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Subject-predicate Agreement Restrictions in Persian

Anousha Sedighi

A Thesis submitted to the
Faculty of Graduate and Postdoctoral Studies
in partial fulfillment of the requirements for the degree of
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in
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Subject-predicate Agreement Restrictions in Persian

Anousha Sedighi

ABSTRACT

This work investigates two distinct constructions which appear to induce a constraint on verbal agreement. The first construction involves inanimate plural subjects and verbs appearing in third person singular/default morphology. Adopting the framework of Distributed Morphology which has recently been used as a key to capturing several agreement restrictions in languages, I propose that the restriction caused by Animacy in Persian resides in post-syntactic morphology through an impoverishment operation. The second construction I study contains Psychological predicates which have not been entirely explored from the point of view of Psychological Constructions in the previous literature. The nominative experiencer does not induce agreement on the verb and the verb appears in third person singular, which provides evidence for separation of agreement and Nominative case assignment. I argue that the lack of verbal agreement in Persian Psychological constructions is only apparent and I provide evidence to show that they do not involve compound verbs. I propose that these constructions have a Tense requirement and involve applied arguments. The experiencer is licensed by a *Super High Applicative* head which takes a TP (a sentential predication/full proposition) as complement. Furthermore, I propose that the *Super High Applicative phrase* is a strong phase, a new category to be added to the set of strong phases proposed by Chomsky 1999-2004.

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List of Abbreviations:

ACC/Acc= Accusative
AGR = Agreement
AO = Applied Object
Appl/APPL= Applicative
APPLE = Event Applicative
APPLI = Individual Applicative
APPLH =High Applicatives
APPLL =Low Applicatives
APPLP = Applicative Phrase
BEN = Benefactive
C = Complementizer
CL = Clitic
CONJ = Conjunction
CP = Complementizer Phrase
DP = Determiner Phrase
DAT/Dat = Dative
DO = Direct Object
DOC = Double Object Construction
ECM = Exceptional Case Marking
EPP=Extended Projection Principle
FEM/Fem = Feminine
FUT =Future
GEN/Gen = Genitive
IO = Indirect Object
Ind=Indicative
LOC = Locative
MAS/Mas = Masculine
N/Neu = Neuter
NOM/Nom = Nominative
NP = Noun Phrase
Obj = Object
OBL = Oblique
OCC=Occurrence
P = Phrase
PASS = Passive
PL=Plural
PP = Prepositional Phrase
PRES/Pres = Present
PRO=big pro
pro = Small pro
Psp=Participle
Pt=Past
QR = Quantifier raising
Refl+Reflexive
SG/Sing = Singular
SPEC/Spec = Specifier

Sub=Subjunctive
SUBJ/Subj = Subject
SupHighApplP=Super High Applicative Phrase
TP = Tense Phrase
VP = Verb Phrase

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Chapter 1: Introduction

1.1. The Notion of Subject

The notion of subject has been extensively explored in the past decades. What is a subject? Do we need a subject in every sentence of every language? Does the notion of subject have fixed syntactic and semantic properties and attributes? How many subjects can a sentence have? Although the notion of subject seems rather straightforward at first glance, linguists from different theoretical frameworks have controversial debates around the notion of “Subjecthood.”

This work is an attempt to explore the idea found in linguistic literature that there are no postulated standard criteria for subject and subjecthood, and it is not possible to provide a specific definition or description for subjecthood (Sigurðsson 1992-2004, Landau 2003, Harley 1995, and the references therein). Sigurðsson (2001) suggests that the notion of subject and consequently the Extended Projection Principle (EPP), which states that clauses must have a subject (Chomsky 1981-1995), should be redefined and reduced (which he has done in his more recent papers). However, it is evident that there is one or more NPs in every clause of a language fulfilling certain conditions and relations that are in the “range” of subjecthood (Boeckx 2000, Ura 2000, Sigurðsson 2001, Shibatani & Pardeshi 2001, among others). This thesis provides further support for the statements below.

“... the set of properties that characterize a canonical subject in a highly “subject prominent” language cannot be linked to a single position- it is simply not the case that there is a one to one mapping of “subject” properties to some universal

syntactic position. Even within a given language, many constructions exist in which properties usually attributed to a canonical subject seem to be scattered between two or three NPs.”

(Harley 1995: 14)

“The past 20 years have seen the gradual deconstruction of the notion "subject" (McCloskey 1997, Sigurðsson 2000). Subjecthood is no longer viewed as a package deal; rather, particular subject properties are distributed over separate dimensions (structural positions, case, agreement, EPP, thematic prominence, topicality, etc).”

(Landau 2003:80)

1.2. Central Problems and Solutions

This monograph studies two constructions which pose problems for verbal agreement in Persian: (a) constructions with inanimate subjects; and (b) Psychological constructions. These two constructions seem problematic because they appear to exhibit subject verb agreement restrictions in Persian. It is a common belief that in Standard Persian verbs agree in Number and Person with the structural subject (Khanlari 1980, Meshkat-al dini 1987, among others). In current minimalist terms, it appears that only Person and Number are among the set of Φ -features that need to be valued in the sense of Chomsky (2001). This is illustrated in (1a-b).

- (1) a. **mæn** to ra did-**æm**
 I you Acc. saw-1sg
 I saw you

b. **Farzin væ madær-æsh be Iran ræft-ænd**

Farzin and mother-3sg to Iran went-3pl

Farzin and his mother went to Iran

In (1.a) the verb *did-æm* contains first person singular morphology which is in agreement with the subject *mæn* (I). The verb in (1.b) *ræft-ænd* agrees with the subject *Farzin væ madær-æsh* (Farzin and his mother) and appears with third person plural morphology.

However, in the two constructions under study, subject-verb agreement does not seem to be present and the agreement between the verb and the subject seems to be restricted. A description of the two problematic constructions is provided in I and II:

I. Constructions with a plural inanimate subject:

(2) **In shaye?e-ha mærdom ra [azord-Ø]**

This rumour-pl people-Acc. hurt-3sg

These rumours hurt/disappointed people

In (2) the subject *in shaye?e-ha* (these rumours) is in plural form while the verb *azord* (hurt) appears in 3rd person singular and therefore does not agree with the subject in number.

Following a recent body of literature that argues that verbal agreement restrictions do not reside in syntax and provides post-syntactic accounts for such restrictions (Boeckx 2000,

Rivero 2004), I propose that the verbal agreement restriction for plural inanimate subjects in Persian does not reside in Syntax. I suggest a post-syntactic morphological treatment within Distributed Morphology for the restriction in which there is a feature mismatch between number and animacy resulting in deletion or impoverishment of the number.

The second type of construction exhibiting verbal agreement restriction in Persian involves psychological predicates.

II. *Psychological Predicates:*

Experiencers in subject position in constructions with psychological verbs do not trigger agreement on the verb. For instance, consider the contrast in agreement in (3) and (4)

- (3) **ma** u/un¹ ra/ro [dust dar-**im**]
 we her/his Acc. friend have-**1pl**
 We like her/him
- (4) **ma** æz u xoš-eman amæd-**Ø**
 we from her/his pleasure-1pl came-**3sg**
 We liked her/him (She/he appealed to us)

Example (3) does not involve any complications; it has a nominative subject *ma* (we) and an accusative object *u* (him/her), and the compound verb *dust dar-im* (friend have-1pl) agrees with the subject. By way of contrast, constructions like example (4) are interesting because they seem to violate the obligatory rule of subject predicate agreement; the verb

¹ In the Persian examples both formal and informal forms may have been used.

amæd-Ø (came) is in 3rd person singular while the experiencer in subject position, *ma*, is in 1st person plural. Constructions such as (4) have been introduced as “Impersonal” or “Subjectless” in the literature and have not been named/viewed as psychological constructions. Moreover, the properties of the experiencer in constructions such as (4) have never been entirely captured in the previous literature. I capture the properties of Persian psychological constructions by proposing that they involve applied arguments. Marantz (1984) was the first to argue that only objects are true arguments of the verb, licensed within the domain of VP, and subjects are not in such close connection to the verb. Marantz (1984) argued that unlike objects, subjects are added and therefore, ‘extra’ or ‘non-core’ participants in the events described by the verb. He argues that the meaning of the verb (the interpretation of the verb phrase) depends on the choice of object while the external arguments only depends on the structure and does not affect the meaning of the verb². Kratzer (1996) developed Marantz’s insight into a theory of Voice, a syntactic head responsible for licensing the external argument: the external argument is projected as the specifier of Voice, which takes the verbal phrase as its complement. In addition to objects and spec Voice subjects, there exists a third kind of argument, applied argument, with similar properties as both subjects and objects. An applicative head (Pylkkänen 2001, McGinnis 2001, and Cuervo 2003, among others) licenses an applied non-core argument in its specifier and relates it to the category it takes as a complement. Previous studies (Pylkkänen 2002, McGinnis 2001) argue that Applicative heads are divided into two kinds: High Applicative heads which take a vP (an event) complement, and low applicative heads which take a DP (an individual) complement.

² This fact might be another reason for the distinct behaviour of subjects.

Based on the data from Persian psychological verbs discussed in this monograph, I depart from Pylkkänen (2002) and McGinnis (2001) who argue that applicative heads can take only a vP or a DP as complement. I propose a new category of Applicative head, *Super High Applicative* head, which takes a TP (a sentential predication/full proposition) as complement³. In addition, I propose that the *Super High Applicative* projection (SupHighApplP) is a strong phase with an *EPP/peripheral* feature, which assigns the thematic role of experiencer to the applied argument projected in its specifier. This new category (SupHighApplP) is thus to be added to the set of strong phases (CP, vP, and possibly DP) proposed by Chomsky (1999-2004).

Verbal agreement and subject properties have been tied to nominative licensing in the literature (Chomsky 1982-1995, Leland & Kornfilt 1981). However, Persian psychological constructions and constructions with inanimate subjects discussed in this thesis provide evidence for the divorce of nominative licensing and verbal agreement. Following Haeberli 2002, Pesetsky and Torrego 2001, 2004, and Svenonius 2001, (among others), I propose that Tense is responsible for nominative licensing⁴.

The Persian constructions I study in this work provide substantial evidence for the claim that grammatical subjects exhibit distinct behaviours across languages (Boeckx 2000, Sigurðsson 2001, Harley 1995, Landau 2003, Ura 2001, among others) and that it is not possible to include all configurations of subject in one definition. Instead, subject properties (case, agreement, EPP, thematic prominence) are distributed in ‘dimensions’ (Landau 2003). Therefore, a hierarchy involving degrees of subjecthood must be

³ See Rivero 2004 for a similar idea on reflexive clitic *feel-like* constructions in south Slavic/Albanian.

⁴ This idea is a return to GB in which Tense and not Agreement relates to Nominative case marking.

established and concepts of subject and the EPP should be reduced to a large extent (Sigurðsson 2001, Sedighi 2001, and Boeckx 2000, among others).

1.3. The Theoretical Frameworks

In this thesis I adopt the Minimalist Program of Chomsky (1995- 2004), which is discussed in section 1.3.1., as a theoretical framework. The Minimalist Program aims to describe the language faculty in a minimalist way by introducing economy principles and minimizing/simplifying earlier theoretical frameworks. In particular, the Strong Minimalist Thesis states that economy is at the heart of the computational system/language faculty.

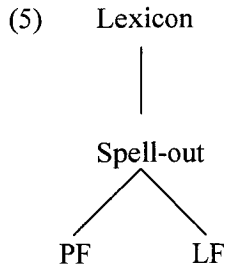
In addition to the Minimalist Framework, I adopt Distributed Morphology (DM) (Halle and Marantz 1993, 1994, Marantz 1997, Halle 1997) and assume that morphological operations and processes can be applied at various points of pre-syntactic, syntactic, and post-syntactic derivations. Some basic concepts of Distributed Morphology are introduced in section 1.3.2.

1.3.1. The Minimalist Program

Chomsky's Minimalist Program (1992-2004) aims to establish the theory of grammar of human language by postulating only minimal and necessary assumptions which are required for capturing the conceptual grounds. The Program provides the means to approach "Plato's" problem (Chomsky 1986, 1991), namely the problem of how language is acquired given the limited evidence for its structure. The Minimalist Program tries to establish that there is ultimately 'one' set of universal 'principles' and a finite array of options as to how these principles apply, or 'parameters.' The Minimalist Program has reformulated several assumptions of generative grammar as encapsulated in

the model known as the Government and Binding Theory. It has also eliminated several unnecessary steps of previous theories such as deep and surface structure. Some of the basic assumptions of the Minimalist Program are outlined below.

The structure of grammar shown in (5) consists of lexicon and numeration in which the selected items form the lexicon. The lexicon is defined as a set of LF, PF⁵ pairs. By contrast with previous stages of the theory, the only levels that remain in Minimalism are the interface levels: PF (the articulatory conceptual level) and LF (conceptual intentional) as they are the only levels visible to the computation.

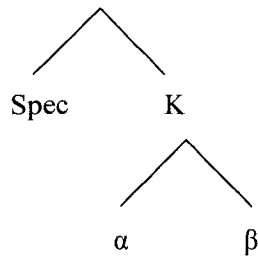


The computational system consists of three recursive operations that build structure: Merge, Move, and Agree.

Merge is the simplest operation. It builds up larger structures from smaller ones. Merge takes a pair of syntactic objects (α and β) and forms a more complex one (K). Merge combines a Head (the syntactic object which selects in any merge operation) with a complement. This combined unit is then merged with Spec (second merge). Merge corresponds to *external merge* in “Beyond Explanatory Adequacy,” Chomsky 2001.

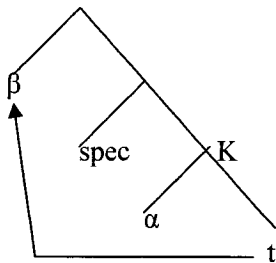
⁵ In his most recent work, Chomsky 2004, it is not clear that LF and PF exist in the strict sense of the term as representation levels. They are accessed or spelled out as chunks as the derivation unfolds/proceeds.

(6)

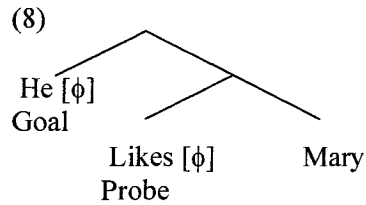


Move takes a structure formed by merge and moves one of the elements of that structure into a c-commanding position. Move is called *internal merge* in “Beyond Explanatory Adequacy,” Chomsky (2001). The structure of Move is given in (7).

(7)



Features are either *interpretable* or *uninterpretable*. Interpretable features have a semantic content or have an effect on semantic interpretation. Uninterpretable features are semantically void of content and must be removed before spell. Syntactic operations apply in order to eliminate uninterpretable features. Uninterpretable features must be checked/valued; once checked, they can be deleted (however they are still accessible unless erased). In order for features to be checked/valued, they need to match first and then *Agree*. *Agree* represents an asymmetric relation between a Probe (which has uninterpretable features) and a Goal (which has interpretable features). If features of Probe and Goal match, then *Agree* eliminates the uninterpretable features on the Probe by ‘valuing’ them and removing them (spelling them out phonologically).



In (8) the phi-features of the verb are uninterpretable while the phi-features of the (pro)nominal are interpretable. The phi-features of the verb enter the derivation unvalued. They need to be valued by the relevant phi-features of the (pro)nominal. According to the most recent minimalist assumptions, there is no need for Goal *He* to move to a specifier position and Agree can occur while the Goal is in situ via *Long distance Agree*. The movement of the pronominal to the specifier position in (8) is to satisfy the EPP requirement.

The notion of *EPP* was originally formulated by Chomsky (1981) as 'principle P' defined as "the structural requirement that certain configurations ... must have subjects (Chomsky 1981: 27)". Chomsky (1982) introduces the term *Extended Projection Principle*, since he believes that the requirement goes beyond the Projection Principle. In (8) T has an EPP (OCCurrence in "Beyond Explanatory Adequacy" and Peripheral in the most recent term) requirement and this requirement is satisfied by the movement of the pronominal *He* into the specifier position of T.

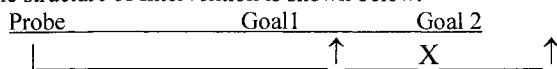
Based on data from Icelandic (which will be discussed in detail in chapter 2), Chomsky revised his ideas on subjects in *Minimal Inquiries* (2000) and in *Derivation by Phase* (2001), suggesting that the correlation between nominative case and NP-movement/EPP is only indirect. Icelandic accommodates non-nominative NPs into [specTP] (among many other distinguished properties that will be discussed in chapter 3). Accordingly,

Chomsky rejects feature-based movement, replacing feature checking via movement with a relation of *long distance Agree*: Agree and elimination of uninterpretable features. He argues that the EPP has nothing to do with feature checking in the sense of Chomsky (1995). Rather, similar to his earliest view, certain functional heads require a specifier. Chomsky (2004) puts further weight on C and states that all operations are determined by the C phase, and T inherits from C. He claims that the Φ -features of C seek a goal, which may raise to [SpecT] and the edge-feature of C can also seek a goal (maybe a copy of the same goal) and raise it in parallel to [SpecC].

Locality of Agree states that Agree holds between a feature F on X and a matching feature F on Y iff there is no intervening Z[F]. *Intervention* is when Z intervenes between X and Y in [X...Z...Y] while X c-commands Z and Z c-commands Y. Chomsky (2004) also states that in the operation of Agree the probe agrees with goals in its domain as long as a goal has valued features which blocks further search (intervention)⁶.

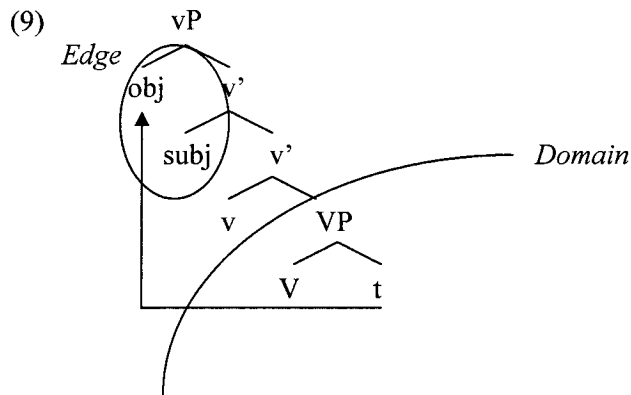
I follow *Phase Theory* (Chomsky 1999, 2000) and assume that syntactic derivations undergo semantic and phonological interpretation in incremental chunks or *phases*. According to this theory, *Phases* are chunks of structure that are semantically and phonologically complete. Weak Phases are not complete propositional structures. Strong phases are phases whose heads may have an EPP/OCC/P feature, are propositional, and can be a target of movement. Strong phases are CP or vP (or possibly DP)⁷. Once a phase is complete, movement and agreement operations can target a head and constituents in its

⁶ The structure of Intervention is shown below.



⁷ vP is the lexical phase, containing VP. CP is the functional phase, containing TP.

edge (specifiers and adjuncts) but cannot target constituents in its *domain* (complement) as shown in (9).



(McGinnis 2001: 6)

In the structure above, the domain of the head (*v*) is not accessible to operations outside of *vP*, but only *v* and its edge (*Head impenetrability condition*). An element that needs to be raised has to move to the edge (either spec or adjunct to *vP*) of the phase. At every phase, the history of derivation within the previous phase is lost.

In phase theory, the derivation proceeds by phase and is cyclic. That is, interpretation/valuation and spell out take place at the phase level, and at the end of each phase the structure is sent to LF and PF for interpretation. Cyclic phases are embedded inside each other; therefore the meaning of the whole depends on the embedded cycles.

Case licenses the function of an NP in a clause and is divided into two general types: *Structural/Morphological case*, which is licensed by functional projections (the usual Nom/subj, Acc/obj case); and *Inherent/Lexical case*, which is associated with specific lexical items and their theta assignments. Lexical items, verbs, or event nominals assign

lexical case which is checked/valued at the same time that theta roles are checked/valued (Chomsky 1995, Ura 1996). Example (10) will be further discussed in chapter 3.

(10) Calvini liki verkid *Icelandic*

Calvin.Dat. like the job.Nom.

Calvin likes the job

(Harley, 1995:144)

A common assumption is that in (10) the argument in the subject position is lexically/inherently marked dative while it structurally appears in a nominative (subject) position.

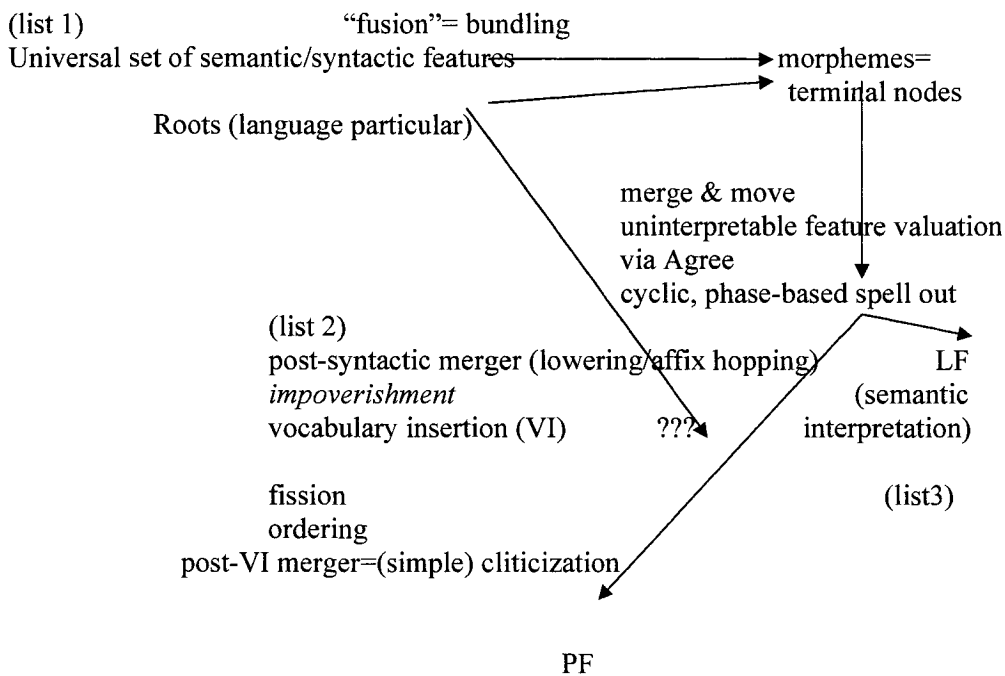
Having provided a background of the Minimalist Program I will now discuss Distributed Morphology in which some of the basic assumptions of the Minimalist Program are preserved.

1.3.2. Distributed Morphology

The framework of Distributed Morphology (Halle and Marantz 1993, 1994, Marantz 1997, Halle 1997) views the Morphological Component as a distinct level of grammatical representation, operating on its own principles and mediating between syntax and phonology. Unlike traditional morphology, morphological principles and processes in DM may apply at various points of the syntactic derivation; therefore, morphosyntactic information can be changed in the course of the derivation. Only after all morphological operations have been applied at the syntactic and post-syntactic level can morphological

structure insert Vocabulary items. The term *distributed* in DM then means that the job assigned to the Lexicon in earlier theories is *distributed* through various components. Background information about DM and examples provided in this section, unless otherwise mentioned, is from Marantz's (2003) LSA summer institute course material. The structure of Grammar according to DM is shown in (11).

(11) Distributed Morphology: The structure of the Grammar



As can be seen in (11) the structure of the grammar is of the classic Y-type, familiar from the Government and Binding framework and also the Minimalist Program discussed in the previous section. The sub-set of universal features chosen by a language is combined or bundled into morphemes for the computational system. This is called *Fusion*. Fusion is the pre-syntactic bundling of features to create merge-able nodes for Syntax. These morphemes contain only the features relevant for the computational system of syntax and

nothing else. An example of fusion would be bundling of Φ -features of the subject with the Tense features into a single morpheme⁸. This happens, for instance, in Mezquital Otomí (Jensen 1990). In this language, it is not possible to isolate affixes meaning ‘I,’ ‘he,’ ‘you,’ ‘past,’ ‘present,’ and future. In other words, we cannot separate person from Tense (12.a). On the other hand, in German, these two sets of features (person and Tense) are separate (12.b).

(12)	a.	1 st	2 nd	3 rd	
	present	<i>dí</i>	<i>gí</i>	<i>bí</i>	<i>Mezquital Otomí</i>
	future	<i>ga</i>	<i>gi</i>	<i>da</i>	
	past	<i>dá</i>	<i>gá</i>	<i>bi</i>	
					(Jensen, 1990:50)
	b.	sag-	te-	st	sag- Null- st <i>German</i>
		‘say’	past	2sg	‘say’ Pres 2sg
					(Halle, 1997: 427)

In (12a) the manifestation of person and number is not separable from Tense. These features are combined or fused together. However, in German (12b) the set of Φ -features is represented in one morpheme *st* (2nd sg) separate from Tense features *te* (past).

Syntax then generates structures from Roots (language Particular) and the set of universal features by “merge” and “move” and uninterpretable feature valuation via Agree (as discussed in the previous section, these operations result in required movements and matching of features when necessary in a minimal way). Spell-out delivers these

⁸ Halle (1997:427) introduces English as an example of fusion of ϕ -features (say, said), but the verb *be* (was, were) escapes this generalization.

syntactically generated structures to the morphophonology and to LF for interpretation in a “phase-based” cyclic way. This means that at the end of each phase the result of the computation is sent for post-syntactic operations as well as interpretation and a new cycle starts.

List (1) is the ‘narrow lexicon’ (Marantz, 1997), which provides the units that syntax operates with. It contains roots of the language as well as the bundles of features. Feature insertion is the insertion of purely morphological features such as case and agreement. *Vocabulary insertion* (list 2) is the insertion of the most highly specified vocabulary item that fits. This means that if English *-en* and *-s*, both of which have a [+pl] feature and carry distinct phonological features, are competing for insertion into a node from syntax, *-en* will win the competition in the environments of *childr* and *ox* because *-en* carries the contextual feature that limits its insertion to a small set of roots (*childr*, *ox*) and is the more specified vocabulary item. DM comprises a number of morphological operations:

Fission: originally proposed by Noyer (1992), it is the situation when a single morpheme has not exhausted all its features and may correspond to more than one vocabulary item. Where fission occurs, Vocabulary insertion does not stop after a single Vocabulary item has been inserted. Rather, it accretes on the sister of the fissioned morpheme (or in a local domain) until all Vocabulary items that can be inserted have been inserted. However, the second insertion is always for the less marked Vocabulary item from the same list. According to Marantz, Fission allows for multiple vocabulary items to correspond to one syntactic node at a single level of hierarchical structure. An example of fission in Tamazight Berber (Harley & Noyer, 1999) is given below where the AGR morpheme can appear as one, two, or three separate vocabulary items, realized as prefixes or suffixes:

(13) a. Prefix Conjugation in Tamazight Berber. *dawa* ‘cure’

singular plural

3m *i-dawa dawa-n*

3f *t-dawa dawa-n-t*

2m *t-dawa-d t-dawa-m*

2f *t-dawa-d t-dawa-n-t*

1 *dawa-© n-dawa*

b. Vocabulary items in Tamazight Berber

/n-/ ↔ 1st pl

/t-/ ↔ 2nd

/-m/ ↔ pl m (2nd)

/i-/ ↔ sg m

/-d/ ↔ sg (2nd)

(Harley & Noyer, 1999: 19)

It is argued that in (13) the vocabulary items that correspond to features in parenthesis cannot be inserted unless the parenthesized feature has been exhausted/discharged. For example, *-m* can be inserted only on a verb to which *t-* (2nd) has already been attached. Parentheses thus denote features that are secondarily expressed by a vocabulary item.

Impoverishment: also called blocking across positions, this occurs when one morpheme or vocabulary item deletes the features of another independent morpheme before vocabulary insertion at the other morpheme. Impoverishment will be further explored in section (2.3).

Merger is a binary combination. It trades or exchanges a structural relation between two elements at one level of representation for a distinct structural relation at a subsequent level (Harley & Noyer, 1999). Marantz provides the example of the English possessive 's after Vocabulary insertion. This is shown below:

(14) [the queen of England]'s hat → [the queen of England's] hat

In (14) the clitic 's leans over England as opposed to the whole DP, which shows the mismatch between word structure and functional structure.

Marantz (1997) describes (List 3) in (14) as the “Encyclopaedia”, that is the list of special meanings of particular roots relative to their system and within a local domain.

Marantz argues that in DM all words are built from roots. Therefore, the noun “cat” is the root $\sqrt{\text{CAT}}$ with a nominalizing affix, “little n”, which is phonologically realized as zero.

The meanings and pronunciation of roots are fixed in the environment of the first category-determining head (n, v, a) to attach to the root and any category higher than that must take and perhaps manipulate the meaning and pronunciation of the lower category head.

Furthermore, Harley & Noyer (1999) state that in DM any given expression requires at least two structural descriptions during its derivation. A morphophonological description, which is the information about the expression's phonological pieces and a morphosyntactic description, which is the description of an expression's morphemes and their constituents. Therefore, the expression “cats” can be stated as below:

(15) morphosyntactic description: [Root [+plural]]

morphophonological description: [kat+z]

DM provides the possibility of occurrence of morphological operations at various levels of derivation including post-syntax, which has recently been used as a key factor in capturing several phenomena not previously explained in languages (Bonet 1994, Boeckx 2000, Rivero 2004). For instance, the process of “Impoverishment” in DM makes it possible for a less marked feature to delete a more marked feature; other theories of linguistics have had a hard time explaining such situations. In section 2.3, I adopt DM to explain the lack of agreement for plural inanimate subjects in Persian by introducing an impoverishment rule deleting number feature in the morphology component after syntax.

1.4. Background Knowledge on Persian

In this section, I provide a summary of some basic attributes of Persian. Persian is a member of the Indo-European family of languages, and within that family it belongs to the Indo-Iranian /Aryan subfamily. Today Persian is spoken primarily in Iran, Afghanistan and Tajikistan, and Uzbekistan. Historically Persian was a more widespread language in an area ranging from the Middle East to India. The specific dialect under investigation, Modern Standard Persian, is spoken in the capital of Iran, Tehran.

Many linguists including Dabir Moghadam (1982), Samiiian (1983), Karimi (1989-2005), and Browning and E. Karimi (1994), among others, have argued that the underlying word order in Persian is SOV. An example is provided in (16) where the subject *mæn* (I) is in the sentence initial position followed by the direct object *ketab* (book) and then the indirect object *Sepehr*, with the verb *dad-æm* (gave-1sg) in the sentence final position.

- (16) *mæn* *ketâb* *ra* *be* *Sepehr* *dad-æm*
 I book Acc. to Sepehr gave-1sg
 I gave the book to Sepehr

Nonetheless, as scrambling is very common in Persian, example (16) may have grammatical counterparts with different word orders as illustrated in (17). However, as stated in Karimi (2003, 2005) these scrambled forms are not exactly the same and different discourse factors such as Focus and Topic differentiate them⁹.

(17) a. mæn dad-æm ketâb ra be Sepehr
 I gave-1sg book Acc. to Sepehr
 I gave the book to Sepehr

b. mæn be Sepehr dad-æm ketâb ra
 I to Sepehr gave-1sg book Acc.
 I gave the book to Sepehr

c. dad-æm mæn ketâb ra be Sepehr
 gave-1sg I book Acc. to Sepehr.
 I gave the book to Sepehr

d. ketâb ra mæn dad-æm be Sepehr
 book Acc. I gave-1s to Sepehr
 I gave the book to Sepehr

Persian is a “Pro Drop” or “Null Subject” language; in other words, an overt subject is not required in the clause, and the Φ -features of the null subject are fully specified for

⁹ See Karimi (2005) for a comprehensive discussion of scrambling in Persian.

person and number through the verbal morphology. Therefore, example (16) has a grammatical variant without an overt subject as illustrated in (18).

- (18) ketab ra be Sepehr dad-æm
 book Acc. to Sepehr gave-1sg
 I gave the book to Sepehr

I adopt the general idea that in pro-drop languages the verbal inflection is rich enough to encode the subject (Alexiadou & Anagnostopoulou 1998). Example (18) also demonstrates that gender is not morphologically encoded in Persian. This can be further seen in (19) where the pronoun *u* in the subject position stands for *he* as well as *she*.

- (19) u mæn ra did-Ø
 she/he I Acc. saw-3sg
 S/he saw me

The plural marker¹⁰ on animate NPs is traditionally the suffix *an*, while inanimate NPs acquire the suffix *ha*. Examples are below.

¹⁰ Persian is influenced by Arabic and morphological features of Arabic words may be preserved in loans. Thus Persian exhibits "broken" plural formations, that is, some words may have two different plural forms, one is the Persian form and the other is the Arabic form which is known as the irregular plural form. This is shown below:

- (I) a. loghæt (*word*)
 b. loghæt-ha (*word-pl*)
 c. loghat (*words*)

(I.a) is the singular form; (I.b) is the Persian plural formation; and (I.c) is the Arabic plural formation utilized in Persian.

- | | | |
|------|----------------------|--------------------|
| (20) | a. doxtær- an | b. name- ha |
| | girl-pl | letter-pl |
| | girls | letters |

In (20a) *-an* is the plural marker for the animate DP *doxtær* while the plural marker for the inanimate noun in (20b) *name* is *-ha*. This rule is not respected in Modern Persian and the plural marker *ha* is used in both environments.

With respect to case marking, in Persian nominative case marking is not overtly realized; i.e., nominative is the unmarked form. Traditionally *ra*¹¹ was known as the accusative marker. A rich body of literature has explored the nature of *ra* (Karimi 1996-2005, Ghomeshi 1996, 1997, Dabir Moghaddam 1992, 2005, among many others). Dabir Moghaddam argues that *ra* is the topic marker. Karimi (2003-2005, among others) argues that *ra* is the marker of specific direct objects, example (19) is repeated below.

- | | | | | |
|------|---------------|-----|------|---------|
| (21) | u | mæn | ra | did-Ø |
| | she/he | I | Acc. | saw-3sg |
| | She/he saw me | | | |

In (21) the pronoun in nominative form has no nominative marker and appears in default form. Moreover, the specific direct object, the pronoun in Acc. form, appears with *ra*. The suffix *ra* may be further utilized in other environments such as temporal adverbs and topics. Examples are in (22).

¹¹ In modern Persian *ra* may appear as *ro/o*.

(22) a. *emshæb* *ra* *ba* *ma* *bash*

tonight Acc. with us stay

Spend tonight with us

b. *Googoosh_i-o* *mæn* *ahæng-ha-sh_i-o* *doost dar-æm*

Googoosh-Acc I song-pl-her-ra friend have-1sg

As for Googoosh, I like her songs

In (22.a) *ra* appears on the temporal adverb *emshæb* (tonight) and in (22.b) it attaches to the topic *Googoosh*. Case patterns such as dative and ablative are indicated through prepositions. This is shown below.

(23) *mæn* *ketab* *ra* *æz* *u* *gereft-æm va be Færzin* *dad-æm*

I book Acc. from s/he got-1sg and to Farzin gave-1sg

I got the book from her/him and gave it to Farzin.

In (23) the subject *mæn* (I) appears with no overt nominative case marker and is basically in unmarked form. The accusative marker *-ra* appears on the direct object *ketab* (book). The indirect object *u* (s/he) is marked ablative by the preposition *æz* (from). Genitive case is realized by the Ezafe construction¹² or by possessor pronouns. This is shown in (24).

¹² The Ezafe construction will be explained in detail below.

- (24) u ketab-e mæn ra be pesær-æsh dad-Ø
 s/he book-ezafe I Acc. to boy-3sg gave-3sg
 S/he gave my book to his/her son

In (24) *my book* is expressed by adding the Ezafe vowel to the NP *ketab* (book); also the possessor pronoun *æsh* (his/her) indicates the genitive case of *pesær* (boy).

The pronominal system of Persian is shown in table (25), and each of these full pronouns has a corresponding clitic form, listed in table (26).

(25) Full Pronouns in Persian

	Singular	Plural
1 st	mæn I	ma we
2 nd	to/shoma you	shoma/shomaha you
3 rd	u/un/an s/he(it)	anha/unha/ishan they

(26) Clitic Pronouns in Persian

	Singular	Plural
1 st	-æm	-eman/emoon
2 nd	-æt/et	-etan/etoon
3 rd	-æsh/esh	-eshan/eshoon

Full Pronouns and clitic pronouns in Persian do not display any case distinction.

Therefore, the clitic pronouns in (26) may function as *possessor*, *direct object*, or *indirect object* (in which case the clitic is attached to a preposition). Examples are in (27-28).

(27) mæn ketab-**æm** ra/ro be-h-**eshoon** dad-æm
 I book-1sg Acc. to-_h insertion-3pl gave-1sg
 I gave my book to them

In (27) the clitic *æm* (1sg) is attached to the noun (book) functioning as a possessor. It should be noted that the clitic pronoun -æm is homophonous with the verbal agreement -*æm* (1sg). Also, the clitic pronouns *eshoon* (3pl) is attached to the preposition *be* (to) functioning as the indirect object.

An example of the clitic pronoun functioning as a direct object is provided in (28). The example in (28.a) contains a full pronoun *an* (that), where as (28.b) contains a clitic pronoun *esh* (3sg) on the verb *khord* (ate), and after the subject agreement *æm* (1sg).

(28) a. **an** ra khord-æm
 that Acc. ate-1sg
 I ate that
 b. khord-æm-**esh**
 ate-1sg-3sg
 I ate it/that

Furthermore, Negation, Tense, and Mood in Persian may also be attached to the verb by proclitics. Darzi (1995) describes the verbal morphology of the verb in Persian as follows.

(29) *Verbal morphology of the verb in Persian*

negative marker-mood marker-verbal stem-Pt-Psp-personal ending

(Darzi, 1995:19)

The verb in (30) contains the subject *æm* (1sg), the direct object *æsh* (it), the negation *ne* (not), and the imperfective aspect *mi*.

- (30) ne- mi- bord- æm- æsh
not-impe-took-t-1sg-3sg
I have not been taking it/him/her

Complex Predicates are extremely common in Persian and are replacing simplex verbs (Barjasteh 1983, Ghomeshi and Massam 1994, Karimi 1997-2005, Karimi Doostan 1997-2005, Dabir Moghadam 1997, Megerdooomian 2000-2001, Vahedi-Langrudi 1996, Folli, Harley, among many others). A compound verb in Persian consists of a non-verbal element and a verbal element/light verb. The non-verbal element may be a noun, an adjective, a prepositional phrase, or a particle. This is shown in (31).

(31) a. **Noun+ Light Verb (LV)**

kotak zadan/xordan
beating hitting/colliding
to beat, to get beaten

b. **Adjective+LV**

pahn kardan/shodan
wide doing/becoming
to spread, to widen

c. **Particle+LV**

bala avardan

up bringing

to vomit

d. **PP+V**

be donya amadan

to world coming

to be born

(Karimi 2005: 12)

The subject-verb agreement clitic of complex verbs in Persian always appears on the verbal element and never on the non-verbal part¹³. This is shown in (32).

(32) *mæn u ra [æz dəst dad-æm]*

I s/he Acc. from hand gave-1sg

I lost him/her

In (32) the verbal element of the compound verb *æz dəst dad-æm* which is *dad-æm* (gave-1sg) is the host of the agreement with the subject *mæn* (I).

Moreover, the object may be cliticized either on the nonverbal element of the compound (33.a) or on the verbal element (33.b)¹⁴.

¹³ This issue differentiates constructions like *mæn xosh-æm amæd* (I my-pleasure came or pleasure came to me) which have been considered as compounds by a number of linguists. The fact that the verbal element in these constructions never bears agreement morphology differentiates them from compound verbs. I will discuss these kind of constructions in detail in chapter 4

¹⁴ Jila Ghomeshi pointed out to me that the direct object and object clitic can, but do not normally co-occur.

(33) a. mæn u ra/o [æz dæst-esh dad-æm]

I s/he Acc. from hand-3g gave-1sg

I lost him/her

b. mæn u ra [æz dæst dad-æm-esh]

I s/he Acc. from hand gave-1sg-3sg

I lost him/her

Several studies have been done to determine the syntactic and semantic roles of the non-verbal element and the light verb. Mohammad and Karimi (1992) argue that the light verb is semantically empty and the non-verbal element contributes to the argument structure of the verb. Vahedi-Langrudi (1996) argues that light verbs are bleached elements and do not correspond to particular thematic roles; moreover, the transitivity of the compound verb is determined by the non-verbal element. Karimi Doostan (1997) argues that the light verb contributes aspectual information but not argument structure. Ghomeshi and Massam (1994) and Barjasteh (1983) consider the non-verbal element as an argument of the verbal element. Ghomeshi and Massam (1994) suggest that complex verbs in Persian are syntactically transparent and are formed in the syntax. Karimi (1997) argues that both components of the compound verb contribute a thematic structure which undergoes a semantic fusion after incorporating at LF.

Traditionally, complex verbs have been considered as a lexical unit since these compounds undergo nominalization and adjectival formation, bear a single stress, and cannot be separated by interveners such as PP's. However, other linguists have argued that compound verbs are visible to syntactic and morphological processes since the two

components can be intervened by negation and inflectional affixes, auxiliaries, modals, and emphatic elements (Mohammad and Karimi 1992, Megerdooonian 2001, 2002). In addition, certain (but not all) non-verbal elements can be limitedly modified, gapped (Karimi 1997), or relativized. Based on Hale and Keyser's (1993) approach and the non-lexicalist Distributed Morphology model, and following the previous proposals on compositionality of Persian compound verbs (Karimi Doostan 1997, Vahedi-Langrudi 1996), Megerdooonian (2001) proposes that the non-verbal element and the light verb decompose to even smaller elements/basic syntactic atoms such as roots and functional elements. Foley, Harley, and Karimi (FHK) (2003) argue that Hale and Keyser's (1993, 2002) model fits perfectly into Persian compound verbs (see examples therein). FHK argue that the light verb in compound verbs may have an effect on (a) agentivity/causativity (b) eventiveness and (c) duration. Accordingly, Karimi (2005) argues that the light verb and the non-verbal element in Persian compound verbs are "separately generated and combined in syntax, and become semantically fused at a different level (page 15)." She argues that although the two parts of the compound may be syntactically intervened "limitedly", they semantically behave as a single unit. I will come back to the behavior of compound verbs in chapter 4 where I discuss Persian psychological verbs.

Before closing this chapter, I briefly introduce a specific construction in Persian called the *Ezafe Construction* since it might appear in Persian examples throughout this monograph. Literally *Ezafe* means "adding" and comes from a borrowed Arabic root. *Ezafe* is an unstressed enclitic vowel *-e* (*-ye* after vowels) and is semantically vacuous. It appears on lexical items that are linked within adjectival, nominal, and prepositional

phrases. The Ezafe construction does not appear on verb phrases. Examples of Ezafe constructions are illustrated below.

i - between a noun and its complement

- (34) xordæn-e ghæza
 eating-Ez food
 The eating of food

ii) between a noun and a modifier

- (35) doxtær-e ziba
 girl-Ez beautiful
 Beautiful girl

iii) between a noun and a possessor

- (36) ketâb-e Soroush/mæn
 book-Ez Soroush/I
 Soroush's/my book

iv) between an adjective and its complement

- (37) abi-ye roushæn
 blue-Ez light
 Light blue

v) between a preposition and its complement

- (38) posht-e dær
 behind-Ez door
 Behind the door

For a series of different syntactic proposals on the Ezafe construction, see Tabaiian (1979), Samiian (1983), Mahootian (1993), Ghomeshi (1996, 1997), Kahnemuirpour (2000), and Moin Zadeh (2005).

1.5. Outline of the Thesis

The main purpose of chapter 2 is to explore Persian constructions with plural inanimate subjects which exhibit verbal agreement restrictions. In order to do so, I will discuss several constructions with verbal agreement restrictions in a cross-linguistic way. I first discuss 3rd person restriction in Icelandic, which is a restriction raised in presence of non-nominative subjects. I provide a series of proposed analyses for the Icelandic person restriction, most of which have tried to capture the restriction within syntax. Boeckx (2000), however, makes an attempt to capture the restriction within post-syntactic morphology. In order to further establish the place of morphology in explaining verbal restrictions, I introduce the quirky restriction in Spanish (Rivero 2004-2005) and show how this restriction is captured within post-syntactic morphology. The restriction that lack of animacy causes in Persian will be the next topic to explore. I first lay out the situation and then adopt distributed morphology to explain that such agreement does not belong to syntax and is the result of a feature mismatch which occurs in post-syntactic morphology. I also provide an analysis of Karimi (2005) for the Persian animacy restriction in which the restriction is explained in syntax and interface. I show how this account is not capable of capturing the true nature of the restriction.

Chapter 3 provides the basis for the discussion of Persian psychological verbs provided in chapter 4. The aim of chapter 3 is twofold. I first discuss Psychological predicates cross-linguistically and provide a comprehensive summary of the relevant literature. In the

second part of chapter 3 I introduce a cross-linguistic series of distinct constructions in which an extra argument with some subject properties is added to a complete clause. Namely, I discuss dative/double subject constructions in South Asian languages, Categorical/Broad subjects in Hebrew/Japanese/Arabic, and dative subject constructions in south Slavic/Albanian. In sum, the discussion of chapter 3 provides the path to a better understanding of chapter 4 which concerns Persian psychological constructions.

Chapter 4 discusses Psychological verbs in Persian. I first introduce the notion of applied arguments (Pylkkänen 2002, McGinnis 2001, and Cuervo 2003) and then argue that Persian psychological verbs involve applied arguments and applicative heads. The discussion in chapter 4 provides an original contribution to the study of psychological verbs in Persian. I discuss the properties and characteristics of Persian psychological verbs in great detail. I introduce the previous literature and provide reasons to show that they are not capable of capturing all the properties these constructions exhibit. Unlike previous literature which considers Persian psychological verbs as compound verbs, I provide evidence such as nominalization to prove that their structure differs from complex predicates. Furthermore, the A and $\bar{A}$ properties of the experiencer will be explored with the conclusion that rather than being a regular subject, the experiencer is an applied argument to a complete clause which contains a Tense requirement. Chapter 5 consists of concluding remarks and implications.

Chapter 2: Animacy and Agreement Restriction in Persian

2.1. Introduction

The main purpose of this chapter is to study the restriction that animacy induces on verbal agreement in Persian. Namely, plural inanimate subjects may appear with 3rd person/default morphology with no number agreement as in (39).

(39) in shaye?e-ha mærdom ra [be khænde andakht-Ø]
 this rumour-**pl** people Acc. to laughter dropped-**3sg**
 These rumours made people laugh

In (39) the compound verb *be khænde andakht*, appears with 3rd person singular morphology while the plural inanimate subject *shaye?e-ha* (rumours) is in plural form. To capture the verbal agreement restriction, I propose that agreement is in fact obtained in syntax for both animate and inanimate subjects and that one of the core operations of Distributed Morphology, *Impoverishment*, is responsible for the restriction on subject-verb agreement in the case of plural inanimate subjects.

The restriction that animacy induces on number agreement in Persian is somehow reminiscent of other verbal restrictions that have been studied in the literature; namely, Person Restrictions in Icelandic that affect nominatives in the presence of quirky dative subjects (ZMT 1985, Sigurðsson 1992-2002, Anagnostopoulou 2003, Stepanov 2003, Boeckx 2000, among others), the Person Case Constraint (PCC)¹⁵ that affects accusative

¹⁵ Bonet (1991-1994) states the following morphological condition for combinations of weak elements such as clitics, agreement affixes, or weak pronouns.
PCC: if DAT then ACC 3rd (Bonet: 1994: 36)

morphological markers in ditransitives with datives in a large variety of languages (Bonet 1994, Anagnostopoulou 2003), and Person Restrictions on nominatives in quirky constructions in Spanish (Rivero 2004-2005). Most of the above studies have suggested syntactic approaches to capture the agreement restriction. However, there is a recent body of literature arguing that Φ -restrictions do not reside in syntax, but occur in post-syntactic morphology. For instance, Boeckx (2000) and Rivero (2004-2005) argue that morphology is at the core of the person restrictions in Icelandic and Spanish, and suggest morphological accounts for such restrictions. In the following sections, I first provide a summary of the syntactic and morphological accounts of Φ -restrictions in the literature and then propose a morphological account for the Φ -restriction found in Persian in the case of inanimate subjects.

2.2. Restrictions on Verbal Agreement: Syntactic vs. Morphological Accounts

In this section, I discuss several restrictions on verbal agreement including the 3rd person restriction in Icelandic in the presence of quirky subjects and Spanish quirky restriction; I also provide a summary of syntactic and morphological treatments proposed for them. This section serves as a background for section 3 in which the study of Persian agreement restriction in the case of inanimate subjects is addressed. I will first discuss Icelandic quirky subjects, as the 3rd person restriction occurs when there is a quirky subject in the structure.

2.2.1. Icelandic Quirky Subjects

The cases canonically assigned to subjects across languages have been considered to be nominative and ergative except when there is a Quirky Subject involved. Quirky Subjects

are subjects with non-nominative (oblique) case and a non agentive theta role and do not induce agreement on the verb. They are considered to be subjects since they exhibit some subject properties (some of which will be provided below). An Icelandic example of a quirky subject presented as (10) is repeated in (40).

(40) Calvini liki verkið *Icelandic*

Calvin.Dat like the job.Nom

Calvin likes the job

(Harley, 1995:144)

In (40), the preverbal NP *Calvin* bears dative case and is an experiencer rather than the agent of the sentence.

Constructions with quirky subjects have drawn a lot of attention in the past two decades, mostly because of the complications that they cause for a series of well-known syntactic concepts like case assignment, EPP, and agreement structures. Icelandic, in particular, has been argued to exhibit a rich variety of quirky subjects. This is shown in examples (41-43) where the boldface constituents are considered to be subjects.

(41) **Henni** var kalt

Her.Dat was cold

She was freezing

(42) **Hana** vantadi vinnu.

Her.Acc lacked job.Acc

She lacked/needed a job

- (43) **Hennar** var saknad.
 Her.Gen was missed (by someone)
 She was missed (by somebody)

(Sigurðsson 2000:4)

Example (41) contains a dative element *Henni* (her.dat) that functions as the subject. In (42), both the subject and object *Hana* (her) and *vinnu* (job) are in accusative form; finally, in (43) the NP in subject position, *Hennar* (her), is in genitive form. However, all the above nominals, irrespective of case marking and semantic role, are still considered syntactic subjects since they demonstrate almost the same properties as grammatical subjects with an agent thematic role and can appear in the same contexts as logical subjects with nominative case. In other words, they undergo “tests of subjecthood.” Sigurðsson (1992) argues that the most prominent tests of subjecthood¹⁶, namely, subject-oriented reflexivization, subject-verb inversion, exceptional case marking (ECM), raising, subject control, and conjunction reduction, can be applied to Icelandic quirky subjects. The examples in (44), compared to those in (45), show that subjects with structural nominative case occur in the same environments as quirky subjects do.

Regular subjects

- (44) a. Hun sa myndina sina *Reflexivization*
 she.Nom saw picture self
 She saw her own picture

¹⁶ Stepanov (2003) shows that the control and conjunction-reduction tests are not true indicators of quirky subjects and cannot be used to differentiate between Icelandic and German counterparts.

b. Hefur hun sed myndina? *Inversion*

Has she.Nom seen pictures

Has she seen the pictures?

c. Eg tel [hana hafa sed myndina] *ECM*

I believe her.Acc have seen picture

I believe her to have seen the picture

d. Hun_i virdist [t_i hafa sed myndina] *Raising*

She.Nom seems have seen picture

She seems to have seen the picture

e. Hun vonast til [ad PRO sja myndina] *Control*

She hopes for to PRO see picture

She hopes to see the picture

f. Hun horfði og (hun)sa myndina *Conj.reduc*

She.Nom looked and (she_{Nom}) saw picture

She looked and saw the picture

Quirky subjects

(45) a. Henni_i ledist bokin sín_i

Her.Dat bores book self's

She finds her own book boring

b. Hefur henni leidst bokin?

Has her.Dat bored book

Has she found the book boring?

c. Eg tel [henni hafa leidst bokin]

I believe her.Dat have bored book

I believe she found the book boring

d. Henni_i virdist [_{t_i} hafa leidst bokin]

Her.Dat seems have bored book

She seems to have found the book boring

e. Hun vonast til [ad PRO leidst ekki bokin]

She hopes for to PRO bore not book

She hopes not to find the book boring

f. Hun var syfjud og (henni) leiddist bokin

She was sleepy and (her_{dat}) found the book boring

She was sleepy and found the book boring

Sigurðsson (1992:5)

The examples in (45) demonstrate that non-nominative quirky subjects in Icelandic pass all the standard tests of subjecthood and can appear in all the syntactic positions where ordinary nominative subjects appear.

2.2.1.1. Agreement Patterns in Icelandic:

The agreement paradigm in Icelandic is rather complicated because of the existence of quirky subjects. Sigurðsson (1992) reports four different situations.

I) the most straightforward situation is when there is a nominative subject in the construction. In that case, the nominative subject is responsible for verb agreement (as in other languages). This can be seen in example (46) where the nominative subject is 1st person plural and the verb agrees with it.

- (46) vid kusum stelpuna
 We.Nom.pl elected.1pl girl.Acc
 We elected the girl

Sigurðsson (1992:2)

II) If there is a quirky subject in the construction, and that quirky subject is the only argument, agreement is not obtained and the verb appears in a default/3rdsg form Sigurðsson (2000). This can be seen in (47).

- (47) okkur hefur/*hofum verid kalt
 Us.Dat has_{3sg}/*have_{ipl} been cold
 We have been cold

Sigurðsson (2001:85)

III) If there is another argument involved in the object position, agreement depends on the case of the object.

a) If the case of the argument in the object position is dative/accusative/genitive, no agreement occurs. Examples are as in (48-49).

(48) Mig idrar pess
 Me.Acc repents.Default this.Gen
 I repent this

(49) Mig van tar penning
 Me.Acc lacks. Default money.Acc
 I lack money

Yip et al. (1987:230)

b) If the case of the argument in the object position is nominative, the finite verb agrees in number with the nominative argument but only 3rd person is acceptable; i.e. the 1st and 2nd person nominative objects are not possible and are blocked from controlling agreement (Sigurðsson, 1996, 2000, and Taraldsen, 1995). This can be seen in the following examples:

(50) Henni voru gefnar bækurnar
 Her.Dat_i were.3.pl given books.Nom.pl
 She was given the books

Sigurðsson (1992:5)

(51) *?Henni leiddust vid
 Her.Dat.sg bored.3.pl we.nom.pl
 She was bored with us

Taraldsen (1995:309)

Example (50) is well-formed because ‘books’ is third person so the verb agrees with the object in number and person and no complications arise. Example (51) is problematic because the nominative element is 1st person plural and the sentence is ungrammatical as 1st person agreement on the verb is disallowed.

2.2.1.2. The 3rd Person Restriction on Nominative Objects

According to Taraldsen (1995) and Sigurðsson (1996-2002), the 3rd person restriction on nominative objects observed in (51) happens in two distinct environments:

i) Infinitival clauses in which the matrix subject is *dative* (quirky) and the *nominative* serves as an argument of the infinitival. Examples are illustrated in (52). Example (52.a) contains a 3rd person nominative and the sentence is well formed. Example (52.b) contains a 1st person nominative and the sentence is ill formed:

(52) a. *Mér* höfðu fundist [*þær* vera gáfaðar]
 Me.Dat had found they.Nom.pl be intelligent
 I had found them intelligent

b. **þeim* höfum alltaf fundist [*við* vinna vel]
 Them.Dat have always found we.Nom.pl work well
 They have always thought that we work well

ii) Monoclausal quirky subject constructions (passives, unaccusatives) with nominative objects; as illustrated in examples (53). The contrast in grammaticality depends on whether the nominative object is 3rd or 1st, 2nd person:

- (53) a. *Henni* leiddust *þeir*
 She.Dat was bored by-3pl they.Nom
 She was bored by them
- b. **Henni* leiddust *við*
 She.Dat was bored by-2pl us.Nom
 She was bored by us

There has been a growing body of recent literature to justify and explain the Icelandic 3rd person nominative constraint, namely by Taraldsen (1995), Sigurðsson (1996-2002), Schütze (1997), Boeckx (2000), Anagnostopoulou (1999), and Stepanov (2003). Basically, every author except Boeckx tries to solve the problem within Syntax. Boeckx, however, proposes a morphological account. Here, I briefly mention proposals by Sigurðsson (1992-2002), Anagnostopoulou (2003), Stepanov (2003), and Boeckx (2000).

2.2.1.3. Sigurðsson's Contributions

Ever since his thesis on Icelandic case assignment in 1989, Sigurðsson has indeed contributed a great deal to the area of case assignment and Icelandic quirky subjects. Here, I introduce some of his contributions and his proposal for the 3rd person restriction. Sigurðsson (2001) clarifies the notions of case and its manifestations based on Chomsky (1981-2000). He proposes the vP-internal case-matching hypothesis and argues that morphological case is a PF exponent and like other PF components serves the purpose of distinctiveness and does not necessarily have to “make sense”. Ultimately he proposes that vP-external phenomenon, which has been previously attributed to nominative case

and/or EPP, is in fact brought about by Person. That is the primary purpose of NP-movement is matching of a Person feature of the Tense complex of the clause.

For solving the mystery of quirky subjects and the Icelandic person restriction, Sigurðsson (2001) proposes a featural relationship between quirky subject and the ‘finite complex,’ namely, Person Matching. As described before, the situation is that the finite verb agrees with a 3rd person nominative object and not with 1st and 2nd person objects. He considers two projections for Person and Number each. He argues the following: (a) 3rd person is not ‘true’ person and hence agreement for 3rd person nominative object involves only number agreement; and (b) the dative subject enters into a default (3rd person) ‘null agreement’ with the person head of a finite verb; hence the nominative object cannot enter into that relation anymore and is thus blocked from controlling person agreement and can control only number agreement. Accordingly, Sigurðsson (2004) proposes the following structure.

(54) C...Pers_i...Dat_i...Num_j...[...~~Dat~~ ... Nom_j...]

(Sigurðsson 2004: 149)

In (54) person is checked/matched by a dative quirky subject and therefore blocks person checking of the nominative object which can only check/match number features.

Sigurðsson (2002) argues that in German, however, only the nominative can enter into an agreement relation with the finite verb, an agreement which is long distance. Hence the nominative does not need to raise to [SpecPerP] (as Icelandic does) and does not block person checking of a nominative object. Therefore, the 3rd person restriction does not occur. Furthermore, Sigurðsson (2002) argues that unlike Icelandic dative subjects, the

German dative subject does not raise out of the agreement scope of the finite verb prior to person agreement.

2.2.1.4. Anagnostopoulou's Proposal

Anagnostopoulou (2003) has dedicated a chapter of her book (The syntax of ditransitives) solely to the discussion of Person restrictions. She proposes an analysis based on “Multiple” checking for the Icelandic 3rd person restriction. She argues that dative arguments can check person features on T in Icelandic and in constructions where a dative argument and the nominative object (the argument with structural case) case check ϕ -features against the same head (T) it should be noted that the argument with structural case must be third person. She provides the following observations.

Context of the restriction: Clauses in which the nominative object agrees (in number) with the verb.

Observation: In the presence of a dative subject, the nominative object has to be 3rd person.

She summarizes the properties of the Icelandic 3rd person restriction as follows:

- (i) It is found in Icelandic only and looks like a language-specific constraint.
- (ii) It occurs only when there is a dative (quirky) subject and the nominative object *agrees* in number with the verb. If the nominative object does not agree with the verb, the constraint does not apply.

(iii) The restriction also affects constructions with a nominative *reflexive* (Taraldsen 1994). She provides the example in (55) in order to demonstrate this fact. The reflexive nominative is ungrammatical in (55.a) whereas a reflexive accusative in (55.b) is acceptable. Thus, she argues that reflexive nominatives pattern with 1st and 2nd person nominatives in not being able to co-occur with dative subjects.

- (55) a. **Maríu* fannst *sig* vera gáfuð
 Mary(Dat) thought-3sg *sig* (Nom) be gifted(Nom)
 Mary thought she was gifted
- b. *María* taldi *sig* vera gáfuða
 Mary(Nom) believed-3sg *sig* (Acc) be gifted(Acc)
 Mary believed she was gifted

(iv) The restriction applies to constructions *without an external argument*. As can be seen in example (56.b), active ditransitives with a third person dative and a 1st, 2nd person accusative pronoun are well formed but not passives (56.a) (Collins & Thráinsson 1996: 423, Schütze 1997: 117).

- (56) a. **Honum* varst gefinn þú
 Him(Dat) was given you(Nom)
- b. *Ég* gaf honum þig í jólangjölf
 I(Nom) gave him(Dat) you(Acc) as Xmas-gift
 I gave him you as a Christmas present

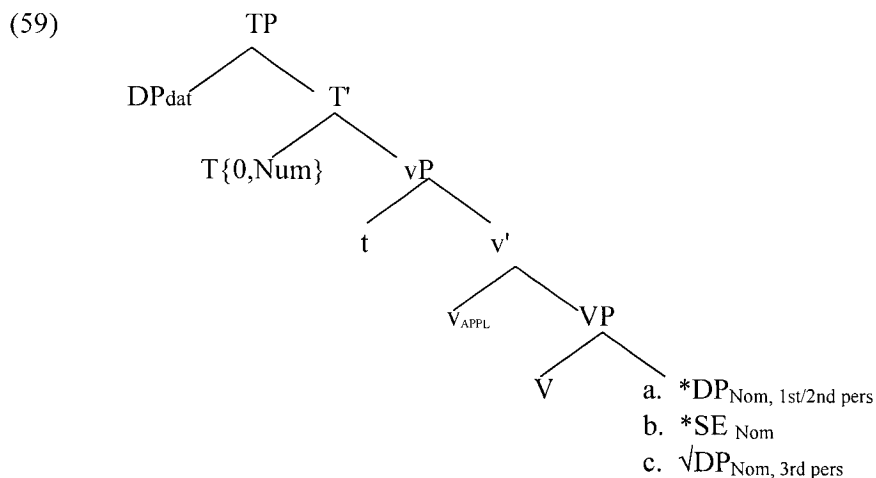
She argues that in cases in which the restriction occurs, speakers resort to other configurations to prevent the restriction. In monoclausal sentences, they use the regular nominative-accusative form, example (57); and in biclausal sentences, the non-agreeing form will be utilized, as in (57).

- (57) pid vorud syndir/syndar henni
 you(Nom) were shown_{mas/fem} her(Dat)
 You were shown to her

(Sigurðsson 1996:32)

- (58) þeim hefur/*höfum alltaf fundist [við vinna vel]
 Them(Dat) has-sg/*have-pl always found we(Nom,pl) work well
 They have always thought that we work well

Anagnostopoulou (2003) argues that the Person restriction in Icelandic is purely syntactic, reflecting checking of person separately from number of the dative and the accusative object against the same head (T). This is shown below where the dative argument raises first because of locality since the nominative is in the minimal domain of V or infinitival T. Raising first, the dative checks the Person feature of T. Once the person feature of T is checked, the nominative DP cannot be 1st/2nd person or a *se* pronoun:



Therefore, in (59), 3rd person pronouns match $T\{0,Num\}$ because they are [-person] while 1st/2nd person pronouns and reflexives do not match $T\{0,Num\}$, since they are [+person].

2.2.1.5. Stepanov (2003)

Stepanov (2003) studies quirky subjects in Icelandic and German. He argues that the claim by Zaenen et. al (1985) and Sigurðsson (2000-2002) that Icelandic quirky subjects differ from their German counterparts is only apparent¹⁷. He contends that three tests of subjecthood that have been argued to differentiate Icelandic quirky subjects from their German counterparts, namely, control, conjunction reduction, and the agreement restriction, have independent alternative accounts providing evidence for the assumption that German in fact behaves the same as Icelandic with respect to ‘quirky phenomena.’ Here, I mention only Stepanov’s arguments on Agreement which are relevant to the discussion on person restrictions. Following the literature, Stepanov raises the point that the Icelandic restriction does not exist in German and presents this in the following examples.

¹⁷ See also Moore & Perlmutter (2000) for a discussion of Russian dative subjects.

- (60) a. Henni líkuðu þeir
 her-dat liked they
 She liked them
- b. *Henni líkuðum við
 her-dat liked-1pl we-nom
 She liked us
- c. *Henni líkuðuð þið
 her-dat liked-2pl you-nom
 She liked you

(Stepanov 2003: 17)

In (60.a) there is a dative (quirky) subject *Henni*, the nominative object is third Person, and the sentence is grammatical. Examples (60.b, c) in which the nominative is in first and second person are unacceptable and nominative NPs are blocked from controlling agreement.

The German example in (60), however, does not exhibit this restriction and 1st, 2nd, and nominative NPs are possible, as shown by the grammaticality of (61).

- (61) a. Ihm gefälltst du *German*
 him-dat please-2sg you-nom
 He likes you

b. Ihm	gefällt	sie
him-dat	please-3sg	she-nom
He likes her		

Following a body of literature (Benveniste 1966, Silverstein 1986, Bonet 1991, Johns 1993, Taraldsen 1995, Ritter 1995 and Kayne 1998 among many others) Sigurðsson (2000) and Alexiadou (2002) consider 3rd person morphology as absence of the feature [person]; i.e. 3rd person means ‘no person’ and only 1st and 2nd persons contain a person feature. Therefore, Sigurðsson (2000) and Alexiadou (2002) argue that Icelandic Dative subjects are like nominative subjects and check their Person feature against a high functional head like T (Person for Sigurðsson 2000). The result is ‘invisible’ or ‘null’ agreement with the verb and 3rd person verbal morphology. Thus the absence of the person restriction in German is then considered as the absence of the checking relation between the dative and T indicating that, unlike Icelandic, the dative is not in the subject position.

Following a body of literature (Harley 1995, Alexiadou 2002, Taraldsen 1995), Stepanov argues for the existence of a functional projection below T that checks nominative Case in Icelandic quirky constructions. He states that these authors argue that this functional head (AgrN for Taraldsen, Aspect for Alexiadou, AgrO for Harley) has the property of checking the Number, but not Person, of the Nominative NP. Accordingly, nominative Case in nominative objects is a result of checking Number against a functional licenser below Aspect situated below T, so it is restricted to 3rd/0 person. He states the following:

(62) Asp is operative in Icelandic, not in German.

(Stepanov 2003: 19)

According to (62) nominative objects are licensed by Asp in Icelandic, and by Tense in German, since the German lexicon does not contain Asp. The distinction captures the differences between the two languages and in German (but not in Icelandic) the Case on the Nominative subject is licensed in situ (long-distance Agree, Chomsky 2000).

2.2.1.6. Boeckx (2000): A Morphological Approach

Boeckx (2000) tries to explain Icelandic 3rd person restrictions in terms of post-syntactic/Distributed Morphology. He relates the Icelandic restriction to the Person Case constraint of Bonet (1994) and considers it a morphological constraint¹⁸. Bonet introduces a constraint¹⁹ called The Person-Case Constraint (PCC), which states that human natural language disallows the presence of first or second person agreement with a direct object when there is also dative agreement.

(63) The Person-Case constraint

If Dative (agreement) – Accusative (agreement) = 3rd

(Bonet, 1994:36)

Boeckx does not provide an inclusive analysis of the Icelandic restriction but suggests that agreement occurs with quirky subjects but the result is ‘null’ and the agreement is not morphologically realized for economy reasons and it only forces 3rd person agreement. He argues that economy considerations dictate the non-overt agreement on the verb

¹⁸ Anagnostopoulou (2003) also tries to provide a unified account for PCC and the Icelandic 3rd person restriction; her analysis, however, is purely syntactic in which the difference between the two constraints is the syntactic head where the multiple feature checking occurs (T against v).

¹⁹ Bonet (1994) claims that the PCC constraint is universal.

because the information is already visible on the noun²⁰. He relates Dative to Person which encodes ‘Point of view’ (speaker/addressee) and argues that sentences like (64) in Icelandic yield a point of view clash. That is 1st and 2nd person nominative elements *við* (us) contain a point of view feature which is exclusive for Dative quirky subjects and that is why the sentence is ungrammatical.

- (64) **Henni* leiddust *við*
 She(Dat) was bored by-2pl us(Nom)
 She was bored by us

To explain why agreement is unavailable for nominative objects, he argues that AgrS features are checked by the quirky subject and AgrO is checked by a nominative object. A morphological process says that whenever Agr features are checked by nominative arguments, they can be morphologically realized. Also taking PCC into consideration, it can be said that AgrO features checked by a nominative element can surface; however, since there is a dative argument involved, the person feature gets deleted and the result is the nominative restriction, as in (64).

Providing morphological accounts for agreement restrictions has recently been proposed by other authors as well. For instance, Rivero (2004) provides a morphological analysis for agreement restrictions on nominatives in the context of quirky subjects in Spanish. In the next section, I provide a summary of her proposal.

²⁰ Boeckx refers to ‘Generalized Doubly Filled Comp Filter’ which is avoidance of structure and avoidance of Morphology.

2.2.2. Quirky Restrictions in Spanish: A Morphological Approach

Rivero (2004)²¹ studies some previously unnoticed quirky constructions with person restrictions in Spanish. She exploits Bonet's Person Case Constraint (PCC) as a tool to capturing the difference between Spanish quirky constructions with and without person restrictions.

Rivero argues that many Spanish counterparts of Icelandic constructions with person restrictions do not display the constraint; moreover, in the presence of a dative logical subject, nominative logical objects triggering verbal agreement can be 3rd, 2nd, or 1st person. In Spanish, however, the dative is obligatorily doubled by a dative clitic. This is shown in (65a-c) with *gustar* 'like' in which the dative clitic is 3rd person singular *le*:

- (65) a. Yo sé que a Ana le gustan ellos
 I know that Ann.Dat Dat.Cl like.3Pl they.Nom
 I know that Ann likes them
- b. Yo sé que a Ana le gustais vosotros
 I know that Ann.Dat Dat.Cl like.2Pl you.Nom.Pl
 I know that Ann likes you
- c. Yo sé que a Ana le gustamos nosotros
 I know that Ann.Dat Dat.Cl like.1PL we.Nom
 I know that Ann likes us

(Rivero 2004: 2-3)

²¹ Also see Rivero 2005. *On quirky person restrictions in Spanish and the Morphology-Syntax interface*. Paper presented at Workshop on The Role of Morphology in Argument expression and interpretation. University of Vienna.

In (65a-c) the dative does not interfere with finite verb agreement in contrast to Icelandic. Accordingly, it has been argued that person restrictions of the Icelandic type do not exist in Spanish.

However, Rivero (2004) brings to attention the fact that there are quirky constructions in Spanish with person restrictions not previously noticed. Verbs like *antojar* (se) ‘to take a fancy’, and *ocurrir* (se) ‘imagine’ are restricted to dative subjects and nominative objects and the nominative must be 3rd. The 1st and 2nd person nominatives are ruled out as shown in (66).

(66) a. A Ana siempre se le antojan {los mismos chicos / ellos}.

Ann.Dat always 3.Refl Dat.Cl fancy.3Pl {the same guys /they.Nom}

Ann always takes a fancy to (the same guys/ them)

b. *A Ana siempre nos le Ann.Dat antojamos nosotros

Ann Dat always 1Pl.Refl Dat.Cl fancy.1Pl we.Nom

*Ann always takes a fancy to us

c. *A Ana siempre os le antojais vosotros

Ann.Dat always 2Pl.Refl Dat.Cl fancy.2Pl you.Nom.Pl

*Ann always takes a fancy to you

In sum, Rivero (2004) argues that in Spanish there are two kinds of quirky constructions: The familiar *gustar* ‘like’ type without person restrictions, and the less familiar one *antojar* (se) ‘take a fancy to’ type with person restrictions.

To capture the contrast between these two verb types, Rivero (2004) suggests the PCC as a preliminary tool. She argues that constructions with quirky person restrictions contain a reflexive clitic (for the nominative), and constructions without restrictions contain only a dative clitic. She argues that in Spanish, the restriction arises in a post-syntactic morphological component when the two clitics must both be mapped to the person field in the sense of Bonet (1991). Following a rich body of literature, Bonet assumes that reflexive clitics in these constructions are accusative (case absorbers triggering NP-movement of nominative objects, Chomsky 1981, and references). She also assumes that some Spanish reflexives are person forms, carrying a person specification. Accordingly, she argues that the combination of a dative clitic and a 2nd or 1st person accusative reflexive clitic in (66.a, c) is ruled out by the PCC. This restriction does not apply to (66.a) which contains a clitic *se*, that is not accusative.

Following other morphological proposals discussed in this chapter (Boeckx 2000, Rivero 2004), I introduce agreement restrictions caused by Animacy in Persian in the next sections and provide a morphological account for them.

2.3. Animacy in Persian

In this section, I study the morphological realization of animacy in Persian and discuss the constraint this feature induces on subject-predicate agreement. Animacy is often overlooked among the set of Φ -features. Person, number, and gender have drawn more attention in the literature than animacy²². Furthermore, Bonet (1995) states that Animacy

²² There is however a growing body of literature on Animacy; for instance, Ormazabal & Romero (2002) propose that Bonet's (1991) PCC is in fact triggered by the presence of Animacy in object agreement. Moreover, Animacy in Russian has been of particular interest since it is reflected in the accusative case form of certain nouns and in the agreement of adjectives (Fraser & Corbett 1995, among others).

often seems to have an active syntactic and/or semantic role in languages with a rare morphological correlate. Furthermore, she states the following:

“One of the ideas that might be pursued in the future is that, similar to the Morphology Component, hierarchical feature structures are also present in the syntax and the mapping to the Morphology Component consists of pruning of syntactic feature structures in different ways depending on the properties of each language. One of the features that surely would be present in this more complex syntactic feature structure would be [-/+animate], a feature that seems often to have an active syntactic and/or semantic role in many languages, but that does not have, so often, a morphological correlate.” (Bonet, 1995: 645)

I argue that in Persian animacy not only has morphological exponents but also imposes a restriction on verbal inflection and subject-predicate agreement, indicating that Animacy is an active feature which is morphologically and syntactically realized. To support my claim about the active role of animacy in the grammar of Persian, I provide three environments in which animacy is a distinguishing feature.

The first environment in which animacy is morphologically realized in Persian is in *Plural markers*. As a general rule (Khanlari, 1980), the plural marker for animate NPs is the affix *-an*, while inanimate NPs will be pluralized by the affix *-ha*²³ (There are however exceptions to this rule; see Saadat (1996) for a comprehensive list).

²³ As mentioned in chapter 1 this rule is very relaxed in Modern Persian and the suffix *-ha* is taking over for both environments.

- | | | |
|------|----------------------|--------------------|
| (67) | a. doxtær- an | b. name- ha |
| | girl-pl | letter-pl |
| | girls | letters |

In (67a) **-an** is the plural marker for the animate DP *doxtær* while the plural marker for the inanimate noun in (67b) *name* is **-ha**.

The second environment in which animacy is realized in Persian is Direct Objects (Lazard 1982, Ghomeshi 1997). It is argued that the animate direct object obligatorily takes the suffix *ra* while the inanimate counterpart can appear without the suffix *ra*. The sentences in (68) differ based on the animacy of the direct object.

- | | | | | |
|------|-----------------------|-----------------|----|---------------|
| (68) | a. (u) | ghased-i | ra | ferestad-Ø |
| | s/he | messenger-indef | | Acc. sent-3sg |
| | S/he sent a messenger | | | |
| | b. (u) | peyghm-i | | ferestad-Ø |
| | s/he | message-indef | | sent-3sg |
| | S/he sent a message | | | |

In (68.b) there is a tendency to omit the direct object marker *-ra* when the object is inanimate.

The third environment where animacy plays a role is *verbal agreement*. In Standard Persian, inanimate subjects do not induce agreement on the verb. The verb appears in

singular/default form and subject-predicate agreement may be restricted²⁴. This is shown in example (2) repeated as (69).

- (69) In shaye?e-ha mærdom ra negæran kærd-Ø
 This roomer-**pl** people-Acc. worry did-**3sg**
 These roomers worried people

In (69) the subject *in shaye?e-ha* (the roomers) is in plural form while the verb appears in third person singular and does not agree with the subject in number.

Example (70) contains two environments in which animacy is realized (plural marking and verbal agreement).

- (70) a. dozd-**an-e** gostakh-Ø [færa^{van} **ænd**] , æz an-**an** [doori kon-id]
 thief-pl-_{ezafe} bold plenty be-**3pl** from that-pl farness do-2pl
 There are a lot of bold thieves, stay away from them

- b. ændishe-**ha-e** gostakh-ane [færa^{van} **æst**] , æz an-**ha** [doori kon-id]
 thought-pl-of bold-_{inanimate} plenty be-**3sg** from that-pl farness do-2pl
 There are a lot of bold thoughts, stay away from them

(Saadat 1996: 50)

In (70.a) with an animate subject, the plural marker is *-an*, and the compound verb *færa^{van} ænd* (are plenty) agrees with the subject by being in 3rd plural form. By contrast, the inanimate subject *ændishe-ha* (thoughts) takes the suffix *ha* as the plural marker and the compound verb (*færa^{van} æst*) appears with 3rd sing/default morphology.

²⁴ Thackton (1983) reports an exception on the verb “to be”.

2.3.1. Constraint on Verbal Agreement

As mentioned in chapter 1, it is a common belief that in Persian, only person and number have morphological exponents on subject-predicate agreement (Meshkat-al dini 1987, Thackton 1983, among others). However, I showed in the previous section that Animacy is a crucial feature in the grammar system of Persian since it has a morphological realization on plural markers and direct objects. Moreover, animacy exhibits a constraint on verbal agreement in Standard Persian and a lack of this feature causes the verb to appear with default agreement. In other words, only animate subjects induce number agreement on the verb and plural inanimate subjects appear with singular agreement morphology. An example showing the contrast between the animate and inanimate plural subjects is in (71).

- (71) a. *toofan-ha-ye* *peyapey* *dehkæde* *ra* [*viran* *kærd-Ø*]
 storm-pl-*ezafe* constant village Acc. destroy did-3sg
 Constant storms destroyed the village
- b. *dozd-an-e* *gharætgar* *dehkæde* *ra* [*viran* *kærd-ænd*]
 thief-pl-*ezafe* plunderer village Acc. destroyed did-3pl
 Thieves destroyed the village

In (71.a) the subject *toofan-ha* is in 3rd person plural while the verb bears 3rd person singular/default morphology. On the contrary, in (71.b) the subject *thieves* is in plural form and the verb agrees with it in number and is in plural as well. This state of affairs appears to be a violation of the common situation in Persian, which is that predicates agree with the structural subjects.

Cross-linguistically, the same restriction on verbal agreement exists in Georgian and Turkish. The Georgian examples are illustrated in (72a, b).

(72) a. knutebi goraven *Georgian*
 Kittens they-roll
 The kittens are rolling

b. burtebi goravs
balls it-rolls
The balls are rolling

(Harris 1981: 21)

In (72.a) the plural animate subject *kittens* triggers number agreement on the verb while the plural inanimate subject *balls* in (72.b) fails to do so.

This restriction on inanimate subjects does not appear surprising considering Aissen's (2003) universal hierarchy of marked subjects.

(73) Markedness Constraint Hierarchy of the subject

*SUB/INANIM >> *SU/ANIM >> *SUB>>HUM

(Aissen 2003: 12)

The hierarchy in (73) means that if any type of clause is to be avoided because of the animacy of the subject, it will be a clause with an inanimate subject.

Generally subjects are considered agents, which is the highest role in the thematic hierarchy.

(74) Agent>instrument>experiencer>theme/patient> cause>goal/benefactor

Subjects are also typically considered to be animate and human, which are the characteristics that define the most unmarked subject; in contrast, inanimate subjects are highly marked given that inanimates are generally objects.

Saadat (1996) argues that in Old Persian inanimates were not treated as real agents in the sense of having control over their actions and that is why the non-agreeing form was used. Following this claim I argue that the restriction on inanimate subjects in Persian somehow indicates that Persian respects the hierarchy of features suggested by the scale in (73). I further suggest that perhaps in Persian grammar it is only the agent that induces verbal agreement and subjecthood is not a sufficient factor for verbal agreement (this issue will be further discussed after introducing Persian psychological predicates in chapter 4).

Continuing with Persian and agreement restrictions, in (75) I provide further examples to demonstrate that the animacy restriction applies to different predicate types in Standard Persian. In (75.a) the copula verb (be) undergoes the agreement restriction and appears with 3rd sing/default morphology while having a plural external argument *khiyaban-ha* (streets). In (75.b) the verb ‘dropped’ is in unaccusative form and the inanimate internal argument *ghætre-ha-ye baran* (rain drops), originating as an internal argument moving to the subject position, induces the restriction on the verb *chekid-Ø*, which appears with 3rd sing/default morphology. Example (75.c) with the transitive verb *tærsand-Ø* (scared) exhibits the highest contrast with respect to the hierarchy of animacy since the subject is inanimate *shaye?e-ha* (roomers) and the object *mærdom* (people) is animate and human.

Again, in (75.c) the compound verb *negæran kærd-Ø* (worried) is appearing in default form not agreeing with the inanimate subject *shaye?e-ha* (roomers).

- (75) a. khiyaban-ha [khælvæt æst-Ø] (*copula*)
 street -pl quiet is-3sg
 The streets are quiet
- b. ghætre-ha-ye baran be zæmin chekid-Ø (*unaccusative*)
 drop-pl-_{ezafe} rain to ground dropped-3sg
 Raindrops fell down on the ground
- c. shaye?e-ha-ye akhir mærdom ra [negæran kærd-Ø]
 rumour-pl-_{ezafe} recent people Acc. worry did-3sg
 Recent rumours worried people

In **Modern Persian**, however, plural inanimate subjects may select a verb either in plural or singular form as shown in (76.a, b).

- (76) a. ghætre-ha-ye baran be zæmin chekid-Ø
 drop-pl-_{ezafe} rain to ground dropped-3sg
 Raindrops fell down on the ground
- b. ghætre-ha-ye baran be zæmin chekid-ænd
 drop-pl-_{ezafe} rain to ground dropped-3pl
 Raindrops fell down on the ground

In (76.a) the inanimate NP in subject position (rain drops) is plural and the verb is singular. In (76.b), however, the same NP in plural form takes an agreeing verb in plural form. Meshkat Al-dini (1987) argues that when the emphasis is on the individual members, the agreeing form is used; when the NP is used as a unit/whole, the verb appears in singular form. He provides the following example:

- (77) dær bagh gol-ha-ye ziba-yi [shekofte æst/ænd]
 in garden flower-pl-_{ezafe} beautiful-indef. bloomed is/are
 Beautiful flowers are (have) bloomed in the garden.

(Meshkat al-dini 1987: 87)

He argues that in (77) if the reference is every single flower in the garden, the agreeing form is used; if the reference is the whole group of flowers that have bloomed in the garden, the non-agreeing form is utilized. However, this distinction is not respected by native speakers who can use the agreeing and non-agreeing form interchangeably.

Although Modern Persian exhibits an optionality with respect to verbal agreement of plural inanimate subjects, there are sentences in Modern Persian (78) in which the non-agreeing form is used favourably.

- (78) in hærf-ha mæn ra narahæt mi-kon-æd/?nd
 This word-pl I Acc. uncomfortable ind-do-3sg/?pl
 These talks/words make me sad/uncomfortable

I argue that the contrast in hierarchy of subjecthood markedness is responsible for the contrast in (78) as the sentence contains an *inanimate subject* and an *animate human object*.

Inspired by proposals by Boeckx (2000) (for Iceland person restriction) and Rivero (2004) (for Spanish quirky restriction) which claim that agreement restrictions do not reside in syntax, I consider post-syntactic morphology responsible for the animacy agreement constraint in Persian. I adopt the framework of Distributed Morphology (DM) introduced in chapter 1 to provide an account of lack of agreement for inanimate subjects. In the next section, I first lay out a theoretical account of the process that I propose is responsible for the agreement restriction in the case of inanimate plural subjects, namely *Impoverishment*, and then explain the lack of agreement.

2.3.1.1. On the Nature of Impoverishment

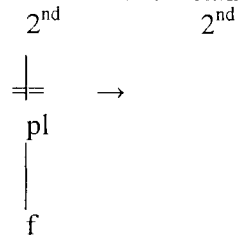
According to Marantz²⁵, Impoverishment is the key reason for doing morphophonology after syntax. In simple words, it is the deletion of some of the features operating in syntax prior to doing phonological realization of features.

Impoverishment rules were first introduced by Bonet (1991) as delinking rules.

Impoverishment as delinking means that delinking of a certain feature entails delinking of features dependent on them. This is shown in (79).

²⁵ The citation is from LSA (2003) course material.

(79) Impoverishment as Delinking



(Harley & Noyer, 1999:17)

In (79) the Person feature dominates number features, which dominate gender features. As a consequence of this geometry of features, the impoverishment (delinking) of number entails delinking of gender as well. A famous example of delinking by Bonet (1991) in Spanish is when the dative clitic *le* is deleted when combined with the accusative clitic *lo*. Bonet argues that the reflexive *se* is the default clitic and when the dative clitic gets deleted, the default form *se* surfaces. This is shown in (80).

(80) *le lo* → *se lo* (reflexive *se*= default clitic)

Marantz argues that in DM, impoverishment is one of the ways that the morphology can manipulate the morpho-syntactic structure via the deletion of a feature in a specific context. Two examples of impoverishment rules for English and Russian are given below:

(81) [person, Num] → ∅ / [+past]²⁶ English

(81.a) means that by deleting person and number features in the context of [+past] in English, no vocabulary insertion rules will be able to access these features and thus no

²⁶ This rule does not hold for the verb *be* (was, were) which has person distinctions in the past form and is an exception.

verb in English will have person or number distinction in the context of perfect tense.

This is shown in (82).

(82) a. He goes

b. He went

In (82.b) even though the verb contains [3sg +past] in the syntax, the 3rd sg feature is deleted after syntax and prior to Vocabulary insertion by the impoverishment rule introduced in (82). Consequently, no person distinction is shown in (82.b).

In a similar vein, (83) indicates that in Russian no gender distinctions are marked in the plural form.

(83) [gender] → Ø / [plural] *Russian*

(Bobaljik, 2002:15)

The impoverishment rule in (83) deletes all gender features in the context of plural as part of the mapping from a syntactic representation to vocabulary insertion. Therefore, [plural, feminine] cannot survive in vocabulary insertion and in Russian no gender distinctions are marked in the plural form. This is shown in (84) where the feminine (gender) morpheme *a* does not survive in the plural form and only the plural morpheme *i* surfaces on the noun.

(84) a. devočka → devočki

girl-sg.f girl-pl

a girl girls

b. malčik	→ malčiki
boy-sg	boy-pl
a boy	boys

Noyer (1997) rejects the geometries used by Bonet for impoverishment in (79). Noyer (1997) follows Calabrese (1995) in arguing that impoverishment should be viewed as feature co-occurrence restrictions or “filters” for phonological segment inventories. For example in Arabic, the absence of a first person dual must be represented as the filter *[1 dual]; because the Universal Feature Hierarchy places Person higher than Number, dual is impoverished automatically. This is shown in (85).

(85) [dual] → Ø / [1st] Arabic dual impoverishment

(86) a. ?-aktub ‘I write’

b. t-aktub-ā ‘you (dual) write’

c. *?-aktub- ā ‘we (dual) write’

(Noyer, 1998: 270)

The impoverishment rule in (85) indicates that the dual form does not exist in the presence of 1st person, ruling out the form in (86.c).

The Universal Feature Hierarchy proposed by Noyer (1992) is in (87). The deletion of a feature is only possible by deletion of features hierarchically higher than the feature in question. As a result, in (85) dual is impoverished by the person feature which is located above it.

(87) Partial Version of Noyer’s Universal Feature Hierarchy

Person features > Number features > Gender features

Furthermore, Noyer (1998) argues that impoverishment can also be a change of feature as opposed to feature deletion. The important issue however, is that the process will always be from a more marked to a less marked value and never vice versa.

2.3.1.2. Impoverishment and Blocking

Impoverishment is known as a kind of blocking with special characteristics which differs from a usual blocking. A typical example of blocking is the English past tense *-ed* which may be blocked by other morphemes. For instance, the past tense of the verb *go+ed* is blocked by *went*.

In this section, I clarify the differences between Blocking and impoverishment.

As mentioned earlier, in DM affixes compete with each other for insertion on the same terminal node. The most highly specified affix wins the competition and gets inserted and therefore *blocks* the appearance of other affixes.

The first difference is that Blocking happens *at* a single position and is featurally coherent (the competing affixes carry similar features (past tense: *-ed/went*)).

In impoverishment, one morpheme or vocabulary item deletes features in a different (independent) morpheme that may be distant from it (for instance gender is deleted by 1st person). Therefore, impoverishment happens *across* positions but in a local domain.

Impoverishment is not featurally coherent (usually spelling out different features, but one agreement morpheme might impoverish a feature of another morpheme).

Another difference between Impoverishment (Blocking across positions) and (competitional) Blocking (at a position) is that Impoverishment causes less

specified/marked forms to block the more specified/marked forms, while Blocking (at a position) causes a more marked form to block a less marked one. For example, the more marked irregular past tense form (*went*) blocks the less marked form (**goed*). These operations can happen on stems (as *went* example) or on morphemes. Therefore, blocking is the emergence of the *marked* feature whereas impoverishment is the emergence of the *unmarked* feature.

Marantz cites Inkelas's (1993) examples of Nimboran subject-verb agreement structure where the difference between competition blocking and Impoverishment is more evident. In Nimboran, the 'dual' vocabulary item is more highly specified than the default 'plural' vocabulary item. Therefore, the dual vocabulary item is inserted on the number agreement node, blocking the less marked 'plural' when the subject is dual. An example of competition blocking is given in (88).

- (88) a. [ngedou] -[k-d-u]
 draw (here) dual-Fut-1st
 We two will draw here
- b. [ngedói] -[<i>-d-u]
 draw (here) plural-Fut-1st
 We (many, not two) will draw here

In (88), the more highly specified dual '*k*' blocks less specified <*i*> when the number feature of the subject is dual.

An example of blocking across positions or Impoverishment causing a less specified form blocking more specified form is illustrated in (89)

- (89) a. [ngedói] -[<i>-tam-t-u]
 draw plural-DUR-Pres-1st
 We two (or many) are drawing

- b. *[ngedói]-[k-tam-t-u]

In (89a,b) the Durative morpheme ‘*tam*’ impoverishes the number features on the number agreement node, destroying the features that dual vocabulary item ‘*k*’ needs for insertion. Therefore in the context of Durative when the subject is dual instead of the dual morpheme, the default ‘plural’ vocabulary item <*i*> is inserted.

Marantz believes that other theories of morphology would have a hard time explaining why a word with a plural (less marked) morpheme may be interpreted as having a dual (more marked) subject. That is why impoverishment is considered as one of the key elements of DM. With this background on DM, I now return to Persian agreement phenomena.

2.4. Proposal for Animacy and Agreement Restriction

Let us consider the Persian data again. Example (69) is repeated in (90).

- (90) in toofan-**ha** dehkæde ra [viran kærd-**Ø**]
 this storm-**pl** village Acc. destroy did-**3sg**
 These storms destroyed the village

In (90) the verb does not agree with the inanimate subject in number and appears in default form (3rd person singular). The following chart reflects how agreement patterns.

(91) Subject-verb Agreement Paradigm in Persian

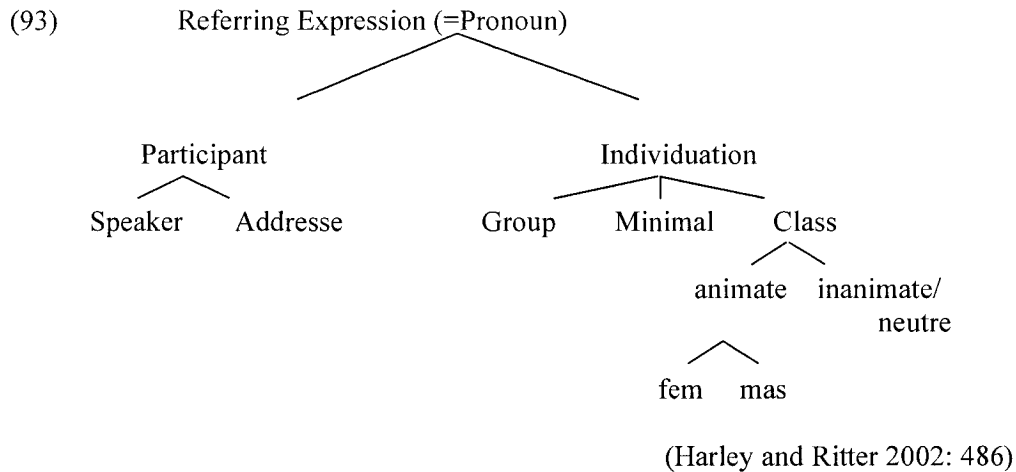
	Subject	Agreement
+Animate	-pl	+
	+pl	+
-Animate	-pl	+
	+pl	Default

The chart in (91) tells us that verbal agreement with animate subjects is attained in both plural and singular forms. Whereas for inanimate subjects, agreement occurs only for singular/-plural subjects, and +plural subjects appear with default morphology on the verb. In my view, there are no semantic or structural reasons for these different agreement patterns. Therefore, following Sedighi (2003) I propose that agreement is obtained with animate as well as inanimate subjects in Persian. However, Number is optionally impoverished in the post-syntactic morphology by the [-Ani] feature in accordance with earlier proposals in DM. This rule is shown in (92).

(92) [N] → Ø / [-Ani]

The impoverishment rule in (92) deletes Number feature in the context of [-Ani], leaving the verb with default (3rd sing) morphology.

A basic version of universal hierarchy of features by Noyer (1992) was introduced in (87). Here I adopt the more comprehensive classification of the Morphosyntactic Feature Geometry by Harley and Ritter (2002) in (95).



In (93), *Participant* stands for Person, *Individuation* for Number, and *Class* for Gender. It can be seen that this classification places Number higher than Animacy. Recall that in the previous section it was argued that in Impoverishment, deletion of a feature is only possible by deletion of a feature higher than the one in question. According to classification in (93), Animacy is located lower than number. However, the feature geometry proposed by Harley and Ritter (2002) has been questioned based on several cross-linguistic data. There is a recent body of literature proposing different ways to conceive of features and their values (McGinnis 2005, among others). Therefore, I argue that the Persian data for lack of agreement in the case of inanimate plural subjects indicates that “Animacy” must be situated higher than number.

According to the DM analysis I am developing, subject-verb agreement applies in the usual way in Syntax. However, after syntax and before Vocabulary insertion, an impoverishment rule/operation deletes Number features of T by (or in the context of) [-Ani] feature of the subject. Similar to any other impoverishment (blocking across positions) rule, the product of this operation leads to emergence of a less marked feature; in this case, it leads to no Number feature/singular.

Also, it should be noted that there is no dual in Persian and Number has only two exponents: singular and plural. This is shown in (94a, b) and (94.c) by the contrast between Persian and Arabic in which a dual feature exists.

- | | | |
|-------------------|----------------------------------|----------------|
| (94) a. t-aktub-ā | you (dual) write | <i>Arabic</i> |
| b. t-aktub-u | you (plural) write | |
| c. mi-nevis-id | you (plural/more than one) write | <i>Persian</i> |

Therefore, impoverishment of number in (92) affects only plurals since number has only two exponents in Persian. The product of the impoverishment rule in (92) leads to emergence of a less marked form; i.e., singular morphology which is unmarked or default form Number. Therefore the impoverishment rule in (92) follows the definition of impoverishment in the sense of emergence of a less marked form.

As mentioned in section 2.3.1, in Modern Persian both agreeing and non-agreeing forms are possible²⁷ as in (95).

²⁷ Saadat (1996) argues that the semantics of the verb dictates which verbs bear agreement and which verbs do not depending on their external argument selection (animate or inanimate). This issue remains to be further explored.

(95) a. ghætre-ha-ye baran be zæmin chekid-Ø
 drop-pl-_{ezafe} rain to ground dropped-3sg
 Raindrops fell down on the ground

b. ghætre-ha-ye baran be zæmin chekid-ænd
 drop-pl-_{ezafe} rain to ground dropped-3pl
 Raindrops were falling down on the ground

I argue in favour of “Optionality” of the impoverishment rule in (92). In (95.b) where subject-verb agreement with [+pl, -Ani] subjects is obtained, I assume that the agreement obtained in Syntax has not been affected by the impoverishment rule in (92); therefore, full agreement surfaces. In (95.a), the impoverishment rule applies after syntax and before vocabulary insertion, causing the default form of the verb. Where exactly Optionality fits within DM is a question that remains unanswered at this point.

2.4.1. Karimi’s Proposal for Animacy Restriction

Karimi (2005) provides a brief discussion about inanimate subjects. In short she argues that only specific subjects induce agreement on the verb and that Persian grammar optionally interprets inanimate subjects as specific subjects. If they are interpreted as specific, they move (to spec vP she argues) and induce agreement. If they have a non specific interpretation, they remain in situ and do not induce agreement on the verb. Let us study her analysis in more detail. Following Diesing (1992), Kratzer (1995), and Diesing and Jelinek (1995), Karimi argues that PredP is the domain of existential closure and that NPs inside this domain are neutral with respect to Case. She further suggests that there is no Agreement between the subject inside the PredP and the verb; only specific

subjects are checked for Agreement. She provides the examples in (96) to support her claim.

- (96) a. *jelo-ye dar se ta sag neshaste bud/*bud-an*
 front-*ezafe* door three part dog sitting be-3sg/*be-3pl

Three dogs were sitting in front of the door

- b. *un sag-a-ye sefid jelo-ye dar neshaste bud-an/*bud*
 that dog-pl-*ezafe* white front-*ezafe* door sitting be-3pl/*be-3sg

Those white dogs were sitting in front of the door

(Karimi 2005: 95)

She argues that in (96.a) the verb does not agree with the nonspecific subject *se tâ sag* (three dogs); however, in (96.b) the specific subject *un sag-â-ye sefid* (those white dogs) induces agreement on the verb. I point out two issues with respect to example (96). First, example (96.a) in Persian has an ‘existential reading’ and there is a tendency for the theme of Existential constructions to be indefinite; therefore, by nature, they cannot have a specific subject. Second, I argue that in (96.a) there is an animacy hierarchy in effect since the same example with human DP (three men) is only grammatical when the verb agrees with the subject; the non-agreeing form is not possible. This is shown in (97).

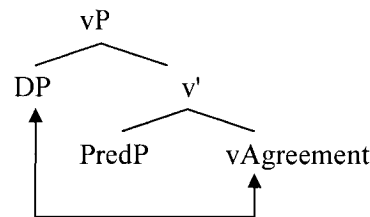
- (97) a. *jelo-ye dar se ta mærd neshaste bud*/bud-an*
 front-*ezafe* door three part man sitting be-3sg*/be-3pl

Three men were sitting in front of the door

In (97) it is impossible for the DP *se tâ mærd* (three men) to appear with the verb in 3rdsg and must have the plural morphology on the verb.

Karimi (2005) argues that the subject does not have to move out of the vP, and the only position where the specific subject and the verb can establish an Agree relation for the purposes of Nom Case and Agreement checking is the Spec of vP²⁸. Accordingly, Karimi (2005) suggests the following for Persian Nom Case and subject-verb agreement.

(98) Nom Case and Subject -verb Agreement



(Karimi 2005: 106)

Coming back to the main issue of this section, with respect to the behavior of inanimate subjects, she argues that these elements only optionally agree with the verb in number and provides the following examples.

- (99) a. ketâb-hâ ru miz e/an
 book-pl on table 3sg/3pl (is/are)

The books are on the table

- b. deraxt-hâ sabz shod-e/an
 tree-pl green became-3sg/3pl

The trees have become green

(Karimi 2005: 176)

²⁸ I do not make any judgements with regards to this assumption.

In (99.a,b) there is optional agreement between the subjects *ketâb-hâ* (books) and *deraxt-hâ* (trees) and the verbs *e/an* (is/are) and *shod-e/an* (became.sg/became.pl).

She argues that this optional agreement indicates that Persian grammar allows the inanimate subject to optionally move out of the PredP to the Spec of vP in order to establish an Agree relation with the verb. She quotes Samiian (1983) in proposing that the plural suffix *-hâ* forces a specific reading. She states this is true for animate subjects, meaning that the plural animate NP always has a specific reading. Karimi, however, argues that inanimate subjects do not necessarily seem to undergo the rule of becoming specific when pluralized and an inanimate subject with the plural suffix may maintain its nonspecific interpretation and consequently remain inside the PredP. If they remain in situ, agreement between the inanimate subject and the verb is obtained. She states that if her prediction is correct, it should be the case that the inanimate subject can appear in a post-verbal position only if the verb agrees with it. She argues that this prediction is true, as evidenced by the examples in (100,101) in which the PredP has moved into a higher position to express emphasis. Only the specific subject which is outside the PredP, can stay behind; the nonspecific subject, being part of the PredP, must move along with the verb (Karimi 2005:176).

(100) a. [ru MIZ -an]_I ketâb-â t_i

On table -be3pl book-pl

The books are on the table

b. ??[ru MIZ -e]_I ketâb-â t_i

on table -be3sg

c. *[ru MIZ -e]_i ketâb-â-ye to t_i
 on table -be3sg book-pl-Ez you

Intended meaning: Your books are on the table

(101) a. [SABZ shod-an]_i deraxt-â t_i
 green became-3pl tree-pl

The trees have become green.

b. ??[SABZ shode]_i deraxt-â t_i
 green became-3sg tree-pl

c. *[SABZ shode]_i deraxt-â-ye mâ t_i
 green became-3sg tree-pl-ezafê our

Our trees have become green

(Karimi 2005: 98)

In (100-101) the subjects *ketâb-â* (books), *ketâb-â-ye to* (your books), *deraxt-â* (trees), and *deraxt-â-ye mâ* (our trees) appear post-verbally and the verb has moved to the initial position. She states that the sentences in (100-101b), where the verb is singular, are awkward. Those in (100-101c), where the subject has clearly become specific, are still worse. This judgment was not supported by native speaker audiences of the Iranian linguistics conference (2005, Leipzig, Germany) who could use all the forms presented in (100-101). The fact that all three options are acceptable indicates that the specificity of inanimate subjects does not affect agreement. Another piece of evidence to show that specificity does not affect agreement is presented in (102) in which the plural inanimate

subject *in lebas-ha* (these clothes) is undoubtedly in specific form, yet the verbal agreement is constrained and the verb appears with default morphology.

(102) in lebas-ha be to ne-mi-yad-Ø
 this clothes-pl to you neg-subj-come-3sg
 These clothes don't suit you

Therefore, in my view there is no semantic difference between the agreeing and non-agreeing forms of inanimate plural subjects and as indicated in the previous section, the answer lies in morphology. In addition, although *specificity* plays a big role in Persian grammar, many people have argued that specificity should be viewed as a pragmatic effect (Reinhart 1982, among others).

2.5. Summary

In this chapter I studied three constructions with restrictions on verbal agreement: Icelandic 3rd person restriction, Spanish quirky subject restrictions, and Persian constructions with a restriction caused by inanimate plural subjects. It was shown that the verbal constraints have been captured within syntax or post-syntactic morphology, and several proposals were introduced. Persian agreement restriction caused by inanimate subjects was proposed to reside in post-syntactic component of morphology. It was argued that the number feature gets deleted/impoverished in the absence of animacy causing the verb to appear with default morphology.

Chapter 3: Psychological Verbs and Multiple Subject Constructions

3.1. Introduction

The purpose of this chapter is twofold. First, I discuss Psychological predicates and provide a summary of the recent analyses for them, taking into account their complicated case marking and agreement patterns. Second, I explore several distinct constructions cross-linguistically in which subject properties are split between more than one element. That is, such constructions involve multiple subjects and exhibit complications with respect to case marking, verbal agreement, and scope interpretations. Accordingly, I introduce recent trends and proposals in approaching the spectrum of subjecthood. The basic intuition developed in this chapter is viewing subjecthood from a broader perspective, namely by introducing new elements in the clause that may satisfy some but not all of subject properties. The discussion will include double subject constructions, broad subject constructions, and applied arguments. The aim of this chapter is to provide a better foundation for an understanding of certain psychological constructions in Persian that I will introduce in chapter 4.

3.2. Psychological Predicates

Psychological verbs are predications of physiological/psychological/mental states, events, or feelings. They can include verbs of perception, cognition, possession, existing and lacking, verbs with modal meanings of wanting, obligation, trying, etc. Psychological Predicates take an experiencer and a theme as their arguments. The highest role assigned in Psychological predicates, experiencer, is lower than agent/causer in the standard scale of thematic role; it therefore triggers complications with respect to its subjecthood properties, including case marking and verbal agreement. An example is in (103).

(103)	Siita-ko	raam	pasand	hai
	Siita-Dat.	raam-Nom.	liking	is
	Sita likes Raam			

(Verma and Mohanan, 1990:2)

Example (103) contains a dative experiencer *Siita* in the subject position, and the theme object *raam* appears in nominative form.

Psychological predicates, cross-linguistically, show complicated patterns for subjects, verbal agreement, and case marking. Several studies have been done on the nature of Psychological predicates. Among them Belletti & Rizzi (1988) (B&R) is the first comprehensive one with the main focus being Italian. They provide the following classification for the syntactic configuration of psychological verbs.

(104) Belletti & Rizzi's Classification of Psychological verbs

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.

Here, I focus mainly on type three or the *piacere* (to like) type, which is the relevant class for the Persian constructions that I discuss in chapter 4.

The experiencer argument in class three has been argued to have inherent dative case, as sketched in (105).

(105) piacere: θ -grid [Experiencer, Theme]

Case-grid [Dat -]

(B&R 1988: 344)

B&R argue that in Italian the experiencer argument asymmetrically c-commands the theme argument. This is shown in the structure in (107).

(106) a. A Gianni è sempre piaciuta la musica

Gianni.DAT is always pleased the music

Gianni has always liked music

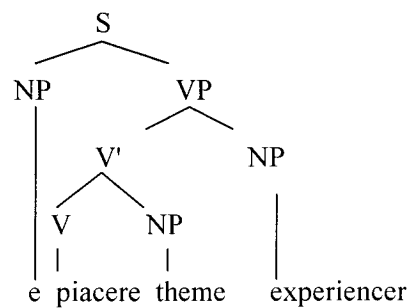
b. La musica è sempre piaciuta a Gianni

the music is always pleased Gianni.DAT

Gianni has always liked music

(B&R 1988: 334)

(107)



(B&R 1988: 335)

B&R argue that (107) represents hierarchical relations. Inherent case properties in (107) are expressed in the case grid associated with the verb in the lexicon.

In order to explore psychological predicates in more detail, in the next section, I provide a summary of the most recent works on psychological verbs by discussing Landau's (2003) monograph on psychological verbs.

3.2.1. Experiencers as Mental Locations

Landau (2003) brings together the entire literature on psych verbs with the principal theme of considering experiencers as mental locations. Below, I provide a summary of some of the issues discussed in this work by mainly focusing on properties of class III verbs as this class of verbs in Persian is the topic of next chapter.

Landau (2003) makes the proposals listed in (108) in relation to constructions with psychological verbs.

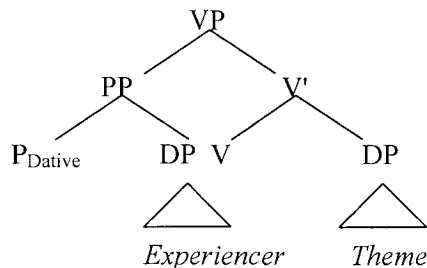
- (108) - Experiencers are mental locations, i.e., locatives.
- All object experiencers are oblique (or dative)²⁹.
- Experiencers undergo "locative inversion."

(Landau, 2003:5)

Focusing on class III, Landau proposes the following structure for Class III psych verbs in which a PP with a dative head hosts the experiencer. According to Landau, in languages where the dative marker is not an independent preposition, class III experiencers are still governed by a null preposition $\emptyset_{\Psi}$, assigning dative case. The structure is given in (109).

²⁹ In chapter 4, I show that this is not true for Persian experiencers.

(109) Class III Verbs



(Landau 2003: 8)

Landau (2003) maintains the standard assumption that class III verbs are unaccusative (Perlmutter 1983, Belletti & Rizzi 1988, Legendre 1989, Pesetsky 1995, Arad 1998, Reinhart 2001) and following Pesetsky (1995) he argues that the "theme" argument of these verbs is not a Causer but rather a Target/Subject Matter, (T/SM)³⁰.

Landau (2003) argues that considering experiencers as mental locations/containers or destinations of mental states/effects is a basic intuition. This claim is supported in South Asian languages by Kachru (1970) and Pandharipande (1981) in which the psychological construction indicates the experiencer as the abstract location of mental state 'fear' and the construction may alternate between dative and locative case on the experiencer.

- (110) a. niinaa-ko bay hai
 Nina-D fear-N be-Pres
 Nina is afraid

³⁰ Pesetsky (1987, 1995) argues that the semantic roles borne by the "theme" argument in Subject-Experiencer and in Object-Experiencer predicates are not identical. In the first case, the "theme" object is interpreted as Target of Emotion or Subject Matter (T/SM), whereas in the second case the "theme" subject is interpreted as a Cause (Pesetsky 1995, ex. 166). It is also argued that the causer provokes the psych-event, and T/SM triggers it. I, however, will adhere to the general notion of theme in my analysis.

b. niinaa-ma bay hai
 Nina-Loc fear-N be-Pres
 Nina is fearful

(Mohanar 1990: 172)

In (110.b) *-ko* is marked locative, encoding the abstract relation of a locative form while (110.a) contains a dative experiencer.

In order to understand the conceptualization of psych verbs, Landau cites Jackendoff's (1990) representation of experiencer verbs. In the structure below, (111a) is conceptually represented as (111b), which reads as (111c):

- (111) a. X frightens Y.
 b. [CS+ ([X]_, [INCH [BE ([FEAR ([_])], [AT [Y]])])]]]
 c. X causes fear of X to come to be in Y.

(Jackendoff 1990: 300)

In (111) the mental state itself is "extracted" from the verb and stands as a co-argument of the experiencer.

Bouchard (1995) also studies the nature of psychological verbs and suggests that psychological relations are modeled on the spatial relation of "contact." Similar to Jackendoff, Bouchard assumes that the mental state is an independent semantic argument, which he terms *psy-chose*. He states the following:

“...in mental space, the psych-chose is somehow put in contact with the argument it affects. This argument must be an entity capable of hosting the emotion or feeling that the psy-chose refers to.”

(Bouchard 1995: 272)

Bouchard argues that the “psych-chose” is also a *syntactic* argument which stands on its own, as in periphrastic psych constructions (112.a) or can be incorporated into the verb, as in standard ObjExp verbs (112.b):

(112) a. Cela a éveillé en Pierre une rage terrible.

That awoke in Pierre a terrible rage

b. Cela a enragé Pierre.

That enraged Pierre

(Bouchard 1995: 275)

In (112.a) the mental state/psych chose *une rage terrible* (a terrible rage) has been extracted from the verb and stands as a syntactic argument, while in (112.b) the mental state is within the verb *enragé* (enraged). However, Landau (2003) argues that while it is possible for psych verbs to be decomposed into an “action” light verb and a mental state (psy-chose) at some conceptual level, it does not necessarily mean that this decomposition goes to syntax³¹. Landau believes that the mental state is syntactically active only when visible, i.e. in periphrastic constructions. Landau (2003) states that Bouchard’s syntactic decomposition, which is also adopted by Arad (1998, 2000), cannot

³¹ In chapter 4, I introduce Persian psychological constructions which invalidate Landau’s argument as it is argued that the mental state behaves as the theme subject of the unaccusative light verb.

be motivated on semantic grounds alone. In the next chapter, however, I will demonstrate syntactic evidence for that through Persian psych constructions.

Further examples of periphrastic constructions with a psych noun and a locative experiencer stated in Landau (2003) are given in (113) where the psych noun is in bold form and the locative experiencer in Italics.

- (113) a. yeš be-*Gil* **eyva** **gdola** klapey soxney bituax
 there-is in-Gil rancor great toward agents-of insurance
 Gil has a great rancor toward insurance agents

- b. yeš be-tox *Rina* **tšuka** **amitit** le-omanut
 there-is inside Rina passion real to-art
 Inside Rina there is a real passion for art

(Bouchard 1995: 266)

- (114) a. *shil* hóó **yéé**.
 with-me became fear
 I am terrified

- b. *shil* yá'át'ééh.
 with me, it is good
 I like it

(Jelinek & Willie 1996, ex. 36, 37)

In further exploring psychological predicates, Landau (2003) discusses Speas's (1990) proposal that unlike non-experiencer subjects, subject experiencers introduce a "path," either as a goal or a source, as shown in (115-116).

(115) a. I got angry but it went away

b. ?? I laughed but it went away

(116) a. I tried to remember his name, but it wouldn't come to me

b. ?? I tried to write his name, but it wouldn't come to me

(Speas 1990, ex:3,7)

In (115.a) there is an experiencer subject and the sentence clearly states the directionality through the expression *but it went away*. This conjoined element is not possible in form (115.b) which does not contain an experiencer subject. Again in (116.a) the experiencer is treated as location by the expression *but it wouldn't come to me* which makes form (116.b), without an experiencer subject, rather odd.

South Asian languages provide further evidence for Landau's proposal in considering experiencers as mental locations. Landau (2003) discusses the literature demonstrating the evidence for the tight connection between experiencers and goals/locations (Verma 1990, and Mohanan & Mohanan 1990). He argues that in Marathi, dative experiencers contain the same marker that appears on locative postpositions. Landau (2003) also cites Pandharipande (1990) who proposes that in South Asian languages, experiencers are nothing but locatives marked [+Animate].

Landau's other piece of evidence for the locative nature of experiencers is the co-occurrence of dative subjects with the light verb 'come,' providing proof for their directional interpretation as in (117).

(117) a. baalan baalakaye werut_t_u.

boy.Nom. girl.Acc. hate-PAST

The boy hated the girl

b. baalan\ baalikayoot werupp\ wan_n_u.

boy.Dat. girl.Com. hatred-Non. come.Past

The boy felt hatred for the girl/Lit: To the boy came hatred for the girl

(Landau 2003: 11)

In (117.b) the light verb *come* clearly indicates the abstract sense of movement of *hatred* towards *the girl* as a location.

Landau (2003) proposes that universally, non-nominative experiencers bear inherent case. Following Emonds (1985), Landau (2003) assumes that, universally, inherent case is assigned by P. Following Anagnostopoulou (1999) Landau considers psych-effects a property of non-agentive constructions, and Following Rinehart (2001) he argues that experiencers are specified for [+mental state] and lack [+causer]. Also, following the literature, he considers experiencer higher than theme in the thematic hierarchy, in which mapping to the syntax is governed by the following scale:

(118) Agent >> Causer >> Experiencer >> Theme (Target/Subject Matter)

Accordingly, Landau (2003) argues that stative class III verbs select both an experiencer and a target/subject matter argument, as shown in (119a-b).

(119) a. Global warming preoccupies George.

b. *preoccupy*: <EXP, T/SM>

(Landau 2003: 51)

Landau (year) argues that the experiencer of a stative class II/III verbs (e.g., *preoccupy*) project internally, not externally like the experiencer of a class I verb (e.g., *fear*). This proposal is stated through the following generalizations.

(120) Inherent case is only assigned to internal arguments.

(121) Universally, non-nominative experiencers bear inherent case.

(Landau 2003: 52)

Following the previous literature, Landau introduces the inherent case of non-nominative experiencer arguments as *quirky* case that can be realized in subject position. Following the discussions in chapter 2 of this work, he considers a quirky subject as an argument that displays most canonical subject properties except for agreement and one that bears inherent case.

Landau divides languages into three kinds with respect to quirky cases:

(122) *Possible Case of Quirky Subjects*

a. All cases: Icelandic, Faroese, Greek.

b. Dative only: Italian, Spanish, Dutch.

c. No case: English, French, Hebrew.

(Landau 2003: 77)

He argues that in class ‘a’ languages, dative, accusative or genitive experiencers freely occur preverbally as quirky subjects. In class ‘b’ languages, only dative quirky subjects are exploited. In class ‘c’ languages, no quirky subject is allowed.

He believes that the classification in (122) is due to the fact that in certain languages some morphological cases (dative) are tolerated in subject position and others (accusative/genitive) are not. He further states the following:

“In principle, languages could instantiate other options that are not represented in (122) (only accusative quirky subjects), yet in practice, this is doubtful.

Overwhelmingly, it seems that the unmarked case for quirky subjects across languages is dative (e.g., Russian, Polish, Georgian, Japanese, and Korean); if a language allows non-dative quirky subjects, it also allows dative ones, but the opposite does not hold. Moreover, finer distinctions among the non-dative cases vis-à-vis quirkiness are not attested³².”

(Landau 2003:78)

Landau (2003) also states the following Quirky Subject Parameter:

(123) Quirky Subject Parameter (QSP)

At PF, [Spec,TP] must be marked:

- a. [+Nom,-Acc] (English, French, Hebrew)
- b. [+Nom] (Italian, Spanish, Dutch)
- c. Anything (Icelandic, Faroese, Greek)

(Landau 2003:77)

³² The generalization that if a language allows non-dative quirky subjects, it also allows dative ones may be questioned by the Persian data in which the quirky subject is in nominative with no instance of dative marking.

He argues that the QSP acts as a morphological filter at PF, eliminating subjects with morphological features that are not acceptable for “subjects” in that language. Landau (2003) argues that quirky subjects do not establish any *case* relation with Tense. Rather, they are marked with inherent case and only bear a case relation to the preposition that governs them. He maintains the recent standard assumption that quirky subjects move to the subject position for EPP reasons. Landau (2003) makes the assumption that the following generalization is universal:

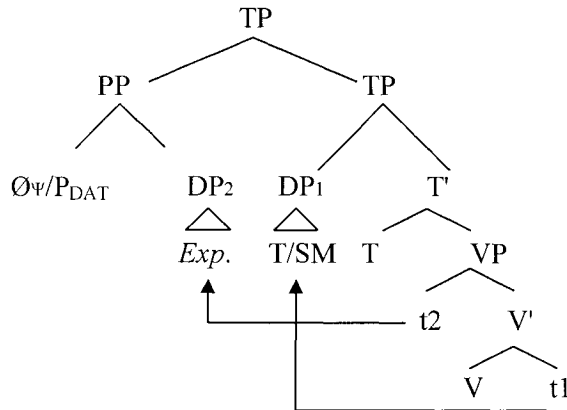
(124) All experiencers are LF-subjects.

(Landau 2003:80)

As Landau states, this claim is only about the status of experiencers at LF and about their [SpecTP] position. It does not indicate anything about their subjecthood properties. Furthermore, Landau affirms the possibility of multiple specs for Tense which has been reported in Japanese and Korean where there are double A-specifiers (Ura 1996). Also, Richards (1997) argues for the existence of multiple A-bar specs in Slavic languages. He demonstrates that it is very common for a functional head to license only one *overt* specifier but several *covert* ones (Chomsky also discusses multiple spec’s in Icelandic).

As mentioned earlier, Landau (2003) argues that the oblique case of experiencers is assigned (inherently) by a preposition and accordingly provides the following structure for class III verbs.

(125) Stative Psych Verbs: LF



(Landau 2003: 84)

In (125) the theme/SM argument moves to [specTP] overtly, and the experiencer moves to a second spec position in PP at LF. Landau (2003) argues that according to (125), all non-nominative experiencers are quirky but depending on the language and its morphological case, this quirkiness can be either expressed overtly (standard quirky subject) or covertly (the second subject position in (125)).

To sum up, Landau (2003) provides substantial evidence for considering experiencers as instances of locatives/mental locations and argues that they move to a second subject position and are located in a PP, which by default assigns dative case to the experiencer.

In the following sections, I introduce analyses for a series of cross-linguistic constructions in which there exists a general notion of an extra Argument being applied to a complete clause. What these analyses, proposed for structurally distinct constructions, share is the theme of having an argument which is not the core/true argument of the verb added to a complete clause. The purpose of reviewing these studies

is to stress some analytical similarities that they exhibit with the analysis I will adopt for a variety of Persian constructions that I will introduce in chapter 4.

3.3. Dative Subject Constructions in South Asian Languages

Shibatani & Pardeshi (Sh&P) (2001) study dative subjects in South Asian languages and propose that unlike what is usually taken for granted, dative subject constructions are not transitive and do not contain two relevant arguments of the lexical predicate. Instead, Sh&P (2001) propose that there is only one lexically selected argument and the other one is “sanctioned” by a clausal predicate.

Sh&P (2001) report the existence of Dative subject constructions in a wide range of Indian languages including South Asian (Verma 1976, Verman & Mohanan 1990), Georgian (Harris 1984), and Japanese (Kuno 1973) and provide extensive examples of non-canonically case marked or dative subjects in South Asian languages as in (126-128).

- [illegible]

- (127) **mare** jəvuu joiiə *Gujarati*
 I-Dat go needed
 I want/need to go
 (Lambert 1971: 11)

- (128) **Ræm-la** jarman bhæshæ bol-tæ ye-t-e
 Ram-Dat German language-fem speak-Participle come-pre-fem
 Ram can speak German

(Shibatani 2001: 312)

In the examples above, the DPs in bold in sentence initial position are in dative form and have been considered as subjects. Unlike the common treatment that considers verbs in dative subject constructions as transitives with two arguments, in which the argument in dative form is the subject and the nominative (unmarked) argument is the object, the authors claim that these constructions are structurally different from canonical transitive constructions. They argue that these constructions are also different from straightforward intransitive constructions in the sense that an extra argument is being “sanctioned” in the clause.

The key point to Sh&P’s analysis is the fact that the subject of dative constructions is marked dative because it bears the experiencer role, as opposed to the agentive role of the subject in regular transitive constructions. Sh&P (2001) further acknowledge the analyses proposed by Mohanan & Mohanan (1990) and Pandharipande (1990) in which dative subject constructions have been analyzed as containing a goal/locative structure. However, Sh&P (2001) believe that although the marker of goal/location is usually identical to the dative marker across languages, constructions such as (129), in which the dative subject can hardly be considered the goal/location, remain unexplained under this approach.

(129)	niNAL-kka	pook-aam	<i>Malayalam</i>
	You-Dat.	go-may	
	You may go		

(Jayaseelan 1990: 279)

In (129) the dative element is not a location or an experiencer, rather the sentence implies a modal sense of permission.

Sh&P (2001) state that relational grammar treats Dative subject constructions in terms of “inversion” in which the surface dative nominal is said to behave like a subject because it is a subject in the initial stratum, and the surface nominative NP is so marked because it is a final subject. However, Sh&P (2001) believe that previous analyses lack both “empirical support and analytical sophistication” for an explanation of these constructions.

Sh&P (2001) provide the following examples from Mohanan (1990) and Kachru (1990) as evidence for the intransitive nature of dative subject constructions. The examples with dative subjects usually have a nominative counterpart. The dative/genitive versions (131) are argued to have intransitive heads with the basic meaning of be/become and a verbal noun, while their nominative counterparts (130) contain transitive verb phrases³³.

(130)	naan	Ninn-e	sneehik’k’-uNNu	<i>Malayalam</i>
	I-Nom.	You.Acc.	Love.pres	
	I love you			

³³ In chapter 4, I argue that the same situation holds for Persian psychological constructions.

(131) enik'k'A Ninn-ood.A sneeham aan.A
 I-Dat you-2Dat love.Nom be- pres
 I love you

(Jayaseelan 1990: 281)

Example (130) is clearly transitive with two arguments (I and you). Form (131) is argued to contain a light verb *be* and a verbal noun. Intuitively, the structure behind this analysis can be paraphrased as “love is in me from you.”

Based on examples like (131), Sh&P (2001) argue that there is lexical evidence that dative constructions and their variants are intransitive with a verbal complex, and accordingly provide the structure below to demonstrate the difference between canonical transitive constructions and dative constructions.

(132) a. Canonical transitive construction

[NP-NOM NP-ACC PRED]
 SUBJ

b. Dative Construction

[NP-DAT/GEN NP-NOM PRED]
 SUBJ

(Gair 1990: 19)

Sh&P (2001) argue that canonical transitive (132.a) and non-canonical case marked constructions (132.b) represent two different conceptualization patterns: the subject of a canonical transitive construction (132.a) is an argument of the verb representing an “agent in control of the event expressed,” which codes the event as a ‘controllable situation.’ Dative/non nominative subject constructions, on the other hand (133.b), represent “uncontrollable situations” in which the non-canonically marked subject is not

an agent in control of the event. Sh&P (2001) further support this claim by stating that dative subject constructions typically happen in psychological/physiological constructions, mental activities like remembering/forgetting, and other uncontrolled events such as losing something over which one has no control.

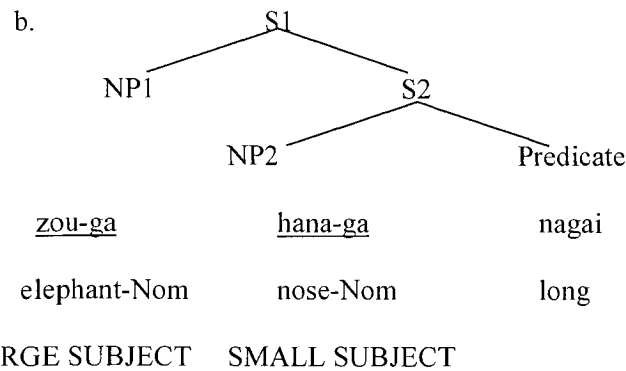
Sridhar (1979) first reports the contrast of the grammatical correlates between “controllable” and “uncontrollable” coding patterns. Sh&P (2001) further argue that the “*controllability*” contrast differentiates dative subject constructions (132b) in which the dative nominal lies outside of the scope of lexical predication. These constructions differ from canonical transitives (132a) in which both nominals are the arguments of the predicate.

Sh&P (2001) find similarities between dative subject constructions and Double subject constructions. Hence, in order to have a better understanding of their analysis for dative subject constructions, the authors provide a discussion of Double subject constructions. Double subject constructions, therefore, will be introduced in the next section.

3.3.1. Double Subject Constructions

Shibatani & Pardeshi (2001) discuss the notion of double subject constructions and argue that Dative subject constructions are variants of double subject constructions. They report that double subject constructions have been observed in a number of Asian languages (Japanese and Indonesian for instance) where there are two nominative subjects (or two unmarked subjects for languages with no overt case marking). Examples of Double subject constructions for Japanese are given in (133).

- (133) a. *zou-ga hana-ga nagai (koto) Japanese*
 elephant-Nom nose-Nom long (that)
 (that) an elephant has a long nose/trunk



(Shibatani & Pardeshi 2001: 331)

Sh&P (2001) argue that in (133) *nagai* (long) represents a one-place intransitive expression predicating over the NP in nominative form *hana* (nose). The clause [*hana-ga nagai*] (nose is long) is predicated of the NP in nominative form *zou-a* (elephant-Nom) creating the double subject. They argue that, in general, the sentence implies that an elephant is such that the state of affairs of ‘*a nose being long*’ obtains a true value with respect to it (Sh&P 2001:331).

Furthermore, the authors argue that although there is nothing syntactically wrong with ‘a nose is long,’ S2 in (133.b) cannot stand by itself. They argue that in double subject constructions, predicates express the state of affairs which are not “universally true” and are only true within the context of the double subject construction. That is, the large subject provides the “domain” in which the proposition ‘*a nose is long*’ receives a truth value.

As mentioned earlier, Shibatani & Pardeshi (2001) propose that Dative subject constructions are instances of double subject constructions. They argue that there is an intransitive predicate involved in Dative subject constructions that is “true within the

domain of the dative subject.” This line of argumentation implies that although dative subjects appear to require two arguments, there is actually one true argument and the other one (dative) is applied to it.

A piece of evidence that Sh&P (2001) provide for the intransitivity of dative subject constructions comes from the elliptical nature of dative subject constructions without the dative argument itself. Consider the examples in (134).

- (134) a. kuTTik’k’A wayarA nirannu *Malayalam*
 Child-Dat stomach-Nom fill(intr)-past
 The child was full
- b. wayarA nirannu
 stomach-Nom fill(intr)-past
 (Someone) was full

(Mohanani & Mohanani 1990: 54)

Sh&P (2001) state that example (134b) contains an intransitive verb *niranu* (fill) and a nominative subject and is syntactically complete. However, examples of this type are considered semantically odd and elliptical by native speakers. Sh&P (2001) argue that (134.b) does not imply that *a stomach was full* and it can only be true within the domain of a certain individual which is provided by the dative argument. Hence it is argued that mental/physiological/psychological states cannot occur without a cognizer, and that is why (134.b) is considered elliptical.

Sh&P (2001) attest that the same argument applies to possession and existential constructions. An example of a possessor³⁴ construction is provided in (135).

(135) a. malA don bhAu Ahe-t *Marathi*
 I-Dat two brothers-nom be-pl
 I have two brothers

b. don bhAu Ahe-t
 two brothers-Nom be-pl
 (Someone) has two brothers

(Mohanani & Mohanani 1990: 54)

Form (135.b) is considered elliptical since there is no cognizer (*I* in 141a) in the sentence. Sh&P (2001) argue that similar to psychological predicates, possession and existential constructions define a relation to a possessor or location which manifests in the dative argument and provides a domain for the predicate.

Sh&P (2001) explore the intransitivity of psychological verb of “liking” by providing an example from Mohanani & Mohanani (1990).

(136)a. rAm-lA sitA Awad-t-e *Marathi*
 Ram-Dat Sita-fem like-pres-fem
 Ram likes Sita

³⁴ These constructions somehow resemble structures that many analyze via possessor raising, where the dative element originates as the possessor within the NP and raises to the verb as a dative possessor. Chapter 4 includes a brief discussion on such constructions.

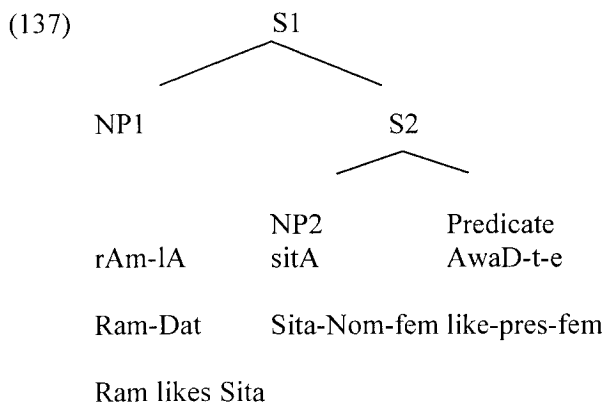
b. sitA Awad-t-e
Sita-fem like-pres-fem
(Someone) likes Sita

The verb *AwaD* (like) in (136) is the equivalent of the Japanese adjectival nominal *suki da* (like), German *gefallen*, Spanish *gustar*, Italian *piacere*, and Russian *nravitsja*. Sh&P (2001) make the assumption that these verbs, which are usually translated as ‘like’ or ‘pleasing,’ are not really transitive. They are intransitive and somehow similar to the double subject constructions, requiring a “cognizer” to refer to. Furthermore, they state the following:

“...the motive predicates in question ascribe a state to another entity, who/which causes the emotions of liking, hatred, etc., in the mind of a cognizer, the only one through whom the emotive state materializes. In these languages then someone is likeable only when someone else feels so.”

(Shibatani & Pardeshi 2001: 335)

Consequently the authors propose the following structure for dative constructions as instances of double subject constructions.



Sh&P (2001) argue that large subjects are not the argument of the lexical predicates but subjects of the clausal predicates for which they are providing domain , and that predications of this kind require a general constructional meaning that binds the two elements together³⁵. They further argue that case markers of the large subject indicate the degree of dependency of the large subject to the clausal predicate, and that this notion has a direct relation with the distribution of subject properties in the clause. Sh&P (2001) argue that in double subject constructions, subject properties are split between the two arguments (dative and nominative), and there is no precise formulation of how they are distributed between these two arguments. It may change from one language to another or even within the same language.

Sh&P (2001) believe that the higher the degree of dependency between the large subject and its predicate clause, the greater the number of subject properties that it exhibits and vice versa. For instance, dative case demonstrates a higher degree of dependency to the clause than instrumental/ablative case. Therefore a large dative subject exhibits a higher level of subject properties. This is in accordance with Kachru et al.'s (1976) observation about the degree of subjecthood in different kinds of subjects in Hindi summarized in (138).

(138) Degree of Subjecthood among Indic Languages

SI, ST < S DAT < S OBL < S PASS

(intransitive subject, transitive subject < dative subject < oblique subject < derived subject of the passive)

³⁵ In the next chapter, I propose an applicative head to implement the notion of dependency of the applied argument to the clausal predicate in Persian psychological constructions.

The authors state that there might be exceptions to this generalization as Marathi shows in the following binding pattern.

- (139) *rām-l sitæ swataha-cyæ bahINI pekshæ jæsta æwaD-t-e*
 Ram-dat Sita-Nom self-of sister that more like-pres-N
 Ram likes Sita more than his (Ram's/*Sita) sister

- (140) *ma-lA to swatahA-cyA gharAt dis-l-A*
 I-dat he-Nom self-of house-in dis-l-A
 I saw him in his/*my house

(Pandharipande 1990: 165)

In (139) the dative argument *Ram* binds the reflexive, while in (140) the nominative argument (*he-nom*) binds the reflexive. Sh&P (2001) argue that the contrast in (139-140) shows that dative constructions are not uniform in their interpretation as well as their syntactic properties even within the same language; moreover, they recognize “the degree of dependency of the large subject and the clausal predicate” as a factor contributing to this issue. That is, whether the large subject has dominance over the small subject or vice versa; whichever one does have dominance also has a greater contribution “to the realization of the state of affairs expressed in the predicate clause”.

To summarize, Sh&P (2001) discuss dative subject constructions and argue that they involve intransitive structures and the dative element is “sanctioned” by a clausal intransitive predicate. In my analysis of Persian psych constructions in chapter 4, I partially adopt two general ideas of Sh&Ps’ analysis. I will retain the idea that the dative

element is not a true argument of the verb. I will also retain the idea that the dative element is situated in a position above the remainder of the clause. However, I encode the two ideas mentioned above into a High Applicative head that takes a complete clause/TP as complement.

3.4. Categorical/Broad Subjects

Similar to the proposal by Sh&P (2001) for dative subject constructions discussed in the previous section, in this section, I introduce another analysis of certain constructions with the main theme of having a non-core argument applied to a complete clause. Heycock & Doron (2003) and Alexopoulou, Doron, & Heycock, (2003) (Alexopoulou et al. hereafter) discuss the notion of categorical subjects in Japanese, Modern Hebrew, and Arabic. They introduce Broad subjects (BS) as “initial nominative phrases which are followed by a full sentence”. Examples are in (141).

- (141) a. ruti ye-s l-a savlanut *Hebrew*
 Ruti there-is to-her paitience
 Ruti has patience
- b. ruti sof-a le-naceax
 Ruti end-hers to win
 Ruti will end up winning

(Doron & Heycock 2003:2)

In (141a) *ruti* is in nominative form and is attached to a complete clause *there-is to-her paitience*. The same situation holds for (141b).

Heycock & Doron (2003) and Alexopoulou et al. (2003) argue that BS's are the "arguments of the sentential predicate," which is a new complex property. It is argued that BS's are in A-positions without being assigned a thematic role by the lexical predicate. The authors argue that BS's are merged (and not moved) in [specTP]. BS's are considered as subjects since they exhibit some subject properties (cross-linguistic and language specific properties). Examples of BS's will be provided in page 109.

Broad subjects have been called "Multiple nominatives" or "Major Subjects" in the literature on Japanese. Heycock & Doron (2003:2) propose that these Nominative NPs are interpreted by "abstraction over a position within the clause, which is occupied syntactically by a pronoun (overt in Hebrew, null in Japanese)" without any movement of the broad subject itself. Traditionally these constructions were treated as left-dislocation (Blau 1966) among others). Following Ornan (1979) and Rosén (1977), Alexopoulou et al (2003) provide evidence to show that the initial noun phrase is not dislocated, but a syntactic subject with argument properties. To have a better understanding of these constructions and the analysis they propose, the authors provide a discussion for different kinds of left peripherals and their distinctions which is indicated below.

3.4.1. Distinctions between the Left Peripherals³⁶

Alexopoulou et al (2003) provide the following definitions and distinctions between the notions of "left-dislocation," "topicalization," "clitic-left-dislocation," and finally "broad subjects." Consider the following basic notions/assumptions.

³⁶ All the examples provided in this section, unless otherwise mentioned, are from Alexopoulou et al. (2003).

(142) **PXP**: any phrase that appears at the left periphery

RP: any element occurring within a sentence, whether clitic or not, that is

bound by the PXP

(Alexopoulou et al 2003: 2)

- Left dislocation

Cinque (1977) mentions English constructions that he calls “hanging topic” constructions. In Cinque (1990) they are called Left Dislocations (LD). Examples are in (143-144).

(143) A man like that, I'd run a mile before I trusted him with a secret.

(144) *From a man like that, I'd run a mile before I accepted a gift from him.

The characteristics Cinque assigns to left dislocated constructions follows.

- a. A nominal PXP including PP, AP, or VP (Cinque 1990: 58, Cinque 1977).
- b. An RP that *can* be a strong pronoun.
- c. Restriction to root clauses. The construction may not appear in embedded clauses
(see the article for some exceptions).

(Alexopoulou et al 2003: 2)

-Topicalization

Topicalization is illustrated below in English and Modern Greek (Alexopoulou & Kolliakou 2002):

(145) Shoes like those I would never wear.

(146) a. **tin** **parastasi** skinothetise o karolos kun
 the-Acc show directed-3s the-Nom Karolos Kun
 Karolos Kun directed the show

b. **tetia paputsia** de tha foruse pote i maria
 such shoes not would wear-3s never the-Nom Maria
 Maria would never wear such shoes

(Alexopoulou et al 2003:4)

- *Characteristics:*

- a. PXP is not necessarily nominal.
- b. No pronominal RP.
- c. Not strictly limited to root clauses (impossible in finite clauses).
- d. Focal stress is not on PXP

-Clitic Left Dislocation (CLD)

CLD has been reported in Italian, French, Greek, and Lebanese Arabic. Examples are in (147-148).

(147) In quella citta, non **ci** sono mai stato. (*Italian*)
 in that town not there am ever been
 I have never been in that town

(148) fakart ?inno naadya seef-**a** Kariim mbeerih (*Arabic*)
 thought that Nadia saw-her Karim yesterday
 I thought that Karim saw Nadia yesterday

- *Characteristics:*

- a. PXP is not necessarily nominal
- b. RP is a *clitic* pronoun.
- c. Not restricted to root clauses.
- d. Focal stress is not on PXP

- **Broad Subjects**

Doron and Heycock (1999, 2003) and Alexopoulou et al (2003:2) argue for the existence of a further type of PXP, *Broad Subjects* in Hebrew, Japanese, and Arabic. Examples are in (149-151).

(149) **ruti** yes I-a savlanut

Ruti there-is to-her patience

Ruti has patience

(150) **mary-ga** kami-ga nagai (koto)

Mary-Nom hair-Nom long (fact)

Mary has long hair

(151) **?al-bayt-u** ?alwaan-u-**hu** zaahiyat-un

the-house-Nom colours-Nom-its bright-Nom

The house has bright colours/The house, its colours are bright

- Characteristics:

- a. PXP nominal and in the nominative case (where this can be determined).
- b. Not restricted to root clauses.
- c. May bear focal stress.

3.4.2. Arguments for Subjecthood of BS

Doron and Heycock (1999, 2003) and Alexopoulou et al (2003:2) argue that BSs are located in [SpecTP] and have the properties normally associated with subjects in A-position rather than properties of left-dislocated constituents in A-positions. They provide the following reasons to argue for the subjecthood of BS.

- Case Marking

BSs in Japanese appear with *-ga* (nom) and not *-wa* (Top) marker.

The examples below show that Japanese (152) is different from topicalized elements which are marked by the topic marker *-wa*.

(152) a. mary-**wa** kami-ga nagai (*Topic*)

Mary-Top Hair-Nom long

Mary has long hair

b. john-**wa** kuruma-ga seibihuryoo na

John-Top car-Nom ill-conditioned is

John's car is ill-conditioned

- ECM

Alexopoulou et al (2003) argue that BSs can undergo ECM and alternate between Nom. and Acc. marking just as narrow/regular subjects can. This is shown in (153).

- (153) dhana-tu l-bayt-a ?alwa:n-u-hu za:hiyat-un *Arabic*
 Thought-1S the-house-Acc colors-Nom-its bright-Nom
 I believed the house to be of bright colors

The fact that (the house) appears with accusative case differentiates Broad subjects from dislocated and topicalized elements. Example (154) shows the impossibility of topicalized elements undergoing ECM.

- (154.a) dhanan-tu hind-an yuqabilu-**ha** t-tullabu *Arabic*
 thought-1sg Hind-Acc. meet(3M)-her the students
 I believed Hind to have been met by the students

- (154.b) *dhanan-tu hina-an yuqabilu t-tullabu
 thought-1sg Hind-Acc. meet(3M) the students
 I believed Hind to have been met by the students

In (154.b) the lack of the clitic *-ha* on the verb identifies *Hind* as a topicalized element and makes the ECM construction ungrammatical. (154.a) contains a broad subject *Hind* and undergoes ECM.

- Coordination

Doron and Heycock (1999, 2003) and Alexopoulou et al (2003:2) argue that in coordination, a single noun phrase may be “shared” between two conjuncts, in one it functions as the Broad subject and in the other it functions as a narrow subject. An Arabic example illustrating this situation is shown in (155).

(155) sayya:rat-i [[lawn-u-ha za:hiyy-un] wa- [maftu:Hat-un min al-a'la]]

car(F)-my colour(M)-nom-its bright(M)-nom and open(F)-NOM from above

My car has bright colours and is a convertible

It is argued that since adjectival predicates (AP) in Arabic do not license *pro*-drop, the AP *maftu:Hat-un min al-a'la* (from above) in (155) cannot be a sentence with a null subject. This confirms the conjunction of the clause with BS (my car has bright colors) with the clause having a canonical subject (opens from the above).

A Hebrew example is provided in (156) where the clause with BS (Ruti has patience) is conjoined, sharing the same subject with the clause that has canonical subject (Ruti is successful at solving crossword puzzles).

(156) ruti yeS l-a savlanut ve-macliXa be-pitron taSbecim

Ruti there-is to-her patience and-is-successful at-solving crossword puzzles

Ruti has patience and is successful at solving crossword puzzles.

(Doron & Heycock 2003: 3)

Doron & Heycock (2003) argue that in (156) the predicate *macliXa be-pitron taSbecim* (is successful at solving crossword puzzles) is a present tense VP and not a sentence with a

null subject since present tense VPs do not license *pro*-drop in Hebrew. Therefore *Ruti* satisfies subject properties.

- Non-peripheral position

Doron and Heycock (1999, 2003) and Alexopoulou et al (2003:2) argue that BSs always appear to the left of the narrow/regular subject. Furthermore, similar to narrow subjects, BSs appear to the right of an adjunct. Doron & Heycock (2003) provide examples like (157) in Hebrew where a Broad Subject may occur to the right of an adjunct while a left-dislocated phrase cannot.

- (157) be-anglit kol miSpat yeS l-o nose
 In-English each sentence there-is a-subject
 In English each sentence has a subject

- (158) a. *ba-misrad haze dani dina xikta l-o
 In-office this Dani Dina waited for-him
 In this office, Dani, Dina waited for him

- b. dani ba-misrad haze dina xikta l-o
 Dani in-office this Dina waited for-him
 Dani, in this office Dina waited for him

In (157) a broad subject appears after an adjunct which is grammatical while in (158.a) it is not possible for a left dislocated element to appear after an adjunct. (158.b) is grammatical since the left dislocated element is to the left of the adjunct.

- Wh-formation and Quantified subject

Doron and Heycock (1999, 2003) and Alexopoulou et al (2003:2) argue that similar to narrow subjects, BSs can be *wh-phrases* and *quantified elements* while a usual assumption in the literature is that topicalized and left-dislocated elements may not. In (159.a) the *wh*-element *who* appears in the position where the BS appears. In (159.b) the quantifier *no-one* stands in the location reserved for BS and the sentence is grammatical.

(159) a. mi yeS l-o zman la-dvarim ha-ele
 Who there-is to-him time for-the-thing-s the-these
 Who has the time for these things?

b. af no eyn be-yad-o la'azor le-rina
 no one it-isn't in-power- to help Rina
 No one has it in his power to help Rina

- Reflexive Binding

Doron and Heycock (1999, 2003) and Alexopoulou et al (2003:2) claim that BSs can bind reflexives, which indicates that they are in an A-position. Topicalized and left-dislocated elements which are in A-positions cannot bind reflexives. The Japanese example (160) illustrates this characteristic.

Japanese

(160) sono hito_i-ga kodomo-ga jibun_i-yori atama-ga ii (koto)
 that person_i-Nom child-Nom self_i-than head-Nom good (fact)
 That person_i [is such that his/her] child is more intelligent than him_i/her_i

In (160) the BS *sono hito-ga* (that person) can bind *jibun_i* (self) and this binding property is an A position/subject property.

Thus far, the similarities between BS's and regular/canonical subjects have been explored. Below is a description of factors that differentiate BSs from regular/canonical subjects.

3.4.3. Differences between BS's and Narrow/Regular Subjects

Doron & Heycock (1999, 2003) and Alexopoulou et al (2003) further argue that the following factors differentiate BS's from narrow subjects.

- BSs are *Merged* and not *Moved*

One of the main properties of subjects is the fact that they are moved from their original position/situ into [spec TP]. The authors further claim that since movement of a subject would entail checking/valuing of Φ -features and consequently verbal agreement, and given that BSs do not induce verbal agreement, they are not considered a product of movement. An Arabic example is given in (161).

(161) a. ?aT-Tulla:b-u yuqa:bilu-una hind-an *Arabic*
 the-students(M)-Nom meet(3M)-P Hind(F)-Acc
 The students are meeting Hind

b. **hind-un** yuqa:bilu-ha T-Tulla:b-u
 hind(F)-Nom meet(3M)-her the-students(M)-Nom
 The students are meeting Hind.

Literally: Hind, the students are meeting her

(Doron & Heycock 1999: 12)

The fact that *hind-un* (3sgF) in (161.b) does not induce agreement on the verb *yuqa: bilu-ha* (3sgM) suggests that the BS has not been moved to the present position and has been base generated/merged in [SpecTP]. Narrow subjects though, as shown in (161.a), induce agreement on the verb since they are the produce of a movement³⁷.

- Idioms

The authors argue that a standard test to differentiate between control and raising structures is to apply them to idiomatic constructions. Idiomatic phrases can maintain their idiomatic meaning once they are raised but lose their idiomatic meaning when acting as controllers. This is shown below.

- (162) a. The cat seems to be out of the bag. *Idiomatic*
 b. The cat tried to be out of the bag. *Literally only*

Following Ura (1996) who applies this test to multiple subject constructions, Doron & Heycock (2003) apply this test to constructions with broad subjects. Their predication is that if constructions with BS's involve raising they are expected to maintain their idiomatic meaning. The examples below can be used as evidence against the raising of BS since only literal readings are possible. Consider the Hebrew idiom to *blunt someone's teeth* meaning *to scold someone*.

- (163) kvar hikheti et sin-av sel dani pe'amim rabot *Hebrew*
 already blunted(1sg) Acc teeth-his gen. Dani times many
 I have scolded Dany many times (literally)

(Doron & Heycock 1996: 20)

³⁷ This is not necessarily true as we saw in chapter 2 that Icelandic quirky dative subjects are seen as the product of movement (Sigurðsson among others), and still they do not trigger agreement on the verb.

The phrase *sin-av sel dani* (Dani's teeth) can undergo A-movement as shown below for a passive construction.

- (164) *sin-av sel dani kvar hukhu pe'amim rabot*
 Teeth-his Gen Dani already were-blunted times many
 Dani's teeth have been blunted many times (literally)

However, it is argued that the same phrase *sin-av sel dani* (Dani's teeth) cannot retain its idiomatic interpretation as a Broad Subject.

- (165) *sin-av sel dani kvar hikheti ot-an pe'amim rabot*
 Teeth-his gen Dani already blunted(1sg) Acc-them times many
 Danis's teeth, I have blunted them many times. *Literal only*

The fact that the idiomatic meaning in (165) is lost indicates that there was no movement involved.

- Lack of Scope Ambiguity

The authors claim that BSs have scope over a quantifier in the predicate while narrow subjects can be construed under the scope of a quantifier in the predicate (Heycock & Doron 1999: 20). The Arabic example in (166) illustrates what happens to narrow subjects while (167) illustrates broad subjects.

Narrow subject

- (166) fata:t-un Tawi:lat-un raqasat ma'a kull-i Sa:bb-in
girl-Nom tall-Nom danced(3FS) with every-Gen boy-Gen
A tall girl danced with every boy. *Ambiguous scope*

Broad Subject

- (167) fata:t-un Tawi:lat-un 'arraftu-ha bi-kull-I Sa:bb-in
girl-Nom tall-Nom introduced(1S)-to-her every-Gen boy-Gen
I introduced all the boys to a (specific) tall girl.
(Heycock & Doron 1999: 21)

It is argued that *tall girl* is base-generated inside the predicate in (166) and then moves to [SpecTP]; therefore the indefinite subject can have two scopes in relation to the quantifier in the VP. This is supported by the fact that the sentence has two readings: in one there was only one *tall girl* who danced with all the boys; in the other reading, for each boy there was a different *tall girl* as a dance partner. In (167) where there is a BS, on the other hand, it can be seen that the *tall girl* must have wide scope over the quantifier and consequently there is only one reading.

- Interpretation

Doron and Heycock (1999, 2003) and Alexopoulou et al (2003) claim that within the discourse structure, BSs (similar to narrow subjects) may be part of focus, whereas LD constituents have a fixed pragmatic role of topic. They believe that there is a relation of predication between BSs and the clause following it; in contrast, the clause following an LD element is a full proposition, not just a property.

To summarize, the authors argue that BSs are initial nominative phrases which are followed by a complete sentence, rather than a predicate with an open position. Broad subjects are in A-positions without having a thematic role since they are not the result of movement and are interpreted by “abstraction” over a position within the clause, which is occupied syntactically by a pronoun. However, the authors do not discuss the licensing of multiple instances of nominative case and leave this issue for further research. Similar to the analysis of dative subject constructions discussed in the previous section, I retain the idea from the analysis of BSs that BSs are not arguments of the verb but somehow are added to a full clause. Also, I retain the idea that unlike topicalized or left-dislocated elements, in the BS constructions the sentence initial nominative element displays subject properties. Unlike the analysis of BSs, I will provide evidence to demonstrate that the extra arguments in Persian constructions to be discussed in chapter 4 are not located in [Spec TP] but belong to a higher position.

The next section provides an analysis for dative subjects in reflexive feel-like constructions in south Slavic/Albanian which involves the notion of applying an argument to a complete clause as well.

3.5. Dative Subject Construction in South Slavic/Albanian

Another instance of assigning an argument to a clausal predicate is the study of Rivero & Sheppard (2003)³⁸ and the consequent works by Rivero (2003-2004)³⁹ for west Slavic patterns traditionally known as involuntary state constructions for the so called ‘feel like’

³⁸ Rivero & Sheppard (2003) also discuss similar constructions in west Slavic languages (Polish and Czech) which do not have the ‘feel-like’ meaning. They propose that in west Slavic the dative was also predicated from the full clause, but the meaning was not psychological unlike South Slavic. The meaning in Polish /Czech is a lack of control on the part of the dative. Nonetheless, the syntactic structure of all languages was the same: the high applicative with the dative and a full TP as a complement.

³⁹ See Žaucer and Marušić (2005) for a different account with a bi-clausal structure for the south Slavic type. They propose a null psychological verb in the matrix clause and a complement clause containing the overt verb.

constructions with a dative element in subject position and a corresponding reflexive clitic for South Slavic and Albanian. Two examples of the south Slavic type with the psychological or feel-like interpretation are in (168-169).

(168) Na Ivan mu se cetjaja knigi. *Bulgarian*
 Ivan-Dat he.Dat **Refl** read-Imp.3PL books
 John felt like reading books.

(Rivero 2004: 3)

(169) Janezu se je delalo dobro. *Slovenian*
 Janez.Dat.Mas SE AUX.3PL worked.sg.Neut. well
 Janez felt like working well/Working came easily to Janez

The core proposal is that the dative element in these constructions is nonselected (i.e., not part of the argument structure of the verb), hence not intrinsic to the argument structure of the verb.

Rivero and Sheppard (2003) argue that in (168-169) the reflexive clitic *SE* realizes an indefinite pronoun, which combines an existential quantifier and a variable. Rivero & Sheppard (2003) point out that in (168-169) the reflexive element *SE* takes nominative case and plays the role of the subject of an active sentence. Being a defective pronoun, *SE* has a single [+human] feature, lacks gender, number, and person features, and gets the interpretation ‘one’ or ‘people.’

Furthermore, Rivero & Sheppard (2003) propose that the operation they call ‘Dative existential Disclosure’ connects in semantics this formally represented indefinite pronoun argument to the nonselected dative. As stated above, Rivero & Sheppard (2003) argue that the dative element in these constructions is a syntactic adjunct, independent of the

Rivero & Sheppard (2003) argue that in the syntax the dative sits in the specifier position of a projection that is an adjunct as in (170). This adjunct has an empty head that receives a modal interpretation in the semantics.

Janez_{DAT} REFL AUX dance

Rivero (2003-2004) refines this analysis and proposes that the syntactic phrase hosting the dative argument in Slavic is what could be called a "Super-high" Applicative Phrase as in (171). As stated, the applicative head is null but contains an interpretable feature, which in semantics is the compositional basis of the 'feel-like' interpretation in south Slavic.

(Rivero 2003: 485)

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To summarize, in the involuntary constructions of Slavic and Albanian, Rivero (2003) considers the dative as the Spec of a high applicative and the reflexive element *SE* as a signal of a sort of free variable in the component of this applicative. Consequently, the dative is not a core argument of the verb. Rivero (2003) argues that involuntary state constructions contain two parts: a passive/impersonal core, which is a TP, and a dative element that sits in a high applicative phrase which takes the former as a complement. The impersonal/passive TP core contains an argument that counts as a free variable and the dative in the high applicative is the constituent that binds this variable.

The notions that I retain from Rivero's analysis discussed above, are the high applicative projection hosting the "subject-like" constituent, which is not a true argument of the verb, and a full clause as the complement of the high applicative head.

The three analyses I reviewed in the above chapters share three major themes that I retain in my analysis of Persian psychological verbs in the next chapter: (a) the general idea that there is a higher phrase holding the experiencer-like element; (b) the idea that the experiencer is not a true argument of the verb; and (c) the idea that below the higher phrase with the experiencer, there is a complete clause as complement.

3.6. Summary

In this chapter, I reviewed some recent proposals on psychological constructions in a large variety of languages, focusing mainly on class III or *piacere* type verbs. I first discussed proposals to the effect that experiencers are mental locations/goals/possessors. I then turned to recent analyses for Dative subject constructions in south Asian languages, so called Broad Subjects (in Hebrew, Arabic, and Japanese) and Dative subject constructions in Slavic/Albanian. The principal theme these analyses based on different language families had in common was the notion that experiencers are not core

arguments of the verb. In this view, experiencers sit in a high projection that dominates the reminder of the structure and are licensed by the relation they bear to such a structure, which is a complete clause/clausal predicate/sentential predicate. The implication of these analyses is that subject properties in these constructions may be split between more than one element. I now turn to the study of Persian psychological constructions using the ideas discussed in this chapter as a background.

4. Psychological verbs in Persian and Applied Arguments

4.1. Introduction

In this chapter, I study constructions in Persian that contain what I call psychological verbs. They always involve involuntary expressions of psychological/physical states and exhibit agreement restrictions. I propose that these constructions involve applicative heads and applied arguments. The principal idea is that the experiencer is not a core argument of the verb; rather, it is introduced by a new category of applicative, a Super High applicative head. Moreover, the theme subject contains a possessor which is applied to the structure as an extra argument and by a low applicative head.

In order to have a better understanding of my analysis on Persian psychological verbs, I first introduce the notion of ‘Applicative Phrases’ and then discuss Persian psychological constructions.

4.2. Applied Arguments

Based on earlier works on Bantu languages by Baker (1988a-1996), Bresnan & Moshi (1993), and Marantz (1984-1993), Pylkkänen (2002) introduces the notion of Applicative head as a syntactic head whose function is to license an argument DP (applied argument) which is not a true argument of the verb. Pylkkänen argues that cross-linguistically there are two kinds of applicatives⁴⁰ which are differentiated semantically and syntactically by the type of complement they take (Marantz 1984, Baker, 1988, Pesetsky, 1995, among others): High applicatives where the applicative head denotes a thematic relation between

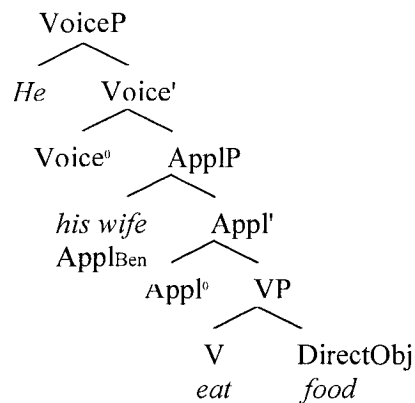
⁴⁰ See also Diaconescu (2004) for an analysis of Romanian applicative constructions.

an individual and an event⁴¹; and Low applicatives, where the applicative head denotes a transfer of possession relation. The structures are given in (172).

(172)

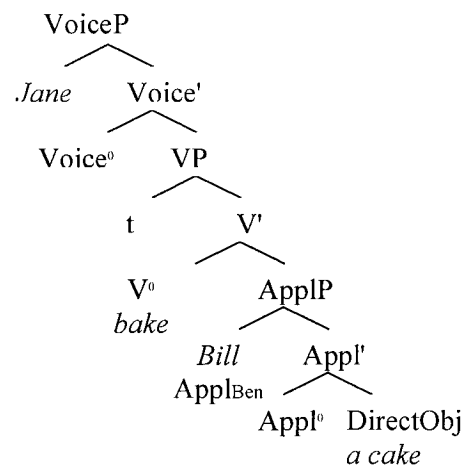
a. HIGH APPLICATIVE (Chaga)

He is eating food for his wife



b. LOW APPLICATIVE (English)

John baked Bill a cake



(Pylkkänen 2002: 10)

As previously mentioned, Pylkkänen (2002) argues that high applicatives relate a DP to an event. They license the applied argument DP in a position external to the vP, similar to the licensing of external arguments. The structure in (172) contains a VoiceP and the subject is located in its spec (Kratzer 1996). It is argued that the high applicative head and voice both add a participant to the event by being added to the event vP. An example of a high applicative with a static verb in Albanian is in (173).

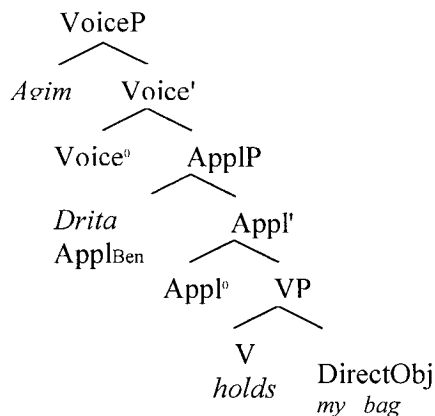
⁴¹ Pylkkänen (2002) builds on Marantz's (1993) hypothesis that applicative affixes are elements which take an event as their argument and introduce an individual which is thematically related to that event.

- (173) Agimi I mban Drites çanten time
 A_{NOM} DAT.CL holds Drita_{DAT} bag_{ACC} my
 Agim holds my bag for Drita

(Pylkkänen 2002: 26)

In (173) the applied argument *Drita* is a benefactive licensed by an applicative head below VoiceP where the nominative argument is introduced.

(174)



(175) Semantic interpretation of High Applicatives

a. **High Appl:** $\lambda x. \lambda e. \text{APPL}(e, x)$

(collapsing APPL_{BEN}, APPL_{INSTR}, APPL_{LOC} and so forth)

(Pylkkänen 2002: 21)

Pylkkänen argues that low applicatives relate two individuals to each other. A low applicative head takes an object DP (theme) as its complement and relates it to the DP licensed in its specifier (applied argument). The applicative phrase then combines with the verb. She proposes that the low applicative head denotes a relation of transfer of possession where the higher DP can be either the *recipient* (DOC) or the *source*

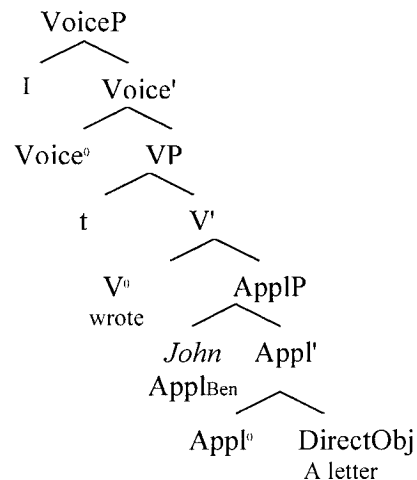
(possessor raising constructions) of the lower theme DP. She divides low applicative heads into two sub-types: *LowAppl-TO* (176) and *LowAppl-FROM* (177).

Pylkkänen considers the double object construction (DOC) as an instance of low applicative construction in which there is a transfer of possession. In the structure of *LowAppl-To* in (176), the indirect object is an intended *recipient* of the direct object.

Low recipient applicative (English)

(176) I wrote John a letter. *I wrote a letter and the letter was to the possession of John.*

(Pylkkänen 2002: 19)



An example of *LowAppl-FROM* is in (177). These constructions have been considered as "Possessor dative constructions" in the literature and have been argued to differ from the double object construction (Landau, 1999, among others). Pylkkänen considers such examples as instances of low applicatives where the directionality of the applicative relation is *FROM* rather than *TO* (which was the case for DOC).

Low source applicative: Korean

- (177) Totuk-i Mary- hanthey panci-lul humchi-ess-ta
thief-Nom Mary-Dat ring-Acc steal-Past-PLAIN

The thief stole a ring from Mary/The thief stole Mary a ring. *The thief stole a ring and it was from Mary's possession'*

(Pylkkänen 2002: 21)

The lexical entries of low recipient and source applicatives are given below.

(178) Semantic interpretation of low Applicatives:

b. **Low-Appl-TO** (Recipient applicative):

$\lambda x. \lambda y. \lambda f \langle e \langle s, t \rangle \rangle. \lambda e. f(e, x) \ \& \ \text{theme}(e, x) \ \& \ \text{to-the-possession}(x, y)$

Low-Appl- FROM (Source applicative):

$\lambda x. \lambda y. \lambda f \langle e \langle s, t \rangle \rangle. \lambda e. f(e, x) \ \& \ \text{theme}(e, x) \ \& \ \text{from-the-possession}(x, y)$

(Pylkkänen 2002: 21)

To sum up, Pylkkänen argues that that low applicatives relate a *recipient* or a *source* to an *individual* which is the internal argument of a verb and imply a dynamic relation of transfer possession; high applicatives relate an *individual* to an *event*.

McGinnis (2001) expands Pylkkänen's classification of Applicative constructions based on Chomsky's 'Derivation by Phase.' She proposes that the different semantic properties of applicative heads affect not only phrase structure, but also *phase* structure. That is, different XPs may count as phases depending on whether a clause contains ApplH, ApplL, or neither (McGinnis 2001: 7). She observes that the distinction between high and

low applicatives cannot be reliably distinguished based on the *applicative marking* or *morphological case*. For instance, applicatives marked by an overt applicative morpheme may be high (Kinyarwanda and Georgian) or low (Kinyarwanda). Moreover, applicatives not marked by an overt applicative morpheme may also be high (Italian experiencers) or low, as in the English benefactives. Also, with respect to case marking, applicatives whose applied argument has Dative morphological case may be high as Albanian benefactives or low Icelandic benefactives and applicatives whose applied argument lacks dative morphological case may be high (Kinyarwanda benefactives) or low (English benefactives)⁴².

Adopting Pykkänen's proposals on phrase structure and semantics of the two types of applicatives and Chomsky's Phase theory (1999, 2000) discussed in section 1.2., McGinnis (2001) states the generalization in (179) and makes the distinction between *Event Applicatives* (AppIE) and *Individual Applicatives* (AppII) (high versus low applicatives in Pykkänen's proposal). In McGinnis's approach, AppIE heads a phase since it is the sister of VP and (perhaps in combination with VP) assigns a theta-role to the applied argument. By contrast, AppII is not a sister of VP, so it does not head a phase. She argues that in the latter case, as elsewhere, *v* heads a phase if it has an argument generated in its specifier. Assuming that no argument is generated in the specifier of unaccusative and passive *v*, they also do not need head phases.

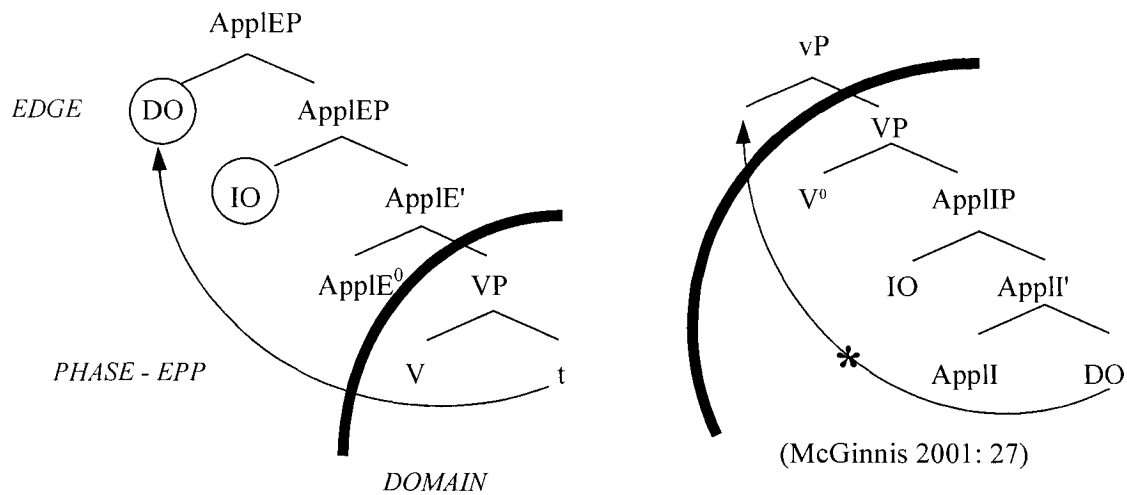
(179) The sister of VP heads a phase if an argument is generated in its specifier.

This account explains how in a passive AppIE, both the DO and the applied object can raise to the subject position. The structures are given in (180).

⁴² See McGinnis (2001) for examples.

(180) a. Event Applicatives (AppIE)

b. Individual Applicatives (ApplI)



In an AppIE (180a), only the lower object (the DO) is embedded within the domain of the AppIEP phase, so it can check an EPP feature which is added to this phase by raising to an additional (specAppIEP). On the other hand, in an ApplI (180b), both objects (the applied object and the DO) are within the domain of the vP phase; therefore if only one phase-EPP feature is added for the passive construction, it can be checked only by the higher, applied object. In the discussion of Persian psychological verbs in this chapter, I adopt Pytkänen (2002) and McGinnis's phase distinction on applicatives and propose a new category of applicatives: the Super High applicative head, which, similar to high applicatives, takes an event complement, with the difference of having a Tense requirement. The tense requirement causes the Super High applicative to constitute a strong phase.

Another recent work on applied arguments is the study of Spanish dative clitics by Cuervo (2003). Building on Pytkänen's proposal for the existence of high and low applicative constructions, Cuervo (2003) argues that Spanish clitic doubled dative

arguments are instances of applicative constructions. She proposes that in Spanish the clitic doubled dative arguments are not true arguments of the verb and are licensed by applicative heads. The applicative head assigns inherent dative case to the argument it licenses, and the dative clitic is the spell-out of the applicative head. Cuervo (2003) argues that dative arguments in Spanish are determined by the category of their complements (DP, vP in the spirit of Pylkkänen), the position they are licensed (as a specifier or complement of a root), and the type of event expressed by the vP (e.g., stative, dynamic, activity, causative, or inchoative). She assumes that verbs are formed in the syntax by the combination of a lexical *root* and a verbalizing head “little *v*” and may be decomposed into three types of primitives: *vDO*, *vGO*, *vBE*.

Without discussing the complete list of applicative datives that Cuervo (2003) explores for Spanish, I focus on the ones that have similarities with Persian structures that I will discuss in the next section.

4.2.1. Applicatives and Psych Verbs

Cuervo (2003) introduces unaccusative psychological predicates in Spanish as in (181-82). She proposes that this type of applicative combines a dative argument with stative predicates that express a psychological experience (*gustar* to like) or a ‘manner’ of existence (*faltar* to lack) . She argues that these datives are interpreted as *experiencers*, *locations*, or *possessors*.

Unaccusative psychological predicates → Experiencer

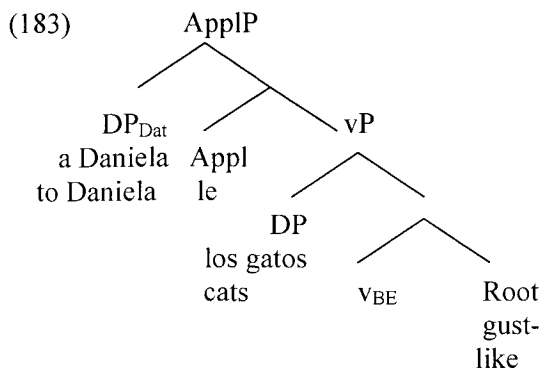
- (181) A Daniela le gustan los gatos
 Daniela.Dat CL.Dat like.PL the cats
 Daniela likes cats/To Daniela appeals the cats

(Cuervo 2003:30)

- (182) Al libro le faltan las tapas
 the book.Dat CL.Dat lack.PL the covers
 The book has no covers/ is missing its covers

(Cuervo 2003:163)

Unlike previous studies that have identified these experiencer/locative datives as the subject (Masullo 1992, Fernández Soriano 1997, Cuervo 1999, among others), Cuervo (2003) argues that in (181) the dative DPs *Daniela* and *Al libro* (the book) are introduced by applicative heads and are not an argument licensed by the verb⁴³. She argues that the subject-like properties that these DPs exhibit derive from their being the higher argument in the structure. The source of the feeling in *gustar* (to like) comes from the theme which she calls the ‘inner’ subject *los gatos* (the cats) in (183). Accordingly, she provides the following structure for (181).



⁴³ The idea of considering dative experiencers in Spanish as applied arguments and not the arguments of the verb is in par with Shibatani & Pardeshi's (2001) proposal for dative subject constructions in South Asian languages discussed in chapter 4.

The dative DP in (183) is merged higher than the nominative DP theme and asymmetrically c-commands it (as argued in discussion of psych verbs by B&R in 3.1).

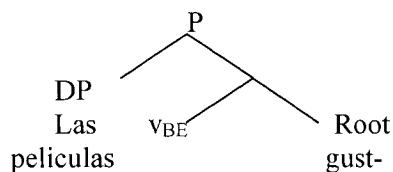
Cuervo (2003) points out that it is possible for most psychological verbs of *piacere* type in Spanish to appear *without an experiencer*, and in that case the sentence expresses a property of theme.

(184) Psych predicates without the experiencer

- a. Las películas japonesas gustaron mucho
 [the movies Japanese].Nom pleased.PL a-lot

The Japanese movies were very much liked/Many people liked the Japanese movies

b.



(Cuervo 2003: 167)

She states that as there is no structural accusative case in unaccusatives, these predicates have a theme subject. Therefore, she argues that the notion of subject of predication, is distinct from the notion of subject as an external argument. Although unaccusatives do not project an external argument, their internal argument can be licensed as a subject (specifier) or as an object (complement).

She further expands the idea that the theme of psychological predicates is a subject and that there is a predication relation between the theme and the predicate:

“The idea that the theme of psychological predicates is a subject (i.e., that there is a predication relation between the theme and the predicate), and that the experiencer is external to the predication is further supported by the syntactic and semantic parallels between psychological predicates and predicates built by the combination of copular or quasi-copular verb (i.e., stative light verbs) and an adjective that ‘become’ psychological predicates when a dative argument is added. This is the case of *ser* ‘be’, *parecer* ‘seem’ and *resultar* ‘turn out to be’. Sentences in (12) express a property of the books or the movies, and it is hardly controversial that there is a predication relation between the nominative argument and the predicate (formed by a verb and an adjective).”

(Cuervo 2003: 168)

- (185) a. Esos libros son /parecen importantes
 those books.Nom are.PL /seem.PL important
 Those books are important

In (185) the books are in nominative and the sentence expresses certain property of the books through the verbs *son/parecen* (are/seem).

4.2.2. Light Verbs in Spanish Psych Verbs

As Cuervo (2003) states, it is very frequent for a Spanish psych verb to combine a noun that names the ‘feeling’ with a light verb. An example is in (186).

(186) Daniela tiene mucho sueño /hambre /frío /miedo /ganas

Daniela.Nom has a-lot-of sleep /hunger /cold /fear /cravings

Daniela is very sleepy/ hungry/ cold/ afraid/craving for something

(Cuervo 2003: 170)

In (186) the subject experiencer *Daniela* undergoes a state which is expressed by a bare noun as the object of *tener* (to have). The psychological predicate in (186) is the combination of *sueño /hambre /frío /miedo /ganas* (hunger/cold/fear/cravings) and the light verb *tener* (to have).

The source of the feeling is not stated in structures like (186). However, forms like (187) express the source or the ‘stimulus’ of the psychological feeling or state as well.

(187) a. A Daniela le dan sueño /náuseas /frío las películas de Greenaway

Daniela.Dat CL.Dat give.PL sleep /nausea /cold the movies of Greenaway

Greenaway’s movies make Daniela sleepy/ nauseous / cold

4.2.3. Possessor Applicatives

Following Pykkänen (2002), Cuervo (2003) considers possessor dative constructions as instances of low applicatives. Possessor datives are datives that are interpreted as the possessor of the theme object. They are arguments related to the theme object and bear no direct relation to the verb or event. An example is in (188).

(188) Pablo le besó la frente a Valeria
 Pablo CL.Dat kissed the forehead.Acc Valeria.Dat
 Pablo kissed Valeria on the forehead/Pablo kissed Valeria the forehead
 (Cuervo 2003:63)

In (188), *Valeria* is the inalienable possessor of the forehead. The action expressed by the verb falls on the forehead through the possessive relation, on Valeria.

Possessor datives have been argued to be semantically licensed as arguments of the direct object rather than of the verb. Possessor datives have been analyzed as cases of *possessor raising* by Demonte (1995) and Landau (1999). They have been analyzed as instances of control structures by Borer & Grodzinsky (1986) and abstract incorporation by Masullo (1992). Pylkkänen (2002) argues that (Hebrew) possessor datives are an expression of the (dynamic Source) low applicative. Cuervo (2003) maintains Pylkkänen's analysis about possessor datives but departs from her when she argues that low applicatives appear only in the context of dynamic transfer. Cuervo (2003) argues that in Spanish, depending on the verb that embeds the low applicative, possessor datives may be embedded under a stative predicate (*admirar* 'admire,' *envidiar* 'envy,' *conocer* 'know') (as in 189.a) or a activity verb (*lavar* 'wash,' *besar* 'kiss,' *mirar* 'look at,' *sostener* 'hold') (as in 189.b).

She argues that Possessor datives in the first set of verbs above are applied arguments licensed by a low applicative head with a static meaning. Cuervo (2003) argues that these applicative heads are heads that establish a static relation of possession rather than a dynamic one. The dative argument does not get or lose anything as a result of the event; rather, it is just a participant in the event as the possessor of the theme DP.

(189) a. Valeria le sacó una foto a Gabi
 Valeria CL.Dat took-out a picture.Acc Gabi.Dat
 Valeria took a picture from/of Gabi/Valeria took Gabi a picture

b. Pablo le admira la paciencia a Valeria
 Pablo CL.Dat admires the patience.Acc Valeria.Dat
 Pablo admires Valeria's patience (Lit: Pablo admires Valeria the patience)

(Cuervo 2003: 74)

Cuervo (2003) states that the dative *a Valeria* in (189.a) is understood as the *possessor* of the patience, the person whose patience Pablo admires.

Cuervo (2003) argues that syntactically and morphologically, dative possessors are expressed exactly as *recipients* and *sources*⁴⁴ are; they exhibit the same properties in terms of case, hierarchical position, word order, and spell-out of the head. Semantically, the dative argument is related directly to the object and not to the verb. It makes sense, therefore, to hypothesize that they have the same structure as low applicatives introduced by Pylkkänen. Hence, Cuervo (2003) introduces *Low-Appl-AT* as below.

(190) **Low-APPL-AT** (Possessor applicative):

$\lambda x. \lambda y. \lambda f \langle e \langle s, t \rangle \rangle. \lambda e. f(e, x) \ \& \ \text{theme}(e, x) \ \& \ \text{in-the-possession}(x, y)$

(Cuervo 2003: 73)

⁴⁴ These are the two low applicatives introduced by Pylkkänen (2002).

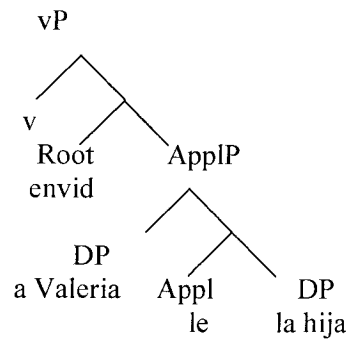
Cuervo (2003) argues that the difference between a Genitive construction and an Applicative construction is that there is a direct situation between two arguments and the combination of the two is in relation to the verb itself. Cuervo (2003) provides the following examples where (191a) demonstrates an instance of low-applicative construction and (191b) demonstrates a genitive construction.

- (191) a. Pablo le envidia la hija a Valeria
 Pablo CL.Dat envies the daughter.Acc Valeria .Dat
 Pablo envies Valeria the daughter
- b. Pablo envidia a la hija de Valeria
 Pablo envies [the daughter of Valeria].Acc
 Pablo envies Valeria's daughter

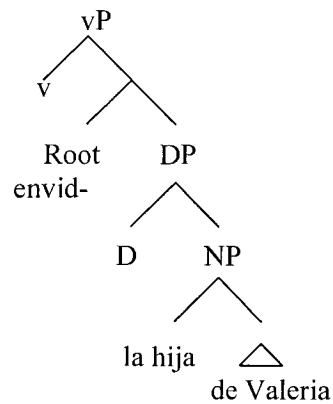
(Cuervo 2003: 75)

In both (191a.b.) Cuervo (2003) argues that *Valeria* is related to the theme object. The difference is in the relation between *Valeria* and the verb. In the genitive construction (191b), *Valeria* is part of the theme object (*Valeria's daughter*) and this constituent is not related to the verb at all. In the dative construction (191a), however, *Valeria* is one of the arguments that, after combining with the theme object, relates to the verb as its complement. The structures of the sentences in (191) are represented below.

(192) a. Possessor dative construction



b. Genitive construction

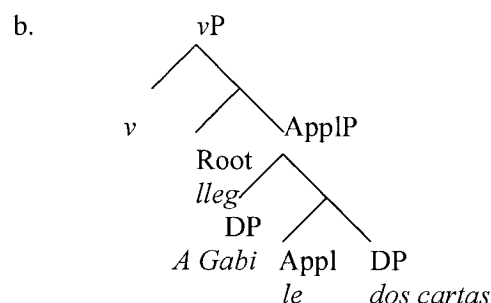


Cuervo (2003) argues that the structure of the low applicative phrase expresses a relation between two individuals that are embedded under the verb. The *Low-Applicative-AT*, introduced by Cuervo (2003), states that there are two variables for individuals that relate to the event: the *theme* and the *possessor*. In the interpretation of the genitive construction there would be only one for the theme DP.

Cuervo (2003) argues that the object of a low applied argument (dative) can also appear as the object of an unaccusative verb like “arrive.” This dative argument is licensed as the

specifier of a low applicative which takes the theme DP as its first argument. An example is in (193).

- (193) a. A Gabi le llegaron dos cartas
 Gabi.Dat CL.Dat arrived.PL two letters
 Gabi got two letters



(Cuervo 2003: 181)

In (193) Cuervo (2003) argues that the dative is interpreted as a recipient of the theme. The dative argument *A Gabi* is not related to the verb but to an individual *dos cartas*. I will adopt Cuervo's distinction of construction with genitive applicatives for Persian psychological verbs studied in the next section. Having discussed the notion of applied arguments, I turn to the Persian constructions.

4.3. Psychological Constructions in Persian

In chapter 3, I studied Persian constructions with inanimate subjects which induced restrictions on subject verb agreement⁴⁵ as in (194).

⁴⁵ Constructions with raising verbs also demonstrate agreement restrictions in Persian. Ghomeshi (2001) explains the lack of agreement through A and $\bar{A}$ movement. An example is in (I).

(I) lazem-e [(ke) bācch-ha be-r-æn mādresse].
 necessary-3SG [(C) child-PL SBJ-go-3PL school]
 It is necessary that the children go to school

(194) shaye?e-ha mærdom-ra [negæran kærd-Ø]
 rumour-pl people-Acc. worry did-3sg
 Rumours worried people

I proposed a morphological analysis in which the lack of animacy triggers impoverishment or deletion of number in post- syntactic morphology.

In this chapter, I study and investigate other constructions in Persian which seem to trigger restrictions on subject-verb agreement from the perspective of syntactic structure and their thematic properties. These constructions are classed as impersonal in Persian literature (Thackton 1979, Ghomeshi 1996, among others) and have never been viewed as psych constructions in previous studies. Similar to Psychological constructions in Italian or Hebrew (Belletti & Rizzi 1988, Landau 2003, among others), these constructions always denote a physiological/mental /physical state of the experiencer and most resemble Class III or the Italian *piacere* type (*Nominative* theme, *dative* experiencer: *The idea appealed to Julie*). Unlike experiencers in many of the well studied languages in linguistic literature which are in dative/oblique form, the experiencer DP in

(II) bæche-ha lazem-e/*-ænd [(ke) be-r-æn mædresse].
 child-PL necessary-3SG/*3PL [(COMP) SBJ-go-3PL school]
 It is necessary that the children go to school

(Ghomeshi 2001: 34)

In the examples above the matrix verb *lazem boodæn* (to be necessary) is a raising predicate in which the external argument is empty. It always appears with 3rd default agreement and takes a clausal complement in subjunctive form. The subject of the clausal complement *bæche-ha* can optionally appear sentence initially without inducing agreement on the matrix verb. Ghomeshi (2001) provides several arguments to show that the movement of subject of the complement clause is an $\bar{A}$ -movement to a functional projection above TP. She captures the distinction between A and $\bar{A}$ movement by adopting the theory of phases and spell out of Chomsky (1999) (Phase Impenetrability condition), in which material within a phase (in this case CP) is no longer available for the higher phase. Since the subject moves to a position above CP, it cannot induce agreement on the matrix verb since the CP phase which hosts the matrix verb has already been closed off.

Persian is in nominative form⁴⁶ while the verb appears with 3rd sing/default morphology.

This issue raises an interesting problem for Chomsky's view that nominative and agreement are tied together (while nominative and EPP are divorced) because it is not clear how nominative case is licensed in absence of agreement. However, I develop an analysis for these psych constructions in which there is a Tense requirement and that is how the nominative is checked.

The Persian psych constructions may have a regular counterpart in which the agreement restriction does not occur. This contrast is shown in (195-196)⁴⁷.

(195) (**ma**_i) to ra/ro [dust dar-**im**_i]

we you-Acc. friend have-**1pl**

We like you

(196) (**ma**_i) æz to [xosh-**emun**_i umæd-**Ø**]

we from you pleasure-**1pl** came-**3sg**

We liked you (you appealed to us)

Example (195) displays an ordinary agreement pattern and has no complications. The verbal constituent of the compound verb *dust dar-im* agrees with the DP in the subject position *ma* (we). On the contrary, in example (196), the DP in sentence initial/subject position *ma* is a first person plural pronoun and does not induce agreement on the verb

⁴⁶ The fact that the experiencer is in nominative form raises a problem for Landau's proposal in which the default case of experiencers is dative and languages can have other forms of experiencers if they already have dative ones (see section 2.2).

⁴⁷ Although example (195) can also be considered as a psychological construction, I use the term "psych/psychological constructions" thereafter, exclusively for referring to psychological constructions with agreement restriction as in (196), corresponding to class III of B&R (1988).

which appears with third person singular (default) morphology. This last situation seems like a violation of subject-predicate agreement in Persian. The sentence initial DPs in (195-196) (*ma*) are optional. Another difference between (195) and (196) is that when the DP in sentence initial position is present in (196), it is always *co-referential* with a *clitic pronoun* (*-emun*) attached to what is believed to be the non-verbal constituent of a compound verb. This co-referentiality does not exist in (195) given that the non-verbal constituent of the compound verb does not contain a clitic pronoun. Further examples of these psych constructions are provided in (197).

- (197) a. (mæn_i) teshn-æm_i ast-Ø
 I thirsty-1sg is-3sg
 I am thirsty
- b. (unha_i) xab-eshun_i gereft- Ø
 they sleep-3pl took-3sg
 They got sleepy
- c. (Færzin_i) saxt-esh_i ni-st-Ø
 Farzin hard-3sg neg-is-3sg
 (It) is not hard for Farzin
- d. (to_i) særd-et_i bud-Ø
 you cold-2sg was-3sg
 You were cold

f. (ma_i) gerye-moon_i gereft-Ø
 we cry-1pl ind-took-3sg
 We felt like crying

g. (un-ha_i) boht-eshun_i zæd-Ø
 they wonder-3pl hit-3sg
 They got shocked/stunned

In the examples above, the preverbal NPs in the subject position *mæn*, *unha*, *Færzin*, *to*, *ma* and *unha* (I, they, Farzin, you, we, they) are optional and when present, do not induce agreement on the verbs *æst-Ø*, *geret-Ø*, *æst-Ø*, *bud-Ø*, *gereft-Ø*, and *zæd-Ø* (is, took, is, was, took, hit). The verbs always appear in third person singular/default form giving the impression that agreement is not obtained. Below I provide ten properties that the components of psych constructions (the verb, the psych state, and the experiencer) exhibit.

Properties

- 1) The verb always appears with 3rdsg/default morphology and seems frozen.
- 2) The verb is limited to a number of verbs as in (198-202)⁴⁸.

(198) **gereftæn: to take**

gery/hers/khand/-æm gereft-Ø
 cry/anger/laughter/-1sg took-3sg
 I felt like crying/laughing/I got angry

⁴⁸ The above list is not exhaustive.

(199) **amædæn: to come**

dærd/xosh/bæd-æm amæd

pain/pleasure/bad-1sg came-3sg

I got hurt (pain came to me)/ I disliked (it), I liked (it)/I am pleased

(200) **bordæn: to take** (used in an unaccusative way)

mat/khab-æm bord

frozen/sleep-1sg took-3sg

I got stunned/fell sleep

(201) **shodæn: to become**

særd/færamoosh-æm shod

cold/forget-1sg became-3sg

I got cold/I forgot

(202) **zædæn: to hit** (used in an unaccusative way)

khoshk/boht-æm zæd

dry/wonder-1sg hit-3sg

I got shocked/stunned

(203) **ræftæn: to go**

yad/khab-æm ræft

memory/sleep-1sg went

I forgot (it/something)/I fell asleep

4) As mentioned above, I argue that the verb in the above constructions appears in an unaccusative form which only requires a theme subject. If the construction contains another argument, a direct argument/source of the feeling, that argument appears as an adjunct. This is shown in (204) in which *pul* (money) and *to* (you) are optionally present in the structure as adjuncts.

b. (shoma)	lazem-e-tun	mi-shævæd-Ø
You(pl)	necessary-2pl	ind-become-3sg
You(pl) will need (it/something)		

d. (mæn) xosh-æm umæd- Ø

I liking-1sg came-3sg

I am pleased/ I liked (something/someone)/(something) appealed to me

Examples (204.b,d) do not contain the source (*pul* and *to*) and the structure is fine. The same structure in (204.a,c) takes a source argument (*pul* and *to*) in the form of an adjunct. The structure of (204.a,c) in Persian differs from the corresponding English structure in which the second argument/direct object is obligatory.

(5) By nature, the psychological construction always denotes a non-agentive event. They are usually stative (as in 204.a, *you need money*) or denote a change of state (205-206).

(205) (mæn) **khab**-æm gereft-Ø
 I **sleep**-1sg took-3sg
 I got sleepy

(206) (unha) **teshne**-shun shod-Ø
 they **thirsty**-3pl became-3sg
 They became/got thirsty

In (205-206) the event is not only a description of a state; rather, there is a situation in which a change of state (from not being sleepy to feeling sleepy or from not being thirsty to becoming thirsty) has occurred. However, it is evident that the constructions under investigation never denote an agentive event.

(6) The sentence initial experiencer (*unha* in 206) is obligatorily coreferential with a clitic pronoun, (*eshun* in 206), attached to the psychological state (*teshne* in

206)⁴⁹. Even if the sentence initial experiencer is not overtly present in the structure, it is always encoded in the doubled clitic pronoun⁵⁰.

- (7) The presence of the clitic pronoun in the psych construction is obligatory. Unlike Spanish psych verbs discussed by Cuervo (2003) as in (184), Persian psych constructions can never have a generic reference such as *the houses pleased* in Spanish. The construction would lose its psych meaning if used in infinitival form. Example (207), without the genitive clitic and in infinitival form, can be used only for inanimate objects getting cold (like *the food got cold*) in which the psych situation is not conveyed.

- (207) særd shod-æn
 cold became-inf

 To get cold

In fact most of psych examples cannot be used in infinitival form.

⁴⁹ I thank Vida Samiian for suggesting that examples of psych constructions may have different interpretations. Examples are in (I) and (II).

(I) (mæn) xosh-æm umæd-Ø
 I pleasure-1sg came-3sg
 I am pleased/ I liked it

(II)(mæn) del -æm gereft-Ø
 I heart/mind-1sg took-3sg
 I got depressed/sad

Samiian argues that the genitive clitic (*æm* in *xosh-æm*) has an underlying dative sense and is originally “*xosh mæ-ra amæd*” (pleasure to-me came), while (*del-æm*) in (II) has a real genitive sense and is (my heart/mind and not heart -to me). In other words, it is argued that the semantic interpretation of (I) and (II) are distinct. As mentioned in chapter 1, clitic pronouns in Persian may function as possessor, direct object, or indirect object. There is no case distinction on clitic pronouns in Persian. Therefore, *æm* (1sg) in both examples, is referring to the goal which is an experiencer, either as the possessor (II) or the affectee (I), i.e. the experiencer is either in the possession of the theme (II) or is affected by the psych feeling (I). Therefore, I believe that the proposed distinction is not relevant in the structure. In addition, genitive case is a morphological case and may cover semantic relations beyond possession. For instance, *John's picture* in English might mean *a picture taken from John* (affected argument), *a picture that belongs to John* (possessor), or a picture taken by John (agent). The main point here is that in all of such psych examples, the notion of the theme/psychological state being somehow related to the goal/possessor/clitic is maintained. I will capture/demonstrate this relation by introducing an applicative head in section (4.4).

⁵⁰ Although the verb is always in 3rd sing/default form, the fact that the experiencer in Persian psych constructions is always encoded with a doubled clitic differentiates them from a true “impersonal construction” in which no *Person* distinction is encoded.

(208) * xab gereft-æn

Sleep took-inf

to feel like sleeping

This property of psych constructions is an indication against their compound-like nature that will be explored in section 4.3.2.

(8) The experiencer appears with no case marker. As mentioned in chapter 1, Persian has no overt nominative marker; hence the general impression is that the experiencer is in an unmarked form which is nominative.

(9) The experiencer has been identified as a *topicalized subject* (Hajati 1979, Yarmohammadi 1996), which appears in less formal contexts or situations.

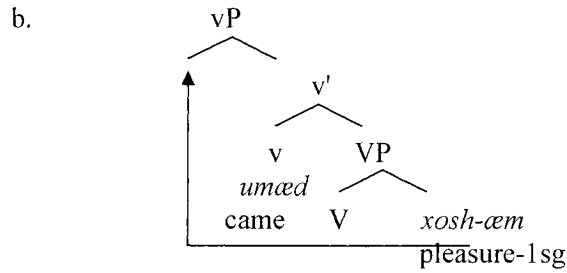
(10) The psychological state may be expressed by a *Noun xab* (sleep) in (205) or an *Adjective teshne* (hungry) in (206).

In previous literature, the psych constructions of interest have been considered as a VP compound unit consisting of a non-verbal element and a light verb. After introducing the existing literature, I propose that these psych constructions involve a vP projection and are complete propositions, not just a compound verb. I argue that the psychological state which has been argued to be the non-verbal constituent of the so-called compound (*xosh-æm* in 209) is the theme argument of the unaccusative light verb which moves to the subject position.

(209) a. *xosh-æm* *umæd- Ø*

pleasure-1sg came-3sg

I was pleased/ I liked (something)/(something) appealed to me

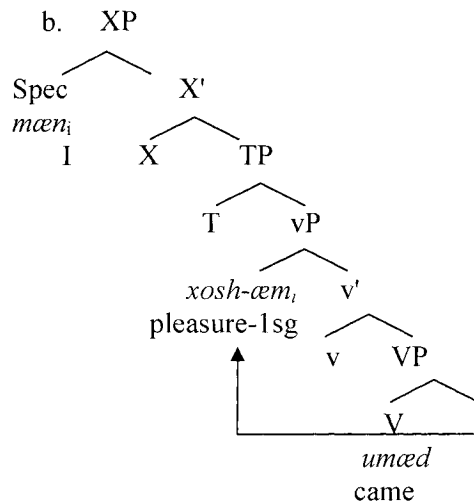


In (209.b) the goal subject *xosh-æm* (the psych-state) is the element checking Φ -features and satisfying the EPP/OCC/*p* requirement. By nature, the psych state is in third person singular and induces 3rd sing agreement on the verb. Therefore, the assumption that there exists no verbal agreement in such constructions is only apparent. Moreover, I argue that the experiencer in sentence initial position *mæn* (I) is an extra argument which is applied (in the sense of Rivero 2004) or sanctioned (in the sense of Shibatani 2001) to a complete clause as in (210) (this complete clause, however, has a Tense requirement that will be explored in 4.4.1.).

(210) a. *mæn xosh-æm* *umæd- Ø*

I pleasure-1sg came-3sg

I was pleased/ I liked (something)/(something) appealed to me



This line of argumentation is also reminiscent of Doron & Heycock's (2003) analysis of Broad subjects studied in section 3.5 in which a sentence initial NP is followed by a complete clause. I will show that the sentence initial experiencer *mæn* satisfies some subject properties and argue that this is because of its position as the highest argument in the clause. However, the theme subject of the unaccusative verb, the psych/mental state *xosh-æm*, is the element satisfying the EPP/OCC/*p* feature of *v* by moving to its spec and inducing agreement on the verb. By nature, the psych/mental state is in 3rd sing form and that explains the presence of the 3rd sing agreement on the verb. This analysis shows that the lack of verbal agreement in psych constructions is only apparent. Before laying out the complete picture of my proposal, I discuss the previous analyses proposed for the psych constructions under investigation.

4.3.1. Compound Verbs of Experience

Similar to many other linguists, Barjasteh (1983) considers the predicates of psych constructions as complex verbs and calls them “compound verbs of experience.” Barjasteh (1983) considers the sentence initial experiencer as the subject of the compound verb. This assumption is somehow problematic since subject agreement always appears on the verbal component of the compound and never on the non-verbal element. This is not the case for his “compound verbs of experience”; the verbal component always bears default morphology. The contrast between regular compound verbs and Barjasteh's compound verbs of experience is illustrated in examples (211-212).

(211) (an-ha_i) to ra [dust dar-ænd_i]

They you-Acc. friend have-3pl

They like you

(212) (an-ha_i) æz to [xosh-**eshan**_i amæd-Ø]

They from you pleasure-3pl came-3sg

They liked you/You appealed to them/liking came to her/him from you

In (211) *an-ha* (they) is the subject. The compound verb *dust dar-ænd* agrees with the subject and the agreement clitic *ænd* (3pl) appears on the verbal component *dar*. On the contrary, in (212) the verb does not agree with the experiencer *an-ha* and appears with 3rdsg/default morphology; moreover, the experiencer is clitic doubled on the non-verbal element of the so-called compound. This contrast is problematic for linguists who have identified the psych constructions under investigation as instances of compound verbs. In order to justify the above issue, Barjasteh (1983) points out that Persian has an optional rule of “Accusative Object Cliticization”⁵¹ where a clitic pronoun attaches to the inflected form of the verbal stem. In the case of a compound verb, the clitic attaches to the nominal part of the compound verb and refers back to the NP in the subject position as in (213).

(213) anha karmændan_i-ra [extraj-eshan_i kærd-ænd]

They employees-Acc. dismissal-their did-they

They dismissed the members of the staff

(Barjasteh, 1983: 73)

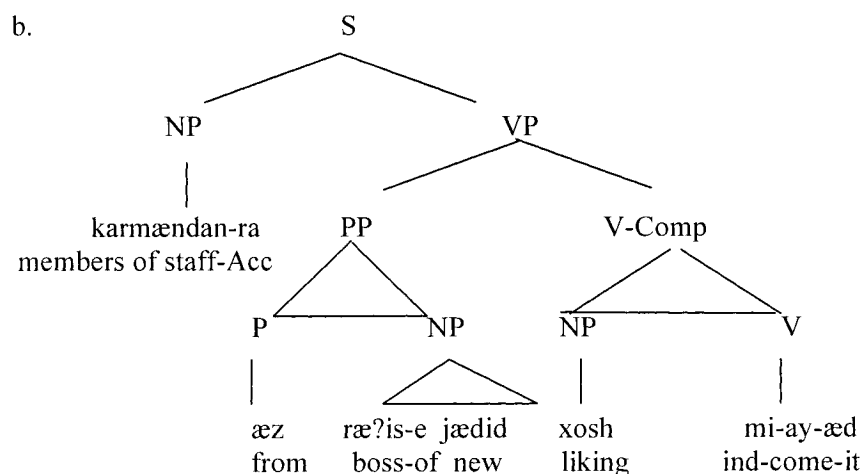
In (213) the object clitic *eshan* coreferential with *karmændan* (employees) appears on the non-verbal part of the compound *extraj* (dismissal).

⁵¹ This situation was already described in section 1.4.

Barjasteh (1983) makes an ad hoc assumption that only applies to his “compound verbs of experience.” He expands the “Accusative object cliticization rule” to subjects and proposes a kind of “Accusative subject cliticization rule” for his “compound verbs of experience,” in which the subject gets cliticized on the non-verbal component of the compound verb.

He argues that each compound verb of experience such as the one in (214a) has a corresponding underlying representation where the subject-like NP is accompanied by an accusative case marker *ra*, as in (214b)⁵². In other words, in this analysis the construction has an accusative “subject.” This is shown below where (214.a) contains the surface form in standard Persian and (214.b) is the underlying form.

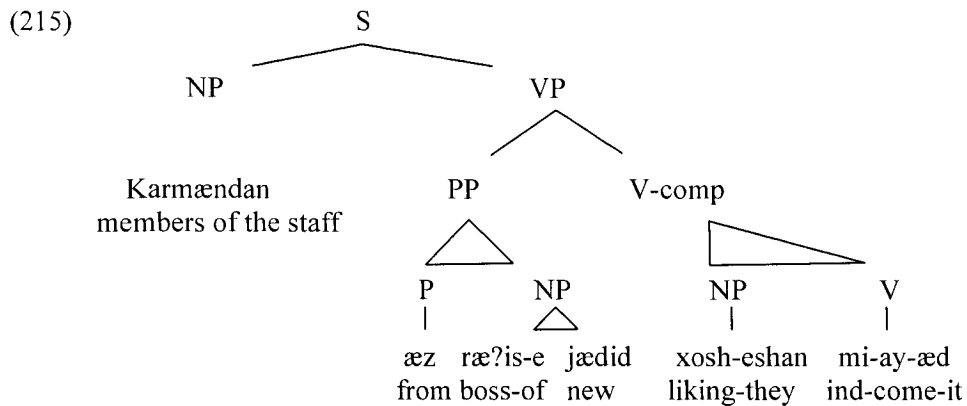
- (214) a. karmændan æz ræʔis-e jædid [xosh-eshan mi-ay-æd]
 members of staff from boss-of new liking-their ind-come-it
 The members of the staff like the new boss



(Barjasteh, 1983:72)

⁵² This structure is archaic and not used in Modern Persian.

Barjasteh argues that the structure in (214b) undergoes the syntactic rule of “accusative subject cliticization” to produce the surface form (215) in which *ra* is omitted from the subject and has a corresponding clitic on the non-verbal element of the compound verb.



(Barjasteh, 1983: 75)

A piece of evidence that Barjasteh provides for his claim is diachronic and comes from an Early New Persian text.

(216) eskændær-ra æz ishan ?æzim [xosh amæd-Ø]

Alexander-Acc from him a lot liking came-it

Alexander liked him a lot (to Alexander, came liking from it a lot)

(Barjasteh, 1983: 75)

Barjasteh argues that in (216) the subject *Alexander* contains the Accusative marker *ra* which is not clitic doubled on the non-verbal element of the verb. The author does not explain why the verb in his ‘compound verbs of experience’ always appears in default form.

I have two criticisms of Barjasteh's analysis. As stated in chapter 2, the suffix *ra* is not only the accusative marker; it can also demonstrate obliqueness, specificity, and discourse functions. Therefore, I argue that in the diachronic form (216) when *ra* accompanies the experiencer, it has an oblique form; intuitively, it states *to Alexander, came liking from him a lot*. Furthermore, I argue that there is not enough evidence to support the 'accusative subject cliticization' rule that Barjasteh provides.

4.3.2. Comparison of Compound Verbs and Psychological Verbs

As mentioned previously, several studies have argued that the psych constructions of interest are/resemble compound verbs (Barjasteh 1983, Ghomeshi 1996, among others). The first and foremost evidence for not considering the constructions under investigation as compound verbs is their agreement pattern. In the previous section the contrast of subject agreement pattern between compound verbs and psych-constructions was illustrated in (195-196). It was shown that the subject agreement clitic always appears on the verbal element of the compound verb (*dust dastshstan* to like, in 195); however, the experiencer in psych-verbs never induces agreement on the verb as in (217) where the verbs always appears with 3rd sing morphology.

(217) (mæn) mat-æm bord-Ø
 I frozen-1sg took-3sg
 I got stunned

Under the assumption of considering the psych constructions of interest as compound verbs, the lack of verbal agreement remains problematic.

Two similarities have been reported between the psych constructions of interest and compounds; namely that similar to compound verbs they take one stress, and interveners cannot separate the so called non-verbal element from the verbal component. However, the validity of these arguments can be questioned in two ways. On the one hand, the argument of considering compounds as a lexical unit has been questioned by demonstrating that the two components of the compound verb may be relativized, gapped, and separated by a series of elements such as negation, inflectional affixes, auxiliaries, modals, and emphatic elements (Karimi 1997, Vahedi-Langrudi 1996, Karimi Doostan 1997)⁵³.

On the other hand, there are examples that show that the psych constructions may accommodate intervening elements and bear dual stress. Consider example (218) in which the capitalized word shows the place of stress.

- (218) ‘Xosh-et mi-‘Yad?
 Pleasure-2sg ind-come
 Do you like (it)?/ are you pleased (with it)?

In the interrogative form in (218) the existence of two stresses on the parts of the so-called compound is yet another factor for not considering the psych-constructions as compound verbs.

Also, examples in (219a, b) show the possibility of intervening elements between the two components of the so-called compound.

⁵³ See Megerdooomian (2002) for a comprehensive list of compound verbs’ dual syntactic and lexical characteristics.

(219) a. (mæn_i) del-æm_i gereft-Ø

I heart-1sg got-3sg

I felt depressed

b. (mæn_i) del-æm_i (æz donya) gereft-Ø

I heart-1sg from world got-3sg

I felt depressed from the whole world

In (219) the prepositional phrase *æz donya* (from the world) intervenes between the light verb and the supposedly non-verbal element of the compound. Example (219) clearly shows that the psych constructions cannot be considered as a lexical unit.

Also, (220) may bear a rising tone on the adverb *xeili* (a lot) to show the focus.

(220) (mæn_i) xosh-æm_i æz-æsh XEILI na-y-amæd-Ø

I pleasure-1sg from her/his a lot neg-y insertion-came-3sg

S/he didn't appeal to me MUCH/ I didn't like him/her A LOT

In (220) two elements, a PP *æz-æsh* (from her/him) and an adverb *xeili* (a lot), intervene between the elements of the so-called compound.

Example (221.a) has a scrambled variant as in (221.b) with a high rising tone on *pænj shab-e* (it is five nights).

(221) a. mæn_i [pænj shab-e] khab-æm_i næ-bord-Ø-e

I five night-is sleep-1sg neg-took-3sg

It is/has been five nights that I have not fallen asleep

b. mæn_i khab-æm_i [PæNJ SHAB-E] næ-bord-Ø-e

I sleep-1sg five night-is neg-took-3sg

It is/has been five nights that I have not fallen asleep

In (221.b) a complete clause *pænj shab-e* (it is five nights) appears within the elements of the so-called compound verb. As an instance of scrambling, this complete clause can intervene between the theme and the light verb (with rising stress on the theme).

The fact that different elements can intervene between the constituents of the so-called compound in the sentences above, clearly rules out the possibility of considering them as lexical units or compound verbs.

So far, I have presented evidence against the parallel behaviour of compound verbs and psych constructions based on their stress patterns and the possibility of separating the two components by interveners such as PPs and full clauses. Another line of argumentation that demonstrates the differences between psych constructions and compound verbs is the lexical properties of compound verbs. Dabir Moghaddam (1995) argues that Persian compound verbs undergo nominalization. Moreover, Megerdooian (2002) argues that compound verbs in Persian undergo nominalization and can form adjectives and adverbs which suggests that they have to be treated as X^0 units. Persian Psych constructions, on the other hand, do not undergo the above lexical processes. Examples from Megerdooian (2002: 123) are in (222).

Gerundive nominalization

- (222) sigar keshidæn-e in bæche khatarnak ast
cigarette pull-inf.Ez this kid dangerous is
This child's smoking is dangerous

In (222) gerundive nominalization has occurred by adding the morpheme *æn* to the past stem of the complex predicate *sigar keshidæn* (to smoke) . Psych constructions, on the other hand, do not undergo gerundive formation.

- (223) *særd-et⁵⁴ shodæn-e to khatarnak ast
Cold-(2sg) become-inf-Ez you dangerous is
(intended meaning: Your becoming cold is dangerous)

Agentive noun formation

- (224) bazi kon-an/ændegan
Play do-Ø-pl
The players

⁵⁴ As mentioned previously, Psych constructions such as *særd-et shod-Ø* (you became cold) can never be used in infinitival form since the presence of the clitic experiencer in the structure is obligatory; otherwise, the sentence would lose its psych meaning. I will further develop an account in which there is an obligatory applicative head above TP. The fact that the construction loses its psych meaning in infinitival form supports my argument since the applicative is added to a full tensed TP and cannot be non-finite.

The compound verb *bazi kæn* (to play) has formed an agentive noun by having *an/ændegan* added to the present stem of verbal component (224). Agentive noun formation is not possible in the case of psych verbs as in (225).

(225) * xoshk-æm zæn-an/ ændegan

Dried-(1sg) take-Ø-pl

Adjectival formation

(226) in kelid peyda shodani n-ist
this key found become-adjF neg-is

This key is not to be found/foundable

In (226) the compound verb *peyda shodan* (to find) has undergone adjectival formation by having the suffix *-i* added to the present stem of the verbal component. The process of adjectival formation is not possible on a psych verb as in (227).

(227)* in doxtær særd-esh shodæn-i n-ist

This girl cold-3sg become-AdjF neg-is

*This girl is not to be/become cold

Participle adjective formation

(228) lebas-hay-e khoshk shod.e
Clothes-pl-Ez dry become-PartAdj

(The) dried clothes

In (228) the participle adjective form of the compound verb *khoshk shodæn* (to become dry) is obtained by adding the particle *-e* to the past stem of the verbal element of the compound. Such a process is not obtained with psych constructions as in (229).

(229)* dokhtær-ha-ye særd-eshun shod.e

girl-pl-Ez cold-3pl became.PartAdj

(intended meaning: The girls who have become cold)

The above properties of complex predicates are not detected in the equivalent psych constructions, which indicate that the two constructions contain rather distinct structures.

To sum up, in this section I have shown the distinct behavior of psych verbs and compound verbs (which are lexical units with limited syntactic freedom). Unlike previous studies that claim that psych constructions contain a VP, I argue that they involve a vP with a theme subject. Furthermore, I propose that psych constructions undergo meaning composition in a way that is predictable from syntax and semantics, and they are not arbitrary like compound verbs.

4.3.3. Dabir Moghaddam's Proposal

Dabir Moghaddam (1997) disagrees with the assumed compound nature of the constructions under investigation. Instead, the author believes that they are “full fledged” sentences in which the nominal element of the compound verb is the ‘subject,’ and the obligatory rule of subject-verb agreement in Persian systematically treats these NPs as the subject. He presents the conjugated form in the following example to support his

proposal.

(230) (a) xosh-æm amæd-Ø

liking-my came-it

I liked it (My liking came)

(b) xosh-esh amæd-Ø

liking-his/her came-it

He/she liked it (His/her liking came)

(c) xosh-etan amæd-Ø

liking-you-pl came-it

You liked it (Your liking came)

(Dabir Moghaddam, 1997:44)

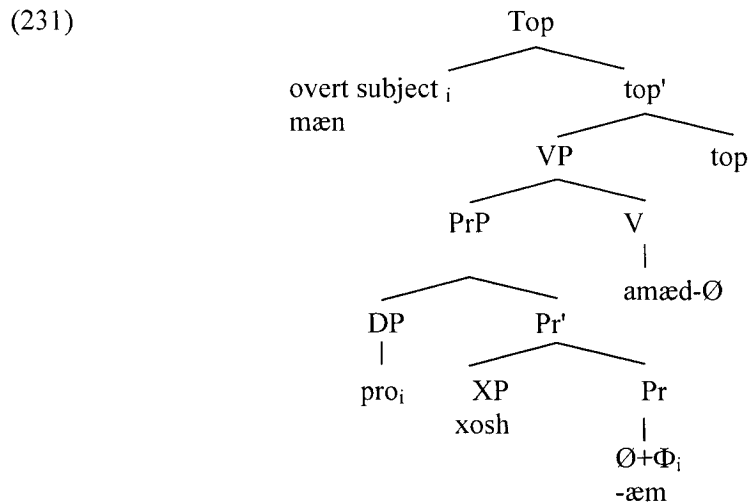
In section (4.4), I develop an analysis of psychological constructions in Persian that retains Dabir Moghaddam's principal idea. Dabir Moghaddam (1997) argues that although subject incorporation has been proposed in the literature, there is not enough evidence to assume that the constructions under study are instances of such a process in Persian. He believes that these constructions are "frozen sentences whose verb meanings are metaphorically extended."

(Dabir Moghaddam, 1997:46)

4.3.4. Ghomeshi's Proposal

Ghomeshi (1996) discusses the constructions under investigation and following Thacktson (1978) calls them "Impersonal Constructions." She points out the similarities between the impersonal construction and compound verbs and consequently argues that

they involve only a VP. She argues that the verb stays within VP and does not raise to check agreement features; she also claims that the subject position [specPrP] is filled with *pro*, which must be identified by the pronominal enclitic *æm*. Ghomeshi (1996) proposes the following structure for impersonal constructions:



(Ghomeshi 1996: 228)

In order to explain the lack of verbal agreement, she argues that unlike compound verbs, there is no case to be assigned to [specPredP] in the impersonal constructions. She argues that when the subject is overtly realized, it is located in [specTopP] coreferential with the pronominal enclitic and does not induce agreement on the verb. Ghomeshi (1996) sees similarities between impersonal constructions and Clause level Topicalization or Resumptive Construction introduced by Thacktson 1983.

A common type of sentence in Persian is the resumptive (or topic-comment) sentence, wherein a topic which is not the subject of the main verb is introduced as subject of the sentence; the predicate then affords some information about that

subject. Since the sentence-subject is not the subject of the main verb, the sentence-subject must be referred to pronominally in its proper position in the predicate. Both the independent and the enclitic pronouns are used for this purpose.

(Thackston, 1983:92)

(232) an zæn-i ke dærbare-æsh sohbæt mi-kærd-im æz
 that woman-indef that about-3sg talk cont-did-1pl from
 xane-æsh ræd mi-shod-æm
 house-3sg pass con-became-1sg
 That woman that we were talking about, I passed by her house
 (*I passed by the house of that woman we were talking about*)

(Thackston, 1983:92)

Ghameshi (1996) argues that her analysis does not capture the experiencer properties of impersonal constructions:

“One of the most interesting properties of impersonal constructions, namely that the ‘subject’ identified by the pronominal enclitic is construed as an experiencer remains unexplained here.”

(Ghameshi, 1996:284)

Ghameshi (1996) provides an attractive analysis with the strong point of considering the experiencer in a high projection. However, I argue that psych constructions do not involve VP with *pro* in the subject position. Within the recent minimalist view, especially since the replacement of traces with copies, the relevance/existence of empty categories

has diminished and therefore the existence of *pro* is not well supported (Alexiadou and Anagnostopoulou 1998, Holmberg 2005, Manzini and Savoia 1997, 2002). Rather, I argue that psych constructions contain a vP in which the subject/spec position is filled with the psych-state, satisfying the EPP/OCC/*p* requirement of the phase. Also, I show that the properties that the sentence initial experiencer exhibits are beyond the scope of regular left-peripheral positions such as topics or left-dislocated elements. I propose that the experiencer is an applied argument generated in the specifier position of an applicative head which constitutes a strong phase (complete proposition) and assigns the thematic role of experiencer to the applied argument.

4.3.5. Subjectless Constructions

Karimi (2005) also discusses the psych constructions under investigation and provides an analysis for them. She believes that there is no overt subject in these “Subjectless constructions” and that they involve a compound verb. Karimi (2005) adopts Harley’s (1995) analysis of “incorporation and psych predicates” to provide a treatment for her Subjectless constructions and further divides them into two groups: “Inalienable Possessor constructions” and “Inalienable Pseudo-possessor constructions.”

4.3.5.1. Inalienable possessor constructions

Karimi (2005) argues that the class of Inalienable possessor constructions does not allow an overt grammatical subject, and their semantics represent “experiencer-type” constructions analogous to Romance ‘*J’ai froid*.’ She argues that this class reveals a possessive interpretation and provides the following examples.

(233) (mæn_i) gorosn-**æm**_i-e⁵⁵

I hungry-me-is

I am hungry

(234) (mæn_i) gærm-**æm**_i-e

I warm-me-is

I am warm

(235) (Kimea_i) særd-**esh**_i-e

Kimea cold-her-is

Kimea is cold

(236) (una_i) xæst-**æshun**_i-e

they tired-them-is

They are tired

(Karimi 2005: 79)

Karimi (2005) argues that the optional DP in the sentence-initial position cannot be the grammatical subject since it does not morphologically agree with the verb.

She proposes that that these sentences have an underlying “possessor” construction containing *HAVE*. The *possessor* is the obligatory clitic attached to the non-verbal element of the compound and co-indexed with the optional overt DP in the initial position. She adopts Freeze (1992)⁵⁶, Kayne (1993), and Harley’s (1995) intuition of *HAVE* as a prepositional element incorporated into a verbal *BE*. She cites Harley’s (1995) examples in (237-239) with the underlying structure in (240).

⁵⁵ The clitic in bold form in (233-236) must be glossed as 1sg, 3sg, 3pl, etc.

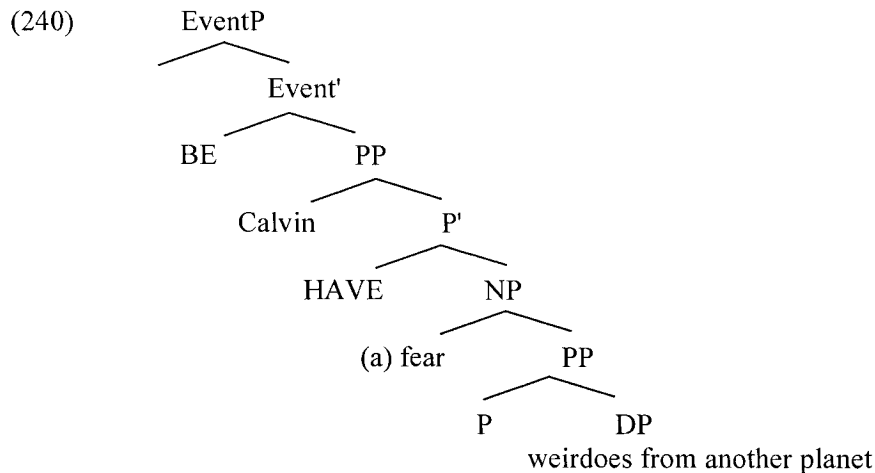
⁵⁶ Benveniste (1966) and Freeze (1992) note that the notion of possession in many languages is derived by using the existential *BE* plus some prepositional marking on the possessor. Accordingly, he proposes that the verbal “have” is derived from *BE* plus a prepositional element.

(237) Calvin fears the weirdoes from another planet

(238) Calvin is afraid of the weirdoes from another planet

(239) Calvin has a deep-rooted fear of the weirdoes from another planet.

(Harley 1995:208-9)



(Harley 1995: 209)

Harley argues that the above sentences are derived as follows. In (237) the noun *fear* moves into *HAVE*, and the two of them move into *BE*, producing the verb *fears*. In (238) the noun *fear* moves into *HAVE*, producing the adjective *afraid*. The copula *be* will be spelled out in this case. In (239) *HAVE* moves into *BE*.

Accordingly, Karimi (2005) suggests the structure in (241.b) for sentence (241.a). There is an underlying preposition *HAVE* (predicate in her system) which creates a Possessor Construction⁵⁷. She argues that the copy of the possessor DP *man* (I) in the sentence

⁵⁷ Advancing a criticism of this proposal, I refer to Harley's (1995:202) discussion of psych predicates in *Have-not* languages such as Dine', and I argue that the situation in Persian resembles the one found in *have-not* languages. In Dine' the psychological/experiential state is expressed using transitive verbs like "kill." Forms like "*hunger kills me*" which mean "*I am hungry*" or "*sleep kills me*" meaning "*I am sleepy*." The experiencer in these constructions is not marked with a Prepositional phrase as Harley (1995) proposes for *Have* languages with possessor constructions. Examples from Slave are in (1).

(1) a) mbeh sedhehxi
 sleep 1sgO.pf.kill
 I am sleepy. (lit. "sleep killed me")

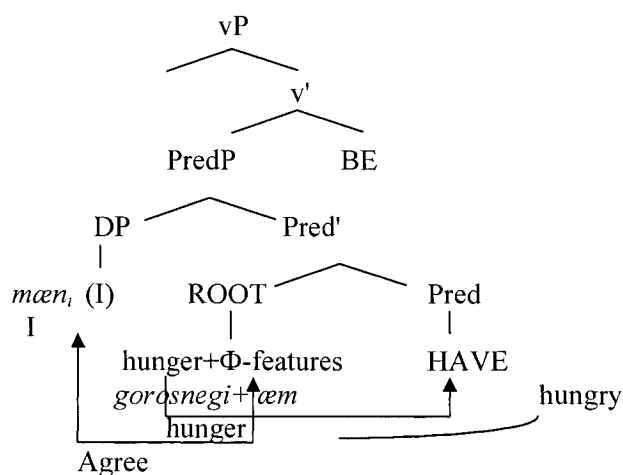
initial position “carries the Φ -features on the noun *hunger*, which surfaces as a clitic pronoun” Karimi 2005: 91.

(241) a. (man_i) gorosn-am_i e

I hungry-me[1sg] is

I am hungry

b.



(Karimi 2005: 91)

b) wheko ?anihwhw
fever 2sgo.pf.affect
You (sg) have a fever. (lit. “fever affected you”)

(Rice & Saxon, 1994:176)

Harley (1995) argues that the verb KILL in these constructions is not in agentive form. She argues that the event head in these constructions is *BE* and KILL has an affect meaning such as “*sleeping affects me* for (.a).” Furthermore, Harley believes that the crucial point here is not the verb stem *kill*, but the ordering of the arguments and that in these constructions the subject is the psychological state and the experiencer/goal/location argument is the object. The Persian constructions under investigation are very similar to these Dine’ constructions since they may contain transitive light verbs such as “hit” and “got” without having an agentive sense. Example (205) is repeated below.

(II) (mæn_i) khab-æm_i gereft-Ø
I sleep-1sg took-3sg
I got sleepy

As mentioned earlier, (II) can be paraphrased as ‘sleeping occurred to me’ which is on par with the Dine’ example of “*sleeping affects me*” in (I.a). Karimi (2005) considers examples such as (II) as Inalienable pseudo-possessor constructions since the light verb is not *BE*.

Karimi (2005) argues that incorporation of the root (hunger) into the Pred *HAVE* provides the adjective *gorosne* ‘hungry’ in (241.b) and similar to Harley’s structure, the copula BE is spelled out. Karimi (2005) assigns an Agree relation between the possessor DP in the [SpecPredP] (clause initial position) and its copy, the Φ -features on the root. She argues that features surface as the clitic pronoun, attached to the root, and co-indexed with the DP post-syntactically. Karimi (2005) argues that this optional element serves as the topic of the clause. She further argues that that *pro* is in the possessor position in the absence of an overt DP in the clause initial position. She further reports that these constructions are somehow reminiscent of the ones with double object cliticization introduced by Barjasteh in (214) where the copy of the object appears as a clitic on the verb.

4.3.5.2. Inalienable Pseudo-possessor constructions

Since not all of the light verbs in these constructions are *BE* (examples 198-202), Karimi needs to introduce *inalienable pseudo-possessor* constructions in which the light verb is not *BE* and may be other verbs like ‘come’ or ‘hit.’ She states that in this category, the complement PredP of the light verb may contain a PP. Examples are below.

(242) (mæn) æz in ræŋg xosh-æm mi-ya-d
 I of this color pleasure-me[1sg] dur-come-3sg
 I like this color

(243) (bæchche-ha) xeyli dræd-eshun mi-yad
 child-pl very pain-them[3pl] dur-come-3sg
 The children are hurting badly

(244) (shoma) dust-a-ye ghædimi færamush-etun shode
 you friend-pl-_{ezafe} old forgetting-you[2pl] become-3sg
 You have forgotten old friends

(Karimi 2005: 93)

Karimi (2005) believes that intuitively, these examples contain a predicate *HAVE* as well. She provides the following example which she calls “the old fashioned version” of these sentences in which *HAVE* is present:

(245) ma in ræng-ra xosh næ-dar-im
 we this color-râ pleasure neg-have-1pl
 We do not like this color

(Karimi 2005: 93)

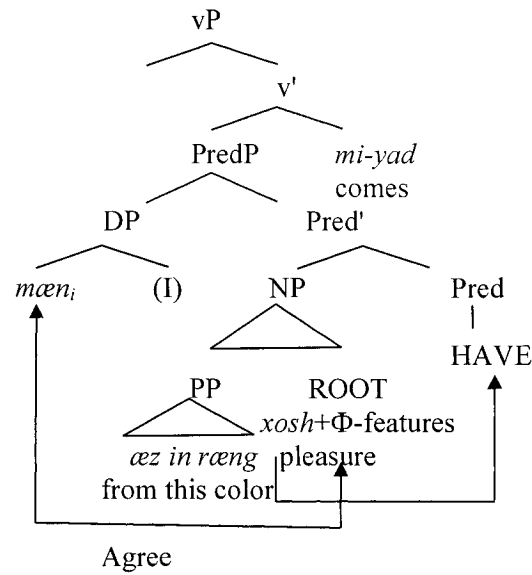
The assumption that the constructions under investigation contain an underlying predicate *HAVE* is not suitable to all examples. It is rather odd to imagine that examples such as (246) have an intuitive underlying *HAVE*⁵⁸ where the psych predicate describes the feeling of being *shocked*.

(246) khoshk-æm zæd
 dry-1sg hit-3sg
 I got shocked

Karimi (2005) introduces the following underlying phrase structure for (246) in which an embedded PP is added to the structure of inalienable possessor constructions.

⁵⁸ Harley (1995: 205) also reports similar situations in *Have-not* languages such as Dine’ where she argues that it is clear that the configuration discussed is not used to express possession.

(247).



(Karimi 2005: 94)

Karimi (2005) argues that in (247), similar to (241b), the root *xosh* ‘pleasure’ is incorporated into *HAVE*, while the light verb is spelled out. She argues that in the absence of the optional experiencer DP *man* ‘I,’ *pro* appears in the Spec of PredP. She believes that there is no overt grammatical subject in these constructions, and the optional DP serves as the topic of the sentence once it moves out of the PredP.

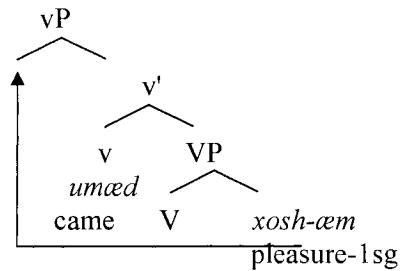
The analysis of “Subjectless constructions” presented above involves too many unnecessary operations and does not capture the experiencer-like nature of sentence initial DPS in such constructions. Also, the arbitrary extension of incorporation to verbs that are not *BE* in *Inalienable pseudo-possessor constructions* seems rather unfounded. Unlike the proposed analysis which argues that the construction is Subjectless, I provide evidence to show that the construction contains a theme subject. Also, based on the scope interpretation of the sentence initial experiencer, I argue that it does not originate from within the clause and is merged in a higher position.

4.4. The Proposal for Persian Psychological Constructions

So far, it has been shown that the Persian constructions under investigation involve a psychological/physical state and the nominative experiencer in the sentence initial position does not induce agreement on the verb which appears in 3rd person. The intuitive idea that I propose is in the spirit of Dabir Moghaddam (1997), who considers the psychological state as the subject of the sentence. As already mentioned, I propose that the verb is in unaccusative form and the psych-state is the theme argument which moves to [specvP] and values Φ -features. The basic structure without the overt sentence initial experiencer would be a complete sentence in which the experiencer is obligatorily encoded as a clitic pronoun *æm* on the psych-state as in (248).

- (248) *xosh-æm* *umæd- Ø*
 pleasure-1sg came-3sg
 I am pleased (by something/someone)

b.



In (248) the verb is in unaccusative form. The theme *xosh-æm* (pleasure-1sg) originates in the object position and moves to [spec vP] to satisfy the EPP/OCC/*p* requirement of the strong phase vP.

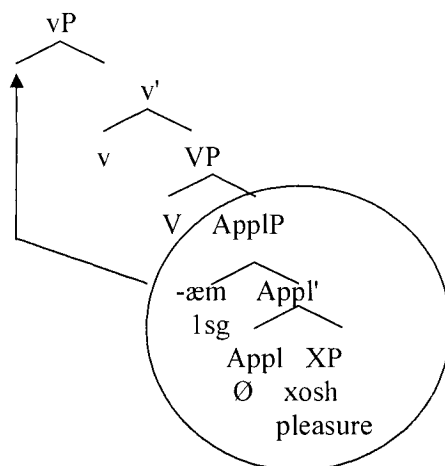
Furthermore, I argue that the pattern with a clitic experiencer attached to the psych state *xosh-æm* is not a case of a genitive construction; rather, it constitutes a low possessive applicative phrase⁵⁹. In the spirit of Pylkkänen (2002) and Cuervo (2003), I provide a low applicative analysis for these constructions along the lines of their proposed analyses for possessor datives. Following Cuervo (2003), I consider the constructions under investigation as unaccusative predicates that express transfer of a theme (pleasure/hunger/mental/physical state) towards a goal/location/affectee (the clitic *æm*). These constructions have similarities to the analysis of possessor datives as low applicatives. In section 4.2 it was argued that the reasons provided for Pylkkänen (2002) and Cuervo (2003) for considering dative possessives as applied arguments was that they are not core arguments of the verb. Abstracting away from several differences in details, the same situation holds for the Persian psych constructions of interest. The structure then would be an unaccusative verb (light verb) that takes the theme as the subject. The theme itself is a low ApplP with a null head indicating a possession relation between the applied argument and the psych-state. The clitic pronoun *æm* (1 sg) is not an argument of the verb itself; rather it is the argument of the theme/psychological state. The theme subject contains an applied argument *æm* (1 sg) which is interpreted as the possessor/recipient/location/affectee of the theme *xosh*.

Intuitively the informal semantic relations of the structure for (248) would be as in (249).
 (249) To me came (my)pleasure and I am now in the possession of pleasure (or affected by it.)

⁵⁹ The distinction between the structure of a regular genitive construction and a low possessive applicative construction was illustrated in examples (194.a,b).

Therefore, I propose the following syntactic structure for the sentence in (252).

(250)



In (250) the applicative head (which in this case is a null head) licenses an extra/non core argument in 1sg clitic form and relates it to the theme *xosh* which is a true argument of the verb. The applied argument (1sg. clitic) is not directly involved in the event. Its relation to the event is through the possession relation with the psychological state *xosh* (pleasure).

This analysis indicates that in psychological constructions, considering the verb in impersonal/default form is only apparent: rather, the theme subject of the unaccusative verb (the psychological/mental state) moves to [SpecvP] and values Φ -features. By nature, the psychological state is an entity in 3rd singular form, inducing 3rd sing agreement on the verb.

4.4.1. The Tense Requirement on Psychological Constructions⁶⁰

I further propose that the psych constructions of interest have a Tense requirement. In section 4.3.2 it was argued that psych constructions cannot be nominalized; moreover, they cannot be used in infinitival form or they will lose their psych meaning (as in 208).

Therefore, I argue that although the structure of the clause in (248) is semantically complete, it does not predict that the configuration cannot appear in infinitives and contains the obligatory genitive clitic. There is a need for a structure to be obligatorily present above TP. I propose that psychological constructions contain a *Super High Applicative* projection that is always present above TP and licenses the experiencer in its specifier⁶¹. In the absence of an overt experiencer in the sentence initial position as in (250), the *Super High Applicative* projection is still present and is filled with a phonologically null category with a [+human/+mental state] feature. This category ensures that psych constructions only apply to human or elements containing [+mental state] features as psych constructions are not applicable to non-humans. This phonologically empty category is different from null categories of GB in the sense that it is encoded with features such as [+human/+mental state] which do not have a phonological realization in Persian.

⁶⁰ I thank María-Luisa Rivero for pointing out the insight that the impossibility to nominalize and use the psych construction in infinitival forms could be seen as an argument in favor of the applicative head taking a TP complement, and that this requirement perhaps universally exists in all psych constructions.

⁶¹ The proposal on Tense requirement for Persian psychological constructions may be further expanded to a different construction in Persian which usually contains the modal *bayæd* (must) and is “impersonal” in the sense that it cannot take an overt subject and does not refer to a specific person. Example is in I.

(I). bayæd ræft-Ø
must went-3sg
(one) must go

The impersonal construction in (I) does not have an overt subject. It contains a short form of infinitive (without –æn) which is the bare past stem (*ræft* (went)). These constructions are always tense-less and can never have a subject. This is further evidence for a link between tense requirement and the possibility of an applied argument, in the sense that the lack of tense requirement implies lack of an external argument. I thank Jila Ghomeshi for this observation.

4.4.2. The experiencer is an Applied Argument

Let us now consider a structure with an overt sentence initial non-clitic experiencer in sentence initial position as in (251).

(251) (mæn_i) xosh-æm_i umæd-Ø

I pleasure-1sg came-3sg

I am pleased (by something/someone)/ I liked it

As shown in the previous sections, the structure of clauses without an experiencer could be considered semantically complete since the experiencer is always encoded in the shape of the clitic. When the overt sentence initial experiencer is present, it is in fact doubling the clitic within the clause. Therefore, the optionality of the sentence initial experiencer is more like in clitic doubling, and not total absence of signal for an experiencer (unlike Spanish examples discussed by Cuervo (2003) in which an experiencer could be completely absent as in *gustaron las casas* (houses pleased)).

I argue that the Tense requirement in psychological constructions dictates the structure of the *Super High Applicative* projection. The projection is present regardless of the overt sentence initial experiencer (filled with an empty category with *human/+mental state* feature in the absence of the overt experiencer). I argue that the version with the higher experiencer differs in information from the one with just with the clitic experiencer. In the next section, I will show that if the higher experiencer is expressed, the sentence has a topic with discourse functions (such as quantification and wh-formation); if it is not expressed, the sentence is topic-less⁶². I further argue that the topic experiencer is not a core argument of the verb and is licensed by an applicative head. This analysis is

⁶² As mentioned in the previous chapter, considering the sentence initial experiencer as a topic has been suggested in the previous literature. However, I argue that this element is in fact a non-core applied argument to the complete clause.

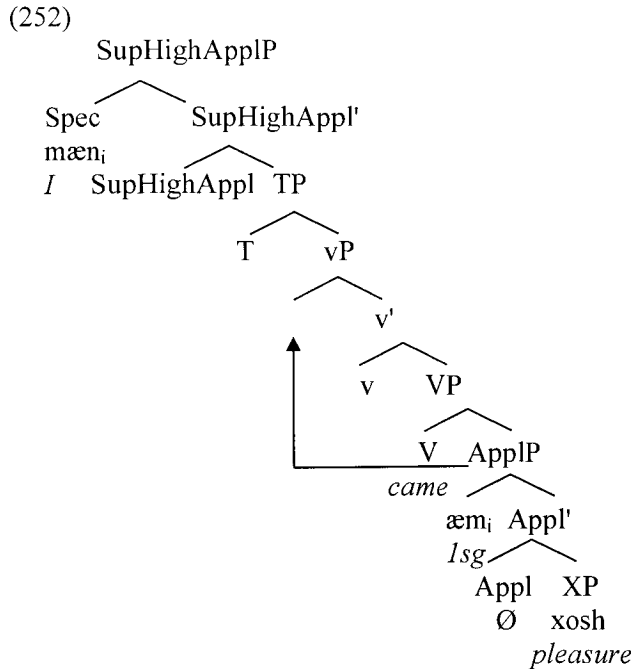
different from some of the previous analyses which locate the experiencer within the clause, suggesting that it has a selected status at that level. Rather, I argue that the experiencer is a non-core applied argument merged/base generated in a higher position.

I propose that in Persian psych constructions two applicative heads are needed: one to relate to the relation between the clitic experiencer (lowApplP) and another one to express the predication relation between the higher (doubled) experiencer and the predication (SuperHighAppl).

Here, I depart from Pylkkänen (2002), McGinnis (2001), and Cuervo (2003) who argue that a high applicative head can take only a vP or a DP as complement; instead I follow Rivero (2004) in proposing a “*Super High Applicative*” head which takes a TP as complement and hosts the experiencer. The justification for this claim is that, as argued earlier, psych constructions must necessarily be finite and contain a *Person/human* feature (encoded in the clitic pronoun); they therefore must contain Tense, which I propose is the requirement that the Super High applicative head take a TP-complement. I also propose that the SupHighApplP is a strong phase, similar to CP and vP, is propositional, and assigns the thematic role of experiencer to the arguments generated in its spec.

The applied argument/experiencer is merged in [specSupHighApplP], licensed by the Super High applicative head, and is applied to a thematically (but not propositionally) complete clause; thus it is not an infinitive or a nominalization. This line of argument is also along the lines of Heycock’s broad subjects and Shibatani’s analysis for dative subjects discussed in chapter 4 both of which assigned the DP to a complete clause co-indexed with an element within the clause. The main theme shared with the above

analyses is the concept of applying an argument to a complete clause or a sentential predicate and recognizing/co-indexing it somewhere within the clause. The syntactic structure is presented below.



In the structure above, the theme subject *xosh-æm* (pleasure-1sg), a low applicative phrase, moves to [specvP], satisfies its EPP/OCC/*p* requirement, and values the Φ -features, causing the unaccusative verb to appear with 3rd sing morphology. The sentence initial experiencer *mæn* is an extra argument applied to a thematically complete clause (*xoshæm amad/my pleasure came/pleasure came to me*), which has a Tense requirement. It is base generated/merged in [specSupHighApplP] and is licensed by the SupAppl null head. The fact that there is a Tense requirement in the psych construction explains why the experiencer surfaces in nominative form; Tense would be responsible for licensing nominative. The sentence initial applied experiencer needs to be identified within the clause and that is why it is co-referential with the clitic pronoun *æm* (1sg) which is the

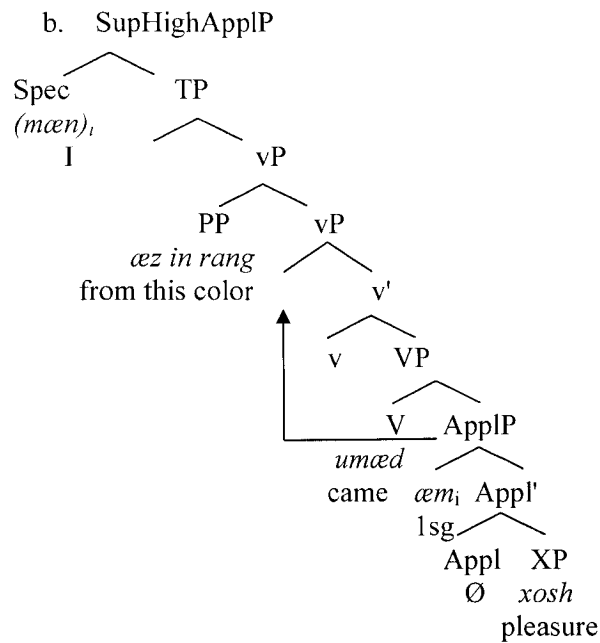
possessor/affected argument of the theme *pleasure* and the two have an internal connection through the super high applicative phrase. In other words, the clitic behaves like a bound variable as opposed to a full pronoun, so unless there is a binder, the sentence will be ‘incomplete’.

As mentioned earlier, according to this analysis, the structure of *Super High Applicative* phrase is obligatory even when the overt sentence initial experiencer is not present. Therefore, I argue that in the absence of the overt experiencer, there is a null category with *human/+mental state* feature occupying the specifier position of the *Super High Applicative* phrase. I argue that the position is not empty like *pro*; rather, Persian grammar does not have an overt phonological word with only the feature of *human/+mental state*. As a result, although the structure is always present, in the absence of the overt experiencer, it appears empty. In other words, there is a category with a set of features which is not given a phonological shape upon vocabulary insertion in the morphological component⁶³.

In cases such as (253), where the psych construction contains a source PP, I argue that the PP is an adjunct to vP.

- (253) a. (mæn) az in ræŋg xosh-am umæd-Ø
 I from this color pleasure-1sg came-3sg
 I liked this color

⁶³ The principal idea is in a Constructionist approach in which the meaning of the sentence is derived from the construction in semantics. In this approach it is the structure and not the lexical items that provides part of the meaning.



In the next section I study the nature of the sentence initial experiencer in detail. I show that on the one hand, the experiencer exhibits some subject-like properties; on the other hand, it demonstrates some characteristics which are not considered as subject properties.

4.4.3. Properties of the Sentence Initial Experiencer

Here I explore some of the properties of the experiencer in the sentence initial position.

Note that being the highest DP in the clause it is not surprising that this experiencer/applied argument may exhibit several subject properties. Broad subjects discussed in chapter 4 were also able to exhibit subject properties but were recognized as subjects of the sentential predicate (not subject of the clause) since they were not the produce of a movement. Let us now consider the subject properties of the experiencer. Some of these properties differentiates the sentence initial experiencer from topicalized and left-dislocated elements.

- **Reflexivization:** the psychological construction with sentence initial experiencer undergoes reflexivization and can be bound by an element within the clause.

(254) *mæn_i* æz *xod-æm_i* xosh-æm_i umæd-Ø
 I from self-my pleasure-my came-3sg
 I liked myself (I was pleased by myself)

In (254) the experiencer *mæn* (I) is the antecedent of *xod-æm* (myself). The ability to antecede subject-oriented reflexives is often interpreted as a sufficient condition for subjecthood. (See recently Moore & Perlmutter 2000, and Babyonyshev 1997). The psych construction is able to undergo reflexivization in the absence of the sentence initial experiencer as in (255).

(255) æz *xod-æm_i* xosh-æm_i umæd-Ø
 from self-my pleasure-1sg came-3sg
 I liked myself (I was pleased by myself)

In (255) I argue that the null category with the feature *human/+mental state* is the element that binds the reflexive *xod-æm*.

- **Experiencers can appear to the right of an adjunct**

(256) diruz tu kelass **Ali_i** khab-esh_i bord-Ø
 Yesterday in class Ali sleep-his took-3sg
 Yesterday in the class Ali fell asleep

In (256) the adjunct “yesterday in the class” appears to the left of the experiencer. This is typically an A property and this subjecthood property of the sentence initial experiencer also differentiates it from clause level topicalized elements which cannot appear to the right of an adjunct. This is shown by the ungrammaticality of (257) in which the same adjunct “yesterday in the class” appears to the left of a clause level topicalized element .

- (257) *diruz tu kelass [un zæne_i pedær-esh_i-o did-æm]
 Yesterday in class that woman father-3sg-Acc saw-1sg
 Yesterday in the class, that woman, I saw her father

- Conjunction-reduction

- (258) ki-ha kot næ-pushid-æn_i va særd-eshun_i shod-Ø?
 Who-pl coat neg-wore-3pl and cold-3pl became-3sg?
 Who didn't wear warm clothes and got cold?

In (258) the same subject is shared between two clauses; in one the subject is an experiencer *særd-eshun shod-Ø* (they got cold) and in the other it is an agent *kot næ-pushid-æn* (they didn't wear warm clothes). The sentence in (258) was chosen in interrogative form so that it would be impossible for the two clauses to have different references (as Persian is a pro-drop language, it is possible to have a reading without an overt subject for the second clause if stated in affirmative form/without wh-question). If example (258) were in affirmative form (without a wh-phrase), the two clitics could either refer to the same individual across conjunctions, or to individuals, which means

that question word must behave like an R-expression. This indicates that the higher experiencer is obligatory with a semantic role in reference.

- Experiencers can be bare quantifiers

(259) *hich-ki* *særd-esh* *na-shod-Ø*
 No-one cold-3sg neg-became-3sg
 No-one became/got cold

In (259) the experiencer is the quantifier *hich-ki* (no-one). This indicates that the experiencer adds its own semantic content which cannot be carried by the genitive clitic. The fact that an experiencer can be a quantifier also differentiates it from a left-dislocated element which cannot be a quantifier.

- Experiencers can be Controllers⁶⁴

(260) a. *mæn* *yad-æm* *ræft-Ø* *ke* *be-ræ-m*
 I memory-1g went-sg that Sub-go-1sg
 I forgot to go

In (260.a) the experiencer, *mæn* (I), can be used with the control verb *forget* and be the controller. However, the control structure is also possible in the absence of the overt sentence initial experiencer as in (260.b).

⁶⁴ I thank Jila Ghomeshi for pointing out this possibility to me.

b. yad-æm ræft-Ø ke be-ræ-m
 memory-1g went-sg that sub-go-1sg
 I forgot to go

I argue that in (260.b) in the absence of the sentence initial experiencer, the null category with *human/+mental state feature* is the controller.

- Experiencers can be Controllees⁶⁵

In addition to being a controller, the sentence initial experiencer can also be the controllee in the structure. This is shown in (261).

(261) a. Soroush ne-mi-khast-Ø khab-esh_i be-bær-e
 Soroush neg-ind-want-3sg sleeping-3sg sub-take-3sg
 Soroush didn't want to fall asleep

In (261) the experiencer, *Soroush*, can be used with the control verb *want* and be the controllee. Same as example (260), the control structure is also possible in the absence of the overt sentence initial experiencer as in (261.b).

b. ne-mi-xast-Ø xab-esh_i be-bær-e
 neg-ind-want-3sg sleeping-3sg sub-take-3sg
 S/he didn't want to fall asleep

Most of the recent works on Icelandic quirky subjects contain the 'controllee' test as part of the subjecthood tests.

⁶⁵ I thank Éric Mathieu for pointing out this possibility to me.

Persian has no “ordinary” ECM or raising, perhaps since it lacks infinitives (Karimi 2005, Ghomeshi 2001). Therefore, ECM and raising tests are not applicable.

4.4.3.1. Arguments against movement of the experiencer

In the previous section I discussed subject like properties of the experiencer. It was also argued that the fact that the experiencer is the highest DP in the clause might determine some of these properties due to structure. Below I present arguments to show the differences the experiencer has with typical subjects, namely, arguments against the movement of the experiencer. Moving to check/satisfy Φ -features and to satisfy EPP requirements is a common property of ordinary subjects⁶⁶. Below I provide arguments to show that the experiencer does not exhibit this property of prototypical subjects.

- Lack of verbal agreement

As mentioned in the beginning of the chapter, the experiencer does not have the ability to trigger agreement on the verb. This is shown below.

- (262) (un-ha_i) boht-eshun_i zæd-Ø
they wonder-3pl hit-3sg
They got shocked/stunned

In (262) the experiencer is in third person plural while the verb is in default form.

⁶⁶ It was shown in chapter 2 that valuing Φ -features and satisfying EPP can be done through different elements.

- Lack of scope ambiguity:

Having two scopes within the clause and being able to reconstruct (interpreted in two positions) is a property of a moved element. As subjects are considered to be moved elements in order to satisfy EPP requirement and check/value Φ -features, they exhibit movement properties and can be interpreted in two positions: one is the landing position (wide scope), and another is the situ or original position (narrow scope). Therefore, it is argued that in the presence of a quantifier, subjects can have ambiguous readings depending on the scope they take. This is shown in the example below.

- (263) *ye doxtær-e ziba ba hær pesær-i mi-rægħs-æd*
A girl-of beautiful with every boy- indef ind-dance-3sg
A beautiful girl dances with every boy (*Ambiguous scope*)

In (263) the moved subject *ye doxtær-e ziba* (a beautiful girl) can have two readings depending on its position (whether or not it reconstructs): when the subject takes wide scope ($a > \text{every}$), *a beautiful girl* is interpreted under the scope of *a*, and there is there is a specific girl who dances with all the boys; when the subject takes narrow scope and reconstructs in a low position below the quantifier in the object ($\text{every} > a$), *a beautiful girl* is interpreted under the scope of the quantifier *every* in the predicate, in which for each boy there is a different girl who dances with him.

Psych constructions are not open to this type of scope ambiguity and are not ambiguous when a quantifier is added. The experiencer has what is called in the literature “frozen” scope. It must have wide scope over a quantifier in the predicate and cannot reconstruct (be interpreted in two positions) which means that it is not generated within the clause and is not product of a movement in syntax or LF. This is shown in (264).

(264) ye doxtær-e ziba æz hæz pesær-i xosh-esh mi-ad-Ø⁶⁷

A girl-of-beautiful from every boy-indef pleasure-3sg ind-come-3sg

A beautiful girl likes every boy (*only a specific girl*)

In (264) there is only one reading where the experiencer takes wide scope (a > every), and a *beautiful girl* is interpreted under the scope of *a*. Under this reading there is a specific girl who likes all the boys. Lack of scope ambiguity for experiencers indicates that they are not able to reconstruct in two positions and that they are not the result of a movement in syntax or LF and are base generated in a position above TP, the position where regular (moved) subjects land.

To sum up, ordinary subjects can have wide or narrow scope, the last if reconstructed. Experiencers must have wide scope, so they never occupy a lower syntactic position within the clause, which indicates that they are not a product of a movement. This indicates that the experiencers are located in a higher position than ordinary subjects; namely [specSuperHighApplP] in my proposal. Given that the experiencer in psychological constructions cannot reconstruct and has “frozen scope”, I argue the Super High Applicative Phrase (SuperHighApplP) is a boundary/strong phase.

⁶⁷ A member of the audience of the conference on aspects of Iranian linguistics brought to my attention that the same sentence in the past tense might have ambiguous readings; however, I argue that this issue might be related to the fact that the past tense in Persian carries modal features or has modal uses, so that it may contain an operator able to interact with the scope of quantifiers. Modals are ambiguous in their interpretation, which has sometimes been attributed to the idea that they are raising verbs. So adding a modal-like element could add a type of structure that gives rise to different scopes. In the absence of modals the construction has the properties of root modals.

4.5. Summary

In this chapter I studied Persian constructions similar to class III of Belletti and Rizzi's psychological verbs. I argued that these psych constructions involve two applicative phrases: a high applicative head that takes TP as a complement licensing the applied experiencer (and is a strong propositional phase); and a low applicative head expressing the relation between the psychological state and a possessor/affectee/experiencer (and is a weak non-propositional phase). I argued that in psych constructions, the unaccusative verb and the theme subject constitute a complete clause which is semantically complete but structurally has a Tense requirement; therefore, the sentence initial experiencer is applied to TP complement, which must thus be a finite sentence. I demonstrated that subject properties are shared between the theme subject (checking Φ -features) and the applied sentence initial experiencer. The applied sentence initial experiencer exhibits some A-properties and some discourse functions and semantic contents, such as being reference, and quantifier, which cannot be carried by the lower clitic. The properties of experiencer/applied argument were shown to be different than topicalized or left-dislocated elements. This proposal for Persian psychological verbs has two implications for grammar theory: (a) the existence of a new category of applicative heads, Super High Applicative, located above TP; (b) the existence of a new category of strong phase SupHighApplP, to be added to the set of Chomsky's strong phases.

Chapter 5. Concluding Remarks

The Persian constructions discussed in this thesis, namely, constructions with plural inanimate subjects and psychological constructions, both provide evidence for the claim that subjecthood should no longer be viewed as a rigid concept; moreover, subject properties including case, agreement, EPP, and thematic prominence may be split between several constituents in the clause (Harley 1995, Landau 2003, Sigurðsson 2002, among others).

Based on the Persian constructions studied in this work (inanimate subjects and experiencers), I propose that the degree of volition or control of the verbal action by the subject is a criterion that affects verbal agreement in Persian. The feature primitive of theta selection proposed by Reinhart (2001) categorizes agents as [+causer, +mental state]. I argue that as long as any of the two primitive agentive features are missing in the structure of the argument in subject position, verbal agreement is somehow constrained in Persian. Inanimate subjects lack the ‘*mental state*’ feature and can be considered as instruments. Experiencers obligatorily contain a *mental state* feature, but lack the ‘*causer*’ feature. In chapter 2 it was argued that intuitively Persian grammar does not consider inanimate subjects as agents in the sense of having control over their actions (Saadat 1996). In that sense, inanimate subjects are more akin to instruments, a causer with [-mental state] feature. Also, Persian psychological constructions introduced in chapter 4 lacked the ‘causer’ feature as they expressed a sense of involuntary state where the psychological state was occurring to the experiencer without the experiencer’s control/volition. The implication of the thematic mapping into syntax described above is that subjecthood is not a sufficient condition for verbal agreement in Persian and it is in

fact agenthood that is responsible for agreement. A similar idea with respect to volitionality and agreement for dative subject constructions was first introduced by Sridhar (1976) (as discussed in 3.2).

Another implication of this work is the issue of psychological predicates (class III) which have a Tense requirement and have to be finite and cannot be nominalized. It was suggested that perhaps this Tense requirement for psychological constructions is universal and has to be explored cross-linguistically. The Tense requirement on psychological constructions is an indicator of the existence of a new category of applicative heads, Super High applicatives. Applicative heads have been argued to take an event (vP) or another individual (DP) as complement. However, there is no theoretical reason preventing an applicative head from taking a TP as complement. This new category of applicatives is similar to high applicatives which take an event complement with the difference that they must comply with a Tense requirement because their complement is a TP. Moreover, I proposed that the new category of applicative constitutes a strong phase since it is a propositional/domain of semantic predication. Following the definition of a phase, the *SuperHighAppl* head is created by adding an applied argument to the remainder of the clause and assigning the theta role to the applied argument.

Finally, following Haeberli (2002), Pestesky and Torrego (2001, 2004), and Svenonius (2001), I propose that the two Persian constructions studied in this work provide further evidence for the separation of nominative licensing from verbal agreement. The two Persian constructions of interest, as well as non-nominative/quirky subject constructions (discussed in chapter 2), are evidence for the fact that linguistic theories must be flexible

enough to accommodate subject properties and verbal agreement for arguments with marked subject features (i.e. non-nominative case, experiencer subject, and inanimate subjects).

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