Split Ergativity in Davani

by

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A Thesis Submitted in Conformity with the Requirements for the Degree of Doctor of Philosophy in linguistics

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This thesis examines the phenomenon of split ergativity in Davani, an endangered Iranian language spoken in southern Iran. The research is based on original field work. The complex ergative agreement system in Davani distinguishes between agents and objects in the past tense, with the affectedness status of the object also being a factor in the agreement patterning. A Minimalist analysis is proposed to account for the complex case-agreement patterns, in which absolutive is argued to be nominative, and ergative is an inherent case, assigned by $v$ when selected by a past tense inflection.

Davani clitics are argued to be the realization of phi-features on a functional head rather than doubled clitics. In addition, the case patterns of psych verbs are explored in three different verb classes. In the analysis of these verbs, experiencers are shown to be internal to VP, either merged in the spec of VP or as a sister to V. It is argued that the ergative marking on experiencers come from $V_{\text{Psych}}$. Finally, an analysis of complex predicates and their interaction in Davani is presented in this thesis. The claim is that Davani complex predicates formed from a N+V are better analyzed as (partially) incorporated units rather than a combination of N+V. It is further argued that these units have a dual nature, in that they show properties of both syntactic and lexical units. Ergative agreement is used as a diagnostic to show that the nominal element of complex predicates is best
analyzed as a non-specific object. This is based on the key assumption that the presence of an ergative marker depends on the presence of an object. The implications of Davani case for the structure of other complex predicates is also explored.
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Chapter 1
Introduction

This thesis deals with the phenomenon of split ergativity in Davani, an Iranian language spoken in southern Iran. In the majority of ergative languages, in particular Iranian languages, the ergative pattern generally appears with past transitive constructions in perfective aspect. In this thesis, I will examine the properties of the ergative agreement system in Davani investigating how agreement distinguishes between agents and objects in ergative constructions in the past tense. In this chapter, first, I will give an overview of different aspects of ergativity. Second, I will briefly discuss the phenomenon of ergativity in the Iranian languages context. Then I will introduce the Davani language and discuss how the data was collected for this work. Finally, I will lay out the assumptions within the Minimalist Program of Chomsky (1995) followed by an overview of the main analysis and an outline of the thesis.

1.1. Ergativity

Ergativity is a term that refers to a grammatical pattern that some languages employ to exhibit the relationship between a verb and its arguments. The arguments of a verb include the subject of an intransitive verb, the subject of a transitive verb and the object of a transitive verb. According to Dixon (1994), 25 percent of the languages of the world show a pattern of ergativity in their system. For the purpose of this work, I will adapt the terminology from Dixon (1979). From
now on, I will refer to the subject of an intransitive verb as S, the subject of a transitive verb as A, and the object of a transitive verb as O. In the more common nominative-accusative system, S and A are treated the same, distinguishing O. However, in an ergative language, S and O pattern together while A is marked differently. These two patterns are illustrated below:

(1)

\[
\begin{array}{c|c}
A & O \\
\hline
S & A \\
\end{array}
\]

A. Ergative alignment  
B. Accusative alignment

Ergativity is normally defined in terms of case marking. If a language shows ergativity in its case marking system, S and O are marked with the same case, absolutive and A is marked with ergative case. Such an ergative pattern is referred to as morphological ergativity. Consider the following example from Dyirbal:

(2) Dixon (1994)

a. yabu banaga-nyu
   mother.ABS return-NON-FUT
   ‘Mother returned.’

b. ŋuma yabu-ŋgu bura-n
   father.ABS mother-ERG see-NON-FUT
   ‘Mother saw father.’

In the above example, S and O are marked with the same case that is absolutive while A takes a different marker, ergative. Notice that in Dyirbal, the absolutive case is phonologically null and
the ergative is –ŋgu which is a suffix on the agent of the clause. As seen in (2), ergative pattern occurs with ergative case. However, this pattern can also be attested without any ergative case morphology where intransitive subjects and transitive objects are cross-referenced by the same agreement morpheme(s) in the same position (normally attached to an auxiliary or a verb). In this case, the subject of the transitive verb is marked by a different agreement morpheme in a different position. There are usually two sets of agreement morphemes in such languages, one set to mark S and O and one set to mark A. This will be shown in chapters 2 and 3.

An observation about ergative languages is that languages that employ an ergative pattern are not fully ergative (Dixon, 1994). That is these languages employ the ergative pattern in one part of their grammar while they make use of another pattern (e.g. accusative) in another environment. Such a pattern is called a split ergativity. The two most commonly described types of split ergativity are (i) aspectual splits, and (ii) person splits (Coon and Preminger 2014). In aspectual splits, the ergative pattern is lost in some subset of non-perfective aspects or possibly certain tenses (Coon 2013) while in person splits the ergative pattern disappears with certain combination of highly ranked nominal arguments (Coon and Preminger 2014). Coon and Preminger offer an analysis in which each of these splits is always associated with a fixed value (or set of values) of that substantive category (e.g. perfective for aspectual splits, 3rd person for person splits). The example in (3) clearly shows the aspect split in Gujarati where the verb agrees with the object in perfective aspect while A is marked as ergative in (3b):
(3) Horn (1990) handout

a. Ramesh pen khɔɾid-t-oŋ  hɔŋ-t-oŋ.
   R(M.) pen(F.) buy-IMPF-M  AUX-IMPF-M
   'Ramesh was buying the pen.'

b. Ramesh-e pen/ khɔɾid-y-iŋ.
   R(M.-ERG) pen(F.) buy-PRF-F
   'Ramesh bought the pen.'

Dyirbal is a good example of a language with person split. Example (2) is repeated in (4) below:

(4) Dixon (1994)

a. yabu banaga-n²u
   mother.ABS return-NON-FUT
   ‘Mother returned.’

b. nguma yabu-ŋgu bura-n
   father.ABS mother-ERG see-NON-FUT
   ‘Mother saw father.

The case marking in the above example follows an ergative-absolutive pattern. The A takes the
ergative case while both S and O are morphologically unmarked. However, this is not the case
when we are dealing with first person and second person pronouns. In the examples in (5), O
takes the accusative marker –na; A and S are morphologically unmarked.

(5)

a. Pana banaga-n²u
   we.Nom return-NON-FUT
   ‘We returned.’

b. n²urra banaga-n²u
   you.Pl.Nom return-NON-FUT
   ‘You all returned.’
c. ⁿ urra _ ana-na bura-n
    you.Pl.Nom  we-Acc  see-NON-FUT
    ‘You all saw us.’

d.  Pana  ⁿ urra-na bura-n
    we.Nom  you.Pl-Acc  see-NON-FUT
    ‘We saw you all.’

As observed above, a language such as Dyirbal follows the directionalities introduced by Coon and Preminger (2014). Later, in chapter 3, we will examine these two fixed directionalities with regard to Davani data.

Moreover, split ergativity can be found at both morphological and syntactic levels. It seems that there is a large class of morphologically ergative languages and a small class of syntactically ergative languages (Manning 1996). I will start with a brief overview of morphological ergativity that is relevant to the analysis of ergative agreement in Davani.

In general, morphological split ergativity can be the result of four factors: a) pronouns, b) agreement, c) subordinate clauses, and d) tense/aspect which will be discussed below. Anderson (1977) introduces some generalisations regarding how an ergative pattern and an accusative pattern can co-occur within the same language.

**Pronouns**

The first generalisation is that a language may have an ergative pattern of case marking for full NPs while it has a nominative-accusative pattern for pronouns and never the other way around.

Consider the following Case system from Tongan:
(6) Devane (2008)

Tongan Case System: Prenominal particles

In the above case system, pronouns are used with the accusative pattern while full NPs (i.e., S, A, and O) display an ergative pattern. Here, S and O are marked with ‘a, while A is marked with a different marker, ‘e. This is shown in the following example:

(7)

a. Na’e ‘alu ‘a Sione
   PST go ABS John
   ‘John went.’

b. Na’e kai ‘e Sione ‘a e mango.
   PST eat ERG John ABS DEF mango
   ‘John ate the mango.’

Dixon (1994) argues that this type of split can be explained in terms of the animacy hierarchy which was first proposed by Silverstein (1976). In this type of hierarchy, full NPs are arranged based on their potential animacy. Silverstein’s animacy hierarchy (1976) is shown below:

(8)
Dixon notes that for many verbs the NP that is A is normally human while for others it may be human or animate, and very few verbs select an inanimate A. However very few NPs that are animate function as O. This means that the ones on the left-hand end of the hierarchy are most likely to function as A and the ones on right-hand end are more probable to function as O.

For a language which has a split case marking system, it is more probable for the nominals that are higher on the scale (from the middle to the extreme left of the hierarchy) to be marked as accusative, while the lower ones, that is the least animate ones, are more likely to be marked as ergative case. A clear example of this type of split is seen in Dyirbal (Dixon 1994). The ergative and accusative forms are inside boxes.

(9)

Table 1: Dyirbal: Dixon (1994)

In the above Table, we have the accusative marker –na and the unmarked nominative –Ø for first and second person pronouns. However, we have ergative –ŋgu versus unmarked absolutive –Ø
for the three columns on the right.

In chapter 3, we will see how person/animacy split determines the presence of the ergative agreement pattern in Davani and that the object agreement only appears on the verb when the object is [+animate], [+human], and [+specific] and [+highly affected]. We can see that the transitive agent is always marked with ergative agreement in the past tense. The ergative-nominative pattern in the past tense appears when the object is [+animate], [+human], and [+specific] and [+highly affected] otherwise we will see the ergative-default pattern in the past transitive constructions.

Another split pattern that we might see is when a language shows an ergative pattern of case marking and an accusative pattern of agreement, but we do not see an accusative pattern of case marking and an ergative pattern of agreement. Bittner and Hale (1996b) give an example of Warlpiri, an Australian language, which shows an ergative case marking in contrast to its accusative agreement system. Consider the following sentence:

(10) Walpripri (Bittner and Hale 1996a: 23)

   you-ERG Prs-2.s.-1.s. me(ABS) see-NPst
   “You see me.”

b. Nyuntu ka-**nqa** purka-mi.
   you (ABS) Prs-2.s. run-NPst
   “You are running.”

c. Ngaju ka-**ma** purka-mi.
   me (ABS) Prs-1.s. run-NPst
   “I am running.”

In the above example, the A which is second person singular nyuntulu, marked as ergative, and
the S nyuntu marked as absolutive trigger the same agreement that is npa. This is set against the fact that both of these nominals are marked differently. Moreover, the first person singular pronoun ngaju, marked as absolutive, depending on its function (whether S or O), triggers different agreement markers. The agreement marker is –ju if it is O and –ma if it is S. This is different from Davani since ergativity is marked through agreement system, and there is no overt morphological case marking in the language.

**Perfective vs. Imperfective Aspect**

A language may show an ergative pattern in the perfective and an accusative one in the imperfective, but not vice versa. This is a split that is conditioned by tense/aspect. This type of pattern is very common in Iranian and Indic languages. In these types of languages, the ergative marking is restricted to the perfective aspect which is usually based on the past tense while the accusative marking appears in imperfective aspects. Consider the following example from Hindi:

(11)

a. larka kutte-ko dekhta hai.
   boy dog-ACC sees aux
   ‘The boy sees the dog.’

b. larke-ne kutte-ko dekha hai.
   boy-ERG dog-ACC has-seen aux
   ‘The boy has seen the dog.’

(Anderson 1977)

In 11(b), the agent of the transitive clause is marked by –ne which is the ergative case in the perfective aspect. However, it does not appear in the imperfective aspect in 11(a).
Main clause vs. Subordinate Clause

As well as the above splits, a language may demonstrate an ergative pattern in main clauses and an accusative pattern in subordinate clause, but not vice versa. Dixon (1994) argues that this type of split might seem to be grammatically conditioned. However, it can be related to tense/aspect type or the NP conditioned splits in that this type of split can also have a semantic basis. Mam is an example of this type of language. In chapter 3, we will see that Davani shows patterns of ergativity in both main and subordinate clauses.

As well as morphological ergativity, languages might show a pattern of syntactic ergativity. This is seen when two clauses are joined together through subordination or coordination. Some languages show syntactic constraints on the combination of clauses or on the omission of coreferential constituents in clause combinations (Dixon 1994). If S and O are treated the same and A differently due to these constraints, that language is an example of syntactic ergativity. One of the areas regarding the phenomenon of syntactic ergativity is relativization. It is assumed that syntactically ergative languages show an ergative pattern with respect to relativization (Otsuka 2006). In this type of ergativity, an absolutive argument can undergo relativization while the ergative argument cannot. Otsuka (2006) shows this restriction in two ways: a) relativization of ergative arguments is strictly prohibited and therefore, the structure must be first anti-passivized for the relativization to occur (e.g., Dyirbal) or b) relativization of ergative arguments requires a resumptive pronoun (e.g., Tongan). The example in (12) is from Dyirbal in which only absolutive arguments can undergo relativization.
a. Dyirbal (Dixon 1972)

DEM tree- ERG cut-REL-ERG DEM man-ERG 1.S-ACC almost hit-NONFUT
The tree which the man had cut nearly fell on me.’

b. Dyirbal (Dixon 1994)

ŋuma-Ø [banaga-ŋu-Ø] yabu-ŋgu bura-n.
father-ABS return- REL-ABS mother- ERG see-NONFUT
“Mother saw father, who was returning.”

c. Dyirbal (Dixon 1994)

mother-ABS [see-APASS- REL-ABS father-DAT return- PST
‘Mother, who saw father, was returning.’

As observed, in the above examples, anti-passive must be first applied before A is relativized.

As a result, the underlying A which is marked as ergative appears as the derived absolutive S.

This chapter continues by first laying out the assumptions within the Minimalist Program of Chomsky (1995) and then providing a brief of discussion of ergativity in Iranian languages and their morpho-syntactic patterns that are relevant to the analysis of ergativity in Davani. This is followed by a leading analysis with respect to the split ergativity pattern in Davani. The last section will conclude the chapter by presenting the outline of the thesis.
1.2. Theoretical Background and Assumptions

This thesis gives an overview of the ergative agreement system in Davani within the Minimalist analysis of Chomsky (1995). In this section, I will overview the key concepts that are relevant for the main analysis of split ergativity in Davani.

In the Minimalist Program, it is proposed that sentences are composed of smaller units called phases. In order to account for the ergative agreement pattern in Davani, I will particularly adopt the claim that all transitive and unergative verb phrases (vPs) are phases (Chomsky 1999, 2000, 2001) and that a sentence consists of two phases, the CP phase and the vP phase. These are propositional units. Phases are restricted to units headed by a core functional category with phi-features (Landau 2003). Phases do not include TPs and unaccusative verbs. In a phase \( \alpha \) with a head \( H \), the domain of \( H \) is not accessible to operations outside \( \alpha \), only \( H \) and its edge (=specifiers/adjuncts) are accessible to such operations (Landau 2003). Within the Minimalist Program, the lexical items (LI), V and N are drawn from the lexicon and merged fully inflected, that is, the verb is merged with tense and agreement and nouns with number and case. These are merged with other LI(s) into binary branching structures (Chomsky 1992).

I will also make use of the concept of ‘tucking in’ (Richards 2001) which maintains underlying hierarchical relations; this will make sure that the A c-commands the O in its derived case position as well as in its merged position, in accordance with the shortest move. Tucking in is a version of Merge in which an element moves to Spec of a phrase to satisfy the shortest Move after the specifier is merged. This will create a lower tucked-in specifier for the vP head. This will be further discussed in chapter 3.
As we will see later, in Davani, objects with certain features, e.g. [+specific], [+human], [+animate] and [+highly affected], move to the lower spec of vP through the tucking in process. This movement is shown in the structure in (13):

(13)

A further assumption regards the ergative agreement. In the analysis of the Davani ergative system, it is assumed that the source of ergativity is in the vP functional system. Ergative is not a structural case but an inherent case assigned along with the external theta role (Legate 2006b, Massam 2006, Woolford 1993, 1997, 1999, Nash 1996, Mahajan 1989, Laughren 1989, 1992, Harbert and Toribio 1991). Moreover, in the proposed analysis, objects which are [+human], [+specific] and [+highly affected] move out of VP (cf. Diesing 1992 and Woolford 2001). However, objects without these features remain inside VP.

1.3. Ergativity in Iranian Languages

Iranian languages form a branch of the Indo-European language family; Genetically, they are descended from the Indo-Aryan languages. Many Iranian languages show the pattern of split
ergativity in clauses with past and perfective transitive verbs. That is, clauses with present tense are accusative with regard to both case marking and agreement. No Iranian language shows clear evidence of syntactic ergativity (Haig 2008). In fact, Iranian languages did not show any pattern of ergativity two or three thousand years ago. In the Old Iranian Period (525 BC - 300 BC), the agreement pattern in both present and past was uniformly accusative; agreement patterns in the past tense were identical to those of the present tense (Haig 2008). Iranian languages underwent a lot of changes since the initial shift away from accusative agreement in the past tense clauses. These languages which were initially accusative across all tenses shifted from accusative to ergative, and then back to accusative. For instance, a language such as Modern Persian, which was initially accusative in the Old Iranian Period and ergative during the Middle Iranian Period, has lost its ergativity and became fully accusative again while the majority of languages have kept their ergative pattern in the past tense. It is important to know that throughout the entire family of Iranian language, ergativity is completely restricted to one single environment: transitive clauses in the past tense. Note that the question of why these changes occurred and what underlies their principles and what guided their development will not be addressed in this thesis. Instead, I will focus on the synchronic situation in one language, Davani.

As stated above, Iranian languages exhibit different alignments depending on the tense/aspect of the clause. Haig categorizes four features that are closely associated with alignment in Iranian languages. These features include Tense-Sensitive alignment, lexical transitivity, the poly-functional oblique case, and the proliferation of hybrid alignment types.
**Tense-Sensitive Transitivity**

In Iranian languages, ergativity is confined to transitive clauses with a past verb form. In all other environments, accusative pattern is employed. This is what Haig (2008) calls Tense-Sensitive alignment in Iranian languages. Haig rejects the term ‘split ergativity’ as he argues that the alignment associated with past tense verb forms in many cases is not straight forward ergativity, but some form of non-accusative alignment. Throughout this work, I will make use of the term ‘split ergativity’ as there are only two patterns found within Davani grammar: one part of grammar is purely accusative, and one part of grammar exhibits an ergative pattern. As we will see later, the type of split ergativity that Davani presents can be also explained based on tense, unlike what we see in the literature for many Iranian languages where the factor determining ergativity is both perfectivity and the past tense. Therefore, from now on, I will follow this generalization that ergativity in Davani is sensitive to tense and not aspect. As we will also see later, in Davani there are some exceptions to the Tense-Sensitive alignment introduced by Haig (2008). In Davani, the subject of transitive psychological verbs (i.e., love, respect, etc.) is also marked as ergative even in present tense clauses. This issue will be dealt and discussed in chapter 3.

**Lexical Transitivity**

The second factor triggering ergativity in Iranian languages is what Haig (2008) calls lexical transitivity. As well as requiring the presence of a verb stem in the past tense, the verb stem must
be transitive. For Haig (2008), here transitivity is not used in a semantic sense. To show this fact clearly, he provides examples from three west Iranian languages including Kurdish, Balochi and Vafsi. In these examples, Haig examines the alignment associated with various types of complex predicates expressing affairs. He finds these patterns hardly expected of transitive verbs:

(14) Northern Group of Kurdish, Haig (2002a)

```
bihar-ê dest pê kir-i-ye
spring-OBL hand- to.it do:PST-PTCPL-3sg
'Spring has begun.' (lit. Spring has put hand to-it.)
```


```
kāgī-ā bāl ku
crow-OBL flying do:PST:3sg
'The crow flew.'
```

(16) Vafsi, Stilo forthc.b

```
tani há=s kærđ
he-OBL running=CLC:3sg do:PST
'He ran away.'
```

Haig (2008) discusses the above examples and argues that all of the three clauses refer to states of affairs which involve one participant, i.e., beginning, flying, and running away. He does not refer to these verbs as transitive either since the case marking is not accusative. In all of these examples, the A is marked as oblique which is also not the case for an intransitive clause in any of these languages. Instead, Haig (2008) refers to the fact that the lexical verb in these clauses is
specified as transitive. Therefore, these clauses show non-accusative alignment in the past tense. In his analysis of these example, the semantic or ‘whole-clause’ notion of transitivity (in the sense of Hopper and Thompson 1980) is not a relevant factor. What is important here is the lexically determined class of the verb. Haig (2002) also discusses this factor extensively. In both works, Haig does not refer to transitivity as the presence of a syntactically realized direct object.

As we will see in chapter 4, Davani presents evidence for this claim as the ergative marker appears with complex predicates that are not semantically transitive. We will see that the agent of these verbs is marked as ergative although the verb stem is semantically intransitive. However, unlike what Haig claims for the western Iranian languages, in Davani, the semantics of the clause is essential for the S and O to pattern together. That is the semantics of the whole clause can affect the way the ergative pattern is presented; The ergative agreement appears with a subset of verbs. This will be shown in chapter 4 when I discuss the interaction of ergativity and complex predicates.

*The Poly-functional Oblique Case*

Haig (2008) presents another feature of Iranian languages that is cross-linguistically present. This is when the A of a past transitive clause is marked with a general purpose oblique case, and this marker is also used in the present tense to mark O. This is shown in the following example from Southern Balochi:
Haig (2008) discusses this factor within the broader context of ergative languages. He compares these examples with languages with an ergative construction where the case of A is identical to other markers, for example instrumental in some languages. This is what he refers to as polyfunctional oblique case. Note that only with the past stem the oblique is interpreted as ergative marker in such languages.

Proliferation of Past Tense Alignments

The last parameter that Haig (2008) discusses is the proliferation of past tense alignments in Iranian languages. According to Haig (2008, 2002), alignment patterns in Iranian languages are mainly defined based on case marking and verbal agreement. Considering the two structural cases, Direct and Oblique, Haig (2008) suggests four different possible constellations of case on A and O. In terms of the verbal agreement, the verb may agree with the A or the O or neither.
Therefore, there are three possible agreement constellations. If these combine with the above four possible constellations of case marking, we have a total of twelve possible alignment types. Ergative and accusative alignments are only two of these twelve possibilities.

(18) Two possible alignment types (two cases, no pronominal clitics)

Accusative alignment: A= Dir. O=Obl. Verb agrees with A
Ergative alignment: A=Obl. O=Dir. Verb agrees with O

The above twelve alignments are taken into account without considering the pronominal clitics. Otherwise, the number of alignments would dramatically increase. Interestingly, some Iranian languages such as Northern Group of Kurdish employ all of these twelve possibilities (Dorleijn 1996). Haig (2008) also refers to the presence of the pronominal clitics as part of the agreement system in many Iranian languages in past transitive constructions. These clitics obligatorily cross-reference the A in many ergative Iranian languages. This topic will be discussed in detail in the next chapter. In chapter 3, I will discuss the presence of some of these possibilities including accusative and ergative alignments in Davani with regard to case and verbal agreement. I will show how Davani’s agreement system is similar and yet different from other Iranian languages.
1.4. Davani Language

The Iranian languages form a branch of Indo-Iranian languages which themselves are the major eastern branch of Indo-European language family. Iranian languages are mainly spoken across a vast stretch of Asia including Iran, Iraq, Turkey, Arran (nowadays the Republic of Azerbaijan), Afghanistan, Tajikistan, Pakistan, China, Turkmenistan, Georgia, Russia and other scattered areas of the Caucasus Mountains as well as the southern Persian Gulf.

Traditionally, Iranian languages are genetically classified into two main branches, East Iranian and West Iranian, and the latter is further divided into northwest and southwest (Haig, to appear). Davani, is a southwestern Iranian language spoken in the village of Davan. It is worth noting that Davani is a minority endangered language with a decreasing population of 120 speakers. The following map shows the location where Davani is spoken.

![Map of Iranian languages](http://www.cais.soas.com/CAIS/Languages/iranian_languages.htm)
Haig (to appear) lists four main characteristics of Iranian languages that are crucial in their typology including OV word order, differential object marking, a very high frequency of complex predicates based on a small set of light verbs, and tense-based alignment splits, affecting transitive verbs. In the following chapters, we will see how these features become relevant for the analysis of the ergative pattern in Davani.

1.4.1. Data Collection

The data comes from formal elicitation sessions conducted by the author during a fieldtrip to the village of Davan between January and March 2011. Most of the examples are gathered from a variety of data types such as interviews with native speakers (in-person, via email and over the phone), transcribed spontaneous speech, and narratives. During the elicitation sessions, the author would ask native speakers of Davani to translate from Persian into Davani or would ask them to say a sentence in their language based on the context provided. At times, the speakers would be asked to make grammaticality judgments about certain structures in their language.

1.5. Sketch of the analysis

There are several formal proposals for generating the ergative pattern in the languages of the world. In this work, I propose that ergativity in Davani is dependant on its agreement system and that it is independent of any ergative case morphology. As mentioned earlier, I will adopt the Minimalist Program of Chomsky (1995) to generate and explain the ergative pattern in this language. The main claim will be that nominative agreement cross-referencing intransitive
subjects and transitive objects in the past tense corresponds to structural nominative case assigned by finite T. This means that in some sentences an agreement relationship is established between finite T and the nominative object. The realization of object agreement is argued to be the result of these objects moving outside VP. Since there is a parallel between the nominative agreement with the subject of intransitive subjects and the nominative agreement with the object of the transitive clause. It will be suggested that absolutive is nominative in Davani (cfr. Bittner (1994), Bittner and Hale (1996) and Murasagi (1992)). It will also be shown that objects with a particular bundle of features move out of vP resulting in an ergative-nominative pattern. While the object moves out of VP, the agent remains inside the vP and is assigned the ergative case.

The ergative agreement in Davani will also be used to analyze the structure of complex predicates in this language. The main focus of the analysis will be the status of the nominal element of the complex predicates in Davani and other related Iranian languages. It will be shown that these nominal elements have the same structural position as non-specific objects.

1.6. Outline of the thesis

In the remaining chapters, I will mainly focus on Davani and its agreement system with regard to ergativity. Chapter 2 provides an overview of Davani person and number morphology. First, the status of clitics and suffixes will be presented and discussed with regard to agreement. Based on the distribution of clitics and suffixes in Davani, it will be argued that clitics which mark ergative agents are better analyzed as agreement markers rather than pronominal clitics. We will also see how these clitics are the realization of phi-features of an argument, not doubled clitics, as they show properties of agreement.
In chapter 3, I will first examine the properties of the ergative agreement system in Davani. I will primarily investigate how agreement distinguishes between agents (subjects of transitive clauses) and objects in ergative constructions. The main claim will be that nominative agreement cross-referencing intransitive subjects and transitive objects in the past tense corresponds to structural nominative case assigned by finite T. This means that an agreement relationship is established between finite T and the nominative object. The realization of object agreement is argued to be the result of objects moving outside VP.

Chapter 4 provides an analysis of the structure of complex predicates and their interaction with ergativity. I use ergativity to shed light on the status of the nominal element of the complex predicates in Iranian languages and in particular in Davani. The issue that we mainly focus in this chapter will be the syntactic status of the nominal elements in complex predicates. Chapter 5 summarizes the findings with regard to research questions and brings the thesis to a conclusion.
Chapter 2

The status of Davani clitics:
Agreement Markers or Clitic Doubling

This chapter focuses on the status of Davani clitics and affixes and aims to distinguish agreement from clitic doubling. The central puzzle of this chapter is the status of the ergative clitics. The main question is whether these clitics are the realization of phi-features on a functional head (i.e., agreement affixes) or they are doubled clitics that are associated with the agent of transitive clauses, and that they move to attach to their host which is mainly the first constituent of the clause. In this chapter, I will argue that ergative clitics are better analyzed as agreement markers rather than pronominal doubled clitics in Davani. I will show that these clitics are the morphological realization of phi-features of an argument (i.e., agreement affixes) and not doubled clitics or a pronoun-like morpheme as they show properties of agreement. I will also show how these morphemes co-vary in their morphological form agreeing with the phi-features of the agent of a transitive clause. This analysis will be based on their distribution and morphological form. To understand the agreement system in Davani, we need to have an understanding of agreement markers and their position within clauses. For this reason, I will first present the different functions of clitics within Davani grammar. Then, I will lay out the data with regard to the placement of clitics. To start with the basic verbal morphology, it is important to know that Davani has two different sets of agreement markers which identify the number and
the person of a verb’s core arguments. These obligatory agreement markers function based on ergativity and the tense of the clause. One set which are clitics attach to the first constituent of the clause and mark the ergative A in the past tense. The other set are suffixes that appear on the finite verb and cross-reference S and A in the present tense and S and O in the past tense.

Throughout this work, I will refer to these two sets as Set A and Set B respectively. These two sets are shown in the following Tables.

<table>
<thead>
<tr>
<th>Singular</th>
<th>Plural</th>
</tr>
</thead>
<tbody>
<tr>
<td>1P</td>
<td>2P</td>
</tr>
<tr>
<td>-m</td>
<td>-t</td>
</tr>
</tbody>
</table>

Table 1. **Set A.** Agreement clitics in Davani (ergative)

<table>
<thead>
<tr>
<th>Singular</th>
<th>Plural</th>
</tr>
</thead>
<tbody>
<tr>
<td>1P</td>
<td>2P</td>
</tr>
<tr>
<td>-ɛ</td>
<td>-ɛ</td>
</tr>
</tbody>
</table>

Table 2. **Set B**: Agreement suffixes in Davani (nominative)

These two sets have the same function: to mark verbal agreement. The only difference between these two sets is their position, namely the second position for Set A. Later, it will be argued that the attachment of these clitics is a syntactic rather than phonological phenomenon, that is, syntax determines their placement. Let’s look at the structure of verbs in Davani before addressing the issue of whether Set A markers are agreement markers or pronominal clitics. The order of verbal elements in Davani is presented in (1):

(1)

neg-aspect-verb stem-agreement suffix- (agreement clitic)

---

1 This is the agreement with the subject/agent in the present tense. I will refer to this set as nominative throughout.
2 Set A markers appear on negation or aspect marker if there are no other elements preceding them. This is shown in examples in (4).
In the above structure, the verb stem is preceded by the negation and aspect markers. However, the agreement suffix follows the verb. Note that agreement clitics only attach to the finite verb when there is no other element in the clause to host the clitic. Parentheses are used to show this fact. The following examples illustrate the structure of verbs in Davani. Let’s start with a clause which includes negation.

(2) *Negation marker*

\[
\text{nae-t} \quad \text{xa} \\
\text{NEG-2sg.cl} \quad \text{ate}
\]

‘You did not eat (it).’

In (2), the negation precedes the base, i.e., the lexical verb. Since there is another element in the clause other than the verb, the clitic attaches further from the lexical verb; it attaches to the negation marker which is the first element in the clause. This is a transitive clause in the past tense. Note that the object is implied based on the context. Recall that for the A in the past tense, the agreement marker is selected from Set A which marks ergative. Sentence (3a) is an example of a lexical verb preceded by the progressive marker. This is a clause in the present tense. Therefore, the agreement suffix which cross-references S is from Set B.

(3) *Progressive marker*

a. Present tense

\[
\text{me} \quad \text{ðov-ε-t}^3 \\
\text{PROG} \quad \text{run-ε-3sg}
\]

He is running.

\[^3\text{The presence of } [ε]\text{ is purely phonological.}\]
b. Past tense

\[
\text{mɛ-t} \quad \text{xa} \\
\text{PROG-2sg.cl} \quad \text{ate}
\]

‘You were eating/ate (it).’

In (3b), the agreement marker is selected from set A. In this case, the agreement marker attaches to the progressive marker which is the first constituent in the clause.

In (4), the lexical verb is preceded by both the negation and progressive marker. The agreement suffix which is from Set B agrees with the subject of the clause in the present tense. However, in the past tense, depending on the nature of the lexical verb, either an agreement suffix from Set B or a clitic from Set A is selected. In the latter case, the negation and the agreement marker are between the nominal element of the complex predicate and the lexical verb.

(4) Negation and progressive marker

a. Present tense

\[
\text{næ} \quad \text{mɛ} \quad \text{xa-t} \\
\text{NEG PROG} \quad \text{eat-3sg}
\]

‘He is not eating.’

b. Past tense

\[
\text{næ-t} \quad \text{mɛ} \quad \text{xa} \\
\text{NEG PROG} \quad \text{ate}
\]

‘He was not eating.’
The example in (5) shows the structure of a verb in Davani in which all of the elements in (1) are present.

(5)

\[
\begin{array}{llllll}
\text{kɛ-ʃu} & \text{nae} & \text{me} & \text{avorde-ð-u} \\
\text{COMP-3pl.cl} & \text{NEG} & \text{PROG} & \text{brought-ð-1pl} \\
\end{array}
\]

That they were not bringing/catching us (by force).

In (5), the lexical verb is preceded by both negation and progressive markers. This is an example in which the verb agrees with both the A and the O of the transitive clause. The verb in this sentence agrees with the O through the agreement suffix –u ‘us’ which is from Set B. In this case, the agreement marker remains on the finite verb. The ergative clitic -ʃu ‘they’, however, is from Set A and is attached the first constituent of the clause, in this case, the complementizer.

Recall that as well as the agreement suffixes (Set B), clitics (Set A) can also attach to the finite verb when there is no other overt element in the clause to host the clitic. This is shown in (6):

(6)

\[
\begin{array}{llllll}
\text{avorde-ð-u-ʃu} \\
brought-ð-1pl-3pl.cl \\
\end{array}
\]

They brought us (by force)

In (6), there are two agreement markers attached to the finite verb, the agreement suffix –u which cross-references the number and person of the O and the ergative clitic -ʃu which agrees in number and person with the A. As mentioned in chapter one, Davani is a verb final language and any other element occurs to the left of the verb. However, in (6), the clause contains only one element other than the clitic that is the verb. In this case, verb is not in final position. It precedes the clitic.
2.1. Agreement suffixes

In this section, we will look at the agreement system in Davani. In Davani, verbs change according to the person and number features of S/A/O depending on the tense.

Alignment in the Present Tense

In the present tense, agreement follows a nominative-accusative alignment as the examples below illustrate.

(7) Present Tense

a. **Intransitive**
   
   \[\text{mu}^4 \text{ me-ʃ-u} \]
   
   we \text{ PROG-go-1pl} \`
We are going.\`

b. **Transitive**

   \[\text{mu una mɛ-ɛn-u} \]
   
   we \text{ 3pl PROG-see-1pl} \`
We are seeing them.\`

c. \[\text{una mɛ-ɛn-u} \]
   
   them \text{ PROG-see-1pl} \`
We are seeing them.\`

(7a) is an example of an intransitive clause in Davani. In this example, the verb agrees with the subject through the presence of the agreement suffix –\( u \) on the verb. In (7b) as in (7a), the verb takes the suffix –\( u \) which indicates agreement with the agent of the transitive clause in the present tense. The agreement suffix in these two examples is from Set B which cross-references S and A in the present tense.

\(^4\) Davani is a null subject language. In (7c), the subject is dropped.
We will see later that this set is also employed to cross-reference S and O in the past tense in certain environments where the object of the clause bears certain features. There is no object agreement in the present tense. Note that the verbal suffix and the overt argument of the verb (i.e., S or A) co-occur. The overt argument can be a full NP or a pronoun which can be dropped. These agreement suffixes are obligatory and license pro-drop of either S or A in the present tense. The alignment in the present tense is shown in Table (3).

<table>
<thead>
<tr>
<th><strong>Alignment in the present tense</strong></th>
<th><strong>Intransitive</strong></th>
<th><strong>Transitive</strong></th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Nominative</td>
<td>Nominative-accusative</td>
</tr>
</tbody>
</table>

Table 3. Alignment in the present tense

It should be noted that term alignment here is used in the sense of Harris and Campbell (1995) and Haig (2008) to refer to labels such as nominative, nominative-accusative and ergative. Haig (2008) uses three different parameters to define different alignments. These parameters include case, agreement and syntactic processes. Case refers to case marking of core arguments, restricted to just subjects and direct objects and more recently to indirect objects. In contrast, agreement is the formal means of cross referencing core arguments on the verb. Haig (2008) points out that in Iranian languages agreement with core arguments may be via clitics on other constituents. Lastly, it is the syntactic processes involving syntactic rules which can only be formulated with reference to specific core arguments. Typical examples are Equi-NP deletion, relativization, or control of reflexive pronouns. It seems that Davani employs the second parameter, agreement, to identify and define different alignments in the present and past tense.
Alignment in the Past Tense

In the past tense, unlike the present tense, agreement follows a mixed alignment: ergative-unmarked (transitive without object agreement) or ergative-nominative alignment (transitive with object agreement) or nominative (intransitive clauses). This renders a three-way agreement system as shown in the examples in (8-10). Let’s start with intransitive clauses in the past tense as displayed below:

(8)

**Intransitive**

to feð- ɛ  
2sg went-2sg  
‘You went.’

In the past tense, in intransitive clauses as in (8), the verb agrees with the subject through the agreement marker (Set B) which is on the verb. In (8), the verb agrees with S via the verbal suffix -ɛ on the verb. This agreement suffix is obligatory whether S is present or not. The obligatory agreement suffix cross-references the number and person of the S in this clause.

Now let’s turn to transitive clauses in the past tense and see how agreement is marked in different clauses. The example in (9) below illustrates a transitive clause where there is no object agreement, and in which the A is cross-referenced with an ergative clitic.

(9) Transitive Clause with no Object Agreement

a. uʃ æli æ tu oyne di oʃ xændɛ kɛ  
3sg-3sg Ali in to mirror saw CONJ-3sg laugh did  
‘He saw Ali in the mirror and laughed.’
b. ketav-æ-ku-*m* da æ æli
   book-æ-def-*1sg* gave to Ali
   ‘I gave the book to Ali.’

   c. ketav-*ha*-m da æ æli
      book-pl-*1sg* gave to Ali
      ‘I gave books to Ali.’

In a transitive clause in the past tense, unlike the present tense, verbal suffixes are only used when there is object agreement. In the past tense, the verb agrees with A through an agreement marker from Set A (clitics). In (9a), there are two agreement markers -ʃ, both ergative clitics which are bolded. These two clitics agree with the person and number of the A in both clauses. In the first clause, the ergative clitic is attached to the A of the clause while in the second clause, the ergative clitic is attached to the coordinating conjunction o ‘and’. In the second clause, the subject is null as well. Both the A and the coordinating conjunction are the first constituent in their own clause. The presence of these clitics is obligatory. Notice that in the second clause, although ‘laugh’ is an intransitive predicate; Davani makes use of the ergative clitics rather than the verbal suffix that we saw in Table 2 (Set B). As we will see in chapter four, Davani treats such complex predicates as transitive. That is why an ergative clitic is used to cross-reference S in the second clause rather than the verbal suffixes from Set B. In (9b), there is one agreement marker that is the clitic -*m*. This clitic agrees in number and person with the agent of the clause which is dropped. In both of these examples, the verbs agree with their arguments in person and number, whether these arguments are overt or covert. This agreement is through the use of clitics (Set A) in these two sentences. (9c) is an example of a transitive clause with a plural non-specific object. There is no object agreement in this case as well. Within transitive clauses in the past
tense, we can also see structures where the verb agrees with both arguments. Below is an
example where the verb of the clause agrees with both A and O in the past tense.

(10) Transitive Clause with Object Agreement

hæsæn-o æ li-μu zeδ-en.
Hasan-and Ali-1pl.cl hit-3pl
We hit Hasan and Ali.

In the above example, there is one clitic from Set A, i.e. -μu and one verbal suffix -en from Set B. The clitic –μu cross-references person and number features of A and the verbal suffix –en
agrees with person and number features of O that is Hasan and Ali in the past tense; the presence
of -en is obligatory in this clause. The lexical verb in this clause agrees with its core arguments
that are A and O. As observed, in the past tense, we have three agreement patterns: a) intransitive
clauses with nominative agreement; b) transitive clauses with no object agreement; c) transitive
clauses with object agreement. Recall that in the present tense the agreement pattern is uniformly	nominative-accusative within transitive clauses. This is the property of a language that has a
pattern of split-ergativity in its agreement system. This phenomenon will be fully explained in
chapter three, and it will be shown why only certain verbs in the past tense agree with both A and
O while other verbs agree with their A only.

Based on the data presented above, there are two sets of agreement markers in Davani. Set
A which are ergative clitics and attach to the first constituent of the clause. These are obligatory
markers which cross-reference A in person and number. Set B which are verbal suffixes and
remain on the verb cross-reference S and A in the present tense and S and O in certain contexts
in the past tense.
Note that the presence of these markers is obligatory. Both sets of markers (clitics and verbal agreement suffixes) have the same function: to cross-reference the verb arguments. For clitics, Davani uses the second position; they attach to the first constituent of the clause while verbal suffixes stay on the verb. The other difference between the two sets is their morphology depending on the tense of the clause. The alignment in the past tense is presented in the following table.

<table>
<thead>
<tr>
<th>Alignment in the past tense</th>
<th>Intransitive</th>
<th>Transitive A</th>
<th>Transitive B</th>
</tr>
</thead>
<tbody>
<tr>
<td>Nominative</td>
<td>Ergative-Unmarked (without object agreement)</td>
<td>Ergative-Nominaive (with object agreement)</td>
<td></td>
</tr>
</tbody>
</table>

Table 4. Alignment in the past tense

Moreover, the ergativity of Davani is in its agreement system. That is, ergative alignment is reflected in its agreement system in finite clauses in the past tense. Therefore, it is only found in its verbal paradigm. The pattern becomes ergative when two conditions are met: first the A has inherent ergative case, and second when verb agrees with the nominative O in person and number. In this case, O is cross-referenced by the same morpheme series as S in the same position (attached to the verb), while A is cross-referenced by a different series in a different position (attached to the first constituent in the sentence). Davani displays a typologically less common pattern. In Davani Os with very specific features and subjects are collapsed into a class as they are the only arguments that agree with the verb. This is illustrated in (10). In order for an object in the past tense to trigger agreement, it must be [+specific], [+human] and [+ highly affected]. Objects without these features do not trigger nominative agreement as shown in (9 a-b).

5 In chapter 3, I will provide an analysis to support the fact that absolutive is nominative in Davani.
While subject marking is obligatory in both present and past tenses, object marking is more restricted in its distribution. Since the status of clitics in Iranian languages studies has been controversial (Haig 2004, 2008), it is also helpful to identify the nature of these markers in Davani. In the next section, we will focus on the function of clitics in Davani.

2.2. Distinguishing between clitics and affixes in Davani

Although it is true that clitics and affixes are both bound morphemes and do not occur on their own, we need to make a distinction between the two. The distinction between the affix and the clitic is sometimes not easy to make as clitics also have some characteristics of affixes (Kari 2002).

In this section, I will show that the two sets of agreement markers, despite showing common features (both sets of markers agree in number and person with the NP they co-refer), are distinct from each other since one has the property of affixes while the other displays properties of clitics. In the previous section, it was shown that there are two sets of agreement markers in the Davani: Set A (clitics) and Set B (suffixal). This means that there are two cross-referencing mechanisms based on tense. We also said that Set A markers cross-reference agents in the past transitive constructions while Set B co-index both transitive objects in the past and intransitive subjects (in all tenses) and agents in the present tense.

Normally, there are two types of bound morphemes that attach to (free) words in many languages: clitics and affixes, in particular inflectional affixes (Zwicky and Pullum 1986).
Zwicky and Pullum (1986) introduce a set of criteria to distinguish between clitics and affixes. The first criterion that they present is the degree of selection between clitics and the words preceding them. Clitics can attach to words of virtually any category while (inflectional) affixes are specific in their selection of stems. This holds true for Davani clitics and affixes as the clitics attach to any element except for topics which are external to the clause. However, affixes only attach to the verb stem. A few examples are given below. More examples are presented in section 2.4.

(11)

a. **Present tense**

```
to u me-ven-ɛ
2sg 3sg PROG-see-2sg
‘You are seeing him.’
```

b. **Past tense without object agreement**

```
to-t una xa
2sg-2sg,cl 3pl ate
‘You ate them.’
```

c. **Past tense with object agreement**

```
vo-ʃ zɛð-ɛ
and-3sg hit-1sg
‘and he hit me.’
```
```
vo-ʃ me zɛð-ɛ
and-3sg PROG hit-1sg
‘and he was hitting me.’
```

In (11a) and (11c), both the agent agreement suffix -ɛ and the object agreement suffix -ɛ are
attached to the verb stem while in (11b) and (11c), the ergative clitics -t and -ʃ attach to different categories, i.e., the agent in (11b) and the conjunction in (11c) respectively. The fact that Set B (clitics) attach to different hosts in Davani makes it clear that they are not combined with the constituent to which they are attached. This means that they do not form a unit. However, the agreement suffixes form a unit with the lexical verb as they enter the derivation with the verb stem (this will be discussed in chapter 3).

The third reason for the distinction between clitics and (inflectional) affixes is that clitics can attach to elements that already contain other clitics while the (inflectional) affixes cannot (Zwicky and Pullum 1986). This is also the case in Davani. Let’s look at the following examples from Davani.

(12)

\[
\begin{align*}
\text{xak-u-} & \text{mu-ʃ} & \text{mæ dovni} \\
\text{sister-u-1pl.cl.3sg.cl} & 1sg & \text{made run}
\end{align*}
\]

‘Our sister made him run.’

The above example clearly shows that the third person singular clitic -ʃ has attached to a constituent which already contains another clitic. This is not true for affixes as they always attach to verb stems without any element intervening.

One criterion that appears to also distinguish clitics from affixes is that clitics attach outside affixes (Nevis 1989, Kari 2002b). Let’s examine this criterion in Davani as well. In Davani, affixes occur closer to the verb rather than clitics. This means that in Davani clitics occur after the inflectional affixes that are attached to the verb. Recall that agreement clitics attach to preverbal hosts and inflectional suffixes attach to the verb stems; if there are no preverbal elements, the clitic has to stay on the verb. In this case, the agreement suffix is closer
to the verb stem and the clitic attached after the inflectional suffix. In the following example, when the suffix is already attached to the verb stem, the agreement clitic occurs after the inflectional suffix.

(13)

a. gir avorde-ð-en-fu
    catch bring-ð-3pl-3pl.cl
    They caught them (by force).

b. *gir avorde-ð-fu-en
    catch bring-ð-3pl.cl-3pl
    They caught them (by force).

(13b) is ungrammatical as the agreement clitic occurs between the inflectional suffix and the verb stem. This means the unity between the verb stem and the inflectional suffix is strong. Kary (2002) uses this as an argument that the morphological unity between suffix-stem is stronger than the one existing between clitic-host combination. Put more strongly, the clitic does not form a morphological unit with its host, unlike the affix (Kari 2002b).

2.3. Function of Davani clitics

In Middle Iranian syntax, the pronominal clitics are omnipresent. In fact, one might suggest that the simplification of the case system between Old and Middle Iranian was, to some extent, compensated for by the massive increase in the use of clitics (Haig 2008). As Haig suggests this became a striking feature of grammars of numerous Modern West Iranian languages. According to Haig (2008), pronominal clitics may have five different syntactic functions: (1) an A-past; (2)
an O-present; (3) an Indirect-Participant; (4) an adpositional complement; (5) an adnominal possessor. This is summarized in Table (5):

<table>
<thead>
<tr>
<th>TENSE</th>
<th>A</th>
<th>O</th>
<th>IND.PARTIC.</th>
<th>ADP.COMPL.</th>
<th>AND.POSS.</th>
</tr>
</thead>
<tbody>
<tr>
<td>PRESENT</td>
<td>-</td>
<td>+</td>
<td>+</td>
<td>+</td>
<td>+</td>
</tr>
<tr>
<td>PAST</td>
<td>+</td>
<td>-</td>
<td>+</td>
<td>+</td>
<td>+</td>
</tr>
</tbody>
</table>

Table 5. Possible functions of pronominal clitics in different tenses (Haig 2008)

The above table shows that A with the past and O with the present function according to tense while the presence of other clitics is independent of the tense of the verb. Let us look at a few examples of the core functions of these pronominal clitics from Middle Iranian. The sentence in (14) exemplifies the use of these clitics as O in the present tense in Middle Iranian.

(14) **O-Present** (Haig 2008)

```
  u-m kunēd nām Kerdir
  and-1s make-PRES-3sg name Kerdir
  ‘And (he) names me Kerdir […]’ (MacKenzie 1999b)
```

As well as marking O in the present tense, it seems that the use of pronominal clitics to mark A in the past tense has been the most common strategy in Middle Iranian. This is shown in the example below.

(15) **A-Past** (Haig 2008)

```
  u-f ūn-īz guft
  and-3sg this-too speak-PTCPL
  ‘and he said this too’ (William 1990a)
```
Among these clitics in Middle Persian, the presence of the pronominal clitics functioning as A in the past tense is obligatory regardless of the presence of absence of a full pronoun. This fact detached them from the rest of the pronominal system over time. As a result, they began to display characteristics of an agreement system. Table (6) presents the different functions of these clitics in Davani language.

<table>
<thead>
<tr>
<th>TENSE</th>
<th>A</th>
<th>O</th>
<th>DATIVE</th>
<th>EXPERIENCER</th>
<th>POSSESSOR/REFL.PRO</th>
</tr>
</thead>
<tbody>
<tr>
<td>PRESENT</td>
<td>-</td>
<td>-</td>
<td>+</td>
<td>+</td>
<td>+</td>
</tr>
<tr>
<td>PAST</td>
<td>+</td>
<td>-</td>
<td>+</td>
<td>+</td>
<td>+</td>
</tr>
</tbody>
</table>

Table 6. Possible functions of clitics in different tenses in Davani

By comparing Tables (5) and (6), we can see how clitics in Davani can also take on different functions; however, some of these functions differ from that of other Western Iranian languages. Just as with the Western Middle Iranian, these clitics can function as A in the past tense.

(16) **A-past (Davani)**

>mæ-m dig u ge

1sg-1sg yesterday it took

‘I took it yesterday.’

In the above example, the clitic –m cross-references the A in the past. The use of this clitic is obligatory; it is required even when an overt A is present as in the above example. If the agent pronoun is not present, then the clitic attaches to next element in the clause. This is shown in (17) below.
(17)

dig-o-m u ge\(^6\)
yesterday-o-\text{-1sg} it took
‘I took it yesterday.’

Below is an example in which the dative is marked using the clitic from Table 1.

(18) **Dative function**

\textit{a. Present tense}

\[
\text{mæ-t æʃ mæge-y-ɛ} \\
\text{l-2sg.cl to say-y-1sg}
\]

‘I am saying to you.’

\textit{b. Past tense}

\[
\text{mæ-m-ɛ-t æʃ ga} \\
\text{l-1sg.cl- ɛ-2sg to said}
\]

‘I said to you.’

\[
\text{æʃ-ɛ-t-o-m ga} \text{\(^7\)} \\
\text{to-ɛ-2sg.cl-o-1sg said}
\]

‘I said to you.’

In the examples in (18), the dative is marked using the clitic from Table 1 for both present and past tense. In (18a), where the first person pronoun is present in the clause, the dative clitic attaches to it. In contrast, in (18b) in the second example, when the first person pronoun \textit{mæ} is dropped, the dative clitic \textit{-t} attaches to the preposition \textit{æʃ} ‘to’. Notice the presence of the ergative clitic \textit{-m} in this example when the full pronoun \textit{mæ} is not present anymore; it attaches after the dative clitic \textit{-t} in \textit{æʃ-ɛ-t-o-m}. The order of ergative and dative clitics in (18b) will be discussed in section 2.5.

\(^6\) The presence of [o] in 17 and (18b) is purely phonological.
There is also the evidence that these clitics function as genitive markers in Davani. In (19), the clitic is translated as a possessor and it attaches to its possessed. Here the clitic expresses the possessor of the ‘book’.

(19) **Clitics functioning as genitive**

\[
\text{mæ-m kətav-ɛ-t da æ æli} \\
\text{lsg-1sg book-ɛ-2sg gave to Ali} \\
\text{‘I gave your book to Ali.’}
\]

Set A clitics can also mark experiencers in both present and past tense in this language. The following are examples of this particular function across different tenses.

(20) **Clitics functioning as experiencers**

a. **Present tense**

\[
\text{mu-mu xətə-ɛ-f ma} \\
\text{We-1pl like-ɛ-3sg.GEN have} \\
\text{‘We like him.’ (i.e., we want his liking.)}
\]

b. **Past tense**

\[
\text{mu-mu xətə-ɛ-f ma sa} \\
\text{1pl-1pl like-ɛ-3sg.GEN want PST} \\
\text{‘We liked him.’ (i.e., we wanted his liking.)}
\]

In (20a) and (20b), the experiencers are marked with the same markers from Set A. The use of clitics to mark genitive and experiencers will be dealt with in Chapter 3.

The last function of these clitics is shown in the example (21).
Below is a list of the reflexive pronouns in Davani. These pronouns are formed from the noun xo ‘self’ and Set A clitics.

<table>
<thead>
<tr>
<th></th>
<th>Singular</th>
<th>Plural</th>
</tr>
</thead>
<tbody>
<tr>
<td>xo-m</td>
<td>xo-t</td>
<td>xo-f</td>
</tr>
<tr>
<td>self-1sg.cl</td>
<td>self.2sg.cl</td>
<td>self.3sg.cl</td>
</tr>
<tr>
<td>myself</td>
<td>yourself</td>
<td>himself/herself</td>
</tr>
<tr>
<td>xo-mu</td>
<td>xo-tu</td>
<td>xo-fu</td>
</tr>
<tr>
<td>self-1pl.cl</td>
<td>self.2pl.cl</td>
<td>self.3pl.cl</td>
</tr>
<tr>
<td>ourselves</td>
<td>yourselves</td>
<td>themselves</td>
</tr>
</tbody>
</table>

Table 7. Reflexive pronouns in Davani

In this section, we looked at the different function of the clitics across different tenses in Davani compared to those of other Western Iranian languages, in particular Middle Iranian. We also examined how these clitics are different from verbal agreement suffixes which only identify nominative NPs (i.e., subjects and agents in the present tense, and subject and objects in the past tense). It is evident that these clitics are widely used throughout Davani grammar. In section 2.4, we will look at the placement of these clitics within different clauses. In section 2.6., we will see how agent clitics function as agreement markers rather than doubled clitics.

2.4. Placement of Davani Agent Clitics

As far as clitic placement is concerned, in the past tense, agents are cross-referenced by ergative clitics which are second position clitics; these clitics attach to the first constituent of the
clause regardless of its syntactic category. Here the second position clitics are bolded. In the following, I exemplify the different hosts to which these clitics attach.

The sentence in (22a) below shows that the ergative clitic -fu which cross-references the agent attaches to the first element in the clause which is una, i.e., the agent of the clause. (22a) is an example of an agent pronoun while (22b) is an example in which the agent is a proper noun. Also, in this example, the ergative clitic -f which agrees in number and person with the agent attaches to the first element in the clause that is Ali, the agent.

(22)

a. agents

una- fu sёv- æ-ku xa
3pl-3pl.cl apple-æ-DEF ate
‘They ate the apple.’

b. agents (proper noun)

æli-f sёv- æ-ku xa
Ali-3sg.cl apple-æ-DEF ate
‘Ali ate the apple.’

The ergative clitic cross-referencing the agent can also attach to the first element of the clause if that is the verb complement, i.e., the direct object. In the sentence below, sёv- æ-ku is the object (i.e., the patient) of the clause. The clitic has attached to the end of the noun phrase sёv-æ-ku. It can be noticed from the sentence in (23a) that ergative clitics do not attach to the first element but the first constituent of the clause.
(23)

a. **objects**

sεv- æ-ku-fu xa
apple-æ-DEF-3pl.cl ate
‘They ate the apple.’

b. **object pronouns**

u-m xa
3sg-1sg.cl ate
‘I ate it.’

(23b) shows an object pronoun to which the ergative clitic has attached. The above examples illustrate how these clitics can attach to full object NPs as in (23a) or object pronouns as in (23b).

Adjuncts can also host ergative clitics in a clause in Davani. In (24a), the ergative clitic -fu is on the first element of the clause that is the adjunct dig ‘yesterday’. Below is another instance of clitics attachment to the first constituent of the clause, i.e., adjuncts.

(24) **adjuncts**

a. dig-æ-fu sεv- æ-ku xa
yesterday- æ-3pl.cl apple-æ-DEF ate
‘They ate the apple yesterday.’

b. dig-æ-fu una sεv- æ-ku xa
yesterday-æ-3pl.cl 3pl apple-æ-DEF ate
‘They ate the apple yesterday.’

c. mali-fu δε-u
a lot-3pl.cl hit-1pl
‘They hit us a lot.’

Note that in (24c), there are two agreement markers, the ergative clitics -fu and the object
agreement suffix -*u*. This is an ergative pattern where the verb agrees with both of its arguments.

This pattern will be dealt with in chapter 3.

It renders the sentence ungrammatical if the agreement clitic attaches to any element other than the adjunct. This is shown below.

(25)

a. * dig sëv- æ-ku-fu xa yesterday apple-æ-DEF-3pl.cl ate ‘They ate the apple yesterday.’

b. * dig una-fu sëv- æ-ku xa yesterday 3pl-3pl apple-æ-DEF-3pl.cl ate ‘They ate the apple yesterday.’

If there is no other element present in the clause, the ergative clitic remains on the verb as in (26a) and (26b). In both cases, the ergative clitic has no host other than the main verb. This is the case where there is only one word in the sentence, i.e., the main verb. Let us look at clauses with this property.

(26) *lexical verb*

a. xa-f(a) ate-3sg.cl
   He ate (it).

b. xa-fu ate-3pl.cl
   They ate (it)

c. ðë-u-fu hit-1pl-3pl.cl
   ‘They hit us.’
The verb in (26c) bears two agreement marker, one ergative clitic -ʃu and the other -u, the object agreement marker which is suffixal.

Conjunctions can also host clitics in a clause if they are the first constituent. Below the coordinating conjunction o ‘and’ hosts the clitic -ʃ in the second clause.

(27) Conjunction

\[
\text{dig-e-f } \text{æli kêtav-gæl xæri o-f } \text{da mæ}
\]
\[
yesterday-e-f' \text{ Ali book-pl bought CONJ-3sg.cl gave me}
\]
\`
Ali bought books yesterday and gave them to me.
``

If there is a conjoint NP at the beginning of the clause, the ergative clitic attaches to the end of the conjoint NP as in (28). Attaching the ergative clitic to the first element of the clause Ali renders the sentence ungrammatical as in the following example:

(28)

conjoint NP

a. \[
\text{æli-o hæsæn-e-fu } \text{nu xa}
\]
\[
\text{Ali-CONJ-Hasan-e-3pl.cl food ate}
\]
\`
Ali and Hasan ate food.’
``

b. *\[
\text{æli-e-fu } \text{o-hæsæn } \text{nu xa}
\]
\[
\text{Ali-e-3pl.cl CONJ-Hasan food ate}
\]
\`
Ali and Hasan ate food.’
``

Relative pronouns in Davani may host the ergative clitics. In (29) below, the relative pronoun ke hosts the ergative clitic -ʃ.

(29) Relative pronoun

\[
\text{doti ke-f } \text{xændë më } \text{ke-f } \text{kêtav-e-f } \text{da më}
\]
\[
girl who-3sg.cl laugh PROG did-3sg.cl book-3sg.cl gave me
\]
\`
The girl who was laughing gave her book to me.’
``
There are two instances of the clitic -ʃ in this sentence. The first one is an ergative clitic which has attached to the relative pronoun ke ‘who’. The verb of the relative clause is an example of an intransitive verb which is a complex predicate. As mentioned earlier in this chapter, for intransitive subjects, regardless of tense, Davani employs verbal agreement suffixes. There is only one exception; that is when the intransitive verb is a complex predicate. In this case, the agreement marker is selected from Set A which are ergative clitics. Interestingly, the ergative clitic-ʃ which cross-references the agent of the main clause has syntactically attached to the initial DP as well as to the lexical verb ke ‘did’ in the relative clause, in other words, to the end of the relative clause ke-ʃ xænde me ke ‘who was laughing’.

Another host for ergative clitics in Davani are complementizers. Ergative clitics also attach to the complementizer in a clause since the complementizer is the first element in a complementizer phrase, CP.

(30) **Complementizers**

```
be næzer me ræz-t ke-ʃ dig æli xænde me ke
to idea PROG arrive-3sg that-3sg.cl yesterday Ali laugh PROG did
```

It seemed that Ali was laughing yesterday.

In (30), the ergative clitic -ʃ is on the first element in the CP that is ke ‘that’.

Perhaps the most intriguing clitic attachment is when the intransitive or transitive verb is a complex predicate. Consider the following examples in (31 a-c).

(31) **Nominal element of the complex predicates**

```
  a. tiʃ-e-ʃ ge
     fire- e-3sg.cl caught
     ‘It caught fire.’
```
b. gæp-æ-m ze
talk-æ-1sg.cl hit
‘I talked (lit. I talk hit).’

c. xɛvær-e-fu æva ke-fu una avors
news-e-3pl.cl brought that-3pl.cl 3pl brought
‘They said (lit. brought news) that they have brought them.’

The three examples above in (31) are examples of clauses with complex predicates, a predicate which is composed of a non-verbal element and a verbal element. In all of these examples, the ergative clitic attaches to the nominal part of the complex predicate if it is the first constituent in the clause. In the first example, tiʃ ge lit. fire take/catch ‘caught fire’ is a complex predicate, and the nominal part of the predicate tiʃ ‘fire’ hosts the ergative clitic -ʃ. In (31c), the non-verbal part xɛvær ‘news’ of the complex predicate xɛvær æva ‘brought news’ hosts the clitic -ʃu.

There has been much debate on the status of the nominal part of complex predicates and their relation to the verb in Iranian languages. Some argue that the non-verbal part of the complex predicate in Iranian languages is a non-specific direct object (Ghomeshi & Massam 1994, Mohammad & Karimi 1992). However, some argue that the bare nominals in complex predicate constructions are distinct from bare objects. They argue that the two categories of preverbal nouns cannot receive the same analysis since they display distinct syntactic and semantic behavior (Megerdoomian 2002, 2012).

Davani has a large number of complex predicates composing of a lexical verb and a nominal element, typically nouns, adjectives, adverbs. As will be shown in chapter 4, these non-verbal elements that can be treated as a grammaticalized complement and agent clitics can appear on either
of these elements. Since complex predication is a productive process in Davani, this issue will be
dealt with separately in chapter 4.

As seen previously, clitics attach to different categories of hosts. In all of the preceding
examples, the clitic directly attached to the first constituent of the clause. Modals are not an
exception in clitic attachment.

(32) *Modals*

\[\begin{array}{l}
\text{bay} \text{-om} \quad \text{xar} \text{s} \text{-vat} \\
\text{must-1sg.cl} \quad \text{eaten} \quad \text{have} \\
\text{‘I must have eaten.’}
\end{array}\]

In (32), the modal bayes ‘should’ hosts the ergative clitic –m. If there are any wh-words at the
beginning of the clause, the clitic attaches to them as in (33).

(33) *Wh-words*

\[\begin{array}{l}
a. \quad \text{k} \text{-f} \quad \text{nu} \quad \text{xa} \\
\text{who-3sg.cl} \quad \text{food} \quad \text{ate} \\
\text{‘Who ate the food?’}
\end{array}\]

\[\begin{array}{l}
b. \quad \text{ki-f} \quad \text{æli} \quad \text{jam} \quad \text{xa} \\
\text{when-3sg.cl} \quad \text{Ali} \quad \text{dinner} \quad \text{ate} \\
\text{‘When did Ali eat dinner?’}
\end{array}\]

The ergative clitic cross-referencing the agent argument is on the wh-words ke ‘who’ and ki
‘when’ in (33a-b).

Prepositional phrases can also be an indication of syntactic attachment of these clitic. If a
clause starts with a prepositional phrase, the clitic attaches to the phrase rather than the first
element which is a preposition.
(34) *Prepositional phrases*

\[ æ \text{ tu } xunæ-m-æ-ʃ } \text{ ketav } xund \]
\[ \text{in to house-1sg-æ-3sg.cl book read} \]
He read a book in my house.

The agent clitic has attached to the end of the PP, æ \text{ tu } xunæ-m \text{ lit. in to my house}.

The last element that we will examine in this section is the negation marker as presented in (35).

(35) *Negation marker*

\[ næ-t \text{ xa} \]
\[ \text{NEG-2sg.cl ate} \]
You didn’t eat.

Negation makers can also be the host for the ergative clitic if there is no other element present in the clause to host the clitic which is an indication that the negative marker is syntactically and prosodically independent from the verb.

So far we have seen that clitics attach to different categories of hosts. However, these clitics never attach to fronted topics as they are external to the clause. The following example illustrates this.

(36)

\[ sɛv-a-ku, \text{ mæ-m xa. apple-a-DEF, 1sg-1sg.cl ate} \]
\[ 'The apple, I ate it.' \]

In (36), the agreement marker is cliticized to the agent of the clause not the topicalized object DP.
Based on the data presented in this section, we can conclude that the formal properties of the agent clitics in Davani are as below:

a. They appear in second position.

b. They attach to different categories of hosts.

c. They attach further from the base (i.e., the verb) unless the verb is the only element in the clause.

d. They attach to the first constituent of the clause rather than the first word.

e. They never attach to topicalized elements in a clause.

2.5. Order of clitics

In the previous section, we examined the placement of the agent ergative clitics. This section examines the order of clitics or the so-called clitic clustering. So far, we have seen examples in which clitics are located in different positions within a clause. Clitics in Davani generally appear in a fixed order. In this section, we will exemplify their order with regard to the verb and the other elements and with respect to each other within a clause.

(37)

a. daʔi-\textbf{mu-ʃ}  \textit{di}
mother-1\textsubscript{pl}.GEN.cl-3sg.cl saw
‘Our mother saw (it).’

b. xun-\textbf{em-ʃ} \textit{tij  ge}
house-1\textsubscript{sg}.GEN-ɛ-3g.cl fire caught
My house caught fire.
In the examples (37 a-b), the ergative clitic follows the possessive clitic. In (37c), the ergative clitic –m follows the dative clitic -ʃ. In the last example, where the lexical verb is the only element in the clause, the agreement suffix (Set B) is on the verb followed by the ergative clitic (Set A). It seems that the ergative clitic always attached to the end of the first constituent of the clauses preceded by other clitics if any. In (37e), the dative clitic is attached to the preposition ‘to’ and the ergative clitic is attached to the end of the prepositional phrase ‘to you’. However, when the agent of the clause is overt, both the dative clitic and the ergative clitic move from the preposition ‘to’ and attach to the agent of the clause ‘I’. In this case, the ergative clitic attaches to the agent first; the dative clitic attaches to the right of the ergative clitic.

### 2.6. Davani ergative clitics: Agreement markers or doubled clitics

In this section, I will provide evidence that these second position clitics are agreement
morphemes rather than doubled clitics. There are two main questions that need to be addressed here: what is the status of the agent marker, i.e., the ergative marker? What is the status of the lexical agent when a co-referential ergative/agent marker is present? Now I turn to three tests that demonstrate whether Davani ergative markers are agreement markers or doubled clitics. In the following, by examining the behaviour of these clitics, I will argue that Davani clitics are better analyzed as agreement markers rather than doubled clitics with the lexical agent as the real argument of the verb. To answer these two questions, we need to make a distinction between clitic doubling and obligatory marking of the agent. Clitic doubling can be defined as the co-occurrence of these agent markers with the co-referential agent NPs while obligatory agent marking is when the agent NP must co-occur with the agent marker for the sentence to be judged as grammatical. Therefore, one evidence to show whether these clitics are agreement markers or doubled clitics is obligatoriness. To illustrate these two definitions, consider the sentence in (38) where the presence of the clitic cross-referencing the ergative argument is obligatory:

(38)

a. mæ-Ø kētav-æ-ku ēsē
  1sg-1sg.cl book-æ-DEF bought
  I bought the book.

b. * mæ kētav-æ-ku ēsē
  1sg book-æ-DEF bought
  I bought the book.

In (38a), the ergative marker –m cross-references the agent of the clause mæ ‘I’. Without the presence of the ergative marker –m, the sentence in (38b) would be judged ungrammatical by native speakers of Davani. This means that this marking of the agent is obligatory in Davani.
This is called grammatical or syntactic agreement since it is obligatory (Baker 1988b); it is independent of whether the agent NP is present or not. In both cases, the presence of the ergative marker is obligatory. Now compare the following sentence in (39) where the agent NP is not present to the examples in (38). Here again the presence of the ergative marker is obligatory and it agrees in number and person with the agent NP which is not present in this context.

(39)
\[ \text{gæp-æ-} \text{m} \quad zɛ \]
\[ \text{talk-æ-1sg.cl} \quad \text{hit} \]
‘I talked.’

Also in (40) below, the clause minimally consists of the verb stem and the agent clitic. The agent clitic is present even if there are no other preverbal elements. In this case, it stays on the verb and agrees with the person and number of the absent NP.

(40)
\[ \text{xa-mu} \]
\[ \text{ate-1pl.cl} \]
‘We ate (it).’

This is strong evidence that these clitics serve as agent agreement markers in the past tense.

The same holds for all subjects and agents in all tenses in Davani. The agreement marker (suffixal or clitic) is obligatory. However, for object marking as mentioned earlier, the presence of the agreement marker depends on whether the object NP has a particular obligatory set of features.

With regard to the distinction between agreement and clitic doubling, Kramer (2011) also makes a distinction between the two. Kramer (2011) views object agreement as the realization
of phi-features on $v$, whereas clitic doubling is often analyzed as the movement of a D head in order to attach to a verb. Using the Nahuatl example below, Kramer argues, the obligatory object agreement marker $k$ realizes third person singular agreement with $\textit{šočitl}$ ‘flower’. Kramer uses the term ‘obligatory’ as evidence for agreement rather than clitic doubling.

(41)

\[
\begin{array}{l}
\text{ni-**(k)-te:moa} \quad \textit{šočitl} \\
1S.S-3S.O-seek \quad \text{flower}
\end{array}
\]

\textit{Object Agreement : Nahuatl}

I seek a flower.’ (Stiebels 1999:790)

As for clitic doubling, Kramer provides examples from languages such as Rioplatense Spanish and Greek. These examples are presented below.

(42) \textbf{Clitic Doubling}

\begin{enumerate}
\item[a.] \textbf{Rioplatense Spanish}
\begin{itemize}
\item \textit{(lo)} vimos a Guille.
\item 3MS saw.1PL a Guille
\item ‘We saw Guille.’ (Jaeggli 1982:14)
\end{itemize}
\item[b.] \textbf{Greek}
\begin{itemize}
\item \textit{(ton)} idhame to Jani
\item 3MS saw.1PL the John.ACC
\item ‘We saw John.’ (Philippaki-Warburton et al. 2004)
\end{itemize}
\end{enumerate}

In the above examples, the third person masculine singular clitics \textit{lo} for Rioplatense Spanish and \textit{ton} for Greek are optional, and they refer to the direct objects \textit{Guille} and \textit{Jani} respectively (Kramer 2011). Note that Kramer uses the term ‘optional’ to refer to the fact that these are examples of clitic doubling. In (41) above, -$k$ is obligatory and a prefix on the verb while the clitics in (42) are optional and cliticized to the verb. Moreover, Roberge (1990) notes obligatory presence of an affix can be a strong indication of its status as an agreement marker. However, Roberge argues that there is no one-to-one correlation since clitics can also be obligatory in certain languages/dialects. Therefore, this condition is necessary but not sufficient. Roberge
(1990: 170) defines doubling as in (43) below:

(43) Doubling is a process where some grammatical features of a lexical NP in argument position can be reproduced phonologically by an affix on the head of which the NP is an argument.

As Roberge notes this can be an optional process. However, he suggests that this is not always the case. That is if an affix is obligatorily doubled by a lexical NP, it is not necessarily an agreement marker. It seems that what we see in Davani is an example of obligatory agreement since the absence of the ergative clitics renders the sentence ungrammatical. Consider the example in (41) repeated below:

(44)

a. xa
    ate-1pl.cl
    ‘We ate (it).’

b.*xa
    ate
    ‘We ate (it).’

The sentence in (44b) is ungrammatical as the agreement morpheme which licenses the pro-drop in person and number is missing.

The obligatory repetition of the ergative clitic in the second conjunct of a sentence can also be an indication of its status as an agreement morpheme rather than a doubled clitic. In (45a), the ergative clitic is present in the second conjunct of a coordinating construction.

(45)

   Ali-3sg.cl killed-ð-3pl and-3sg.cl on-on pull did- 3pl
   Ali killed them and pulled them on the ground.
   Ali-3sg.cl killed-ð-3pl and on-on pull did-ð-3pl
   Ali killed them and pulled them on the ground.

Roberge (1990) also discusses this requirement to make a distinction between agreement morphemes and doubled clitics. However, as he argues that this is valid only under a certain analysis of coordination, and this is not a one to one correlation since certain clitics in certain languages can also be repeated under coordination. Therefore, obligatory repetition under coordination appears to be a necessary but not sufficient condition for an affix to be analyzed as an agreement marker. It seems that since Davani ergative morphemes meet all of the requirement of agreement markers, based on the above distributional diagnostics, we can conclude that they function as agreement markers rather than doubled clitics, i.e., they display properties of agreement; These clitics are licensors of agents in the past tense in Davani, and they co-vary with the phi-features of the agent.
Chapter 3
Split Ergativity

3. Split Ergativity: Ergative Agreement in Davani

In this chapter, I will examine the properties of the ergative agreement system in Davani. That is, I will primarily investigate how agreement distinguishes between agents (subjects of transitive clauses) and objects in ergative constructions. The main claim will be that nominative agreement cross-referencing intransitive subjects and transitive objects in the past tense corresponds to structural nominative case assigned by finite T. This means that an agreement relationship is established between finite T and the nominative object. The realization of object agreement is argued to be the result of objects moving outside VP.

3.1. Ergative Agreement

In this section, I will show that ergativity in Davani is a morphological phenomenon which only applies to the agreement system; Davani treats S and O equivalent at the morphological level (and not a syntactic level). An important characteristic of Davani is that this language is not fully ergative. This means that the accusative pattern is found in other environments within its grammar. This section also offers an overview of the agreement system in Davani. Two questions will be addressed: how can we derive the ergative pattern in Davani within the Probe-

1 It should be mentioned that for the purpose of this work, following Bittner and Hale (1996a) and Marantz (1984) among others, the term nominative has been preferred instead of absolutive. This will be discussed in detail in section 3.4.
As mentioned in chapter 1, it is a basic fact of the syntax of the modern Iranian language family that the Past Transitive Construction (PTC) displays a variety of non-accusative alignments including ergativity. Outside the PTC, simple clauses are quite uniformly accusative (Haig 2008). Therefore, despite the deep typological rifts cross-cutting the family, there is a striking grammatical property common to the vast majority of Iranian languages: the morpho-syntax associated with past transitive verbs differs from that associated with all other verbs in the languages concerned. Iranian languages generally exhibit what is known as split ergativity. Clauses using tenses based on the present stem are accusative with respect to both case-marking and verbal agreement. Alignment in the past tense is no longer accusative (Haig 2008). Davani is not an exception in this case. However, subjects and objects in this language are licensed by agreement rather than Case marking unlike many other Iranian languages. For this reason, throughout this work, agreement and Case are used interchangeably.

Another feature that is common in a number of Indo-Iranian languages is the ergative pattern with regard to aspect. In other Indo-Iranian languages there is ERG-NOM marking in the perfective aspect as opposed to NOM-ACC marking in the non-perfective aspect. Hindi is an example of a language displaying this type of split. In Hindi, the ergative pattern is seen in the perfective aspect while transitive verbs pattern accusatively in the imperfective aspect. This is shown in the following example:

(1) Mohanan (1990:94)

a. Raam-ne ek bakraa bec-aa
   Raam-ERG one goat.NOM sell-pfv.sg.m
   ‘He sold a goat.’
As the above examples show, the split is driven by aspect in Hindi; the subject of the transitive verb in the perfective aspect is marked with the ergative morpheme. The same holds true for most other Indo-Aryan languages (Dixon 1994) that present/imperfective correlates with nominative-accusative pattern and past/perfective with an ergative pattern. Dixon (1997) argues that in perfective aspect usually the patient (P) is affected while in imperfective actions are agent-centered and patients are not affected. Malchukov (2008) also adapts the following hierarchy from (Nedjalkov 1979) to show that ergative pattern is mainly seen in the perfective aspect in the Indo-Aryan language family. The following hierarchy shows the degrees of ergativity in Chukchi, a Paleo-Asiatic language:

(2) Degrees of ergativity in the Chukchi agreement system

imperfect > aorist > perfect

Based on the above hierarchy, if the aorist is non-accusative, the perfect is also non-accusative. Let’s look at the following example from Georgian.

(3) Georgian (Hewitt 1989)

Šina.ber.a-s jagl-is=tvis jval-i mi-ø-u-c-i-a
spinster-DAT dog-GEN=for bone-NOM Prev-(she)-OV-give-PF-it
‘The spinster apparently has given a bone to the dog.’

Malchukov (2010) discusses the above data from Georgian and shows how it conforms to the hierarchy with respect to agreement. He suggests that in Georgian although cross-referencing is accusative for both imperfective and perfective domains (A/S are cross-referenced by the same
set of agreement markers), in the perfect domain, P/S are cross-referenced with the same agreement markers. However, as will be shown in the next section, we will see that Davani does not follow the above hierarchy with regard to agreement patterns.

3.2. Data: Davani Morpho-syntax

In what follows, I will first lay out the data and generalizations about Davani morpho-syntax. These properties of its morpho-syntax are needed to develop an account of ergativity in this language. Davani is a pro-drop language with SOV word order. Subject pronouns are used only for emphasis as in examples (4b) and (4d). I will use capitals to indicate this. Consider the following sentences:

Present tense: Intransitive and Transitive clauses

(4)

a. mɛ xand-u
   PROG laugh-1pl
   'We are laughing.'

b. mu mɛ xand-u
   1pl PROG laugh-1pl
   'WE are laughing.'

c. Ali mɛ vɛn-cn
   Ali PROG see-3pl
   'They are seeing Ali.'
In the above examples, the intransitive subject (S) and the transitive subject (A) arguments are licensed by agreement. That is, the verbs in (1a-d) agree with their S/A through an agreement suffix on the verb, whereas the O argument does not agree with the verb in the present tense. This shows a NOM-ACC pattern as it identifies the intransitive subject and the transitive subject as opposed to the transitive object.

These morphological behaviours conform to the accusative pattern. Moreover, the above examples clearly show that grammatical relations in Davani are expressed by agreement rather than case marking. This means Davani uses verbal inflections to show these relations. It is worth mentioning that pronouns in Davani do not have separate forms for subjects and objects just like full DPs which are never case marked in this language.

**Past tense: Intransitive**

Patterns found in the past tense differ crucially from the nominative/accusative pattern we find in the present tense. Let’s examine intransitive clauses first.

(5)

a. **una** ḡɛδ-ɛn  
   3pl went-3pl  
   'THEY went.'

b. **Ali-o** Hasan ḡɛδ-ɛn  
   Ali-and Hasan went-3pl  
   'Ali and Hasan went.'
In the past tense, as with the present tense, intransitive verbs bear a suffix that cross-references the person and number of their S argument: i.e. intransitive subjects (S). The above examples (4-5) all show how agreement is used as a licensing mechanism for S/A arguments in the present tense and past intransitive constructions. This kind of agreement is morphologically realized by the presence of an affix on the verb. So far we have not encountered any environment in which ergativity can occur. Things are slightly different with the transitive constructions in the past tense. In the past tense, transitive subjects (A) are morphologically marked as ergative. Clauses in the past tense will display two patterns with transitive verbs. One pattern triggers object agreement and one pattern does not. The following examples illustrate this clearly. Examples without object agreement will be considered first:

**Past tense: Transitive with no object agreement**

(6)

a. sev-a-ku-fu xa
   apple-a-def-3pl.cl ate
   'They ate the apple.'

b. sev-gæl-ku-fu xa
   apple-PL-def-3pl.cl ate
   'They ate the apples.'

In (6a) and (6b), the ergative clitic agrees in person and number with the A. Looking back at (6a) and (6b), note that in this case, the A receives ergative agreement not nominative (from Set A). As seen, the agreement clitic is not on the verb but on the first constituent of the clause: in this case, the direct object. The presence of the agent clitic is obligatory. There is no object
agreement in this case as the objects in both examples are not [+specific], [+human], and highly affected by the verb. Therefore, person/number marking of transitive subjects (A) in the past tense is shown with an ergative clitic. Here, the A argument is realized by an ergative clitic. This is seen in all persons and numbers. This marking of the agent, i.e. ergative marking, is not specific to Davani. In most other Iranian languages such as Hindi/Urdu, Pashto, Kurdish, this ergative marking is present even when the pattern is not ergative. Most researcher consider this as differential subject marking (DSM) (Haig 2008). Apart from the splits discussed above (present transitive constructions vs. past transitive constructions), there is another type of agreement pattern in this language. In this pattern, the transitive verb agrees with the O and the ergative clitic with the A. The distribution of this marker was exemplified in the previous chapter. It will be discussed more in the next chapter. The following examples exemplify the agreement and the ergative pattern in the past tense.

**Past tense: Transitive with object agreement**

(7)

a. **Perfective**

una-m zɛð-ɛn
3pl-1sg.cl hit-3pl
'I hit them.'

b. **Imperfective**

una-m mɛ zɛð-ɛn
3pl-1sg.cl PROG hit-3pl
'I was hitting them.'
As shown in (7a), the transitive verb in the perfective aspect agrees with its object through an agreement suffix on the verb to the exclusion of the A-the transitive subject ‘una’. Meanwhile, the clitic agrees with the A in person and number. The same agreement suffix used to cross-reference the intransitive subject in (5b) is used for object agreement in (7a) and (7b). That is S and O align as nominative against A as ergative. This is an obligatory object agreement marker conditioned by [+specificity], [+humanness], and [+affectedness] of the object. The same holds true for singular objects. Therefore, objects agree with the verb when they are human, specific and highly affected in the past tense. The following two examples clearly show how the same suffix is used for S and O agreement.

(8)

a. Transitive clause with object agreement

hæsæn-o æli-mu zeð-ɛn.
Hasan-and Ali-1pl.cl hit-3pl
‘We hit Hasan and Ali.’

b. Intransitive clause

hæsæn-o æli šɛð-ɛn
Hasan-and Ali went-3pl
‘Hasan and Ali went.’

However, when one of the features [+specific], [+human], and [+affected] is absent, the verb does not agree with its object anymore. This is when we get default agreement. In the following example, the object is [+specific], [+human], but not highly affected by the verb. There is no nominative agreement with the object in this case.
Now consider the following examples (10 a-d) in which the object is [+specific], [-human], and highly affected by the verb. Since the feature [+human] is not present on the object, the verb does not agree with it. Instead we get default agreement. The same holds true for (10d) in which the feature [+specific] is absent. In this case, the default agreement surfaces.

(10)

a. ali-ʃ gorg-æ-ku koʃ[tâ]\(^2\)
   Ali-3sg wolf-æ-DEF killed
   'Ali killed the wolf.'

b. æli-o hæsæ n-e-fu gorg-gæl-ku koʃ[tâ]
   Ali-and Hasan-e-3pl wolf-pl-DEF killed
   'Ali and Hasan killed the wolf.'

c. æli-o hæsæn-e-fu yæk gorg-i koʃ[tâ]
   Ali-and Hasan-e-3pl one wolf-INDEF killed
   'Ali and Hasan killed a wolf.'

d. æli-o hæsæn-e-fu zæn-gæl-i koʃ[tâ]
   Ali-and Hasan-e-3pl woman-pl-INDEF killed
   'Ali and Hasan killed (some) women.'

\(^2\) tâ is optional in this sentence. Its use is archaic.
Notice that the A is cross-referenced by a different obligatory agreement marker (agreement clitic) in all the examples in this section. Therefore, as the examples show, in Davani ergativity is marked by verb agreement rather than case.

This pattern conforms with the definition of ergativity in which the object of a transitive verb patterns with the single argument of a transitive verb while the transitive subject, the agent is marked differently. (See e.g. Comrie 1978; Dixon 1979, 1994). This contrasts with the nominative-accusative pattern seen in the present tense clauses earlier in this section in which the subject of the transitive clause patterns with the single argument of the intransitive clause excluding the object.

The same holds true for the imperfective aspect. The example in (7b) clearly shows this. Like the perfective aspect, in the above example, O is cross-referenced with an agreement suffix on the verb, while A is cross-referenced by an agreement clitic on the object which is the first constituent of the clause. In (5), S triggers person and number agreement on the verb in the same way as O in (7a) and (7b). This feature makes Davani different from many other Iranian languages in which the ergative pattern is only found with the perfective aspect; In Davani it is found with both perfective and imperfective aspect. However, Coon (2010:21) questions the existence of ergative patterns in the imperfective aspect. Coon shows the directionality of aspectual splits as below:

(11)

\[
\begin{array}{c|c|c|c}
\text{} & \text{ERGATIVE} & \text{NON-ERGATIVE} & \text{} \\
\text{perfective} & \rightarrow & \text{imperfective} & \rightarrow \text{progressive} \\
\end{array}
\]
Coon assumes that aspect is the only trigger of this type of split-in particular, perfective aspect. Coon supports this claim by giving examples from Basque. Basque shows an ergative pattern in the perfective aspect. However, the ergative marking is lost in the imperfective aspect. She also gives examples from Hindi, Gujarati and Kashmiri which are Indo-Iranian language. The data from these languages conform to the generalization that the ergative pattern is retained in the perfective while a non-ergative pattern is found either in the progressive, or in the progressive and imperfective aspects. In this case, Davani is a counter example to this generalization because aspect is not a necessary factor. Trask (1979) also presents a typological universal with regard to ergativity. In his terms, if the ergative pattern is limited to some tense or aspect, it occurs in the past tense or perfective aspect with the NOM-ACC pattern in other tenses. The data from Davani supports this universal in that the ergative pattern occurs in the past tense.

So far we have looked at examples with full pronouns. Now consider an example with full object DPs. As with the pronouns, full object DPs also trigger nominative agreement on the verb. In the following example, the object DP is [+specific], [+human] and [+highly affected] by the action. The full DP agrees with the verb through an agreement suffix. Like the previous examples, the A triggers person and number agreement through an agreement clitic on the first constituent of the clause: i.e. the direct object.

(12) Full Object DP

a. Hasan-o Hoseyn-e-š a ro gel ro: kešek kerdeō-en
   Hasan-and Hoseyn-e-3sg.cl on on ground pull did-3pl
   'He pulled Hasan and Hoseyn on the ground.'
*b. Hasan-o Hoseyn-e-š a ro gel ro: kešek kerdeð
    Hasan-and Hoseyn-e-3sg.cl on on ground pull did
    'He pulled Hasan and Hoseyn on the ground.'

c. Hasan-e-š a ro gel ro: kešek kerdeð-Ø
    Hasan-e-3sg.cl on on ground pull did-3sg
    'He pulled Hasan on the ground.'

(12b) is ungrammatical as the verb does not agree with the object through the agreement suffix. Notice that the A is still ergative although there is no object agreement on the verb. Davani requires verbs to agree with their objects in the past tense only when the objects are [+human], [+specific], [+highly affected] (cf. Woolford 1999, Comrie 1981, Croft 1988, 1990, Bentley 1994). This property of Davani ergative system elaborates on Hopper and Thompson (1980) transitivity parameters and the notion of transitivity in general. Hopper and Thompson (1980) identify a set of parameters which suggest a scale according to which transitivity in a clause can be ranked. Their ranking allows clauses to be characterised as more or less transitive. For Hopper and Thompson transitivity does not only involve the presence of an object. In their view, these set of parameters can rank a clause as low transitive or high transitive. Interestingly, in their scale, clauses with totally affected O and highly individuated O are ranked as high transitive. They refer to individuation as the distinctness of the O from A and the distinctness of O from its own background. For them, nouns which are proper, human, animate, concrete singular count definite are more individuated than their counterparts. An action can be more effectively transferred to a patient which is individuated than to one which is not; thus a definite/specific O is often viewed as more completely affected than an indefinite one (Hopper and Thompson
This means that ergativity in Davani is seen in the transitive clauses which are ranked as high transitive in Hopper and Thompson’s scale. In other words, the ergative pattern is attested with a highly individuated/affected object rather than a non-referential/less affected object. This also conforms to the generalization presented in Aissen (1999) given below:

(13) Overt Case Marking of Objects (Differential Object Marking: DOM)

- Local person > Proper Noun 3rd > Human 3rd > Animate 3rd > Inanimate 3rd
- Agent > Patient
- Animacy Scale:
  - Human > Animate > Inanimate
- Definiteness Scale:
  - personal pronoun > proper noun > definite full NP > indefinite specific NP > non-specific indefinite NP

As for the first ranking, Aissen calls 1st and 2nd person the 'local' persons-outranking 3rd, and within the 3rd person there is a further ranking of various subcategories.

The higher in prominence a direct object is, the more likely it is to be overtly case marked (Silverstein 1976; Comrie 1979; Comrie 1986: 65; Comrie 1989; Bossong 1991). Silverstein proposed that the represented markedness underlies split-ergative case marking in languages where the split is based on person and/or animacy (Dixon 1994).
3.3. Generalizations based on the Data

In this section, I lay out the generalizations based on the data presented in the previous section. It seems that verbs in Davani change according to the person and number features of S/A, and agreement follows a nominative-accusative alignment in the present tense, as the examples in (4) illustrate. Therefore, core arguments are cross-referenced on Davani verbs by agreement suffixes in the present tense. There is no object agreement in the present tense. The alignment in the present tense is shown in the following table.

<table>
<thead>
<tr>
<th>Alignment in the present Tense</th>
<th>Intransitive</th>
<th>Transitive</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Nominative</td>
<td>Nominative-Accusative</td>
</tr>
</tbody>
</table>

Table 1: Alignment in the present tense

In the past tense, agents are cross-referenced by agreement clitics which attach to the first constituent of the clause regardless of its syntactic category. They never attach to fronted topics as they are external to the clause. The following example illustrates this.

(14)

sæv-a-ku, mæ-m xa.
apple-a-DEF, 1sg-1sg.cl ate
'The apple, I ate it.'

As seen, in the above example, the agreement marker is cliticized to the agent of the clause not the topicalized object DP.

Based on the definition of ergativity which was given earlier in chapter 2, Davani is a split-ergative language as it shows ergativity in one portion of its grammar and nominative-accusative
alignment in another; Split ergativity in Davani is conditioned by tense, semantic nature of the object DP, and semantic nature of the verb (i.e., highly affecting verbs: kill, hit, pull on the ground, bury, etc.) as the examples in (7) show.

The ergativity of Davani is in its agreement system. That is, ergative alignment is reflected in its agreement system in finite clauses in the past tense. Therefore, it is only found in its verbal paradigm. The pattern becomes ergative when two conditions are met: first the A has inherent ergative case and second when O is nominative. In other words, O is cross-referenced by the same morpheme series (Set B) as S in the same position (attached to the verb), while A is cross-referenced by a different series (Set A) in a different position (attached to the first constituent in the sentence).

In the past tense, unlike the present tense, agreement follows a mixed alignment including transitive clauses with ergative-default agreement and transitive clauses which show an ergative-nominative agreement pattern or nominative (intransitive clauses). However, the syntax of Davani follows a nominative-accusative pattern.

3 The syntax of Davani follows a nominative-accusative pattern. The evidence comes from coordinate clauses where the gap is co-referential with the agent of the first clause and not the object.

\[
\begin{align*}
\text{He-3sg} & \quad \text{Ali in to mirror saw CONJ-3sg laugh did} \\
\text{'He saw Ali in the mirror and laughed.'}
\end{align*}
\]
Therefore, the split is found in morphology rather than syntax. This is a three-way agreement system as shown in the following table.

<table>
<thead>
<tr>
<th>Alignment in the past tense</th>
<th>Intransitive</th>
<th>Transitive A</th>
<th>Transitive B</th>
</tr>
</thead>
<tbody>
<tr>
<td>Nominative</td>
<td>Ergative- Ø default (without object agreement)</td>
<td>Ergative- nominative (with object agreement)</td>
<td></td>
</tr>
</tbody>
</table>

Table 2: Alignment in the past tense

An interesting question that arises here is why ergativity is seen in one portion of Davani’s grammar. This is not the case in Davani only. We can observe this phenomenon in other Indo-Aryan languages (Hindi) and languages outside this family (Basque). The fact that ergative languages do not appear to be consistently ergative and show ergative pattern only a sub-portion of their grammar is also observed in other languages (Coon 2004, 2012). In an ergative language it is rare to see a consistent pattern of ergativity throughout its grammar. For this reason, the label ‘split’ is used to define the type of ergativity in these languages. However, Davani displays a typologically less common pattern. In Davani Os with very specific features and subjects are collapsed into a class as they are the only arguments that agree with the verb. This is illustrated in (7). In order for an object in the past tense to trigger agreement, it must be [+specific], [+human] and [+ highly affected] as shown in (7a) and (7b). Objects without these features do not trigger nominative agreement as shown in (8). This means that the object marking, i.e., object agreement is not random. It only applies to a semantically well-identified NPs.
In the next section, I argue that these splits are triggered by tense and the transitivity of the clause. We also saw that the non-ergative portion of Davani grammar represents a split, i.e., the difference between the agent marking in the present tense and the past tense.

Below, I will present an analysis of how the split in agreement is triggered by tense, type of nominal argument and the semantics of the verb-not aspect- unlike many other ergative languages, in particular ergative Iranian languages.

3.4. The Analysis

This section outlines the analysis and the key assumptions. First, I will present the background and the central claims. Then based on these, I will develop an account that derives the ergative pattern in Davani within the Minimalist Theory.

The main analysis is based on an assumption that is present in the literature of Indo-Iranian languages. In Indo-Iranian languages, v with Past tense (and/or Perfective aspect) is ‘defective’, and does not assign ACC case (Nevins & Anand 2003, Haig 2008, Bobaljik & Branigan 2004)-which goes back to its origin as a participle with nominal properties. This is a traditional view on the origin of ergativity in the Indo-Aryan languages which is based on the hypothesis of the shift from passive to ergative.

3.4.1. Derivations in Intransitive Constructions across Different Tenses

Based on the above assumption, it can be said that in Davani, present tense T selects a
transitive $v$ head which assigns accusative case to its object, and past tense $T$ selects a transitive $v$ head which assigns ergative case to its specifier. These selections are shown in the following structures in the section below.

(15) Present tense

\[
\text{TP} \\
T \text{[present]} \quad vP \\
\quad v' \\
\quad v \text{[trans, ACC]}
\]

(16) Past tense

\[
\text{TP} \\
T \text{[past]} \quad vP \\
\quad v' \\
\quad v \text{[trans, ERG]}
\]

The structure in (16) shows the property that the transitive $v$ cannot assign accusative case to its complement. It should be noted that in this analysis, the source of ergativity is in the $vP$ functional system. Ergative is an inherent Case assigned along with the external theta role (Massam 2006, Legate 2008a, Woolford 1993, 1997, 1999, Nash 1996, Mahajan 1989,}

I will also assume a “Tucking in” derivation which maintains underlying hierarchical relations, making sure that the A c-commands the O in its case position—the shortest move (Richards 2001). Tucking in leaves the A as the higher argument even after object shift and it will then be attracted by T.

(17)

A further assumption regards object agreement in the past tense. In the past tense, \( v \) assigns ERG to the A with no case to the object, which means that the object is free to be assigned NOM case by T, and to assign values to T’s phi-features in return. That is, the O with the conjunction of particular features agree with T-hence with the finite verb. Therefore, Finite T licenses nominative agreement, as required for intransitive subjects and transitive objects (in the past tense).

In the proposed analysis, it is assumed that objects which are [+human], [+specific] and [+highly affected] move out of VP (cfr. Diesing 1992 and Woolford 2001). However, objects without these features remain inside VP and do not receive accusative case as \( v \) in the past is defective and cannot assign accusative case. Therefore, these objects are morphologically
realized as null.

Now based on the above assumptions, I will provide a structural analysis of the split ergativity in Davani in the next section. To begin, I examine the nature of unaccusatives and unergatives in the present and past tense\(^4\). Consider the unaccusative structure for the example in (18).

(18) Unaccusative

\[
\begin{align*}
xuna & \quad so:t-\varnothing \\
\text{house-def} & \quad \text{burned-3sg} \\
& \quad \text{‘The house burned.’}
\end{align*}
\]

(19) Unaccusative derivation

\[^4\text{I assume that the tense feature on V agrees with the tense feature from } v\text{ that is selected by } T.\]
In the above structure, $v$ cannot be interpreted agentively. This is similar to any unaccusative construction in that the external argument is not projected. Instead, the internal argument, i.e., the theme moves to Spec T to check the nominative and EPP features.

(20) **Unergative**

```
ma me še-še-m
1sg PROG go-1sg
'I go/am going.'
```

(21) **Unergative derivation**

![Diagram of Unergative derivation]

As shown in the structures (18) and (20), in an intransitive clause, neither structural accusative case nor inherent ergative case is assigned. The single argument of the intransitive clause (i.e. the theme in (18) and the agent in (20) undergoes feature agreement with T, has its nominative case licensed by T, and is attracted to the specifier of TP to satisfy the EPP feature of T. This is shown through the nominative agreement on the verb from Set B agreement morphemes (suffixal agreement markers). The derivation of intransitive clauses in the past tense is the same as the
ones in (18) and (20). Let us now consider the derivation for transitive clauses in the present tense.

3.4.2. Present Tense: Transitive Clauses

Objects without Particular Conjunction of Features

(22)

\[
\text{ma me xor-e} \\
\text{I PROG eat-1sg} \\
\text{'I am eating it/I eat it.'}
\]

(23)

In the above structure, T undergoes phi-feature agreement with the highest DP: i.e. the A resulting in agreement and licensing of nominative Case. Then the EPP feature of T attracts this

5 I am going to abbreviate this bundle of features as AFFECT.
DP to the specifier of TP. The nominative agreement in the present tense will be morphologically realized as an agreement suffix on the verb. Transitive \( v \) also assigns accusative case to its object.

As mentioned earlier, there is no object agreement in the present tense.

**Transitive Clauses: Objects with Particular Conjunction of Features**

(24)

\[
\text{to una mē zēr-ē} \\
2\text{sg 3pl PROG hit-2sg} \\
\text{You are hitting/hit them.}'
\]

The structure in (25) is a derivation for transitive clauses with specific highly affected human objects in the present tense. It is assumed that DP objects with a conjunction of these features are excluded from VP-internal positions (cfr. Diesing 1992 and Woolford 2001). This means that objects with these very specific features occupy a different position (i.e. outside the VP) in the syntactic tree.

(25)
In the above structure, transitive \( v \) assigns accusative case to its object, and then the object with very specific features moves to the lower spec of \( v\)P in the edge of the \( v\)P phase before the T merges (cf. Richards 2001). Later, the Probe T merges. T which is specified for unvalued phi-features will enter into a Probe-Goal relation with the closest Goal (i.e. the agent DP) which bears valued phi-features. The EPP feature of T attracts this DP to the specifier of TP. The nominative agreement in the present tense will be morphologically realized as an agreement suffix on the verb. There is no object agreement in the present tense.

Now let us turn to the structure of clauses in the past tense. In the following, I will discuss the derivations of the ERG-DEFAULT and ERG-NOM systems are derived in past transitive constructions. The construction in which the object remains unmarked for agreement (in its base position) is shown in (26). This is the ERG-DEFAULT pattern.
3.4.3. Past Tense

Transitive Clauses: Objects without Particular Conjunction of Features

(26)

to-t una xa
2sg-2sg.cl 3pl ate
‘You ate them.’

(27)

The above structure is the derivation of a transitive clause in the past tense where the verb agrees with the agent and there is no object agreement. Recall that $v$ in the past tense is defective. This means that no case is assigned to the object DP. We also assumed ergative case as an inherent case associated with the theta-role of the agent. Therefore, in the above structure, past transitive $v$ assigns inherent ergative case to the agent which is merged in spec vP, resulting in ergative agreement. Ergative agreement will later show as an agreement clitic on the first constituent of the clause. When T merges, it is the only structural case assigner in the clause. It probes down
for a goal to value its phi-features, but the agent has already been inherently case marked; It is not possible to agree with phi-features with a DP that bears inherent case (Chomsky 1986). The EPP feature of T attracts the ergative DP to the specifier of TP. On the other hand, the features of the phase which introduces the external argument block agreement with the internal DP unless the object DP is in the edge of the phase. As a result, the object DP is also not available to T as the lower spell out domain is the complement of little v, i.e. the VP has been sent to spell-out. Therefore, the caseless object DP survives to LF and PF where it receives its case by default post-syntactically (Schütze 2001). This is a post-syntactic spell-out of the object DP which is not licensed structurally in syntax. As Schütze argues the availability of this default case is a property of morphology in general. Therefore, in the case of Davani, the object DPs which are not associated with any case feature assigned are spelled out with a default case since their case is not determined by syntactic mechanisms\(^6\). This means that default case is found in the environments where syntactic mechanisms are ruled out or not applied\(^7\).

---

\(^6\) This presupposes that unlike the common assumption a DP’s Case feature does not need to be valued to satisfy Full Interpretation; A DP need not be assigned a case feature to satisfy syntactic licensing requirements. More specifically, restrictions on the surface position of DPs, usually treated under the Case Filter (Chomsky 1981) cannot be implemented by the same features that underlie case morphology because morphological case and abstract case behave as separate systems (Marantz 1991, Schütze 1997, Legate 2008).

\(^7\) It is hard to position a case system for Davani as cases have no morphological realization in this language. It may be a completely caseless language. Further research is needed to show that if Davani has a case system. The question also arises as to why null marking is the default case. Is the default case accusative? This will not be explored in this thesis.
In this case, T fails to find an appropriate goal, and probing fails (Legate 2008). Following Preminger (2011), I assume that a failure of agreement does not lead to ungrammaticality; the derivation will not crash if probing fails and agreement is not possible. Instead, the morpho-syntax insures that the relevant inflection surfaces in default form (Preminger 2014). This gives us the ERG-DEF agreement pattern.

**Transitive Clauses: Objects with Particular Conjunction of Features**

Now consider the derivation of a transitive sentence in the past tense with object agreement:

(28)

`Hasan-ɛʃ  avors-ɛn.
Hasan-3sg.cl brought-3pl`

'Hasan brought them (by force).'

The following derivation is proposed for the transitive constructions in which the verb agrees with both the agent and the object. This is the ERG-NOM agreement pattern.

(29)
As noted earlier, it is assumed that objects with a conjunction of specific features move outside VP. The landing site of these objects is below the merged position of external arguments. In this case the object moves to the lower spec of vP near the edge of the vP phase (cf. Richards 2001) before T merges. Therefore, the external argument will merge first followed by a tucking in of the derived object; there are two object positions in this derivation: i.e. the logical object position where the object is first merged inside VP and the derived object position where the object tucks in. The difference between the position of the two objects is related to the semantic features of the object DPS. Moreover, as v in the past tense is defective the object DP's uninterpretable Case feature is not checked.

When the ergative agent is merged in [Spec, vP] its Case feature is assigned inherently by past transitive v, subsequently, resulting in ergative agreement. Ergative agreement will later
show as an agreement clitic on the first constituent of the clause. T is then merged, and probes down for a goal to value its phi-features. Since T has an EPP feature, the ergative agent moves to spec TP to satisfy EPP feature. As Anand and Nevins (1999) note this movement ameliorates a potential intervention effect, as it allows a clear search space (i.e., free of c-commanding interveners). Therefore, this movement makes the object DP available to T. The object “them” undergoes phi- feature agreement with T, resulting in object agreement and the licensing of nominative case. This object agreement is realized as a nominative agreement on the finite verb. That is the verb agrees with its object in person and number. Nominative case is not licensed on 'Hasan' the agent, as it already bears inherent ergative case. This gives the ERG-NOM pattern. Given the two structures above, the variation between the NOM-ACC and ERG-NOM can be located to properties of v: In the NOM-ACC pattern, v assigns ACC case to the object, no case to the subject, which means that the subject is free to be assigned NOM by T and to assign values to T’s ϕ-features in return (which are spelled out as an agreement affix on the finite verb). In the ERG-NOM pattern v assigns ERG to the agent, no case to the object, which means that the object is free to be assigned NOM case by T, and to assign values to T’s ϕ-features in return, i.e. to agree with T (hence with the finite verb).

The above analysis shows that the nominative case is uniform in Davani in that the source of structural nominative on intransitive subjects and nominative on transitive objects with a conjunction of particular features is finite T.

In the above section, I have argued for a structural account of split ergativity in Davani. First, I described the data across different tenses. I showed that ergativity in Davani is tense-based. I also showed that Davani is not following the pattern seen in other Indo-Iranian languages shown blow:
(30)

a. perfective aspect: ergative alignment

b. non-perfective aspect: nominative alignment

I also showed the case on a subject of a transitive clause depends on the tense. In the past tense the subject of a transitive clause receives ergative case. That is the subject is marked differently in the past tense regardless of the ergative pattern. In all other tense, only nominative subjects are possible. Therefore, as many other languages the ergative pattern only appears in one portion of Davani grammar. Next, I developed an analysis of the ergative agreement pattern whereby ergative is an inherent case assigned by transitive \( v \) in the past tense, and nominative is a structural case assigned by finite T.

Based on the above analysis, I also proposed that absolutive is nominative in Davani, and is assigned in the inflectional domain-external to VP. Thus nominative case is uniform in Davani in that the source of structural nominative on intransitive subjects and transitive objects (where objects show nominative agreement with the finite verb) is finite T.

I also showed that the nominative case on objects in ergative patterns is dependent on T. Moreover, Davani presents evidence for two different object positions. The factor determining the position of these objects are a conjunction of semantic/specific features on the object DPs. That is objects with the conjunction of these particular features appear in a higher position: i.e. the lower spec of \( vP \). Also, Davani shows a nominative-accusative alignment in the present tense while a three-way agreement system in the past tense.

The above analysis places two distinct \( v \) transitives in Davani: a) transitive \( v \) in the past tense which is defective and cannot assign structural accusative case to its object DPs, but
assigns inherent ergative case to its external arguments. b) transitive $v$ in the present tense which assigns accusative case to its object DPs and licenses accusative structural case, but does not assign inherent ergative case. However, both of these $v$ heads introduce the external argument.

I argued that Davani like many Iranian languages is a split-ergative language showing ergative marking with the agent and nominative agreement with the object in the past tense. This means that verbal agreement occurs with both object in the past tense and the agent. However, Davani allows objects to agree in the past tense only when the objects are [+human], [+specific], [+highly affected]. This elaborates on Hopper and Thompson (1980) transitivity parameters and the notion of transitivity. Hopper and Thompson (1980) identify a set of parameters which suggest a scale according to which transitivity in a clause can be ranked. Their ranking allows clauses to be characterised as more or less transitive. With regard to O, they introduce two components which refer to the O: a) AFFECTEDNESS of O and b) INDIVIDUATION of O. That is the degree to which an action is transferred to a patient is a function of how completely that patient is affected. The component of INDIVIDUATION, however, refers both to the distinctness of the patient from A, and to its distinctness from its own background (Hopper and Thompson 1980). In their view, the referents of nouns which are [+proper], [+human, animate], [+concrete], [+singular], [+count] and [+referential, definite] are more highly individuated than those without these properties. This is different from the traditional view which defines transitivity as necessarily involving an activity transferred from an agent to a patient (Hopper and Thompson 1980).

Moreover, Davani is an example of a language where subjects of intransitives and objects of transitives receive the same agreement marking: i.e. the ergative agreement pattern in the past
tense. However, in non-past paradigms (i.e., present/future), the agreement is only with agents and subjects resulting in a nominative-accusative alignment.

### 3.5. Psych Predicates in Davani

This section explores and gives an analysis of a subtype of transitive constructions in Davani known as psych predicates or experiencer predicates. Psych predicates in Davani form a small class whose behaviour is different from other verbs in the language in terms of agreement patterns. Recall that in the previous section, I showed, in the present tense, in transitive clauses, Davani follows a nominative-accusative pattern while, in the past tense, the agreement system follows an ergative-unmarked or an ergative-nominative pattern depending on the specific properties of objects.

In this section, I will discuss a different agreement pattern found within psych predicates in the present and the past tense depending on the class to which these predicates belong. There are three type of psych predicates in Davani based on the agreement properties they display: a) in type one, which is similar to canonical transitive clauses, in both present and past tense, the experiencer of the psych verb is marked as ergative while the target of the emotion (theme) is unmarked. b) in the second type, there are two different agreement patterns depending on the tense of the clause. In the present tense, the experiencer is marked as ergative and the source/trigger of emotion marked as nominative. Contrastively, in the past tense, the experiencer is unmarked while the source of emotion is marked as ergative. c) the third type of psych
predicate are the ones where the experiencer is marked as ergative and the source of emotion is expressed through a prepositional phrase. This is summarized in Table 3 below:

<table>
<thead>
<tr>
<th>Type of Psych Predicate</th>
<th>experiencer of emotion</th>
<th>causer/trigger of emotion (theme)</th>
<th>target of emotion (theme)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Type 1</td>
<td>Ergative (subject)</td>
<td>×</td>
<td>Unmarked</td>
</tr>
<tr>
<td>Type 2</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>a. Present</td>
<td>Ergative (object)</td>
<td>Nominative</td>
<td>×</td>
</tr>
<tr>
<td>b. Past</td>
<td>Unmarked (object)</td>
<td>Ergative</td>
<td>×</td>
</tr>
<tr>
<td>Type 3</td>
<td>Ergative (subject)</td>
<td>PP</td>
<td>×</td>
</tr>
</tbody>
</table>

**Table 3: Type of Psych Predicates**

The above Table clearly exhibits the special properties of experiencers in Davani. In all instances of psych predicates, the experiencer is marked as ergative, with the exception of type 2 predicates in the past tense. Later, in the analysis of psych predicates in Davani, I will deal with this issue and explain how we can have a unified analysis for the experiencer of psych predicates in Davani despite the fact that type 2 experiencers in the past are marked differently from the rest of experiencers. For the purpose of this analysis, I will follow Belleti and Rizzi (1988) classification of psych verbs that is listed below:

(31)

a. **Class I**: Nominative experiencer, accusative theme.
   
   John loves Mary.

b. **Class II**: Nominative theme, accusative experiencer.
   
   The show amused Bill.
c. **Class III**: Nominative theme, dative experiencer.

The idea appealed to Julie

It is important to mention that Belleti and Rizzi (1988) have employed the term ‘theme’ for non-experiencer arguments in the above classifications. The special behaviour of these experiencers and their psych predicates is not surprising as cross-linguistic study of psych verbs has shown that these verbs behave differently as opposed to other verbs in a language and that experiencers are grammatically special. For instance, in Greek, clitic doubling of the accusative objects is obligatory when the object is an experiencer. However, this accusative doubling becomes optional when the object is not an experiencer. This is exemplified in the following Greek data from Landau (2009):

(32)

a.  O Jannis (tin) ghnorise tin Maria se ena party.
    The John (cl.ACC) met the Mary in a party
    ‘John met (her) Mary at a party.’

b. ta epipla *(ton) enohlun ton Petro.
    the furniture *(cl.ACC) bother the Peter
    ‘The furniture bothers Peter.’

In (32a), the accusative object is not an experiencer. Therefore, clitic doubling is marked as optional while in (32b) where the object is an experiencer, it renders the sentence ungrammatical if the clitic is not doubled. This type of restriction is also found in Hebrew where relativization of direct objects can optionally leave a resumptive pronoun. This resumptive pronoun becomes obligatory when the object is an experiencer. The following examples illustrate this fact.
(33)

a. ze ha-išl še-ha-ma'amar te'er *(oto1).
   this the-man that-the-article described *(him)
   ‘This is the man that the article described.’

b. ze ha-išl še-ha-ma'amar hid'ig *(oto1).
   this the-man that-the-article worried *(him)
   ‘This is the man that the article worried.’

It seems that all of these syntactic properties that we see in the above examples are the result of
the effect of psych predicates. Moreover, experiencers have shown special properties in the
history of Iranian languages. For instance, it is assumed that in the earlier stages of Old Persian,
there used to be a dative case-marker which became extinct. As a result, a genitive marker has
taken up its corresponding functions. That is, the genitive case marker assumes the functions
associated with itself and with the dative case-marker. One of these functions was to mark the
experiencer in a psychological state or the agent/benefactive in a past participle construction.
Baker and Atlamaz (2014) also discuss the behaviour of a small group of dyadic non-agentive
verbs in the Iranian context, in particular Kurdish varieties. In their work, they refer to the
analysis of Badīnānī dialect of Northern Kurdish spoken in Iran. In Badīnānī dialect, there are
several non-agentive verbs with experiencers or possessive subjects including verbs that mean
Atlamaz discuss the different agreement patterns found in both present and past tense showing
how these verbs, in the present tense, have the same ergative case-and-agreement pattern that
agentive verbs only have in the past tense. That is the experiencer subject has oblique case, the theme (stimulus) argument has direct case, and the verb agrees with the stimulus argument. This is shown in the following examples from Baker and Atlamaz (2014) adapted from (Haig 2008:260)

(34)

a. ama hasp na-vë-n.
   1PL:OBL horse:PL  NEG-be.necessary:PRES-3PL
   ‘We do not want horses.’

b. ta az na-vë-m.
   2s:OBL  1S   NEG-be.necessary:PRES-1S
   ‘You do not want me.’

In the remainder of this section, I’ll show how the agreement patterns presented in Table 3 earlier are derived within the split-ergative agreement system of Davani. Recall that in the previous section, I argued for the split agreement pattern in Davani to be tense-based. We found split ergativity that correlated with tense, in particular the past tense, and argued that this split appears as an agreement system only, rather than case. Given the above facts, let us examine the first type of psych predicates.

**Class I: Ergative Experiencer/Unmarked Theme (target of emotion)**

Consider first the data from Davani in (35) from both the present tense and the past tense:
As observed in the above examples, in both the present tense and the past tense, the experiencer of psych verbs is marked with what is similar to the ergative marker in Davani. In all of these examples, the target of the emotion, the theme, is unmarked. This is regardless of the animacy of both experiencers and themes. In either case, the same agreement pattern appears. This class of verbs in Davani is similar to class I of Belletti and Rizzi’s (1988) classification which was
presented earlier in this section. It seems that the structure of these verbs is similar to that of canonical transitive constructions in the past tense in this language in that the verbal agreement, i.e., ergative targets the subject of the sentence which happens to be the experiencer here. It is a familiar observation that an experiencer can act as a subject (X likes/hates/fears Y) or as an object (Z pleases/disgusts/frightens X) (McGinnis 2008).

To derive the internal structure of the first type of psych predicates in Davani, the assumption will be that experiencers are always internal to VP and that for psych predicates the ergative agreement comes from $V_{psych}$. We assume that the $v$ of these verbs does not assign thematic roles. Instead, the two arguments of these verbs are inside the VP. This view is common in the analysis of psych predicates in languages in which experiencers behave differently (Belleti and Rizzi 1988). Therefore, for example (35c) repeated in (36) below, we would have the structure (37). Notice that this ergative assignment from $V$ to the experiencer is assumed to be different from the inherent ergative case assigned to the external argument of the verb in the past tense in the previous section. Here, the assumption is that ergative that is assigned to experiencers is a lexical case associated with psych predicates. This is a view of psych predicates where there are two internal arguments. In this case, the grammatical subject is actually the internal argument.

(36)

una-ju ow ma
3pl-3pl.ERG water want
‘They want water.’
In the above structure, both the experiencer and the theme are internal to VP, with the experiencer merged in the spec of VP and the theme sister to \( V_{\text{Psych}} \). Earlier, it was mentioned that in these types of verbs, vP does not assign any theta roles. The experiencer and the theme receive their case from \( V_{\text{Psych}} \). This is similar to Type 1 of Belleti and Rizzi’s classification of psych verbs. Following Belletti and Rizzi’s definition of psych verbs, I also assume that psych verbs are unaccusative verbs which lack an external argument and fail to assign case to their object. As a result, objects that remain internal surface with unmarked case. Note that this pattern does not vary with tense.

**Class II: Present Tense: Ergative Experiencer/Nominative Theme (causer)**

Another class of psych verbs in Davani is type 2 where there are two agreement patterns depending on tense. In the present tense, the experiencer is ergative and the source of emotion is
nominative. Before looking at the examples from past tense, let’s see how this pattern is derived in the present tense for the examples presented in (38). The examples below include experiencers that are animate with source of emotions being animate and inanimate. In all of these cases, the agreement pattern is nominative-ergative. The ergative morpheme agreeing with the person and number of the experiencer is bolded. Pesetsky (1995) has a distinct role, i.e., causer for the agent of the object experience verbs. On the other hand, the object of subject experiencer verbs is called target of emotion or subject matter of emotion.

(38) Class II: Present tense

a. ma-t me tersen-e
   1sg-2sg.ERG PROG frighten-1sg.NOM
   ‘I frighten you.’

b. to-m me tersen-e
   2sg-1sg.ERG PROG frighten-2sg.NOM
   ‘You frighten me.’

c. oj-o-m me tersen-e-t
   3sg-1sg.ERG PROG frighten-e-3sg.NOM
   ‘He frightens me.’

d. ma-f me tersen-e
   1sg-3sg.ERG PROG frighten-1sg.NOM
   ‘I scare him.’

e. sag-a-ku-f me tersen-e
   dog-a-DEF-3sg.ERG PROG scare-1sg. NOM
   ‘I scare the dog.’

f. sag-a-ku-m me tersen-e-t
   dog-a-DEF-1sg.ERG PROG frighten-3sg.NOM
   The dog frightens me.
In (38) a-d, both the experiencer and the source of emotion are [+human]. (38e) is an example with a [+animate] [-human] experiencer and [+human] source of emotion. In (38f), the experiencer is [+human] and the source of emotion is [+animate] [-human]. In the last example, the causer is [-animate] while the experiencer is [+human]. In all of these examples, the experiencer is marked as ergative. This shows that the presence or absence of animacy does not affect the agreement pattern in psych predicates.

Earlier we assumed that ergativity in psych predicates comes from $V_{psych}$ and that experiencers are always internal to VP. However, the difference between the structure for sentences in (35) and the ones in (38) is the position where the experiencer is merged. In type 1 verbs, the experiencer merges in the specifier position of VP as shown in (36). In this class of verbs, the experiencer is merged as sister to V where it receives its case from $V_{psych}$; the causer/agent in this type is merged as an external argument in the specifier position of vP. An example from (38) is repeated below:

(39)

\[
\begin{align*}
\text{sag-a-ku-f} & \quad \text{me} \quad \text{tersen-e} \\
\text{dog-a-DEF-3sg.ERG} & \quad \text{PROG} \quad \text{scare-1sg. NOM}
\end{align*}
\]

‘I scare the dog.

The structure of the above sentence would be similar to (40) below:
(40) Present Tense

As the above structure illustrates, the source of emotion or causer is merged in the spec vP. To derive the nominative agreement with the source of emotion, theme, T undergoes phi-feature agreement with the highest DP: i.e., the theme, resulting in agreement and licensing of nominative Case. Then the EPP feature of T attracts this DP to the specifier of TP. This is how the nominative agreement in the present tense of class two of psych verbs in Davani is derived. Note that the nominative agreement is morphologically realized as an agreement suffix on the Verb (Set B suffixes). The above analysis is along the lines of McGinnis (2008) in that if the causer role is assigned to spec-v, then the experiencer role must be assigned below spec-v, assuming that there is only one v per (simple) clause.

**Class II: Past Tense: Ergative Causer/Unmarked Experiencer**

Now let us turn to the discussion of the same type of verbs (class two of psych predicates) in
the past tense. As stated previously, this class of verbs show a different agreement pattern in the past tense. To start with, let’s examine some data below.

(41) Class II: Past Tense

a. ma-t (mɛ) tersemi
   1sg-2sg.ERG (PROG) frighten-unmarked
   ‘You frightened me.’

b. to-m (mɛ) tersemi
   2sg-1sg.ERG (PROG) frighten-unmarked
   ‘I frightened you.’

c. oj-o-m (mɛ) tersemi
   3sg-1sg.ERG (PROG) frighten-unmarked
   ‘I frightened him.’

d. Hasan-o-m (mɛ) tersemi
   Hasan-o-1sg.ERG (PROG) frighten-unmarked
   ‘I freighted Hasan.’

The examples in (41) show a different agreement pattern in the past tense with class two of psych predicates. As discussed earlier, in the present tense, this class of verbs show an nominative-ergative agreement with the experiencer marked as ergative and the causer (source of emotion) as nominative. However, in the past tense of this class, the causer is marked as ergative and the experiencer is unmarked. Also, recall that for this class of verbs, we assumed that the experiencer is merged as sister to V with the causer merged as an external argument in the specifier position of vP. Given the above fact, the structure of class two of psych verbs in the past tense is represented in (42) below.
What makes these two patterns (the present and the past) of class II of psych predicate different is the presence of ergative on experiencers in the present tense as opposed to the ergative causer in the past tense. This difference can be easily explained using our analysis of ergative agreement pattern with agentive verbs in the past tense. In the analysis of split ergativity in Davani, we made the assumption that in canonical transitive constructions, the source of ergativity is in the \( vP \) functional system and that ergative is an inherent Case assigned along with the external theta role. It was also assumed that in the literature of Indo-Iranian languages, \( v \) with past tense (and/or Perfective aspect) is ‘defective’, and does not assign ACC case which goes back to its origin as a participle with nominal properties. This is a traditional view on the origin of ergativity in the Indo-Aryan languages which is based on the hypothesis of the shift from...
passive to ergative (Haig 2008). This clearly explains the presence of ergative marker on the causer which is merged as an external argument in the specifier position of vP. Now one might ask why the experiencer of this type of verbs in the past tense is unmarked unlike any other experimenters in different classes of psych verbs. I suggest that in the structure in (37), VP Psych still assigns ergative case to its sister, i.e., the experiencer just as any normal psych verb we examined previously. However, it seems that the presence of two ergative cases is a morphological constraint. As a result of this, the lower ergative case is not spelled out. This is how we derive the ergative-unmarked pattern in the past tense of class two of psych verbs.

Class III: Ergative Experiencer/ Causer (PP)

In class three of psych predicates in Davani, we see an agreement pattern that is different from the other two classes. In this class of verbs, experimenters are marked as ergative while the causers are within a prepositional phrase. This pattern is presented in (43) below.

(43)

a. ma-m a: sag-gal me tersit(a)
   1sg-1sg.ERG from dog-pl PROG afraid/fear
   I am afraid of dogs. Lit. I have fear from dogs.

b. ma-m a: sag-gal me tersess-a
   1sg-1sg.ERG from dog-pl PROG afraid/feared
   I was afraid of dogs. Lit. I had fear from dogs.

c. ma-m a i qeseye xasha mi
   1sg-1sg.ERG from this story enjoyment come
   I enjoy this story.
In the above examples, the experiencer is case marked as ergative and the causer is in a prepositional phrase. The same pattern is found in both present and past tense. To derive the agreement pattern in the data in (43), I assume that the experiencer is merged in the specifier of VP where it receives ergative case from $V_{\text{Psych}}$.

(44)

As for the causer, the PP is merged as sister to V. In this case, the preposition assigns accusative case to its object which is morphologically null.

---

8 For now, complex predicates are set aside. See chapter 4.
In this section, I presented three different agreement patterns within a small sub-class of verbs in Davani called psychological or experiencer predicates. In the analysis of these verbs, I assumed that experiencers are internal to VP. Depending on the class of verbs, the experiencers is merged in the spec of VP or as a sister to V. For the first type, I showed that the experiencer is merged in the specifier of VP where it received its ergative case while the theme was merged as sister to V. For class two of psych verbs in Davani, we saw two agreement patterns depending on the tense of the clause. In the present tense, the experiencer was marked as ergative with the theme or source of emotion as nominative. In this case the experiencer is merged as sister to V and the source of emotion in the specifier position of v. I showed that the ergative marking on the experiencer comes from V_{Psych} and the nominative agreement with the theme/causer comes from T. In the past tense of class two, this pattern disappears. There is no ergative agreement on experiencers anymore. Instead the source of emotion or the cause is marked as ergative, and the experiencer is unmarked. For this pattern, we argued that the source of emotion in this type of verbs in the past tense is merged as an external argument where it receives its ergative case from
\( \nu \). Similar to the present tense, the experiencer is merged as sister to \( \nu \). This is the only pattern where the experiencer is not marked as ergative. Instead the ergative marker is on the source of emotion. To derive this agreement pattern, I argued that both the experiencer and the source of emotion receive ergative case from \( \nu \) and defective past \( \nu \) respectively. I suggested that the absence of the ergative marker on the experiencer is the result of a late phonological rule which rules out the presence of two ergative agreement marker within a clause. In the last class of verbs, we saw the same pattern for experiencers- they are marked as ergative. However, the difference is in the structure of the causer. In this class, the causer is within a prepositional phrase.
Chapter 4

Ergativity and the Structure of Complex Predicates

4.1. Introduction

The issue that we mainly discuss in this chapter will be the syntactic status of the nominal elements in complex predicates. Just as many other Indo-Iranian and Indo-Aryan languages, Davani makes use of a large number of complex predicates. This chapter presents an analysis of the structure of complex predicates and their interaction with ergativity. I use ergativity to illustrate how it can shed light on the status of the nominal element of the complex predicates in Iranian languages and in particular in Davani.

Complex predicates (CPs) consist of a non-verbal element (NVE) and a light verb (LV) (Folli et al 2005, Megerdoomian 2002-2012, Kornfilt 2003). Many Iranian and non-Iranian scholars have tried to describe the nature of the complex predicates in Iranian languages, in particular Persian; there has not yet been any unifying analysis of complex predicates in Iranian languages. In the literature of the complex predicates in Iranian languages, there are competing analyses of these predicates with regard to a) the status of the non-verbal element in particular, the nominal component, i.e., whether the nominal element of these predicates functions as a non-specific object or it displays distinct syntactic and semantic behavior b) the semantic contribution of the verbal element, c) determining whether these predicates form a lexical or a syntactic unit,
and d) whether these combinations are instances of noun incorporation. In the following sections, I will introduce the different views with regard to the above issues. However, I will focus on the two competing views on the status of the nominal element of complex predicates. I will extend one of the analyses to Davani data and argue that this analysis works better for the Davani language. Additionally, I will also show that Davani complex predicates are better analyzed as (partially) incorporated units rather than a combination of N+V.

4.2. Background

Complex predicates are predicates which are multi-headed; they are composed of more than one grammatical element (either morphemes or words), each of which contributes part of the information normally associated with a head (Alsina et al. 1997). Haig (2002) mentions that although the definition given by Alsina et al. is broad, it still fails to cover all the attested uses of the term ‘complex predicate’. He further gives a list of the phenomena that are considered as complex predicates in the literature:

a. Morphologically simplex unergative verbs in English such as dance (Hale & Keyser-1997).

b. Combinations of ‘particles’ plus a verb lexeme, e.g. Hungarian Reki Rohan, lit. ‘toward rush’ (Ackerman & Lesourd 1997).

c. Predicates consisting of a single morphologically complex word, e.g. causatives in Chichewa (Al Sina 1997).
d. Serial verb constructions containing two or more verb lexemes (Durie 1997).

e. Combinations of auxiliary and main verb in some European languages (Rosen 1997).

f. Combinations of a noun plus a verb, e.g. in Hindi (Mohanan 1997).

Note that Davani mainly employs the type of complex predicates introduced in (f) above.

4.3. Basic Facts about Davani

As shown in the previous chapters, Davani is a SOV language. Davani shows evidence of ergativity in the past tense in transitive constructions. That is ergativity is exhibited in both perfective and non-perfective aspects in the past tense. However, as we will see in this chapter, the agent of a semantically intransitive clause can also be marked as ergative if the intransitive verb is a complex predicate.

Previously, I argued that nominative case is uniform in Davani in that the source of structural nominative case on intransitive subjects and transitive objects (where objects with particular bundle of features show nominative agreement with the finite verb) is finite T. It was also demonstrated that the nominative case on certain objects in ergative patterns is dependent on T, and that objects that carry the features [+human], [+specific], and [+highly affected] appear in a higher position than objects that do not carry these features. I also proposed that absolutive is nominative in Davani, and is assigned in the inflectional domain, external to vP.

There are two sets of verbs in Davani: simple verbs and complex predicates. In the literature on complex predicates, these complex verbs are also called light verb constructions, conjunct
verbs, compound verbs or complex predicates. For instance, Haig (2002) makes use of the terms ‘conjunct verbs’ and ‘compound verbs’ in his analysis of complex predicates in Kurdish to make a distinction between N+V combinations (conjunct verbs, Masica 1991) and V+V combinations (compound verbs, Butt 1997). For simplicity and consistency, I will adopt the term ‘complex predicate’ throughout this work. We begin by examining the morphological structure of these predicates in Davani. Davani makes use of different categories as non-verbal elements. As a result, complex predicates in Davani can be categorized based on the nature of the non-verbal element. The non-verbal element can be a noun, an adjective, an adverbial elements/particle or a preposition. There are a few verbs for which the non-verbal element is a phrasal unit. These possibilities are exemplified below:

Non-verbal element is a noun: N+ LV

(1) dæs daøæn lit.‘hand give’ ‘to shake hands’

Hoseyn-ɛ-f dæs da æ Hasan.
Hoseyn-ɛ-f.cl hand gave to Hasan
‘Hoseyn shook hands with Hasan.’

(2) tænbi kɛ:tæn lit. ‘punishment do’ ‘to punish’

a. mæ-m Hasan tænbi kɛ:
  lsg-1sg.cl Hasan punishment did
  ‘I punished Hasan.’

b. tænbi-m kɛ:
  punishment-1sg.cl did
  ‘I punished him.’
c. tænbi-ɛ  bað-i-m  ke:
punishment-EZAFE  bad-INDEF-1sg.cl  did
‘I punished him badly.’

(3) bal getæn  lit. ‘wing take’  ‘to fly’
yɛ  kæmutær-i-f  bal  ge  bof-ɛ
one  pigeon-INDEF-3sg  wing  took  went away/left-3sg
‘A pigeon flew and went away.’

(4) dizi ke:tæn  lit. ‘stealing do’  ‘to steal’
una-fu  dizi  ke
3pl-3pl  stealing  did
‘They stole (something).

In examples (1-4), the non-verbal element is a noun. The verbal elements are daðæn ‘give’,
diðæn ‘see’, getæn ‘take’, and ketæn ‘do’ respectively. In (1), -f is the ergative marker which is
attached to the subject of the sentence Hoseyn. In (2a), the ergative marker -m is attached to the
subject pronoun mæ ‘I’. However, in (2b), in the absence of the subject pronoun, the ergative
marker has attached the nominal element of the complex predicate that is tænbi ‘punishment’.
The example in (2c) shows how the nominal element of the complex predicate allows for a
modifier. This is not true for all nominal elements of these predicates. There are only a few
nominals which allow modifiers. The adjective bæd ‘bad’ modifies the noun tænbi ‘punishment’.
Note that the indefinite marker in this example translate into ‘a’ in English. One might wonder
why the ergative marker has attached to the modifier before the light verb. Recall that in Davani,
ergative clitics attach to the first constituent of the sentence. Here, tænbi-ɛ bæd-i ‘(one) bad
punishment’ forms a constituent. In (3), there are two verbs. Both ‘fly’ and ‘go’ are intransitive. The first verb is a complex predicate while the second verb is a simple verb. Interestingly, the subject of the first verb is cross referenced with the ergative marker -ʃ while for the subject of the second verb which is a simple verb, i.e., bof-ɛ, the nominative marker -ɛ is used regardless of the fact that in both sentences the subject is the same and both of these sentences are in the past tense.

Recall that the agreement pattern for intransitive clauses in the past tense is nominative. The sentence is (4) is another example where the nominal element is a noun. In this example, the ergative marker has also attached to the agent of the clause. Examples (5-7) below are instances of complex predicates with the non-verbal element as an adjective. There are only three light verbs that form these predicates: ketæn ‘to do’, bi:ðæn ‘become’, and buðæn ‘to be’ which are causative, inchoative and stative respectively.

Non-verbal element is an adjective: Adj+LV

(5) **por ketæn** lit. full do ‘to fill up’
    tongi ow-ɛ-ʃ por ke
    jar water-ɛ-3g.cl full did
    ‘He/she filled the water jar.’

(6) **dʒeda ketæn** lit. separated do ‘separate’
    rovalæ¹-t dʒeda ke
    grape-2sg.cl separated did
    ‘You separated the bad grapes from the good grapes’

¹rovalæ in Davani is a type of grape which is too ripe (bad grape).
(7) \( \text{xæra kætæn} \) lit. ‘destroyed/ruined do’ ‘to destroy’

\[
\begin{array}{c}
[\text{xun-o dun]-m-fu xæra kæ} \\
\text{house-1sg-3pl.cl destroyed did}
\end{array}
\]

‘They destroyed my house.’

In the above examples, the non-verbal element, i.e., the adjectives por ‘full’, \( \text{dæda} \) ‘seperated’ and \( \text{xæra} \) ‘ruined’ form a complex predicate with the light verbs \( \text{kætæn} \) ‘to do’. Notice how in (5-7), the ergative clitic is used to mark the agent.

Below we see examples of adverbs as the non-verbal element combining with the light verb.

*Non-verbal element is an adverbial element/verb particle: Adverbial + LV*

(8) \( \text{pæs ævaðæn} \) lit. back bring ‘to return, bring back’

\[
\begin{array}{c}
\text{bætʃek-ku-tu pæs æva} \\
\text{child-DEF-2pl.cl back brought}
\end{array}
\]

‘You brought back the child.’

(9) \( \text{vær poriðæn} \) lit. up jump ‘to get shocked, to jump up’

\[
\begin{array}{c}
\text{vær-e-mu pori} \\
\text{up-e-1pl.cl jumped}
\end{array}
\]

‘We jumped up (as we were shocked).’

Depending on the transitivity of the light verb, the resulting predicate can be transitive or intransitive. For instance, in (8), the light verb is transitive, and the resulting predicate is

\(^2\)Note that here light verbs are distinguished from their heavy counterparts in that light verbs employ different types of non-verbal elements, in particular NPs. A change in the category of the non-verbal element changes the event structure of the complex predicate as will be shown in section 4.5. I assume that light verbs and their heavy counterparts are different in terms of their argument structure properties and telicity. In some cases, the light verb constructions do not have a corresponding heavy verb.
also transitive. However, in (9), the light verb is intransitive and the resulting predicate is also intransitive. In both examples, the ergative clitic is used to mark the agent or the subject of the clause.

*Non-verbal element is a prepositional phrase: PP+LV*

Here, we see examples of prepositional phrases as the non-verbal element accompanied by the light verb. Depending on the transitivity of the light verb, the resulting predicate can be transitive or intransitive. For instance, in (10-11), the light verb is transitive, and the resulting predicate is also transitive. However, in (12), the light verb is intransitive and the resulting predicate is also intransitive.

(10) ǝǝ ǝǝ ǝvæǝn  lit. ‘from hand bring’  ‘to earn’
       ǝǝ ǝǝ ǝ-ǝ ǝ-ǝ ǝvæ
       from hand-o-1sg  brought
       ‘I earned (something).

(11) ǝǝ ǝǝ ǝdǝǝn  lit. ‘from hand give’  ‘to lose’
       ǝǝ ǝǝ ǝ-ǝ ǝ-ǝ ǝdǝ
       from hand-o-3pl.cl  give
       ‘They lost (something).

(12) ǝǝ ǝǝ ǝsǝ ǝdǝǝn  lit. ‘from head go’  ‘to overload’
       ǝǝ ǝ-ǝ ǝ-ǝ ǝsǝ ǝdǝ
       soup-o-3sg.cl  from head  go
       ‘The soup boiled over (from the sides of the pot).

As stated at the beginning of this chapter, for the purpose of this work, we will only focus on one
subtype of complex predicates that is the combination of a nominal element plus a verb (i.e., (1-4) from the above examples) as Davani employs this construction extensively.

Davani complex predicates can further be classified based on the type of light verb and the transitivity of the light verb. The light verb in a complex predicate can be transitive or intransitive.

The light verb in complex predicates in Davani can range over a number of simple verbs. Below is a list of light verbs which can function in a complex predicate:

<table>
<thead>
<tr>
<th>LV: Transitive</th>
<th>Example</th>
<th>Gloss</th>
<th>LV: Intransitive</th>
<th>Example</th>
<th>Gloss</th>
</tr>
</thead>
<tbody>
<tr>
<td>a. xonædan</td>
<td>nomaz</td>
<td>Lit. prayer</td>
<td>a. ðæđæn</td>
<td>æ ser</td>
<td>Lit. from head</td>
</tr>
<tr>
<td>(read)</td>
<td>xondæn</td>
<td>read ‘to pray’</td>
<td>(go)</td>
<td>ʃæn</td>
<td>go ‘to overload’</td>
</tr>
<tr>
<td>b. daðæn</td>
<td>lo: daðæn</td>
<td>Lit. push</td>
<td>b. biðæn</td>
<td>va: biðæn</td>
<td>Lit. open become</td>
</tr>
<tr>
<td>(give)</td>
<td></td>
<td>give ‘to push’</td>
<td>(become)</td>
<td></td>
<td>‘to open’</td>
</tr>
<tr>
<td>c. ke:taen</td>
<td>tif ke:taen</td>
<td>Lit. fire</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>(do)</td>
<td></td>
<td>catch ‘to catch fire’</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>d. xatæn</td>
<td>yossæ</td>
<td>Lit. sorrow</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>(eat)</td>
<td>xatæn</td>
<td>eat ‘to be upset’</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>e. zeðæn</td>
<td>katʃ zeðæn</td>
<td>Lit. bite</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>(hit)</td>
<td></td>
<td>hit ‘to bite’</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

**Table 1**: Examples of transitive and intransitive light verbs

The most common light verb in Davani is ke:taen ‘do’. Its heavy counterpart has lost its use in this language. It is important to know that other light verbs that are used in complex predicates are also used as heavy verbs in Davani. Consider the following two examples in (13):
a. kæmutær-i-ʃ bal gɛ pigeon-INDEF-1sg.cl wing took 'A pigeon flew.'

b. mæ-yæ kæmutær-i gɛ 1sg-1sg one pigeon-INDEF took/caught/bought 'I took/caught/bought a pigeon.'

The above example clearly shows how the verb getæn ‘take’ is used as a light verb in (13a) and as a heavy verb which translate into English verbs take, catch, and buy in (13b). There are many examples like this in Davani.

The summary of the above discussions is presented in the following Table:

<table>
<thead>
<tr>
<th>Non-Verbal Element Category</th>
<th>NOUN</th>
<th>ADJECTIVE</th>
<th>PP</th>
<th>ADVERB</th>
</tr>
</thead>
<tbody>
<tr>
<td>LV: Transitive</td>
<td>dæs dæðæn</td>
<td>por ke:taen</td>
<td>æ dæs daðæn</td>
<td>pæs ænuðæn</td>
</tr>
<tr>
<td></td>
<td>lit. ‘hand give’</td>
<td>lit. full do</td>
<td>lit. ‘from hand give’</td>
<td>lit. back bring</td>
</tr>
<tr>
<td></td>
<td>‘to shake hands’</td>
<td>‘to fill up’</td>
<td>‘to lose’</td>
<td>‘to return, bring back’</td>
</tr>
<tr>
<td>Resulting complex predicate</td>
<td>Transitive</td>
<td>Transitive</td>
<td>Transitive</td>
<td>Transitive</td>
</tr>
<tr>
<td>Non-Verbal Element Category</td>
<td>NOUN</td>
<td>ADJECTIVE</td>
<td>PP</td>
<td>ADVERB</td>
</tr>
<tr>
<td>LV: Intransitive</td>
<td>æw feðæn</td>
<td>va: biðæn</td>
<td>æ ser feðæn</td>
<td></td>
</tr>
<tr>
<td></td>
<td>lit. water become</td>
<td>lit. open be</td>
<td>lit. from head go</td>
<td></td>
</tr>
<tr>
<td></td>
<td>‘to feel embarrassed’</td>
<td>‘to open’</td>
<td>‘to overload’</td>
<td></td>
</tr>
<tr>
<td>Resulting complex predicate</td>
<td>Intransitive</td>
<td>Transitive/Intransitive</td>
<td>Intransitive</td>
<td></td>
</tr>
</tbody>
</table>
the focus of many studies and much debate in the literature of complex predicates in particular in Iranian languages. That is the second column on the left of the Table.

4.4. Complex predicates: Syntactic or Lexical

One issue that has been the center of attention in the study of complex predicates is whether these combinations form a syntactic or a lexical unit. That is are they result of a syntactic process or a morphological and lexical process? In this section, using Davani data, I will show how the nominal element and the light verb which form a whole unit have properties of both of these processes; they have a dual nature. This means that these predicates show properties of syntactic units due to their syntactic behaviour as they can often be separated by functional categories such as negation, auxiliaries (progressive and future), modals, and the imperative marker. On the other hand, these predicates can undergo nominalization and carry phrasal stress which leads us to argue for their status a morphological unit. Karimi and Mohammad (1992) argue for the Persian complex predicates being the result of a syntactic rather than a lexical process as the nominal element and the light verb can be separated by elements such as negation and inflectional affixes, the auxiliary verb for future tense and emphatic elements. Let’s look at a few examples from Davani below:

(14) **Negation marker**

tongi ow-ɛ-ʃpor ne kɛ
jar water- ɛ-3g.cl full NEG did
‘He/she did not fill the water jar.’
In (14), the negation marker precedes the light verb; the negation is between the nominal element *por* ‘full’ and the light verb *kɛ* ‘did’. Here the negation takes scope over the whole complex predicate.

In (15) below, the progressive marker is between the nominal element *gæp* ‘talk’ and the light verb *zɛ* ‘hit’.

(15) **Progressive marker**

```
gæp-o-m  me  zɛ
  talk-o-1sg.cl  PROG  hit
  ‘I was talking.’
```

The progressive marker is also used in the present tense and the future tense. There is no future marker in Davani. To express a future event, Davani employs the progressive marker and an adverb that shows the action will happen in the future. This is shown in the following examples:

(16)

a. ðælænæ  gæp  me  zen-e
   now  talk  PROG  hit-1sg
   ‘I am talking now.’

b. ðæmʃow  gæp  me  zen-e
   tonight  talk  PROG  hit-1sg
   ‘I will talk tonight.’

The sentence in (16a) with the adverb *ðælanæ* ‘now’ refers to an event happening at the time of speaking. However, in the second sentence (16b), the change of the adverb makes the sentence in the future tense.

Genitive markers can also intervene between the nominal element and the light verb of the complex predicate. For instance, in the sentence in (17), The complex predicate is *dærs xanðæn*
‘to study’, lit. lesson read. The sentence in (17) is an example where the genitive marker has attached to the nominal element of the complex predicate. The ergative clitic -ʃ which marks the agent can also attach to the nominal element of these predicates.

(17) **Genitive marker (clitic)**

```
Ali-ʃ nomaz-e-ʃ xa
Ali-3sg.cl lesson-ɛ-3sg.cl.GEN read.PST

‘Ali did his prayer(s).’
```

It is worth mentioning that the above clause contains two clitics, one is the ergative clitic which marks the agent of the clause and the other one the genitive clitic which is attached to nominal element of the complex predicate. If a clause contains more than one clitic, one ergative and one genitive, and there is only one constituent in the clause to host the two clitics, the ergative clitic attaches after the genitive clitic. The following example shows this.

(18)

```
bætʃe-ko-m-æ-fu ma/xa
child-DEF-1sg.cl.GEN-æ-3pl.cl.ERG want

‘They want my kid.’
```

In this example, the genitive marker –m ‘my’ is attached to the head noun ‘child’ before the ergative marker which cross references the person and number of the agent of the clause ‘they’.

As well as, the negation marker, genitive marker, and progressive marker, agent clitics, i.e., ergative markers can also intervene between a nominal element and the light verb. This is when there is no other constituent in the clause to host the clitic. This is shown in the example in (18).
(19) **Agent ergative clitic**

\[
\text{dærs-} - \text{f} \quad \text{xand}
\]

\[
\text{study-} - \text{e-3sg.cl} \quad \text{read}
\]

‘He studied.’

Finally, modifiers may be placed between the nominal element and the verbal element. This is not the case for all of these predicates. Adverbs and adjectives can separate the nominal element and the light verb in some predicates.

(20) **Modifiers**

a. \( tænbi-\varepsilon \quad \text{bað-i-} \quad \text{m} \quad \text{kē} \):

punishment-\text{EZAFEF} \quad \text{bad-INDEF-1sg.cl} \quad \text{did}

‘I punished him badly.’ lit. I did a bad punishment to him.

b. \( \text{Hasan-} - \text{f} \quad \text{xænd-} - \text{e} \quad \text{goti} \quad \text{kē} \):

\( \text{Hasan-3sg.cl} \quad \text{laugh-} \text{EZAFe} \quad \text{loud} \quad \text{did} \)

‘Hasan laughed loudly.’ lit. Hasan did a loud laugh.

c. \( \text{næfs-gæl-} - \text{e} \quad \text{æmiq-i-f} \quad \text{qessi} \):

breath-pl-\text{EZAFe} \quad \text{deep-INDEF-3sg.cl} \quad \text{pulled}

‘He took deep breath(s).’

d. \( \text{ye} \quad \text{næfs-} - \text{e} \quad \text{æmiq-i-f} \quad \text{qessi} \):

\( \text{one breath-} \text{EZAFe} \quad \text{deep-INDEF-3sg.cl} \quad \text{pulled} \)

‘He took a deep breath’.

As the above examples illustrate, modifiers can appear between the nominal element and the light verb. In the first example, \( bæð \ \text{‘bad’} \) along with the indefinite marker -\( \text{i} \) and the ergative clitic -\( \text{m} \) precede the light verb. In the second example, \( \text{goti} \ \text{‘loud’} \) is placed between the two
elements of the complex predicate. In the third example, the plural marker -gæl and the modifier æmiq ‘deep’ along with the indefinite marker -i are placed between the two parts. Notice how the nominal element is preceded by the determiner ‘one’ in the last example. The ergative clitic -ʃ in this case has attached at the end of the constituent ye næfs-e æmiqi ‘one deep breath’. The above data can be the evidence for the fact that these combinations, i.e. N+V, form a syntactic rather than a lexical one as different elements can separate the nominal element from the light verb. Folli et al (2002) also use these facts as evidence for an analysis in which the light verb and the nominal element are generated separately and combined in syntax. Later, they argue that these two units will combine at LF.

On the contrary, Dabir Moghaddam (1997) argues for the morphological and lexical status of these combinations. His findings support Mithun (1984), Rosen (1989), and Spencer (1995)’s claim with regard to the morphological/lexical nature of these predicates He proposes that in forming a compound verb, we are dealing with a lexical process. He later classifies these processes under two subcategories: combination versus incorporation. In his analysis, combination is when an adjective, noun, prepositional phrase, adverb, or past participle has combined with a verb. These includes examples such as adjective+ auxiliary combination (xæste budæn ‘to be tired’ lit. tired be, noun+verb combination (tæhdid kærdæn ‘to threaten’ lit. threat do), prepositional phrase+ verb combination (be donja amædæn ‘to be born’ lit. to-world-come) and adverb+verb combination (foru rixtæn ‘to collapse’ lit. down (ward pour)). This is what we call complex predication throughout this work. Dabir Moghaddam has not made use of the term ‘complex predicate’ for these units. Instead, he has employed the term ‘combination’. 
On the other hand, if a direct object loses its grammatical ending(s) and some prepositional phrases functioning as adverbs of location lose their preposition and incorporate with the verb to create an intransitive compound verb which is a conceptual whole (Dabir Moghaddam (1997), the process is called incorporation. Therefore, in incorporation there is always a corresponding non-incorporated construction. Dabir Moghaddam (1997) argues that the verbs formed through combination and incorporation are morphologically compound. He gives the following example as an incorporated object in Persian:

(21)

a. bætʃ-ʃ-ha qæza-ɛʃ-an-ra xor-d-ænd
   child-pl food-his/her-pl-ACC eat-pst-they
   'The children ate their food.'

b. bætʃ-ʃ-ha qæza xor-d-ænd
   child-pl food eat-pst-they
   'The children did food-eating.'

In (21a), the direct object qæza-ɛʃ-an-ra ‘their food’ loses its grammatical ending, i.e., the accusative marker and incorporates into the verb in (21b).

As well as the syntactic properties discussed above, Davani shows properties which can be the evidence for these combinations to be considered as lexical units and the result of a morphological process. The first piece of evidence comes from the fact that these predicates can undergo nominalization and bear the word stress. In Davani, the nominalization process will change the finite verb as in (22a) into an infinitival as in (22b). It is important to know that Davani like many other Iranian languages makes use of EZAFE construction. Ezafe is a
feature of noun phrases in many Iranian languages in particular, Persian. It is an unstressed vowel that links the noun to its modifier (Kahnemuyipour 2014, Ghomeshi 1997, Samiian 1983).

In nominalization of finite verbs in Davani, the infinitival with the nominal element become the head of the EZAFE construction. Let’s look at the examples in (22) which clearly illustrate this.

(22)

a. [bal getæn-ɛ kämutær] dʒu ɑ wing take-EZAFE pigeon beautiful is ‘Pigeon’s flying is beautiful.’

b. [dow zeðæn-ɛ Ali]-m xatɛɛ run hit-EZAFE Ali-1sg.cl enjoy ‘I enjoy/like Ali’s running.’

c. [æ gel xatæn-ɛ Maryam]-ɛ-t di from ground fall-EZAFE Maryam-ɛ-2sg saw ‘Did you see Maryam’s falling?’

In the above examples, the bracketed words, i.e. the nominalized complex predicate functions a constituent. The evidence comes from the fact that the ergative clitic attaches to the end of the nominalized constituent.

Mohammad and Karimi (1992) argue that in complex predicate constructions, the nominal element carries the semantic burden while the light verb is semantically empty. They further argue that there is no thematic relation between the light verb and the nominal element and that these two elements cannot be nominalized and form an EZAFE construction. Dabir Moghaddam (1997) discusses Mohammad and Karimi’s claim and their proposed analysis of complex predicates which is shown in the following structure:
In the above structure, the specific object which is marked by the accusative marker –ra in Persian will occupy the NP position under the SPEC and is assigned inherent accusative case by AGRO and the nominal element of the complex predicate appears in non-specific NP position and receives structural case from the verb. Dabir Moghaddam rejects this view and argues that postulation of two accusative cases for Persian is counter intuitive and empirically unjustifiable.

The following examples are from Mohammad and Karimi (1992) which are later adapted by Dabir-Moghaddam (1997):

(24)

a. Kimia be ramin ketab dad-Ø [(21)]
   kimea to Ramin book gave-he
   'Kimea gave (a) book to Ramin.'

b. dadan-e ketab be ramin dorost na-bud-Ø
giving-EZ book to Ramin right NEG-was-it
   'Giving (a) book to Ramin was not right.'

c. kimia in otaq-ro be mehmun extesas dad-Ø [(23)]
   Kimea this room-ra to guest allocation gave-he
'kimea allocated this room to the guest.'

d. *dadan-e extesas otaq-ro be mehmun dorost na-bud-Ø
giving-EZ allocation room-ra to guest right NEG-was-it
‘Allocating the room to guests was not right.’

Dabir Moghaddam provides the nominalized forms of the above predicates given in (25) below. He addresses the issue that Mohammad and Karimi have disregarded the fact that the nominalized forms below are as grammatical:

(25)

a. ketab dadan-e kimia be ramin
   book giving-EZ Kimia to Ramin
   ‘lit. Kimia’s book giving to Ramin.’

b. extesas dadan-e in otaq be mehmun
   allocation giving-EZ this room to guest
   ‘lit. allocation of this room to guest.’

He further argues that Mohammad and Karimi’s nominalized forms are not correct and that (25a) and (25b) are indeed the nominalized forms of (24a) and (24c) respectively.

Now let’s look at an example from Davani.

(26)

a. ser zedæn lit. head hit ‘to visit for a short time’

   una-fu ser ze a ma
   3pl-3pl.cl head hit to 1pl
   ‘They visited us.’
b. ser zeðæn-ɛ una a ma head hitting-EZAFE 3pl to 1pl ‘lit. visiting of them to us’

In the above example, ser zeðæn ‘head hit’ which means ‘to pay a short visit’ is a complex predicate in this language. However, zeðæn ‘hit, cut’ can also function as a heavy verb taking ser ‘head’ as a direct object.

(27) zeðæn ‘hit, cut’

a. una-fu ser-ɛ-f ze-Ø
   3pl-3pl.cl head-EZAFE-3g.POSS hit-3sg.NOM
   ‘They cut his head.’  lit. ‘They head hit him.’

b. una-fu ser-i ze-Ø
   3pl-3pl.cl head-INDEF hit-3sg.NOM
   ‘They cut a head.’  lit. ‘They hit a head.’

c. una-fu ser ze
   3pl-3pl.cl head hit
   ‘They cut head(s),’  ‘lit. They did head-cutting.’

d. ser zeðæn-e-f
   head cut-EZAFE-3sg.POSS
   ‘lit. The cutting of his head’

In (27a), the noun ser ‘head’ is the direct object, and the verb zeðæn ‘hit, cut’ functions as a heavy verb. In (27b), the object NP bears the indefinite marker -i. In (27c), the object NP loses the attached grammatical marker. i.e. genitive marker or the indefinite marker. In both of these examples, the NP ser ‘head’ is referential. It seems that in (27c), the object incorporates with the verb. In this case, the resulting predicate is intransitive, and the NP ser ‘head’ is non-referential.

3 I apologize for these violent examples. This was the best choice to show the facts.
This is also an evidence for the incorporation of the NP object and the verb. (27d) is an example where the nominal element and the complex predicate have undergone the nominalization process. Notice that in (27) the resulting verb is transparent in terms of semantics while the combination of a noun and a verb to form a complex predicate is largely metaphoric as the examples presented in (26). These examples provide support for Dabir Moghaddam’s analysis of noun incorporation in Persian compound verbs where the direct object loses its grammatical marker –ra or plural marker to incorporate to the verb.

The same holds true for the examples in (28) below. In (28a), the object NP xorak ‘food’ is accompanied by the genitive clitic -ʃ. The genitive marker disappears when the object and the verb incorporate. The examples in (27c) and (28b) support the claim that these constructions can be the result of incorporating the object and the verb.

(28) xatæn ‘to eat’

a. Ali-ʃ xorak-ɛ-ʃ xa
   Ali-3sg.cl food-EZAFE-3sg.cl ate
   ‘Ali ate his food.’

b. Ali-ʃ xorak xa
   Ali-3sg.cl food ate
   ‘lit. Ali did food-eating.’

c. xorak xatæn-ɛ Ali
   food eating-EZAFE Ali
   ‘lit. food-eating of Ali’

Consider the following examples where in (29b), the indefinite direct object loses its grammatical ending (i.e., the indefinite marker) and the classifier to form a complex verb that is intransitive.
This is also similar to Massam (2001)’s analysis of pseudo noun incorporation (PNI) in Niuean. Massam makes use of this diagnostic (i.e., the absence of prenominal functional elements) to account for Niuean sentences. In Davani, these elements mainly follow the noun. She argues that sentences exhibiting PNI are those where the verb is directly followed by a nominal which has no preceding case marker. Note how the two sentences differ in terms of their meaning. In the first example of each set, the noun (i.e., direct object) is referential while the incorporated noun in the third example does not refer to any outside entity. Also, unlike complex predicates, for these type of incorporated constructions there is a non-incorporated counterpart. Moreover, this confirms that fact that when an object incorporates to the verb, the resulting element is intransitive as these verbs in Davani are intransitive. This does not hold true for complex predicates in Davani. These predicates can be transitive or intransitive while predicates that are the result of this type of incorporation are consistently intransitive.

As well as these structures, the examples in (22) are repeated in (30) below are also the evidence of a morphological process:
Assuming that nominalization is a morphological process, the above examples clearly show how these constructions can be the result of a morphological process. However, these examples should not weaken the fact that these constructions can also result from a syntactic process as they can be separated by negation marker, modifiers, ergative clitics, etc. as we recall from examples (15-20). The observations so far:

a. For every incorporated construction, there is a non-incorporated form. However, for complex predicates this is not the case.

b. The resulting predicate from incorporation is intransitive.

c. The complex predicate is not semantically transparent.

4.5. Previous analysis of NEs and LVs

Before we move on to the focus of this chapter, we should also mention that determining whether both components of the complex predicates are responsible for semantic and syntactic
contributions of these predicates has also been an issue in the study of these constructions. Some have suggested that light verbs are semantically empty, and that it is the preverbal nominal element that lends its arguments to the complex verb (Mohammad and Karimi 1992). However, there have been a few studies in which they have argued that the light verb of a complex predicate can also contribute aspectual information but not argument structure (Karimi Doostan 1997). Karimi (1997) however argues that both elements contribute to the thematic structure of the complex predicates. Karimi further argues that these two elements fuse semantically after incorporating at LF; Their semantic and syntactic properties must be determined post-syntactically rather than in the lexicon. Moreover, it is true that while the light verbs determine the agentivity and the eventiveness of these constructions, they cannot capture their event structure and the telicity (Karimi 1997); The type of event structure depends on the choice of the non-verbal element not the light verb. For example, with the same light verb and various non-verbal elements, we can have different complex predicates that signal both accomplishment and achievement (Folli et al 2005). For them, it is the category of the non-verbal element that identifies the structure of the whole complex predicate. They argue that light verbs fail to determine the event structure and telicity of a complex predicate; The event structure can differ depending on the type of the non-verbal element. If the non-verbal element is a noun, then the complex predicate is atelic (activity or semelfactive). However, if the noun itself is eventive, then the complex predicate may be telic (accomplishment). In cases where the non-verbal element is anything other than a noun, the complex predicate is telic (accomplishment or
achievement). In this case, it is only the light verb that identifies the event type not the nominal element. Therefore, their main argument suggests that when the light verb allows for event type variation it is the category of the NV element that determines the event structure of the whole complex predicate. The only exception is light verbs such as fodaen ‘become’ which can determine the event type of the complex predicate and result in accomplishments and achievements. Let’s start with the light verb of complex predicates. Earlier, it was suggested that light verbs determine agentivity (Karimi 1997). Consider the following examples from Davani:

(31)

a. tif-ɛ-ʃ  gg
   fire-ɛ-3sg.cl caught
   ‘It caught fire.’

b. tif-ɛ-ʃ  ze
   fire-ɛ-3sg.cl hit
   ‘He set fire to it.’

In the above examples, the nominal element is the same. However, the light verb is different in each case. This contrast clearly shows the fact that the light verb in the second example determines the agentivity of the complex predicate. In contrast, the first structure is non-agentive due to the presence of a different light verb. This is what Folli et al (2005) have also examined with Persian data. The Persian data is presented in (32).

(32)

a. Minu bachcha-ro kotak zad
   Minu child-ra beating hit
   ‘Minu hit the child.’
They use the Persian data as a strong evidence to demonstrate that agents are selected by a different predicate than other arguments (Folli et al 2005) in addition to the fact that the agentivity of a predicate does not depend on the choice of the nominal element. In their analysis, they examine different light verbs with regard to causativity, agentivity, duration and eventiveness. For the purpose of this chapter, I am not going to discuss the various distinctions determined by light verbs.

As well as what light verbs can do, the non-verbal elements can also contribute to the semantic of the whole complex predicate. This is referred to as aspeectual interpretation (Karimi 1997). To illustrate this, Folli et al (2005) give an example of Persian bidar shoden ‘awake’ lit. awake become (intransitive) and bidar kardan ‘awake’ lit. awake do (transitive). The first one is an example of inchoative while the second one is a causative form. Although, the light verbs are different, Aktionsart is not affected, since the non-verbal element is an adjectival small clause in both of these examples.

Now let’s combine the same light verb kardan ‘do’ which is used in awake (transitive) and cry (unergative); the Aktionsart of the two constructions becomes different.


a. Kimea ye sa`ate/ * bara`ye ye sa``at bida`r shod
   K. one hour/ for one hour awake became
   ‘Kimea became awake within an hour.’
b. Kimea ye sa`ate/ *bara`ye ye sa`at Papar-ro bida`r kard  
K. one hour/ for one hour P.-ra` awake made  
‘Kimea woke Papar up within an hour.’

c. Kimea *ye sa`ate/ bara`ye ye sa`at gerye kard  
K. one hour/ for one hour cry did  
‘Kimea cried for one hour.’

The same holds true when the non-verbal element is a nominal or a prepositional phrase. Turning to Davani data, we can also see the same contrast across similar constructions.

(34)

a. Hasan a yæk seyti/ *bërêy yæk seyti vaxès bi-Ø  
Hasan to one hour/ for one hour awake became-3sg  
‘Hasan became awake within an hour.’

b. Hasan-ɛ-ʃ Ali a yæk seyti/ *bërêy yæk seyti vaxès ke  
Hasan-ɛ-3sg.cl Ali to one hour/ for one hour awake did  
‘Hasan woke Ali up within an hour.’

c. Hasan-ɛ-ʃ Ali *a yæk seyti/ bërêy yæk seyti gêri ke  
Hasan-ɛ-3sg.cl Ali to one hour/ for one hour cry did  
‘Hasan cried for an hour.’

Based on the data presented in this section and the discussion we can conclude that both the non-verbal element and the light verb contribute to the interpretation of the whole complex predicate. The light verb can play a role in causativity, agentivity, duration and eventiveness of the predicate while the non-verbal element gives rise to aspectual interpretation of the complex predicate. Again, this was a brief introduction with limited data to determine which of the complex predicates are responsible for semantic and syntactic interpretation of the whole
4.6. NEs as Arguments of LVs

Now that we have looked at the internal structure of these complex predicates, we can move on to a more important issue here. The question that many scholars have tried to answer in the literature of complex predicates is the role of the different elements in these constructions in terms of argument structure. The first and the most important question is with regard to the status the nominal element in N+V constructions. Let’s look at a few examples of complex predicates in particular N+V combination presented in (35):

(35)

```
a. tiʃ-ɛʃ gɛ
  fire-ɛ-3sg.cl caught
  ‘It caught fire.’

b. xɛvær-ɛ-fu ævɑ ke-fu unɑ ævorɛ
  news-ɛ-3pl.cl brought that-3pl.cl 3pl brought
  ‘They said (lit. brought news) that they have brought them.

c. gæp- æ-m ze
  talk-æ-1sg.cl hit
  ‘I talked.’

d. xænd-æ-fu ke
  laugh-a-3pl.cl did
  ‘They laughed.’
```

(35a) is an example of an unaccusative construction. In this example, the light verb is geræn ‘take’. The subject of the intransitive complex predicate triggers ergative marking the same as

4 To see a full discussion of this topic with various examples, see Folli et al (2005).
the agent of a transitive predicate in the past tense. When the intransitive verb is not a complex
predicate, there is no ergative agreement. Furthermore, these intransitive complex predicates
trigger ergative agreement in the past tense only, just as the transitive constructions do in the past
tense. These complex predicates can be intransitive or transitive.

The question that arises here is are there any unergative verbs in this language which are
not complex predicates? The answer is NO. This fact is along the lines of Hale and Keyser
(1993, 1997, 1999) who proposed that the lexical representation of unergative verbs, even in a
language such as English, includes a nominal element, i.e., a complement that incorporates into
the verb at the (pre)-syntactic level of L-Syntax. This means that unergative verbs are inherently
transitive, and that unergative verbs are created through incorporation of an object in a transitive
construction into an abstract verbal head; this verbal head later appears to be intransitive.
Essentially, their proposal suggests that these verbs are composed of a LV and a non-verbal
syntactic element. If we consider the unergative verbs in the above examples, we will see that
these verbs have preserved their original meaning. However, their syntactic behaviour is
different from their lexical specification. For Hale and Keyser, a verb like ‘work’ is transitive in
its underlying structure and translates into ‘do work’. This is showing in the following structure
in (36).

(36)
Also, in Hale and Keyser (1993), a change in the light verb results in a change in the selection of the agent; the light verb determines the absence of the presence of an external argument.

Following Hale and Keyser (1993), Folli et al. (2005) show that agentivity in complex predicates in Persian depends on the light verb while the non-verbal element is responsible for telicity of the complex predicate. Given the above facts, if we consider an unergative verb consisting of a nominal element and a light verb and that these two elements are incorporated and form a unit which selects an external argument, we can have the following structure for the Davani data in (37).

(37)

a. **English**

![Diagram of English structure]

b. **Davani**

![Diagram of Davani structure]

In their proposal, Hale and Keyser examine non-verbal elements that are bare nouns, adjectival heads and prepositional small clauses. In the above examples, only de-nominal unergative verbs
are presented. The difference between Davani and a language such as English is that unlike English, the V head in Davani is morphologically realized as a light verb.

The remaining question concerns the status of the nominal element of the complex predicate: a) are these elements real arguments of the verb or b) have they been entirely incorporated into the verbal complex or c) do they have some kind of intermediate status as argued in (Haig 2002)? As mentioned earlier, many Indo-Aran and Indo-Iranian languages including Davani make use of complex predicates. These languages include Tamil, Dravidian, Persian, Turkish, and Hindi. However, unlike its neighbouring languages, Davani’s complex predicates have not yet been studied. In the analysis of Kurdish and Persian complex predicates, Haig (2002) argues that these verbs are traditionally called conjunct verbs (Masica 1991) and he makes a distinction between these verbs and ‘compound verbs’, sequences of two or more verbs (Butt 1997).

There have been two competing views with regard to the status of the nominal element of the complex predicates in Iranian languages, in particular Persian. The first analysis considers the nominal element and non-specific objects to have the same structural position (Mohammad and Karimi 1992, Ghomeshi and Massam 1994, Farudi 2005, Farudi and Toosarvandani 2008). In contrast, the second analysis suggests that the nominal element of complex predicates and non-specific objects display distinct syntactic and semantic behavior (Megerdoomian 2002, Folli et al. 2005). These two views are presented in the following structures:
In (38a), the non-verbal element is the direct object of the ‘light verb’ (the complement of V). In this case, it is structurally identical to direct objects. However, in (38b), the non-verbal element is in an extended verbal projection, with the light verb instantiating the functional category v (Farudi and Toosarvandani 2008).

**Analysis#1: Non-verbal Element= Non-specific Object**

In what follows, I will show how Davani data confirms that structure presented in (38a). I will suggest that what we see as the nominal element in complex predicates in Davani is better analysed as a non-specific object. This is also along the lines of Ghomeshi and Massam (1994) who treat non-specific objects and the nominal element equally in syntax and argue that both of these elements are non-specific and non-referential.

In Davani, non-specific objects are bare nouns that are adjacent to the verb. These nouns
form a single unit with the verb and take the primary stress within their phonological phrase (Ghomeshi and Massam 1994, Kahnemuyipour 2003, Farudi and Toosarvandani 2008). The same holds true for nominal elements that form a unit with the light verb in a complex predicate in Davani. These nominals immediately precede the light verb and carry the primary stress within the phrase. This is shown in the example in (39).

(39)

a. non-specific object

\[
\text{kêtav-i-} \quad \text{êsse} \\
\text{book-INDEF-3sg.cl} \quad \text{bought} \\
\text{‘He/she bought a book.’}
\]

b. nominal element

\[
\text{gæp-} \quad \text{zë} \\
\text{talk-1sg.cl} \quad \text{hit} \\
\text{‘I talked.’}
\]

In (39a), êkêtav ‘book’ is a non-specific direct object which takes the primary stress. Similarly, in (39b), the nominal element of the complex predicate which is gæp ‘talk’ bears the primary stress in the clause; both of them immediately precede the inflected verb as well.

In the proposed analysis below, I suggest that both of these nominals are arguments of the verb. However, they are different in their degrees of objecthood.

In the literature of complex predicates in Iranian languages, different scholars have employed various diagnostics to determine the status of a nominal as the direct object to the verb. One of these diagnostics is the presence of accusative case marking (Karimi 1990, Farudi and Toosarvandani 2008). Karimi (1990) argues that the presence of an accusative case marker
implies specificity, and as a result this marker does not appear on non-specific objects.

Karimi gives an example of Persian with both specific and non-specific objects. The specific object is accompanied by the accusative marker –ra while the non-specific object lacks this marking.

(40) **Persian specific and non-specific objects: Karimi (1999)**

a. Kimea aghlab barâ mâ she'r mi-xun-e
   K often for us poem hab-read-3sg
   'It is often the case that Kimea reads poetry for us.'

b. Kimea aghlab hame-ye she'r-â-ye tâza-sh-ro barâ mâ mi-xun-e
   K often all-Ez poem-pl-Ez fresh-her-râ for us hab-read-3sg
   'It is often the case that Kimea reads all her new poems for us.'

It seems that in Persian, specific objects precede the indirect object while non-specific objects are immediately before the verb in a neutral word order. This diagnostic does not work for Davani data as unlike its neighbouring languages such as Persian, Davani objects are not marked with an accusative marker regardless of their specificity. As we have seen in the examples throughout the thesis, objects in Davani always occur in preverbal position whether they are specific or non-specific. Their position is also fixed with regard to indirect objects.

The second diagnostic employed in the literature to identify the direct object of a verb is the process of passivization (Farudi and Toosarvandani 2008); however, there is no clear indication of the presence of passive constructions in Davani.

The last diagnostic to determine the nature of a nominal element as the direct object of an inflected verbs is the presence of ergative agreement. In the typology of ergative languages, transitivity has mostly been an essential part of the definition of ergativity (Dixon 1979).
Donohue (2006) and Woolford (2014) argue for an analysis in which the presence of ergative agreement depends on the presence of a direct object. Their analysis also holds true for verbs which have a semantically incorporated object. Following Donohue (2006) and Woolford (2014), I make the following assumptions for the presence of the ergative agreement within a clause: a) the clause must contain two DPs b) both of these DPs are arguments of the same verb.

Given the above assumptions, let’s start with the first analysis which was presented in (38a). If we assume the analysis in (38a) is correct, then we will have the structure in (42) for an intransitive clause in the past tense in Davani.

(41) complex predicate: intransitive clause

a. Ali  mɛ xænde-t
   Ali  PROG laugh-3sg.NOM
   ‘Ali laughs.’

b. Ali-ʃ xændæ  kɛ
   Ali-3sg.cl laugh did
   ‘Ali laughed.’

5 Recall that in the analysis of agreement system in Davani, we assumed two distinct types of ergative case, one which is an inherent case assigned by v to its external argument in the past tense, and one which is a lexical case assigned by V_{psych} to experiencers in the present and past tense.

6 According to my consultant, the simple form of the verb ‘laugh’ in the present tense is more common. Native people use the simplex verb form in the present and the complex predicate ‘laugh do’ in the past tense. The use of the simple unergative verbs is the result of borrowing from Davani’s neighbouring language, Persian.
In the above structure, the nominal element qualifies as a non-specific direct object to trigger ergative agreement; this DP is the complement of V (sister to V). As a result, this clause contains two DPs, and based on our assumption above, the presence of the two DPs triggers ergative agreement. That’s how the agent *Ali* is marked as ergative. As for the case marking of the internal DP, i.e., the nominal element of the complex predicate, we assume that this DP (NE) incorporates to the verb and does not need case. It satisfies the case requirement through incorporation. This DP cannot be a specific nominal since it forms a unit with the verb at a very low level. The data in (41) also confirms the important property of transitive clauses in this language; in Davani, the agent of transitive clauses in the past tense is marked as ergative while in the present tense the agents are marked as nominative. This is also the evidence for the fact that case and agreement patterns in Davani are sensitive to tense and transitivity of the clause. Now let’s consider an example of a transitive verb which is a complex predicate. Recall that Davani has two ergative agreement patterns in the past tense: a) clauses which contain an
object without the particular bundle of features and b) clauses which contain objects with particular bundle of features. The agreement pattern for the former is ergative-unmarked while the latter follows an ergative-nominative pattern. Below is the structure for the clauses which contain objects without particular bundle of features. In chapter 3, we argued for these objects to remain inside VP. However, objects which were [+human], [+specific], and [+highly affected] moved outside VP to receive nominative agreement. The structure for transitive complex predicates with objects that are not [+human], [+specific], and [+highly affected] is given in (43) below.

(43)

\[
\begin{array}{c}
\text{VP} \\
\text{DP}_{\text{Agent}} \\
\text{v} \\
\text{v} \\
\text{DP}_0 \\
\text{DP (NE)} \\
\text{LV}
\end{array}
\]

In the above structure, there are three DPs, the DP agent, the direct object and the nominal element of the complex predicate. It is clear that the DP agent moves to the specifier of TP to satisfy the EPP feature and to check the nominative case. de Hoop (1992) suggests that some
objects are weak DPs and they just incorporate to the verb. There is no overt marking for these objects. They mainly occur in anti-passive and noun incorporation structures. Similarly, the DP which is the nominal element of the complex predicate incorporates to the verb and forms a unit with the verb and therefore does not require case.

As you recall, Davani agreement pattern is different when the object of transitive clauses bear particular bundle of features. Consider the example in (44):

(44) **complex predicate: transitive clause (objects with particular bundle of features)**

\[
\begin{align*}
\text{bač-a-gal-} & \text{-m} \text{ tænbi} \text{ kɛð-ɛn} \\
\text{child-a-pl-} & \text{1sg.cl} \text{ punishment} \text{ did-3pl.NOM} \\
\text{I punished (physically) the children.'}
\end{align*}
\]

The structure for the examples of this type is proposed in (45) below:

(45)
In the example in (44), there are two agreement markers, one ergative agreement cross-referencing the agent of the clause and one nominative agreeing with the person and number of the object of the clause. The question here is what determines which DP receives the nominative agreement when we have an ERG-NOM agreement pattern? Is it the direct object or the nominal element of the complex predicate? In the main analysis, it was assumed that objects which are [+human], [+specific] and [+highly affected] are excluded from VP (cf. Diesing 1992 and Woolford 2001); The DP object has to move out of VP in order to receive the wide scope. Once it moves out through a “Tucking In” derivation (to maintain underlying hierarchical relations and make sure that it is the shortest move (Richards 2001)), it becomes available to T. However, the non-verbal element of the complex predicate is not available to T as it is too low compared to the higher DP. Therefore, in this case, probe will see the higher DP and will agree with it. Additionally, the DP which is the nominal element of the complex predicate incorporates to the verb and forms a unit with the verb and therefore does not require case. The above analysis is also along the lines of de Hoop (1992) who relates the semantic interpretation to the case morphology; certain cases correspond to certain interpretations (cf. Aissen 2003). This means that non-incorporated direct objects have a strong interpretation while the incorporated objects have a weak interpretation meaning that the association between a certain case and a certain interpretation is due to the inherent semantic features of an argument.

Based on the above analysis, we can conclude that the nominal element of the complex predicate is better analyzed as a non-specific object the way it is argued in the literature.

**Analysis#2: Non-verbal Element≠ Non-specific Objet**

Now let us consider the analysis presented in (38b) with regard to the status of the nominal element of the complex predicate. Consider the following phrase structures for intransitive clauses in (46) and transitive clauses in (47). The issue arises when we look at the phrase structure of a transitive clause in (47).

(46) Complex predicate: Intransitive Clause

```
  vP
  /   \
 DP_{subj} v' 
  /     \ 
 N(P)   v  
 /     \  
 NE     LV
```
Recall that one of our assumptions to mark ergative agreement was the presence two DPs in the same domain; Also, these two DPs have to be arguments of the same verb. In the structure in (47), it seems that two DPs are not in the same domain, i.e., the DPo is too embedded and the two DPs can’t see each other; Consequently, this analysis does not support our main assumptions.

4.7. Conclusion

I started this chapter by presenting basic facts about complex predicates in Davani. Then we classified the different types of complex predicates in this language. I also discussed whether these combinations are the result of a syntactic process or a morphological and lexical process. Later I showed how the nominal element and the light verb which form a whole unit have properties of both of these processes; they have a dual nature. I argued that these predicates
show properties of syntactic units due to their syntactic behaviour as they can often be separated by functional categories such as negation, auxiliaries (progressive and future), modals, and the imperative marker. On the other hand, these predicates can undergo nominalization and carry a single word stress which leads us to argue for their status a lexical unit. Finally, using ergative agreement, I suggested that the nominal element in N+V constructions is better analyzed as a non-specific object as it shows properties of objects. Considering the fact that non-nominal elements within complex predicates in this language also trigger ergative agreement, we can suggest that in such structures, there is a complement position next to the verb, and that this complement position needs to be filled with a category that fulfills the requirement for a complement. This complement is essentially a noun phrase. However, occasionally, this position can be filled with other categories including prepositional phrases and adjective phrases. The role of non-nominal complements in complex predicates remains open for further research.
Chapter 5

Conclusion

5.1. Summary

This thesis started with an overall description of agreement markers and their status in Davani. I particularly discussed the function and status of clitics that are employed to mark ergative in this language. Using evidence from their distribution and morphological form, I showed that what we see as the ergative marker in Davani is a morpheme that agrees with the phi features of an external argument, i.e., the agent in transitive constructions in the past tense and the experiencer of psych predicates in both the present and past tense, and that it is not a doubled clitic. More evidence came from other properties that seem to be characteristics of agreement such as obligatory presence within a clause, and agreement in number and person with the NPs they co-occurred. I then laid out the data with regard to the agreement system in Davani. Having demonstrated different grammatical structures with different tense and aspect combinations, I examined properties of the agreement system in this language. It was shown that in the present tense Davani follows a nominative-accusative pattern while in the past tense this pattern disappears. Instead, in past transitive constructions, Davani displays a non-accusative pattern. This was said to be a common grammatical property across the majority of Iranian languages. With the past tense in Davani, intransitive clauses behave the same as those in the present
tense in that intransitive verbs bear a suffix that cross-references the person and number of their S argument: i.e., the intransitive subjects (S). However, the patterns we found in the past tense differed crucially from the nominative-accusative pattern in the present tense.

In the past tense, transitive subjects (A) are morphologically marked as ergative. As for objects, we saw two patterns: ergative-unmarked and ergative-nominative. The former does not trigger object agreement while in the latter, the transitive verb agrees with the O and the ergative clitic with the A. Object agreement was argued to be obligatory and conditioned by [+specificity], [+animacy], and [+affectedness] of the object. The agreement suffix used to cross-reference the transitive object in the past tense was shown to be the same as the suffix used to mark intransitive subjects in both present and past tenses. Here, S and O align as nominative against A as ergative. In the context where the object does not bear the combination of these features, Davani shows the ergative-unmarked pattern of agreement.

Within the Iranian context, I showed how Davani is different from other Iranian languages in terms of displaying ergativity in both perfective and imperfective aspects. I also showed that Davani is a counter example to Coon (2004)’s claim that aspect is the only trigger for this type of split ergativity and that the ergative pattern is only found in non-perfective aspect. Through the analysis of full DPs and split ergativity, we saw how Davani data conforms to the generalization presented in Aissen (1999), namely that the ergative pattern is attested with a highly individuated/affected object rather than a non-referential/less affected object.
The above facts and the split we find in the agreement system in Davani led us to conclude that Davani exhibits the phenomenon of morphological ergativity, which only applies to its agreement system, and that Davani displays a typologically less common pattern of ergativity in only a subtype of its grammar triggered by tense.

In the main analysis of split ergativity in Davani, I proposed that nominative agreement cross-referencing intransitive subjects and transitive objects in the past tense corresponds to structural nominative case assigned by finite T. Thus in transitive clauses, an agreement relationship is established between finite T and the nominative object. The realization of object agreement was argued to be the result of the object moving outside VP. Based on this, Davani presented evidence for two different object positions. This is along the lines of Woolford (1995) for the analysis of object agreement in Palauan. The factor determining the position of these objects was said to be the conjunction of semantic/specific features on the object DPs. Objects with the conjunction of features including [+specificity], [+animacy], and [+affectedness] appeared in a higher position: i.e. the lower spec of vP as shown below.

(1)
Moreover, I also suggested that absolutive is nominative in Davani (see also Legate 2005), and is assigned in the inflectional domain- external to vP. Based on this analysis, I developed a structural account that derives the ergative pattern in Davani within the Minimalist Theory. According to the analysis of agreement patterns in Davani, two distinct v heads were introduced to account for the data: a) transitive v in the past tense which is defective and cannot assign structural accusative case to its object DPs, but assigns inherent ergative case to its external arguments as in (2).

(2)

On the other hand, transitive v in the present tense assigns accusative case to its object DPs and licenses accusative structural case, but does not assign inherent ergative case as in (3) below.

(3)
However, both of these $\nu$ heads introduce the external argument.

The main analysis of split ergativity in Davani was followed by a discussion of psychological (henceforth psych) predicates in this language. I proposed that these predicates which form a subtype of verbs in Davani behave differently from other verbs in this language. These predicates show different agreement patterns within their clauses in the present tense and past tense, depending on the class to which these predicates belong. Initially, psych verbs were classified into three groups based on the structure of their clause and the agreement properties they displayed. For the analysis of these three types of predicates, I made the assumption that experiencers are always internal to VP and that for psych predicates the ergative agreement comes from the $V$ head, i.e., $V_{\text{Psych}}$. Also, I assumed that the $\nu$ with these verbs does not assign a thematic role.

In type one, which is similar to canonical transitive clauses, in both present and past tense, the experiencer of the psych verb is marked as ergative while the target of the emotion (theme) is unmarked. This includes verbs such as want, like, love, feel sorry, etc. This class of verbs in Davani was shown to be similar to class I of Belletti and Rizzi (1988). In the first type, considering that both the experiencer and the theme are internal to VP, I merged the experiencer in the specifier position of VP and the target of emotion, the theme, as sister to $V_{\text{Psych}}$. 
(4) Type 1: present and past tenses

In the second type, I illustrated two agreement patterns based on tense: nominative-ergative and ergative-unmarked. In the present tense, the experiencer is marked as ergative and the source/trigger of emotion marked as nominative.

(5) Type 2: present tense
For the present tense, it was proposed that the ergative-nominative pattern is derived by $V_{\text{Psych}}$ assigning ergative marking to its complement, i.e., experiencer, while the causer or the trigger of emotion, which is merged in the specifier of $vP$ as an external argument, receives its nominative case from $T$.

For class two of verbs in the past tense for the ergative-unmarked pattern, I also assumed that the experiencer is merged as sister to $V$ with the source of emotion merged as an external argument in the specifier position of $vP$. The difference between these two classes came from the presence of the defective past $v$ which assigns inherent ergative case to its external argument. In this case, the experiencer receives its case from $V_{\text{psych}}$ and the causer of emotion receives its ergative case from $v$ inherently. For the ergative-unmarked pattern of this type in the past tense, we assumed a restriction on the presence of two ergative markers within the same clause. As a result, their co-occurrence was ruled out in the PF component and the lower ergative marker was not spelled out.

(6) Type 2: past tense
The third type of these predicates are the clauses in which the experiencer is marked as ergative and the source of emotion is expressed through a prepositional phrase.

(7) Type 3: present and past tenses
In class three of psych predicates in Davani, we saw an agreement pattern that is different from the other two classes. In this class of verbs, experiencers are also marked as ergative while the source of emotions is in a prepositional phrase. This pattern was present in both present and past tenses. The experiencers in type three verbs are also merged in the specifier of VP and receive their case from $V_{Psych}$. The source of emotion is merged as a PP.

In the remainder of the thesis, I presented an analysis of the structure of complex predicates and their interaction with ergativity in Davani. I used ergativity to shed light on the status of the nominal element of complex predicates in Iranian languages and in particular in Davani. The issue I focused on was the syntactic status of the nominal element in a complex predicate, as there has not been a unified analysis of these predicates in Iranian languages yet.

With regard to complex predicates, I presented two competing views on the status of the nominal element of complex predicates and extended one of the analyses to the Davani data and proposed that this analysis works better for the Davani language. The claim in this thesis is that Davani complex predicates are better analyzed as (partially) incorporated units rather than a combination of N+V. Then using Davani data, I argued how the nominal element and the light verb which form a whole unit have properties of both lexical and syntactic units; they have a dual nature. That is, they show properties of a syntactic unit since they can often be separated by functional categories such as negation, auxiliaries (progressive and future), modals, and the imperative marker. On the other hand, these predicates can undergo nominalization and carry a single word stress which leads us to argue for their status a lexical unit.
In the end, I made use of ergative agreement as a diagnostic to show that the nominal element of complex predicates in Davani is better analyzed as a non-specific object, which is along the lines of Ghomeshi and Massam (1994) who treat non-specific objects and the non verbal element equally in syntax in that both are non-specific and non-referential. To this end, I relied on the main assumption that the presence of an ergative marker depends on the presence of an object.

5.2. Limitations and Suggestions for Further Research

The presentation, description and analysis of the data in this thesis was limited to major clause types due to time and resources limitations. In particular, I focused on clauses that show patterns of ergative agreement in canonical transitive constructions, psych predicates and complex predicates. There might be some peripheral clause type(s) that could have major theoretical contributions and implications within recent theories of syntax.

In addition, more data is needed to determine where Davani stands in the Iranian languages context and the broader family in terms of both typology and sociolinguistic variation.

One more area that deserves further investigation is the variability in the speech of the elderly and the younger generation, and how and to what extent the younger generation’s speech has been influenced by the neighbouring languages, in particular Persian. Moreover, the variation found among ergative Iranian language families is interesting and could be the basis of future study. For example, the fact that Davani displays ergative
marking in both perfective and imperfective or that object agreement is only with certain objects in the past tense, while in most other Iranian languages the verb uniformly agrees with all objects in the past tense raises a lot of thought-provoking questions. It would be interesting to see how the proposed analysis for split ergativity in Davani can be extended to account for other ergative Iranian languages especially those that are understudied. Further analysis of new data might suggest that our account of split ergativity in Davani needs revision. This work is an initial step towards bringing this endangered and understudied language into the literature of ergative languages. Of course, the ultimate goal is to reach a unifying analysis, at least within the Iranian language family.
References


