

Psychological Constructions and Super High Applicatives in Persian*

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Abstract: The constructions under review in this work have been introduced as Impersonal/Subject-less constructions in the Persian linguistic literature and have been argued to involve compound verbs (Ghomeshi 1996, Karimi 2005, among others). In this paper, I explore them from the point of view of Psychological constructions and show that they do not involve compound verbs after all. I capture the specific properties of Persian psychological constructions by proposing that they contain a *Tense* requirement and involve *Applied Arguments*. I depart from previous works (Pylkkänen 2001, among others) which 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 full proposition) as complement and is a strong phase. This new category (SupHighApplP) thus needs to be added to the set of strong phases proposed by Chomsky (1999-2004).

Keywords: Applicative heads, psychological constructions, phases, checking/valuing, Persian

1. Introduction

It is a common belief that in Standard Persian verbs agree in Number and Person with the subject (Khanlari 1980, Meshkat-al dini 1987, among others). This is shown in (1).

- (1) an-ha be iran ræft-ænd
 That-pl to Iran went-3pl
 ‘They went to Iran.’

In (1), the verb *ræft-ænd* (went-3pl) agrees in Person and Number with the structural subject pronoun, *an-ha* (they). However, experiencers in subject position in constructions with certain Psychological verbs in Persian do not trigger agreement on the verb. This is shown in (2).

- (2) **ma** xoš-eman amæd-Ø
 we pleasure-1pl came-3sg
 ‘We liked (something)/(something) pleased us.’

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In (2) the verb *amaed-Ø* (came) is in 3rd person singular while the experiencer in subject position, *ma*, is in 1st plural. Examples such as (2) seem to impose a constraint the subject-verb agreement of Persian. Such constructions have been introduced as “Impersonal” (Thackston 1983, Ghomeshi 1996) or “Subjectless” (Karimi 2005) in the literature involving Compound Verbs. They have not been systematically studied as Psychological constructions and the properties of the experiencer in these constructions have not been received a full analysis. In this paper, I capture the properties of Persian psychological constructions by proposing that they contain a *Tense* requirement and involve *Applied Arguments*. An applicative head (Pylkkänen 2001, McGinnis 2001, and Cuervo 2003, among others) licenses an applied/extra/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. Based on the data from Persian psychological verbs discussed in this work, 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 complement.¹ In addition, I propose that the *Super High Applicative* projection (SupHighAppIP) 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 (SupHighAppIP) 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, Psychological constructions in Persian provide evidence for the divorce of nominative licensing and verbal agreement. Following Haerberli 2002, Pesetsky and Torrego 2001, 2004, and Svenonius 2001, (among others), I argue that Tense is responsible for nominative licensing.

¹ See Rivero (2004) for a similar idea on reflexive clitic *feel-like* constructions in south Slavic/Albanian.

2. Persian Psychological Constructions

Similar to Psychological constructions in Italian or Hebrew (Belletti & Rizzi 1988, Landau 2003, among others), the Persian constructions under review always denote a psychological state of the experiencer and most resemble Class III or the Italian *piacere* type (*Nominative* theme, *dative* experiencer: ex. *The idea appealed to Julie*). Unlike most experiencers which are in dative/oblique form, experiencers in Persian are in nominative form² while the verb appears with 3rd sing/default morphology. Persian Psych constructions may have a regular counterpart in which the agreement restriction does not occur. This contrast is shown in (3-4).³

(3) (ma_i) to ra/ro [dust dar-im_i]
we you-Acc. friend have-1pl
'We like you.'

(4) (ma_i) æz to [xosh-emun_i umæd-Ø]
we from you pleasure-1pl came-3sg
'We liked you (you appealed to us).'

Example (3) displays an ordinary agreement pattern and has no complications. The verbal constituent of the compound verb *dust dar-im* agrees with the subject *ma* (we). On the contrary, in example (4), the DP in sentence initial/subject position *ma* is a first person plural pronoun and does not induce agreement on the verb which appears with third person singular/default morphology. Lack of agreement makes constructions such as (3) interesting. Another difference between (3) and (4) is that when the optional DP in sentence initial position is present in (4), it is always *co-referential* with a *clitic pronoun*

² 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 fact that the experiencer is in nominative form also raises a problem for Landau's (2003) proposal in which the default case of experiencers is dative and languages can have other forms of experiencers if they already have dative ones.

³ Although example (3) can also be considered to be a psychological construction, I use the term "Psych/psychological constructions" thereafter exclusively in reference to psychological constructions with agreement restriction as in (4), corresponding to class III of B&R (1988).

(-emun) attached to what is believed to be the non-verbal constituent of a compound verb. This co-referentiality does not exist in (3). Further examples of the psych constructions of interest are provided in (5).

- (5) 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. (to_i) særd-et_i bud-Ø
 you cold-2sg was-3sg
 ‘You were cold.’
- d. (un-ha_i) boht-eshun_i zæd-Ø
 they wonder-3pl hit-3sg
 ‘They got shocked/stunned.’

In the examples above, the preverbal DPs in the subject position *mæn*, *unha*, *to*, and *unha* (I, they, you, they) are optional and when present, do not induce agreement on the verbs *æst-Ø*, *geret- Ø*, *bud-Ø*, and *zæd-Ø* (is, took, was, hit). The verbs always appear in third person singular/default form giving the impression that agreement is not obtained. Properties of these Psychological constructions are shown below.

2.1 Properties

- 1) The verb always appears with 3rdsg/default morphology.
- 2) The verb is limited to a number of verbs: *gereftæn: to take*, *amædæn: to come*, *bordæn: to take*, *shodæn: to become*, *zædæn: to hit*, *ræftæn: to go*.
- 3) The verb is used in an unaccusative form even if it is transitive, i.e., *zæd: hit* and *bord: took* really mean “occurred.” Considering these verbs in unaccusative form implies that they only require a theme subject. If the construction contains another argument, a direct argument/source of the feeling, that argument appears as an

thirsty to becoming thirsty) has occurred. However, it is evident that the constructions under investigation never denote an agentive event.

- 5) The sentence initial experiencer (*unha* in 8) is obligatorily coreferential with a *clitic pronoun*, (*eshun*), attached to the psychological state (*teshne*). Even if the sentence initial experiencer is not overtly present in the structure, it is always encoded in the doubled clitic pronoun.
- 6) The presence of the clitic pronoun in the psych construction is obligatory. Unlike Spanish psych verbs 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. For instance, example (9), without the genitive clitic and in infinitival form, can be used only for inanimate objects getting cold (*ghæza særd shod- the food got cold*) in which the psychological situation is not conveyed.

- (9) særd shod-æn
 cold became-inf
 ‘To get cold.’

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

- (10) * xab gereft-æn
 Sleep took-inf
 ‘to feel like sleeping.’

This property of Psych constructions is another indication against their compound-like nature that will be explored in the next section.

- 7) The experiencer appears with no case marker. Persian has no overt nominative marker; hence the general impression is that the experiencer is in an unmarked form which is nominative. The experiencer has been identified as a *topicalized subject* (Hajati 1979, Yarmohammadi 1996), which appears in less formal contexts or situations.

- 8) The Psychological state may be expressed by a *Noun xab* (sleep) in (8) or an *Adjective teshne* (thirsty) in (7).

In the previous literature on this topic, the Psych constructions studied herein have been considered to involve a VP compound unit consisting of a non-verbal element and a light verb (Barjasteh 1983, Ghomeshi 1996, Karimi 2005, among others). However, following Dabir Moghaddam (1997), I propose that these psych constructions do not involve compound verbs. I provide the evidence in the next section.

3. Comparison of compound verbs and psychological verbs

As mentioned earlier, several studies have argued that psych constructions in Persian are/resemble compound verbs. The first and foremost evidence for not considering the psych constructions as compound verbs is the contrast in terms of subject agreement that is exhibited between them as shown by the examples (3–4). In (3) the subject agreement appears on the verbal element of the compound verb *dust dastshtan*, while the experiencer in the psych construction appearing in (4) does not induce agreement on the verb and the verb always appears with 3rd sing./default morphology. Another example to show the default agreement can be found in (11).

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

Previous literature (Ghomeshi 1996, among others) has reported two similarities between the psych constructions and compounds; namely that similarly 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 for 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).⁴ On the other hand, there are examples showing that the Psych constructions may accommodate intervening elements and bear dual stress. Consider example (12) in which the capitalized word shows the place of stress.

- (12) ‘Xosh-et mi-‘Yad?
 pleasure-2sg ind-come
 ‘Do you like (it)? / Are you pleased (with it)?’

In the interrogative form in (12) 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 (13a, b) show the possibility of intervening elements between the two components of the so-called compound.

- (13) 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 (13) the prepositional phrase *æz donya* (from the world) intervenes between the light verb and the supposedly non-verbal element of the compound. Example (13) clearly shows that the psych constructions cannot be considered as a lexical unit. Also, (14) may bear a rising tone on the adverb *xeili* (a lot) to show the focus.

- (14) (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 (14) two elements, a PP *æz-æsh* (from her/him) and an adverb *xeili* (a lot),

⁴ See Megerdoomian (2002) for a comprehensive list of compound verbs’ dual syntactic and lexical characteristics.

intervene between the elements of the so-called compound. Example (15.a) has a scrambled variant as in (15.b) with a high rising tone on *pænj shab-e* (it is five nights).

- (15) 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 (15.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.

3.1 Comparison of lexical properties

Another line of argumentation that demonstrates the differences between psych constructions and compound verbs is the *lexical properties of compound verbs*. Several studies have explored the lexical properties of compound verbs. Below, I compare the lexical properties of compound verbs with psych constructions. Dabir Moghaddam (1995) argues that Persian compound verbs undergo nominalization. Moreover, Megerdoomian (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. I compare examples of compound verbs from Megerdoomian (2002: 123) with psych constructions below.

3.1.1 Gerundive nominalization

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

In (16) 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.

- (17) *særd-et⁵ shodæn-e to khatarnak ast
 Cold-(2sg) become-inf-Ez you dangerous is
 (intended meaning: Your becoming cold is dangerous)

3.1.2 Agentive noun formation

- (18) bazi kon-an/ændegan
 play do-Ø-pl
 ‘The players.’

The compound verb *bazi kærdaen* (to play) has formed an agentive noun by having *an/ændegan* added to the present stem of verbal component (18). Agentive noun formation is not possible in the case of psych verbs as in (19).

- (19) * xoshk-æm zæn-an/ændegan
 Dried-(1sg) take-Ø-pl

3.1.3 Adjectival formation

- (20) in kelid peyda shodani n-ist
 this key found become-adjF neg-is
 ‘This key is not to be found/findable.’

In (20) 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 (21).

⁵ 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.

- (21) *in doxtær særd-esh shodæn-i n-ist
This girl cold-3sg become-_{AdjF} neg-is
*‘This girl is not to be/become cold.’

3.1.4 Participle adjective formation

- (22) lebas-hay-e khoshk shod.e
clothes-pl-Ez dry become-_{PartAdj}
‘(the) dried clothes.’

In (22) 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 (23).

- (23) *dokhtær-ha-ye særd-eshun shod.e
girl-pl-of 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. Unlike previous studies that claim that psych constructions contain a VP, I argue that they involve a vP with a theme subject. I propose that unlike compound verbs, psych constructions undergo meaning composition in a way that is predictable from syntax and semantics.

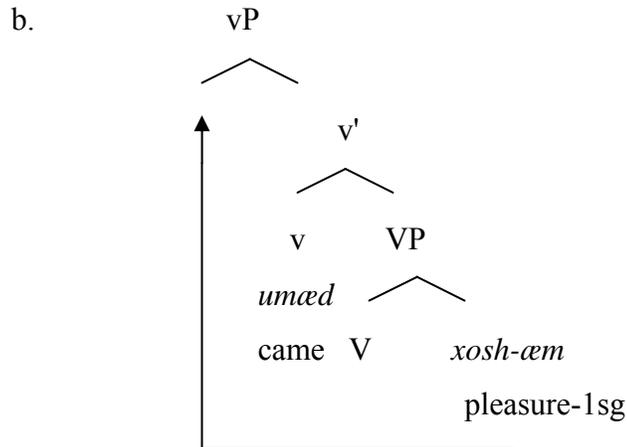
4. Proposal

4.1 Super High ApplP and the Tense requirement

Exploring properties of Persian psychological construction in the previous section demonstrated that they do not involve compound verbs. Rather, they contain an unaccusative verb, a psychological state containing a clitic co-indexed with the nominative experiencer, and the latter does not induce agreement on the verb. 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. Unlike previous literature which considers psych constructions as VPs, I argue that they contain a vP projection and are complete propositions. I propose that the psychological state which has been argued to be the non-verbal constituent of the so-called compound (*xosh-æm* in 24) is the theme argument of the unaccusative light verb which moves to the subject position. This is shown below.

- (24) a. *xosh-æm* *umæd-Ø*
 pleasure-1sg came-3sg
 ‘I liked (something/someone)/pleasure came to me (by someone/something).’



In (24) the verb is in unaccusative form. The theme *xosh-æm* (pleasure-1sg) originates in the object position and moves to [spec vP] to satisfy/value the EPP/OCC/*p* requirement of the strong phase vP. By nature, the Psych state is in 3rd 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.

I argue that the basic structure without the overt sentence initial experiencer (24) is a complete sentence in which the experiencer is obligatorily encoded as a clitic pronoun *æm* on the psychological state. Previous studies argue that when the sentence initial experiencer *mæn* (I) is present in the structure, it is the subject or topic (Thackston 1983, Ghomeshi 1996, Karimi 2005, among others). However, I argue instead that it is an extra/additional argument which is applied to a complete clause *xosh-æm umæd*. I

provide arguments against considering the experiencer as an ordinary subject, topic or left dislocate element.

I further propose that the psych constructions under review have a Tense requirement.⁶ It was argued above that psych constructions cannot be nominalised and cannot be used in infinitival form or they will lose their psych meaning. Therefore, I argue that although the structure of the clause in (24) 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 to ensure the existence of T. I propose that Psychological constructions contain a *Super High Applicative* projection that is always present above TP and licenses the experiencer in its specifier.⁷ In the absence of an overt experiencer in the sentence initial position as in (24), the *Super High Applicative* projection is still present and is filled with a phonologically null category with a [+*mental state*] feature. This category ensures that psych constructions only apply to human or animate elements containing [+*mental state*] features. This condition is not unforeseen since Persian psych constructions cannot be used for inanimates. This phonologically empty category is different from null categories of GB in the sense that it is encoded with the feature [+*mental state*] which do not have a phonological realization in Persian. Again, the reason for the tense requirement is the impossibility of utilising psych constructions in infinitival form and nominalization; and adding a structure above TP is to ensure that the tense requirement of psych constructions is satisfied.

Recent studies on applicatives (Pylkkänen 2002, McGinnis 2001, and Cuervo 2003) argue that a high applicative head can take only a vP or a DP as complement. Following

⁶ Thanks are due to María-Luisa Rivero for pointing out this requirement to me.

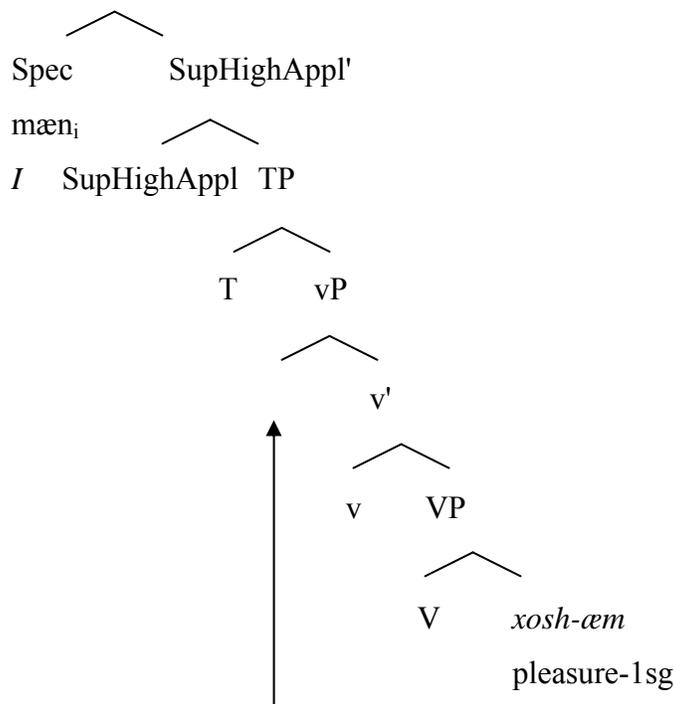
⁷ The proposal on Tense requirement for Persian psychological constructions may be further expanded to a different construction in Persian which usually contains the modal *bayæd* (must) and is “impersonal” in the sense that it cannot take an overt subject and does not refer to a specific person. Example is in (i).

(i). bayædræft-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.

Rivero (2004) who proposes a *Super High Applicative* head for reflexive clitics in south Slavic languages, I argue that Persian psychological constructions contain a *Super High Applicative* head which takes a TP as complement and hosts the experiencer. The SupHighAppIP is a strong phase, similar to CP and vP, is propositional, and assigns the thematic role of experiencer to the arguments generated in its specifier. This line of argument is along the lines of Heycock and Doron's *Broad Subjects* (2003) for Arabic and Hebrew and Pardeshi and Shibatani's (2001) analysis for dative subjects for South Asian languages. 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 in (25).

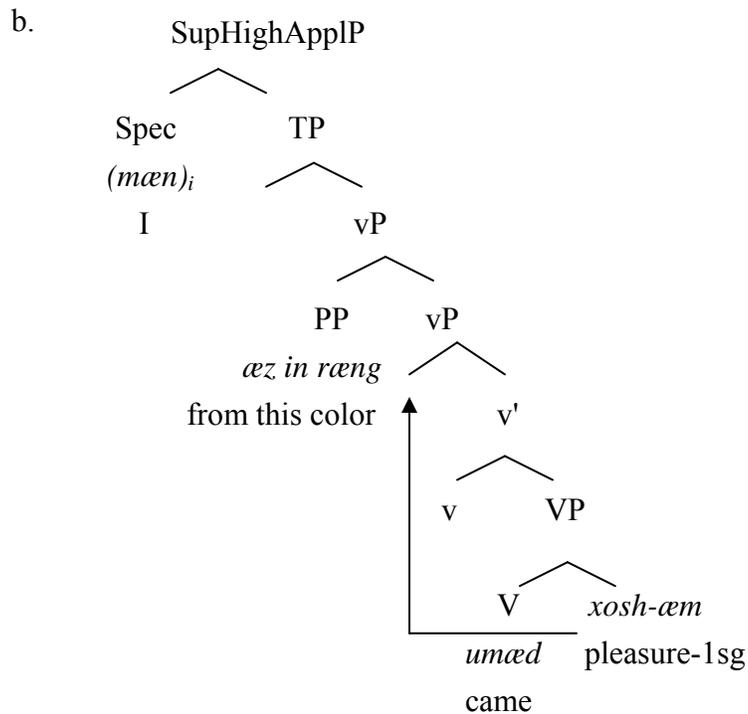
(25) SupHighAppIP



In the structure above, the theme subject *xosh-æm* (pleasure-1sg), 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 [SpecSupHighAppIP] 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 cases such as (26), where the psych construction contains a source PP, I argue that the PP is an adjunct to vP.

- (26) a. (mæn) æz in ræng xosh-æm umæd-Ø
 I from this color pleasure-1sg came-3sg
 ‘I liked this color.’



In the next section, I study the nature of the sentence initial experiencer in detail. I show that although the experiencer exhibits some subject-like properties, it is different from an ordinary subject, topic, or a left dislocated element.

4.2 Properties of the experiencer

In this section, I explore 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 some subject properties. Let us now consider the subject properties of the experiencer. Some of these properties differentiate the experiencer from topicalized or left-dislocated elements.

4.2.1 Reflexivization

The psychological construction with sentence initial experiencer undergoes reflexivization and can be bound by an element within the clause.

- (27) **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 (27) the experiencer *mæn* (I) is the antecedent of *xod-æm* (myself). The ability to antecede subject-oriented reflexives is often interpreted as a condition for subjecthood. (See Moore & Perlmutter 2000 and Babyonyshev 1997). The psychological construction may undergo reflexivization in the absence of the sentence initial experiencer as in (28).

- (28) 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 (28) I argue that the null category with the feature [+*mental state*] introduced in the previous section is the element that binds the reflexive *xod-æm*.

4.2.2 Experiencers can appear to the right of an adjunct

- (29) diruz tu kelas Ali_i khab-esh_i bord-Ø
Yesterday in class Ali sleep-his took-3sg
'Yesterday in the class Ali fell asleep.'

In (29) the adjunct, *yesterday in the class* appears to the left of the experiencer. This is typically an A property. This subjecthood property of the 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 (30) in which the same adjunct *yesterday in the class* appears to the left of a clause level topicalized element.

- (30) *diruz tu kelas [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.'

4.2.3 Conjunction-reduction

- (31) 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 (31) 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 (31) 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 (31) were in affirmative form (without a wh-phrase), the two clitics could either refer to the same individual across conjunctions, or two 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.

4.2.4 Experiencers can be bare quantifiers

- (32) *hich-ki* *særd-esh* *na-shod-Ø*
 No-one cold-3sg neg-became-3sg
 ‘No-one became/got cold.’

In (32) 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.

4.2.5 Experiencers can be Controllers⁸

In (33.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 (33.b).

- (33) a. *mæn* *yad-æm* *ræft-Ø* *ke* *be-ræ-m*
 I memory-1g went-sg that Sub-go-1sg
 ‘I forgot to go.’
- 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 (33.b) in the absence of the sentence initial experiencer, the null category with [+mental state] feature is the controller.

4.2.6 Experiencers can be Controllees⁹

In addition to being a controller, the sentence initial experiencer can also be the controllee in the structure. This is shown in (34). In (34) the experiencer, *Soroush*, can be used with the control verb *want* and be the controllee. Same as example (33), the control structure is also possible in the absence of the overt sentence initial experiencer as in (34.b).

⁸ Thanks are due to Jila Ghomeshi for pointing out this possibility to me.

⁹ I thank Éric Mathieu for pointing out this possibility to me.

- (34) 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.'
- 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. Persian has no "ordinary" ECM or raising, perhaps since it lacks infinitives (Karimi 2005, Ghomeshi 2001). Therefore, ECM and raising tests are not applicable.

4.3 Arguments against subjecthood/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 subjects. Below I provide arguments to show that the experiencer does not exhibit this property of subjects.

4.3.1 Lack of verbal agreement

As mentioned earlier, the experiencer does not have the ability to trigger agreement on the verb which is a principal property of Persian subjects. This is shown below.

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

In (35) the experiencer is in third person plural while the verb is in default form.

4.3.2 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.

- (36) *ye doxtær-e ziba ba hær pesær-i mi-ræghs-æd*
 A girl-of beautiful with every boy-indef ind-dance-3sg
 ‘A beautiful girl dances with every boy.’ (*Ambiguous scope*)

In (36) 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 (37).¹⁰

¹⁰ 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.

- (37) ye doxtær-e ziba æz hær pesær-i xosh-esh mi-ad-Ø
a girl-of-beautiful from every boy-indef pleasure-3sg ind-come-3sg
'A beautiful girl likes every boy (*only a specific girl*).'

In (37) there is only one reading where the experiencer takes wide scope ($a > \text{every}$), 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.

5. Summary

This paper focused on certain Persian psychological constructions which seem to constrain verbal agreement in interesting and unexpected ways. Unlike previous analyses available in the literature, I argued that the constructions in question do not involve compound verbs. Rather, I put forward the hypothesis that these constructions involve unaccusative verbs and the theme subject induces agreement on the verb. I also proposed a Tense requirement on psychological constructions, which implies the existence of a structure above TP. I argued that Persian psychological constructions contain a *Super High Applicative* head that takes TP as a complement licensing the experiencer. I demonstrated that the properties of experiencer/applied argument are different than a regular subject, topicalized or left-dislocated elements. My 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 which is a

strong phase; (b) the separation of nominative licensing and verbal agreement which implies that Tense is responsible for nominative licensing.

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