit discussion either on negator or negation. But, in its chapter on analytical Nancowry dictionary the work does list two lexical forms through two of its sub-headings, namely, a list of particles and, words. The present paper considers both the forms as negators.

4.1.4.1. A list of particles

Under this sub-heading, the work lists one of the two forms along with its gloss in English and the form is reproduced below:

Hât ‘negative particle’

4.1.4.2. Words

Under this sub-heading, the work lists two forms, one of which has already had its listing in 4.1.4.1. The two forms are:

Hât, Tit

Unlike in 4.1.4.1, here these forms are found to occur as part of the supposedly negated forms along with their glosses in English. A comparison of their phrasal occurrence with the respective glosses reveals the following observations:

Both the forms seem to convey the same meaning. The following pair of instances reproduced from the work can be taken as proof for such an inference:

Hât hiah ‘impious’
Tit hiah ‘impious’

Both the forms, in addition, seem to convey antonymous counterpart of words also, as seen from the following pair of instances reproduced from the work:⁶

Hât rôh ‘to lose’ (x of win)
Tit pamaha ‘brave person’ (x of coward)

Hât seems to function as negative quantifier also. The following pair of instances drawn from the work can be taken as proof for such an observation:

Hât rôt ‘nothing’
Hât hñay ‘without any’

Hât seems to function as negator in reality also. The couple of instances reproduced from the work would stand as proof for such a function:

Hât kamaiah ‘not a selfish person’
Hât lép nga sí ‘careless’

4.2. Negators of present day Muöt

The Muöt of present day seems to carry out the process of negating by means of a set of fourteen lexical forms. They are:

xaⁿt, *ñit*, *nit*, *vat*, *cit*, *ci ðai^t*, *xaⁿð^t*, *ci ðai^t*, *xε[?]t*, *mit*, *ðinaⁿ^t*, *ðife^t*, *ðunaⁿ^t* and *ðufe^t*

5. Classification of negators

All these fourteen forms of negators are broadly classed into two types, namely, prohibitive negators and declarative negators on the basis of their differential functions at the time of negating.

5.1. Prohibitive negators

They are negators which negate the meaning of sentences prohibitively by being in the imperative and obligatory moods. The following lone form of the above list falls under this type:

vat

The process of negation exemplified in the sentences 6 and 7 can be taken as illustration for its function in the language:

6. *vat* *ðujo:lə* *ðufe⁷* *ðaⁿn⁸* *ju:n* *ðin⁹* *mε:ⁿ*
 proh.neg tell pl rem1.vis lie syn.prox.vis 2sg
 ‘Do not tell lie’
7. *vat* *leat* *um.əx* *uk[?]ə* *ðin* *cəⁿ* *ə¹⁰* *nε[?] ðihε:ⁿ*
 proh.neg per obl come syn.prox.vis 1sg sub now
 ‘I should not have come now’

⁶ The contents within the brackets are of the author’s inference based.

⁷ The usage of eleven pronominal forms, namely, *cəⁿ* for first person singular, *ci ðai* for first person exclusive dual, *xaⁿð* for first person inclusive dual, *ci ðai* for first person exclusive plural, *xε[?]* for first person inclusive plural, *mε:ⁿ* for second person singular, *ðinaⁿ* for second person dual, *ðife* for second person plural, *ðaⁿn* for third person singular, *ðunaⁿ* for third person dual, *ðufe* for third person plural and the syntactic property of *ðufe*, the third person plural pronoun, functioning as plural marker in the language has already been established in (Rajasingh V.R. 2010).

⁸ The syntactic property of noun or pronoun preceded by the determiners *nε[?]*, *ðaⁿn*, *ηaⁿη* and *kə[?]* with deictic references, proximate-visible, remote1-visible, remote2-visible and remote-invisible respectively has been already established in (Rajasingh V.R. 2011).

⁹ This is yet another determiner which precedes nouns and pronouns with the same deictic reference as that of *nε[?]*, but unlike *nε[?]*, it will not function as stem for further derivation.

¹⁰ The syntactic structure of the language shows that embedding of every complement in the form of phrase or word is done with a subordinator. The subordinator may either be elided or retained in the surface level.

vat in the above sentences is said to be prohibitive negator because it negates their meanings prohibitively by being in the imperative and obligatory moods respectively.

5.2. Declarative negators

They are negators which effect negation in reality by being in non-imperative and non-obligatory moods. Negators of such type can further be sub-classified into pronominalized declarative negators and generic declarative negators based on the subject choice of the sentence they take as their scope of functioning.

5.2.1. Pronominalized declarative negators

They are declarative negators which would have as their scope of functioning sentences with any pronouns other than third person singular one as their subjects. Negators of present day Muöt that fall under this category are the following:

cit, ci ʔai't, xaʔ't, ci ʔəi't, xɛʔ't, mit, ʔinaʔ't, ʔife't, ʔunaʔ't, and ʔufe't

Based on the type of pronoun with which they occur, all these pronominalized negators can be named individually in the following way:

<i>cit</i>	first person singular pronominalized declarative negator
<i>ci ʔai't</i>	first person exclusive dual pronominalized declarative negator
<i>xaʔ't</i>	first person inclusive dual pronominalized declarative negator
<i>ci ʔəi't</i>	first person exclusive plural pronominalized declarative negator
<i>xɛʔ't</i>	first person inclusive plural pronominalized declarative negator
<i>mit</i>	second person singular pronominalized declarative negator
<i>ʔinaʔ't</i>	second person dual pronominalized declarative negator
<i>ʔife't</i>	second person plural pronominalized declarative negator
<i>ʔunaʔ't</i>	third person dual pronominalized declarative negator
<i>ʔufe't</i>	third person plural pronominalized declarative negator

The negating processes exemplified in the sentences from 8 to 17 can be taken as illustration of their function in the language:

8. *cit* *juəŋsise* *ʔitcaccə* *nɛʔ* *le:pə.ɛ*
1sg.pro.de.neg cont read prox.vis book
'I am not reading the book'
9. *ci ʔai't* *kaji:ŋə* *nə* *sak* *kap*
1ex.dl.pro.de.neg go pur hunt turtle
'We (exclusive dual) do not go for turtle hunting'
10. *xaʔ't* *juəŋsise* *kaji:ŋə* *nə* *xajui:nə* *kəʔ* *nət*
1inc.dl.pro.de.neg cont go pur hunt rem3.invis pig
'We (inclusive dual) are not going for pig hunting'
11. *ci ʔəi't* *nen* *kaji:ŋə* *ʔin* *iskol* *ɬə* *minjuɪ*
1ex.pl.pro.de.neg pa go syn.prox.vis school sub yesterday
'We did not go to school yesterday'
12. *xɛʔ't* *nen* *puaʔ* *ŋaŋ* *jeav*
1inc.pl.pro.de.neg pa catch rem2.vis crocodile
'We did not catch crocodile'

13. *mit kom t̚ə ʔin ʌeak mat t̚uəʔ nen*
 2sg.pro.de.neg bring syn.prox.vis honey pa
 ‘You (sg) did not bring honey’
14. *ʔinaʔʔt juaŋsise kaji:ŋə t̚ə ʔaʔn ɲicɔ:n*
 2dl.pro.de.neg cont go sub rem1.vis John’s house
 ‘You (dual) are not going to John’s house’
15. *ʔifeʔt nen vi:ʔ ʔə t̚ə nɛʔ ʔi xɛ:ʔ*
 2pl.pro.de.neg pa work sub today
 ‘You (pl) did not work today’
16. *ʔunaʔʔt nen juaŋsise xaleəx t̚in ki¹¹ kəʔ kani:*
 3dl.pro.de.neg pa cont collect acc pl rem3.invis tuber
 ‘They (dl) were not collecting tubers’
17. *ʔufeʔt t̚op ʔaʔn ʌeak*
 3pl.pro.de.neg drink rem1.vis water
 ‘They (pl) do not drink water’

In the sentences 8 to 17 *cit*, *ci ʔaiʔt*, *xaʔʔt*, *ci ʔəiʔt*, *xɛʔʔt*, *mit*, *ʔinaʔʔt*, *ʔifeʔt*, *ʔunaʔʔt*, and *ʔufeʔt* are said to be first person singular pronominalized declarative negator, first person exclusive dual pronominalized declarative negator, first person inclusive dual pronominalized declarative negator, first person exclusive plural pronominalized declarative negator, first person inclusive plural pronominalized declarative negator, second person singular pronominalized declarative negator, second person dual pronominalized declarative negator, second person plural pronominalized declarative negator, third person dual pronominalized declarative negator and third person plural pronominalized declarative negator respectively because these sentences are not only in the non-imperative and non-obligatory moods but also they are with pronominal subjects *cəʔ* ‘first person singular’, *ci ʔai* ‘first person exclusive dual’, *xaʔʔ* ‘first person inclusive dual’, *ci ʔəi* ‘first person exclusive plural’, *xɛʔ* ‘first person inclusive plural’, *mɛ:ʔ* ‘second person singular’, *ʔinaʔʔ* ‘second person dual’, *ʔifeʔ* ‘second person plural’, *ʔunaʔʔ* ‘third person dual’, *ʔufeʔ* ‘third person plural’ respectively.

5.2.2. Generic declarative negators

They are declarative negators which are not selective while taking sentences as their scope of functioning in respect of their subjects. They would negate meaning of the sentences which have pronominal as well as nominal subjects. Negators of present day Muöt that fall under this category are the following:

xaʔʔt, *t̚it* and *nit*

The processes of negation seen in the sentences 18 and 19 can be taken as illustration of such a function in the language:

- 18(a) *xaʔʔt juaŋsise ʔitcaccə nɛʔ le:pə:ʌe ʔin cəʔ*
 ge.de.neg cont read prox.vis book syn.prox.vis 1sg
 ‘I am not reading the book’
- 18(b) *xaʔʔt vi:ʔ ʔə ʔin cɔ:n nə lepɲəse*
 ge.de.neg work syn.prox.vis John sub well
 ‘John does not work well’

¹¹ The use of *ki-* as a plural marker in the language has already been established (cf. *ibid*)

19(a) *nit* *juənsise* *ʔuŋ səŋ* *ʔin* *ʔəʔn* *inka:nə*
 ge.de.neg cont cook syn.prox.vis 3sg fem
 ‘She is not cooking’

19(b) *nit* *nen* *juənsise* *ʔiŋtəŋ* *kəʔ* *cuke* *ʔin* *ʔipora*
 ge.de.neg pa cont spin rem3.invis basket syn.prox.vis Deborah
 ‘Deborah was not spinning basket’

As is seen, in 18 (a) and 19 (a) *xaʔt* and *nit* negate meaning of the sentences which have pronominal subjects *cəʔ* ‘first person singular’ and *ʔəʔn* ‘third person singular’ respectively, but in 18 (b) and 19 (b) they negate meaning of the sentences which have nominal subjects *cən* ‘John’ and *ʔipora* ‘Deborah’ respectively.

The table below would give a quick glance at the types of negators of present day Muöt

Negators		
Prohibitive	Declarative	
<i>vat</i>	Pronominalized	Generic
	<i>cit, ci ʔai't, xaʔʔ't, ci ʔəi't, xəʔ't, mit, ʔinaʔ't, ʔife't, ʔunaʔ't, ʔufe't</i>	<i>xaʔt, tit, nit</i>

6. Analysis of negators

A close examination of the functions these negators perform in the present day Muöt, reveals the following:

6.1. Declarative negators as expositors of antonyms

All the declarative negators seem to convey antonymous counterparts of words by taking morphology as their scope of functioning. Instances such as the following can be taken as illustration of such a function:

xaʔt lapəʔ ‘ugly’
ʔit lanepɣəse ‘casualness’
nit ɹaməx ‘failed person’
cit vani:ʔəcə ‘lazy-self’

In the above examples *xaʔt*, *ʔit*, *nit* and *cit* seem to convey antonymous counterparts of pleasant, carefulness, successful and active by pre-positioning to the words *lapəʔ*, *lanepɣəse*, *raməx* and *vani:ʔəcə* respectively.

6.2. Generic declarative negator as expositor of total quantification

Among the generic declarative negators, *xaʔt* seems to carry out distributive total quantification and indefinite total quantification by pre-positioning to the verbs *jaʔ* ‘to leave’ and *ʔəx* ‘to come up’ respectively. The sentences in 20 and 21 can be taken as illustration of such a function:

20(a) *muŋsi* *nə* *ʔamis* *ci ʔəi't* *ɹəx* *ʔujaʔɣə* *nəʔ* *cuk* *nəʔ ɛʔx*
 Because of sub rain 1exc.pl.pro.de.neg can leave prox.vis place this
 ‘Because of rain we cannot leave this place’

20(b) *xacux* *ʔin* *kirismas* *ʔin* *ci ʔəi* *ʔə* *xaʔt ʔujaʔ* *saminju*
 celebrate syn.prox.vis Christmas syn.prox.vis 1ex.pl sub every year
 ‘Every year we celebrate Christmas’

21(a) *ʔəxləʔə* *ɹeak*
 come up water
 ‘water that has come up (flood)’

- 21(b) *kom tə xaⁿt ʔitəx ɲuaⁿt ʔin mɛ:ⁿ*
 bring any coconut syn.prox.vis 2sg
 ‘You bring any coconut’

As is seen, in 20 (a) and 21 (a) the root form of the verbs *jaʔ* and *təx* convey their primary meanings, ‘to leave’ and ‘to come up’ respectively, but in 20 (b) and 21 (b) they convey distributive total quantification and indefinite total quantification respectively by pre-positioning with them *xaⁿt* ‘generic declarative negator’.

6.3. Generic declarative negator as negative quantifier

The generic declarative negator *xaⁿt* also seems to carry out negative quantification by pre-positioning to the verb, *xiəŋ* ‘to exist as one’. The sentences given in 22 can be taken as illustration for such a function.

- 22(a) *ʔot xiəŋ juəŋ ko:ən ʔin t̪ai cəⁿ ʔinkɔ:ŋ¹²*
 exist one clas son syn.prox.vis dat 1sg mas
 ‘I have one son’
- 22(b) *xaⁿt ʔot ʔaⁿn xaⁿt xiəŋ juəŋ t̪ə ʔɔal ɲi:*
 ge.de.neg exist rem.1vis nobody clas sub in the house
 ‘Nobody is in the house’

As is seen, in sentence 22 (a) *xiəŋ* functions as an enumerator signifying cardinal numeral one, but in 22 (b) it functions as total quantifier by pre-positioning with it *xaⁿt* ‘generic declarative negator’

6.4. Generic declarative negator as source for pronominalized declarative negators

Among the generic declarative negators, *nit* seems to become the source for the optional formation of all the pronominalized declarative negators when the subject of the clause happens to be any one of pronouns other than third person singular one. In such a syntactic setting, the subjects of the clause which is at the end moves to the clause initial position preceding the negator. Then, by contraction with the preceding pronouns *nit* is said to give rise to the first person singular pronominalized declarative negator *cit*, the first person exclusive dual pronominalized declarative negator *ci ʔaiⁿt*, the first person inclusive dual pronominalized declarative negator *xaⁿʔⁿt*, the first person exclusive plural pronominalized declarative negator *ci ʔaiⁿt*, the first person inclusive plural pronominalized declarative negator *xəʔⁿt*, second person singular pronominalized declarative negator *mit*, second person dual pronominalized declarative negator *ʔinaⁿt*, second person plural pronominalized declarative negator *ʔifeⁿt*, third person dual pronominalized declarative negator *ʔunaⁿt* and third person plural pronominalized declarative negator *ʔufeⁿt*. The sentences given in 23 can be taken as illustration of such a process.

- 23(a) *nit juəŋsise ʔitaccə nɛʔ le:pəɛ ʔin cəⁿ*
 ge.de.neg cont read prox.vis book syn.prox.vis 1sg
- 23(b) *cəⁿ nit juəŋsise ʔitaccə nɛʔ le:pəɛ*
 1sg ge.de. neg cont read prox.vis book
- 23(c) *cit juəŋsise ʔitaccə nɛʔ le:pəɛ*
 1sg.pro.de.neg cont read prox.vis book
 ‘I am not reading book’

In 23 (a) *nit* functions as the generic declarative negator of the sentence whose subject is *cəⁿ* ‘first person singular pronoun’. In 23 (b) the subject *cəⁿ* ‘first person singular pronoun’ of the sentence is moved to the sentence initial position preceding *nit* ‘generic declarative negator’ to give rise to *cit* ‘first person singular pronominalized declarative negator’ as shown in 23 (c).

¹² *ʔinkɔ:ŋ* is a part of *ko:ən*, but due to syntactic free word-order it occurs in the word final position.

7. Finding

1) R  pstorff (1875), R  pstorff (1884) and Man (1889) attest, among others *ha-a*, *kit*, and *h  -  *, and *han  n*, *  nya-pa*, *  nya-ch  *, and *k  h  -t  re* respectively as forms conveying negative meaning which do not seem to find their place in the present day language with the same denotation.

2) (R  pstorff(1884), in addition to *hat*, list another form *h  t* and distinguishes the two by stating that *hat* can be taken as conveying the negation of a fact and *h  t* as that of a conception. The present day language does not seem to make such a distinction of negating a fact and negating a concept by attesting two different forms.

3) (R  pstorff (1875), (R  pstorff(1884) and (Man (1889) do attest among others *wat*, *watshe*, *watme*, and *w  t* respectively as forms conveying negative meaning in the imperative mood. The present day language seems to use a form which is phonetically represented as *vat* to convey the negative meaning and is used in the obligatory mood also. Again, among the three works, (Man (1889) is of the view that *w  t* is a contracted form obtained from the structure *w  -hat* ‘make-not’, but the insights thrown by the present day language favor to consider *vat* as a monosyllabic root form.

4) R  pstorff (1875), R  pstorff(1884) and Man (1889) list among others *tjit*, and *ti  t*, and *chit*, *met*, *net*, *het*, *in  t*, *if  t*, *on  t*, *of  t* respectively which can be taken as those correspond to what is called the pronominalized declarative negators in the present day language. Further, (R  pstorff(1884) and (Man (1889) treat these respective forms as resulting from the contraction of the pronouns of first person singular, second person singular, third person singular, first person inclusive plural, second person dual, second person plural, third person dual and third person plural respectively with the negative form *hat* (cf.4.1.2 & 4.1.3.1). The insights thrown by the present day language favor the formation of the contracted forms that correspond to, *chit*, *met*, *het*, *in  t*, *if  t*, *on  t* and *of  t* but disfavor that of *net*. Instead, the present day language seems to have the form *nit*, similar in kind to *hat*, having its status as a root form, and it appears to prove that the contracted forms that correspond to *chit*, *met*, *het*, *in  t*, *if  t*, *on  t* and *of  t* result from the contraction of the respective pronouns with this *nit* (cf.6.4). Moreover, the present day language attests the contracted forms *ci   ai’t*, the first person exclusive dual pronominalized declarative negator, *xa  ’t*, the first person inclusive dual pronominalized declarative negator and *ci    i’t*, the first person exclusive plural pronominalized declarative negator also. It explains their formation also as resulting from the contraction of the respective pronouns with *nit* (cf. ibid).

5) R  pstorff (1875), Man (1889) and Radhakrishnan (1981) seem to treat *hat   t*, *watme*, *kitma*, and *hat-h  ang*, *hat-  t*, *ngong*, and *h  t    t* and *h  t h  ang* respectively as forms conveying total negation (cf.4.1.1, 4.1.3.2, & 4.1.4.2). But, the insights provided by the present day language seem to favor assigning total negation meaning to the form that corresponds to *hat-h  ang* and *h  t h  ang* alone (cf.6.3. 22.b). The forms that correspond to *hat-  t* and *h  t    t*, and *wat*, and *ngong* get the treatment of conveying existential negation, prohibitive negation and total quantification respectively in the present day language as shown in sentences 24, 25 and 26 respectively:

24. *xa  t    t ki k  ? ko:  n    i   in     n*
exist.neg pl rem3.invis offspring dat syn.prox vis 3sg
‘He has no children’

25. *vat     p n  ?     k   in m  :  *
proh.neg drink prox.vis water syn.prox.vis 2sg
‘Don’t drink water’

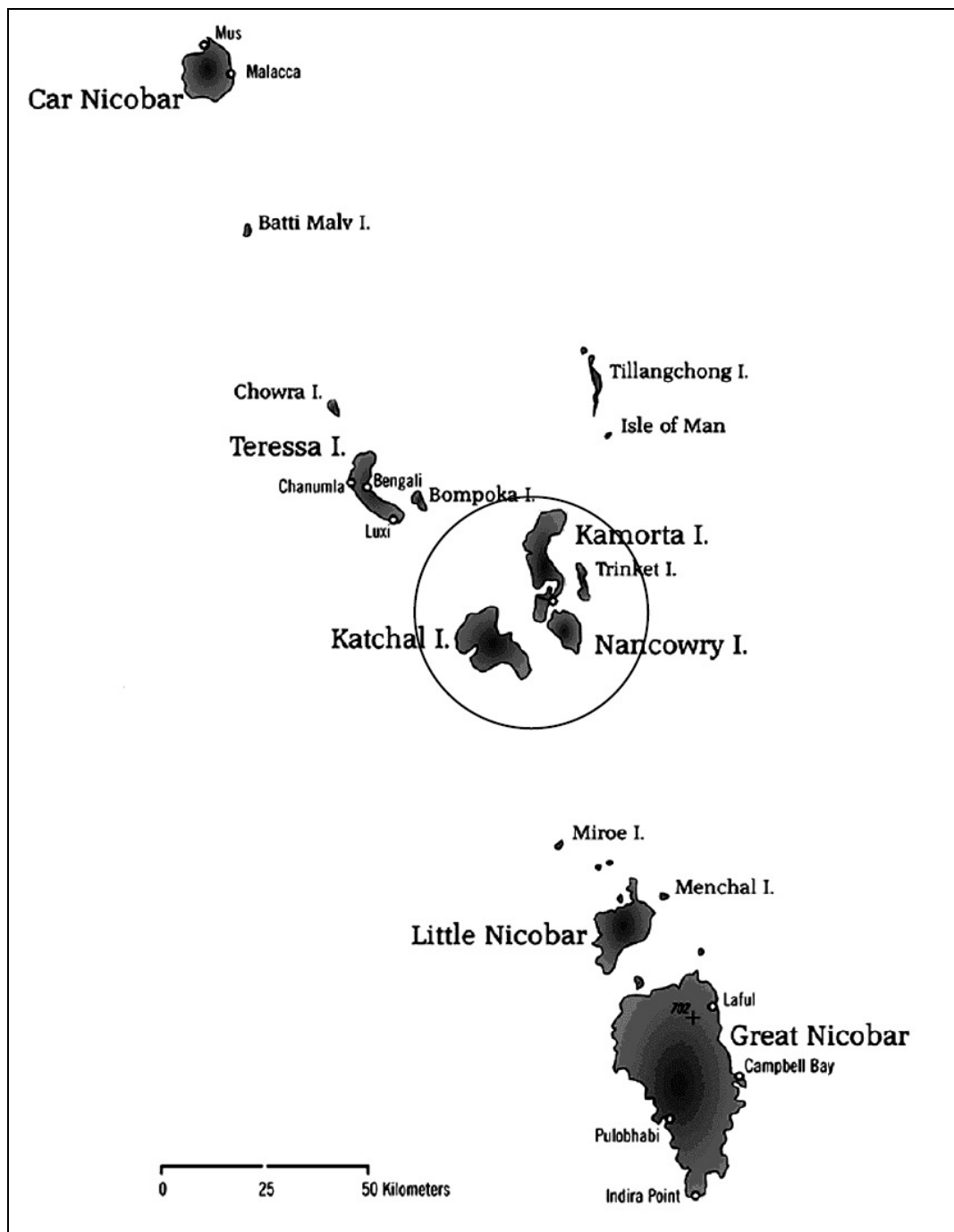
26. *ju   sise   uxuv ki k  ?    m         *
cont bark pl rem3.invis dog all
‘All the dogs are barking’

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Symbols and Abbreviations

x	Opposite of	ge	generic
1ex	first person exclusive	ibid	in the same source
1inc	first person inclusive	invis	invisible
1sg	first person singular	mas	masculine
2dl	second person dual	neg	negator
2pl	second person plural	obl	obligatory mood
2sg	second person singular	pa	past tense
3dl	third person dual	per	perfect tense
3pl	third person plural	pur	purposive participle
3sg	third person singular	pl	plural
acc	accusative case	pro	pronominalized
cf	compare with	proh	prohibitive
clas	classifier	prox	proximate
cont	continuous	rem1	remote 1
da	dative	rem2	remote 2
de	declarative	rem3	remote 3
dl	dual	sub	subordinator
exist	existential	syn	syntactic
fem	feminine	vis	visible



Map: Nicobar Archipelago with Muöt area circled