IS PRO_{ARB} THE SAME AS *pro*?
EVIDENCE FROM PERSIAN IMPERSONAL CONSTRUCTIONS

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This paper challenges the existence of PRO module in the grammar. Hornstein (1999) suggests that PRO does not exist and PRO$_{arb}$ is identical to *pro*. Landau (1999), however, claims that PRO exists and PRO$_{arb}$ is different from *pro* syntactically. The data provided here, along with the analysis to be presented, show that PRO$_{arb}$ and *pro* function similarly in Persian imperson-al constructions. Persian does not have any overt DPs with appropriate semantics such as impersonal *one* in English. Therefore, the only feature combinations that are compatible with the semantics are those for the covert equivalent of *one*.

1.   Introduction

This paper suggests that the distribution of PRO$_{arb}$ and *pro* in Persian impersonal constructions is identical. The data provided in this paper, along with the analysis to be presented, show that *pro* in Persian impersonals can be identical to PRO$_{arb}$ in the sense of Hornstein (1999: 91), if we assume that Persian-as a null subject language- does not have any overt NPs with appropriate semantics such as "one" in English, and the only feature combinations that are compatible with the semantics are those for the covert equivalent of *one*.

The paper is organized as follows: Section 1 is an overview of Persian phrase structure and some of the main syntactic properties of this language. Section 2 contains two main discussions. First, I present the properties of impersonal constructions and my proposal regarding the nature of these constructions. Then, I suggest different semantic and syntactic evidence to show whether *pro* or PRO are the subject of Persian impersonal constructions. Section 3 is devoted to the similarities of *pro* and PRO$_{arb}$ in Persian impersonal constructions and following Hornstein (1999), I propose that- at least in Persian impersonal constructions- *pro* and PRO$_{arb}$ are identical.

2.   Overview

Persian[1] has SOV order.   This means that the object (internal argument) immediately precedes the verb if it is non-specific, and indirect objects are represented by prepositional phrases (PP) as illustrated in (1):

	Indirect object	Direct object	
1)	Sârâ be Sâsân	ketâb	dâd.
	S. to S.	book	gave-3rd.Sg.

"Sârâ gave this book to Sâsân."

Direct objects are marked by *râ* if they are specific.   This is illustrated in the following example:

2)   Sârâ ketâb-ro[2]   be Sâsân dâd.
       S.   book-râ-ACC to S.   gave-3rd.Sg.
       "Sârâ gave this book to Sâsân."

Persian has neither overt nor covert expletives (Ghomeshi 2001: 34, Karimi in press: 28), and it is a Topic prominent language.   Therefore, the grammatical subject in Persian is not required to move out of vP.   There is no active-passive contrast in Persian (Moyne 1974, Karimi in press), and the construction that is most like a passive is an instance of complex predication (Folli, Harley and Karimi 2003).   Persian is a null subject language in the sense that the empty category *pro* can bear the external theta-role and receives the nominative Case in the sentence.
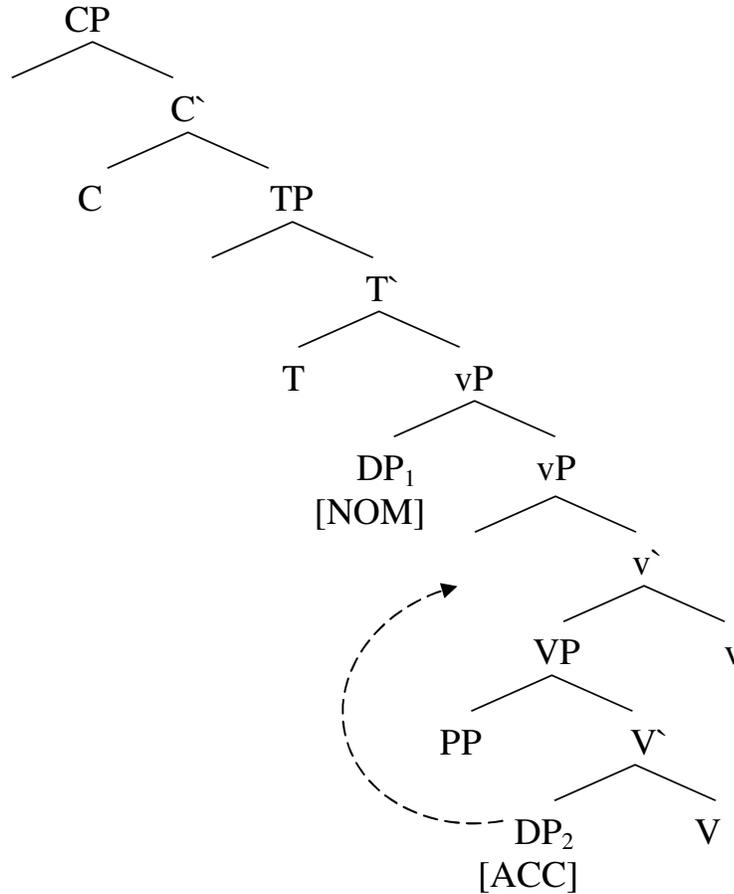   Based on the above discussion, following Karimi (in press), I suggest the following structure for Persian phrase structure:

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[1] Modern Persian is a member of the Indo-Iranian language group, which is a branch of the Indo-European family. It is spoken in Afghanistan, Iran and Tajikistan and it is named: Dari, Farsi, and Tajiki, respectively in each of these regions. The variety investigated in this paper is the standard dialect of Farsi spoken in Tehran. In this paper, the use of *Persian* refers to this dialect.

[2] The particle *râ* is a specificity marker that appears with a number of nominal elements that receive accusative Case. In spoken language, *râ* is employed as *ro* and o. (Lazar 1992, Ghomeshi 1996, Karimi 1999)

3)

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                    CP
                   /  \
                     C`
                    /  \
                   C    TP
                       /  \
                          T`
                         /  \
                        T    vP
                            /  \
                        DP₁     vP
                       [NOM]   /  \
                                  v`
                                 /  \
                               VP     v
                              /  \
                            PP    V`
                                 /  \
                               DP₂    V
                              [ACC]
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It should be explained that following Karimi (in press), I suggest that in Persian we have multiple specifier-vP and DP_1 is in the spec-vP and receives the nominative Case via Agree. DP_2 also moves to the spec-vP and checks its accusative Case.

3.   Persian Impersonal Constructions

There is widespread variation in the form of impersonals cross-linguistically, although all have arbitrary subjects. A question addressed in this section is what is the nature of the subject in Persian impersonal constructions?

Before we answer this question, I describe impersonal constructions in general and those of Persian in particular.

3.1   Properties of Impersonal Constructions

Stenson (1989: 379-381) suggests the following properties for impersonal constructions:

- Impersonal constructions can have nonspecific subjects like: "one," "they," or "you" in English, *on* in French, *man* in German, and *si/se* in Italian.

- There are often no overt pronouns, but only verbal inflection with an arbitrary referent.

- Verbal Inflection is either third person singular or third person plural in these constructions.

Consider the sentences in (4-6):

4)   bâyad haqiqat –ro goft.
       must truth   râ said-3rd.Sg.
       "One must tell the truth."

5)   mi-š-e   be Sârâ e'temâd kard.
       Dur-become-3rd.Sg. to S.   trust   did-3rd.Sg.
       "One can trust Sârâ."

6)   mi-g-an   (ke)   Sârâ ezdevaj karde.
       Dur-say-3rd.Pl. (that) S.   marry   done-has-3rd .Sg
       "They say that Sârâ has got married."

Sentences in (4) and (5) consist of:

  ➢ The impersonal modal *bâyad,* 'must,' or the auxiliary *šodan,* 'become,' plus the bare infinitive of the verb, and I call them bare infinitive or pure impersonals:

7)   ⎡ *bâyad* "must"   ⎤
       ⎢   ⎥   +   bare infinitive of the verb
       ⎣ *šodan* "become" ⎦

Both *bâyad,* 'must' and *miše,* 'become' are in the process of lexicalization in contemporary Persian and usually function as adverbs. *bâyad* is derived from the verb *bâyestan,* 'have to' which has lost its inflection. *miše,* on the other hand, has kept its inflection and aspectual features.[3]

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[3] See Lazard (1992), for more details on the lexicalization process in modal and auxiliary verbs like *bâyad,* "must," and š*âyad, "perhaps"* in Persian.

> The sentence in (6) is composed of:

8)   *mi-g-and*   **+**   CP
      Dur-say-3rd.Pl

I call these constructions pseudo-impersonals, because as we can see in the next sub-section, they share some common properties with pure impersonals but they differ in other aspects.

    Impersonal constructions are often assumed to have no external argument (Stenson 1989: 384). If the external argument is to be understood as the grammatical subject, then these sentences will violate the Extended Projection Principle (EPP) in the sense of Chomsky (1981: 27), which argues every clause to have a subject. Stenson notes that the absence of an external argument accounts for the impossibility of an adjoined by-phrase. She states that "…this claim seems clearly incorrect since such sentences do refer to a specific action, and the existence of an actor (i.e., animate subject) is implied" (p: 384, 385). Stenson claims that impersonal constructions have an animate subject. Semantically, these constructions refer to a specific action or event where the actor is implied.

    In parallel to Stenson's argument regarding the presence of animate subject in impersonal constructions, I suggest that impersonal constructions are different from other constructions without an agent, such as unaccusatives. Consider the following sentence:

9)   a.   *šiše bâ ehtiyât   šekast
              glass with careful broke-3rd.Sg.
            "*The glass broke carefully."

      b.   bâyad šiše-ro bâ   ehtiyât šekast.
            must   glass-râ with careful break-3rd.Sg.
            "One must break the glass carefully."

      c.   *šiše bâyad be-škane.
              glass must Subj-break-3rd.Sg.
            "The glass must break."

      d.   Sâsân šiše-râ   bâyad be-škane.
            S.   glass-râ must Subj-break-3rd.Sg.
            "Sâsân must break the glass."

e.   *zamin larze šiše-râ   bâyad be-škane.
       earthquake glass-râ must Subj-break-3rd.Sg.
       "The earthquake must break the window."

In (9a), the THEME *šiše,* 'glass,' is in the subject position and the ungrammaticality of the sentence shows that there is a spontaneous event without any outside agent, because the adverb *bâ ehtiyât,* 'carefully,' requires an agent. In the impersonal construction in (9b), the grammaticality of the sentence with the adverb of manner *bâ ehtiyât* shows that an agent does the act of breaking. In (9c), the verb of the sentence is a modal unaccusative verb *bâyad beškane* 'must break,' and the sentence is not grammatical. When we add an agent in (9d), the sentence will be grammatical while the subject is inanimate in (9e) the sentence is ungrammatical. This observation shows that we need an agent in impersonal constructions. Therefore, this semantic evidence supports the claim that impersonal constructions have an animate subject.

3.2   Similarities and Distinctions of Bare Infinitives and Pseudo-Impersonals

In both bare infinitive and pseudo-impersonal constructions, the subject has an arbitrary referent. As illustrated in (8), pseudo-impersonals are composed of two clauses: 1) A matrix clause with the verb *mi-g-and* 'they say-3rd-Pl.,' and 2) An embedded clause. I assume that like other impersonal constructions, the arbitrary subject appears in the matrix clause. The verbal inflection in bare infinitives is the default inflection third person singular[4]. In pseudo-impersonals the inflection is third person plural. Some linguists (Karimi in press: 12) suggest that the subject of Persian pseudo-impersonals is *pro*. *pro*, however, often refers to a specific referent. A question of interest is, if *pro* refers to a specific referent, then how can *pro* with specific referent be the subject of pseudo-impersonals with arbitrary referent? I discuss this issue in Section (2-5-2) in detail.

Another distinction between pseudo-impersonals and bare infinitive constructions is that only the former may have overt DPs or pronouns in the subject position, while the latter may not. Consider (10):

10)   a.   *mardom* mi-g-and   (ke) Sârâ ezdevaj karde
              people Dur-say-3rd.Pl. (that) S.   marry done-has-3rd.Sg.
              "They say that Sârâ got married."

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[4] Persian past tense stem, rather than infinitives is the citation form of the verbs. This stem used in third person singular with zero inflection such as: u xord-Ø   (See Lazard 1992 for more discussion)
                        he ate-3rd .Sg

b.   * *u*   mi-š-e   be Sârâ e'temâd kard.
     he Dur-become-3rd.Sg. to S.   trust   did-3rd.Sg.
     "He can trust Sârâ."

3.3   Proposal (1)

The subject of impersonal constructions is assumed to have arbitrary and an indefinite or generic interpretation. Stenson (1989: 401) similarly claims that the subject of Irish impersonals is arbitrary PRO (PRO_arb). I propose that the subject of bare infinitive constructions is PRO_arb based on the following evidence:

1.   PRO_obl receives its referent from a controller, and PRO_arb is assigned an arbitrary referent. The subject of the bare infinitive does not have a specific referent, and in this respect, its meaning is much like that of arbitrary PRO.

2.   In the case of pseudo-impersonals, following Karimi (in press: 12), I suggest that *pro* can be the grammatical subject of these constructions. However, I add to her suggestion that *pro* refers to an arbitrary referent (*pro_arb*) in Persian pseudo-impersonals, and it can be replaced by an overt DP, because *pro* can be interpreted as a pronoun, either definite (similar to *he*, *they*, *she*, etc) or indefinite (similar to *one*) (Hornstein 1999: 91). The subject of pseudo-impersonal constructions co-refers with the third person plural subject-agreement at the end of the verb *mi-g-and,* 'they say.'

Cross-linguistic evidence supports the second claim in the sense that *pro_arb* is the subject of the pseudo-impersonal constructions. Persian is not the only null subject language which has *pro_arb* in the subject position in one form of impersonal constructions. Similar cases are found in Spanish as well. Consider the following example taken from Suñer (1988: 189).

11)   ***pro*** dicen que *pro* va a nevar.
     "They say that it is going to snow."

Suñer claims that the bold *pro* in this construction has the indefinite/unspecified reading of the third person plural. This *pro* meaning "they" is ambiguous between the arbitrary and specific referent. Although the verb appears in the third person plural, *pro* is completely indeterminate as to the possible number of referents. For example, the speaker who utters (11) could either have meteorologist X in mind or

be reporting pure hearsay. In short, in Spanish the [+plural] feature of *pro* and the verb is a formal way to indicate arbitrariness of referent in this kind of impersonal construction.

The question of interest is if *pro* in Persian can have an arbitrary referent why do we need a PRO$_{arb}$ in bare infinitives? Why *pro*$_{arb}$ cannot be the subject of the bare infinitives too? I discuss this issue in the Section 2-5.

Before I present different evidence for my proposal concerning the nature of the subject of Persian impersonal constructions, I start with an overview of the syntactic and semantic features of the empty categories PRO and *pro*.

3.4. PRO versus pro

Within the Government and Binding theory (henceforth GB) there are four empty categories: 1) *pro,* 2) PRO, 3) NP-trace, and 4) *Wh*-trace. In this section, I just focus on *pro* and PRO and show how they are different from each other syntactically and semantically.

pro can have definite referent, and it functions as a pure pronominal, thus Chomsky (1982) concludes that it is [-anaphor, +pronominal]. In null subject languages, *pro* appears as the subject, and it is licensed through agreement. It receives the theta role and nominative Case (Haegeman 1999: 418). Consider the Italian example in (12):

12) *pro$_i$* parl-o$_i$
     speak-1st.Sg.
     "I speak."

In sentence (12), the subject *pro* is identified by the first person singular inflection in the verb and receives nominative Case. Since *pro* receives Case and the theta role, an overt DP can substitute for it. This is illustrated in the following sentences:

13) a.   *pro* qazâ-ro xord-am
           food-râ ate-1st-Sg.
           "I ate the food."

     b.   *man* qazâ-ro xord-am
            I   food-râ ate-1st-Sg.
           "I ate the food."

PRO in GB is characterized by the feature matrix [+anaphor, +pronominal]. Chomsky (1995) suggests that PRO is referentially dependent due to its lack of Φ-features. PRO is often controlled by another NP in the sentence. When PRO is not subject to control by another NP, it refers freely and has an arbitrary reading (PRO$_{arb}$). PRO fills the subject of the infinitival clause in control constructions as an abstract pronominal element in English. In these constructions, the embedded verb assigns a theta role to its external argument in the same way that it would do if it were the main verb in a regular finite sentence. This is illustrated in the following sentences:

14) a. John$_i$ decided [$_{CP}$ PRO$_i$ [$_{IP}$ to go]   (Obligatory)
    b. PRO to behave oneself in public would help Bill.   (Arbitrary)
                                                  (Haegeman 1999: 263)

Within GB Theory, PRO does not have a Case. Within the Minimalist Program, however, it is suggested that PRO has a special Null Case available from the non-finite T (Cf. Chomsky 1993, 1995 and Lasnik 1993). Since in either analysis the appropriate Case for an overt DP is not available in non-finite clauses, PRO is not replaceable by an overt DP. Consider the following sentences:

15) a. John$_i$ decided [$_{CP}$ [$_{IP}$ PRO$_i$ to go]
    b. *John$_i$ decided [$_{IP}$ Mary to go].

Now let us return to Persian.

3.5   The Nature of Subject in Persian Impersonal Constructions

Since Persian is a null subject language, and in these languages, *pro* appears in the subject position, then the best candidate to occupy the subject position in Persian impersonal constructions can be *pro*. Let us test this assumption with semantic properties and morpho-syntactic of *pro*.

3.5.1. Semantic properties

Chomsky (1982: 79) argues that *pro* can be replaceable by an overt DP. If *pro* is the subject of impersonal constructions, it should be replaced by an overt DP. However, one of the main features of impersonal construction is that its subject has arbitrary referent and cannot be an overt DP. Let us test both bare infinitives and pseudo-impersonal constructions in this regard.

16) *Sârâ bâyad haqiqat –ro goft.
      S.   must true   râ say-3rd.Sg
     "Sârâ must tell the truth."

17) *Sâsân mi-š-e   be Sârâ e'temâd kard.
      S.   Dur-become-3rd.Sg. to S.   trust   did-3rd.Sg.
     "Sâsân can trust Sârâ."

18) mardom mi-g-an   (ke)   Sârâ ezdevaj karde.
     People Dur-say-3rd Pl. S. that   S.   marry done-has-3rd.Sg.
     "People say that Sârâ got married."

In the bare infinitive constructions in (16) and (17), when the subject of the verb is an overt DP, the sentences in Persian are ungrammatical. In (18), where we have a pseudo-impersonal construction, the sentence is grammatical in that the subject can be the full DP *mardom,* 'people,' because *mardom* refers to a generic referent. Therefore, this kind of impersonal (i.e., pseudo-impersonal) can have an overt subject but with an arbitrary referent.

Furthermore, *one*, as the subject of English impersonal construction can be replaced by an indefinite, generic subject. Consider the following sentences in (19):

19) a.   One must tell the truth.
     b.   A man must tell the truth.

If we assume that the subject of impersonal constructions in Persian is *pro* with arbitrary referent, then we expect that *pro,* similar to *one* in English impersonal constructions, is replaceable by an indefinite, generic subject. However, this is incompatible with Persian as illustrated in (20b):

20) a.   bâyad haqiqat –ro goft.
           must truth   râ say-3rd.Sg.
           "One must tell the truth."

     b.   *mard-i/ye   mard bâyad haqiqat –ro goft.
            Man-Ind/one mard must true   râ say-3rd.Sg.
            "A man must tell the truth."

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3.5.2 Morpho-syntactic Properties

Impersonal constructions in some *pro*-drop languages like Irish are not compatible with reflexives or reciprocals (Stenson 1989: 384, 397) while *pro* in subject position is compatible with these forms. Consider (21):

21) a.   *Gortaiodh *pro*   é féin.
         hurt-PA-IMPS himself

   b. *Maraiodh *pro* a chéile.
       kill-PA-IMPS each other   (Stenson 1989: 384)

It should be mentioned that the Persian reflexives usually appear in the emphatic form *xod,* 'self,' in the formal style as illustrated in (22):

22)   man$_i$ xod$_i$-ro   dar ayne did-am
      I   myself-râ in mirror saw-1st.Sg.
      "I saw myself in the mirror."

The emphatic *xod,* "self," combines with possessive clitics in spoken Persian and makes pronominal forms, as presented in (23):

23)   Persian Emphatic-pronouns

      xod-am   *xod-emun*
      self-my   self-our

      xod-et   *xod-etun*
      self-your   self-your

      xod-eš   *xod-ešun*
      self-him/her   self-them

Now, consider the following examples:

24)   a.   *pro*$_i$ qazâ-ro xord-am$_i$
                food-râ ate-1st-Sg.
            "I ate the food."

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b. *pro*ᵢ xod-amᵢ qazâ-ro xord-amᵢ
    self-1st.Sg. food-râ ate-1st-Sg.
    "I ate the food myself."

In (24b), *pro* is compatible with the emphatic pronoun *xod-am,* 'self-my,' and the sentence is grammatical. Consider the following bare infinitive constructions:

25) a. bâyad qazâ-ro xord
    must food-râ eat-3rd.Sg.
    "One must eat the food."

b. * xod bâyad qazâ-ro xord
    self must food-râ eat-3rd.Sg.
    "One must eat the food oneself."

c. * xod-eš bâyad qazâ-ro xord
    self-3rd Sg. must food-râ eat-3rd.Sg.
    "One must eat the food oneself."

Sentences (25b and 25c) show that when we include the emphatic reflexive *xod,* 'self,' or the emphatic pronoun *xod-eš,* 'self-her/him,' in bare infinitive constructions, the sentences are ungrammatical, because the emphatic *xod* is an overt pronoun and bare infinitives are incompatible with overt pronouns or DPs. In other words, this observation shows that *pro* can be the subject of bare infinitives, because it is a covert pronoun.

Let us see what happens for pseudo-impersonal constructions with respect to the reflexive and emphatic forms:

26) a. mi-g-and (ke) Sârâ Sâsân-o dust dâre
    Dur-say-3rd Pl. (that) S. S. -râ friend have-3rd.Sg.
    "They say that Sârâ likes Sâsân."

b. #xode-šun mi-g-and (ke) Sârâ Sâsân-o dust dâre
    self-3r Pl. Dur-say-3rd Pl. (that) S. S. -râ friend have-3rd.Sg.
    "They say themselves that Sârâ likes Sâsân."

In sentence (26b), emphatic pronoun *xode-šun,* 'themselves,' refers to the third person plural subject. Therefore, it is compatible with *pro.* But semantically, this sentence is odd, because the subject has lost its arbitrary meaning and refers to a

specific referent, i.e., in this sentence *they* refers to a set of people which are presupposed by the speaker and are known by the hearer. In other words, if the emphatic pronoun *xode-šun,* 'themselves,' is in the subject position of pseudo-impersonals, then the sentence loses its impersonal reading.

3.5   Interim Conclusion

The evidence concerning the replaceability of *pro* by an overt subject reveals two main important facts: 1) the subject of pseudo-impersonals is *pro*, because it can be replaced by the overt DP, and 2) the bare infinitive differs from pseudo-impersonals in the sense that its subject cannot be *pro,* because it cannot be replaceable by an overt DP. If the subject of bare infinitives cannot be *pro*, then the only candidate for the subject position will be empty category PRO. Therefore, I conclude that the subject of Persian bare infinitives is PRO.

So far, I have tried to answer the question related to the nature of the subject in Persian impersonal constructions. The next questions that should be answered with respect to the impersonal constructions are where PRO_{arb}/pro_{arb} is located as the subject of impersonal constructions? How are they licensed there?

3.7   Subject Position in Persian Impersonal Constructions

Since Persian is a topic-prominent language (Karimi in press: 56), and the grammatical subject is not required to move out of the vP, thus we expect that the subject stays in-situ (Spec vP). Otherwise, it receives discursive or informative interpretation in topic or focus position. In that case, it moves to the Specifier of TopP or the Specifier of FocP. Therefore, I suggest that the subject of impersonal constructions is also in the Specifier of vP, and I present the tree-structure in (28) for bare infinitives in (27a & 27b):

27)   a.   bâyad haqiqat-râ goft.
              must   truth-râ   say-3rd.Sg.
              "One must tell the truth."

       b.   miš-e   haqiqat-râ goft.
              can/ be able-3rd. Sg. truth   say-3rd.Sg.
              "One is able to tell the truth."

28)
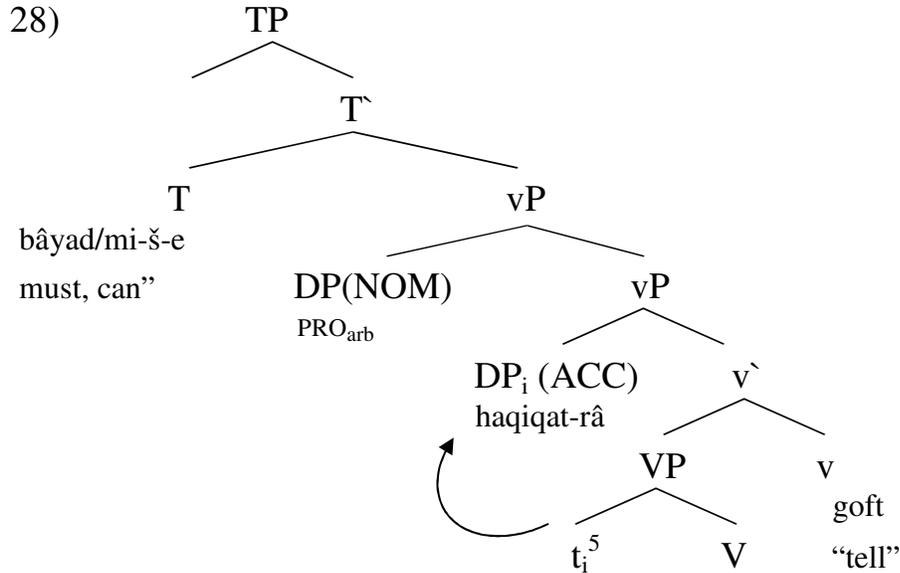
As I mentioned in Section 2-1, both *bâyad,* 'must' and *miše,* 'is able to /can' are in the process of the lexicalization in contemporary Persian and they have kept some verbal properties. Persian modals, similar to verbs have the theta-grid. In Persian bare infinitive constructions, the Modal phrase subcategorizes for a complement clause with a PRO as the subject. Besides, as I explained in Section 1-1, vP in Persian has multiple specifier that the higher one is the position of the subject and the lower is the direct object's position.

To summarize, in this section, I have proposed that PRO is the subject of bare infinitive constructions and receives the agent thematic role, and *pro* is the subject of pseudo-impersonals in Persian. I also argued that PRO/*pro*-as the subject of impersonal constructions- remains in-situ (i.e., Spec-vP).

4.   PRO_{arb} versus *pro*

So far, our discussion regarding the Persian impersonal constructions shows that both PRO_{arb} and *pro* can be the subject in these constructions. Both PRO_{arb} and *pro* refer to arbitrary reference and satisfy the nominative Case and the theta-role requirements. The only difference between PRO_{arb} and *pro* in Persian impersonals is that the former cannot be replaced by the pronoun or overt DP while the latter can. Consider the following sentences:

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[5] Following Karimi (in press), I assume that Persian VP is the domain of the existential closure (Cf. Diesing 1992) and specific objects, which are marked by *–râ,* must leave the VP and move to the Spec of vP.

29)   a.   *u bâyad haqiqat –ro goft.   (bare infinitives)
          he must true   râ say-3rd.Sg.
          "He must tell the truth."

      b.   *u mi-š-e   be Sârâ e'temâd kard.   (bare infinitives)
          he Dur-become-3rd.Sg. to S.   trust   did-3rd.Sg.
          "He can trust Sârâ."

      c.   una   mi-gan-d   (ke) Sârâ bâ Sâsân ezdevaj karde.
          They Dur-say-3rd-Pl. (that) S.   with S.   marriage did
          "They say that Sârâ got married Sâsân."

In this case, I suggest an alternation here: PRO$_{arb}$ is not replaced by the overt
pronoun in impersonal constructions in sentences (29a and 29b), because *u,* 'he,' as
the overt pronoun, does not have appropriate semantics to fill the subject position
of the bare infinitives. Since Persian does not have any overt NPs with appropriate
semantics such as *one* in English, the only feature combinations that are
compatible with the semantics are those for the covert equivalent of *one*. It should
be mentioned that in the case of pseudo-impersonals in (29c), only those pronouns
(third person plural) and overt DPs can be in the subject position which refer to
indefinite references. I present the following chart summarizing the interaction of
PRO$_{arb}$/ *pro* in Persian:

30)

Empty Category	Case	Theta-Role	Anaphoric	Pronominal
pro	+	+	-	-
PRO$_{arb}$	+	+	-	-

Based on this observation a question of interest is can we say that PRO$_{arb}$ and *pro*
are the same? Hornstein (1999:73) suggests the same proposal and claims that non-
control PRO is identical to *pro* in this sense that *pro* can be interpreted as a
pronoun, either definite (similar to "he", "they", "she", etc) or indefinite (similar to
"one"). He also suggests that non-control PRO does not require an antecedent. If
PRO does have an antecedent, it need not be local. Split antecedents are readily
available for non-control PRO. Our discussion in Persian impersonal constructions
supports Hornstein's claims that PRO$_{arb}$ and *pro* are identical. Based on the Chart
(30), the antecedents of PRO$_{arb}$ and *pro* are not local and they behave similarly
regarding the Case and theta role assignments in Persian impersonal constructions.

5.   Conclusion

The discussion of this paper regarding Persian impersonal constructions has two main contributions: 1) Morpho-syntactic behavior of Persian impersonal constructions present more pieces of evidence in favor of Hornstein's proposal in the sense that the PRO_{arb} and *pro* are identical. 2) The categorization of Persian impersonal constructions into two classes: 1) bare infinitives, and 2) pseudo-impersonals with PRO_{arb} and *pro* as the subject of these constructions respectively, gives a clear account for their distinctive syntactic behavior in Persian Grammar.

References

Chomsky N. 1995. *The Minimalist Program*, MIT press, Cambridge Mass.

Chomsky N. 1998. "Minimalist inquiries": In *Step by Step: Essays on Minimalism in honor of Howard Lasnik*, ed. R. Martin, D. Michaels & J. Uriagereka, 89-155**.** MIT press.

Dabir Moghamdam, M. 1987. *Syntax and semantics of Causative construction in Persian,* Diss. University of Illinois.

Folli, R., Harley H. & Karimi S. 2003. "Determinants of Event type of Persian Complex predicates", appears in Lingua.

Ghomeshi J. 1996. *Projection and Inflection: A study of Persian Phrase Structure*, Ph.D Diss. University of Toronto.

Harley, H. 2000. Irish: "The EPP and PRO," (ms).

Hornstein, N. 1999. "Movement and Control," LI 30: 1, pp: 69-96.

Iatridou S. & Embick D. 1997. "Apropos *pro*," Language 68, pp: 58-78.

Karimi, S. 2004. *A Minimalist approach to scrambling: Evidence from Persian*, Berlin: Mouton de Gruyter.

Lazard, G. 1992. *A Grammar of Contemporary Persian*, Cosa Mesa, Calif.: Mazda Publishers in association with Bibliotheca Persica.

Manzini M. R.& Roussou A. 1999. "A minimalist theory of A-movement and control," *UCL Working Papers in Linguistics 11, pp: 403-440.*

Manzini M. R.& Savoia M. L. 1997. "Null Subject without *pro*," *UCL Working Papers in Linguistics 9*, pp: 303-313.

Manzini M. R.& Savoia M. L. 2002. "Parameters of Subject Inflection in Italian Dialects": In *Subjects, Expletives, And the EPP,* ed. P. Svenonius, pp: 157-199, Oxford University Press.

Martin R. 2001. "Null Case and the distribution of PRO," LI 32:1, pp: 141-166.

Stenson, N. 1989. "Irish Autonomous Impersonals," NLLT 7, pp: 379-406.

Suñer, M. 1988. "*pro*_{arb}," LI 14:1, pp: 188-191.

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