ADDIS ABABA UNIVERSITY
SCHOOL OF GRADUATE STUDIES
DEPARTMENT OF LINGUISTICS AND PHILOLOGY

THE DESCRIPTION OF COMPLEMENT RELATIONS IN XɨMT'AƉA: BASED ON FUNCTIONAL-TYPOLOGICAL APPROACH

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A THESIS SUBMITTED TO THE SCHOOL OF GRADUATE STUDIES OF ADDIS ABABA UNIVERSITY IN PARTIAL FULFILLMENT OF THE REQUIREMENT FOR THE DEGREE OF MASTERS OF ARTS IN LINGUISTICS

Approved by

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List of Abbreviations

- =	The given feature not express
* =	Ungrammatical
+ =	The given feature expressed
+/-=	The given feature either expressed or not expressed
A =	Aspect
ABL =	Ablative case
ACC =	Accusative
AGN =	Agent like argument of transitive verb
AUX =	Auxiliary
B =	Balancing
CAUS =	Causative
CL =	Clause
COM =	Comitative
COMP =	Complimentizer
CTP =	Complement taking predicate
D =	Deranking
D/B =	Either deranking or balancing
DAT =	Dative case
DEF =	Definite
Des. =	Desideratives
DTR =	Dependent or Determined Time Reference
FNTZR =	Finitizer
FSG =	Feminine singular
FUT =	Future tense
IMPRF =	Imperfective
ITR =	Independent Time Reference
Know. =	Knowledge
LOC =	Locative
M =	Mood
Man. =	Manipulatives
Mod. =	Modals
MSG =	Masculine singular
NEG =	Negative
NZR =	Nominalizer
O =	Patient-like argument of transitive verb
PASS =	Passive
PAST =	Past tense
Perc. =	Perception
PERF =	Perfective
Phas. =	Phasals
PL =	Plural
POSS =	Possessive
PRES =	Present tense
PROG =	Progressive
Prop.a. =	Propositional attitude
RECP =	Reciprocal
S =	Single argument of intransitive verb
SG =	Singular
SoA =	State of Affair
T =	Tense
TEMPO =	Temporal
Utt. =	Utterance

CHAPTER ONE

1. INTRODUCTION

1.1. Background of the Study

Ximt'aŋa is spoken in the Amhara Regional state, in an area called Wag-Ximra which is about 720 kms North East of Addis Ababa. Wag- Ximra is one of the eleven zones of the Amhara Regional state. According to the report by the 'Amhara Regional Information Bureau' (2001), the Wag Ximra zone covers about 788, 486 km square. From this, 104, 708.37 hectare land is used for farming. The weather condition of Wag-Ximra zone is 63.42% lowland (hot), 31.43% mild, and 5.4% highland (cold). 90% and above of the people live in the rural area and their main livelihood is farming. The Wag Ximra zone has six woredas, namely, Säk'^{w}ät'a, Zik'^{w}ala, Dähäna, Gazgibla, Abärgälle and Sihalla, and one additional town administration, namely, Säk'^{w}ät'a town Administration. Among these woredas, Ximt'aŋa is mainly spoken in Zik'^{w}ala, Säk'^{w}ät'a, as well as Abärgälle.

According to Appleyard (1984 and 2006), Ximt'aŋa is a member of Central Cushitic (Agew group) language family which itself belongs to Cushitic Afro-Asiatic macro-family. The Agew group includes the four interrelated languages, namely, Ximt'aŋa, Bilen, Awŋi and Kemantney. These four languages are again sub-grouped into two branches: Northern and Southern. The northern branch includes Bilen, spoken in Keren, Eritrea; Kemantney, spoken in Chilga, Gonder; and Ximt'aŋa, spoken in Wollo. The Southern branch includes Awŋi, spoken in Gojjam. Teshome (2007) mentioned that most of the Ximras (speakers of Ximt'aŋa) are bilinguals mainly in Amharic and Ximt'aŋa and in Tigrigna, and Ximt'aŋa. Some of the adults are monolinguals in the language, and very few of them are polyglots in Ximt'aŋa, Amharic and Tigrigna.

According to the 2007 census of Ethiopia, the Wag-Ximra Administrative Zone total number of population is 426, 038. The report 'Amhara Regional Information Bureau' (2001), shows that, from the total number of the population, 46.84% are Ximt'aŋa, 50.92% are Amharic and 2.1%

are Tigrigna speakers. Other few people use other languages. From the total population, 99.6% are Orthodox Christians, 0.27% are Muslims and 0.13% are other religious followers.

According to Appleyard (1987a), Ximt'aŋa has four main dialect areas. These are

Abärgälle: east of Täkkäze river and north of the T'irare river,

Zik'^{w}ala: east of the Täkkäze and south and west of the T'irare, centering on Zik'^{w}ala district,

Säk'^{w}ät'a: in the region of the town and district of Säk'^{w}ät'a, and

Simen (Sihalla): west of the Täkkäze, in the district of Sihalla, and north along the eastern edge of the Simen massif. Among these, this study focuses on the Säk^{w}ät'a dialect which is spoken in Säk'^{w}ät'a wäräda in which most of the native speakers are found.

1.2. Previous Studies on the Language

Concerning the previous studies of Ximt'aŋa, we have some published and unpublished works. Two of the published materials are Appleyard (1987a) entitled as 'A grammatical sketch of Khamtanga –I' and Appleyard (1987b) entitled as 'A grammatical sketch of Khamtanga –II', which are the general descriptions of the language.

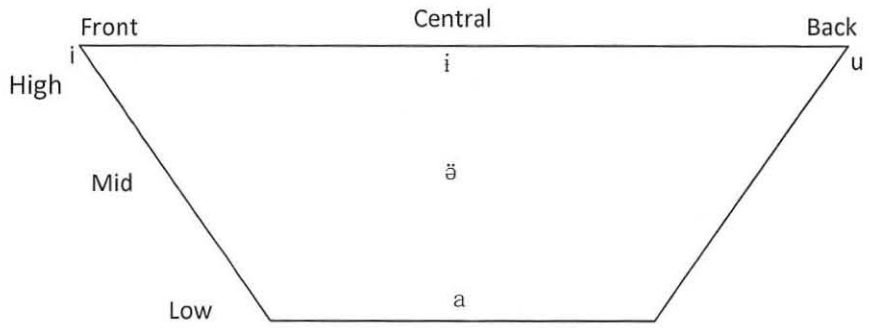
In Appleyard's (1987a) phonological description of the language, thirty one consonants and five vowels have been identified. According to Appleyard (1987a:246), the phonemic inventories of Ximt'aŋa consonants and vowels are presented below:

Table 1. Consonant phonemes of Xɨmt'aŋa

	Bilabial	Labio dental	Coronal	Palatal	Velar	Labio-velar	Uvular	Libio-Uvular	Laryngeal
Plossive stops	b		t d		k g	k^w g^w	q	q^w	
Glotalized stops			t'		k'	k'^w			
Fricatives		f	s z	š			x	x^w	h
Glotalized fricatives			s'						
Affricatives				č ǰ					
Glottalized affricatives				č'					
Nasals	m		n		ŋ	$ŋ^w$			
Lateral			l						
Tap			r						
Semivowels	w			y					

Adopted from Appleyard (1987a: 246)

Table 2. Vowel Phonemes of Xɨmt'aŋa



Adopted from: Appleyard (1987a: 249)

According to Appleyard (1987a), the vowel system of Xɨmt'aŋa is simpler than that of any of the other Agaw languages in that it has five vowel systems as against the seven of Bilen and Kemantney. Awŋi also has an underlying five vowel systems, though as the dipthongs /**ia**/ and /**ua**/ are realized as [**æ**] and [**o**], respectively. Superficially Awŋi may also be said to have seven vowels. As for **e** and **o**, Appleyard (2006) indicated that they can both be reconstructed from

Proto-East Cushitic alongside **a**, **i** and **u**, long and short. Since the latter can also be proposed at the Proto-Cushitic level, there is no problem about their subsequent development into Proto-Agaw. The correspondences of Proto-Cushitic **e** and **o** in Proto-Agaw are, however, much less certain as so few possible cognates can be established. As a result, Ximt'aŋa lacks **e** and **o**.

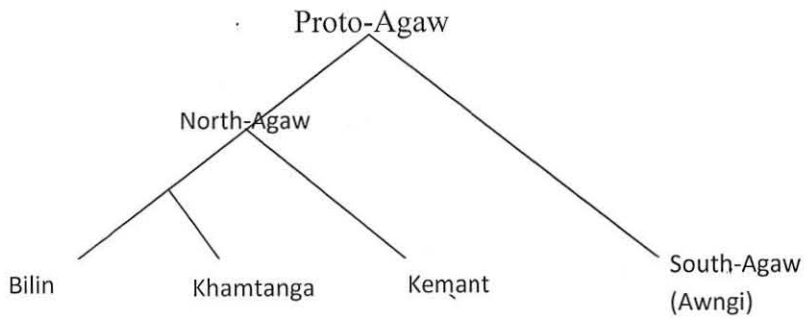
Appleyard (1987a) also noted that there is accent in Ximt'aŋa and the position of the accent is largely a question of morphology. According to him, there are several instances of minimal pairs, for accent, for instance in the case of the gender contrasts; but the special nature of the accented forms are not productive. In the same volume, Appleyard also described the nominal system of the language in four broad sections: nouns, adjectives, pronouns, and numerals. In the second volume,(Appleyard, 1987b), the verbal system of Ximt'aŋa has been described. Here the description is on the derivation of the verb stem and the inflectional morphology of the verb of the language. In describing the derivation of the verb stem, Appleyard (1987b) noted that there are three basic radical extensions for the formation of derived stems from roots which function as verb stems. These are **s**-extension, the **š** -extension, and the **t-** extension. The **s**-extension is connected primarily with the notion of transitivity, or in another way, causation. As in other Agaw and Cushitic languages, a 'double causative' extension also occurs in Ximt'aŋa, and its form is a repetition of the simple causative extension. The radical extension **–(i)š-** with its variant – **(i) št-** regularly show the passive of simple transitive verbs. However, the formation of passives with verbs whose roots end in a sibilant (**s, z, š**) do not employ the extension of **–(i)š –/** and **-(i) št-,** but make use of the **t**-extension. The derivation of passive extension occurs with the function of a reciprocal marker: - **išš** – which is a doubling of the passive **–(i) š.** A radical extension –t-, like in the function of passives in the restricted context of sibilant final stems, also occurs as a non-productive format on such stems as **iq-r-** 'wash', **tə r-** 'come', **čib-r-** 'stand', **si-r-** 'dress on self', and so on. In Ximt'aŋa, as in the other Agaw languages, its current range of functions typically centers a round the notion of the 'middle', reflexive, or auto-benefactive.

The other part of the description of volume II of Appleyard (1987b) is inflectional morphology of the verb. It is indicated that all verbs in Ximt'aŋa are inflected by means of suffix complexes to show person, number, gender, tense, mood, special subordinate verb forms, and separate

affirmative and negative paradigms. The existence of different inflections for subordinate verbs a feature common to most Cushitic languages, but Agaw languages have further developed the process and exhibited the special adverbial paradigms such as conditional, purposive, causal, temporal, concessive, comparative, citational, consecutive, etc., in addition to the relative verb paradigms. The relative verb paradigms can be further differentiated according to the referential status of the head noun in the syntax of the subordinate clause. The extent to which negative verb inflection is developed alongside the affirmative is also a particular development of the Agaw languages. Hetzron (1969), in his work entitled 'The Verbal System of Southern Agaw', also remarked that the Agaw verbal system is extremely rich in forms. He distinguished between the main verbal forms capable of forming an independent predicate, and subordinate verbal forms that depend on a main form. As in other Cushitic and Ethiopian Semitic languages, the Agaw verb stands at the end of the clause, and the main verb at the end of the sentence. Subordinate clauses always precede the main one.

The other published work is Appleyard's (1984) which compares the Agaw languages from a morphological perspective. In his study, Agaw languages, including Xɨmt'aŋa, have a two-term gender system: masculine and feminine. Gender marking in the morphology of case marking in nouns has been identified in all Agaw languages. But the system of gender marking in case marking in Awŋi is different from the system in Xɨmt'aŋa, Bilen and Kemantney. Appleyard (1984) also indicated that in Xɨmt'aŋa, Bilen and K'emantney, plural marking in nouns is heterogeneous and there is no always a one-to-one relationship between a given noun and a certain plural formative device; but in Awŋi, plural marking is homogenous as compared to the others. The other point raised by Appleyard (1984) is the morphology of main and subordinate verb inflection in Agaw languages. He pointed out that the common method of finite verb inflection in Agaw is the suffixation of composite elements to the lexical root, marking such categories as person, tens/aspect, modality, and certain other specific syntactic functions. On the other hand, subordinate differentiation is reflected in the 'auxiliary' component of the verbal complex in Xɨmt'aŋa, Bilen and Kemantney. Appleyard (2006) also indicated that the Agaw languages form a close family that can be divided into two branches, the North Agaw comprising the Bilin, Xamtanga and Kemant clusters, and the South Agaw consisting of Awngi. The internal relationship of the Agaw languages can be established firstly on the basis of shared phonological

and morphological innovation, and is also corroborated by lexical comparison. Hence, based on the phonological, morphological and lexical comparative study, Appleyard (1984:378 and (2006: 4) developed the Proto-Agaw language as shown below:



Mengistu (1984), in his B.A. thesis, describe the morphology of verbs in Ximt'aŋa. He tried to describe the inflectional and some derivational markers of verbs in the language. According to him, verbs in Ximt'aŋa are inflected for person, number, gender, tense, aspect, condition and mood. The inflectional affixes for person, number, and gender are generally identical and consistent in tense inflection, but they are different and inconsistent in aspect and mood inflections. He describes the passive, the causative and the double causative derived stems.

Mengistu (1989) wrote his M.A thesis entitled 'The Structure of Noun Phrase Complements in Khamtanga'. He employed the GB Theory to analyze projection of the head nouns into higher levels and explain the particular relationship between the head and its complements. In addition to the above two unpublished works, Mengistu (1992) has one published material entitled 'The Status of Bound Possessive Pronominal in Khamtanga' that are attached to the possessed noun, and argued that these bound forms are clitics by invoking a general property of clitics; i.e., the property of case absorption.

The other recent unpublished work on the language is Teshome's (2007) MA thesis under the title 'The Syntax of Determiners in Ximt'aŋa'. In his study, he described the constituents of determiners in the language and showed their derivations based on the Minimalist Program. The descriptive part of his work is more important for the present study. He briefly described the noun inflections, articles, pronouns, genitives and quantifiers of the language.

1.3. Statements of the Problem

As we have seen in the previous study section above, works that can be mentioned with reference to Xɨmt'aŋa are very few. Not only the number of the studies but also their scope is limited, and hence there are still various topics, especially syntax, to be studied, and I have been initiated to describe the complement relations in the language.

1.4. Objectives of the Study

The general objective of this study is to examine the morphosyntactic and semantic features of complement relations in Xɨmt'aŋa.

This study has the following specific objectives:

- to examine the semantics of complement types,
- to describe the classes of complement-taking predicates,
- to examine the semantic features of complement relations,
- to describe the morphosyntactic coding of complement relations, and
- to examine the correlation between the morphsyntactic coding of complement relations and the semantics of complement –taking predicates of the language.

1.5. Significance of the Study

The researcher believes that the study will have the following contributions:

- Since Xɨmt'aŋa is not fully studied, this study will fill the gap and serve as a source of knowledge about the complement clauses of the language for linguists, teachers and students.
- Since Xɨmt'aŋa is serving as medium of instruction for primary school in Wag Xɨmra Administrative zone, it will contribute to the preparation of teaching-learning materials.
- It will also serve as a source material for further researches on the language.

1.6. Delimitation of the Study

This study is delimited to subordination, particularly to the complement relations in Xïmt'aŋa. Since there is dialectical variation (as mentioned in section 1.1) in the language, the data used to analyze the complement attempt to examine the complement relations have been taken only from the Sək'^{w}ət'a dialect.

1.7. Methodology of the Study

Data are elicited and recorded mainly from native speakers of the language. Secondary data which are related to this study have also been consulted from the previous studies; but such data have been cross-checked with the native informants.

The data collection technique in this study is elicitation technique. In this technique, the researcher prepared sentences which show complement relations in a way that the analysis of the data is done. The sentences were prepared in Amharic that is the common language for the researcher and informants. Then, data have been collected one by one and cross-checked with the informants. After collecting, checking and organizing the data, a thorough examination of phonemic transcription, translation and analysis of data have been made. The researcher analyzed the data qualitatively by following the Functional Typological Approach in general and applying the Complement Deranking Hierarchy Principle for analyzing the morphosyntactic devises used to code the dependent event in complement relations and the general parameters, such as, the level of clause structure, predetermination, and semantic integration for examining the semantic features of different complement relations, in particular. Then the correlation between the morphosyntactic coding of dependent SoAs and their semantic features across the complement relation types has been examined, based on Cristofaro's (2003) work (see details in the next chapter).

CHAPTER TWO

2. CONCEPTUAL FRAMEWORK OF THE STUDY

This study aims to describe the complement relation which is the type of subordination relations (complement, adverbial and relative relations) in Ximt'aŋa. In order to describe the complement relations in the language, a mechanism underlying the notion of subordination in complement relations is going to be designed.

Dik (1978), Croft (1995), Cristofaro (2003) and others claim that there are two general paradigms for the study of language: Formal paradigm and functional paradigm. According to Dik (1978), in the formal paradigm, a language is regarded as an abstract object (e.g. a set of sentences) and a grammar is defined in terms of formal rules of syntax to be applied independently of the possible meanings and uses of the construction described. In functional paradigm, on the other hand, a language is regarded as an instrument of social interaction between human beings. This means that verbal interaction is a form of structured cooperative activity in the sense that it is governed by social rules, norms, or conventions. Dik (1978:5), on his stand, proposed that, 'The study of the language system must the very start take place within the framework of the system of language use'.

2.1. Formal Paradigm

Formal paradigm refers to the autonomy of Syntax (autonomist formalism) in which the syntactic component of the grammar is independent, largely systematic and largely self-contained with respect to the semantic and pragmatic functional components (Croft, 1995). Cristofaro (2003:7) describes that, 'Formalist theories regard language as an autonomous and self- contained system. This means that there exists a set of non- semantic and non- discourse-derived grammatical properties whose principles of combination make no reference to system-external factors'. This also means that any formal approach does not consider the function of any syntactic construction.

According to Cristofaro (2003:1), 'the concept of 'subordination' is usually defined on the grounds of morpho-syntactic criteria such as clausal embedding. Clausal embedded clause is a

clause functioning as a constituent of another clause', as shown in the following English sentence:

1) CL [I said [it was a man [I knew]

In the sentence (1), the clauses [I knew] and [it was a man] are embedded in the other clause [I said]. We can also show the clausal embedment in the source language, Xɨmt'aŋa, as follows in 2) and (3):

2) CL [ŋɨr ɨfärä-d CL [ɨjɨr-dyä-t t'az-ø-ans] dämz-ä-č]
she boy- DEF man-DEF-ACC hit-3MSG-COMP want-PRES -3FSG
'She wants the boy to hit the man.'

3) CL [yan CL[yɨ-s'amräd-d tär- ø -äk^{w}] hasb- ø -u-n]
I my- friend –DEF come 3MSG-PRES think-1SG-PAST-1
'I thought that my friend come.'

In these sentences, we have embedded clauses such as [**ɨfäräd ɨjɨrdyät t'azans**] in (2) and [**yɨs'amräd täräkw**] in (3) which are embedded in the main clauses [**ŋɨr dämzäč**] and [**yan hasbun**], respectively.

According to Cristofaro (2003), even though embedding actually allows one to make a significant distinction between the embedded vs. non–embedded cause types, there are two major problems such as the Continuum Problem and the Mismatch Problem.

In Continuum Problem, even if one is able to individuate distinct subordinate clause type, for example, embedded vs. non- embedded clauses, (i) these clause types will not be internally consistent as far as their morphosyntactic structure is concerned and (ii) the distinction will fail to account for all the clause linkage types found across the world's languages (Cristofaro, 2003), as we can compare the examples given in (5) with the examples given in (6a) and (6b) below.

The Mismatch Problem comes from the fact that the same semantic and/or pragmatic functions (relationships) are not coded by the same construction types across languages. Therefore, if one defines subordination on the basis of some formal parameters such as embedding, there might be languages that do not have subordinate clauses at all, or at least do not use them for all of the semantic and pragmatic functions associated with subordination in other languages (Cristofar,

2003). For instance, in (5) below, English use infinitive embedded, morphologically reduced clause; but in (6a) and (6b) from Amharic and Ximt'aŋa respectively, they use embedded but not reduced clauses for the same semantic function. Thus, for the same function the construction type of clauses differ across languages (Cristofaro, 2003).

(4) While **staying** in Paris, we went to a couple of concerts

(5) I want **to see** the dog.

(6) a. ine wišša-w-in li- ø -?ay ?-fällig-all-ähu
I dog-DEF-ACC COMP-1SG- see.IMPRF 1-want.IMPRF-PRES-1SG
'I want to see the dog.'
b. yan gizin-dyä-t qal- ø - č'- -ä tämz-ø-äk^{w}-in
I dog-DEF-ACC see-FUT-1SG-COMP want-1SG-PRES-1
'I want to see the dog.'

'Another morphosyntactic criterion that is traditionally invoked to define subordination is the use of non-finite verb forms such as infinitives, gerunds and the like' (Cristofaro, 2003:1). According to Cristofaro (2003), verb forms are traditionally distinguished as either finite or non finite. Finite verb forms are limited by parameters such as tense, aspect, mood, number and person, and on the other hand non finite verb forms are not marked for these parameters. Additionally, non finite verb forms can not usually occur in independent clauses. We can see the examples in (4) and (5) above from English.

The underlined verbs in (4) and (5) are gerundive and infinitive forms which occur in the embedded clauses, 'while staying in Paris and 'to see the dog' respectively. Such non-finite forms in sentences are traditionally used to describe subordination in a language.

However, the analysis of subordination based on formal criteria becomes language dependent (specific). For instance, the finite vs. non- finite verb distinction which refers primarily to the verbal system of European languages, turns out to be of limited cross- linguistic applicability (Cristofaro, 2003). Because, not all languages display the same morpho-syntactic structures. That means, not all languages use embedded clauses or non finite verb forms to express a particular relation between events. Different languages use different formal ways to express a particular conceptual situation or relation, as shown above in (6a) from Amharic, in (6b) from Ximt'aŋa and in (5) from English (i.e. the translated version in 6).

When we compare the sentences in (6a) and (6b) with the English version in (5), all the three sentences use complement clause to express the same concept, but with different formal ways. The complement ' to see the dog' in (5) is the infinitive complement type because of the lack of person, number, tense, aspect and mood distinctions on the verb 'see'. In (6a) and (6b), on the other hand, the verb form of the complements are inflected for person in both cases but the verb of the complement in (6a) is marked for aspect while the verb of the complement in (6b) is marked for tense. Hence, the complement type of these dependent clauses having verb forms marked for person and tense or aspect is the subjunctive type not the infinitive type like the English one. In all the three cases, there is complementizer, but they differ in their appearance in the clauses. All these show that different languages have more or less different formal ways to express a particular concept. This implies also that the morphosyntactic criterion of using non-finite verb forms fails to define the notion of subordination (complementation, in particular) across languages. Therefore, because of the inapplicability of the morphosyntactic criteria across languages, we cannot rest on the formal paradigm to describe the complement relations of Xɨmt'aŋa in the present study.

2.2. Functional Paradigm

Functional paradigm is a general theory of the grammatical organization of natural languages, which was initiated by Dik (1978) as Functional Grammar, based on a functional view of the natural language (Asher, 1994). According to Dik (1978), as mentioned in (Asher, 1994), language is first and foremost conceived as an instrument of human communication. This means that speakers and addressees can influence each other's content of mind or pragmatic information and ultimately each other's action patterns through natural language. In this way, a natural language is basically a pragmatic phenomenon (Asher, 1994). This means that pragmatics is more important than semantics and semantics is more important than morphosyntax, and hence, autonomy of syntax is rejected, based on Dik (1978), as quoted below from Asher (1994), 'The forms of language are there in order to act as carriers of meanings; and meanings are there in order to transmit messages from one speaker to another within the context and situation of actual speech events. Thus, morphosyntax is sub- servant to semantics, and semantics is sub-servant of pragmatics. The 'autonomy of syntax' is explicitly rejected' (Asher, 1994: 1318).

However, here also, there is a problem of autonomy for functionalism. According to Sapir (1921) as mentioned in Croft (1995), there is curious lack of accord between form and function; and this is an undeniable fact of all languages. The notion of autonomy emerges from this fact and it is yet problematic for functional analyses. As quoted in Croft (1995), Sapir (1921) describes that the basic difference between structuralism and functionalism is the opposite direction each goes from the fact that there is strange and unusual lack of linkage between form and function. The structuralist takes the lack of accord to be evidence for autonomy of syntax, while the functionalist instead focuses on the unconscious analysis into individual concepts which may be complicated with or overlaid by the more irrational factors.

In order to avoid the opposition between the two paradigms, Croft (1995) argues that linguistic theories must accommodate the facts that are said to support autonomy, while finding a place for linguistic function. In other words, there should be many intermediate positions that integrate the two realities Sapir (1921) describes. Based on this argument, 'the structuralist- functionalist debate comes down to the question: to what extent can 'grammar' be considered as system of formal structures that is autonomous from its function?' (Croft,1995:492).

In order to solve the problem of autonomy, Croft (1995) identifies two claims about a linguistic system: a weaker claim, that it includes arbitrariness and a strong claim, that it is self contained. Here we need to clarify the terms, autonomy, arbitrariness, systematicity and self- contained as follows:

- **Autonomy** – 'is the sum total of at least two different notions: arbitrariness and self-containedness' (Croft, 1995:490).
- **Arbitrariness-** 'is the first and in some respects most fundamental property of autonomy. It is the syntactic component that contains elements and rules of combination which are not derivable from semantic or discourse categories and their combinations' (Croft, 1995: 494).
- **System** – 'the term system here is to mean that there is a set of interlocking regularities that structure the syntactic units and constructions of a language' (Croft, 1995:495).
- **Self-containedness** – 'If the definition of system here includes only the concept of syntax, then we may say the system is self- contained. That is to say, the rules of system interact with each other but do not interact closely with the rules existing elsewhere. For the autonomy of syntax, 'elsewhere' is generally taken to be semantics' (Croft, 1995:495).

2.3. Types of Functional Approaches

Croft (1995) describes that, given the weaker and stronger claims, for any given functional analysis one must ask which of these autonomy claims it actually challenges. Thus, with respect to functional analysis in syntax, there are three logically possible conclusions that might be drawn and four functional positions (approaches) associated with each of the conclusions presented below (Croft, 1995:491):

a. Syntax is arbitrary and self- contained

- AUTONOMIST FUNCTIONALISM

b. Syntax is arbitrary, but not self- contained

- MIXED FORMAL /FUNCTIONALISM AND
- TYPOLOGICAL FUNCTIONALISM

c. Syntax is not arbitrary or self- contained

- EXTREME FUNCTIONALISM

Now let us discuss the four named functionalisms briefly based on Croft (1995).

1. **AUTONOMIST FUNCTIONALISM**: Compatible with the self-containdness of syntax.

   In this approach, syntax is viewed as arbitrary and self- contained. In other words, the syntactic component of the grammar is independent, systematic and self-contained with respect to semantic, pragmatic and/or discourse-functional components. It accounts for constraints on syntactic behavior in terms of the function of a systematic construction, but does not attempt to account for the syntactic structure of that construction (Croft, 1995).

2. **MIXED FORMAL/ FUNCTIONALISM:** challenging the self- containedness of syntax

   According to Croft (1995), in mixed approach, syntax is arbitrary, but not self- contained. In other words, syntax is independent relative to semantic counter part and systematic but not self- contained. This also means that there are partial reductions of syntactic constraints to functional principles that pose a move series problem for self- containedness of syntax.

3. **TYPOLOGICAL FUNCTIONALISM:** Limiting arbitrariness in syntax

   In this approach, like in the mixed formal/functionalism, syntax is arbitrary, but not self-contained. In other words, syntax is arbitrary and systematic also, yet not self-contained; but, arbitrariness of syntax is given a much more limited role than in the mixed approach. Croft (1995) notes that the arbitrary parts of the analysis in the mixed analysis are language-

specific, while the universal properties instantiated in typological functional analysis are functional. This means that the typological functional analyses are more functional than mixed analyses with regard to universals, not with regard to autonomy.

4. **EXTREME FUNCTIONALISM:** Denying Arbitrariness in syntax.

   In this extreme position, syntax is not arbitrary or–self- contained. In other words, it denies arbitriness in syntax, and hence, grammar can not be attested (Croft, 1995). Among the above functional approaches, the typological- functional approach is going to be applied in this study. Here after, we can make argument why we intend to use the typological-functional approach (or hereafter, functional-typological approach, to give emphasis on function).

2.4. Functional – Typological Approach

This approach, according to Cristofaro (2003), is an essentially empiricist approach and takes as its starting point the existence of cross- linguistic variation and aims to find the patterns underlying it. The functional – typological approach seeks to account for language structure in terms of language function, in that, at least certain aspects of language structure depend on, and can be explained in terms of language function. This is the strongest and most distinctive explanatory hypothesis of the functional typological approach (Cristofaro, 2003).

According to Cristofaro (2003), the basic idea in this approach is that, a set of interconnections exist between morphosyntactic structures and their semantic and pragmatic functions. More over, interconnections are postulated between the grammar of individual speakers and language external factors such as language use, language acquisition, and language processing. This view, which Croft (1995) labels integrative functionalism, is partially evident in the works of scholars such as Byee (1985), Do Bois (1985 and 1987), Givon (1990), Hopper (1985), and Croft (2000), as mentioned in Cristofaro (2003).

Cristofaro (2003) and the other proponents of functional- typological approach provide the following arguments for the valuablity of the approach.

1. It is valuable for cross- linguistic comparability. This argument basically consists of two distinct issues. First, languages need not display the same morphosyntactic structures. Therefore, if a particular morphosyntactic structure is selected as the object of investigation, a number of languages will have to be left out that do not display the

relevant structure. Second, the same morphosyntactic structures do not perform the same function cross- linguistically, and conversely, the same function is not performed by the same structures. As a result, by comparing structures on the ground of formal similarity, one runs the risk of comparing completely different phenomena.

2. Typologists assume that functional situations, as defined in semiotic terms, are universal across languages. As Bates and MacWhinney (1989) cited in Cristofaro (2003:11), 'all human beings have essentially the same apparatus for perception, articulation, learning and memory, and share a common set of social concerns'.
3. The use of functional definitions involves some real advantages for cross-linguistic research, and that the theoretical value of the analysis is actually reduced if one uses the formalist definitions.

Therefore, the phenomenon under investigation should be defined in language- independent, that is, functional terms.

2.5. The Notion of Complement Relation and its Methodological Premises

In this section, first, we shall discuss about the notion of complement relations; and then, based on the notion, we will design a method for examining the complement relations in Xɨmt'aŋa.

2.5.1. The Notion of Complement Relation

In keeping with the functional- typological approach, the notion of complement relation refers to a dependent clause functions as an argument of a main predicate (Noonan, 1985 and Cristofaro, 2003). According to these scholars, the aim of this definition is to free the definition of complement relations from any specific formal feature of the constructions coding them. According to Cristofaro (2003), complement relations link two SoA (State of Affair) such that one of them (the main clause) entails that another one (the dependent clause) is referred to. This is illustrated in (7) below:

7) He thinks [that she will arrive tomorrow].

In the example (7), the introduction in the discourse of the SoA 'He thinks' requires that the SoA representing the object of thought, namely 'she will arrive tomorrow' also be specified. Both

'that she will arrive tomorrow' and 'He thinks' cannot stand on their own. As far as the latter clause is concerned, inability to occur in isolation is not due to any morphosyntacic reason, but to the fact that the semantic features of complement- taking predicates necessarily involve reference to another clause.

The assumption that a complement clause functions as an argument of the main predicate usually implies that this clause is embedded in the main clause as a nominal constituent of it.... In fact, there are languages where the dependent clause in complement relation does not function as an argument of the main predicate, and is not embedded (Cristofaro, 2003:96).

Here, we have to bear in mind that it is not always the case that a dependent clause in a complement relation functions as an argument of the main predicate, and is embedded, in all languages. For instance in Muna, as mentioned by Cristofaro (2003), 'The clause expressing the dependent SoA is not embedded in the other, and is cross- referenced by pronominal form on the main verb (**-e**, 'it')'.

Muna (Austric, Austonesian, Malayo- Polinesian)

8) a- kona- e [ome- gholi ghunteli]
ISG.REAL- think – it 2SG.REAL – buy egg
'I though you had bought eggs.'
(Cristofaro, 2003:96)

From this example, we can understand that the functional definition of complement clauses proposed here accounts for all the cases where the dependent clause is actually an argument of the main predicate and the cases where it has a different syntactic status. In other words, this definition does not oblige one to assume that dependent clauses in complement relations function as syntactic arguments of the main predicate, which need not be the case for all complement relations in all languages.

Therefore, the assumptions of this- study, based on the above points, are complement clause in Xɨmt'aŋa functions as an argument of main predicate, and there might be the case that dependent clause in complement relation does not function as an argument of the main predicate. But, whatever it is, it can be treated with the functional notion.

2.5.2. Methodological Premises

In order to examine the complement relations in line with the functional typological approach, for out best, our analysis follows the same line as the recent works about subordination, such as Cristofaro (2003) and Noonan (1985). The method proposed especially in Cristofaro (2003) is integrative, in that, first the semantic features of the various complement relation types can be described in terms of three general parameters, such as, the level of clause structure at which the complement relation is established, predetermination of the semantic features of the linked SoAs, and the semantic integration between them. Then, the morophosyntatic structures used to code the dependent SoA in complement relation types can be described by means of Complement Deranking Hierarchy which link the occurrence of a certain features in a given language to the occurrence of other features in the same language and, account for patterns in linguistic variation. Then a connection is established between the morphosyntactic hierarchies and the semantic features of individual complement relation types (Cristofaro, 2003).
Now we shall give a brief highlight about the procedures.

According to Givon (1990), Hopper and Thompson (1984) and Croft (1990), as mentioned in Cristofaro (2003), the semantic features of complement relations can be identified on the basis of the predicate coding the main SoA, or complement- taking predicate. In order to examine complement relations, first, one should know the classes of complement – taking predicates. In Noonan (1985) and Cristofaro (2003), the following predicate classes are examined:

(i) **Modales** ('must', 'can', 'may' 'be able', etc.)
(ii) **Phasals** ('start', 'begin', 'continue', 'stop', etc)
(iii) **Manipulatives** ('order', 'make', 'persuade', 'force', etc)
(iv) **Desideratives** ('want', 'wish', 'hope', etc)
(v) **Perception** ('see', 'hear', 'feel', 'watch', etc)
(vi) **Knowledge** ('know', 'understand', 'realize', etc)
(vii) **Propositional attitude** ('think', 'believe', 'suppose', etc)
(viii) **Utterance** ('say', 'tell', 'report', 'promise', etc)

These predicate classes involve different complement relation types between main and dependent SoA. Based on the notion of these predicates, we can examine the semantic features of complement relations in terms of the parameters mentioned above.

To analyze the morphosyntactic structures of complement relations, two main parameters are used: the verb form and participant coding (Cristofaro, 2003).

The verb forms can be distinguished on the bases of the complement clause types in which they can occur. That means, a verb form can be used in two ways only: either it can occur in independent declarative clauses, or it cannot. As a result, cross- linguistically, there might be verb forms occurring both in dependent clauses and in independent declarative clauses , and verb forms occurring in dependent clause only (Cristofaro, 2003). According to Cristofaro (2003), this distinction is basically functional, in that, it defines verb forms on the grounds of which clause types they can express, regardless of the specific structural features of these forms.

The other main parameter, participant coding, is used to examine whether or not participants are coded in the same way in independent and dependent clauses with regard to whether or not verb agreements are overtly expressed in the dependent clause, and whether participants are coded as possessors or not (Cristofaro, 2003).

According to Cristofaro (2003:131), in general, cross- linguistic analysis shows that the distribution of the various morphosyntatic devices used to code the dependent SoA in complement relations follows ordered patterns of variation; and these patterns are defined by a major hierarchy, the Complement Deranking Hierarchy. According to Cristofaro (2003:131) the **Complement Deranking Hierarchy** looks like the following:

Modals, Phasals>Mainpulatives('make', 'order'),Desideratives> Perception> Knowledge, Proposional attitude, Utterance

This Complement Deranking Hierarchy should be read as: if any non-independent declarative clause – like construction is used to code the dependent event in complement relation at any point on the hierarchy, then it is used for all complement relations to the left of the hierarchy (Cristofaro, 2003). Based on this hierarchy, we can examine the morphosyntatc structures used to code dependent events whether or not they differ in structure from an independent declarative clauses taken in isolation. The hierarchy can hold for a variety of phenomena

Finally, A correlation between the morphosyntactic coding of complement relations and the semantics of complement relations will be examined, based on the following schema in table 3 adopted from Cristofaro (2003:137).

Table 3. Cross-linguistic coding of complement relations and semantic factors

Hierarchical pattern	Morphosyntactic phenomenon	Semantic factors
Mod., Phas., Des., Man., Perc. > others	Lack of TA distinctions	Predetermination; semantic integration
Mod., Phas. > Des., Man., Perc.		Semantic integration
Mod., Phas. > Des., Man., Perc. > others	Lack of M distinctions	
Mod., Phas., Man., Des., Perc. > others	Case marking/ adpositions, possessor coding	
Mod., Phas.> others	Lack of person agreement distinctions, Lack of arguments	
Mod., Phas., Man.> Perc., Know., Prop.a., utt.		Predetermination
Des. > perc.> know., prop. a., utt.		Sharing of participants between main and dependent SoA (not predetermined); semantic integration
Man. ('order'), Des.> perc.	Lack of TAM distinctions	The dependent SoA is unrealized or its mood value is irrelevant; the main predicate involves an element of will

CHAPTER THREE

3. THE SEMANTICS OF COMPLEMENT RELATIONS

According to Noonan (1985), complementation is basically a matter of relating a particular complement type to a particular complement-taking predicate. The reason for this relation is the semantic relation between predicate and complement that is inherent in the meaning of the complement-taking predicate (CTP). In Xɨmt'aŋa, for instance, manipulative predicates as in (1a&b) and knowledge predicates as in (2a&b) are related to different complement types:

1) a. yan t'amtəw tər - ∅ -ans s'ab - ∅- əkʷ-ɨn
I Tamtəw come-3MSG-COMP make-1SIG-PRES-1
'I make Tamtəw to come.'
b. yan tamtəw tər - ∅ -ans s'ab - ∅ - u-n
I Tamtəw come-3MSG-COMP make -1SG-PAST-1
'I made Tamtəw to come.'

2) a. yan t'amtəw tər-t'-u aq- ∅- əŋə arq- ∅- əkʷ-ɨn
I Tamtəw come-FUT-3MSIG AUX-3MSIG-COMP know-1SG-PRES-1P
'I know that Tamtəw will come.'
b. yan t'amtəw tər - ∅ - əŋə arq - ∅ - u-n
I Tamtəw come-3MSG-COMP know-1SIG-PAST-1
'I knew that Tamtəw came.'

In the manipulative predicate **s'ab** – 'make', the complement type is always expressed with imperfective aspect in relation to the CTP and has the complementizer –**ans** both in the present and past forms of the CTP **s'ab** – 'make'. On the other hand, in the knowledge predicate arq- 'know', the complement type differs from the complement type of manipulative predicate in that it has a complementizer - əŋə both in the present and past forms of the CTP **arq-** 'know', but the complement type is either with imperfective aspect as in (2a) or with the perfective aspect with respect to CTP, though no formal marker of aspect in their affirmative forms. These different forms of complement types resulted from the different semantic features of the manipulative predicate **s'ab** – 'make' and the knowledge predicate **arq-** 'know'. This will be discussed in detail later in section (3.2).

Additional factors in the matching of a particular CTP are the semantic possibilities inherent in the morphology and syntax of the complement type (Noonan, 1985). For example, in Xɨmt'aŋa, different complement types can be used with the same CTP, as in (3) and (4), exploiting their inherent meaning potential.

3) a. yan gizin̓-d tər - ∅- ans təmz - ∅ - ək^{w}-in
I dog-DEF come-1SG-COMP want-1S-PRES-1
' I want the dog to come.'
b. yan xabäšə x^{w}-ənəw təmz - ∅ - ək^{w} –in
I bread eat-NZR want – 1SG-PRES-1
'I want eating bread.'

4) a. yan misənə tər - ∅ - an̓^{w} qal - ∅-u-n
I Misənə come -3S- PROG see-1SG-PAST-1
'I saw Misənə coming.'
b. yan misənə - tu tər - ənəw – d qal - ∅-u-n
I Misənə – POSS come-NZR-DEF see-1SG-PAST-1
'I saw Misənə's coming.'

As we can see the data in (3) and (4) above, the semantic relation between CTP and complement is based on the inherent meaning of the morphology of the complement types. For instance, the predicate **təmz-** 'want' in (3b) and the predicate **qal-** 'see' in (4b) can be replaced to each other; this is because, the dependent verbs in (3b) and (4b) have the same morphology, i.e., both are nominalized forms. Whereas, the predicate **təmz** – 'want' in (3a) and the predicate **qal-**'see' in (4a) cannot be replaced to each other since the two verbs of the complements differ in their morphology. In supporting this, Noonan (1985), complement type can either contribute or fail to contribute certain sorts of information to the construction as a whole and so is intrinsically better suited for certain kinds of CTPs and to certain discourse function.

3.1. The Semantics of Complement Types in Ximt'aŋa

According to Noonan (1985:91), 'factors that can affect the semantic potential of a complement type are inherent modality, such as mood distinctions; degree of reduction, choice of complementizer, method of syntactic relation to the matrix clause: subordination versus parataxis, and grammatical status of the notional predicate: verb, noun (in nominalized complements), adjective (in participial complements)'. Based on these factors, the complement types of Ximt'aŋa behave as follows.

3.1.1. Mood Distinctions

The term mood refers to a grammatical category, while modality refers to a semantic category. The two are related in that mood categories can usually be viewed as grammaticalizations of

modalities (Noonan, 1985). According to Noonan (1985), we have two types of mood distinctions in general, such as indicative and subjunctive. The term indicative in complementation refers to the mood which most closely resembles that of simple declarative sentences; whereas, the essence of the subjunctive in the complementation is the coding of complements that are in some way dependent (Noonan, 1985). According to Noonan (1985:92), "A complement is dependent if some aspect of its meaning or interpretation follows from information given in the CTP. Not all complements, however, are coded as subjunctives in any given language with an indicative subjunctive distinction'. There are three sorts of complement dependency (Noonan, 1985:92):

1. Time reference dependency
2. Truth value dependency
3. Discourse dependency

1. Time Reference Dependency

A complement has dependent or determined time reference (DTR) if its time reference is a necessary consequence of the meaning of the CTP', Noonan (1985: 92). According to Noonan (ibid), time-reference dependency, is the most basic of these dependencies, and the property of DTR is almost always included in the modalities represented by the subjunctive.

A complement having DTR typically refers to a future world state relative to the time reference of the CTP. We can illustrate this in Xɨmt'aŋa as follows:

5) yan ŋɨr tər – r – ans azz - ∅ - u-n
I she come - 3FSG-COMP order - 1SG-PAST-1
'I ordered her to come.'

6) yan ŋɨr tər – a – y - əŋə təmz - ∅ - əkʷ - ɨn
I she come-IMPRF-NEG-3FS-COMP want-1SG-PRES -1
'I want her not to come.'

7) ŋay yan ɨtt fit' - ∅ - ans bənn – ŋ - əkʷ
they I there go - 1SG-COMP need-3PL-PRES
'They need me to go there.'

8) ŋay ɨtt fir – t' – ŋ - ə t'uš - ŋ - əkʷ
they there go-FUT-3PL-COMP must-3PL-PRES
'They must go there.'

9) ŋəŋ atinə ward – t' - ∅ - ə čəl – ∅ - əkʷ
he flute play- FUT-3MSG-COMP can-3MS-PRES
'He can play flute.'

10) ŋəŋ ginzib- d siŋ^{w} - ∅ - ans ak'd - ∅ - ək^{w}
he money-DEF steal - 3MS-COMP plan-3MS-PRES
'He plan to steal the money.'

All the complements above from (5)- (10) have only a future time reference with respect to the time reference of the CTPs **azz-** 'order', **təmz-** 'want', **bənn** – 'need', **t'uš** – 'must', **čəl-** 'can' and **ak'd-** 'plan'. But in (11) and (12) below, the complements have a past time reference of the CTPs **azz-** 'order' and **təmz-** 'want', and thus are ruled out as follows:

11) * yan ŋir tigra tət- r- ans azz- ∅ - ək^{w} - in
I she yesterday come-3FSG-COMP order-1SG-PRES-1
'I order her to come yesterday.'
12) * yan ŋir tigra tər – a- y-r - əŋə təmz - ∅ -ək^{w}-in
I she yesterday come-IMPERF-NEG-3FSG-COMP want 1SG-PRES-1
'I want her not to come yesterday.'

As provided above, CTPs that represent commands, requests, intentions, desires, and expressions of necessity, ability, or obligation are among those whose complements have DTR (Noonan, 1985). On the other hand, complements to many CTPs have Independent Time Reference (ITR). Complements with ITR include those that assert, report, comment on as background, or make truth-value judgments about their complements. These are illustrated as follows:

13)a. yan misənə firə -dyə - t x^{w} - ∅ - əŋə arq - ∅ - ək^{w} - in
I Misənə fruit-DEF-ACC eat-3MSG-COMP know-1SG-PRES-1
'I know that Misənə is eating the fuirt.'
b. yan misənə firə - dyə - t x^{w} - ∅ - əŋ^{w} aq- ∅ - əŋə arq - ∅ - ək^{w} – in
I Misənə fruit-DEF-ACC eat-3MSG-PROG AUX-3MSG-COMP know-1SG-PRES-1
'I know that Misənə is eating the fruit.'
c. yan misənə firə - dyə - t x^{w} -t'-u aq- ø - əŋə arq - ∅ - ək^{w} – in
I Misənə fruit-DEF -ACC eat-FUT-3MSG AUX-3MSG-COMP know-1SG-PRES-1
'I know that Misənə will eat the fruit.'
14)a. ŋir iǰŧr- d ǰirwə - dyə - t siŋ^{w} - ∅ - əŋə hasb - ə - č
she man-DEF chicken-DEF-ACC steal -3MSG-COMP think-PRES-3FSG
'she thinks that the man stole the chicken.'
b. ŋir iǰŧr-d ǰŧrwə - dyə - t siŋ^{w} – t' - u aq - ∅ - əŋə hasb - ə - č
she man-DEF chicken-DEF-ACC steal-FUT-3MSG AUX-3MS-COMP think-PRES-3FS
'She thinks that the man will steal the chicken.'

15)a. yan misänä tär-t'-u yəŋ y - ∅ - ək^{w} - in
I Misänä come-FUT-3MSG be say-1SG-PRES-1
'I say that Misänä would come.'
b. yan misänä tär-∅-u y -∅ - ək^{w} - in
I Misänä come-3MS-PAST say-1SG-PRES-1
'I say that Misänä came.'

16)a. yan misänä tär – t' – u aq - änəw – d k'ən - ∅ - ək^{w} - in
I Misänä come-FUT-3MSG AUX-NZR-DEF like-1SG-PRES-1
'I like that Misänä will come.'
b. yan misänä tär- i-y- əw aq – änəw-d k'ən - ∅ - ək^{w} – in
I Misänä come-PERF-NEG-3MSG AUX-NZR-DEF like-1SG-PRES-1
'I like that Misänä did not come.'

17)a. ŋir iǰɬr-d ǰɬrwə - dyə - t siŋ^{w} - t' – u aq - ∅ - əŋə t'art'irš - ə- č
she man-DEF chicken-DEF-ACC steal-FUT-3MSG AUX-3MSG-COMP doubt-PRES-3FSG
'She doubt that the man would steal the chicken.'
b. ŋir iǰir-d ǰɬrwə - dyə - t siŋ^{w} - i- y - əw aq - änəw – d t'art'irš - ə - č
she man-DEF chicken-DEF-ACC steal-PERF-NEG-3MS AUX-NZR-DEF doubt-PRES-3FSG
'She doubt that the man did not steal the chicken.'

As we see the examples in (13), (14), (15), (16) and (17), the time reference of the complement is not bound by the time reference of the CTP and such complements are indicative in their mood. For instance in (16a), the time reference of the complement, **misänä tärt'u aqänäwd** 'that Misänä will come' is in the future relative to the time reference of the main clause, **yən ... k'ənək^{w}in** 'I like...'. For the same time reference of this main clause, the time reference of the complement, in (16b), **misänä täriyäw aqänäwd** 'that Misänä did not come', is in the past.

2. Truth Value (epistemic) dependency

As Noonan (1985:92) noted that, 'A complement is truth-value dependent if the complement construction containing it involves an explicit qualification of commitment to the truth of the proposition embedded in the complement'. According to Noonan (1985), truth value dependent complements are those whose CTP expresses a kind of propositional attitude toward the truth of the complement, for example CTPs such as *think*, *believe*, *doubt*, *deny* and *be possible* in English. Complements to such predicates have ITR. A much more situation is for languages to distinguish between positive propositional attitudes and negative or dubitative propositional attitudes. The complements with positive propositional attitudes or with assertions and reports of

assertions are indicative and the negative or dubitative propositional attitudes with DTR complements are subjunctive, in their moods. These can be illustrated with Ximt'aŋa data as follows:

Indicative Complements

The indicative complements are associated with the CTPs such as **diq^{w}** – 'speak/tell', **hasb-** 'think', **k'äsäw yäŋ** 'it is good', **wäš-** 'hear', **yi-** 'say', **k'än-** 'like', etc. which exports positive propositional attitudes or assertions and reports of assertions. Let us see the examples:

18) yan misänä tär – t' - u aq - ∅ - äŋä diq^{w} - ∅ - u – n
I Misänä come-FUT-3MSG AUX - 3MSG -COMP speak-1SG-PAST-1
'I spoke that Misänä will come.'

19) ŋäŋ kit zilaq - t - t ir-∅ aq – r - ∅ - äŋä hasb - ∅ - äk^{w}
he you tire-FUT-2 - 2SG AUX-2- 2SG-COMP think-3MSG -PRES
'He thinks that you will tire.'

20) kit čiŋ - är aq - änä^{w} –d k'äsäw yäŋ
you meet-1S AUX-NZR-DEF good be
'It is good that I met you.'

21) yan kit ginzib- d ŋi - gis yiw -r- ∅ - äŋä wäč' - ∅ - u- in
I you money-DEF his - DAT give-2-2SG-COMP hear-1SG-PAST-1
'I hear that you gave him the money.'

22) yan misänä tär – t' - u y - ∅ - u –n
I Misänä come-FUT-3MS say-1SG- PAST-1
'I said that Misänä will come.'

23) yan misänä tär- äw aq - änäw – d k'än - ∅ - äk^{w} – in
I Misänä come-3MSG AUX-NZR - DEF like-1SG-PRES-1
'I like that Misänä come.'

In all the examples from (18-23), the complements are indicative; and they can be distinguished with their realis modality. Because, realis modality is associated with complements whose properties are asserted as a fact or commented on as a factual or actual event or state (Noonan 1988). For instance, in (198), the message in the complement **misänä tärt'u aqäŋä** 'that misänä will come' is presented as fact with the CTP **diq^{w}** – 'speak'.

Subjunctive Complements

Subjunctive complements are associated with CTPs having negative or dubitative propositional attitudes and DTR contexts such as requests, commands, intentions, desires, etc., as can be illustrated below.

24) yan ŋəŋ tər- t' - u aq- ∅ - əŋə t'artirš- ∅ - əkʷ – in
I he come-FUT-3MSG AUX-3MS-COMP doubt-1SG-PRES-1
'I doubt that he will come.'

25) yan ŋəŋ tər – t' - u aq -∅ - əŋə amn - a – k'ər - m
I he come-FUT-3MSG AUX -3MSG-COMP believe-IMPRF-FUT-1SG - FNTZR
'I do not believe that he will come.'

26) yan ŋəŋ tər- a-y - ∅ - əŋə təmz - ∅ - əkʷ – in
I he come- IMPRF-NEG-3MSG- COMP want-1SG-PRES-1
'I want him not to come.'

27) yan ŋəŋ tər-a-y - ∅ - əŋə gəwt' - ∅ - əkʷ – in
I he come-IMPRF- NEG-3MSG-COMP fear-1SG-PRES-1
'I am afraid that he will come.'

28) yan ŋəŋ tər - ∅ - ans azz- ∅ u – n
I he come-3MSG-COMP order- 1SG- PAST – 1
'I ordered him to come.'

29) tər - ənəw misənə - s bənnizəw yəŋ
come-NZR Misənə -DAT necessary be
'It is necessary for Misənə to come.'

30) yan itt fič' - ∅ - č' - ə hasb - ∅ - əkʷ – in
I there go-FUT-1SG-COMP think-1SG- PRES-1
'I intend to go there.'

31) yan qal - ∅ - č' - ə čəl - ∅ - əkʷ - in
I see- FUT-1SG-COMP can-1SG-PRES-1
'I can see.'

All the complements in the above sentences from (24) – (31) have irrealis modality since they do not imply that their SoA is presented as factual event or state (Noonan, 1985). For instance in (31), **qalč'ə** 'I to see' is not asserted as actual event, and hence it has irrealis modality which comes directly from the semantic feature of CTP **čəl** –'can'.

3. Discourse Dependency

'A complement is discourse dependent if the proposition it contains constitutes part of the common ground or background to a discourse', Noonan (1985: 98). According to Noonan

(1985), discourse – dependent complements to commentative (factive) predicates and complements to those negative propositional attitude predicates that constitute denials, such as deny or not believe. Discourse – dependent complements with DTR complements and complements of negative propositional attitude predicates form a non-assertive modality which is coded in the subjective complements (Hooper 1975, Terrell and Hooper 1974, Klein 1977, Guitart 1978; as mentioned in Noonan (1985); and on the other hand, the indicative encodes assertions, repots of assertions, and complements of predicates with positive propositional attitudes; such complements can be called assertive (Noonan, 1985). Let them be illustrated in Ximt'aŋa:

Non-assertive Complements

A non-assertive complement contains a proposition which constitutes a common ground for the speaker and hearers, and hence it doesn't encode new information. Such complements have roles for presenting background facts, negative propositional attitudes, hypothesis, commands, requests, intentions, or desires, etc., as the examples are given below.

32) ŋəŋ maritu mistir - dyə - t čiŋ-ənəw ŋit xazns - ∅ - əkʷ
he Maritu-POSS secret-DEF-ACC get-NZR him regret -3MSG-PRES
'He regrets Maritu's getting the secret.'
('Maritu's getting the secrete make him regret')

33) kiros gəwt' – ənəw ayir win - ∅ - u
Kiros fear-NZR odd AUX-3MSG-PAST
'It was odd that Kiros feared.'

34) yan ŋəŋ fətənə - dyə –t fis - ∅ - an amn - ə - ∅ - k'ər – m
I he Exam-DEF-ACC take-3MSG-COMP believe-IMPERF-NEG-1SG-FNTZR
'I do not believe if he took the exam.'

35) t'amtəw xatmə bər - ənəw- d t'ak'məw yəŋ
Tamtəw town leave-NZR-DEF significant be
'That Tamtəw left town is significant.'

36) yan kit inn tər -a –y - r - ər aq- ənəw-d təkʼawmš - ∅ - əkʷ - in
I you here come-IMPRF-NEG-2-2SG AUX-NZR-DEF deny-1SG-PRES-1
'I deny that you don't come here.'

37) yan t'amtəw kit t'az - ∅ - u yə - ∅ hasb - ə - ∅ - k' ər – m
I Tamtəw you hit- 3MSG- PAST say-1SG think-IMPRF-NEG-1SG-FNTLR
'I don't think that Tamtəw hit you.'

38) yan ŋay tər – ŋ - ans təmz - ∅ - əkʷ - in
I they come-3PL-COMP want-1SG-PRES-1
'I want them to come.'

39) yan ŋay tər – ŋ – ans azz - ∅ - ək^{w} – in
I they come-3PL-COMP order-1SG-PRES-1
'I order them to come.'

The complements in the above sentences from (32)- (39) are non-assertive. For instance, in (39), the complement **ŋay tərans** 'they to come' is non assertive in that it doesn't give discourse independent information rather it encodes discourse dependent request through the CTP **azz-** 'order', or the hearers knows the information in the complement. Therefore, the function of the sentences from (32) – (39) is to comment on the discourse dependent information, but not to assert new information.

Assertive Complements

Assertive complements are not discourse dependent. This means, the proposition of these complements is not part of the common ground of the participants in the discourse or the hearers do not know the information in such complements. Let us see the examples from (40) – (43):

40) yan kiros yi - gis ginzib – dyə-t yiw - ∅ - u y - ∅ - u – n
I Kiros my-DAT money-DEF-ACC give-3MSG-PAST say-1SG- PAST-1
' I said that Kiros gave me the money.'
41) yan kiros ki - gis ginzib yiw-r - ∅ - əŋə hasb - ∅ - ək^{w} - in
I Kiros your - DAT money give-2- 2SG-COMP think -1SG-PRES-1
'I think that Kiros gave money to you.'
42) kiros ki - gis ginzib yiw - ənəw – d k'ən - ∅ - ək^{w} – in
Kiros your - DAT money give – NZR – DEF like – 1SG – PRES – 1
'I like it that Kiros gave money to you.'
43) ŋəŋ kiros bər- t'-u aq - ∅ - əŋə yi - gis diq^{w} - ∅ - u
he Kiros leave-FUT-3MSG AUX-3MSG-COMP my-DAT tell-3MSG-PAST
'Kiros told me that he will leaves.'

The complements in the above sentences are assertive. For instance in (43), the complement **kiros bərt'uaqəŋə** 'that he will leave' is assertive since the information in it is new for the hearer, and the same is true for the other complements in (40), (41) and (42).

The three semantic distinctions underlying the indicative /subjunctive complements oppositions in Ximt'aŋa, therefore, can be shown by the following summary:

Table 4. The three semantic distinctions underlying the indicative – subjunctive complements oppositions in Xɨmt'aŋa

The semantic distinctions underlying the indicative/subjunctive complements oppositions			Complement role
ASSERTIVE	REALIS	INDEPENDENT TIME REFERENCE	assertion report of assertion positive propositional attitude
NON-ASSERTIVE			background (factive)
	IRREALIS		negative propositional attitude hypothetical
		DETERMINED TIME REFERENCE	Commands, requests, intensions, desires, etc

3.1.2. Degree of Reduction

According to Noonan (1985: 100), 'There is a general principle in complementation that information tends neither to be repeated nor lost'. Based on this principle, Noonan (1985) noted that reduced complements are typically associated with predicates whose complements have DTR, and are likely to lack tense distinctions. Such complements for instance, in English, are associated with infinitives which are frequently restricted to DTR contexts since their use elsewhere would result in information loss.

In Xɨmt'aŋa , such reduced complements associate with DTR contexts, such as commands, requests, intentions, desires, etc are subjunctives, not infinitives, since they have at least person agreement distinctions in most cases in both their affirmative and negative forms and aspect distinctions in their negative forms. As seen in (44), (45), (46) and (47) below. But, they are reduced in their tense distinctions in most cases in both affirmative and negative constructions. The reason why is the tense information reduced is that the time reference of complements is already determined by the time reference of the CTPs to be in the future time with respect to the time point of the act of command, request, intention or desire. Thus, the information will not be repeated nor lost. Examples are given below:

44) yan kiros fir- ∅ -ans amn – s - ∅ - u – n
I Kiros go- 3 MSG-COMP believe - CAUS-1SG- PAST
'I convinced Kiros to go.'

45) yan x^w – a – ∅ - k' - əŋə wisn - ∅ - u – n
I eat – IMPRF – NEG – 1SG– COMP decide – 1SG – PAST – 1
'I decided not to eat.'

46) ŋay kiros šila ziy - ŋ – ans dəmz - ∅ - ək^w
they Kiros beer drink -3PL -COMP want - 3MSG - PRES
'Kiros wants them to drink beer.'

47) ŋay kiros ŋin - tig^{w}ə fir –a – y – ŋ- əŋə azz- ∅- u
they Kiros house–GOAL go – IMPRF–NEG–3PL–COMP order – 3MSG - PAST
'Kiros ordered them not to go the house.'

However, in the context of desire or intention for oneself, the complements display their future time reference. In other words, when the main and complement predicates share the same subject, the subjunctive complements are expressed with future tense marker and the cmplementizer also changes at the same time. This also shows that the degree of reduction even among the subjunctive complements varies. We can see the examples in (48a) and (48b) below:

48) a. ŋay šila ziy - t - i ŋ - ə dəmz - ŋ - ək^w
they beer drink – FUT – 3PL - COMP want – 3PL - PRES
'They want to drink beer.'

b. ŋir k^{w}irə x^w ə - t- t - ə wisn - i - č
she food eat – FUT - 3FSG - COMP decide – PAST – 3FSG
'She decided to eat food.'

On the other hand, indicative complements are normally excluded from DTR contexts since they are typically coded for tense, and therefore, the expression of tense in such cases is redundant (Noonan, 1985). In Ximt'aŋa, indicative complements are coded for tense in their future use with the marker – **t'/-t** as in (49a); in their remote past use with the past auxiliary verb **win** – 'was/had' as in (49b) in their present use with the present auxiliary verb **aq-** 'AUX' as in (50a). But indicative complements are reduced for tense only in their simple past use as in (50b). This all show that the degree of reduction of information in indicative complement type is lower than in that of the subjunctive type, and this can affect the semantic potential of the complement types in Ximt'aŋa .

49) a. ŋay ŋəŋ tər - t' – u aq - ∅ - əŋə arq - iŋ - ək^w
they he come – FUT – 3MSG AUX - 3MS – COMP know – 3PL – PRES
'They know that he will come.'

b. ŋay ŋəŋ tər - ∅ win - ∅ - əŋə arq - iŋ - əkʷ
they he come – 3MSG AUX–3MSG–COMP know – 3PL – PRES
'They know that he had come.'

50) a. yan kit ginzib - d siŋʷ - r - ∅ - aŋʷ aq – r- ∅ -əŋə amn - ∅ - əkʷ - in
I you money–DEF steal-2–2SG–PROG AUX–2 –2SG –COMP believe –1SG –PRES–1
'I believe that you are stealing the money.'

b. yan kit ginzib - d siŋʷ - r - ∅ - əŋə amn- ∅ - əkʷ - in
I you money – DEF steal - 2 – 2SG –COMP believe – 1SG – PRES - 1
'I believe that you stole the money.'

3.1.3. Choice of Complementizer

Noonan (1985) defines complementizers in such a way that complement types often have associated with them a word, particle, clitic, or affix whose function is to identify the entity as a complement and such forms are known as complementizers.

In Ximt'aŋa, all the complementizers, as illustrated below, are bound forms as opposed to independent words. Specifically, bound forms are either clitics or affixes; and from these two forms, the complementizers in Ximt'aŋa are affixes. This is because, according to Zwicky and Pullum (1983) as cited in Mengistu (1992), clitics can exhibit a low degree of selection with respect to their hosts, while affixes exhibit a high degree of selection. This means, distributionally clitics can attach to a wide range of words of different categories, but affixes are quite restricted to a particular category. In Ximt'aŋa, complementizers attach themselves only to the verb category, as can be seen below in (51):

51) a. yan kit inn tət -r- ∅ - iš tək'awmiš - ∅-əkʷ - in
I you here come-2-2SG-COMP doubt-1SG-PRES-1
'I deny if you come here.'

b. yan ŋir bət -r- an xazn– ič'- ə win - ∅- u -n
I she leave-3FSG-COMP regret-1SG-COMP AUX-1SG-PAST-1
'I was about to regret if she had left.'

c. yan ŋəŋ mi xʷ - ∅ - ans təmz- ∅ - əkʷ -in
I he ǐǰəra eat-3MSG-COMP want-1SG-PRES-1
'I want him to eat injera.'

d. yan ŋəŋ mi xʷ - ∅ - əŋə arq - ∅ - əkʷ -in
I he inǰəra eat-3MSG-COMP know-1SG-PRES-1
'I know that he ate inǰəra.'

e. yan mi x^{w} ə- t- ∅ - ə təmz - ∅ - əkʷ - in
I inǰəra eat-FUT-1SG-COMP want -1SG-PRES-1
'I want to eat inǰəra.'

In Xɨmt'aŋa, the semantic potential of a complement type is affected by its choice of complementizer. For instance, the complements in (51c), and (51d) could not change their complementizers to each other. The complementizers – **ans** in (51c) and – ə in (51c) also could not be replaced to each other; and the same is true for **-iš** in (51a) and – **an** in (51b). According to Noonan (1985: 104) 'When a form functions as a complementizer and something else, its meaning outside the complement system will likely to be related to its use in complementation. The complementizer, then, may not be simply a neutral marker of a complement type but may bring with it a meaning that can affect the semantics and therefore the distribution of the complement type it is associated with'.

Now we can illustrate the complement types with their choice of complementizer in Xɨmt'aŋa and we can see the semantic effect of complementizers on the complement type to which it is attached.

3.1.3.1. Indicative (-əŋə) Complements

Formally, indicative complement most closely resembles declarative main clauses; i.e., its syntactic relation of subject to predicate and range of inflectional categories are the same as main clause (Noonan, 1985). In Xɨmt'aŋa, as we see the data in (52) below, syntactically the predicates in the complements agree with the subjects in person, number and gender. Moreover, the predicates in indicative complements can be expressed with future tense as in (52d), present tense and progressive aspect as in (52b), imperfective and perfective aspects in their negative forms as in (52c) and (52e), and with no tense or aspect marker in their affirmative perfective use as in (52a). Therefore, the indicative (-**əŋə**) complements, in Xɨmt'aŋa, are nearly identical to declarative main clauses except they are not marked with the simple past tense markers, as seen in (50b) and (52a). Let us see the examples given here:

52)a. yan kɨt ŋi - gɨs ginzib yɨw -r- ɨn - əŋə arq - ∅ - əkʷ-in
I you him-DAT money give-2-2PL-COMP know -1SG-PRES-1
'I know that you gave money to him.'

b. ŋir yan bičəri –d kil - ∅-aŋ^{w} aq- ∅ - əŋə gimt - i - č
she I glass-DEF break-1SG-PROG AUX-1SG-COMP guess-PAST-3FSG
'She guessed that I am breaking the glass.'
c. yan ŋir zəf-d k'əb-i-y-r- əŋə arq - ∅ - ək^{w} – in
I she tree-DEF cut-PERF-NEG-3FSG-COMP know-1SG-PRES-1
'I know that she did not at the tree.'
d. yan ŋay zəf –d k'əb -t - ik'w aq -ŋ - əŋə arq - ∅ - ək^{w} - in
I they tree-DEF cut-FUT -3PL AUX -3PL-COMP know-1SG-PRES-1
'I know that they will cut the tree.'
e. yan ŋay zəf -d k'əb – a- y - ək'^{w} aq -ŋ - əŋə arq - ∅ - ək^{w} – n
I they tree-DEF cut -IMPRF-NEG-3PL AUX-3PL-COMP know-1SG-PRES-1
'I know that they do not /will not cut the tree.'

Semantically, when the complements are associated with the complementizer - **əŋə**, they become indicative and have realis modality which is associated with complements whose propositions are asserted as facts or commented on as factual or actual events or states.

3.1.3.2. Subjunctive Complements

According to Noonan (1985: 51), 'Non-indicative sentence like complement type can be referred to by the semantically neutral term subjunctive. For a particular language, a term with more semantic content such as, a term with more semantic content such as optative, irrealis, potential, etc. might be more appropriate'. This means that the indicative and subjunctive verbal forms differ in mood. The subjunctive complements have a future time reference relative to the time reference of the CTP and irrelais modality which comes directly from the CTPs that represent commands, requests, intentions, desires, conditions, etc. These complement types, in Ximt'aŋa, are associated with the complementizers –**ans**, **-ə, -š,** or – **an** based on the semantic features of the subjunctive complements as illustrated below separately:

3.1.3.2.1. –ans Complements

Complements associated with the complementizer –**ans** can be said as –**ans** complements, as illustrated below:

53)a. ŋay ŋəŋ ginzib - d siŋ^{w} - ø- ans asgədid-z-u - ŋ
They he money -DEF steal -3MSG-COMP force- CAUS- PAST-3PL
'They forced him to steal the money.'
b. ŋəŋ ŋir bət - r - ans azz- ø -u
he she leave -3FSG-COMP order-3MSG - PAST
'He ordered her to leave.'

c. ŋay yin itt fir-n-ans təmz - iŋ - ək^{w}
they we there go -1PL -COMP want-3PL-PRES
'They want us to go there.'
d. yan ŋəŋ ŋit bər -a -y -ø - əŋə waqr- ø -u-n
I he him leave -IMPRF-NEG-3MSG-COMP ask-1SG-PAST-1
'I asked him not to leave.'

As we see the examples in (53), the complementizer – **ans** is used only in the affirmative subjunctive complements, as in (53a, b & c). When the complements with –**ans** change to negative, the complementizer become - **əŋə**, as in (53d). If we see the CTPs, such as, **waqr** – 'ask' in (53d), **təmz** – 'want' in (53c), **azz-** 'order' in (53d) and **asgədidz** – cause to 'force' in (53a), the complementizer – **ans** is associated with complements to which the meaning of commands, requests, intentions, desires or manipulatives is attached.

3.1.3.2.2. -ə Complements

Complements associated with the complementizer -ə can be said as -ə complements, as illustrated below:

54) a. yin itt fir -ø- n - ə təmz -n - ək^{w} - in
we there go- FUT-1PL-COMP want-1PL -PRES-1
'We want to go there.'
b. ŋay ŋir-gis dəbdabi s'af - t- iŋ - ə hasb -u -ŋ
they her - DAT letter write -FUT -3PL -COMP think -PAST -3PL
'They though to write a letter to her.'
c. yan s'ayč'ə sa- til fit' -ø -č' - ə qal t'iw- ø -u -n
I nine o'clock -LOC go -FUT -1SG -COMP promise -1SG -PAST -1
'I promised to go at nine.'
d. yin itt fir - a- y -n - əŋə təmz -n - ək^{w} – in
we there go -IMPRF-NEG-1PL-COMP want-1PL-PRES-1
'We want not to go there.'

Complements which are associated with the complementizer-ə complements, like –**ans**, - is also used only in affirmative complements. When -ə complements change to negative forms, the complementizer becomes -**əŋə**, as in (54d). Unlike, the contexts for -ə complements are limited to the desires or intentions of one-self to do some actions. In other words, the -ə complements cannot be associated with CTPs expressing commands, requests or manipulations like –**ans** complements. The –**ans** complements do not share the same participant with the main clauses;

whereas, the -ə̈ complements are only used in the context of sharing participant. Therefore, the choice of complementizer differ according to the semantic features of the complement relation types.

3.1.3.2.3. – š and –an Complements

Complements associated with the complementizer **–š** can be said as **–š** complements, and complements associated with **–an** can also be said as **–an** complements. Both **–š** and **–an** complementizers in Ximt'aŋa are equivalent to the 'if' complementizer in English, as illustrated below:

55) a. yan ŋay tər -ŋ - iš t'artirš -ø - ək^{w} -in
I they come - 3PL-COMP suspect-1SG -PRES-1
'I suspect if they come.'

b. yan ŋəŋ tər - əw aq – ø – š amn - ə – ø- k'ər -m
I he come -3MSG AUX -3MSG-COMP believe-IMPRF-NEG-1SG-FNTZR
'I do not believe if he comes.'

c. yan ŋəŋ bər – ø – š xazn – ø - ək^{w} – in
I he leave - 3MSG -COMP regret-1SG-PRES-1
'I regret if he leaves.'

d. yan ŋay ǰɨm – a – y - ək'^{w} aq – ŋ - iš xazn – ø - ək^{w}- in
I he sing- IMPRF-NEG- 3PL AUX-3PL-COMP regret-1SG-1
'I regret if they do not sing.'

56)a. yan ŋəŋ tər – ø – an t'artirš – ø – č' - ə win – ø – u – n
I he come -3MSG -COMP suspect -FUT -1SG-COMP AUX-1SG-PAST-1
'I was about to suspect if he had come.'

b. yan ŋay tər – ŋ – an amn – ø – č' - ə win – i – ∅ - k'ər – m
I they come-3PL-COMP believe-FUT-1SG-COMP AUX-PERF-NEG-1SG-FNTZR
'I was not about to believe if they had come.'

c. yan ŋay ǰɨm - a – y - ək'^{w} aq – ŋ – an xazn – ø - ək^{w}-in
I they sing -IMPRF -NEG -3PL AUX -3PL -COMP regret -1SG -PRES -1
'I was about to regret if they had not sing.'

The – **š** and –**an** complements are associated with non-factual or irreal modality. As we see – **š** in (55) and –**an** in (56). Just like the English if as described in (Noonan, 1985), both –**š** and –**an** are used as complementizers where the usual positive implications associated with a given CTP are not meant to hold. In other words, the CTPs here express a negative propositional attitude amounting to a denial of the proposition embedded in its complement, as in all the examples in (55) and (56) above. Otherwise, **-š** and –**an** function as adverbial connectives in conditional

clauses of the language. The difference between the complements with **–š** and **–an** is the possibility of the occurrence of their event or state. This means that **–š** is associated with the possible event or state, while **–an** with the impossible event or state of a given complement. Of course, like other subjunctive complements, the **–š** and **–an** complements characterized with irreal modality.

3.1.3.3. Participle Complements (with no complementizer)

According to Noonan (1985), participles are adjectival or adverbial forms of the verbs. In complementation, participles are not the heads of complements, but rather they modify some nouns which function as the head. In other words, participles, in complementation, function as attributive, not predictive, adjectives. The only place in complement systems where regularly found is in complements to immediate perception predicates, as shown below in (57a, b, c and d). Here, the object of the immediate perception predicate is head, and the participle is qualifying clause. This complement type, however, does not have complementizer in Ximt'aŋa. Let us see the data:

57) a. yan ŋəŋ aq^{w} z i q – ø - aŋ^{w} qal – ø – u – n
I he water drink -3MSG –PROG see -1SG -PAST -1
'I saw him drinking water.'

b. yan ŋəŋ ǰɨm – ø -aŋ^{w} wəč' - ø – u – n
I he sing -3MSG -PROG hear -1SG -PAST -1
'I heard him singing.'

c. yan ŋəŋ čibris – ø qal – ø – u – n
I he stop - 3MSG see -1SG -PAST -1
'I saw him stopped.'

d. yan ŋir fi -r qal – ø – u – n
I she go out -3FSG see -1SG -PAST -1
'I saw her went out.'

As we can see the data, the verb forms **Ziqaŋ^{w}** 'drinking' in (57a) and **ǰɨmaŋ^{w}** 'singing' in (57b) are the present participle form of the verbs **ziq** – 'drink' and **ǰɨm** – 'sing', while the verb forms **čibris** 'having stopped' and **fir** 'having went out' are the past participle of the verbs **čibris** – 'stop' and **fi-** 'go out' in their respective complements. Semantically, participle complements are

particularly associated with perception predicates which refer to the way an experiencer perceives the occurrence of events embedded in the complements.

3.1.3.4. Nominalized Complements (with no complementizer)

Noonan (1985:60) noted that, 'Nominalized complements are predications with the internal structure of noun phrases. The predicate becomes nominalized, assuming the form of a verbal noun, and takes over the role of head noun of the noun phrase'. Based on this definition, Ximt'aŋa has the nominalized complement type with no complementizer, as illustrated below:

58)a. yan mäs'af anbib - ənəw k'ən - ø - ək^{w} - in
I book read -NZR like -1SG -PRES -1
'I like reading book.'

b. yan iǰɨr - dyə - t askis - ənəw kirm - ø -ək^{w} - in
I man -DEF -ACC watch -NZR start -1SG -PRES -1
'I start watching to man.'

c. yan mi x^{w} - ənəw – d čibrs – ø- u – n
I inǰəra eat- NZR -DEF stop -1SG -PAST-1
'I stopped eating inǰəra.'

As shown in (58), the nominalized complements are the arguments of the main predicates. The form - **ənəw** is not complementizer, rather, it is the derivational affix which can derive verbal nouns from the verb category. According to Noonan (1985), nominalized predicate may occur with articles, case markers, adpositions, and in some cases may even be pluralized. For instance, in (58c), the nominalized predicate occurs with the definite article-**d**. Moreover, other derivational affixes such as causative as in (59a) and passivizer as in (59b) can occur with it.

59) a. yan qal - išt - ənəw təmz – ø - ək^{w} - in
I see -PASS -NZR want- 1SG -PRES-1
'I want to be seen.'

b. yan gizin – d qal – s - ənəw təmz – ø - ək^{w} - i n
I dog -DEF see -CAUS -NZR want -1SG -PRES -1
'I want to show the dog.'

Generally, the choice of complementizer, in Ximt'aŋa, differs according to the type of complements. The indicative complements are associated with -**əŋə**; while the subujunctive complements are associated with –**ans**, - **ə**, -**š**, and –**an** complementizers. The subjunctive

complements with **–ans** and -ə will have -əŋə complementizer in their negative forms. However, the participle and nominalized complements have no complementizers in Ximt'aŋa.

Therefore, depending on the choice of complementizer, a complement type can have different semantic effect. The complementizers in Ximt'aŋa, are not only the neutral markers of a complement type but also they bring their own meaning with the complement associated with them.

3.1.4. Manner of Syntactic Relation to the Matrix

'Notional complements may be rendered (1) as subordinate clauses or (2) as verb phrases in paratactic constructions, in which case they are syntactically on a par with the clause containing the CTP'. Noonan (1985: 106). According to Noonan (1985), this syntactic difference can be exploited to create semantic contrasts between paratactic and subordinate complement types. The semantic difference, then, between parataxis and hypotaxis (subordination) in complementation involves the number of assertions the construction contains; each clause in the paratactic construction is a separate assertion, whereas in hypotaxis there is a single assertion involving both CTP and complement.

In Ximt'aŋa, as we have seen the examples so far, the manner of syntactic relation of the national complements to the matrix (main clause) is hypotaxsis (subordination). Even in causative and immediate perception contexts in which paratactic complements typically occur, as mentioned by Noonan (1985), a complement is syntactically subordinate to the matrix, and semantically, the complement together with a given CTP involves a single assertion, as shown in (60) below.

60 a. yan iǰɨr - dyə – t səb s'ab - ∅ - aŋ^{w} qal - ∅ - u – n
I man -DEF –ACC work -DEF do -3MSG –PROG see -1SG -PAST -1
'I saw the man doing the work.'

b. yan iǰɨr - dyə – t səb s'ab - ∅ - ∅- ans amn – is - ∅ - u – n
I man DEF ACC work do -IMPRF - 3MSG -COMP believe-CAUS-1SG-PAST-1
'I persuaded the man to do the work.'

As we see the examples, the complement **iǰirdyət səb s'abaŋ^{w}** with the perception predicate **qal**– 'see' in (60a) and the complement **iǰirdyət səb s'abans** with the causative predicate **amnis-** 'persuade' in (60b cannot stand as a separate independent clause and cannot be a separate assertion by themselves, i.e., they are dependent and together with the matrix clause give a single assertion.

3.1.5. Grammatical Status of the Complement Predicate

The function of the complement type in complementation determines the grammatical status of the complement predicates as verb, noun or adjective. According to Noonan (1985: 107), 'The part of speech (verb, noun, or adjective) of the complement predicate can be correlated with the use of the complement type that contains it'. Noonan (1985) noted that since complement predicates are coded as verbs in the great majority of cases, coding predicates as verbs can be viewed as the unmarked case; and indeed, there are languages which allow this as the only possibility for coding predicates. On the other hand, the complement predicates coded as nouns or adjectives are the marked cases, noting that these forms always coexist in complement systems with predicates coded as verbs.

In Ximt'aŋa, as we have seen the complement types in section (3.1.3), the indicative complement predicates as the examples in (52) and the subjunctive complement predicates as the examples in (53, 54, 55 & 56) are coded as verbs; whereas the participle complement predicates are coded as adjectives as in (57) and the nominalized complement predicates as nouns as in (58 & 59). Additionally, we can illustrate them with the examples in (61, 62, 63 & 64) below:

I. Indicative and Subjunctive complement predicates as verbs

As we see the examples in (61), the indicative complement predicate **anbibraŋa** 'that she read' in (61c) and, the subjunctive complement predicates such as **dibt'ə** 'he to read' in (61a), **arqəw aqəš** 'if he knows in (61b) and **anbibrans** 'she to read' are coded or function as verbs.

61) a. itərə - d birə - d dib – t'- ∅ - ə aǰ - ∅ - u
boy -DEF door -DEF close -FUT -3MSG - COMP remember -3MSG - PAST
'The boy remembered to close the door.'

b. yan adəru t'amtəw – t arq- əw aq - ∅ - əš arq - ə - ∅ - k' ər – m
I Adəru Tamtəw ACC know-3MSG AUX 3MSG-COMP know-IMPRF-NEG-1SG-FNTZR
'I do not know if Adəru knows Tamtəw.'

c. yan məs'af – d anbib - r - əŋə arq - ∅ - əkʷ – in
I book -DEF read -3FSG -COMP know -1SG -PRES -1
'I know that she read the book.'

d. ŋəŋ ŋir-gis məs'af- d anbib - r – ans diqʷ - ∅ - u
he her -DAT book -DEF read -3FSG- ans tell -3MSG -PAST
'He told her to read the book.'

II. Predicates as nouns

According to Noonan (1985), nominalizations can be divided into two types: nominalized propositions and activity or state nominalizations. Nominalized propositions are used by speakers to refer to information given previously in a discourse or taken as background to a discourse and, of course, do not in themselves constitute assertions. Activity or state nominalizations are used to refer to kinds of activities or states, not to specific events constituting background information. In Ximt'aŋa, these two types of nominalizations are observed as illustrated below in (62) & (63).

Nominalized Propositions

62)a. adəru – tu kiros - dyə – t t'az - ənəw yit xazn – is- ∅ - u
Adaru - POSS Kiros - DEF -ACC hit –NZR me be sad -CAUS -3MSG -PAST
'Adəru's hitting Kiros caused me sad.'

b. kiw šila ziy - ənəw – d s'iw - r- ∅ - ans s'ab - ∅- u
your local beer drink -NZR -DEF sick-2-2SG-COMP make-3MSG-PAST
'Your drinking local beer made you sick.'

c. ŋiw tər - ənəw yinə - gis k'əsəw yəŋ
his come – NZR our – DAT good be
'His coming is good for us.'

Activity or state nominalization

63)a. biltə k'iw – ənəw adəru – t imt'iŋ – z - əkʷ
rabbit kill- NZR Adəru -ACC be happy -CAUS - PRES
'Killing rabbit made Adəru happy'

b. bəwrə xʷ - ənəw k'əsəw yəŋ
porridge eat - NZR good be
'Eating porridge is good

c. ixʷir- i-z šila ziy -ənəw- d kiros tək'awmiš - ∅ - əkʷ
children-DEF-POSS beer drink –NZR-DEF Kiros deny-3MSG-PRES
'Kiros denies children's drinking beer'

As we see the data in (62) and (63) above, nominalizations of either sort result in a sort of objectification of the predicate, investing it with the status of a name.

III. Adjectivalized Predicates

As nominalization involves objectivalization of predicates, adjectivalization involves converting predicates into modifiers or qualifiers, specifying either attributes of nominals or attendant circumstances of events' Noonan (1985: 109). According to Noonan (1985), adjectivalized predications or participles, characteristically, have the ability to express simultaneity with another event and the sharing of arguments with the main event, and this feature makes the participle quite suitable for use with immediate perception predicates. This is the case displayed by Xɨmt'aŋa as the examples given below in (64).

64) a. yan kiros ŋɨn- d bər- ∅-aŋ^{w} qal - ∅ - u – n
I Kiros house-DEF leave- 3MSG- PROG see-1SIG- PAST- 1
'I saw Kiros leaving the house.'
b. yan kiros wirba- d kər - ∅ - aŋ^{w} qal - ∅ - u – n
I Kiros river-DEF cross-3MSG- PROG see-1SG- PAST-1
'I saw Kiros crossing the river.'
c.* yan adəru ŋi - lik'^{w} –d kil - ∅ - aŋ^{w} amn - ∅ - ək^{w} - in
I Adəru his-leg- DEF break- 3MSG believe-1SG-PRES-1
'I believe Adəru breaking his leg.'

If we see the example in (64a), the two events: *seeing* and *leaving* are simultaneous and share a national argument, **Kiros**, and it is the same for the example in (64b). But, the characteristics of participle that make it compatible with immediate perception predicates make it unsuitable for use with most CTPs, just like the example in (64c).

3.2. The Classes of Complement Taking Predicates in Xɨmt'aŋa

According to Givon (1990), Hopper and Thompson (1984) and Croft (1990), as mentioned in Cristofaro (2003), since predicates are the prototypical device used to refer to SoA (State of Affairs), the semantics of the predicate has a major role in establishing the overall semantics of the main SoA. In other words, complement relations can be identified on the basis of the predicate coding the main SoA, or complement taking predicate. Therefore, in order to examine the complement relations (complementations) of a language, first, one should know the classes

of complement- taking predicates. In the works of Noonan (1985) and Cristofaro (2003), the following predicate classes are examined: modal, phasal, manipulative, desiderative, perception, knowledge, propositional attitude and utterance predicate classes, as listed in section 2.6.2.

3.2.1. Modal Predicates

Noonan (1985) observes that, in principle, any complement taking predicate conveying a modality indication should rank as a modal predicate. However, he leaves out predicates such as 'think' expressing epistemic modality, and restricts the label 'modal predicates' to deontic modality class including expressions of ability such as 'be able', or 'know how' and expressions of obligation and permission, such as 'must', 'should', 'can', or 'may'.

In Xɨmt'aŋa, the modal predicates are **čəl** – 'be able' for expressing ability, again **čəl** - 'can' for expressing permission, **čɨz**- 'should' or 'ought' for expressing moral necessity, and **t'uš** – 'must' for expressing moral obligation. As we can see the examples below from (65) – (68), all the modal predicates can be inflected for person, number, gender, tense and aspect like other verbal predicates in the language. Like all modal predicates in any language, as stated by Noonan (1985), all these modal predicates have complements with DTR. That means, complements to these modals refer to either future events or states relative to the time reference of the CTP (modal predicate). They may give the appearance of being one-place predicates like in (68c) in which the modal verb is impersonal, and the situation of obligation is construed as holding for the dependent SoA as a whole, or two place predicates with an equi-deleted complement subject, as in (68a & b), in that the situation of obligation is construed as holding for some individual entity that must bring about the dependent SoA, as Noonan (1985) and Cristofaro (2003) captured it in moral obligations. Let's give the examples for the predicate of ability, permission, moral necessity, and moral obligation as below in order.

Predicate of Ability

(65) a. ŋəŋ daxna anbɨb- t' - ∅- ə̈ čəl - ∅ - ə̈k^{w}
he well read-FUT-3MSG-COMP be able-3MSG- PRES
'He is able to read well.'

b. ɨwnə̈-šə̈n daxna ǰɨm-t- t- ə̈ čəl -ɨr win - ɨ - č
woman-DEF well sing-FUT-3FSG-COMP be able-3FSG AUX-PAST-3FSG
'The woman was able to sing well.'

Predicate of Permission

(66) a. kiros xabəš – dy- t x^{w} i - t'- ə čə l - ø - ək^{w}
Kiros bread - DEF- ACC eat - FUT- COMP can -3MSG- PRES
'Kiros can eat the bread.'
b. kitin nən fir-t-r-n-ə čəl - ir-n - ək^{w}
you now go-FUT-2-2PL-COMP can-2 -2PL-PRES
'You can go now.'
c. kita-gis nən fir-t- r-n - ə čəl - əw yəŋ
your-DAT now go-FUT-2-2PL-COMP be possible-3MSG be
'It is possible for you to go now.'

Predicate of Moral Necessity

(67)a. kiros nən ŋi - ŋin aqil aq- t' - u
Kiros now his-house in AUX- FUT- 3MSG
'Kiros may be in his house by now.'
b. ŋay nič' itt fir-t'- iŋ - ə čiz-ŋ- ək^{w}
they today there go-FUT-3PL-COMP should-3PL-PRES
'They should go there today.'
c. ŋa- gis nič' itt fir- t' - iŋ - ə čiz – əw yəŋ
their- DAT today there go-FUT- 3PL- COMP be better- 3MSG be
'It is better for them to go there today.'

Predicate of Moral Obligation

68) a. ŋay nič' itt fir- t'- iŋ - ə t'uš – ŋ - ək^{w}
they today there go-FUT-3PL- COMP must-3PL-PRES
'They must go there today.'
b. kiros nən ŋi - ŋin aqil aq - t' - ø - ə t'uš - ø - ək^{w}
Kiros now his-house in be- FUT-3MSG-COMP must- 3MSG-PRES
'Kiros must be in his house by now.'

c. ŋa-gis nič' itt fir- t'- iŋ - ə bənnizəw yəŋ
their-DAT today there go- FUT-3PL-COMP necessary be
'It is necessary for them to go there today.'

In line with Cristofaro (2003), the above data show that the predicate of moral necessity (i.e., weak obligation) can also be one-place predicate as in (67c) or two place predicate as in (67a& b) like the moral obligation. The same is true for the predicate of permition in which the condition of permition holds for individual entities, as in (66a&b) and for SoAs as a whole as in (66c). However, the predicate of ability only allows the condition of ability to be referred to individual entity, as in (65a & b), i.e., this type of modal predicate is two-place predicate. In both

cases, however, i.e., in the predicate of ability on the one hand, and in the predicates of obligation and permission on the other, the entity for which the condition holds is the same entity that is supposed to bring about the SoA to which the condition of ability, permission or obligation refers.

3.2.2. Phasal Predicates

Both Noonan (1985) and Cristofaro (2003) noted that phasal predicates refer to the phase of an act or state: its inception, continuation, or termination through time, and include expressions of such as 'begin', 'continue', 'stop', and 'finish'. In Xɨmt'aŋa, the phasal predicates are **kirm-** 'begin/start', **tikn-** 'continue', **čɨbrɨs-** 'stop' and **abz-**'finish' as exemplified below in (69), (69b), and (69c&d) respectively.

69)a.yɨn tägr - ənəw kirm- n-u-n
we walk-NZR begin-1PL- PAST-1
'We began walking.'

b. ŋay dɨxt-ǰik' tig^{w} –ɨšš -ənəw tikn – u – ŋ
they poverty -COM fight-RECP-NZR continue- PAST-3PL
'They continued fighting with poverty.'

c.yan ǰɨm - ənəw čɨbrɨs - ∅ - u – n
I sing-NZR stop-1SG-PAST-1
'I stopped singing.'

d. ŋəŋ məs'af anbɨb-ənəw-d abz - ∅ - u
he book read-NZR-DEF finish-3MSG- PAST
'He finished reading a book.'

According to Cristofaro (2003:102)'The SOAs involved in the complement relation are: (i). Some entity's being in a certain phase with respect to the temporal development of some SoA (this is the main (SoA); and (ii) the SoA to which this phase refers (this is the dependent SoA)'. For instance, in (69a), 'the speakers' beginning to walk' is the main SoA, and 'the speakers' walking' is the dependent SoA, and the same is true in (69b,c&d). The entity finding itself in a certain phase with respect to the temporal development of some SoA is the same one bringing about this SoA. Since the time reference of the phase of an event must be the same as that of the event itself, as seen in (69), complements to phasal predicates have DTR. Moreover, the phasal predicates are nominalized, and for this reason, the phasal predicates mentioned above are

associated with reduced complements, i.e., their complements have no person, number, gender, tense, and aspect distinctions.

It seems that, they specify the phase of development of an SoA through time, phasal predicates modify the internal constituency of this SoA, and thus can be regarded as aspectual operators, such as, the perfective/ imperfective distinction.

However, as Siewierska (1991), as mentioned by Christofaro (2003), observes, phasal predicates work quiet differently from other aspectual operators, as in (70) below. For instance, the time reference of the aspectual operators in (70a) (i.e., the progressive imperfective aspect) is purely internal to the affected SoA (i.e., the addressee's singing). In other words, the action of singing is on-going. Phasal predicates, on the other hand, relate the SoA they modify (e.g. in (70b), the addressee's singing), taken as a whole to another one, (i.e. to the phase of finishing the addressee's singing itself, in (70b)). In other words, there is no reference to the phase in which the addressee finds himself with the finishing of the action of his singing, in (70b). This also means that the internal temporal constituency of the dependent SoA (the action of singing) is not affected by the aspectual operator. We can see the examples given here:

70)a.ŋəŋ nən ǰɨm -∅ -aŋ^{w} yəŋ
he now sing-3MSG-PROG be
'He is singing now.'

b. ŋəŋ ǰɨm- ənəw abz - ∅ - u
he sing-NZR finish-3MSG-PAST
'He finished singing.'

According to Noonan (1985) and Cristofaro (2003), phasal notions can be expressed differently in different languages, many languages may use phasal predicates; some languages use verbal affixes or particles; some languages indicate continuation by repeating the verb; and so on. But, Ximit'aŋa, as we see the data, expresses the phasal notions with the phasal predicates.

3.2.3. Desiderative Predicates

Desiderative predicates, according to Noonan (1985), are characterized by having an experiancer subjects expressing a desire that the complement proposition be realized. The complement

proposition may be brought about by the experiancer or by other entities, as shown by the contrast between (71a) and (71b):

71) a. ŋir ifərə -d iǰɨr-dyə -t t'az - ∅ - ans dəmz - ə- č
she boy-DEF man-DEF-ACC hit-3MSG-COMP want-PRES-3FSG
'She wants the boy to hit the man.'

b. iǰɨr - dyə -t t'az – t- t- ə dəmz - ə - č
man-DEF- ACC hit- FUT-3FSG-COMP want-PRES-3FSG
'She wants to hit the man.'

Predicates, such as 'want' 'wish', 'desire' and 'hope' are desideratives (Noonan,1985). Their Xɨmt'aŋa versions are **dəmz-/təmz-** 'want', '**marqəs** 'wish' '**bann-**' 'desire' and '**təsfə s'ab** 'make hope'.

The desiderative predicates (cf. Noonan, 1985; Cristofaro, 2003) can be divided semantically into three usage classes; the hope-, wish-, and want-classes. Likewise, in Xɨmt'aŋa, the təsfə **s'ab** – 'hope', **marqəs'-** 'wish', and **təmz** –'want' classes can be identified based on their semantic features. The first **təsfə s'ab** – class has complements with ITR, i.e., the time reference of the complement predicate is not restricted by the time reference of the predicate **təsfə s'ab** – 'make hope'. This predicate has no implication about the realization of the dependent SoA (e.g., in (72a) and (72b) and (72c) below, about the realization of Adəru's coming). The dependent SoA may take place of any moment, though the speaker does not know whether or not it takes or has taken place.

72) a. yan adəru tər - ∅ win - ∅ - əŋə təsfə s'ab - ∅ - ək^{w} - ɨn
I Adəru come-3MSG AUX-3MSG- COMP hope make -1SG- PRES-1
'I hope that Adəru had come.'

b. yan adəru tər -∅- əŋə təsfə s'ab - ∅ - ək^{w} -ɨn
I Adəru come-3MSG-COMP hope-1SG-PRES-1
'I hope that Adəru came.'

c. yan adəru tər -t'-u aq-∅ - əŋə təsfə s'ab - ∅ - ək^{w} -ɨn
I Adəru come- FUT-3MSG AUX-3MSG-COMP hope make -1SG-PRES-1
'I hope that Adəru will come.'

The **təsfə s'ab** – class predicates are the true counter part of predicates of 'fearing' because both types express an emotional attitude toward a proposition whose status is unknown, but which could turn out to be true (cf, Noonan, 1985).

The second class predicates, i.e., **marqəs'**– class predicates, like the **təsfə s'ab** – class predicates, have ITR complements, but differ from those of the **təsfə s'ab** – class in that their complement propositions (dependent SoAs) are presented as counter factual; that is, it is assumed that they do not take palce at any time; and hence, while the status of **Adəru tər winəŋə** 'that **Adəru** had come' in (72a) and **adəru tərəŋə** 'that **Adəru** came' in (72b) above are simply unknown, the complements in (73a) and (73b) below are implied to be false. This difference between **marqəs'**– and **təsfə s'ab**- class predicates holds even when the complements have future reference (cf. Noonan, 1985); for instance, the complements in (72c) is implied to be at least likely to be realized, whereas the dependent SoA in (73c) is implied to be only a remote possibility. The examples on **marqəs'**- 'wish' are given below in (73):

73)a. yan adəru tər - ∅ win - ∅ - əŋə marqəs'- ∅ - ək^{w} - in
I Adəru come-3MSG AUX-3MSG-COMP wish-1SG-PRES-1
'I wish that Adəru had come.'
b. yan adəru tər - ∅ - əŋə marqəs' - ∅ - ək^{w} – in
I Adəru come-3MSG-COMP wish-1SG- PRES- 1
'I wish that Adəru came.'
c. yan adəru tər - ∅ - ans marqəs' - ∅ - ək^{w} –in
I Adəru come-3MSG- COMP wish-1SG-PRES- 1
'I wish that Adəru would come.'

According to Noonan (1985: 122), 'If the complement proposition is incapable of realization, for whatever reason, it cannot be a complement of a *hope*-class predicate but can be a complement of a *wish*- class predicate'. In Ximt'aŋa, the contrafactive interpretation of **marqəs'** –class predicates has its counterpart in the morphology of the verb complex. Notice that (73c), in the **marqəs'**- complement has the meaning of imperfective mood associated with the complementizer– **ans** expressing a less definite, hypothetical interpretation, while in (72c) the **təsfə s'ab** – complement uses the future tense marker **–t'** and the complementizer -**əŋə** which expresses definite possibility.

The third and last class is the **təmz** – class or we can say equivalently, **dəmz**-class to which complements have DTR, and expresses a desire that some state or event may be realized in the future, just in line with the want-class in (Noonan, 1985). The complements in (74a) and (74b) below can only have future reference. **təmz-** class predicates resemble **marqəs'** –class predicates in that their complements may refer to an unrealizable state of affairs, as (75a) and (75b) are given for comparison.

74)a. yan adəru bər- ∅- ans təmz - ∅ - ək^{w} - in
I Adəru leave-3MSG-COMP want-1SG-PRES-1
'I want Adəru to leave.'
b. yan bər- ∅ -č - ə təmz - ∅ - ək^{w}- in
I leave-FUT-1SG-COMP want-1SG-PRES-1
'I want to leave.'

75) a. adəru wat'r lərn imt aq - ∅ - ans təmz - ∅ - ək^{w}
Adəru again twenty years be-3MSG-COMP want-3MSG-PRES
'Adər wants to be twenty again.'
b. adəru wat'r lərn imt aq - ∅ - ans marqəs' - ∅ - ək^{w}
Adəru again twenty years be - 3MSG-COMP wish-3MSG-PRES
'Adəru wishes that he were twenty again.'

According to Noonan (1985), the complement types used by the *hope* -, *wish*-, and *want* classes of predicates follow from their meaning. In Ximt'aŋa, as we have seen so far, **təsfə s'ab** – class predicates are associated with indicative complements. In other words, these predicates have complements with independent time reference (ITR) as seen in (72). But, just like the **təmz** – class predicates as in (74b) and (71b), they are associated with the complements with dependent time reference (DTR), typically subjunctive complements. This is the case when only an equi-relation exists between notional subjects (i.e., when the main and dependent SoAs have the same subject) in **təsfə s'ab** – class predicates and we can compare (76a) and (76b) give below:

76)a. yan itt fič'- ∅- č' - ə təsfə s'ab - ∅ - ək^{w} – in
I there go-FUT-1SG-COMP hope make -1SG- PRES- 1
'I hope to go there'
b. yan itt fič'- ∅– č'- ə təmz - ∅ - ək^{w} – in
I there go-FUT-1SG-COMP want-1SIG-PRES- 1
'I want to go there'

The **təmz** – class predicates, whether an equi-relation exists or not between subjects in their complement relations, have the subjunctive complement types, as seen in (74) and (71) again. Because, these complement types have DTR. Morphologically, the complement predicates of the **təmz** – class predicates are coded with the complementizer – **ans** when there is no equi-relation between the subjects of the two predicates and with future tense and the complementizer **-ə** when there is equi-relation between the subjects.

The complement type used by **marqəs'** – class predicates is indicative when the complements are coded with the complementizer - **əŋə** and subjunctive when the complements are coded with the complementizer –**ans** , as seen in (73).

3.2.4. Manipulative Predicates

Noonan (1985: 125) notes as 'manipulative predicates express a relation between an agent or a situation which functions as a cause, an affectee, and a resulting situation'. Here, in order to get a complement relation (structure), the affectee must be a participant in the resulting situation. Noonan (1985) and Cristofar (2003) classify the manipulative predicates into two classes of expressions based on their semantic differences. The first one includes expressions of **causations** such as 'make', 'force' 'press', persuade, tell, let, etc., and the second class includes expressions of **request** such as 'order, 'ask', and other primarily utterance predicates (Noonan, 1985, Cristofaro, 2003).

In Ximit'aŋa, causation can be expressed with the predicates such as **asgədidz-** cause to 'force', **s'ab-** 'make', **tiqz** – 'press', **amnis-** 'persuade' **fik'd-**'let', etc. and the request can be expressed with the predicates such as **azz-**'order', **waqr** – 'ask', etc. Both the causation and request predicates of Ximit'aŋa are exemplified in (77) and (78) below respectively:

Predicates of Causation

In causation predicates, the dependent SoA is assumed to be realized or the manipulation is generally assumed to be successful as illustrated below in (77).

77)a. ŋay ŋir itt fit - r- ans asgədid-z -∅ - u- n
I she there go- 3FSG-COMP force –CAUS-1SG-PAST-1
'I forced her to go there.'

b. kiros yan səb - dyə - t s'ab - ∅ - ans s'ab - ∅ - u
Kiros I work -DEF –ACC do-1SG -COMP make -3MSG -PAST
'Kiros made me to do the work.'

c. yan misənə liŋət firm - ∅ - ans amn - is - ∅ - u – n
I Misənə again sign -3MSG -COMP believe -CAUS -1SG- PAST-1
'I persuaded Misən to resign again.'

d. ŋəŋ yan t'amtəw –t t'az -∅ - ans t'iqz - i -č
he I Tamtəw-ACC hit- 1SG- COMP press -PAST -3FSG
'He pressed me to hit Tamtəw.'

e. Kiros yan səb - dyə - t s'ab - ∅ - ans ǰiŋz - ∅ - u
Kiros I work- DEF -ACC do -1SG-COMP tell-3MSG -PAST
'Kiros told me to do the work.'

f. ŋay ŋir fit - r - ans fik'd -u -ŋ
they she go-3FSG- COMP let-PAST- 3PL
'They let her to go.'

Predicates of Request

The dependent SoA in the predicates of request may or may not be realized. In other words the manipulation need not be successful. Let us see the examples in (78):

78)a. kiros yan s'əb - dyə - t s'ab - Ø - ans azz- Ø - U
kiros I work –DEF - ACC do -3MSIG – COMP order -3MSG - PAST
'Kiros ordered me to do the work.'

b. kiros yan ŋi -čis ginzib ǰɨw - Ø- ans waqr –Ø –u
Kiros I her –DAT money give - 1SG -COMP ask -3MSG -PAST
'Kiros asked me to give money to her.'

According to Cristofaro (2003) and Noonan (1985), both the causative predicates and request predicates describe an act of manipulation involving an SoA or an entity functioning as a cause. For instance, in (78a) above, '**Kiros'** is the causer, **yan** 'I' is the affectee, and **s'əbdyət s'abans** 'I to do the work' is the SoA resulting from the manipulation.

However, the two predicate classes differ semantically (Cristofaro, 2003) in that predicates like 'make' (**s'ab** – like predicates in Ximt'aŋa) imply that the manipulation corresponding to the main SoA is successfully realized. Predicates like 'order' (**azz**-like predicates in Ximt'aŋa), on the other hand, have no implication that the manipulation be successful, that is the manipulation need not be took place.

Of course, according to Noonan (1985), there is also difference among the causative predicates (**s'ab**–'make' predicate class). For example, in Ximt'aŋa, the complements to **asgədidz** – 'cause to force' in (77a), and **s'ab-** 'make' in (77b) are interpreted as realized, whereas the complements to **amnis**– 'persuade' in (77c), **t'iqz** – 'press' in (77d), **ǰɬŋz** – 'tell' in (77e), and **fik'd** – 'let' in (77f) above have no implication that they are successfully realized. In other words, **asqədidz** – 'cause to force' in (77a), for example, implies 'she went'; but **amnis-** 'persuade' in (77c) implies that '**misənə** was convinced that he should resign, but carried no implication about his actual resignation and **t'iqz** – 'press' in (77d) implies neutrality as to weather or not 'I hit Tamtəw'. But, generally, it is assumed that the manipulation of the dependent SoA (complements) to the predicates like **s'ab** – 'make' are or will be successful; and on the other hand, the dependent SoA of **azz-** 'order' predicates may or may not be realized (Cristofaro, 2003). Because, for example in (79):

79)a. yan ŋir itt fit -r -ans asgədidzi - ø - č'ir yəŋ
I she there go -3FSG - COMP force – CAUS- FUT -1SG be
'I will force her to go there.'
b. kiros yan səb - dyə - t s'ab -Ø - ans s'ab -t- u – Ø yəŋ
Kiros I work - DEF - ACC do-1SG -COMP make-FUT-3MSG be
'Kiros will make me to do the work.'

The predicates **asgədidz** – 'cause to force' in (79a) and **s'ab** – 'make' in (79b) are expressed with future tense, and hence, the realization of the dependent SoA to these predicates and even the main SoAs are not realized. But, the speakers assume that the SoA propositions in both main and dependent SoAs will be realized. Thus, that is why the two manipulative predicate classes the **s'ab-** 'make' predicate and **azz-** 'order' predicate classes have been considered separately in the analysis.

Following the above analysis, in Ximt'aŋa, the choice of complement type by all manipulative predicates is the subjunctive complement type. This is because, the complements to those predicates are characterized formally by the complementizer **–ans** and semantically by their dependent time reference (DTR), i.e., the time reference of the complements is always posterior to the time reference of the main predicates.

The notion of causation conveyed by 'make' predicates can be expressed by means of verbal affixes. These are described as synthetic causatives, as opposed to 'make' verbs proper, also called analytical causatives (Shibatani, 1976 as mentioned by Cristofaro 2003). In Ximt'aŋa, as we can observe the data below, the notion of causative in (80a) is expressed by the verbal affix**-s** and in (80b) by the verb **s'ab-** 'make'. Therefore, the notion of causation in Ximt'aŋa can be conveyed by synthetical and analytical cauatives.

80)a. ŋir kiros ŋi-čis ginzib yiw -Ø -ans amn - is -Ø -č
she Kiros her - DAT money give-3MSG believe - CAUS -PAST -3FSG
'She persuaded Kiros to give her money.'
b. ŋir kiros ŋi - čis ginzib yiw – Ø - ans s'ab -Ø - č
she Kiros her – DAT money give -3MSG -COMP make - PAST – 3FSG
'She made Kiros to give her money.'

3.2.5. Perception Predicates

Perception predicates, also called immediate perception predicates, refer to the way by which an experiancer directly perceives the occurrence of the SoA coded in the complement (Cristofaro, 2003; Noonan, 1985). In the complement relation of perception predicates, two SoAs are involved: the act of perception (the main SoA) and the perceived SoA (the dependent event). According to Cristofaro (2003) and Noonan (1985), this class includes predicates such as see, hear, watch, and feel. In Ximt'aŋa, these predicates are expressed with the forms such as **qal-** 'see', **wəš** – 'hear', **asks** – 'watch', and **wəy-** 'feel'. Examples are given below in (81) and then we can see their features in their complement relation.

81)a. yan iǰɨr -dyə -t məs'af anbib -Ø -aŋ^{w} qal -Ø -u -n
I man -DEF –ACC book read -3MSG -PROG see -1SG -PAST -1
'I saw the man reading a book.'
b. yan iǰɨr - d iwnə - šən -s wigt - Ø - aŋ^{w} wəč' -Ø - u - n
I man -DEF woman-DEF- DAT talk -3MSG- PROG hear- 1SG- PAST-1
'I heard the man talking to the woman.'
c. yan iǰɨr- d ǰɨm- Ø - aŋ^{w} askis- Ø -u -n
I man- DEF sing- 3MSG-PROG watch -1SG -PAST- 1
'I watch the man singing.'
d. yan iǰɨr-d s'iw- s- Ø - aŋ^{w} yi- gis wəy -s - Ø - u - n
I man–DEF sick–CAUS–3MSG–PROG my - DAT feel - CAUS- 1SG - PAST–1
'I felt the man being sick.'
(Semantically: the man being sick caused me felt while something was causing the man sick)

e. yan iǰɨr-d nəqyənə fiz – Ø - aŋ^{w} yi-gis xar – z- Ø – u
I man–DEF fertilizer spread-3MSG–PROG my–DAT smell–CAUS- 3MSG –PAST
'I smelled the man spreading the fertilizer.'
(Semantically: the man spreading the fertilizer caused me to smell)

As we can see the data in (81) above, the complements to the immediate perception predicates in the language such as **qal**-'see', **wəš** – 'hear', **askis** – 'watch', wəy – **'feel'** and **xar** – 'smell' have DTR. Because, the immediate perception of an event (the main event) must have the same time reference as the event itself (the dependent event) (Noonan, 1985).

In the above constructions, the direct object of the act of perception (CTP) is the dependent event as a whole. For instance, in (81a), the object of the act of seeing is not the argument **iǰird** 'the man' coded as the matrix direct object, but the whole complement proposition **iǰɨrd** məs'af anbibaŋw 'the man reading a book'. Semantically, it is the entire event that is perceived. Similarly, in (81e), it is not **iǰɨrd** 'the man' that is smelled, but the dependent event **iǰɨrd nəgysənə fizaŋ^{w}** the man spreading 'the fertilizer' as a whole.

From the given perception predicates above, **wəy** – 'feel' and **xar-** 'smell' use the causative verbal affix **–s** as in (81d) and **–z** as in (81e) respectively to change their argument number from one place to two place; and then they are able to code a dependent event as their argument in perception relation. The other predicates such as **qal-** 'see', **wəš** – 'hear' and **askis-** 'watch' are two place argument by themselves, and hence, they do not need causative markers to have dependent event as their argument.

In Ximt'aŋa, participle complement types are used to the perception predicates. Since the entity brings about the dependent event is considered as a property of that entity and this is reflected at the morphosyntactic level, the verb of the dependent event is treated as an adjectival modifier (Cristofaro, 2003). Hence, these complements take the form of a relative clause with the direct object of perception predicates as their head, as we can see in (82), the participle complement is **iǰird ǰɨrwədyət siŋ^{w}aŋ^{w}** 'he stealing the chicken', the head of the complement is **iǰɨrd** 'the

man' which is the direct object of the perception predicate **qal**-'saw' and modified by the participle complement.

82) yan iǰɬr-d ǰɬrwə - dyə -t siŋ^{w}–Ø - aŋ^{w} qal–Ø –u –n
I man–DEF chicken–DEF–ACC steal –3MSG –PROG see –1SG –1 –PAST
'I saw the man stealing the chicken'

3.2.6. Knowledge Predicates

Knowledge predicates (Noonan, 1985 and Cristofaro, 2003) take experiancer subjects and describe a state of knowledge about a propositional content on the part of the experiancer. This process corresponds to the main SoA, while the SoA referred to by the propositional content is the dependent SoA (complement). This predicate class includes *know*, *realize*, and *forget*, as well as perception predicates such as *see* and *hear* when used in a sense other than that of immediate perception (Noonan, 1985). In Ximt'aŋa, the state and the process of knowledge predicates are **arq-** 'know', **aj** – 'understand', **dədədəds** – 'realize', **mir** – 'forget', **qal** - 'see' and '**wəš-** 'hear' as exemplified below respectively.

83)a. yan ŋay tər–ŋ - əŋə arq –Ø - ək^{w} – in
I they come–3PL– COMP know–1SG –PRES –1
'I know that they came.'

b. yan iǰir-d niddiš – Ø - əŋə aǰ – Ø – u – n – 1P
I man- DEF be angry–3MSG–COMP understand–1SG –PAST - 1
'I understood that the man became angry.'

c. yan iǰɬr- d ŋin – i- l aq – Ø - əŋə dədədəds –Ø –u –n
I man–DEF house –DEF –LOC be -3MSG –COMP realize –1SG –PAST - 1
'I realized that the man is in the house.'

d. yan ŋi - šiŋ^{w} Kiros aq- ∅- əŋə mir- Ø –u –n
I his –name Kiros AUX –3MSIG –COMP forget –1SG –PAST –1
'I forget that his name is Kiros.'

e. yan dixa aq- ŋ - əŋə qal- Ø –u –n
I poor be - 3PL -COMP see –1SG –PAST –1
'I saw that they are poor.'

f. yan iǰɬr –d k'ir - ∅ - əŋə wəč' -∅ -u –n
I man -DEF die –3MSG –COMP hear –1SG –PAST –1
'I heard that the man died.'

Here, in the knowledge sense, **qal-** 'see' and **wəš** – 'hear' as in (83e) and (83f), unlike what happens in (81) and (82), the proposition referring to the dependent SoA cannot be an object of sensory perception, but rather it is a reported information. In the knowledge sense, the complements require the complementizer - **əŋə**, but in the perception sense, no complementizer is used. Moreover, these **qal** – 'see' and **wəš** 'hear' are in the participial form in the case of true perception predicates, and in the indicative form in the case of perception predicates used in the knowledge sense, as can be seen above in (81) and (82).

'Complements to knowledge and acquisition of knowledge predicates are supposed to be true, since it only makes to assert knowledge or acquisition of knowledge about something one takes as a fact' (Noonan, 1985). In Ximt'aŋa, the complements to these knowledge and acquisition of knowledge predicates assert new information as a fact i.e., they are not discourse dependent. In other words, the complements to these predicates have independent time reference, and hence, they are encoded as indicative complements. For instance the predicate **arq** – 'know' can be used with a complement which has the past perfect, simple past, past progressive, present progressive, or future time reference, as illustrated in (84a-f) respectively:

84)a. yan ŋay tər –ŋ win –ŋ -əŋə arq –Ø - əkʷ –n
I they come –3PL AUX –3PL –COMP know-1SG –PRES –1
'I know that they had come.'

b. yan ŋay tər –ŋ -əŋə arq –Ø - əkʷ - in
I they come –3PL –COMP know –1SG –PRES- 1
'I know that they came.'

c. yan ŋay tər –ŋ - aŋw win –ŋ - əŋə arq –Ø - əkʷ –n
I they come –3PL –PROG AUX –3PL –COMP know –1SG –PRES –1
'I know that they were coming.'

d. yan ŋay dixa aq –ŋ - əŋə arq – Ø –u- n
I they poor AUX 3PL –COMP know –1SG –PAST –1
'I know that they are poor.'

e. yan ŋay tər –ŋ - aŋʷ aq- ŋ – əŋə arq –Ø - əkʷ –in
I they come –PL –PROG be –3PL –COMP know- 1SG –PRES –1
'I know that they come coming.'

f. yan ŋay tər –t' –i'kʷ aq- ŋ - əŋə arq –Ø - əkʷ –in
I they come – FUT - 3PL AUX -3PL –COMP know- 1SG –PRES – 1
'I know that they will come.'

3.2.7. Propositional Attitude Predicates

Propositional attitude predicates (Noonan, 1985; Cristofaro, 2003) express an attitude (evaluation) about the mood value (truth value) of some proposition expressed as their complement. According to Noonan (1985) and Cristofaro (2003), some propositional attitude predicates, such as in Ximt'aŋa: **aq-t'- [at'-]** 'be possible' or 'may' as in (85a), **iman yəŋ** 'be certain' as in (85 b& c) and **čəl** – 'can' or 'be probable' as in (85 d & e), express the evaluation indirectly, by expressing the attitude of an experiancer towards the truth of the complement propositional content.

On the other hand, the predicates such as **amn-** 'believe', '**hasb-** 'think' or 'suppose' and **gimt** – 'guess' express positive propositional content (cf. Cristofaro, 2003), as illustrated in (86); whereas, the predicates such as **amn- a- y-** 'do not believe' or **amn-i-y-** 'did not believe' **t'artirš** – 'suspect doubt' and **tək'awmiš**– 'deny' express negative propositional content as illustrated in (87). In Ximt'aŋa, all these propositional attitude predicates are used accordingly, as illustrated below:

85) a. ŋir amir fir –t –i aq –t –i
she tomorrow go –FUT –3FSG AUX-FUX –3FSG
'She may go tomorrow.'
(It is possible for her to go tomorrow.)

b. misänä xaq – š – t' – u aq- Ø - äŋä iman yəŋ
Misän defeat – PASS- FUT – 3MSG AUX – 3MSG – COMP certain be
'It is certain that Misänä will be defeated.'

c. misänä xaq –Ø – äŋä iman yəŋ
Misänä win - 3MSG – COMP certain be
'It is certain that Misänä won.'

d. maritu xaq – t – t- ä čəl - ä - č
Maritu win- FUT –3FSG –COMP can –PRES –3FSG
'Maritu can win.'
(It is probable that Maritu will win.)

e. maritu tigra xaq – t- t - ä čəl – t - i win – i - č
Maritu yesterday win – FUT – 3FSG – COMP can – FUT – 3FSG AUX- PAST – 3FSG
'Maritu would have won.'
(It was probable that Maritu would win yesterday.)

86) a. maritu ŋir – s'amt' - id xaq – t - ik'^{w} aq- ŋ – äŋä hasb- ä – č
Maritu her –friends –DEF win –FUT–3PL AUX –3PL-COMP think-PRES-3FSG
'Maritu thinks that her friends will won.'

b. yan ŋirt k'ən – Ø - əŋə hasb – Ø – u – n
I her love – 3MSG – COMP think – 1SG – PAST – 1
'I thought that he loved her.'

c. Maritu ŋir – s'amt' - id xaq – t' - ik'^{w} aq- ŋ - əŋə amn - ə - č
Maritu her – friends – DEF win – FUT – 3PL AUX – 3PL – COMP believe – PRES-3FSG
'she believes that her friends will win.'

d. maritu ŋir – s'amt'- id xaq – t' - ik'^{w} aq – ŋ - əŋə gimt - ə - č
Maritu her – friends – DEF win – FUT – 3PL AUX – 3PL – COMP guess - PRES -3FSG
'Maritu guesses that her friends will win.'

e. maritu ŋir – s'amt' - id xaq – ŋ - əŋə gimt - ə - č
Maritu her – friends – DEF win – 3FSG – COMP guess – PRES – 3FSG
'Maritu guesses that her friend won.'

87) a. ŋir tər – r - i š t'art'irš – Ø - ək^{w} - in
her come – 3FSG – COMP suspect 1SG – PRES – 1
'I suspect if she comes.'

b. yan ŋir tər – t- i aq – r- iš t'artirš – Ø - ək^{w} – in
I she come – FUT – 3FSG AUX – 3FSG – COMP suspect – 1SG – PRES – 1
'I suspect if she will come.'

c. yan ŋay tər – t' - ik'^{w} aq – ŋ- əŋə amn – a- y - nək'^{w} - im
I they come – FUT – 3PL AUX – 3PL – COMP believe-IMPRF-NEG-1PL – FNTZR
'I do not believe that they will come.'

d. yan ŋay tər – t'-ik'^{w} aq – ŋ - əŋə amn – a- y - nək'^{w} - im
I they come – FUT – 3PL AUX – 3PL – COMP believe – IMPRF – NEG – 1PL – FNTZR
'I do not believe that they will come.'

e. yan ŋay tər – t' - ik'^{w} aq- ŋ – əŋə amn – i – y - nək'^{w} - im
I they come – FUT – 3PL AUX-3PL – COMP believe – PERF – NEG – 1PL – FNTZR
'I did not believe that they will come.'

f. yan ŋay inn tər – t' - ik'^{w} aq – ŋ - əŋə tək'awmiš – Ø - ək^{w} - in
I they here come – FUT – 3PL AUX- 3PL - COMP deny – 1SG – PRES – 1
'I deny that they will come here.'

g. yan ŋay inn tər – t' - ik'^{w} aq – ŋ - iš tək'awmiš – Ø - ək^{w} –in
I they here come – FUT – 3PL AUX – 3PL – COMP deny – 1SG – PRES – 1
'I deny if they will come here.'

h. yan ŋay inn tər – ŋ - iš tək'awmiš – Ø - ək^{w} - in
I they here come – 3PL – COMP deny – 1SG – PRES – n
'I deny if they comes.'

As we can see all the data provided in (85), (86) and (87) above, the attitude or evaluation expressed by the propositional attitude predicates is always subjective; that is, originates from some source, either from the speaker as in (86b, and 87) or the experiancer of the propositional attitude predicate, as in (85, 86a, c, d, & e) but not from the actual speaker. As a result, the propositional content of the propositional attitude predicates is never presented either as

positively true or as positively false. And hence, the propositional content of the complement is never presented as positively realized or positively unrealized. This means that the dependent event is always presented as non-factual, at least with respect to the moment at which the main event is located.

However, different propositional attitude predicates express a different likelihood for the dependent event to be factual (Cristofaro,2003). According to Noonan (1985), 'speaker propositional attitude can also be indicated by choices of complement type. Indicative versus subjective complements can be used to indicate positive versus negative propositional attitude'. Accordingly, in Xɨmt'aŋa, the complements become indicative type when the dependent event is presented as quite likely to be factual, as in (85) and (86) and subjunctive type when it is not the case, as in (87), and also as described in section (3.1.1).

The different likelihood of factualities are expressed by different morphosyntatic devices in the dependent clause. For instance, the dependent clauses to the negative propositional attitude predicates, as in (87), can take the complementizer - **š** which shows conditionality for the occurrence of the dependent event being true; whereas, in (85) and (86), the complements do not use **–š,** rather they use the complementizer -**əŋə** as in (86) and (85 b & c) in which the speaker is more strongly committed to the likelihood of the dependent event being true, and -**ə** as in (85 d &e) in which the speaker is less strongly committed to the likelihood of the dependent event being true. But in (85a), the speaker is very uncertain about the event, and no complementizer is used.

3.2.8. Utterance Predicates

Utterance predicates (Noonan, 1985 and Cristofaro, 2003) describe an act of transfer of information initiated by an agentive subject and directed towards the addressee who may be implicit or overtly expressed. The dependent SoA represents the transferred information, and the CTP describes the manner of transfer, the illocutionary force of the original statement, and the evaluation of the speaker's view about the truth value of the proposition encoded by the dependent SoA (complement). In Xɨmt'aŋa, verbs such as, **yɨ** - 'say', **dɨq^{w}** – 'tell' or 'report',

qalt'iw- 'promise', **waqr** – 'ask', **arqiš** - 'announce' or 'declare' etc are used as utterance predicates as exemplified in (88), (89), (90), (91) and (92).

88) a. kiros bər – Ø – u, y – Ø – u adəru
Kiros leave – 3MSG – PAST say – 3MSG – PAST Adəru
'Adəru said: 'Kiros left.'
b. adəru kiros bər – Ø – u y – Ø – u
Adəru Kiros leave – 3MSG – PAST say – 3MSG – PAST
'Adəru said that Kiros left.'
c. adəru, kiros bər-t'-u yəŋ, y – Ø – u
Adəru Kiros leave – FUT–3MSG be say – 3MSG – PAST
'Adəru said: 'Kiros will leave."
d. adəru kiros bər-t'-u yəŋ y – Ø – u
Adəru Kiros leave-FUT- 3MSG be say-3MSG- PAST
'Adəru said that Kiros would came.'.

As we see the examples in (88), the information given in the complement of utterance predicate **yi-** 'say' are presented in either as a direct report, as in (88a & c), or an indirect report, as in (88b&d). According to Cristofaro (2003), a part from a number of formal differences, there is no reason to make distinction between direct and indirect report as far as subordination is concerned. However, in critical way, they differ in that indirect report describes the content of somebody's utterance, while direct report describes the actual words of somebody, regardless of their semantic content. And hence, the indirect report makes reference to both the man SoA (event) and the dependent SoA (event); whereas, direct report involves just one SoA, that is the main SoA.

Therefore, direct report is irrelevant for the study of complement relations as far as there is no complement subordination in a given construction, as in (88a& c). But the indirect report, as in (88b&d), is our concern since it involves both the main and the dependent clauses. On the other hand, the utterance predicates yi - 'say', in Ximt'aŋa, can also be used as complementizer with indirect report, as in (89c, 90b & 92c) below:

89) a. adəru maritu – s kiros bər – Ø - əŋə diq^{w} - Ø – u
Adəru Maritu – DAT Kiros leave– 3MSG – COMP tell – 3MSG – PAST
'Adəru told Maritu that Kiros left.'

b. adəru maritu – s kiros bər – t'- u aq – Ø - əŋə diq^{w} – Ø - u
Adəru Maritu – DAT Kiros leave – FUT-3MSG AUX-3MSG-COMP tell-3MSG- PAST
'Adəru told Maritu that Kiros would leave.'

c. adəru maritu – s bər – Ø- u – n yi - Ø diq^{w} Ø- u
Adəru Maritu – DAT leave – 1SG – PAST-1 say – 3MSG tell – 3MSG – PAST
'Adəru told Maritu that I left.'

90) a. kiros bər – t' – u aq – Ø - əŋə qal t'iw – Ø – u
Kiros leave – FUT – 3MSG AUX – 3MSG – COMP promise – 3MSG – PAST
'Kiros promised that he would leave.'

b. kiros bəč' – t-ir yəŋ yi - Ø qalt'iw- Ø – u
Kiros leave – FUT – 1SG be say – 3MSG promise – 3MSG – PAST
'Kiros promised that I would leave.'

91) a. maritu yit kiros bər – Ø aq – Ø - əš waqr – i - č
Maritu me Kiros leave – 3MSG AUX – 3MSG– COMP ask – PAST – 3FSG
'Maritu asked me if Kiros left.'

b. maritu yit kiros bər – t' – u aq – Ø - əš waqr – i - č
Maritu me Kiros leave – FUT – 3MSG AUX – 3MSG – COMP ask – PAST – 3FSG
'Maritu asked me if Kiros would leave.'

92) a. kiros bər – Ø - əŋə adəru arqiš - Ø – u
Kiros leave– 3MSG – COMP Adəru announce – 1SG – PAST
'Adəru announced that Kiros left.'

b. kiros bər – t' – u aq – Ø - əŋə adəru arqiš – Ø – u
Kiros leave – FUT – 3MSG AUX – 3MSG–COMP Adəru announce – 3MSG – PAST
'Adəru announced that Kiros would leave.'

c. Kiros bəč'- t – ir yəŋ yi - Ø arqiš – Ø – u
Kiros leave – FUT – 1SG be say – 3MSG announce – 3MSG – PAST
'Kiros announced that I would leave.'

In Ximt'aŋa, complements to utterance predicates, except **qal t'iw** – 'promise', have ITR, i.e., the complements are independent of the time reference of the matrix, as can be seen in (88, 89, 91 & 92). But in (90), the time reference of the complement to the predicate **qal t'iw** – 'promise' is always posterior to the time reference of the main clause. Therefore, the complements provided with ITR contexts above favor the indicative complement type whereas, complements with DTR contexts (i.e., with the predicate **qal t'iw** – 'promise') favor the subjunctive type. However, 'the propositional content of utterance predicates is never presented either as positively true, or positively false, and the dependent SoA is therefore non-factual' (Cristofaro 2003: 109), and the same is true here.

3.3. The Semantic Features of Complement Relations in Ximt'aŋa

The different predicate classes discussed in the last section involve different complement relation types between main and dependent SoAs, and this is going to be examined here. As has been pointed out in ((Givon 1980, 1990; Palmer, 1986; Ransom, 1986; Dik, 1989; Siewierska 1991) mentioned in Cristofaro (2003)), the semantics of the various relation types can also be described in terms of a number of general parameters such as the level of clause structure at which the complement relation is established, predetermination of the semantic features of the linked SoAs, and semantic integration between them. Based on these parameters let us examine the semantic features of the complement relations in Ximt'aŋa as follows.

3.3.1. Levels of Clause Structure

Cristofaro (2003) and Mily Crevels (1998), based on a model proposed within Functional Grammar (Dik 1989, 1997b; Hengeveld, 1989, 1990; Siewierska, 1990); Foley and Van Valin (1984) and Lyons (1977), provide that each clause can be described as a structure consisting of four hierarchically ordered layers or levels, such that each higher layer fully encompasses the lower ones. Each layer designates a different entity type and displays different functional properties. These are named as, predicate and term, predication, proposition, and clause (utterance), starting from the lower layer to the higher layer respectively. They are defined as follows:

> ***Predicates*** *designate properties or relations, while* ***terms*** *are used to refer to entities. Terms can be placed in space and time, and evaluated in terms of their reality.*
> *A* ***predication*** *is the result of the application of a predicate to the appropriate terms, and designates SoAs. An SoA is the conception of something that can be the case in some world, and can be evaluated in terms of its existence. It can be said to occur, take place, or obtain; it can be located in space and time; it can be heard, seen, or otherwise perceived.*
> *A* ***proposition*** *designates a propositional content, which is something that can be evaluated in terms of truth. A propositional content can be said to be known or thought about; it can be mentioned, denied, rejected, and remembered.*
> ***Clause (utterance)*** *encompasses the speech situation as a whole, and specifically refers to the speech act, which can be evaluated in terms of its felicity.* (Cristofaro, 2003: 110)

To illustrate these four levels, an example is given in (93):

93) adəru kiros tigra inn - itis bər – Ø - əŋə yi - gis diq^{w} - Ø – u
Adəru Kiros yesterday here-ABL leave-3MSG-COMP my-DAT tell-3MSG-PAST
'Adəru told me that Kiros left from here yesterday.'

Here, in (93), the predicates are **bər** – 'leave' and **diq^{w}**-'tell', and the terms are 'Kiros', 'Adəru' and 'me'. The predications are built by applying the predicate **bər**– 'leave' to the term (individual) 'Kiros', to form the dependent SoA and by applying the predicate **diq^{w}** 'tell' to the terms '**Adəru'**, 'me' and something being told, that is the dependent SoA. These predications can be evaluated in terms of space and time in which they occurred. For instance, the predication in (93) is realized in away that **Kiros bərəŋə** 'that kiros left' is happened from the space **innitis** 'from here' and in the time of **tigra** 'yesterday'.

The proposition, that is the third layer of a clause, in (93) is the propositional content contained in the clause **Kiros bərəŋə** 'that kiros left'; and this propositional content is presented to be known or thought and that can be a reason for surprise or doubt about 'Kiros's leaving'. The fourth layer that is the speech act of the given construction is the result of the speech situation as a whole. This means, it is the result of relating the felicity of the speech act made by 'Adəru' through the utterance predicate **diq^{w}** – 'tell' to the state of the hearer's knowledge.

However, we cannot tell the exact speech act or result of the speech situation of the complement relation in (93) since the propositional content of utterance predicates, such as **diq^{w}**- 'tell' here, is not presented either as positively true or positively false; and therefore, it is non-factual, as discussed in section (3.2.8.). From this, therefore, the utterance predicates involve complement relations that exist at the level of proposition.

The reason why these levels of clause structure are presented here is that different complement relations pertain to different layers of clause structures, as illustrated above on the utterance predicate **diq^{w}** – 'tell' in (93). Like the utterance complement relations, knowledge and propositional attitude complement relations pertain to the propositional level (cf. Cristofaro, 2003). Let us see the examples in (94) and (95):

94) yan t'amtəw səkʼʷ ət'a – tis bər – Ø - əŋə arq – Ø - u – n
I Tamtəw Səkʼw ət'a – ABL leave - 3MSG – COMP know – 1SG – PAST – 1
'I know that Tamtəw left from Səkʼʷət'a.'

95) misənə xaq – š – it' – u aq – Ø - əŋə iman yəŋ
Misənə defeat – PASS – FUT – 3MS AUX – 3MSG – COMP certain be
'It is certain that Misənə will be defeated.'

The complement relation to the knowledge predicate **arq** – 'know' in (94), and the complement relation to propositional attitude predicate **iman yəŋ** 'be certain' in (95), exist at the propositional level. Because, the state of affair (SoA) in **t'amtəw səkʼʷət'atis bərəŋə** 'that Tamtəw left from Səkʼʷət'a in (94) and the state of affair (SoA) in **misənə xaqšt'u aqəŋə** 'that **Misənə** will be defeated' as such cannot be the objects of knowledge predicate **arq** – 'know' and propositional attitude predicate **iman yəŋ** 'be certain' respectively, rather they are referring to propositional contents which somebody knows and thinks. According to Cristofaro (2003), the knowledge, propositional attitude and utterance relations do not involve two distinct SoAs (State of affairs) directly but rather an SoA that somebody knows, thinks, and says something and a propositional content referring to another SoA that is known, thought and said, respectively. Like the utterance relation, knowledge and propositional relations do not exist at speech act level since they cannot be attested in their felicity; and as discussed in sections (3.2.6) and (3.2.7), their propositional content in their dependent SoA is not actually true but it is supposed to be true (Cristofaro, 2003).

Unlike the knowledge, prepositional attitude and utterance relations, manipulative and perception relations, as in (96) and (97) below, pertain to the predication level (Cristofaro, 2003) in that they refer to the possible occurrence of SoAs, and these SoAs are the direct objects of manipulation and sensory perception. Moreover, the manipulative and perception relations involve two distinct SoAs directly, but not an SoA and a propositional content referring to another SoA like that of knowledge, propositional attitude and utterance relations. What is lost in manipulative and perception relations is the propositional content and the only state of affairs are remained. Let's see the examples in (96) and (97):

96) yan šəgnu adəru - t t'az – Ø – ans amnis – Ø – n
I Shəgnu Adəru –ACC hit - 3MSG – COMP persuade – 1SG – PAST – 1
'I persuaded Shəgnu to hit Adəru.'

97) yan kiros atinə ward – Ø - aŋ^{w} wəč' – Ø - ək^{w} - in
I Kiros flute play 3MSG – PROG hear – 1SG – PRES – 1
'I hear Kiros playing a flute.'

As we see the manipulative relation in (96), it cannot be evaluated in terms of truth, but it can be in terms of reality. Because, it lacks propositional content that can be known or though but involves two distinct SoAs: the SoA resulted from the act of persuasion and the other SoA referring to the act of persuasion. The same is true for the perception relation in (97). Therefore, manipulative and perception relations pertain to the predication level.

When we come to the modal, phasal, and desiderative predicates, Cristofaro (2003) noted that these predicates act as operators modifying the internal constituency of individual SoA, but they do so by relating these SoA, taken as, a whole, to other SoA. Just like the manipulative and perception relations, they involve a relation between two distinct SoA and hence, they pertain to the predication, not either the predicate or proposition level, as examples are given in (98), (99) and (100) for modal, phasal and desiderative relations respectively:

98) kiros amir inn- itis bər - t' – u t'uš – Ø - ək^{w}
Kiros tomorrow here – ABL leave – FUT – 3MSG must – 3MSG PRES
'Kiros must leave from here tomorrow.'
99) ŋəŋ xabəšə x^{w} - ənəw – d kirm – Ø – u
He bread eat – NZR – DEF begin – 3MSG – PAST
'He began eating the bread.'
100) yan adəru tər – t' – u aq – Ø - əŋə təsfə s'ab – Ø - ək^{w} – in
I Adəru come – FUT –3MSG AUX –3MSG – COMP hope make– 1SG – PRES-1
'I hope that Adəru will come.'

In discussing the phasal predicates of Ximt'aŋa in section (3.2.2), we have observed that phasals do act as aspectual operators such as perfective and imperfective aspects, but differ from the aspectual operators in that their reference is not purely internal to the relevant SoA, as also seen in (99). This means, in this case, the time of the beginning of eating is not the time of the whole process of eating or the modal predicate kirm- 'begin' does not show the internal (temporal constituency of the dependent SoA, **xabəšə x^{w}ənəw** 'eating bread'. But its function is relating this dependent SoA to another SoA referring to the phasal itself; and hence, phasal relations pertain to the predication level.

Modal and desiderative predicates also do act as modal operators such as verbal moods (e.g., subjunctives or conditionals as opposed to indicatives) define the mood value of the relevant SoA (e.g., irrealis) independently of any other SoAs; but they differ from modal operators in that they relate the occurrence of the SoA as a whole to a situation whereby this occurrence is necessary, possible, or desired (Cristofaro, 2003), as can be seen in (98) and (100) above. The modal predicate **t'uš-** 'must' in (98) and the desiderative predicate **tösfə s'ab** – 'make hope' in (100) establish a connection between two distinct SoAs. The SoA to which the modal condition applies, and the circumstances defining the modal condition applies, and the circumstances defining the modal condition itself. I other words, the reference of these predicates is not purely internal to the relevant SoA: **kiros amir innitis bərt'u** 'Kiros will leave from here tomorrow' in the case of modal predicate in (98) and **adəru tərt'u aqəŋa** 'that **Adəru** will come' in the case of desiderative predicate in (100). Therefore, modal and desiderative predicates pertain to the prediction level.

To sum up this section, the collection of the various complement taking predicates of Ximt'aŋa at different levels of clause structure is illustrated as follows in table (5).

Table 5. The complement taking predicates of Ximt'aŋa and their levels of clause structure

Predicate class	Level of Clause structure
Modals	Predication
Phasals	Predication
Manipulatives	Predication
Desideratives	Predication
Perception	Predication
Knowledge	Proposition
Propositional attitude	Proposition
Utterance	Proposition

These predicate classes are involved in complement relations only at predication and proposition levels of clause structure not at predicate and clause (utterance) levels; and this semantic features of complement relations is proposed by Cristofaro (2003).

3.3.2. Predetermination

The second major parameter for examining complement relation is predetermination. According to Cristofaro (2003:111), 'complement relations entail that some of the semantic features of the linked SoAs are predetermined by the nature of the relation itself. Predetermination may concern the time reference, aspect, or mood value of the linked SoAs, or the participants of these SoAs'. This means that different complement relations have different implications about the time reference, aspect value, mood value and participants of the linked state of affairs. Now, let us examine the predetermination of these semantic features in each complement relation of Ximt'aŋa based on the data given below:

101) Examples for modal predicates

a. kiros xabəšə - dyə - t x^{w}i - t' Ø - ə čal – Ø - ək^{w}
Kiros bread – DEF – ACC eat – FUT – 3MSG – COMP can – 3MSG – PRES
'Kiros can eat the bread.'

b. kiros amir inn- itis bər – t' Ø - ə t'uš – Ø - ək^{w}
Kiros tomorrow here – ABL leave – FUT – 3MSG – COMP must – 3MSG – PRES
'Kiros must leave from here tomorrow.'

102) Examples for phasal predicates

a. səb s'ab - ənəw – d kirm – Ø – u
task do – NZR – DEF begin – 3MSG – PAST
'He began doing the task.'

b. ŋir s'aŋ - ənəw – d tikn – i - č
She walk – NZR – DEF continue – PAST – 3FSG
'She continued her walking.'

103) Examples for desiderative predicates

a. yan kit kint – r – Ø - ans marqəs' - Ø - ək^{w} - in
I you learn 2 – 2SG - COMP wish – 1SG – PRES – 1
'I wish you to learn.'

b. ŋəŋ šila-d ziy – t' – Ø dəmz – Ø - ək^{w}
he local beer – DEF drink – FUT – 3MSG – COMP want – 3MSG – PRES
'He wants to drink the local beer.'

104) Examples for manipulative predicates

a. kit yit itt fič' – Ø – ans s'ab – r- n – u
you me there go –1SG – COMP make – 2 – 2PL – PAST
'You made me to go there.'

b. ŋir yit ǰɨm – Ø – ans azz – i - č
she me sing– 1SG – COMP order – PAST – 3FSG
'She ordered me to sing.'

105) Examples for perception predicates

a. yan ŋay fir – ŋ - aŋ^{w} qal – Ø – u – n
I they go – 3PL - PROG see – 1SG – PAST – 1
'I saw them going.'

b. ŋirt ǰɨm – r - aŋ^{w} wəč' – Ø – u – n
her sing – 3FSG -PROG hear – 1SG – PAST – 1
'I heard her singing.'

106) Examples for knowledge predicate

a. yan ŋay kint - iŋ - aŋ^{w} aq – ŋ – əŋə arq – Ø - ək^{w} – in
I they learn – 3PL – PROG AUX – 3PL – COMP know – 1SG PRES – 1
'I know that they are learning.'

b. yan ŋay bičiq gəb – an arq – ŋ - əŋə dədədəds -Ø -u-n
I they many thing – PL know– 3PL- COMP realize – 1SG – PAST – 1
'I realized that they knew many things.'

107) Examples for propositional attitude predicates

a. yan iǰir –d ǰirwə - dyə - t siŋ^{w} - Ø - əŋə hasb-Ø - ək^{w} - in
I man-DEF chicken-DEF-ACC steal-PERF-3S-COMP think-1SG -PRES – 1
'I think that the man stole the chicken.'

b. iǰir –d tər – t' – u aq - Ø - əŋə iman yəŋ
man – DEF come – FUT – 3MSG AUX – 3MSG – COMP certain be
'It is certain that the man will come.'

108) Examples for utterance predicates

a. ŋir səb s'ab – ŋ - əŋə wigt – i - č
she work do – 3PL – COMP report – PAST – 3FSG
'She reported that they did the work.'

b. adəru yan šila k'ən – Ø - ək^{w} – in y – Ø – u
Adəru I local beer like – 1SG – PRES – 1 say – 3MSG – PAST
'Adəru said that I like local beer.'

As we can see the given data of complement relations of Ximt'aŋa, the different complement relations predetermine the time reference, aspect value, mood value, and participants of the linked SoAs in various ways. Let us see each of these semantic features one by one based on the data given below.

I. Predetermination of Time Reference

As for the time reference, modal and desiderative complement relations, as in (101) and (103), involve a situation whereby the occurrence of the dependent SoA is necessary, possible, or

desired. However, whether and when the dependent SoA actually takes place is not relevant to the complement relation. Even though the time reference in these complement relations is irrelevant to the condition of desire expressed by the main predicate, it is predetermined in that the dependent SoA always takes places after the main SoA, or not takes place at all. Therefore, the time reference of modal and desiderative relations is predetermined but irrelevant to the relations.

Phasal predicates, as in (102), predetermine the time reference of the dependent SoA to two time points: that immediately preceding the one of the main SoA, and that immediately following it (Givon, 1973) as mentioned by Cristofaro (2003). For instance, in (102a), the time reference of the dependent SoA **səb s'abənəwd** 'doing the task' is immediately after the time of beginning. But, in (102b), the complement relation entails that 'she was walking' both immediately before and immediately after the time point of continuing walking. Therefore, unlike other predicate classes, phasal predicates predetermine the time reference of the dependent SoA with respect to two distinct timpoints instead of just one. Moreover, the time reference of the dependent SoA has different values depending on what predicate is involved in the complement relation, as **kirm** – 'begin' in (102a) and **tikn-** 'continue' in (102b) entail different time reference values in the complement relations.

In the case of perception relations, as exemplified in (105), they entail that main and dependent SoAs take place at the same time, and that the dependent SoA is on–going (Cristofaro, 2003). In (105a) for instance, the time reference of **yan qalun** 'I saw' and **ŋay firŋaŋ^{w}** 'they were going' is determined with respect to the time point at which the other is located. The same is true in (105b). Thus, perception predicates entail that main and dependent SoAs are simultaneous.

Manipulative predicates, as in (104), determine the time reference of the dependent SoA in that the dependent SoA is posterior to the main SoA. For example, in (104a), the dependent SoA **itt fič'ans** 'I to go there' resulting from the act of manipulation **kit yit s'abrnu** 'you made me' must be posterior to the act of manipulation itself.

On the other hand, with knowledge, prepositional attitude, and utterance predicates, the linked SoAs can have any time reference. For instance, in all the examples in (106), (107) and (108), we can change the time reference (tense) of either the main SoA or the dependent SoA in each given complement relation. This means that the time reference of knowledge, propositional attitude and utterance relations is undermined.

II. Predetermination of Aspect Value

As we can see the data, similar observations can be made for aspect value. With knowledge, propositional attitude, and utterance predicates, the linked SoAs main and dependent SoAs can have any aspect value. For example, with the knowledge predicate in (106a), both the linked SoAs have imperfective aspect; but, they can also have different aspect values, as presented below again in (109):

109) a. yan ŋay kint – ŋ - əŋə arq – Ø - ək^{w} – in
I they learn – 3PL – COMP know – 1SG – PRES – 1
'I know that they learnt.'
b. ŋay kint – ŋ - aŋ^{w} win – ŋ - əŋə arq – Ø – u – n
they learn – 3PL – PROG AUX – 3PL – COMP know – 1SG – PAST – 1
'I know that they were learning.'

Here, we observe that with knowledge predicates, the main and dependent SoAs can have any aspect value, i.e., there is no predetermination of aspect value with them. The same is true for propositional attitude and utterance complement relations, as exemplified in (107) and (108).

On the other hand, perception, manipulative and phasal predicates assign a fixed value to the aspect value of the dependent SoA. Perception predicates, as in (105 a&b), entail that the perceived SoA is imperfective, or it is on-going at moment the act of perception takes place. For instance, in (105b), the perceived SoA **ǰimraŋ**^{w} 'While she was singing' is imperfective in its aspect value; while the act of perception **ŋirt** ... **wəč'un** 'I heard her...' is perfective but took place while the other is on-going.

With manipulative predicates, we have two cases: one is with a predicate **s'ab** 'make' as in (104a) and the other is with predicates like **azz-**'order', as in (104b). With the manipulative predicate **s'ab-** 'make', as a result of the act of manipulation, the dependent SoA is always

presented as perfective, that is with no reference to its internal temporal constituency. As we see the example (104a), the internal temporal constituency of the dependent **SoA** is imperfective that is contrary to the fact. Manipulative predicates like **azz-** 'order', on the other hand, describe a situation whereby somebody asks somebody else to bring about some SoA, with no regard to whether or not this SoA actually be brought about (Cristofaro, 2003. In this case, aspect exist to the internal temporal constituency of the linked SoAs, that is, to their development through time. But, as can be seen in (104b), the actual occurrence of the dependent SoA, that is **ǰimans** 'I to sing' is not irrelevant; and hence, its aspect value is irrelevant too; even though, its internal temporal constituency is assigned as imperfective.

With modal and desiderative predicates like manipulative predicates such as '**azz-** 'order', the aspect value of the dependent SoA is irrelevant to the complement relation. For example in (101a), the time reference of the actual occurrence of **xabəšədyət x^{w}ɨt'ə** 'he to eat the bread' is not specified. But here, the actual occurrence of this SoA is irrelevant, and hence, its aspect value is irrelevant too. Of course, the internal temporal constituency is predetermined as imperfective which is implied from the logical order of the two SoAs in the modal complement relation. The same is true desiderative predicates, as exemplified in (103). The aspect value of the dependent SoA is predetermined as imperfective, but it is irrelevant to the complement relation.

Phasal predicates, as in the case of the time reference, predetermine the aspect value of the dependent SoA with respect to two time points, that immediately preceding the one of the main SoA, and that immediately following it, as in (102 a & b) and here in (110):

110) yin sayč'ə sa- til wɨt'y - ənəw čibris- n – u – n
we nine o'clock – LOC run – NZR stop – 1PL – PAST – 1
'We stopped running at nine.'

Here, the phasal predicate **čibris** – 'stop' entails that the dependent SoA, that is, **wɨt'yənəw** 'running' was on-going before 'nine. If we replace **čibris-** 'stop' with the other phasal predicate **kirm** – 'begin', the dependent SoA was on-going after 'nine' and if we replace **čibris** 'stop' with **tikn** – 'continue', the dependent SoA is on-going at nine where the main SoA is located. This means that the aspect value of the dependent SoA is predetermined and its aspect value differs depending on what phasal predicate is involved in the complement relation.

III. Predetermination of Mood Value

According to Cristofaro (2003: 114), 'All complement relations predetermine the mood value of the dependent SoA, albeit in different ways'. In Ximt'aŋa, this is also observed. Since mood value refers to the factuality and non-factuality of the SoA, each dependent SoA in all complement relations in Ximt'aŋa has either factual or non-factual mood value.

With modal and desiderative predicates, as in (111) for modals and in (112) for desideratives below, since the actual occurrence of the dependent SoA is irrelevant to the complement relation on both cases, the mood value of the dependent SoA is irrelevant; but it is presented as non-factual.

111) yan ginzib – d siŋ^{w} – Ø – č' - ə t'uš – Ø - ək^{w} - in
I money – DEF steal – FUT – 1SG – COMP must – 1SG – PRES - 1
'I must steal the money.'

112) yan ki - gis k'əsəw g^{w} idəna aq- Ø - əŋə təsfə s'ab – Ø - ək^{w} – in
I your - DAT good journey be – 3MSG – COMP hope make– 1SG – PRES – 1
'I hope you have a good journey.'

Manipulative predicates such as **azz-** 'order', as is (113) below, entail that the dependent SoA is not realized at the time point where the main SoA is located, and may or may not take place at some subsequent time point. With manipulative predicate **s'ab** – 'make', as in (114) below, the dependent SoA actually takes place as a result of the act of manipulation described by the predicate **s'ab-** 'make'. Therefore, the dependent SoA with **s'ab-** 'make' predicate is presented as factual.

113) ŋəŋ yən sək'^{w}ət'a – tis bər – Ø – ans azz- Ø – u
he I Sək^{w}ət'a – ABL leave – 1SG – COMP order – 3MSG - PAST
'He ordered me to leave Sək'^{w}ət'a.'

114) kit yan čik'ə ǰiŋa wigt – Ø – ans s'ab – r- Ø - ək^{w}
you I bad story tell– 1SG – COMP make – 2 - 2SG – PRES
'You make me to tell bad story.'

Perception predicates, as can be seen in (105), like **qal** – 'see', **wəš** – 'hear' also entail that the dependent SoA is factual, for the reason that the dependent SoA to be perceived, it has to take place of the same time as the act of perception. We can see this also in (115) below:

115) yan if ər – k' id wit'y – ŋ - aŋ^{w} qal – Ø – u – n
I children – DEF run – 3PL – PROG see – 1SG – PAST – 1
'I saw the children running'

Concerning, knowledge predicates, as we have described it in section (3.2.6), they take propositional contents as their object, not SoAs. As we can see the examples in (83, 84) and (106), the relevant propositional content in the dependent SoA is presented as true. As a result, the dependent SoA corresponding to this propositional content is presented as factual too, as seen in (116) again:

116) yan ŋəŋ k'əsəw wit'y ətə aq- Ø - əŋə arq – Ø - əkʷ – in
I he good runner be – 3MS – COMP know – 1SG – PRES – 1
' I know that he is a good runner.'

With propositional attitude predicates, on the other hand, as discussed in (section (3.2.7) and seen in the examples in (85), (86), (87), (107), and (109), the propositional content representing the direct object of those propositional attitude predicates is not presented as positively true, nor as positively false. As a result, the mood value of the corresponding SoA is predetermined as non-factual; again, we can see an example here in (117):

117) yan ŋəŋ ŋirt k'ən – Ø - əŋə amn – Ø – u – n
I he her love – 3MSG believe – 1SG – PAST – 1
'I believed that he loved her.'

In the same manner, for utterance predicates, as seen in (88), (89), (90), (91), (92), and (108), the propositional contents (statements represents by the dependent SoA of utterance predicates are never presented as positively true, nor as positively false (see section 3.2.8.), and as a result, the corresponding dependent SoA is non-factual; and we can also see an example here in (118):

118) ŋay yan ginzib – d fis - Ø – č' ir aq Ø - əŋə diqʷ - u – ŋ
they I money – DEF take – FUT - 1SG AUX – 1SG – COMP tell – PAST – 3PL
'They told me that I would take the money'

IV. Predetermination of Participants

According to Cristofaro (2003:116), 'The fact that predetermination applies to both main and dependent SoAs has some significant linguistic consequences. If the semantic features of some SoA are predetermined with respect to some other SoA, these features need not be overtly specified for both SoAs'. This means, for instance, if two linked SoAs in a complement relation have the same participants, the participants of one SoA can be inferred from those of the other, and thus need not be overtly expressed.

In Xɨmt'aŋa, modal, phasal, and manipulative predicates entail that main and dependent SoAs share a participant, as exemplified in (119), (120), (121) and (122) respectively. For instance in modal relation in (119), the main SoA, i.e., **čələkʷ** 'he can', and the dependent SoA, i.e., **kiros xabəšdyət xʷɨt'ə** 'Kiros to eat the bread' share the same participant 'Kiros'. In phasal relation in (120), the entity **ŋəŋ** 'he' finding itself at the beginning phase with respect to the development of the SoA, i.e., **xabəšə xʷənəw** 'eating bread', is the same as that bringing about his SoA. In manipulative relation in (121), the entity, '**Shəgnu'**, bringing about the SoA, i.e., **šəgnu adəru t'azans** 'Shəgnu to hit Adəru', resulting from the manipulation is the same one as that affected by the manipulation act, i.e., by the act of **s'abənəw** 'making'; and the same is true as in (122), for the manipulative predicates like **azz-** 'order'. The examples are presented below:

119) kiros xabəš - dyə - t xʷə–t – Ø – ə čal – Ø - əkʷ
Kiros bread – DEF – ACC eat – FUT – 3MSG – COMP can – 3MS – PRES
'Kiros can eat bread.'

120) ŋəŋ xabəšə xʷ - ənəw kirm – Ø – u
he bread eat – NZR begin - 3MSG – PAST
'He began eating the bread.'

121) yan šəgnu adəru – t t'az – Ø – ans s'ab – Ø – u – n
I Shəgnu Adəru – ACC hit– 3MSG – COMP make – 1SG – PAST – 1
'I made Shəgnu to hit Adəru.'

122) yan ŋɨr təṭ – r- ans azz – Ø – u – n
I she come– 3FSG – COMP order – 1SG – PAST – 1
'I ordered her to come.'

Therefore, in Xɨmt'aŋa, modal, phasal and manipulative complement relations predetermine the participants of their linked SoAs.

The other complement relation in the language such as desiderative, perception, knowledge, propositional attitude, and utterance, have no entailment about the participants of the linked SoAs. This means that the main and dependent SoAs may or may not share their participants; as can be seen in (123), (124), (125), and (127) respectively for desiderative, perception, knowledge propositional attitude, and utterance predicates:

123) a. yan abzə - d qal – Ø – č' - ə dəmz – Ø - əkʷ – in
I lion – DEF see – FUT – 1SG – COMP want – 1SG – PRES – 1
'I want to see the lion.'
b. yan abzə - d tər – Ø – ans təmz – Ø - əkʷ – n
I lion – DEF come– 3MSG – COMP want – 1SG – PRES – 1
'I want the lion to come.'

124) a. yan s'ab – Ø - əŋʷ qal – Ø – u – n
I work – 1SG – PROG see – 1SG – PAST – 1P
'I saw me working.'
b. yan misənə niddiš – Ø - aŋʷ qal – Ø – u – n
I Misənə be angry – 3MSG – PROG see – 1SG – PAST – 1
'I saw Misənə being angry.'

125) a. yan niddiš – Ø - əŋə aǰ – Ø – u – n
I be angry – 1SG – COMP understand – 1SG – PAST – 1
'I understood that I became angry.'
b. yan iwnə - šən niddiš – r - əŋə aǰ – Ø – u – n
I woman – DEF be angry– 3FS – COMP understand - 1SG – PAST – 1
'I understood that the woman became angry.'

126) a. yan təč' – Ø - ir aq – Ø - əŋə amn – Ø - əkʷ – in
I come – FUT – 1SG AUX – 1SG – COMP believe – 1SG – PRES – 1
'I believe that I would come.'
b. yin ŋay tər –t' - ikʷ' aq – ŋ - əŋə amn – i – y - nək'ʷ - im
we they come – FUT – 3PL AUX – 3PL – COMP believe – PERF – NEG – 1PL – FNTZR
'We did not believe that they could come.'

127) a. adəru maritu- s bər – Ø – u – n yi - Ø diqʷ Ø – u
Adəru Maritu – DAT leave – 1SG – PAST – 1 say – 3MSG tell – 3MSG – PAST
'Adəru told Maritu that I left.'
b. adəru maritu – s kiros bər – t'- u aq – Ø - əŋə diqʷ -Ø-u
Adəru Maritu DAT Kiros leave-FUT-3MSG AUX-3MSG-COMP tell-3MSG PAST
'Adəru told Maritu that Kiros would leave.'

Thus, as we see the data from (123)-(127), the participants of the linked SoAs in desiderative, perception, knowledge, propositional attitude and utterance complement relations are undetermined.

To sum up section 3.3.2, the implications of the various complement relations of Ximt'aŋa with respect to predetermination of the semantic features of the linked main and dependent SoAs are schematized in table 6.

Table 6. Complement-taking predicates of Ximt'aŋa and their predetermination

Predicate class	Semantic features of the dependent SoA			
	Time reference	Aspect value	Mood value	Participants
Modals	PD (irr.)	PD (irr.)	PD (irr.)	PD
Phasals	PD	PD	PD	PD
Manipulatives (**s'ab** - 'make')	PD	PD	PD	PD
Manipulatives ('**azz**- 'order')	PD	PD (irr.)	PD	PD
Desideratives	PD (irr.)	PD (irr.)	PD (irr.)	UD
Perception	PD	PD	PD	UD
Knowledge	UD	UD	PD	UD
Propositional attitude	UD	UD	PD	UD
Utterance	UD	UD	PD	UD

PD= Predetermined; UD= Undetermined; irr. = irrelevant

This result is the same as that of Cristofaro's (2003) general proposal about the predetermination of the semantic features of the linked SoAs in complement relations in a language.

3.3.3. Semantic Integration

The third major parameter for the analysis of complement relations is semantic integration. According to Cristofaro (2003:117) 'main and dependent SoAs in a subordination relation may be interconnected to varying degrees'. This means that there is a tight or a certain degree of interconnection exists between the linked SoAs; or there is no connection at all between the linked SoAs in complement relations. Therefore, the basic component of semantic integration between linked SoAs is the degree to which the boundaries between these SoAs are eroded or kept intact (Cristofaro, 2003).

The notion of semantic integration, as presented in Cristofaro (2003), was originally introduced by Givon (1980 & 1990). Based on this notion, Givon (1990) distinguishes three predicate classes: manipulative verbs, modality verbs (including desideratives, phasals, and so-called implicative verbs such as 'try'), and cognition –utterance predicates (including knowledge, propositional attitude and utterance). The dimension (component) underlying semantic integration, that is suggested by Givon (1990), *is the spatio-temporal integration of two events into a single event frame.* In Givon's view, on the basis of this component of semantic integration, contemporal and spatially contiguous SoAs, and/or SoAs sharing participants (i.e., referential integration which Givon calls), should be more semantically integrated than non-contemporal and non-spatially contiguous SoAs. However, Cristofaro (2003: 19) suggests that 'semantic integration, as such, is independent of spatio-temporal contiguity'. This means that spatio-temporal contiguity and referential integration are neither necessary nor sufficient conditions for semantic integration (Cristofaro, 2003). Let us consider the following sentences from Ximt'aŋa:

(128) yan ifär – k'id - zat qal – ø – and ŋay ginzib - dyä - t siŋ^{w} - iŋ - aŋ^{w} yäŋ
I children – DEF – ACC see – 1SG – TEMPO they money-DEF-ACC steal-3PL-PROG be
'When I see the children, they are stealing the money.'

129) [tigra tär - ø - äw] iǰir – d nän ŋi -ŋin- i- z - tig^{w}ä fir – ø - aŋ^{w} yäŋ
yesterday come-3MSG man-DEF now his-house-DEF-POSS-GOAL go-3MSG-PROG be
'The man who came yesterday is now going to his house.'

In the sentence (128), the linked SoAs **yan ifärk'idzat qaland** and **ŋay ginzibdyät siŋ^{w}iŋaŋ^{w} yäŋ** are spatio-temporally contiguous, but completely distinct from each other, and hence not interconnected semantically. Because, the act of perception, that is, 'seeing the children' could take place if the perceived SoA, that is 'stealing the money', did not take place. Similarly, in case of referential integration, the relative relation (clause construction) in (129) shows that the linked SoAs: **tigra täräw** 'who came yesterday' and **iǰird nän ŋiŋiniztig^{w}ä firaŋ^{w} yäŋ** 'The man is now going to his house' share the participant **iǰird** 'the man'; but, they are completely distinct from each other. Because, there is no semantic connection between **tigra täränäw** 'coming yesterday' and **nän firänäw** 'going now' even though these SoAs share the participant **iǰird** 'the man'. Therefore, based on such analysis, Cristofaro (2003: 118) says that, 'spatio-temporal /referential integration on the on hand, and integration into a single event (SoA) frame on the other, play a quite different role in semantic integration'.

However, in the case of integration of two events into a single event frame, the linked SoAs are tightly interconnected and this dimension is necessary and sufficient condition for semantic integration between the linked SoAs (Cristofaro, 2003). This is the case with phasal predicates, which Givon (1990) and Cristofaro (2003) himself put at the top of the integration hierarchy, as illustrated in (130), (131) and (132) in Ximt'aŋa below:

(130) ŋay nən mös'af dyə-t anbib - ənəw kirm – u – ŋ
they now book – DEF – ACC read - NZR begin - PAST - 3PL
'They already began reading the book.'
131) ŋay mös'af - dyət-ə anbib - ənəw tikn – u – ŋ
they book – DEF – ACC read – NZR continue – PAST – 3PL
'They continued reading the book.'
132) ŋay mös'af - dyə - t anbib - ənəw abz - u – ŋ
they book – DEF – ACC read – NZR finish – PAST – 3PL
'They finished reading the book.'

These phasal predicates: **kirm** – 'begin' in (130), **tikn** – 'continue' in (131), and **abz-** 'finish' in (132) involve integration of the linked SoAs, such as **mösəf anbibənəw** 'reading the book' and **ŋay nən kirmuŋ** 'they already began' in (130), or **ŋay tiknuŋ** 'they continued' in (132), into the single SoA frame, that is, into the action of **anbibənəw** 'reading'. Because, the action of **kirmənəw** 'beginning', **tiknənəw** 'continuing', and **abzənəw** 'finishing', here is actually part of the action of **anbibənəw** 'reading'. Hence, it can be believed that phasal predicates in Ximt'aŋa involve tightly interconnected SoAs.

When we come to modal predicates, they are slightly different from phasal predicates in that the modal condition cannot be regarded as part of the dependent SoA to which it applies. But, like the phasal predicates, modal predicates involve two distinct SoAs: one is the occurrence of some SoA which corresponds to the modal condition, and the other is the dependent SoA to which the modal condition applies. As can be seen in (133) and (134) below, however, since the SoA which corresponds to the modal condition cannot be part of the other SoA, modal predicates involve lower semantic integration than phasal predicates. Moreover, the dependent SoA of modal predicates need not take place as opposed to the dependent SoA of phasal predicates.

133) yin k'ən - išš – ø – n - ə čiz – n - əkʷ – in
we love - RECP - FUT - 1PL - COMP should – 1PL – PRES- 1
'we should love each other.'

134) yan ŋi- gis ginzib yiw – ø - č- ə čəl – ø - əkʷ - in
I his - DAT money give - FUT - 1S – COMP can – 1SG – PRES – 1
'I can give him money.'

However, unlike other complement-taking predicates, modal predicates do not define distinct SoAs with autonomous participants. In other words, as we see the example in (133), the modal SoA, **yin čiznəkʷin** 'we should/ it is necessary for us', and the dependent SoA, **k'ənišššnə** 'we to love each other' share the same participant '**yin** 'we'; or they do not have their autonomous participant. The same is true in (134), in that the participant '**I**' is used in both the modal SoA, **yan čələkʷin** 'I can' and the dependent SoA, **ŋigis ginzib yiwč'ə** 'I to give him money' as shared subject. But, the others except the phasal predicates complement taking predicate classes can involve SoAs with autonomous participants performing specific actions in their own right, but not as an obligation, as can be seen back in (123), (124), (125), (126), and (127).

Even in manipulative predicates, as discussed based on the examples in (121) and (122), the shared participant cannot perform both the main and the dependent actions, and hence the distinct SoAs of manipulative complement relations can be defined with autonomous participants, or with different entities. A modal condition, on the other hand, as seen in (133) & (134), is only defined in terms of the dependent SoA to which it applies and does not involved in the dependent SoA. Therefore, the modal condition cannot be conceptualized separately from the dependent SoA to which it applies; and this determines a very high degree of interconnection between the modal condition and the SoA to which it applies. Hence, the rank of modal predicates in terms of semantic integration is lower than phasal predicates, but higher than the other predicate classes, in the language.

The other factor, suggested by Cristofaro (2003), in determining the degree of semantic integration between linked SoAs in complement relations is *the occurrence of dependent* SoA. Based on this dimension, the manipulative predicate such as **s'ab-** 'make' can be ranked higher than the rest of the predicate classes. Because as exemplified in (135) below, it involves a direct causation relationship between the linked SoAs in the given complement relation, the dependent SoA, in this case; **ŋir məs'afd anbibrans** 'she to read the book' is realized; and as a result, the two SoAs are tightly interconnected.

135) ŋəŋ ŋir məsəf–d anbib – r- ans s'ab – ø – u
he she book – DEF read- 3FSG – COMP make - 3MSG – PAST
'He made her to read the book.'

However, interconnection in the manipulative predicates such as **s'ab** – 'make' is lower than in the case of phasals and modals. Because, in **s'ab** – 'make' predicate class, the linked SoAs are not part of the same SoA frame, and though being interconnected, they can be conceptualized as distinct SoAs involving different entities.

The manipulative predicates such as **azz**-'order', desideratives, and perception predicates, on the other hand, involve a different and lower degree of interconnection between the linked SoAs. Of course, in terms *of occurrence*, the commands, or desires described by these predicates could not take place if they did not refer to the possible realization of some SoA; and an act of perception could not take place if a perceived SoA did not take place. However, unlike the manipulative predicates such as **s'ab**– 'make', SoAs representing the object of commands, desires, or acts of perception take place independently of these commands, desires, and acts of perception as illustrated below in (136), (137) and (138) respectively.

136) yan ŋay ginzib ŋi- gis yiw – ŋ – ans waqr – ø- u – n
I they money his – DAT give– 3PL – COMP ask – 1SG – PAST – 1
'I asked them to give money to him.'
137) ŋay sək'^{w} ət'a fir – t' - iŋ - ə bənn - iŋ - ək^{w}
They Sək'^{w}əta go – FUT – 3PL – COMP need – 3PL – PRES
'They need to go Sək'^{w} ət'a.'
138) yan ifər – k'id imq^{w} - išš-iŋ - aŋ^{w} askis – ø – u – n
I children – DEF kiss – RECP – 3PL – PROG watch – 1SG – PAST – 1
'I watch the children kissing each other.'

As we see the data, for instance in (136), the dependent SoA, **ginzib ŋigis yiwŋans** 'they to give money to him' takes place independently of the command SoA, **yan ŋay waqrun** 'I asked them'. In (137), the dependent SoA (the object of the desire), **ŋay sək'^{w}ət'a firt'itiŋə** 'they to go Sək'^{w}ət'a' takes place independently of the desire SoA, **ŋay bənniŋək^{w}** 'they need'. In (138), though the act of **askisənəw** 'watching' could not take place independently of the perceived SoA, **ifərk'id imq^{w}išširaŋ^{w}** 'the children kissing each other', the perceived SoA takes place independently of the act of perception. Therefore, these predicates classes involve a

lower degree of semantic integration between the linked SoAs than that of the manipulative predicates such as **s'ab-** 'make'.

On the other hand, according to Cristofaro (2003:122), 'some complement relations involve no semantic integration at all between the linked SoAs. This is the case with knowledge, propositional attitude, and utterance relations'. As we have discussed in the previous sections in (3.2.6), (3.2.7), and (3.2.8), these relations do not involve two SoAs directly, but rather an SoA described by the complement –taking predicate and a propositional content. But, still there are two SoAs, because propositional contents refers to SoAs. Let us illustrate this with Xɨmt'aŋa data in (139), (140), and (141) as follows:

139) a. yan kɨt ginzib – d adäru – s yɨw – r – ø - äŋä wäč' - ø - u – n
I you money – DEF Adäru - DAT give – 2 – 2SG – COMP hear – 1SG – PAST – 1
'I heard that you gave the money to Adäru.'
b. yan ŋäŋ tär – t' – u aq – ø - äŋä arq – ø - äk^{w} - n
I he come - FUT - 3MSG AUX – 3MSG - COMP know – 1SG – PRES – 1
'I know that he would come.'

140) a. ŋɨr amir fir – t – i aq – t – i
She tomorrow go – FUT – 3FSG AUX – FUT - 3FSG
'She may go tomorrow.'
(It is possible for her to go tomorrow)
b. yan ŋɨr tär – r- iš t'art'ɨrš - ø - äk^{w} – in
I she come– 3FSG – COMP doubt – 1SG – PRES – 1
'I doubt if she comes.'

141)a. yan misänä tär - t' – u aq- ø - äŋä y – Ø – u – n
I Misänä come – FUT – 3MSG AUX – 3MSG – COMP say – 1SG – PAST – 1
'I said that Misänä would come.'
b. maritu yɨt kiros bär – ø aq – ø- äš waqr – i č
Maritu me Kiros leave – 3MSG AUX – 3MSG – COMP ask – PAST – 3FSG
'Maritu asked me if Kiros left.'

From the above data, knowledge relation, as in (139), involves one SoA, which refers to the state of knowledge, that is, **yan wäč'un** 'I heard', and a propositional content, which refers to the truth value of the dependent SoA, **kɨt ginzibd adärus yɨwräŋä** 'that you gave the money to Adäru' in (39a). This means that the two SoAs are not directly involved by the relation, and hence, there is no semantic integration between the two SoAs. Similarly, the propositional attitude relation in (140) involves an SoA, which is expressed by the prepositional attitude predicate **aqt'i [at'i]**

'may' and the propositional content which refers to the truth value (mood value) of the dependent SoA, that is, **ŋir amir firti** 'that she will go tomorrow' in (141a). Since, the two SoAs are not involved directly, there is no semantic interconnection between the two SoAs in the propositional attitude relation. The same is true in utterance relations, as in (141). Thus, in Ximt'aŋa, the knowledge, propositional attitude, and utterance predicates do not involve semantic integration between the main and the dependent SoAs.

Now, we can rank the complement-taking predicate classes of the language in terms of degree of semantic integration. Phasal predicates involve the highest degree of semantic integration between the linked SoAs, because these SoAs are part of the same SoA frame. With phasal predicates, the linked SoAs are not actually part of the same SoA frame, but one of the two cannot be conceptualized separately from the other. Hence, modal predicates also involve a high degree of semantic integration between the linked SoAs. All the other complement relations involve conceptualization of the linked SoAs as distinct SoAs; therefore, they involve a lower degree of semantic integration, or no semantic integration at all. However, manipulative predicates such as **s'ab-** 'make' involve a higher degree of semantic integration than predicates such as **azz-** 'order', desiderative, and perception predicates; because there is a direct causation relation between the linked SoAs. Finally, knowledge, propositional attitude and utterance predicates involve no semantic integration. These all can be represented by the semantic integration hierarchy which is proposed by Cristofaro (2003), as follows in table 7.

Table 7. Complement – taking predicates and semantic integration in Ximt'aŋa

Semantic integration: The semantic integration Hierarchy	No semantic Integration
Phasals > Modals> Manipulatives (**s'ab-** 'make)' > Manipulatives (**azz-** 'order'), Desideratives, Perception	Knowledge, Propositional attitude, Utterance

> = involves higher semantic integration than

CHAPTER FOUR

4. MORHPOSYNTACTIC CODING OF COMPLEMENT RELATIONS AND ITS CORRELATION WITH THEIR SEMANTIC FEATURES IN XɬMT'AƊA

Here, we are concerned with the morphosyntactic structures used to code the complement relations types in Ximt'aŋa. According to Cristofaro (2003:131), 'Cross-linguistic analysis shows that the distribution of the various morphosyntactic devices used to code dependent SoA in complement relations follows ordered patterns of variation. These patterns are defined by a major hierarchy, the Complement Deranking- Hierarchy', as shown below:

142) **The Complement Deranking Hierarchy**:

Modals, phasals > manipulatives ('make', 'order'), desiderat'ves> perception> knowledge, propositional attitude, utterance

(Cristofaro, 2003: 131)

The complement Deranking Hierarchy in (142) should be read as: if any non-independent declarative clause-like construction is used to code the dependent event in complement relation at any point on the hierarchy, then it is used for all complement relations to the left of the hierarchy (Cristofaro, 2003). The hierarchy holds for a variety of phenomena such as the distribution of deranked verb forms in general, lack of tense, aspect, mood (TAM) and person agreement distinctions, and lack of agent (AGN) and subject (S) arguments as well as case marking/adpositions of the dependent vebrs (Cristofaro, 2003). Based on the hierarchy, we can examine these morphosyntactic phenomena used to code dependent SoAs whether or not they differ in structure from an independent declarative clauses taken in isolation.

According to Cristofaro (2003), in order to evaluate the degree of structural difference between independent and dependent clauses, two main parameters, verb forms and participant coding, can be used. These parameters are logically independent of each other; and they may combine in possibly a very wide variety of ways. Now, let us use them separately to examine the morphosyntactic coding of complement relations in Ximt'aŋaə.

4.1. The Form of the Dependent Verb in Complement Relations

Cristofaro (2003) noted that the distinction between verb forms occurring in independent declarative clauses and verb forms not doing so as basically functional features of these forms. This distinction is cross-linguistically applicable; because, all languages have independent clause as well as dependent clauses. This assumption, according to Stassen (1985) as mentioned by Cristofaro (2003), is the reason for a basic distinction between balancing and deranking.

According to Stassen (1985), in order to code two linked SoAs occurring in a fixed temporal order, a language may resort two strategies; *balancing*, which may code both clauses by means of structurally equivalent verb forms such that each could occur in an independent clause, and *deranking*, in which one of the linked clauses may be expressed by means of a verb form that cannot be used in independent clauses.

According to Cristofaro (2003: 55), deranked verb forms and balanced verb forms basically differ in two aspects:

I. *Total or partial lack of the categorical distinctions normally relevant to verbs in the language, such as tense, aspect, mood, or person distinctions.*
II. *Use of special marking not allowed in independent clauses, which includes nominal or adjectival markers such as case or special tense, aspect, mood, or person markers not occurring in independent clauses.*

However, according to Cristofaro (2003), a verb accompanied by a clitics affixed conjunction should be viewed as balanced, unless some additional deranking strategy is at work.

Depending on the two basic strategies: balancing and deranking, we are going to examine the dependent verb forms in each complement relation type described so far in the language.

4.1.1. The Verb forms of the dependent SoAs in Modal Complement Relations

Here the verb forms in modal complement relations are going to be examined in away that whether they lack tense, aspect, mood and person agreement distinctions and have case marking/adpositions.

143) a. ŋay itt fir – t' - ik'^{w} ŋay
they there go - FUT - 3PL be
'They will go there.'

b. ŋay itt fir – a – y - ək'^{w} ŋay
they there go – IMPRF – NEG -3PL be
'They do not /will not go there.'

c. ŋay itt fir – t' - ə t'uš - ŋ - ək^{w}
they there go – FUT – 3PL – COMP must - 3PL - PRES
'They must go there.'

d. ŋay itt fir - ənəw t'uš - ŋ - ək'^{w}
they there go – NZR must – 3PL – PRES
'They must go there.'

e. ŋay itt fir - ənəw t'uš - a – y - ək'^{w} - im
they there go - NZR must-IMPRF–NEG–3PL–FNTZR
'They must not go there.'

(144) a. yan abza - dyə – t k'iw – ø – č'ir yəŋ
I lion - DEF – ACC kill- FUT – 1SG be
'I will kill the lion.'

b. yan abza - dyə - t k'iw ø - č' - ə čəl - ø - ək^{w} - in
I lion - DEF –ACC kill- FUT – 1SG - COMP can – 1SG – PRES – 1
'I can kill the lion.'

c. yan abza - dyə - t k'iw - ənəw čəl – a – y – k'ər- m
I lion – DEF ACC kill – NZR can – IMPRF - NEG – 1SG - FNTZR
'I cannot kill the lion.'

d. yan abza - dyə - t k'iw – a – y – k'ər – yəŋ
I lion – DEF – ACC kill – IMPRF – NEG – 1SG be
'I don't /will not kill the lion.'

In order to examine whether the verbs of the dependent SoAs are deranked or balanced in their forms, we have to compare and contrast them with their corresponding forms in isolated independent declarative clauses. For instances, here, if we see the tense specification of the verbs in the isolated independent clauses in (143a) and (144a), they are inflected for a compound tense markers: the future tense markers **–t'** in (143a) and **–t** in (144a), and the present tense auxiliary verb **ŋay** 'are'. However, when these verbs are used in modal complement relation, the present tense auxiliary verb **ŋay** 'are'. However, when these verbs are used in modal complement relation, the present tense auxiliary very **ŋay** 'are' is reduced; and as a result the definiteness of the future tense in (143a) and (144a) become indefinite in (143c) and (144b). Moreover, the nominalized verbs in (143d) and (144c), involve total reduction of the tense markers, as and the person agreement markers with respect to their forms in isolated independent clauses, as in (143a) and (144a). This confirms that the verbs of the dependent SoAs in modal complement relations are deranked for the lack of tense and person agreement specification.

On the other hand, the verbs of the dependent SoAs in modal complement relations involve deranking for aspect in that they are not marked for aspect in the complement relations; whereas, in their corresponding forms in isolated independent clauses, they are inflected for aspect. In fact, aspect specification is normally occurred in the negative construction in the language, as we see in (143b), (143e), and (144d). In the modal complement relations, the dependent verbs cannot be negated and marked with aspect; instead, the modal predicates are negated and marked with aspect on behalf of the dependent verbs. Therefore, the verbs of the dependent SoAs in modal complement relations are deranked for the lack of aspect specification. As for mood distinction, not only in these complement relation, but also in all the complement relations in the language, it is not formally specified on the verbs in dependent clauses as well as in the corresponding declarative independent clauses. Therefore, we will not discuss about the specification of mood for other complement relations since it is unmarked.

The other verbal category is case marking/adpositions. In modal complement relation, the dependent verb can be nominalized, and hence it is marked with the nominalizer-**ənəw**. According to Cristofaro (2003), nominalizer is considered as special marking not allowed in independent clauses. The nominalized verb in the language, however, cannot be coded with other case marking/adoption except definiteness. Thus, this nominal marker cause the dependent verbs to be deranked since it is not used in independent clauses. Now, we can show the main points clearly in table (8) as follows:

Table 8. The morphosyntactic specification of the dependent SoA in modal complement relations

Verbal categories		**Tense**	**Aspect**	**Mood**	**Person agreement**	**Case marking or adposition**
Morphosyntactic specification	In independent clauses	+	+/-	-	+	-
	In dependent clauses	+/-	-	-	+/-	+/-
Codification strategy: D, B or D/B		D	D	B	D/B	D/B

4.1.2. The Verb Forms of the Dependent SoAs in Phasal Complement Relations

The dependent pedicates in phasal complement relations are nominalized and as a result they are reduced in their tense, aspect and person agreement markers as opposed to their corresponding forms in isolated independent clauses. Let us see the examples in (145):

145)a. ŋəŋ xabəššə x^{w} - ənəw kirm – ø – u
he bread eat - NZR begin – 3MSG – PAST
'He is eating bread.'

b. ŋəŋ xabəššə x^{w} - ənəw kirm – ø – u
he bread eat – NZR begin – 3MSG – PAST
'He began eating bread.'

146) a. ŋir ǰim - r - a$ŋ^{w}$ win - i - č
she sing – 3FSG – PROG AUX- PAST – 3FSG
'She was singing.'

b. ŋir ǰim - ənəw – d tikn – i - č
she sing – NZR – DEF continue – PAST – 3FSG
'She continued singing.'

The phasal predicates are associated with nominalized complements, as seen in (145b) and (146b), in the language. The verbs in the complements are nominalized with the form - **ənəw**, and optionally inflected with the definite marker **–d**. However, there is no nominalizer in the corresponding isolated independent clauses, as seen in (145a) and (146a), and hence the dependent verbs in modal complement relations are deranked for case marking.

On the other hand, the dependent verbs, in (145b) and (146b) lack the present and past tense markers **yəŋ** 'is' and **win** – 'was' respectively, the progressive aspect marker -aŋw and the person agreement markers, as opposed to the verb forms in the independent clauses in (145a) and (146a). Hence, the dependent verbs in phasal complement relations are also deranked for the lack of tense, aspect and person agreement specification. The summarized points are given in table 9 below.

Table 9. The morphosyntactic specification of the dependent SoA in phasal complement relations

Verbal categories		Tense	Aspect	Mood	Person agreement	Case marking or adposition
Morphosyntactic specification	In independent clauses	+	+	-	+	-
	In dependent clauses	-	-	-	-	+
Codification strategy: D, B or D/B		D	D	B	D	D

4.1.3. The Verb forms of the Dependent SoAs in Desiderative Complements

The verb forms of the dependent SoA in desiderative complement relations are either deranked or balanced for the lack of person agreement distinctions and for case marking/adpositions. On the other hand, they are deranked either of the partial reduiction or for the complete lack of tense specifications. However, the verbs are balanced for aspect specification both in dependent and isolated independent negative clauses, as illustrated below.

147) a. ŋir tər – t- i ŋi
she come – FUT – 3FSG be
'She will come.'

b. ŋir tər – a- y - rəy ŋi
she come – IMPRF - NEG – 3FSG be
'She does not/ will not come.'

c. ŋir tər – t- t - ə dəmz - ə- č
she come – FUT – 3FSG –COMP want – PRES – 3FSG
'She wants to come.'

d. ŋir tər - a – y – r - əŋə dəmz - ə - č
she come - IMPRF - NEG – 3FSG - COMP want – PRES – 3FSG
'She wants not to come.'

e. yan ŋir tət – r- ans dəmz - ø - əkʷ - in
I she come – 3FSG – COMP want – 1SG – PRES – 1
'I want her to come.'

f. yan ŋir tər – a - y- ṛ - əŋə dəmz – ø- əkʷ - in
I she come - IMPRF - NEG – 3FSG - COMP want – 1SG - PRES – 1
'I want her not to come.'

g. ŋir tər - ənəw dəmz - ə - č
she come - NZR want- PRES – 3FSG
'She wants coming.'

In desiderative complement relations, the dependent verbs are either marked for tense, as in (147c) with future tense marker –**t** and the present tense marker **ŋi** 'is', or not marked as in (147d), (147e), (147f) and (147g) as opposed to their forms in the independent clauses in (147a) and (147b). Though tense is marked on the dependent verbs, as in (147c), there is partial reduction of tense, since the present auxiliary verb **ŋi** is reduced and the only subordinate type verbt **tərttə** with future marker is remained. Therefore, the dependent verbs in desiderative complement relations are deranked for lack of tense specification or partial reduction of tense marker.

Aspect specification takes place only in the negative constructions both in independent and dependent clauses, as we can see in (147b), (147d) and (147f). This means that in the affirmative dependent and independent clauses, aspect is not specified, and in the negative dependent and independent clauses, it is specified; and hence the dependent verbs in desiderative complement relations are balanced for aspect specification.

For person agreement distinctions, the verbs in the dependent clauses are either inflected, as in (147c), (147d), (147e), (147f), or not inflected in case of the nominalized verb forms, as in (147g). However, the verbs in isolated independent clauses, as seen in (147a) and (147b), are inflected for person agreement distinctions. Thus, the dependent verbs in desiderative complement relations are either deranked or balanced for person agreement markers. Similarly, since the dependent verbs in desiderative complement relations can be nominalized, in the language, they are specified with the nominalizer - **ənəw**, as seen in (147g). However, in the other forms, there is no such form. Therefore, the verbs of the complements in desiderative complement relations are either deranked or balanced for case marking/adposition. Let us see the summary given in table 10 below;

Table 10. The morphosyntactic specification of the dependent SoA in desideratives complement relations

Verbal categories		Tense	Aspect	Mood	Person agreement	Case marking or adposition
Morphosyntactic specification	In independent clauses	+	+/-	-	+	-
	In dependent clauses	+/-	+/-	-	+/-	+/-
Codification strategy: D, B or D/B		D	B	B	D/B	D/B

4.1.4. The Verb forms of the Dependent SoAs in Manipualtive (s'ab – 'make' and azz- 'order') complement relations

In manipulative complement relations, the dependent verbs are inflected for person both in the negative and affirmative forms, and for aspect in the negative constructions like their corresponding independent forms. Moreover, the verbs have no case marking. However, they lack tense distinctions as opposed to their forms in independent clauses, as the examples given below.

148) a. yin čik'ə ǰiŋa wigt - n – u –n
we bad story speak – 1PL – PAST – 1
'We spoke bad story.'

b. ŋay yin čik'ə ǰiŋa wigt – n – ans s'ab- u ŋ
they we bad story speak – 1PL - COMP make – PAST – 3PL
'They made us to speak bad story.'

c. yin čik'ə ǰiŋa wigt – i - y – nək' win – n – u - n
we bad story speak – PERF – NEG – 1PL AUX – 1PL – PAST – 1
'We did not speak bad story.'

d. ŋay yin čik'ə ǰiŋa wigt – a - y – n- əŋə s'ab – u – ŋ
they we bad story speak – IMPRF – NEG – 1PL – COMP make – PAST – 3PL
'They made us not to speak bad story.'

149) a. yin čik'ə ǰiŋa wigt – t- nik' yəŋ
we bad story speak - FUT – 1PL be
'We will speak bad story.'

b. ŋay yin čik'ə ǰiŋa wigt – in – ans s'ab - ŋ - $ək^w$
they we bad story speak -1PL – COMP make – 3PL - PRES
'They make us to speak bad story.'

c. yin čik'ə ǰiŋa wigt – a - y- nək'^{w} yəŋ
we bad story speak – IMPRF - NEG – 1PL be
'We do not/ will not speak bad story.'

d. ŋay yin čik'ə ǰiŋa wigt – a - y- n - əŋə s'ab – ŋ - ək^{w}
they we bad story speak – IMPRF - NEG – 1PL – COMP make – 3PL – PRES
'They make us not to speak bad story.'

150) a. kitin wit'y - t- ir - nik' aq – t – r - nik'
you run – FUT 2 – 2PL AUX – FUT – 2 – 2PL
'You may run.'

b. ŋəŋ kitin wit'y -r - in - ans azz – ø – u
he you run – FUT - 2 – 2PL - COMP order – 3MSG – PAST
'He ordered you to run.'

c. kitin wit'y a – y - r - in - əŋə azz - ø - U
You run –IMPRF – NEG - 2 – 2PL - COMP order – 3MSG – PAST
'He ordered you not to run.'

d. kitin wit'y a – y - r - inək' yəŋ
you run – IMPRF - NEG – 2 – 2PL be
'You do not/will not run.'

As we see the data in ((148), (149) and (150), the dependent verbs of manipulative (**s'ab** – and **azz**-) complement relations involve deranking in that they lack tense specification, as in (148b), (148c), (148d), (149b), (149d), (150b) and (150c) in both their affirmative and negative forms. However, the verbs are inflected for tense when they are used in both affirmative isolated independent clauses, as seen in (148a), (149a) and (150a); and in the negative isolated independent clauses, as seen in (148c), (149c), and (150d). Therefore, the dependent verbs in manipulative complement relations are deranked for tense in their affirmative and negative forms.

On the other hand, aspect distinction is specified on the verbs when they are used in negative constructions both in the dependent clauses of manipulative relations and in isolated independent clauses; but not in their affirmative forms. From this we can say that the dependent verbs in manipulative complement relations are balanced both in their negative and affirmative constructions, as seen in (148), (149) and (150).

For person agreement distinctions, the verbs of all dependent clauses in manipulative complement relations are inflected, as happened in their corresponding forms in isolated

independent clauses. Therefore, the verbs in the complement of manipulative (**s'ab**– and **azz-**) predicates are balanced for the specification of person agreement distinctions. Moreover, since there is no specification of case marking/adpositions on these verbs both in the complement and isolated independent clauses, they are also balanced. To sum up, the coding of complement verbs in manipulative complement relations is given below in table 11.

Table 11. The morphosyntactic specification of the dependent SoA in manipulative complement relations

Verbal categories		Tense	Aspect	Mood	Person agreement	Case marking or adposition
Morphosyntactic specification	In independent clauses	+	+/-	-	+	-
	In dependent clauses	-	+/-	-	+	-
Codification strategy: D, B or D/B		D	B	B	B	B

4.1.5. The verb forms of the dependent SoAs in perception complement relations

In perception complement relations, the dependent verbs are inflected for person both in the negative and affirmative forms, and for aspect only in the affirmative constructions like their corresponding independent forms. Moreover, the dependent verbs have no case marking. However, they lack tense distinctions as opposed to their forms in independent clauses. Let us see the examples given in (151) by comparing with the examples in (152):

151) a. ŋay iǰid - d iwna - šən wigt - ø - aŋ^{w} wəš - u - ŋ
they man – DEF woman - DEF talk – 3MSG - PROG hear – PAST – 3PL
'They heard the man talking to the woman.'

b. yan kit wit'y - r- ø - aŋ^{w} asks - ø - u - n
I you run - 2- 2SG - PROG watch – 1SG - PAST – 1
'I watched you running.'

c. yin ŋay k^{w}irə x^{w}i - ŋ - aŋ^{w} qal - n - ək^{w}
we they food eat - 3PL – PROG see – 1PL - PRES - 1
'We saw them eating food.'

152) a. iǰir – d iwna - šən - s wigt - ø - aŋ^{w} win – ø - u
man – DEF woman – DEF - DAT talk – 3MSG – PROG AUX – 3MSG – PAST
'The man was talking to the woman.'

b. kɨt wit'y - r- ø - aŋ^{w} win – r - ø – u
you run - 2 – 2SG – PROG AUX – 2 – 2SG – PAST
you were running.'
c. ŋay k^{w}irö x^{w}i - ŋ - aŋ^{w} ŋay
they food eat - 3PL - PROG be
'They are eating food.'

As we described in chapter 3 section 3.2.5. participle complements are regularly associated with immediate perception predicates. The verb of these perception complements are participial in their functions in that they modify the head nouns of the complements with respect to their progressive events of states. Therefore, they are coded with the progressive aspect marker - **aŋ^{w}** just like what happen in isolated independent clauses, as in (152). Hence, the verbs of perception complements are balanced for aspect specification.

However, tense distinctions are not specified in the verbs of perception complements, as we can see in (151), as opposed to their forms in isolated independent clauses, as in (152). For instance, **-u** and **win-** 'was/were' in (152a&b), and **ŋay** 'are' in (152c) are tense markers. Thus, the complement verbs in perception complement relations are deranked.

On the other hand, person agreement distinctions are specified on the dependent verbs like in that of independent clauses; and as a result, the complement verbs are balanced. Here also, there is no formal specification of case marking/ adpositions both in complement and isolated independent clauses; and hence, the complement verbs are balanced. Now, we can see the summary given in table 12 below.

Table 12. The morphosyntactic specification of the dependent SoA in perception complement relations

Verbal categories		**Tense**	**Aspect**	**Mood**	**Person agreement**	**Case marking or adposition**
Morphosyntactic specification	In independent clauses	+	+	-	+	-
	In dependent clauses	-	+	-	+	-
Codification strategy: D, B or D/B		D	B	B	B	B

4.1.6. The verb form of Dependent SoAs in Knowledge Complement Relations

The verb forms of the complements associated with knowledge predicates are inflected for person agreement and aspect distinctions like in their corresponding independent forms. They are also inflected for tense except in their simple past use as opposed to their independent forms. Moreover, they cannot be nominalized and do not have case marking. Let us see the examples in (153):

153) a. iǰr-d birə-dyə- t siŋ^{w} - ø - ək^{w}
man – DEF ox – DEF - ACC steal – 3MSG – PRES
'The man steals the ox.'

b. ŋay iǰir-d birə-d siŋ^{w} - əw aq - ø - əŋə arq - iŋ - ək^{w}
they man – DEF ox – DEF steal – 3MSG AUX – 3MSG – COMP know – 3PL – PRES
'They know that the man steals the ox.'

c. iǰir-d birə-d siŋ^{w} -t' – u yəŋ
man – DEF ox – DEF steal – FUT – 3MSG be
'The man will steal the ox'

d. ŋay iǰir-d birə-d siŋ^{w} -t'-u aq – ø - əŋə arq - iŋ - ək^{w}
they man –DEF ox –DEF steal –FUT-3MSG AUX - 3MSG –COMP know – 3PL – PRES
'They know that the man will steal the ox.'

e. iǰir-d birə-d siŋ^{w} -a – y - əw yəŋ
man – DEF ox – DEF steal – IMPRF-NEG– 3MSG be
'The man does not/ will not steal the ox.'

f. ŋay iǰir-d birə-d siŋ^{w} -a – y - əw aq – ø - əŋə arq - iŋ - ək^{w}
they man-DEF ox-DEF steal-IMPRF-NEG-3MSG AUX-3MSG-COMP know-3PL-PRES
'They know that the man does not/will not steal the ox.'

154) a. iǰir-d birə-d siŋ^{w} - ø - u
man – DEF ox – DEF steal – 3MSG – PAST
'The man stole the ox.'

b. ŋay iǰir-d birə-d siŋ^{w} - ø - əŋə qal – u - ŋ
they man – DEF ox – DEF steal – 3MSG – COMP see – PAST – 3PL
'They saw that the man stole the ox.'

c. iǰir-d birə-d siŋ^{w} - i – y - əw – m
man – DEF ox – DEF steal – PERF – NEG - 3MSG – FNTZR
'The man did not steal the ox.'

d. ŋay iǰir-d birə-d siŋ^{w} - i – y – ø - əŋə qal – u - ŋ
they man – DEF ox – DEF steal – PERF – NEG - 3MSG – COMP see – PAST – 3PL
'They saw that the man did not steal the ox.'

e. iǰir-d birə-d siŋ^{w} - i – y – əw win - ø - u
man – DEF ox – DEF steal – PERF - NEG - 3MSG AUX – 3MSG - PAST
'The man had not stolen the ox.'

f. ŋay iǰir-d birə-d siŋ^{w} -ø win - i – y – ø - əŋə qal – u – ŋ
they man-DEF ox -DEF steal-3MSG AUX-PERF-NEG-3MSG-COMP see-PAST-3PL
'They saw that the man had not stolen the ox.'

The verb forms of the complements associated with knowledge predicates are inflected for tense equivalently as in their corresponding forms in isolated independent clauses except in their simple past use. For instance, the dependent verbs in (153b), (153d) and (154f) are marked for present tense with the auxiliary **aq-** 'AUX', future – present tense with **–t'** and **aq** – 'AUX', and remote past tense with **win-** 'AUX' respectively. The corresponding verb forms in (153a), (153c) and (154e) are also inflected for the tense markers - **ək^{w}** 'PRES', **–t'+ yəŋ** 'FUT + PRES' and **win** – 'PAST' respectively. This shows that the verb forms in complement clauses are balanced with their corresponding forms in isolated independent clauses with respect to tense specification.

On the contrary, in the simple past use, the dependent verbs, as in (154b), are not inflected for tense as opposed to their forms in isolated independent clauses, as in (154a). This by itself shows deranking of the dependent verbs. Thus, knowledge complement relations involve both balancing and deranking strategies in order to code the dependent verb forms with respect to tense distinctions.

On the other hand, aspect distinctions is specified on the verbs in both dependent and independent clauses, as seen in (153e & f), and (154c, d, e & f), in the negative constructions. Whereas, in affirmative dependent and independent clauses, the verbs lack aspect distinctions, as in (153 a-d) and (54 a &b). Similarly, person agreement distinctions on the verbs are always specified in both dependent and independent clauses. As for case marking or adpositions, the verbs either in dependent or in independent clauses are not coded for them. These all facts imply that the verbs in the dependent SoAs in knowledge complement relations are equivalently balanced with their corresponding forms in isolated independent clauses. Let us see the summarized points as follows in table 13.

Table 13. The morphosyntactic specification of the dependent SoA in knowledge complement relations

Verbal categories		Tense	Aspect	Mood	Person agreement	Case marking or adposition
Morphosyntactic specification	In independent clauses	+/-	+/-	-	+	-
	In dependent clauses	+/-	+/-	-	+	-
Codification strategy: D, B or D/B		D/B	B	B	B	B

4.1.7. The Verb Forms of the Dependent SoAs in Propositional attitude complement relations

Like in the knowledge complement relations, the dependent verbs in propositional complements are marked with person agreement and aspect distinctions equivalently to their independent forms, and they are also marked with tense except in their simple past use. Like their independent forms, the verbs of the complements do not have case marking/adpositions. The examples are given below:

155) a. ŋir ŋit k'ən - ə - č
she him love – PRES – 3FSG
'She loves him.'

b. ŋir ŋit k'ən -rəy aq – r – əŋə iman yəŋ
she him love – 3FSG AUX - 3FSG – COMP certain be
'It is certain that she loves him.'

c. ŋir ŋit k'ən – t – i ŋi
she him love – FUT - 3FSG be
'She will love him.'

d. ŋir ŋit k'ən –t – i aq – r - əŋə iman yəŋ
she him love – FUT - 3FSG AUX - 3FSG – COMP certain be
'It is certain that she will love him.'

e. ŋir ŋit k'ən –a – y - rəy – m
she him love – IMPRF – NEG - 3FSG - FNTZR
'She doesn't/will not love him.'

f. ŋir ŋit k'ən – a – y - rəy aq – r – əŋə iman yəŋ
she him love – IMPRF – NEG – 3FSG AUX – 3FSG – COMP certain be
'It is certain that she does not/will not love him.'

156) a. ŋay fir - u - ŋ
they go - PAST - 3PL
'They went.'

b. yan ŋay fir - ŋ - əŋə amn – ø - əkʷ – in
I they go - 3PL – COMP believe – 1SG - PRES – 1
'I believe that they went.'

c. ŋay fir i- y - əkʼʷ - im
they go - PERF – NEG - 3PL – FNTZR
'They did not go.'

d. yan ŋay fir i- y - ŋ - əŋə amn – ø - əkʷ - in
I they go - PERF – NEG - 3PL – COMP believe – 1SG – PRES - 1
'I believe that they did not go.'

e. ŋay fir - ŋ win – u - ŋ
they go - 3PL AUX – PAST – 3PL
'They had gone.'

f. ŋay fir - ŋ - aŋʷ win – u - ŋ
they go - 3PL – PROG AUX – PAST – 3PL
'They had been going.'

g. yan ŋay fir - ŋ win - i – y ŋ - əŋə amn – ø - akʷ – in
I they go - 3PL AUX – IMPRF - NEG– 3PL – COMP believe – 1SG – PRES – 1
'I believe that they had not gone.'

h. yan ŋay fir - ŋ win – ŋ - əŋə amn – ø - əkʷ -n
I they go - 3PL AUX - 3PL – COMP believe – 1SG – PRES – 1
'I believe that they had gone.'

As we see the data given in (155) and (156), the verbs in the complements are inflected for tense except in the simple past use of the verbs, just like in knowledge complement relations. For instance, in the affirmative verbs of the dependent SoAs in (155b), (155d), and (156h) are inflected for simple present tense with the auxiliary verb **aq-** 'AUX', compound future – present tense with **–t** 'FUT" and **yəŋ** 'PRES' and for remote past tense with the auxiliary verb **win** – 'PAST'.

As we see the forms of these verbs in independent clauses in (155a), (155c) and (156e), they are marked with the tense markers **-ə** 'PRES', **-t + yəŋ** 'FUT + PRES' and **win** – 'PAST' respectively. In negative construction the dependent verbs are also inflected for tense, as in (155f) with **aq** – 'PRES' and in (156g) with **win** – 'PAST', like their independent forms. This implies that the verbs in dependent SoAs are balanced or structurally equivalent with their corresponding forms in isolated independent clauses with respect to tense specification.

However, in the simple past use of the verbs the tense is not marked formally in the dependent SoAs in propositional attitude complement relations, as seen in (156b), as opposed to their corresponding verb forms in isolated independent clauses, as in (156a). In this case, the verbs in dependent SoAs are deranked, or, are not structurally equivalent with their corresponding forms in isolated independent clauses with respect to the simple past tense specification.

As for aspect inflection, the negative verb forms either in independent clause or in complement clause, they are always coded with aspect markers, as in (155e), (155f), (156c), (156d), and (156g). In the affirmative forms, the verbs are inflected only for progressive aspect, as in (156f), which can also be occurred in the dependent verb forms in both affirmative and negative uses. This implies that aspect has no role for deranking the verbs in complement clauses, i.e., the verbs in dependent SoAs are balanced.

On the other hand, person agreement distinction is specified in all dependent and independent clauses both in the negative and affirmative verb forms and hence, it has no role for the deranking of verbs in complement clauses of propositional predicates. Similarly, there is no case marking /adpositions on the verbs. Therefore, we can say that the verbs in the complement clauses of propositional predicates are not coded as deranked verbs; rather they are balanced verb forms. We can summarize the points in table 14 below:

Table 14. The morphosyntactic specification of the dependent SoA in propositional attitude complement relations

Verbal categories		**Tense**	**Aspect**	**Mood**	**Person agreement**	**Case marking or adposition**
Morphosyntactic specification	In independent clauses	+/-	+/-	-	+	-
	In dependent clauses	+/-	+/-	-	+	-
Codification strategy: D, B or D/B		D/B	B	B	B	B

4.1.8. Verb Forms of the Dependent SoA in Utterance Complement Relations

The dependent verbs in utterance complement relations are inflected for tense, aspect and person agreement distinctions, and do not have case marking/adpositions just like in knowledge and propositional attitude complement relations, as illustrated below in (157).

157) a. ŋəŋ tər – ø - ək^{w}
he come - 3MSG - PRES
'He comes.'

b. ŋəŋ tər – a – y - əw aq – t' – u
he come - IMPRF – NEG - 3MSG AUX – FUT – 3MSG
'He may not come.'

c. ŋay ŋəŋ tər – əw aq - ø - əŋə yi - gis diq^{w} – u – ŋ
they he come - 3MSG AUX - 3MSG – COMP my – DAT tell- PAST – 3PL
'They told me that he comes.'

d. ŋay ŋəŋ tər – a – y - əw aq - ø - əŋə yi - gis diq^{w} - u - ŋ
they he come - IMPRF – NEG - 3MSG AUX - 3MSG – COMP my- DAT tell –PAST –3PL
'They told me that he does not/will not come.'

e. ŋəŋ tər – t' – u yəŋ
he come - FUT be
'He will come.'

f. ŋay ŋəŋ tər – t' – u aq - ø - əŋə yi - gis diq^{w} - u – ŋ
they he come - FUT - 3MSG AUX - 3MSG – COMP my – DAT tell –PAST –3PL
'They told me that he will come.'

158) a. ŋir nən bər – ə – č
she now leave – PRES – 3FSG
'She leaves now.'

b. ŋay ŋir nən bər – ə – č y – u – ŋ
they she now leave – PRES – 3FSG say - PAST – 3PL
'They said that she leaves now.'

c. ŋir bər – a – y – rəy - m
she leave – IMPRF – NEG - 3FSG - FNTZR
'She does not/will not leave.'

d. ŋay ŋir bər – a – y – rəy - m y – u – ŋ
they she leave – IMPRF – NEG - 3FSG - FNTZR say – PAST – 3PL
'They said that she does not/will not come.'

159) a. ŋir tigra bər - i - č
she yesterday leave – PAST – 3FSG
'She left yesterday.'

b. ŋay ŋir tigra bət-r - əŋə yi - gis diq^{w} – u – ŋ
they she yesterday leave – 3FSG – COMP my – DAT tell - PAST - 3PL
'They told me that she left yesterday.'

c. ŋay ŋir tigra bər - i – y - r- əŋə yi - gis diq^{w} – u – ŋ
they she yesterday leave – PERF - NEG - 3FSG – COMP my- DAT tell - PAST - 3PL
'They told me that she did not left yesterday.'

Like in knowledge and propositional attitude complement relations, the verbs of the dependent SoAs in utterance complement relations are inflected for tense in both isolated independent clauses and dependent clauses except in their simple past use. For instance, the verbs are inflected for simple present and future tenses in independent clauses, as in (157e), and (158a) and dependent clauses, as in (157c), (157f) and (158b), in their affirmative forms. These shows that the verbs of the dependent SoAs in utterance complement relations are balanced structurally with respect to their tense forms in independent clauses. Similarly, the negative verb forms are inflected for tense in isolated independent clauses, as in (157b) with present tense marker **aq-** 'AUX' and future tense marker **'-t'**, together give the meaning of uncertainty 'may', and in independent clauses, as in (157d) with **aq-** 'AUX' only. This is also a balancing strategy for codifying the verbs of the dependent SoAs in utterance complement relations.

However, the verbs of the dependent SoAs in the simple past use, as seen in (159b) and (159c), are not marked with tense as opposed to their corresponding forms, as in (159a); and hence, the verbs of the dependent SoAs in utterance complement relations are deranked for the simple past tense specification.

Aspect distinction, on the other hand, is formally expressed in the negative use of verbs in dependent SoAs, as seen in (157d), (158d) and (159c). The person agreement distinctions are also marked on the verbs of the dependent SoAs like on their corresponding forms in isolated independent clauses. However, here also there is no case marking or adpositions on the dependent verbs in utterance complement relations. Thus, the specification of aspect and person agreement markers, and the lack of case marking /adpositions on the verbs in both dependent and isolated independent clauses make the verbs balanced. Let us see the summary in table 15 below:

Table 15. The morphosyntactic specification of the dependent SoA in utterance complement relations

Verbal categories		Tense	Aspect	Mood	Person agreement	Case marking or adposition
Morphosyntactic specification	In independent clauses	+/-	+/-	-	+	-
	In dependent clauses	+/-	+/-	-	+	-
Codification strategy: D, B or D/B		D/B	B	B	B	B

4.1.9. The ranking of the morphosyntactic codification of the verb forms in dependent clauses across the complement relations in Xɨmt'aŋa

Table 16. The morphosyntactic codifications of the verb forms in the complement clasues across the classes of complement – taking predicates in Xɨmt'aŋa

The types of complement taking predicates		Phasals		Modals		Desideratives		Manipulatives		Perceptions		Knowledge		Propositional attitudes		Utterance	
Codification of the verbal categories in complement clauses	Tense	-	D	+/-	D	+/-	D	-	D	-	D	+/-	D/B	+/-	D/B	+/-	D/B
	Aspect	-	D	-	D	+/-	B	+/-	B	+	B	+/-	B	+/-	B	+/-	B
	Mood	-	B	-	B	-	B	-	B	-	B	-	B	-	B	-	B
	Person agreement	-	D	+/-	D/B	+/-	D/B	+/-	B	+	B	+	B	+	B	+	B
	Case marking or adposition	+	D	+/-	D/B	+/-	D/B	+/-	B	-	B	-	B	-	B	-	B

Based on the Complement Deranking Hierarchy given in (142), we can describe the morphosyntactic codification of verb forms in complement clauses with respect to the classes of complement-taking predicates. As we can see the specifications of the verbal categories in table 17 above, if verb forms are deranked for some or all of the verbal categories at one point on the hierarchy, then they are also deranked at all points to the left. Thus, the morphosyntactic specifications of verb forms in complement clauses of Ximt'aŋa obey the Complement Deranking Hierarchy proposed by Cristofaro (2003).

4.2. The Coding of Participants of Dependent SoA in Complement Relations

The second major parameter to examine the morphosyntactic coding of complement relations is *participant coding*. This means, whether or not the participants of the dependent event are expressed as in independent declarative clauses; and participants in the complement clauses may be not expressed overtly, or expressed as possessors or obloquies (Cristofaro, 2003).

According to Cristofaro (2003), just like how it is done for the dependent verb forms in the previous section, the variation of the morphosyntactic distribution of various phenomena related to participant coding of dependent clauses in complement relations is examined based on one basic parameter: that is, whether or not they differ in structure from an independent declarative clause taken in isolation. Because, all languages have independent declarative clauses occurring in isolation, and so this parameter is universally applicable.

Individual participants are expressed by verb arguments. Manning (1996) and Cristofaro (2003) represent the single argument (actant) of intransitive verbs by S, the agent like argument of a transitive verb by A, and the patient-like argument of a transitive verb by O, as they were introduced by Dixion (1972, 1979 & 1994). But here, to differentiate agent-like argument from aspect which has been represented by A, we can use AGN to represent an agent-like argument. These arguments may be grouped in different patterns across languages; and so different languages can display a variety of ways in the coding of the participants of dependent SoAs (Cristofaro, 2003). According to Manning (1996) and Cristofaro (2003), S, AGN and O may be ranged according to the two most common alignment patterns (groupings): nominative –

accusative (in short, accusative) and ergative – absolutive (in short, ergative). The accusative and ergative patterns are shown in (160).

160) Nominative { AGN, S } Ergative

Accusative { S, O } Absolutive

Manning (1996: 3)

Based on the subsystems of a language, accusative pattern treats S and AGN in one way and O in another; whereas, ergative pattern treats S and O in one way and AGN in another (Manning, 1996). In other words, (Palmer, 1994) in accusative system S is formally identical with AGN in the active construction; whereas, in ergative system, S is formally identical with O in the active construction. These patterns may be altered in the dependent clauses of complement relations in more or less significant ways.

According to Cristofaro (2003), verb arguments may be not expressed in the dependent clause in the case when main and dependent SoAs share a participant corresponding to the missing argument, or when the information pertaining to the missing argument is easily recoverable or irrelevant in the discourse context. When arguments are not expressed in complement relations, this phenomenon obeys an accusative pattern. It means that AGN and S arguments are not expressed in the dependent clause under coreferentiality with AGN and S in the main clause, while O arguments are generally expressed overtly.

Cristofaro (2003) points out that lack of AGN and S arguments obeys the Complement Deranking Hierarchy, as it has been given in (142), in this case it is indicated as the Complement Deranking – Argument Hierarchy. This means that if AGN and S arguments are not expressed at any points on the hierarchy then they are not expressed at all points on the left.

The other point that should be raised here as a background for our analysis is that arguments of the dependent SoA may be coded as possessors or obliques. According to Cristofaro (2003), either of the two arguments, AGN and O, of a transitive verb in dependent SoA can be coded as possessor or oblique, or not expressed; but, coding of both AGN and O as possessors or obliques

is quite rare. Because, it represents a potential source of ambiguity, as can be seen in (161) below. When one argument is allowed to receive possessor or oblique coding, the other argument is either coded in the same as in independent clauses or not expressed. The latter case usually takes place when the affected argument needs not be specified, either because it is co-referential with an argument in the main clause, or because it has no referential value.

161) * ki - gis ginzib ŋi - gis yiw - ənəw k'əsəw yəŋ
your – DAT money his – DAT give – NZR good be
'It is good for you giving money to him.'

According to Cristofaro (2003), since lack of overtly expressed O arguments and coding of O arguments as possessors are however very rare across languages and coding of AGN and S as obliques is also very rare, the analysis of participant coding should only focus on

- lack of overtly expressed AGN and S arguments, and
- Coding of verb arguments in a way different to the coding in independent clauses, with respect to both alignment patterns and possessor marking.

Therefore, based on these issues we are going to analyze whether or not participants are coded in the same way in dependent clauses of complement relations and in isolated independent clauses in the language.

4.2.1. Participant Coding in Modal Complement Relations

In modal complement relations, the arguments of the dependent clauses are either overly expressed or not expressed; but in isolated independent clauses they are always overtly expressed. The alignment pattern of the arguments AGN, S and O in the dependent clauses is the accusative pattern: (AGN, S), O like in an isolated independent clause in the language. Moreover, the AGN and S arguments cannot be coded as possessors like in their independent clauses, as illustrated below.

162) a. kiros k^{w}irə - dyə - t x^{w}ə - t' – u yəŋ
Kiros food – DEF - ACC eat – FUT – 3MSG be
'Kiros will eat the food.'
b. kiros k^{w}irə - dyə - t x^{w}ə - t' – ø - ə čəl - ø - ək^{w}
Kiros food – DEF – ACC eat – FUT - 3MSG – COMP can - 3MSG – PRES
'Kiros can eat the food.'

c. ŋəŋ kʷirə - dyə - t xʷ - ənəw čəl - ø - əkʷ
he food – DEF – ACC eat - NZR can – 3MSG – PRES
'He can eat the food.'

163) a. iwnə - šən iǰir - dyə - t t'az - t – i ŋi
woman – DEF man – DEF – ACC hit - FUT – 3FSG be
'The women will hit the man.'

b. iwnə - šən iǰir - dyə - t t'az - t – t - ə t'uš - ə - č
woman – DEF man –DEF –ACC hit - FUT –3FSG - COMP must –PRES -3FSG
'The woman must hit the man.'

c. iǰir –d iwnə - šən – t t'az – t' – ø - ə t'uš – ø - əkʷ
man– DEF woman – DEF– ACC hit - FUT –3MSG - COMP must –3MSG -PRES
'The man must hit the woman.'

d. ŋəŋ iwnə - šən – t t'az -ənəw t'uš – ø - əkʷ
he woman – DEF ACC hit - NZR must – 3MSG - PRES
'He must hit the woman.'

164) a. kiros fir – t- u yəŋ
Kiros go – FUT - 3MSG be
'Kiros will go.'

b. kiros fir – t'- ø - ə t'uš - ø - əkʷ
Kiros go – FUT - 3MSG – COMP must – 3MSG – PRES
'Kiros must go.'

c. ŋəŋ fir – ənəw t'uš - ø - əkʷ
he go – NZR must – 3MSG – PRES
'He must go.'

Based on the examples given above, the AGN and S arguments in the dependent clauses are either overtly expressed as in (162b), (163 b &c) and (164b), or not expressed as in (162c), (163d) and (164c). However, in isolated independent clauses, as in (162a), (163a) and (164a), AGN and S arguments are overtly expressed.

The alignment pattern of the arguments in the dependent clauses of modal complement relations is (AGN, S), O, which is the accusative pattern. This means that AGN and S are coded or identifiable in the same way and O in another; in that, AGN and S are not marked as different cases and so the S of intransitive verb, e.g., **Kiros** in (164 b, c) can be used in place of the AGN of a transitive verb, e.g., **iwnəšən** 'the woman' and **iǰird** 'the man' in (163b& c) with the same form. O arguments receive the accusative case and are optionally marked with case markers as in (162) and (163). When the O is not marked with accusative marker, it can be identified from the word order of the language SOV (Subject-Object–Verb) and from the verb morphology in that O

has not agreement marker on the verb while S and AGN are marked in the same way, as seen in (162), (163) and (164).

As we can see the data again, the AGN and S arguments of the dependent clauses in modal complement relations cannot be coded as possessors in a way different from the coding in independent clauses.

4.2.2. Participant coding in Phasal Complement Relations

Like in modal complement relations, the AGN and S of the dependent clauses may or may not be expressed, but they can be coded as possessors in a way different from the coding in isolated independent clauses. The arguments AGN, S and O follow the accusative allignment pattern which is the same for all complement relations. Let us see the examples below.

165)a. iǰir-d sigarə t'iys – ø - ək^{w}
man-DEF cigarette smoke-3MSG–PRES
'The man smokes cigarette.'

b. ŋəŋ sigarə t'iys - ənəw – d čibris – ø – u
he cigarate smoke – NZR – DEF stop – 3MSG – PAST
'He stopped smoking cigarate.'

c. iǰir- d sigarə t'iys - ənəw tikn – ø- u
man DEF cigarate smoke – NZR continue – 3MSG – PAST
'The man continued smoking cigarrates.'

166) a. ŋir ǰim - ə - č
she sing – PRES – 3FSG
'She sings.'

b. ŋir ǰim - ənəw kirm - i – č
she sing- NZR begin – PAST -3FSG
'She began singing.'

c. ŋir ǰim - ənəw tikn – i - č
she sing – NZR continue – PAST – 3FSG
'She continued singing.'

d. ŋir sigarə t'iys - ənəw kirm – i - č
she cigarate smoke – NZR begin – PAST – 3FSG
'She began smoking cigarate.'

In the phasal complement relation, S and AGN may or may not be expressed in the dependent clause, as for AGN, in (165) and as for S, in (166). Because the dependent SoA and independent SoA share a participant in phasal complement relation and so the S and AGN in the dependent clause can be deleted under coreferentiality with their agreement markers on the main verb of the

independent clause. As can be seen in (165 b & c) and (166 b & c), the dependent verbs are nominalized and they do not have S and AGN agreement markers.

Like in modal complement relation, here also the (AGN, S), O alignment pattern (accusative pattern) is the code of the arguments grouping in both dependent and independent clauses, as seen in (165 b & c) and (166 b & c) on the one hand for dependent clauses, and in (165a) and (166a) on the other for independent clauses. Because, both S and AGN are not coded with case markers differently (i.e., both are unmarked) and so they can be replaced to each other; that means, the S of an intransitive verb can be AGN of a transitive verb, with the same form, as we can compare the S **ŋir** 'she' in (166b) with the AGN **ŋir** 'she' in (166d).

The AGN and S of the dependent clauses in phasal complement relations can be coded as possessors, as seen in (167) below in a way different from the coding in isolated independent clauses.

167) ŋirw jim - ənəw - d kirm – i - č
her sing - NZR - DEF begin – PAST – 3FSG
'She began her singing.'

4.2.3. Participant Coding in Manipulative Complement Relations

In manipulative complement relations the participants are coded in a way that AGN and S are always expressed since the dependent and main clauses do not share an S and AGN arguments. The S and AGN cannot be coded as possessors, as exemplified below.

168) a. ŋəŋ tèr - ø - u
he come – ø - PAST
'He came.'
b. ŋəŋ ŋəy tər - ø - ans s'ab - u – ŋ
they he come - 3MSG - COMP make – PAST – 3PL
'They made him to come.'
c. ŋay ŋəŋ tər - ø - ans azz – u – ŋ
they he come – 3MSG - COMP order – PAST – 3PL
'They ordered him to come.'

169) iǰir – d bigə ǰib - ø - u
man – DEF sheep buy - 3MSG - PAST
'The man bought a sheep.'

b. yan iǰir – d bigə ǰib - ø - ans s'ab – ø – u - n
I man – DEF sheep buy - 3MSG -COMP make – 1SG - PAST - 1
'I made the man to buy a sheep.'

c. yan iǰir – d bigə ǰib - ø - ans azz - ø – u - n
I man – DEF sheep buy - 3MSG - COMP order - 1SG - PAST - 1
'I ordered the man to buy a sheep.'

In manipulative complement relations, the dependent and independent clauses do not share an S and AGN, and so the dependent clauses have their own unreduced S and AGN arguments, as we can see in (168 b &c) and (169 b & c).

Concerning the alignment pattern, it is the same accusative pattern (AGN, S), O that is coded in any clauses or as a case marking system of Xɨmt'aŋa. On the other hand, AGN and S in manipulative complement relations cannot be coded as possessors, as seen (170 a& b) below:

170) a.* yan iǰir – i - z bigə ǰib - ənəw azz - ø – u - n
I man – DEF- POSS sheep buy - NZR order - 1SG - PAST - 1
'I ordered the man's buying a sheep.'

b.* yan iǰir – i - z tər - ənəw azz - ø – u - n
I man – DEF - POSS come - NZR order - 1SG - PAST - 1
'I ordered the man's coming.'

4.2.4. Participant Coding in Desiderative Complement Relations

171) a. adəru tər - t'- u yəŋ
Adəru come – FUT – 2MSG be
'Adəru will come.'

b. yan adəru tər - t'- u aq – q - əŋə təsfə s'ab – ø – u – n
I Adəru come – FUT – 3MSG AUX- 3MSG – COMP hope make– 1SG – PAST – 1
'I hope that Adəru will come.'

c. yan adəru - tu tər - ənəw - d təsfə s'ab – ø - ək^{w} - in
I Adəru - POSS come – NZR - DEF hope make– 1SG - PAST – 1
'I hope Adəru's coming.'

d. ŋəŋ tər - t' u aq – ø -əŋə təsfə s'ab – ø - ək^{w} - in
he come – FUT – 3MSG AUX 3SG – COMP hope make – 1SG - PRES - 1
'He hopes that he will come.'

e. ŋəŋ tər - ənəw – d təsfə s'ab – ø - ək^{w}
he come – NZR – DEF hope make- 3MSG – PRES
'He hopes coming.'

172) a. ŋir yi- gis ginzib yiw – t – i yəŋ
she my – DAT money give – FUT - 3FSG be
'She will give money to me.'

b. yan ŋir yi-gis ginzib yiw – r – ans dəmz - ø - əkʷ – in
I she my – DAT mone give – 3FSG - COMP want - 1SG - PRES – 1
'I want her to give me money.'

c. yan ŋir-w ginzib yi – gis yiw ənəw - d dəmz – ø - əkʷ - in
I her - POSS money my – DAT give – NZR – DEF want – 1GS – PRES - 1
'I want her giving money to me.'

d. yan ginzib yi – gis yiw- š - ənəw – d dəmz – ø - əkʷ - in
I money my – DAT give – PASS-NZR - DEF want - 1SG - PRES – 1
'I want being given me money.'

In desiderative complement relations, AGN and S of the dependent clauses can either be overtly expressed, for example, S in (171b, c and d) and AGN in (172 b & c), or not expressed, as seen for S in (171e) and for AGN in (172d). Because there is sharing of S in (171e) and the AGN is not needed in (172d), lack of S and AGN is took place.

Moreover, the AGN and S arguments of dependent clauses can be coded as possessors unlike their coding in isolated independent clauses, as in (171c) for S and (172c) for AGN. the coding of arguments in dependent clauses with respect to alignment pattern is the accusative pattern, (AGN, S), O in a way similar to their coding in isolated independent clauses; because, the patient like arguments O are always used as accusative case in the active construction; whereas AGN and S are always used as nominative case and so coded in the same way in the verbs with agreement markers.

4.2.5. Participant coding in Perception Complement Relations

In perception complement relations, the arguments AGN and S are always overtly expressed in the dependent clasues and they cannot be coded as possessors, as the examples are given in (173) and (174):

173) a. ŋir ǰim - r aŋʷ win – i - č
she sing – 3FSG - PROG AUX - PAST – 3FSG
'She was singing.'

b. yin ŋir ǰim - r aŋʷ wəš – n – u - n
we she sing – 3FSG - PROG hear - 1PL - PAST – 1
'We heard her singing.'

174) a. misänä mäsäf anbib - ø - aŋ^{w} yäŋ
Misänä book read – 3MSG – PROG be
'Misänä is reading a book.'
b. yan misänä mäsäf anbib - ø - aŋ^{w} qal- ø – u - n
I Misänä book read – 3MSG – PROG see- 1SG – PAST - 1
'I saw Misänä reading a book.'

In perception complement relations, AGN and S are always overtly expressed in the dependent clauses as in (173b) and (174b) respectively. Because, the immediate perception predicates need a progressive action with S and AGN performing the action and, there is no sharing of participants between the dependent and independent clauses of the perception complement relation. The alignment pattern of the arguments in the dependent clauses of this complement relation and in their isolated independent clauses is also (AGN, S), O for the same reason mentioned so far. Codifying AGN and S as possessors is not possible in perception complement relation.

4.2.6. Participant Coding in Knowledge Complement Relations

In knowledge complement relations, AGN and S of the dependent clauses are overtly expressed like in isolated independent clauses. However, unlike in isolated independent clauses, they can be coded as possessors, as illustrated below in (175) and (176):

175) a. kiros bär - ø - u
Kiros leave – 3MSG - PAST
'Kiros left.'
b. yin kiros bär - ø - äŋä arq - n - äk^{w}
we Kiros leave - 3MSG - COMP know – 1PL - PRES - 1
'We know that Kiros left.'
c. yin kiros – tu bär - änäw - d arq - n - äk^{w} - in
We Kiros – POSS leave – NZR - DEF know – 1PL PRES – 1
'We know Kiros's leaving.'
176) a. ŋäŋ bigä - dyä - t siŋ^{w} - ø – u
he sheep - DEF - ACC steal - 3MSG - PAST
'He stole the sheep.'
b. yan ŋäŋ bigä - dyä - t siŋ^{w} - ø – äŋä dädädäds- ø – u - n
I he sheep - DEF - ACC steal - 3MSG - COMP realize – 1SG - PAST – 1
'I realized that he stole the sheep.'
c. yan ŋiw bigä - dyä - t siŋ^{w} - änäw -d dädädäds - ø - u - n
I his sheep – DEF - ACC steal - NZR - DEF realize – 1SG - PAST – 1
'I realized his stealing the sheep.'

d. yan bigə - d siŋ^{w} - šit - ø –əŋə dədədəds - ø - u - n
I sheep - DEF steal - PASS – 3MSG – COMP realize – 1SG –PAST-1
'I realized that the sheep was stolen.'

In knowledge complement relations, as we can see in (175) and (176), AGN and S of the dependent clauses are overtly expressed except in (176d) where the O of the dependent clause is more important than AGN. On the other hand, AGN and S of the dependent clauses, as in (175c) and (176c), can be coded as possessors unlike in isolated independent clauses, as in (175a) and (176a).

But, like in the other complement relations, the arguments AGN, S and O of the dependent clauses follow the accusative pattern (AGN,S),O that is in the same way as in the isolated independent clauses.

4.2.7. Participant Coding in Propositional Attitude Complement Relations

The AGN and S arguments in propositional attitude complements are overtly expressed and can be coded as possessors, as shown in (177) and (178) below.

177) a. ŋir - s'amrə - d xaq - t' – u yəŋ
her - friend – DEF win – FUT – 3MSG be
'her friend will win.'
b. maritu ŋir - s'amrə-d xaq – t' – u aq- ø - əŋə gimt - ə - č
Maritu her- friend-DEF win-FUT-3MSG AUX-3MSG-COMP suppose –PRES-3FSG
'Maritu supposes that her friend will win.'
c. ŋir ŋir - s'amrə xaq - ənəw - d gimt - i - č
she her - friend win - NZR - DEF suppose – PAST – 3FSG
'She supposed her frined's winning.'

178) a. getayə xabəšə k'ən - ø - ək^{w}
Getayə bread like – 3MSG - PERS
'Getayə likes bread.'
b. yan getayə xabəšə k'ən - əw aq- ø əŋə t'artirš - ø - ək^{w} - in
I Getayə bread like – 3MSG - 3MSG - COMP suspect - 1SG - PRES - 1
'I suspect that Getayə likes bread.'
c. yan getayə - tu xabəšə x^{w} - ənəw -d t'artirš - ø - ək^{w} - in
I Getayə - POSS bread eat – NZR - DEF suspect – 1SG - PRES - 1
'I suspect Getayə's eating bread.'

Here, in propositional attitude complement relations, the AGN and S of the dependent clauses are always overtly expressed, for example, the S **ŋirs'amrə** 'her friend' in (177 b & c) and the AGN **Getayə** in (178 b&c). The reason seems that if the A and S of the dependent clauses were not expressed, the propositional attitudes provided by the main clause predicates such as **gimt** – 'suppose' in (177 b &c) and **t'artirš** – 'suspect' in (178 b & c) could not exist. However, unlike in isolated independent clauses, AGN and S can be coded as possessors in dependent clauses, as in (177c) and (178c). The alignment pattern of the arguments in these dependent clauses is also (AGN, S), O just like in isolated independent clauses.

4.2.8. Participant Coding in Utterance Complement Relations

Here also the arguments AGN and S are always expressed in the dependent clauses as happen in isolated independent clauses; but unlike in isolated independent clauses, they can be coded as possessors, as illustrated below in (179) and (180).

179) a. ŋəŋ məs'af anbib - ø - u
he book read – 3MSG – PAST
'He read a book.'

b. ŋay ŋəŋ məs'af anbib - ø - əŋə wigt - u – ŋ
they he book read – 3MSG – COMP report – PAST – 3PL
'They reported that he read a book.'

c. ŋay ŋiw məs'af anbib - ənəw -d wigt – u - ŋ
they his book read – NZR - DEF report – PAST – 3PL
'They reported his reading a book.'

180) a. ŋay səkʼʷət'a - tigʷ ə fir - u – ŋ
they Səkʼʷət'a - GOAL go – PAST - 3PL
'They went to Səkʼʷət'a.'

b. ŋay səkʼʷət'a - tigʷ ə fir - ŋ - əŋə arqis - u - ŋ
they Səkʼʷət'a - GOAL go – 3PL – COMP announce - PAST - 3PL
'They announced that they went to Səkʼʷət'a.'

c. ŋa-w səkʼʷət'a - tigw ə fir - ənəw - d arqs - u - ŋ
their -POSS Səkʼʷət'a - GOAL go – NZR – DEF announce – PAST – 3PL
'They announced their going to Səkʼʷət'a.'

In utterance complement relations, AGN and S of the complement clauses are always overtly expressed just like in isolated independent clauses, for example, the AGN **ŋəŋ** 'he' in (179 b & c) and the S **ŋəŋ** 'they' in (180 b & c). Moreover, as we see in (179c) and (180c), AGN and S

can be coded as possessors in dependent clauses, in a way different from the coding in isolated independent clauses as in (179a) and (180a). However, the alignment pattern of the arguments in dependent clauses is accusative (AGN, S),O like in isolated independent clauses.

In general, the participant coding of arguments in dependent (complement) clauses of complement relations in Ximt'aŋa is not as such different from the coding in isolated independent clauses, in some cases. For instance, the alignment pattern of the arguments in complement clauses across different complement relations is accusative: (AGN,S),O in which AGN and S are coded in the same way and O in another. Moreover, the coding of AGN and S as possessors is impossible in the dependent clauses of modal, manipulative and perception complement relations, just like the coding in isolated independent clauses. However, in phasal, desiderative, knowledge, propositional attitude and utterance complement relations, the AGN and S arguments of the complement clauses can be coded as possessors in away different from the coding in isolated independent clauses.

On the other hand, lack of AGN and S is observed in the complement clauses of modal, phasal and desiderative complement relations, unlike in isolated independent clauses; whereas, in manipulative, perception, knowledge, propositional attitude and utterance complement relations, AGN and S are always overtly expressed in the dependent clauses in the same way as in isolated independent clauses. According to Cristofaro (2003), as we pointed out it before, lack of AGN and S can obey the Complement Deranking – Argument Hierarchy mentioned in (181), and this can be shown in table 17 below:

Table 17. The coding of AGN and S in dependent clauses across the complement relation types

Complement relations	**Mod.**	**Phas.**	**Des.**	**Man.**	**Perc.**	**Kn.**	**Pro.att.**	**Utt.**
Coding of AGN and S in dependent clauses	+/-	+/-	+/-	+	+	+	+	+
Codification strategy: B, D, or D/B	D/B	D/B	D/B	B	B	B	B	B

181) **The Complement Deranking – Argument Hierarchy**

Modals, phasals > manipulatives ('make', 'order'), desideratives > perception > knowledge, propositional attitude, utterance

Based on this hierarchy, we can defined the lack of AGN and S arguments in the complement clauses of Xɨmt'aŋa; in that, if AGN and S are not expressed at any point on the hierarchy, then they are not expressed at all points to the left. However, the coding of AGN and S arguments in manipulative and desiderative complement relations differs, as we see in table 17 above, in that AGN and S are always overtly expressed in manipulative complement relations whereas in desiderative are not, though the two complement relation types have the same rank on the hierarchy. Of course, this does not contradict with the hierarchy given above as far as the difference takes place at the same rank.

4.3. The Correlation between the morphosytnactic coding of complement relations and the semantic features of complement –taking predicates

So far, we have analyzed the semantic features of complement relations and the distribution of the various morphosyntactic devices used to code the dependent SoA in complement relations in Xɨmt'aŋa. The morphosyntactic forms, such as the distribution of deranked verbs in general, lack of TAM and person agreement distinctions, lack of AGN and S arguments and case marking/adpositions, used to specify the dependent SoA in complement relations follow ordered patterns of variation, and these patterns can be defined by the Complement Deranking-Argument Hierarchy.

However, according to Cristofaro (2003), in principle, all of the morphosyntactic phenomena coding the dependent SoA in complement relations are logically distinct, and need not follow the same pattern. If this is so, two basic questions about the hierarchy should be raised:

Why individual morphosyntactic phenomena obey the hierarchy? And

Why logically distinct phenomena obey the same pattern? More generally, why the relevant morphosyntactic phenomena take place at all in the coding of dependent SoAs?

Cristofaro (2003) says, the answer to these questions is found in the semantic features of the complement-taking predicates. That is, a correlation exists between the morphosyntactic patterns found for complement relations and the semantic features of complement-taking predicates.

This means that the morphosyntactic patterns for complement relations are correlated with the semantic factors such as

i) predetermination, (ii) semantic integration, (iii) the mood value of the dependent SoA, and (iv) the involvement of an element of will, or an interest in the main predicate for the realization of the dependent SoA (Cristofaro, 2003). To make these points clear, the following points are quoted:

> *i) The morphosyntactic phenomena related to predetermination of the semantic features of the dependent SoA are those leading to non-specification or difficult recoverability of information concerning these features (lack of TAM/ person agreement distinctions, use of special forms to code these distinctions, lack of overtly expressed arguments).*
>
> *ii) However, other things being equal (e.g., when two distinct complement relations predetermine the same features of the dependent SoA), the distribution of the morphosyntactic phenomena involved in the cross-linguistic coding of complement relations is sensitive to the degree of semantic integration between the linked SoAs.*
> *iii) Other things being equal, if TAM distinctions are not expressed when the dependent SoA is realized, then they are not expressed when the dependent SoA is unrealized, or when its mood value is irrelevant to the complement relation. Also, other things being equal, predicates involving an element of will or an interest in the realization of the dependent SoA rank higher than the other predicates with respect to lack of TAM distinctions.* Cristofaro (2003: 136)

Therefore, based on the above theoretical conclusions, the role of the semantic factors in the morphosyntactic coding of complement relations in Ximt'aŋa is presented below in table 18.

Table 18. The correlation between the morphosyntactic coding of complement relations and their semantic factors

Hierarchical Pattern	Morphosyntactic phenomena	Semantic factors
1. Phas., Mod., Des., Man., Perc. > others	Lack of T distinctions	Predetermination; semantic integration
2. Phas., Mod. > Des., Man., Perc	Lack of A distinctions	Semantic integration
3. Phas., Mod., Des. > others	Lack of person agreement distinctions; lack of arguments; case marking/ adpositions	Sharing of participants between main and dependent SoAs; semantic integration
4. Phas. > mod., Des. > others		Semantic integration
5. Des. Man. (**azz** – 'order') > Man. (**s'ab** – 'mak'), perc.	Lack of T and M	The dependent SoA is unrealized, or its mood value is irrelevant; the main predicate involves an element of will

In Ximt'aŋa, therefore, the first aspect of the correlation is between the lack of T distinctions on the dependent verb and the predetermination of time reference of the dependent SoA. Lack of T distinctions on the dependent verb implies that no information about the time reference of the dependent SoA since the time reference is predetermined by the time reference of the main predicate (CTP) in a given complement relation. As we see the hierarchical pattern No 1 in table 18, the phasals, modals, desideraitves, manipualtives and perception CTP classes predetermine the time reference of their dependent verb and so the dependent verb lacks T distinctions; whereas, with knowledge, propositional attitude and utterance predicate classes, the time reference of the dependent verb is not predetermined and so the dependent verb can either be expressed or not expressed with T in Ximt'aŋa, as seen in table 16.

In addition to the predetermination factor for the hierarchical pattern No 1 in table 18, the semantic integration between the main and dependent SoAs in a complement relation can determine the hierarchical pattern of lack of T distinctions across the complement relations. In

phasal, modal, desideraitve, manipualtive and perception complement relations, there is semantic integration in varying degrees; whereas, in knowledge, propositional attitude, and utterance complement relations, there is no semantic integration at all, as seen in table 7. This semantic integration difference is directly reflected on the hierarchical pattern for the lack of T distinctions.

As we can refer to table 7 for semantic integration hierarchy, there is semantic integration difference among the phasal, modal, desiderative, manipulative and perception complement relations. In phasal and modal complement relations, there is a higher degree of semantic integration than in desiderative, manipulative and perception complement relations. As a result, they differ in A specification, as we can see the hierarchical pattern No 2 in table 18, and the aspect specification differences in table 16.

As for the hierarchical pattern No 3 in table 18, the phasal, modal and desiderative complement relations, in addition to having higher semantic integration, involves sharing of participants between the linked SoAs; and as a result, the dependent verbs of these complement relations lack the A and S arguments, as seen in table 17, at the same time, they lack person agreement distinctions of the arguments and the dependent verbs become nominalized by adding the nominal marker - **ənəw.** This is the reason why phasal, modal and desiderative complement relations outrank the other complement relations on the hierarchical pattern in table 18 No 3. We can also refer to the morphosytnatic coding of dependent verbs in table 16.

The hierarchical pattern' in table 18 No 4 is also determined by the same reason as the hierarchical pattern No 3 in the table. However, in No 4, phasals outrank modals and desiderative for the lack of person agreement distinctions and for having case marking/appositions, as seen in table 16, due to the highest semantic integration of its linked main and dependent SoAs, as seen in table 7.

The other correlation is between the lack of T and M distinctions, and the mood value of the dependent SoA and an involvement of an element of will from the main predicate for the realization of the dependent SoA. This correlation stablishes the hierarchical pattern No 5 in

table 18. If T and M distinctions are not expressed when the dependent SoA is realized, such as in manipulative (**s'ab** – 'make') and perception complement relations then they are not expressed when the dependent SoA is unrealized or when its mood value of irrelevant or when there is an involvement of will or interest in the realization of the dependent SoA, such as in the desiderative and manipulative (**azz**-'order') complement relations. Hence, the latters outrank the formers being T and M distinctions are not expressed in both cases in Ximt'aŋa.

CHAPTER FIVE

5. SUMMARY

The aim of this study is to describe the semantic and morphosyntactic features of complement relations in Xɨmt'aŋa. To achieve this objective, the necessary data were collected from the native speakers using the elicitation technique. Then, the data have been analyzed qualitatively by following the functional-typological approach in general.

To analyze the semantics of complement types in the language, different factors (parameters), such as mood distinctions, degree of their reduction of information, choice of complementizer, method of syntactic relation to the matrix clause, and grammatical status of the notional predicate in the complements are considered.

Based on mood distinctions, the indicative and subjunctive complement types are identified based on three sorts of dependency, time reference dependency, truth-value dependency, and discourse dependency. The subjunctive complements are dependent in some way either with their time reference, truth-value of the proposition in the complements or the background (common ground) of the participants in the discourse. In other words, a complement is subjunctive if some sort of its meaning or interpretation follows from the information given in the CTP; whereas, indicative complements are not dependent and they are like simple declarative clauses.

Subjunctive complements are associated with CTPs expressing negative propositional attitude such as **təkʼawmɨš** – 'deny' **tʼartʼɨrš** - 'suspect', **amn- a - y** – 'do not believe'/ **amn-i-y** –'did not believe', etc.; commands and requests such as **azz-** 'order', **waqr** – 'ask', **sʼab** – 'make', **diq^{w}** – 'tell', etc; intentions and desires such as **təmz** – 'want', **bənn** – 'need', etc' modalities such as **hasb** – 'intend' **čəl** – 'can', **tʼuš** -'must' **čɨz** – 'should', and **aqtʼ** – 'may'.

Indicative complements are associated with CTPs expressing positive propositional attitude such as **amn** – 'believe', **hasb** – 'think', **gimt** – 'guess', etc; assertion or report of assertions such as **diq^{w}** 'tell', **yɨ-** 'say', **arqɨš** – 'announce', **qal tʼɨw** – 'promise', **qal-** 'see', **wəš-** 'hear', **arq** – 'know', etc.

The meaning of the complement type in Ximt'aŋa are characterized by the choice of complementizer. The indicative complements are associated with the complementizer - **əŋə** to give a sense of realis modality which is associated with complements whose propositions are asserted as facts or comment on as actual events or states.

The subjunctive complements, on the other hand, are associated with the complementizers –**ans**, **-ə, -š** and **-an**. The complements associated with –**ans** give the meaning of commands, requests or manipulatives; while the complementizer **-ə** is associated with complements to which the meaning of intentions or desires is attached. But, both the –**ans** and **-ə** are used only in affirmative complements. When these complements change to negative, their complementizer becomes **-əŋə**.

The subjunctive complements associated with **–š** and – **an** complementizers express a negative propositional attitude amounting to a denial of the proposition embedded in its complement. However, they differ in that the – **š** complements express possible events or states; whereas, the **-an** complements express impossible events or states.

The other complement types which have no choice of complementizer are participle complements and nominalized complements. The participle complements are regularly associated with immediate perception predicates such as **qal** – 'see', **wəš** – 'hear', **askis-** 'watch', **wəy-** 'feel' and **xar-** 'smell'. These complements function as attributive adjectives to modify nouns which function as the head of the complements. The participle complements have DTR and they can be grouped with the subjunctive complement types. Because the occurrence of the dependent SoA and the act of perception in the main SoA is simultaneous.

The nominalized complements are the arguments of the main predicates (CTPs); and they are regularly found with phasal predicates such as **kirm-** 'begin/start', **tikn-** 'continue', **čibris** – 'stop' and **abz** – 'finish', with some desiderative predicates such as **k'ən** – 'like', **dəmz-** 'want' and **bənn-** 'need', and with modals predicates such as **čəl-** 'can', **t'uš-** 'must and '**čiz-** 'should'. The nominalizer of the complement predicates is - **ənəw**.

In Ximt'aŋa, in general, the choice of complementizer differs according to the type of complements and the complementizers are not only the neutral markers of a complement type but also they bring their own meaning with the complement associated with them.

The complement types of Ximt'aŋa also differ in their degree of reduction of information. For instance, the nominalized complements are reduced in their person, number, gender, tense and aspect distinctions. Moreover, their arguments are not overtly expressed. In participle complements, the tense distinctions are reduced. Similarly, subjunctive complements reduce their tense information in varying degrees depending on whether the complements are in their affirmative or negative forms and whether the complement predicates are nominalized or not.

Indicative complements, on the other hand, have less degree of reduction of information for the verbal categories relative to the other complement types. They are reduced only for tense specification when they are used for the simple past event. Since there is less reduction of information in indicative complements, they are not dependent on the main clause and presented as fact. Therefore, the degree of reduction of information affects the semantics of the complement types.

The manner of syntactic relation of the notional complements to the matrix (main clause) in complement relation of the language is hypotaxis (subordination) in which both the main and the complement clause together involve a single assertion, but not paratactic construction in which two separate assertions are involved with main and complement clauses.

The grammatical status of the complement predicate are also identified in Ximt'aŋa complement clauses. Depending on the function of the complement type, the grammatical status of the indicative and subjunctive complement predicates are coded as verbs; whereas, the participle complement predicates are coded as adjectives, and the nominalized complement predicates as nouns.

The classes of complement taking predicates are also examined in Ximt'aŋa since the predicates are the prototypical device used to refer to state of affairs and so has a major role in establishing the overall semantic features of the complement relations. The complement taking predicate

classes in Ximt'aŋa are modals such as **čəl** – 'can', **'t'uš-** 'must, **čiz** – 'should' and **aqt'**-may', phasals such as **kirm** –'begin', **tikn** – 'continue', **čibris** – 'stop' and **abz** – 'finish', manipulatives such as **azz-** 'order', **s'ab** – 'make', **amnis** – 'persuaded', **asg ədidz** –cause to 'force', **waqr** – 'ask', **fik'd-** 'let', **diq**^{w} – 'tell' etc., desideratives such as **təsfə s'ab** – 'make hope', **marqəs'** – 'wish', **təmz** – 'want', **'bənn** – 'need' etc; perception such as **qal** 'see', **wəš-** 'hear', **askis-** 'watch', **wəy-** – 'feel' and **xar** – 'smell', knowledge such as **dədədəds** – 'realize', **arq** – 'know', **mir** – 'forget' as well as the perception predicates such as **qal** – 'see' and **wəš-** 'hear'; propositional attitude such as **iman yəŋ** 'be certain', **aqt'** – [**at'-**] 'be possible' or 'may'; **čəl** – 'can' or 'be probable', **amn-** 'believe', **hasb** – think', **gimt-** 'guess', **t'art'irš-** 'suspect', **tək'awmiš-** 'deny', **amnay-** 'do not believe' , **amniy** – 'did not believe ' etc., and utterance such as **yi** -'say', **diq**^{w} – 'tell', **qal t'iw** – 'promise', **waqr** – 'ask', **arqiš-** 'announce' etc.

The complements of modal predicates are DTR in that they refer to either future events or states relative to the time reference of the modal predicates (CTPs). They can be in the appearance of one-place predicate when the modal verb is impersonal or when the modal situation is considered as holding for the dependent SoA as a whole or two –place predicates with an equi-deleted complement subject.

Complements to phasal complements have DTR. Moreover, the phasal predicates are nominalized, and hence, they are associated with reduced complements. That means, the complements have no person, number, gender, tense and aspect distinctions in Ximt'aŋa.

The desiderative predicates such as **təsfə s'ab-** 'hope' **marqəs'** – 'wish' **təmz** – 'want' have different semantic features and as a result they can form three different classes, namely the **təsfə s'ab-** class, **marəs'** – class and **təmz** – class. The **təsfə s'ab** – class has complements with ITR and has no implication about the realization of the dependent SoA but it may take place at any moment. The **marqəs'**- class predicates also have ITR complements but differ from the **təsfə s'ab** – class predicates in that their complement propositions are presented as counter factual or it is assumed that they do not take place at any time. The **təmz**-class have complements with

DTR, and expresses a desire that some event or state may be realized in the future. The **tämz-** class and **marqäs-** class predicates are similar in that their complements may refer to an unrealizable state of affairs.

In manipulative predicates, there are also two classes: the **s'ab** –'make' class predicates and the **azz-** 'order' class predicates. The **s'ab** – like predicates imply that the manipulation corresponding to the main SoA is/will be successfully realized, whereas in **azz**-like predicates, there is no implication that the manipulation is successful and need not be took place. However, the choice of the complement type by all manipulative predicates is the subjunctive complement type.

Perception predicates are associated with complements which have DTR since the immediate perception of an event and the event of the complements have the same time reference. The dependent SoA is the direct object of the act of perception as a whole. The participle complement type is used to the perception predicate in the language.

The complements to knowledge and acquisition of knowledge predicates have ITR. Because, in Ximt'aŋa, these complements can have past perfect, simple past, past and present progressive, or future time reference. Therefore, the complements to knowledge predicates are encoded as indicative type in the language.

Propositional attitude predicates in Ximt'aŋa can be seen in two aspects: on the one hand, some of them such as **aqt'** 'be possible', **iman yäŋ** 'be certain', and **čäl-** 'be probable' or 'can' evaluate an attitude about the proposition in their complements indirectly. On the other hand, other propositional attitude predicate evaluate a proposition in their complements directly; among these, some predicates such as **amn** – 'believe', **hasb-** 'think/suppose' and **gimt** – 'guess' express positive propositional content, whereas others such as **amn-a-y-** 'do not believe', **amn-i-y-** 'did not believe', **t'art'irš-** 'suspect' and **täk'awmiš-** 'deny' express negative propositional content. The positive versus negative propositional contents are indicated with indicative versus subjunctive complement types.

The complements to utterance predicates represent the transformed information and those utterance predicates describe the manner of transfer and the evaluation of the speaker's view about the truth value of the proposition in the complements. The complements to utterance predicates, except **qal t'iw-** 'promise', have ITR, i.e., the complements are independent of the time reference of the main clause. Therefore, the complements provided with ITR contexts favor the indicative complement type; whereas, complements with DTR contexts, (i.e., with the predicate **qal t'iw-** 'promise' favor the subjunctive type.

The semantic features of complement relations in the language are examined based on the level of clause structure at which the complement relation is established, predetermination of the semantic features of the linked clauses, and semantic integration between the linked main and complement clauses. On the bases of the levels of clause structure, the complements to modal, phasal, manipulative, desiderative and perception predicate classes are established at the level of prediction; whereas, the complements to the knowledge, propositional attitude and utterance predicate classes are established at the propositional level which is higher than the predication level.

Based on the predetermination parameter, the semantic features of a complement SoA in Ximt'aŋa are either predetermined or undetermined based on or with the semantic features of the predicate in the main clause, as presented in table (6).

Based on the semantic integration parameter, the degree of semantic integration between the linked main and complement clauses varies according to the complement-taking predicate classes in the language. Thus, phasal predicates involve the highest degree of semantic integration between the linked SoAs; modal predicates also involve a higher degree of semantic integration between the linked clauses than the other complement-taking predicates; and the manipulative (**s'ab-**'make') predicates involve a higher degree of semantic integration between the linked clauses than the manipulative (**azz-** 'order'), desiderative and perception predicate classes. However, the knowledge, propositional attitude and utterance predicates do not involve semantic integration between the linked clauses.

The morphosyntactic coding of complement relations in Ximt'aŋa is also examined based on two main parameters: the verb forms and participant coding in the complement clauses (dependent SoAs). In both parameters, the morphosyntactic phenomena used to code the dependent SoAs are examined whether or not they differ in structure from their corresponding isolated independent declarative clauses; and the morphosytnactic differences in the verbs and participant coding in the complement clauses across the different complement relations follow ordered pattern of variation in Ximt'aŋa. This ordered pattern of morphosyntactic variation obeys the Complement Deranking Hierarchy in which if the verb forms in tense, aspect, mood, person agreement or case marking/adpositions distinctions, and the participant coding in A and S specification in the complement clauses are deranked at one point on the hierarchy then they are deranked at all points to the left on the hierarchy.

Finally, the correlation between the morphosyntactic coding of complement relations and the semantic features of the complement-taking predicates is also examined in the study. The main correlation exists between the lack of T distinctions on the dependent verb and the predetermination of time reference of the dependent SoA, and at the same time between the lack of T distinctions and semantic integration. This means that if there is lack of T distinctions on the dependent verb, there is no information about the time reference of the dependent SoA since it is predetermined by the time reference of the CTP in a given complement relation. The hierarchical pattern of lack of T distinctions also varies according to the hierarchical pattern of semantic integration in complement relations.

The semantic integration hierarchy in different complement relation types is also reflected on the hierarchical pattern of A specification in Ximt'aŋa. For instance, in phasal and modal complement relations, there is a higher degree of semantic integration than desiderative, manipulative and perception complement relations. As a result they differ in A specifications.

In addition to having high semantic integration, the phasal, modal and desiderative complement relations can involve sharing of participants between the linked SoAs. As a result, the dependent verbs of these complement relations lack AGN and S arguments and person agreement

distinctions of the arguments; and the dependent verbs also become nominalized or marked with the nominalizer - **ənəw**.

The other correlation is between the lack of T and M distinctions and the mood value of the dependent SoA and an involvement of an element of will from the CTP for the realization of the dependent SoA. This means that if T and M distinctions are not expressed when the dependent SoA is realized, then they are not expressed when the dependent SoA is unrealized or when there is an envolvment of interest in the realization of the dependent SoA in a complement relation in which the dependent SoA is realized. For instance, T and M distinctions are not expressed in perception, manipulative (**s'ab** – 'make') complement relations. On the other hand, in manipulative (**azz-** 'order') and desiderative complement relations, the dependent SoAs is unrealized and so T and M distinctions are not specified in the language. As a result the letters outrank the formers on the Complement Deranking Hierarchy.

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DECLARATION

I, the undersigned, declare that this thesis is my original work, it has not been presented before in any university. Moreover, I declare that all the sources of materials used for the thesis have been duly acknowledged.

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Signature _____

Date 24-10-2002 E.C.

This thesis has been submitted for examination with my approval as the university advisor.

Name Zekalem Lyew

Signature _____

Date 01/07/10