Complement clause types in Northern Tepehuan: a continuum of semantic and syntactic complexity[i]

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1. Introduction

Clause union defined as the linkage of two verbs or events (Lehmann 1988; Cristófaro 2003; Givón 2001, 2009) has been studied within three different approaches. Traditionally, the phenomenon was described in terms of two discrete categories defined by a limited number of parameters, i.e. subordination and coordination (Lyons 1968). More recent studies have considered that clause union pertains to less rigid classifications and examples of this are the tripartite (Van Valin 2005) or the continuum perspectives (Lehmann 1988; Givón 2001, 2009). The former classifies clause union into coordination, co-subordination, and subordination while the latter observes the phenomenon in terms of a set of combinable features that yield a variety of clause union types in a continuum. In this approach, these clauses can be placed according to their level of syntactic (Lehmann 1988) or semantic-syntactic integration (Givón 2001, 2009) in one of the extreme points (the less or more integrated constructions) or in between. The richness of this perspective is found in all the intermediate constructions that are located between the extreme points.

Givón (2009:86) claims that the different varieties of linguistic expressions in clause union are due to the use of some morphosyntactic mechanisms or devices. These mechanisms are: (i) coreference vs. non-coreference between arguments; (ii) the presence of a group of grammatical relations or two, i.e. an integrated single set vs. two distinct sets; (iii) the adjacency of the two verbs; (iv) the presence or absence of finite verb morphology; (v) the presence or absence of a subordinator; and (vi) intonational contours (joint vs. separate). When these devices are combined together, they yield varying degrees of clause union which reflect the semantic integration of the events. At this point, the author mentions that the relation between language structure and language function is usually stated in terms of iconic motivation (Haiman, 1985:11) and within the phenomenon of clause union, the basic principle underlying the aforementioned is: "The stronger is the *semantic bond* between the two events, the more extensive will be the *syntactic integration* of the two clauses into a single though complex clause."

Givón's perspective of clause union (2009:81-3) is rather diachronic and he argues that the synchronic typology, in these cases the different varieties of clauses, can only be understood from the diachronic processes that the clauses have undergone. According to him, the common denominator to all types of clause union is grammaticalization,[ii] thus giving rise to morphologically complex verbs. At this stage, the verb becomes an affix on the second verb and shows a more integrated construction which is placed in one of the extremes of a continuum.

The use of the mechanisms or devices for clause union as well as the semantic-syntactic integration have been analyzed in different linguistic expressions such as coordinate clauses, relative clauses, serial verbs, adverbial clauses and complement clauses. The last ones will be the focus of this paper.

Complement constructions defined as expressions that function as arguments of other clauses (Givón 2001; Noonan 2007) have received considerable attention because of the variability of structural codification as well as for their semantic-syntactic interrelationship. The variety of structures in complement clauses occurs because of the presence or absence of the mechanisms or devices that code clause union and this is motivated by the semantics of the two events to be linked (Givón, 2009:86). The correlation of both factors allows talking

about a continuum of semantic and syntactic integration in complement clauses where the different types of clauses are placed. Thus, this paper describes and examines the mechanisms or devices for clause union and the semantic dimension correlated to these mechanisms in object complement clauses in Northern Tepehuan.

In Northern Tepehuan it has been found that there are at least four types of complement clauses. All of them can be placed in a continuum of semantic-syntactic complexity which shows the different morphosyntactic features reflecting the semantic nuances of the events. The language also shows some grammaticalization processes of the complement-taking verbs which prevent the language from being placed in the clearly defined scale of complement-taking verbs proposed by Givón (2001:40).

2. Grammatical aspects of Northern Tepehuan

Northern Tepehuan, a language pertaining to the Tepiman branch of the Uto-aztecan family (Dakin 2004), is spoken by approximately 6,800 people in the southern area of Chihuahua, Mexico.[iii] There are currently three recognized dialects which are located in the regions of Nabogame, El Venadito, and Baborigame. The dialect from the latter region is described in this paper.

Northern Tepehuan is characterized typologically as an agglutinative and head-marking language with a nominative-accusative case system. The language lacks morphological case markers in nouns; however, its nominative-accusative nature is manifested through two sets of pronouns, one for subjects and the other for non-subjects as shown in Table 1.

Table 1. Northern Tepehuan pronominal system

Person	Subject pronouns	Non-subject pronouns	Pronominal clitics	Reflexive pronouns	Possesive pronouns	Pronouns in pospositions
1SG	aan~~i~~	gin~giñ-	=ñ~~i~~ =na	gin-	gin-~giñ-	giñ-
2SG	aapi	g~~i~~-	=pi	g~~i~~-	g~~i~~-	g~~i~~-
3SG	~~i~~gai	Ø	Ø	g~~i~~-	- d~~i~~	Ø
1PL	aat~~i~~m~~i~~~ aat~~i~~n~~i~~	g~~i~~ř-	=~~i~~ř =t~~i~~n~~i~~	g~~i~~ř-	g~~i~~ř-	g~~i~~ř-
2PL	aapimu	gin-	=pimu	gin-	gin-	gin-
3PL	~~i~~gai	Ø	Ø	gin-	-d~~i~~	Ø
Non-specific	_____	ga-	_____	____	-ga (objects & animals)	_____

The use of this set of pronouns is illustrated in the examples below. The subject of an intransitive clause as well as an agent of a transitive clause is coded by independent subject pronouns as the subject *aapimu* '2PL.SBJ' in (1a) and the agent *~~i~~gai* '3SG.SBJ' in (1b). The patient, however, takes a non-subject pronoun that is prefixed to the verb, like *g~~i~~ř-* '1PL.NSBJ' in example (1b). In the case of ditransitive clauses, the recipient is marked by non-subject prefixes as patients in transitive clauses which indicate that the language has a primary object system also. This is exemplified in (1b) and (1c) where the non-subject *g~~i~~ř-* '1PL.NSBJ' marks

a recipient argument in the latter while in the former the same non-subject pronoun is used to mark a patient.

(1) a. **aapimu** kokoso[iv]
2PL.SBJ[v] RDP.CONT.sleep.PRS
'You sleep.'

b. **i̶**gai **gi̶ř**-gi̶gi̶
3SG.SBJ 1PL.NSBJ-RDP.CONT.hit.PFV
'He hit us.'

c. i̶gai **gi̶ř**-ootoši tuminši
3SG.SBJ 1PL.NSBJ-send.PFV money
'He sent us money.'

The non-subject pronoun prefixes are also found in a relationship of possession as illustrated in examples (2a-c) with *giñ-* '1SG.NSBJ', *gi̶-* '2SG.NSBJ', and *gi̶ř-* '1PL.NSBJ'. On the other hand, for the expression of the 3SG or 3PL possession, the suffix *–ḍi̶* is attached to the noun phrase as in (2c).

The suffix *–ga* 'ALIENABLE' that appears in examples (2b) and (2c) expresses possession only for objects or animals.

(2) a. **giñ-i̶**ka
1SG.NSBJ-hand
'my hand'

b. **gi̶-**soi-**ga** gogoši
2SG.NSBJ-DOM-AL dog
'your dog'

c. **gi̶ř**-asaŕa-**ga**
1PL.NSBJ-basket-AL
'our basket'

d. moo-**ḍi̶**
head-3SG.POS
'his head'

Similarly, the non-subject pronouns are used to indicate a reflexive action. In the examples in (3), two clauses of this type are exemplified. As can be observed, the non-subject pronoun *gi̶-* '2SG.NSBJ' codifies the reflexive action for the 2SG and 3SG. The same occurs with *gi̶n-* '2PL.NSBJ' for 2PL and 3PL respectively.

(3) a. aapi **gi̶-**ni̶id[y]i ni̶i-d[y]a-kaŕo-na
2SG.SBJ 2SG.NSBJ –look.at.PRS look.at-APPL-INSTR-LOC
'You look at yourself in the mirror.'

b. i̶gai **gi̶-**ni̶id[y]i ni̶i-d[y]a-kaŕo-na
3SG.SBJ 2SG.NSBJ-look.at.PRS look.at-APPL-INSTR-LOC
'He looks at himself in the mirror.'

2.1 Constituent order

A simple clause in Northern Tepehuan is normally constituted by a verb and a nominal phrase or pronoun. In the intransitive clauses, the unmarked or preferred word order is SV as in (4a), while in a transitive clause it is AVP as in (4b). However, word order may be relatively free depending on the context.

		S	**V**
(4)	a.	Guana	suaka-i
		John	cry-PRS
		'John cries'	

		A	**V**	**P**
	b.	Mařia	guikoma	yoošikai
		Mary	cut.PFV	flower.PL
		'Mary cut flowers'		

3. Some remarks on complement constructions

Most theories that examine complement clauses pay close attention to their syntactic properties because of the variety of structural codifications that give rise to the different complement types. Languages may have a greater or lesser number of complement types. For example, in Irish, it is known that there are only two complement types, the nominalized clause and the complement clause introduced by a subordinator. Other languages present more variety like Lango (a Nilotic language) which has four types: indicative, paratactic, infinitive, and subjunctive complement clause.[vi] In both languages, the complement types can be determined by the presence or absence of the mechanisms mentioned above (Givón, 2009:86).

The syntactic codifications in complement clauses have also been studied with regard to their semantic aspects. However, there is less agreement in linguistic studies about the semantic relationship between the main predicate and the complement clause. Some authors (Dixon 2006; Noonan 2007) classify the complement-taking verbs based on their meaning and the type of complement clause they take without explaining the semantic and syntactic correlation. Others place them into semantic scales based on the main predicate meaning (Haiman 1985; Givón 1980, 2001, 2009). These scales allow explaining the type of correlation between the complement-taking verbs and the type of complement clause in terms of their syntactic and semantic relationship.

According to Givón (2009), the phenomenon of complementation shows a systematic isomorphism between the semantics of the event and the syntax of the clauses. The semantic relation between the main predicate and its complement determines some syntactic features of the complement clause such as the use of the morphosyntactic mechanisms or devices: the reference of the subject, time, aspect or mood, etc. For him (2001: 40), the complement-taking verbs fall into three types: modality verbs ('want', 'begin', 'finish', 'try', etc.), manipulative verbs ('make', 'tell', 'order', etc.) and perception-cognition-utterance verbs ('see', 'know', 'think', 'say', etc.) (PCU henceforth). Modality and manipulative verbs run in parallel showing roughly the same semantic and syntactic relationship since they are the verbs with stronger semantic bonds; while the PCU verbs show less semantic bonds. This parallel behavior reflects a profoundly scalar phenomenon in which the transition from manipulative verbs and modality verbs to PCU verbs can be observed in the languages.

The latter types of complement-taking verbs are explored regarding the different complement types that arise in Northern Tepehuan and will be described below.

3.1 Complement clause types in Northern Tepehuan

In Northern Tepehuan, it has been observed that there are at least four types of complement clauses: morphologically complex verb, serial verb type, non-finite complement clause, and finite complement clause.

a. Morphologically complex verb. This construction is characterized by the following features: (i) the causative verb *-tuɖa* occurs suffixed to the verb of the complement clause, thus forming a verbal complex; (ii) there is no subordinator; (iii) the verbal complex falls into the same intonational contour; (iv) there is one group of arguments, i.e. the causer and the causee; (v) the verbal complex presents the TAM markers. This type of complement occurs with intransitive and transitive verbs as in examples in (5).

(5) a. aaniɨ ø-aši-**tuɖa-**i
1SG.SBJ 3SG.NSBJ-laugh-CAUS-PRS
'I make him laugh.'

b. Tiřiɨsa giñ-kuitiskiɨ-**tuɖa**-i go gogoši
Teresa 1SG.NSBJ-kick-CAUS-PRS DET dog
'Teresa makes me kick the dog.'

Semantically, the event is codifying an implicative causative (Givón, 2001:40) where the manipulator has control and a direct, physical contact with the manipulee. This is reflected also by the marking of the manipulee as a non-subject pronoun prefix in (5b) with *giñ-* '1SG.NSBJ' and (5c) with *giɨ-* '2SG.NSBJ', thus, indicating a non-volitional participant. As both participants are acting at the same time, the clause has only one TAM marker which is reflected with the suffix *i-* 'PRS' in the verbal complex.

Another example of morphologically complex verb that is found in the language is the one formed by the PCU verb *ɨlidʸi~ɨlidʸa* 'to think' and the verb of the complement clause. In this case, the former is generally found in a non-reduced form and in a second position, which means that the verb is starting to grammaticalize into a suffix. This construction occurs when the verb has the modal meaning 'to want' with intransitive and transitive verbs as illustrated in examples in (6).

(6) a. aaniɨ ugia-**ñiɨlidʸi** taškali
1SG.SUJ eat-think.PRS tortilla
'I want to eat tortilla.'

b. ga-ata-ɖui-ña-n**iɨli**-ña=na
NSP.OBJ-ata-do-POT-think-POT=1SG
'I would like to work.'

As it can be observed, the verbal complex requires only one participant encoded by independent pronouns or pronominal clitics, and one TAM marking which shows that the events occur at the same time.

b. Serial verb type. This type of construction presents the following features: (i) there is no subordinator and the verbs are adjacent to each other; (ii) they have the same intonational contour; and (iii) one of the verbs is marked with TAM. Generally, serial verb types present one argument which is coreferential to the participant of the complement verb; however, there are some complement-taking verbs in a serial verb type construction that takes two different arguments. In those cases, one of the two arguments is coreferential with one

participant of the complement verb (see examples in (14) and (15)). Two kinds of serial verb types have been found in Northern Tepehuan:

- *Auxiliary verbs.* The complement-taking verb behaves as an auxiliary since it can not take arguments and independent TAM marking. These properties have been associated with auxiliary verbs (Ramat 1987; Heine 1993). In this paper, an auxiliary verb is understood as one that cannot be used in an independent way as a predicative nucleus or verb with lexical characteristics and occurs in a fixed order with respect to the verb that is TAM marked (Heine, 1993: 23-4). In Northern Tepehuan the order that the two verbs present is [auxiliary verb + main or lexical verb], however, in one particular verb is [main or lexical verb + auxiliary verb].[vii]

The complement-taking verbs that act as auxiliary verbs are the modal *naato* 'finish' and *gɨaaga* 'to start', the PCU verb *maatɨ* 'to know', and *ɨlidʸi~ɨlidʸa* 'to think'. The verb *maatɨ* 'to know' as well as the verb *ɨlidʸi~ɨlidʸa* 'to think' have lost their lexical meaning but have gained a modal one. Examples are illustrated in (7) and (8).

(7) a. Guana **maatɨ** [mɨmɨřa-i] kabami
John know RDP.CONT.run-PRS fast
'John knows how to run fast.'

b. aapi **maatɨ** [baga-i] ɖɨɖɨbɨřai
2SG.SBJ know to.water-PRS RDP.PL.land
'You know how to water the land.'

(8) [imi-mu] **ɨlian** aanɨ
go-FUT.PROB think 1SG.SBJ
'I think that I will run.'

Examples with the modal verb *naato* 'to finish' and *gɨaaga* 'to start' are shown in (9) where the coreference of the participant with the one from the complement verb can be observed as well as the auxiliary nature of the complement-taking verb.

(9) a. Mařia **naato** [oha] sekundaria
Mary finish study.PFV high.school
'Mary finished studying high school.'

b. **gin-aaga** mɨ=nɨ bɨs-kiamuko
1SG.NSUJ-start run.PFV=1SG every-morning-TEMP
'I started to run every morning.'

The analysis of the auxiliary verbs in the language is attested by the coexistence of their lexical form in the synchronic path, showing two different stages of grammaticalization processes (Heine, 1993:50).

(10) mi=**maati**=nɨ [iš=Guana dʸibia-gi]
NEG=know.PRS=1SG SBR=John come-IRR
'I don't know if John will come.'

(11) **ɨlidʸa**=na [ši=Guana ga-ata-guai tanai]
think.PRS=1SG SBR=John NSP.OBJ-ata-do.PRS here

'I think that John work here.'

(12) aaniɨ biiskiřiɨ **nanatoi** gin-talea-ga
1SG.SBJ always RDP.HAB.finish.PRS 1SG.NSBJ-homework-AL
'I always finish my homework'

-Non-auxiliary verbs. In these clauses, the complement-taking verb is marked with TAM and the second verb is codified in a non-finite form with the suffix *-řa* (sometimes a nominalized verb with the suffix *–gai*). Some of the complement-taking verbs like the manipulative *tɨhai* 'to order' and the PCU *ɨlidʸi~ɨlidʸa* 'to think' (in transitive verbs) can take two participants, the agent and the patient. In the case of the verb *tɨhai* 'to order', the patient acts as the agent of the second verb as in the examples in (13).

(13) a. gubuɖa-kɨɖɨ gin-**tɨhai** [nɨi-dʸa-gai]
force-with 1SG.NSBJ-order.PFV sing-APPL-NMLZ
'They forced me to sing.'

b. aaniɨ **tɨhai** Guana [baso-piga-řa]
1SG.SBJ order.PFV John weed-PRIV-NF
'I forced John to weed.'

c. Aguštiña **tɨhai** go aali [bai ñiñia-řa baki]
Agustina order.PFV DET RDP.PL.child well clean-NF house
'Agustina forced the children to clean the house.'

The verb *ɨlidʸi~ɨlidʸa* 'to think' is polysemic in the sense that it also functions as the modality verb 'to want'. When this occurs and there is a transitive verb in the clause, two participants appear: the agent and the patient of the action. The agent is codified in both verbs with the 1SG clitics. See example (14).

(14) gɨgɨbia=ñɨ [**ɨlidʸa**=na] Piyuřo
RDP.CONT.hit=1SG think.PRS=1SG Peter
'I want to hit Peter.'

Another type of PCU verb that the serial verb type construction has is the verb *mai* 'to learn' which has a coreferent argument with the participant of the complement clause. See example (15).

(15) a. aaniɨ **mai** [daiba-řa kabayo]
1SG.SBJ learn.PFV ride-NF horse
'I learned to ride a horse.'

b. Piyuřo **matia** [baso-ma-ɖa-řa]
Peter learn.FUT weed-ma-TR-NF
'Peter will learn to weed.'

Semantically, the serial verb type constructions, i.e. the auxiliary and the non-auxiliary verbs, present implicative modals which reflect the termination of an event such as *naato* 'to finish' or *gɨaaga* 'to start', as well as non-implicative modals like the PCU verbs which denote the meaning of possibility as *ɨlidʸi~ɨlidʸa* 'to think' in (8), and the meaning of ability as *maatɨ* 'to know' in (7). Other verbs that are codified with this type of construction are the manipulative *tɨhai* 'to order' and the PCU *mai* 'to learn'.

In all the cases, a co-temporal event is encoded since only one of the verbs bear the TAM marking. In the manipulative verbs, the agent has control over the situation although it does not have a completely direct and physical contact with the patient.

All these constructions show integrated events; nonetheless, it is less in comparison with the morphologically complex verbs.

c. *Non-finite clauses.* The non-finite clauses are characterized by the following features: (i) the subordinator *iš=~ši=* combine the two clauses; (ii) both clauses fall into the same intonational contour; (iii) the verb within the complement clause is codified in a non-finite form with the suffix *-ř̃a* (sometimes the verb is nominalized with the suffix *–gai*), and (iv) there can be coreferent arguments or not between the main clause and the complement clause. Verbs with the characteristics above are manipulatives such as *tɨhai* 'to order' and *idʸui* 'to make'; modal verbs such as *baiga* 'can' and the PCU *ɨlidʸi~ɨlidʸa* 'to think', *agihi* 'to say/tell', *tɨgidʸo* 'to forget', and *guaguidia* 'to believe'.

In manipulative constructions, as in examples (16) and (17), the patient of the main clause is coreferent with the agent of the complement clause. When there is a pronoun acting as a patient, it is codified with a non-subject pronoun as in example (16) with *gɨ-* '2SG.NSBJ'. There is no direct physical contact between the agent and the patient of the clause. However, there is certain degree of control from the agent and this is reflected in the non-finite codification of the complement clause (*-ña* 'POT' and *–gi* 'IRR'). On the other hand, the two events are less co-temporal in that the second event, that is, the complement clause, could have happened later in time as a consequence of an action and not necessarily at the same time in which the event of the main clause is expressed.

(16) aanɨ gɨ-**tɨhai** [iš=kɨ-ɖui-ña=pi go kuřařai]
1SG.SBJ 2SG.NSBJ-order.PFV SBR=well-do-POT=2SG DET fence
'I ordered you to fix the fence.'

(17) aanɨ **idʸui** [ši=Guana ga-tuɖia-gi]
1SG.SBJ do.PFV SBR=John NSP.OBJ-dance-IRR
'I made John dance.'

Modality verbs such as *baiga* 'can' and the PCU verb *ɨlidʸi~ɨlidʸa* with the modal meaning 'to want' in examples (18), (19), and (20) generally have coreferent arguments in which the dative or agent participant of the main clause is the one that does the action in the complement clause.

(18) **baiga**=tɨnɨ [iš=imia-gi ɖai ɖaɖia-gi ɨmo tasai-rɨ]
can=1PL SBR=go-IRR CONJ come.back-IRR one day-LOC
'We are able to go and come back in the same day.'

(19) Guana **baiga** [iš=miɬia-gi baika ora]
John can SBR=run-IRR three hour
'John can run for three hours.'

(20) ip=**iɬid^{y}a**=tini [iš=iki ga-ugia-gi]
ip=think.PRS=1PL SBR=early NSP.OBJ-eat-IRR
'We want to eat early.'

In the case when one participant desires another to do something, the participant who does the action in the complement clause is coreferent with the patient of the main clause as in example (21). In the same way as the verbs in the complement clause described above, there is an irrealis suffix *–gi.*

(21) aapi p=**iɬid^{y}i** [iš=aani imia-gi]
2SG.SBJ p=want.PRS SBR=1SG.SBJ go-IRR
'You want me to go.'

Modality verbs as the illustrated above show less co-temporal events because when a wish or ability from a participant is communicated, the desired event is more likely to be in the realm of possibility as it can or cannot occur in the future.

Finally, in PCU verbs reflecting a mental state or verbal act of utterance such as *agihi* 'to say/tell', *tigid^{y}o* 'to remember', and *guaguidian* 'to believe', there are no coreference restrictions. In (22), the two events are less co-temporal since the action of coming *d^{y}ibia* is not necessarily happening at the time of the verbal act of telling *agihi*. In the case of (23) and (24), the second event remains in the possibility of happening or not which is reflected by the non-finite form of the verb in the complement clause.

(22) aani **agihi** gi-tatali [iš=d^{y}ibia go šoro-ko]
1SG.SBJ tell.PFV 2SG.NSBJ-uncle SBR=come.NF DET tomorrow-TEMP
'I told your uncle to come tomorrow.'

(23) Piyuřo **tigid^{y}o** [ši=šoro-ko imia-gai Batopili-ři]
Peter remember.PFV SBR=tomorrow-TEMP go-NMLZ Batopilas-LOC
'Peter remembered that tomorrow he will go to Batopilas.'

(24) **guaguidia**=na [iš=Guana gigiɬbia Piyuřo]
believe.PRS=1SG SBR=John RDP.hit.NF Peter
'I believe that John hit Peter.'

d. Finite clause. This type of clauses are characterized by the following features: (i) the subordinator *iš=~ši=* combine the two clauses; (ii) both clauses fall into the same intonational contour; (iii) the verb in the complement clause is codified in a finite form; (iv) The clauses can have coreferent arguments or not. Verbs with these structures are manipulative verbs such as *tihai* 'to order' and *id^{y}ui* 'to make' as in (25) and (26). Both clauses show a non-implicative action where the patient has more control over the situation and is not affected directly by the agent. Both verbs in the clause bear the TAM marking thus showing events that are less co-temporal.

(25) Guana gɨ-**tɨhai** [iš=guikoma=pi basoi]
John 2SG.NSBJ-order.PFV SBR=cut.PFV =2SG weed
'John ordered you to cut the weed.'

(26) Guana **id^{y}ui** [iš=muaa=na Piyuřo]
John make.PFV SBR=kill.PFV=1SG Peter
'John made me kill Peter.'

The PCU verb *ɨlid^{y}i~ɨlid^{y}a* 'to think' with the modal meaning 'to want' also presents two events with its own TAM marking. Examples are illustrated in (27) and (28).

(27) ip=**ɨlɨd^{y}a**=na [iš=guikoma-i=pi muyi kuagi]
ip=think.PRS=1SG SBR=cut-PRS=2SG a.lot wood
'I want you to cut a lot of wood.'

(28) ip=**ɨlid^{y}a**=na [iš=aapi ga-oha-i Pařaŕa-na]
IP=think.PRS=1SG SBR=2SG NSP.OBJ-study-PRS Parral-LOC
'I want you to study at Parral.'

Other PCU verbs as *maatɨ* 'to know', *mai* 'to learn', *nɨid^{y}i* 'to see', *kaɨ* 'to hear', *agihi* 'to say', and *tigid^{y}o* 'to forget' show two events that are less co-temporal also. Examples are illustrated in (29), (30) and (31).

(29) Guana **maatɨ** [iš=Mařia hi Pařaŕa-na]
John know.PRS SBR=Mary leave.PFV Parral-LOC
'John knows that Mary went to Parral.'

(30) Guana **mai** [iš=mamabiyi kokosɨ-i tasɨ-ři]
John learn.PFV SBR=RDP.PL.bear RDP.CONT.sleep-PRS sun-in
'John learned that bears sleep all day long.'

(31) aapi **nɨid^{y}i** aiyi [iš=Guana ga-ɨši]
2SG.SBJ see.PFV when SBR=John NSP.OBJ-steal.PFV
'You saw when John stole it.'

4. Continuum of semantic and syntactic complexity

The four types of object complement clauses in Northern Tepehuan described above can be placed into a semantic-syntactic continuum where the most integrated clauses are situated at the right end while the less integrated ones at the opposite end. In this paper, the morphologically complex verbs with the causative suffix *–tuḍa* and the verb *ɨlid^{y}i~ɨlid^{y}a* 'to think' are considered to be the most integrated clauses while the finite complement clauses are the less integrated ones. In between the two ends, the serial verb type as well as the non-finite complement clauses can be located.

As far as the complement-taking verbs are concerned, it can be observed that the manipulative, modality and PCU verbs in Northern Tepehuan present different types of complements which have different degrees of integration. The manipulative verbs, for example, have shown to have a morphologically complex verb as well as serial verb type, non-finite and finite complement clauses. The same can be observed with modality verbs

which have serial verb type and non-finite complements. Finally, the PCU verbs present morphologically complex verb, serial verb type as well as non-finite and finite complements.

In most of the cases, it can be said that the variety of complement types presented in each type of verb is due to semantic nuances of the events reflected in the syntax of the language. However, some grammaticalization processes present in some complement-taking verbs have originated more integrated structures. Those are the cases of the PCU verbs *maatɨ* 'to know' and *ɨlidʸi~ɨlidʸa* 'to think' where the former shows an auxiliary verb construction with a modality value and the latter, a morphologically complex verb and auxiliary verbs also.

The behavior of these verbs as well as the semantic nuances of the events make the language difficult to fall into Givón's systematic scale of complement-taking verbs (2001:40) presented in section 3. Instead, the different complement clauses can be placed more or less accurately into Lehmann's continuum of syntactic level for clause union (1988:189-92). This continuum refers to the level of the subordinate clause with respect to the main clause which in this paper is conceived as the level of the complement clause with respect to the main clause or complement-taking verb.

Similarly to Givón (2001), the guiding idea of this *continuum* is that the lower the level, the more tightly the subordinate clause is integrated into the main clause syntactically. Between these two extremes (i.e. between the morpheme and the paragraph), there is a multiplicity of syntactic levels. This continuum is shown in Figure 1 below.

SENTENCE ◄——————————————————————————► WORD

subordinate clause is				*complex predicate formation*		
outside	**at margin**	**inside**	**inside**	verb	auxiliary	verbal
main	of main	main	VP	serialization	periphrasis	derivation
clause	clause	clause				

Figure 1. The continuum of the syntactic level

Although in this paper the terms verbal derivation and auxiliary periphrasis are not used since it is believed that the term morphologically complex verb captures better the notion of complexity and the diachronic processes, and avoids the baggage of the term 'auxiliary periphrasis' as it is used within the Indo-European tradition, the complement clauses from Northern Tepehuan can be placed in this type of continuum. This is illustrated in Figure 2 where the object complement clauses as well as the different complement-taking verbs that present each type of complement are shown.

SENTENCE ◄——————————————————————————► WORD

SERIAL VERB TYPE

FINITE CLAUSE	NON-FINITE	NON-AUXILIARY	AUXILIARY	MOPHOLLOGICALLY COMPLEX VERBS
PCU: *maatɨ*	**PCU**: *mai*	**PCU** : *mai*	**PCU**: *maatɨ*	**MPT**:-*tuɖa* 'CAUS'
ɨlidʸi~ɨlidʸa	*ɨlidʸi~ɨlidʸa*	*ɨlidʸi~ɨlidʸa*	*ɨlidʸi~ɨlidʸa*	**PCU**: *ɨlidʸi~ɨlidʸa*
mai	*agihi*		**MODALITY**: *naato*	
nɨɨdʸi	*tɨgidʸo*		*gɨaaga*	
kaɨ	**MPT**: *idʸui*:	**MPT**: *tɨhai*		
guaguidia	*tɨhai*			
MPT *:idʸui*	**MODALITY**: *baiga*			
tɨhai				

OUTSIDE MAIN CLAUSE

Figure 2. Northern Tepehuan continuum of semantic and syntactic complexity.

On the other hand, the idea of a continuum is attested also by the presence of linguistic expressions which show a morphologically complex verb with the causative *-tuḍa* in an analytic clause with the manipulative verb *id^{y}ui* 'to make'. These types of clauses show cases in which there are different degrees of integration within a single clause. Generally, they occur with non-human participants such as *kabayo* 'horse' and *ḍuki* 'rain'. See examples (32) and (33).

(32) go kɨɨli **id^{y}ui** [iš=gašubɨ-**tuḍa**=pi go kabayo]
DET man make.PFV SBR=brush-CAUS=2SG DET horse
'The man made us brush the horse.'

(33) go maatɨ-kami **id^{y}ui** [iš=Diosai otos-**tuḍa** ḍuki]
DET know-NMLZ make.PFV SBR=God send-CAUS rain
'The witch doctor made God send rain.'

Another instance that demonstrate different degrees of integration within the same clause are the ones formed by a serial verb type clause with a morphologically complex verb. This linguistic expression is composed by the manipulative verb *tianɨi* 'to force' which acts as a non-auxiliary serial verb type but at the same time creates a morphologically complex verb with the causative suffix *-tuḍa.* An example of this is shown in (34).

(34) aanɨ gɨn-**t^{y}anɨi-tuḍa-**i **oha-řa**
1SG.SUJ 2PL.NSUJ-force-CAUS-PRS write-NF
'I force you to write a letter.'

5. Final remarks

This paper has described the object complement clauses in Northern Tepehuan, a Uto-aztecan language from the Tepiman branch. The data have shown that there are at least four complement types: morphologically complex verbs, serial verb type, non-finite complements and finite complements. The different complement types were determined by the presence or absence of the mechanisms for clause union (Givón, 2009:86), which also helped to observe the different degrees of semantic and syntactic integration of the events.

The four complement types have revealed that they can be placed in a continuum of semantic and syntactic complexity where the most integrated clauses are situated at the right end while the less integrated ones at the opposite end. The morphologically complex verbs with the causative suffix *–tuḍa* or the verb *ɨlid^{y}i~ɨlid^{y}a* 'to think' are the most integrated clauses while the finite complement clauses are the less integrated ones. In between the two ends, the serial verb type -auxiliary and non-auxiliary verbs- as well as the non-finite complement clauses can be located. The richness of this perspective can be observed in all the intermediate constructions that are located between the extreme points in the language since they show different degrees of integration due to semantic nuances of the events as well as some processes of grammaticalization. This is the case of the PCU verbs *maatɨ* 'to know' and *ɨlid^{y}i~ɨlid^{y}a* 'to think' which have been grammaticalized into modality verbs, thus acting as auxiliary verbs. Also, in the case of the latter, it forms morphologically complex verbs which indicate that the verb is starting to grammaticalize into a suffix.

Other interesting types of clauses that can be found in between the two extreme points are the ones that combine a morphologically complex verb and an analytic construction with a subordinator as well as a serial verb type and a morphologically complex verb.

The latter two factors, the semantic nuances of the events as well as the grammaticalization processes, prevent the language from falling neatly into Givón's (2001:40) systematic scale of complement-taking verbs presented in section 3. Instead, the different object complement types can be placed more or less accurately into Lehmann's continuum of syntactic level for clause union (1988:189-92).

Notes

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[ii] The definition adopted in this paper is: Grammaticalization is defined as the subset of linguistic changes through which a lexical item that reports or describes things, actions or qualities, in certain uses becomes a grammatical item (Hopper & Traugott, 2003:2-4).

[iii] These data were taken from II Conteo de Población y Vivienda 2005 del INEGI (Instituto Nacional de Estadística, Geografía e Informática)

[iv] ř=multiple retroflex; š= postalveolar fricative; ɖ= alveolar retroflex

[v] Abbreviations: 1= first person; 2=second person; 3= third person; AL= alienable; APPL= applicative; CAUS= causative; CONJ= conjunction; CONT= continuative; DET= determiner; DOM=domestic animal; FUT= future; HAB= habitual; INSTR= instrumental; IRR= irrealis; LOC= locative; NEG= negative; NF= non-finite; NMLZ= nominalizer; NSP.OBJ= non-specific object; NSBJ=non-subject ; OBJ= object; PL= plural; PFV= perfective; POS= possessive; POT= potential; PROB= probable: PRS= present; PRV=privative; RDP= reduplication; SBR= subordinator; SG= singular; SBJ= subject; TEMP=temporal; TR= transitive.

[vi] The examples of the complement types of these languages can be observed in Noonan (2007: 54).

[vii] See Estrada & Ramos (2010) for a more detailed analysis of auxiliary verbs in Northern Tepehuan and Lowland Pima. See Estrada (2007) for an analysis of auxiliary verbs in Lowland Pima.

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