# BEITRÄGE ZUR IRANISTIK

Gegründet von Georges Redard, herausgegeben von Nicholas Sims-Williams

Band 34

Topics in Iranian Linguistics

Herausgegeben von Agnes Korn, Geoffrey Haig, Simin Karimi und Pollet Samvelian

WIESBADEN 2011 DR. LUDWIG REICHERT VERLAG Printed with the financial support of *Mondes iranien et indien* (UMR 7528, CNRS, Paris)

Bibliografische Information der Deutschen Nationalbibliothek

Die Deutsche Nationalbibliothek verzeichnet diese Publikation in der Deutschen Nationalbibliografie; detaillierte bibliografische Daten sind im Internet über http://dnb.d-nb.de abrufbar.

# © 2011 Dr. Ludwig Reichert Verlag Wiesbaden ISBN: 978-3-89500-826-9 www.reichert-verlag.de

Das Werk einschließlich aller seiner Teile ist urheberrechtlich geschützt. Jede Verwertung außerhalb der engen Grenzen des Urheberrechtsgesetzes ist ohne Zustimmung des Verlages unzulässig und strafbar. Das gilt insbesondere für Vervielfältigungen, Übersetzungen, Mikroverfilmungen und die Speicherung und Verarbeitung in elektronischen Systemen. Gedruckt auf säurefreiem Papier (alterungsbeständig pH7 –, neutral) Printed in Germany

# Topics in Iranian Linguistics

Herausgegeben von Agnes Korn, Geoffrey Haig, Simin Karimi und Pollet Samvelian

WIESBADEN 2011 DR. LUDWIG REICHERT VERLAG

# Mohammadreza Pirooz

# 1. Introduction

Earlier accounts of the generative tradition on control constructions, especially during the GB era, were under a strong influence of non-finite (infinitival) complementation found in languages like English. This way of thinking viewed finite complementation of control constructions, found only in a handful of languages at that time, marginal to the mainstream tradition. Within this tradition, it is basically maintained that in non-finite clauses of the Obligatory Control (OC) constructions, there was a necessary co-reference between a matrix argument and an embedded null subject which was uninflected for  $\varphi$ -features. It was upon this trend of thought that the null element PRO was incorporated into the system to hold a matrix of two conflicting features [+anaphoric, +pronominal]. It necessarily required the speculative PRO Theorem to be introduced into the system in order to suggest that the empty category PRO be ungoverned and caseless (CHOMSKY 1981). The GB framework, therefore, constructions was necessarily considered as exceptional at the time.

With the advent of the Minimalist agenda, and the dismissal of government from the new Program, a way of handling the distribution of PRO developed, this time from Case. The idea was that PRO, like any other type of DPs, needed to check Case. A special kind of mechanism was thus introduced in CHOMSKY / LASNIK (1995) and then developed in MARTIN (2001). It claimed that PRO can check Null Case of T<sup>0</sup>, the tense head of a non-finite verb. However, the stipulative nature of the Null Case made it hardly available. Null Case was special: only PRO needed to check it; and only a non-finite T<sup>0</sup> was able to assign it. The approach is nonetheless preferable because it introduces into the system the Case of PRO, available in many languages like Icelandic (SIGURĐSSON 1991, 2008, USSERY 2008), Hebrew, as well as Balkan languages (LANDAU 2004, 2006), to name but a few.

However, recent Minimalist authors abandon the traditional approaches to the distribution of PRO in the GB era and the Null Case. LANDAU (2004, 2006) redevelops the idea that PRO is not special with respect to Case. He provides ample evidence from a variety of languages to suggest that PRO is case-marked like any normal DP. As a consequence, Case cannot distinguish between the PRO and the overt DP/pro. His approach, therefore, dissociates the distribution of PRO from Case. This trend of thought, with a standard assumption of case/Case for the PRO, was replicated in ALBOIU (2006), SIGURÐSSON (2008), and LEE (2009), among others. LANDAU (2004, 2006) demonstrated that OC constructions in Balkan languages and Hebrew were sensitive to the distribution of [Tense] and [Agr] both on  $I^0$  and  $C^0$  adopting the interaction of Agree with feature checking and deletion (CHOMSKY 2000, 2001, 2004) for finite control which he tried to formulate in terms of a local calculus.

Despite its general negligence in the generative agenda, finite control has continued to offer its own contribution. LANDAU (2004:825-826, footnote 11) lists references to a handful of such languages mainly from the Balkans. Recent studies on control constructions have focused on cross-linguistic data from finite control constructions, for instance, take POTSDAM / POLINSKY (2007) for Malagasy, SPYROPOULOS (2008) for Greek, and LEE (2009) for Korean. The concept of control thus need be accounted for, this time with the data available from languages with finite complementation.

Data from Persian finite control complementations are important for the ongoing theory of control as these constructions appear to share some properties with corresponding structures in languages like Icelandic, Hebrew, Modern Greek, Malagasy, Korean, and the Balkan languages. It is upon this background that the present study aims to demonstrate that a theory of Persian finite control constructions needs to be incorporated into the current theories in order to arrive at a full picture of control phenomena cross-linguistically, and ultimately, to provide a typology of control constructions. The present study only wishes to introduce these topics. A detailed investigation of each, however, is beyond the scope of the present analysis.

In section two, we discuss OC constructions in Persian. We show that these constructions, unlike the corresponding constructions in languages like English, appear in finite clauses. These clauses are in a subjunctive mood and are dominated by an overt C<sup>0</sup> head. Additionally, the embedded verb receives overt  $\phi$ -feature specifications as well as tense properties. In section three, we introduce some further implications of these constructions to the theory of control. Specifically, we show that the PRO in these constructions checks Nominative Case against a T<sup>0</sup> head in the lower clause. Due to the presence of this type of Case checking, we show that the Case of PRO is checked independent from the case of the controller DP in the matrix clause. Therefore, an analysis in terms of movement, as proposed e.g. by O'NEIL (1997) and the Movement Theory of Control (HORNSTEIN 1999, BOECKX / HORNSTEIN 2003, 2004) can be ruled out for this language.

# 2. The Skeleton of OC in a Finite Clause

## 2.1 Subjunctive Complementation

Despite the fact that OC constructions in a language like English appear in non-finite clauses with a *neutralized* infinitive construction shown for example in (1), the relevant constructions can appear in finite clauses an in the subjunctive mood as shown in (2) below.

(2)  $Sara_1 \ sac'y=kacrd \ [_{CP} \ (ke) \ [_{TP} \ PRO_1 \ be-xab-e]].$ Sarah try=made.3SG that PRO SBJ-sleep-3SG "Sarah tried to sleep."

While the English example in (1) is in a non-finite clause of the infinitive introduced by *to* appearing before the verb *try*, the Persian counterpart in (2) is in a finite clause with a

<sup>(1)</sup> Sarah tried to sleep.

subjunctive mood introduced by the mood marker  $be^{-1}$  attaching onto the verbal stem of *xabidæn* "to sleep". This is due to the fact that Persian generally lacks infinitive constructions as verbal forms (see GHOMESHI 2001:6, KAHNEMOOYIPOUR 2003:337 footnote 9, who patterns infinitives in this language with nouns, and also KARIMI 2008:4). The similarity of the infinitive constructions to the subjunctive constructions may even be viewed in such a way that an infinitive similar to a subjunctive clause is introduced by a mood projection in the derivation.<sup>2</sup> The productivity of the subjunctive and the lack of the infinitive complements to OC constructions makes this language analogous to languages where the subjunctive complements can host OC constructions like Bulgarian (KRAPOVA 1998:89, 2001:105), Malagasy (POTSDAM / POLINSKY 2007:296), and Modern Greek (TERZI 1997:335, ROUSSOU 2009:1811, SPYROPOULOS 2008:159).

The subjunctive in this language can host, among other things, both control constructions with a PRO as in (2) above, and non-control constructions with an overt DP as in (3) or a *pro* as in (4), both with the same predicate *omidvar budæn*, "hope."

(3)	$Sara_1$	omidvar-e	[CP	(ke)	[TP	bæčče <sub>2</sub>	be-xab-e]].
	Sarah	hopeful-be.3SG		that		child	SBJ-sleep-3SG
	"Sarah	hopes that the chil	d wou	ıld slee	ep."		

(4) Sara<sub>1</sub> omidvar-e [CP (ke) [TP pro<sub>2</sub> be-xab-e]]. Sarah hopeful-be.3SG that pro SBJ-sleep-3SG "Sarah hopes that somebody would sleep."

While in (2), there is an empty category in the subject position of the embedded clause, shown with PRO in the derivation, this position is occupied by an overt DP i.e. *bæčče* in (3). This means that while (2) is an OC construction, (3) is not. Yet both clauses appear in the subjunctive mood/clauses. Furthermore, as Persian is also a Null-Subject language (see for example KARIMI 2005, and SEDIGHI 2005, among many others), the subject position of a clause can also be filled with a *pro*. Subsequently, the sentence in (4) shows that the subject of an embedded clause can also be filled by a *pro*.

Therefore, a phonologically similar construction with an empty category as in (2) and (4) above is ambiguous and can have two different interpretations according to the fact that the

<sup>&</sup>lt;sup>1</sup> The marker has three allomorphic variations /be-/, bi-/, and /bo-/ in different phonological environments.

 $<sup>^2</sup>$  It is not strange to describe infinitive constructions in English as having some sort of "infinitive mood." There are several pieces of evidence suggesting they manifest some type of covert modality as also observed by PORTNER (2009 and the references therein). The infinitive behaves in a way quite similar to the verbal mood. So a sentence like (i) may mean something like (ii) below.

<sup>(</sup>i) *Tim knows how to solve the problem.* 

<sup>(</sup>ii) Tim knows how he can solve the problem. (PORTNER 2009)

Infinitives have a strong affinity with subjunctives. They even alternate with subjunctives in some languages, for example in French. BÉLANGER (2002) considers subjunctives and infinitives to be derivationally related in that they represent two possible outputs of the same set of formal features. The presence of subjunctive control in some languages that lack infinitive control like Persian is still another piece of evidence. The Persian constructions corresponding to (i) and (ii), similar to all other OC constructions in this study, are also expressed in the subjunctive. So, one may suggest that the infinitive has the feature [Mood] in its matrix, but this type of mood/modality may introduce a Null Mood projection headed by *to* on a par with the subjunctive mood. However, we are not following this line of enquiry here.

subject position of the embedded clause might be filled by a PRO or a *pro*. In other words, subjunctives in Persian may c-select (or subcategorize as) both control subjunctives and non-control subjunctives. This property of Persian subjunctives, with a dual analysis of the empty subject, makes it similar to Modern Greek (KRAPOVA 1998:75, 2001:108), Bulgarian (KRAPOVA 2001:122), Balkan languages (LANDAU 2004:829), Celtic languages like Irish (BONDARUK 2006:1840 and the references therein), and also to Malagasy (POTSDAM / POLINSKY 2007:300).

KRAPOVA (1998:75, 2001:108) calls the non-control and the control subjunctives in Modern Greek and Bulgarian "Type I and Type II subjunctive", respectively, while LANDAU (2004:827, 2006:164) calls them f-control subjunctives and c-subjunctives. However, we consider the two types of subjunctives in Persian as non-control and control subjunctives respectively. In a non-control subjunctive, the subject position of the clause is filled by an overt DP or the empty category *pro*, resulting in control suspension. In a control subjunctive, however, the subject position is exclusively filled with an empty category PRO, and as a result, it has an anaphoric referential property in that it picks up its reference from a controller DP in the matrix clause, hence a control subjunctive. In other words, the subject position of the embedded subjunctive may be filled by two different types of DPs.

#### 2.2 The CP Projection

In Persian there is a functional head *ke* in the derivation which is typically glossed as "that" and is optionally present in the two types of subjunctive clauses shown in the brackets in (2)-(4) above. It appears somewhere in the left periphery of the embedded clause in the sense of RIZZI (1997). This element receives no inflection and can appear in different types of embedded clauses to mark almost any type of subordination as observed in the literature (see for example LAZARD 2005:251, MAHOOTIAN 1997:29, among many others).

Most authors consider *ke* as a complementizer heading a CP. However, following WURMBRAND's (2001) vP analysis of control constructions, GHOMESHI (2001) claims that control verbs in Persian do not take a CP and/or a TP as their complements. In her analysis, what appears to be the complement of such a verb is a minimum syntactic phrase vP. As such, she discards the complementizer function of *ke* in these constructions and claims that it is a marker of subordination which can be a clitic hosted by a matrix verb. This stance, however, has subsequently been rejected by TALEGHANI (2008), KARIMI (2008), and DARZI (2008). Briefly, we will illustrate the main problems with the proposal.

First, GHOMESHI (2001) claims that Persian control verbs are restructuring verbs in the sense of WURMBRAND (2001), and are incompatible with tense clashes. As a result, they lack TP and CP. She provides the following sentences with *tunestan* "can; to be able to" for her claim. Non-control verbs, as she claims, do not have this type of behavior.

(5) \**Bižæn diruz mi-tunest (ke) færda be-r-e.* Bijan yesterday DUR-could/was.able.3SG that tomorrow SBJ-go-3SG "Bijan could yesterday go tomorrow." (GHOMESHI 2001:26)<sup>3</sup>

TALEGHANI (2008) provides counterevidence for her claim with another control verb like *tæsmim=gereftæn* "to decide" as seen in (6).

(6) Sara diruz tæsmim=gereft (ke) færda be-r-e. Sarah yesterday decision=took.3SG that tomorrow SBJ-go-3SG "Sarah yesterday decided to go tomorrow." (TALEGHANI 2008:83)

Specifically, TALEGHANI (2008) states that if the control verb is also a restructuring verb and as a result, lacks a TP, it should be incompatible with tense clashes. Contrary to GHOMESHI's (2001) expectation, the verb is compatible with tense clashes.

GHOMESHI (2001) also claims that scrambling with a control verb induces negligible discourse/pragmatic effects, but the same process with a non-control verb is interpreted as contrastive. Therefore, as she claims, scrambling seems to be sensitive to the grammatical category of the phrase embedded under a control verb. This is shown below.

(7)	Bižæn	(či)	mi-tun-e	(ke)	[(či)	be-xun-e]?
	Bijan	(what)	DUR-be.able-3SG	(that)	(what)	SBJ-read-3SG
"What can Bijan read?" (GHOMESHI 2001:24)						

DARZI (2008) also provides counterevidence with a matrix reading for a non-control construction shown below regardless of the new position of the *wh*-phrase.

(8)  $Bi\check{z}en [\check{c}i]_{Scr} fekr=mi-kon-i$  (ke)  $[t_{Scr} be-xun-e]$ ? Bijan what thought=DUR-do-2SG (that) SBJ-read-3SG "What do you think Bijan will read?" (DARZI 2008:108)

This means that a wh-phrase may have a wide scope reading in non-control constructions as well. So, scrambling may not be sufficient evidence for a vP analysis of control constructions in Persian.

DARZI (2008) also provides another argument against a clitic analysis of the complementizer ke in Persian from temporal adverbials. He says that if ke were a clitic hosted by the matrix verb, then in a position where the temporal adverbial follows ke, it would be able to modify the matrix verb as well, rendering the sentence ambiguous. This is because the adverb is located on the clausal boundary between the matrix and the embedded verb. This reading, as DARZI (2008) observes, is not borne out since the temporal adverbial hæmiše "always" has only an embedded reading as below.

(9)	U	mi-tun-e	ke	hæmiše	to-ra
	she/he	DUR-be.able-3SG	that	always	you-ACC
	dær	moqabel-e	digæran	særzænes	š=be-kon-e.
	in	front-EZ	others	blame=S	BJ-do-3SG
	"She/He	e is able to always bla	me you in	front of otl	hers." (DARZI 2008:114)

<sup>&</sup>lt;sup>3</sup> The glosses of examples cited from this work, the way these examples are transliterated, and the abbreviations used in the glosses are slightly modified for consistency. This is applied to examples in other works as well.

Apart from these observations, a vP analysis of control constructions requires that one find two types of ke in Persian, one in clitic function, found exclusively in control environments, and one in complementizer function, found in almost all other types of embedded complements. With the vP analysis of control constructions ruled out in Persian, we provide one single analysis of ke in all environments. For our purpose here, this means that there is no difference between the ke in a control construction as in (2) above and the ke in a non-control construction as in (3) and (4) above, a conclusion also favored by Minimalist proposals. Therefore, the presence of this element marks the existence of a CP projection in the left periphery somewhere above the embedded TP. This makes control into a CP a possibility in this language. Control constructions appearing within CPs are also found in Malagasy (POTSDAM / POLINSKY 2007), Polish (WITKOŚ 2007:30), and Korean (LEE 2009:293).

#### 2.3 φ-feature Specifications

Additionally, the lower verb in both control subjunctives and non-control subjunctives receives overt specifications of [person] and [number], which makes subjunctive verbs in this language parallel to the indicative verbs with respect to the overt specifications of  $\varphi$ -features of the matrix clause. This is shown below.

- (10) (Mæn) hærruz værzeš=mi-kon-æm.
  I every day exercise=DUR-do-1SG
  "I exercise every day."
- (11) Doktor goft [<sub>CP</sub> (ke) [<sub>TP</sub> mæn hærruz værzeš=bo-kon-æm]]. doctor said.3SG that I every day exercise=SBJ-do-1SG "The doctor said that I should exercise every day."
- (12) *Mæn sæy=mi-kon-æm* [<sub>CP</sub> (ke) [<sub>TP</sub> PRO hærruz værzeš=bo-kon-æm]. I try=DUR-do-1SG that every day exercise=SBJ-do-1SG "I try to exercise every day."

The examples above respect subject-verb agreement morphology, shown in boldface in the examples above. In a simplex clause like (10), the verb agrees with the subject. Consequently, the verb receives the morphological manifestation of  $\varphi$ -features. The same type of morphological manifestation can be observed in the non-control subjunctive (11), and also in the control subjunctive (12). While in a non-control subjunctive like (11), the  $\varphi$ -feature specifications are only checked in the lower clause, in a control subjunctive like (12), the  $\varphi$ -feature specifications have to wait to be checked with a controller in the matrix clause introducing a control effect. As a result,  $\varphi$ -feature specifications are fully respected in these two types of subjunctives.

#### 2.4 Tense Properties

With control constructions appearing in finite clauses in the subjunctive mood, we may wonder how OC clauses behave with respect to tense. Do embedded clauses of OC constructions appear in tensed clauses, or are they defective in terms of tense? Our analysis supports a tensed analysis of these constructions as we will see below.

We already saw that subjunctive clauses are similar to canonical indicatives with respect to [person] and [number] agreement morphology and the  $\varphi$ -feature specifications. We also saw that OC constructions appear in the subjunctive clauses with the subjunctive marker *be*- attaching onto the embedded verb. One piece of evidence for the availability of tense in OC subjunctives is the presence of this subjunctive marker *be*-. In addition to being a mood marker, the subjunctive marker can induce an irrealis future interpretation. This is due to the fact that the category of tense is strongly intertwined with mood (FABRICIUS-HANSEN 2006). As such, finiteness can naturally introduce the functional head T<sup>0</sup> of a TP projection into the derivation.

Another piece of evidence for the presence of tense in such clauses is that such clauses are introduced by the particle *ke* "that," a complementizer which is optionally present in the derivation as discussed above, also observed, among others, by TALEGHANI (2008), PIROOZ (2008), DARZI (2008), and KARIMI (2008). Overt complementizers are traditionally considered to represent finite clauses. RIZZI (1997), for example, argues that *that* is specified for finiteness in English. ALBOIU (2006:29) also takes the presence of the *ke* complementizer to OC constructions in Persian as a robust CP domain. She also adds that the subjunctive complement to such OC verbs in Persian constitute a phasal domain in the sense of CHOMSKY (2000, 2001, 2004) similar to English, but with the difference that T in Persian, unlike the English infinitive which is  $\varphi$ -deficient, is specified as  $u\varphi$ . She further adds that the presence of the complementizer licenses an *i*T feature on embedded T which also means the Case-marking of the embedded DP subject in its own phasal domain. So the presence of the overt complementizer in these clauses results in the presence of the tense projection.

Consequently, we maintain that both the control subjunctive and the non-control subjunctive appear in tensed clauses in view of the fact that they are introduced by the particle ke. This T<sup>0</sup> head introduces a TP projection in the derivation somewhere above the vP and below the CP along the line of RIZZI (1997). Therefore, OC constructions in Persian appear in tensed clauses inside full TP projections.

So far we analyzed the structure of the non-control subjunctive in Persian. Specifically, we saw that these clauses, unlike infinitive clauses, are to a great extent analogous to the (matrix) indicative clauses. In the next section, we will introduce some implications of these structures for the ongoing theory of control.

# 3. Further Implications

## 3.1 The Case of PRO

For one thing, the presence of finite TP projection as well as the presence of a CP projection in the OC constructions discussed above automatically provokes Nominative Case checking mechanism for both control subjunctives, with the PRO, and non-control subjunctives, with the overt DP/*pro*. This type of Case checking is just like any unmarked Nominative Case checking of the canonical simplex clause: the subject position of a subjunctive TP is available for normal Case checking, which is available strictly in the presence of a tensed T in the derivation, though with an irrealis modality in the case of

these subjunctives (see also ALBOIU 2006 and SIGURDSSON 2008). Put differently, the PRO in the control subjunctive clause is able to check Nominative Case against the  $T^0$  of the lower clause. This makes it similar to the Case checking of an overt DP and a *pro* in a non-control subjunctive in that both are able to check Nominative Case against their relevant local  $T^0$  heads. This means that there is no special Case mechanism for the PRO in the control clauses other than the one present for the overt DP/*pro* in the non-control subjunctives (and also in the canonical indicatives) (see also SPYROPOULOS 2008 for a similar conclusion for Greek). This observation, additionally, is congruent with the traditional conviction that holds that finiteness is the ability to license structural case in the subject position (see for example COWPER 2002 for a review). In the recent Minimalist literature (CHOMSKY 2000, 2001, 2004), again Nominative Case checking is considered to be the by-product of subject-agreement valuation in T.

In addition to these facts, there are also independent pieces of evidence to claim that Case is checked in the lower CP phase in the sense of CHOMSKY (2000, 2001, 2004) in these clauses. Below we will present these pieces of evidence in two groups.

First, KARIMI (2005) takes a distributional reasoning to maintain that PRO checks the local Nominative Case in Persian. She shows that PRO may appear in the same position as a *pro* and an overt DP might be found. As a result, she concludes that PRO receives the same Case as the two elements.

(13)	a.	Mæn	dust=dar-æm	[CP	ke	pro	be-r-æm].	
		Ι	friend=have-1SG		that		SBJ-go-1SG	
		"I['d]	like to go."					
	b.	Mæn	dust=dar-æm	[CP	ke	to	be-r-i].	
		Ι	friend=have-1SG		that	you	SBJ-go-2SG	
		"I['d] like for you to go." (KARIMI 2005:102)						

Second, there are other pieces of evidence based on case-concord. LANDAU (2004, 2006) observes that items like emphatic pronouns, reflexives, floating quantifiers, and some other elements in many languages are inflected for case. Therefore, the specific morphological case they bear reflects the case/Case of the local DP with which they are related. He provides examples from several languages, among which are examples from subjunctive clauses from Greek and Romanian with PRO subjects, and concludes that PRO is case-marked similar to an overt DP. (14) is a Greek example.

(14) Anangasan tin Eleni [PRO na milisi afti i idhja]. forced3PL the.ACC Eleni PRO.Nom SBJ speak.3SG she herself.Nom "They forced Helen to speak herself." (LANDAU 2006:155)

Here, PRO checks Nominative Case since the reflexive pronoun associated with it receives nominative case morphology.

Similar instances are found in other languages. For Icelandic, SIGURDSSON (2008) observes that PRO usually triggers case agreement in infinitives in the same fashion as overt subjects

do in finite clauses. Therefore, he concludes that the morphological case borne by the distant adjective agrees with, or reflects, the Case borne by the PRO.

In Persian, emphatic pronouns, among others, can show overt morphological case as the following examples may show.

(15)	a.	Mæn	un-o	did-æm.				
		Ι	him/her-ACC	saw-1SG				
		"I saw	/ him/her."					
	b.	Mæn	xodæm-Ø	un-o	did-æm.			
		Ι	self-1SG.NOM	him/her-ACC	saw-1SG			
	c.	Mæn	un-o	xod-eš-o	did-æm.			
		Ι	him/her	self-3SG-ACC	saw-1SG			
		"I saw <i>him/her</i> (not anybody else)."						

The sentences above show that the emphatic pronoun xod "self" (marked in boldface) can freely adjoin to the subject and the object of a verb. If it is adjoined to a subject, it receives the zero nominative case marker (shown with  $-\emptyset$  in 15b), and if it is adjoined to the object, it receives -ra, which is an accusative marker of specific objects as in (15c).<sup>4</sup> However, as PIROOZ (2008) observes, the emphatic pronoun cannot bear the accusative marker -ra when it appears with the empty subject PRO.

(16)	Una	Mohse	en-o	majbur=kærd-ær	1	
	they	Mohse	en-ACC	force=made-3PL		
	[CP	(ke)	PRO	xod-eš-Ø	(*-ro)	hærf=be-zæn-e].
		that	PRO	self-3SG-NOM	(*-ACC)	talk=SBJ-make-3SG
	"They	v forced	Mohsen	to talk himself." (H	PIROOZ 200	8:145)

The sentence above is licit only when it goes without the accusative marker. The addition of *-ra*, shown in brackets above, renders the sentence ungrammatical, supporting the idea that PRO must check the Nominative Case in the lower clause/phase. Therefore, the ungrammaticality of this sentence can further support the idea that PRO bears a standard Nominative Case in Persian and values it against a local  $T^0$ .

Thus, control in Persian is uniformly represented with PRO having Nom feature valued in a local domain of the lower CP to exclude Null Case checking of PRO (CHOMSKY / LASNIK 1995, MARTIN 2001), and the Movement Theory of Control (HORNSTEIN 1999, BOECKX / HORNSTEIN 2003, 2004). These data can additionally reject the case-theoretic approach to the PRO (CHOMSKY 1981) as the silence of PRO is unrelated to Case (see also SIGURĐSSON 2008).

<sup>&</sup>lt;sup>4</sup> The clitic -ra is a marker of specific direct objects, which checks the Accusative Case and appears as -o or -ro in colloquial Persian (see KARIMI 2005:86, 2008). Similar conclusions also are made by other authors. GHOMESHI (1996) argues that -ra case marks a presupposed noun phrase adjoined to a VP. GANJAVI (2007) proposes that -ra is a case marker provided that the case feature values are not nominative or dative. Though they are slightly different, these authors consider the clitic to incorporate an accusative case. For further discussion of -ra, see also GANJAVI in this volume.

## 3.2 Case Independence

LANDAU (2008) considers two possibilities for the Case of the PRO in an OC construction. PRO in these clauses can have a manifestation of case independent from the case of its controller DP, or it can share its case with it, where the case of the controller is transmitted to the PRO. He interprets the former as an instance of "case independence" and the latter as "case transmission." The case of PRO in Persian, as studied in this section, shows the first possibility and is different from the case of its controller in the matrix clause. That is, while the controller checks Accusative in the object position of the matrix clause, the PRO in the embedded clause checks Nom locally against the  $T^0$  head of the lower TP as seen in (16) above. This clearly shows that in Persian OC constructions, a local Case checking is advocated and hence the possibility of case transmission is ruled out.

# 3.3 Agree Operation

Following BORER's (1989) Anaphoric Agr analysis, we postulate two types of Agr responsible for the analysis of Persian finite constructions, one anaphoric Agr for the control subjunctives like (2) above and one non-anaphoric Agr for the non-control subjunctives like (3) above.

Nevertheless, our proposal departs from the binding approach, i.e. through the inheritance of properties, to follow LANDAU (2000, 2004, 2006), who conceives finite subject-verb agreement as an instance of Agree Operation (CHOMSKY 2000, 2001, 2004, 2006) interacting with feature checking and deletion. OC necessarily involves the  $\varphi$ -feature transmission from controller to PRO, and that PRO has a non-referential [-R] feature to be checked. So in the non-control subjunctive (3) repeated here as (17), the  $\varphi$ -features of the lower clause are only checked internally in the lower clause/phase.

(17) Sara<sub>1</sub> omidvar-e  $[_{CP}$  (ke)  $[_{TP}$  bæčče<sub>2</sub> be-xab-e ]. [ goal probe ] <u>one single step</u>

In a control subjunctive, where the PRO in the lower clause has to check its features with an external controller in the matrix clause, the Agree requires another operation in addition to the internal  $\varphi$ -feature checking done in the lower clause: PRO needs to check its  $\varphi$ -features once again with an external element in the matrix clause in order to have a control effect. This checking is done with the controller in the matrix clause. So in (2), a control subjunctive, repeated here as (18), one can see two cycles, or phases, of the operation of Agree.

(18)	[Sara1	sæ'y=kærd	[CP	(ke)	[TP	$PRO_{I}$	be-xab-e	]].	
	[		[			goal	probe	]]	step one
	[ goal		[			probe		]]	step two

Consequently, adopting the Agree Operation for the embedded clauses, we propose two types of operations in the finite clauses. In a non-control subjunctive as in (17), the Agree is achieved clause-internally without the need for a further Agree relation with a probe in the higher clause. However, in a control subjunctive like (18) with a control effect, one further

step need be taken: Agree requires to take place once more between the PRO (as a probe) in the lower clause and the controller DP (as a goal) in the matrix clause. So, there are two steps that are required in the OC constructions.

## 3.4 Movement Theory of Control

Importantly, Persian OC constructions further demonstrate that any movement proposals for the PRO, like the one found in the Movement Theory of Control (O'NEIL 1997, HORNSTEIN 1999, BOECKX / HORNSTEIN 2003, 2004), may not exist in the control constructions. There is no need for the finite embedded null subject to move to a higher clause/phase to check Case while it is locally available in the lower TP/clause. Apparently, once Case is valued on a DP, as in Persian, the DP becomes inactive and remains immovable for any further operations or checking (CHOMSKY 2001, 2004). Therefore, Case checking in Persian, contra O'NEIL (1997), HORNSTEIN (1999), and BOECKX / HORNSTEIN (2003, 2004), is achieved locally for both non-control subjunctives and control subjunctives with no need for the embedded subject to move to a higher position in the matrix clause.

We further speculate that any raising-type movement, as the one found in the Movement Theory of Control could only be available in languages where the embedded clause lacks some clausal features, typical of *certain* infinitival clauses with a Case-less or Case-defective subject position. Therefore, subject DP raising for control clauses is only permitted, provided that the subject is not Case-checked in the embedded clause. So the prerequisite for Nominative Case valuation is the C-T relationship (at the clausal level) rather than  $\varphi$ -complete T probe (see also ALBOIU 2006). A full treatment of the raising proposal of the Movement Theory of Control that embraces other aspects of Persian finite control constructions is yet to be carried out independently.

## 3.5 Divorcing $\varphi$ -features from Case

With no need for the PRO/DP-trace to move up to check Case, Persian further demonstrates that while  $\varphi$ -features in OC constructions are transmitted, Case is checked internally in the lower TP/clause. This makes it consistent with ALBOIU (2006) and USSERY (2008:483), who divorce  $\varphi$ -features from Case. Without the need for a functional head F in the derivation, our analysis also departs from LANDAU'S (2000, 2004, and 2006) to advocate a direct Agree mechanism similar to USSERY'S (2008:483) proposal. PRO must enter a direct agreement relation with the controller as a result of which the controller and the PRO bear the same  $\varphi$ - features.

# 4. Conclusions

In this study, we introduced a Minimalist account of the Obligatory Control constructions in Persian. We showed that these constructions, unlike the corresponding constructions in an infinitive-type language like English, appear in the finite clauses headed by the complementizer *ke*, optionally present in the derivation. These clauses appear in the subjunctive mood as this language generally lacks infinitive constructions. The presence of the subjunctive mood in this language is marked by means of a mood marker *be*-, which is

prefixed onto the embedded verb. Additionally,  $\varphi$ -feature specifications of the embedded clause are spelled out in the finite clause as the verb of the lower clause receives the same type of morphological endings for [person] and [number] as does the canonical indicative verb in the embedded (or the matrix) clause. As such, the Obligatory Control constructions in this language advocate a full TP projection in the derivation dominated, among others, by the CP projection. Additionally, we illustrated that PRO in these constructions checks its Case against the local T<sup>0</sup> head of the TP projection inside the embedded CP and therefore receives Nominative internally contra CHOMSKY / LASNIK (1995) and MARTIN (2001). As PRO needs to agree its  $\varphi$ -features with a higher probe DP in the matrix clause, we assume that the Agree Mechanism (CHOMSKY 2000, 2001, 2004, 2006) is responsible for this operation. We showed that these findings rule out an analysis in terms of movement like the Movement Theory of Control (O'NEIL 1997, HORNSTEIN 1999, BOECKX / HORNSTEIN 2003, 2004) since the Case of PRO is checked in the lower phase without the need to probe into the matrix clause, as a result of which an "independent case" mechanism (LANDAU 2004, 2006) is advocated, and therefore, the "case transmission" mechanism is ruled out in these constructions.

Abbreviations

- ACC accusative marker
- DUR duration
- EZ Ezafe
- GB Government and Binding
- NOM nominative case
- OC Obligatory Control
- PL plural
- *pro* an empty pronominal element in a Null-Subject language
- PRO an empty category in the subject position of the embedded clause in a control construction
- SBJ subjunctive mood marker
- SCR scrambled element
- SG singular

#### Bibliography

- ALBOIU, Gabriella 2006: "Are we in Agreement?" In: Cedric BOECKX (ed.): Agreement Systems. Amsterdam: John Benjamins, pp. 13-39
- BÉLANGER, Suzanne 2002: "A Derivational Relationship: The Subjunctive-Infinitive Relationship in French." In: Sophi BURELLE, Stanca SOMESFALEAN (eds.): *Proceedings of the 2002 Annual Conference of the Canadian Linguistic Association*. Montreal: University of Quebec, pp. 15-27
- BOECKX, Cedric, and Norbert HORNSTEIN 2003: "Reply to 'Control is not Movement'." In: *Linguistic* Inquiry 34, pp. 269-280
- 2004: "Movement Under control." In: *Linguistic Inquiry* 35, pp. 431-451
- BONDARUK, Anna 2006: "The Licensing of Subjects and Objects in Irish Non-Finite Clauses." In: Lingua 116, pp. 1840-1859
- BORER, Hagit 1989: "Anaphoric AGR." In: Osvaldo JAEGGLI, Kenneth J. SAFIR (eds.): *The Null Subject Parameter [Studies in Natural Language and Linguistic Theory]*. Dordrecht: Kluwer, pp. 69-109
- CHOMSKY, Noam 1981: Lectures on Government and Binding. Dordrecht: Foris

- 2000: "Minimalist Inquiries: The Framework." In: Roger MARTIN, David MICHAELS, Juan URIAGAREKA (eds.): Step by Step: Essays on minimalist syntax in honor of Howard Lasnik. Cambridge, MA: MIT Press, pp. 89-115
- 2001: "Derivation by Phase." In: Michael KENSTOWICZ (ed.): Ken Hale: A Life in Language. Cambridge, MA: MIT Press, pp. 1-52
- 2004: "Beyond Explanatory Adequacy." In: Adriana BELLETTI (ed.): *Structures and Beyond: The cartography of syntactic structures* vol. 3 Oxford: Oxford University Press, pp. 104-131
- 2006: "On Phases." In: Robert FREIDIN, Carlos OTERO, Maria-Luisa ZUBIZARETTA (eds.): *Foundational Issues in Linguistic Theory*. Cambridge, MA: MIT Press, pp. 133-166
- CHOMSKY, Noam, and Howard LASNIK 1995: "The Theory of Principles and Parameters." In: Noam CHOMSKY (ed.): *The Minimalist Program*. Cambridge MA: The MIT Press, pp. 13-128

COWPER, Elizabeth 2002: "Finiteness." Manuscript, University of Toronto

- DARZI, Ali 2008: "On the vP Analysis of Persian Control Constructions." In: *Linguistic Inquiry* 39, pp. 103-116
- FABRICIUS-HANSEN, Catherine 2006: "Tense." In: Keith BROWN (ed.): *Encyclopedia of Language and Linguistics* XII. Amsterdam: Elsevier, pp. 566-573

GANJAVI, Shadi 2007: Direct Objects in Persian. PhD dissertation, University of Southern California

- GHOMESHI, Jila 1996: Projection and inflection: A study of Persian phrase structure. PhD dissertation, University of Toronto
- 2001: "Control and Thematic Agreement." In: Canadian Journal of Linguistics 46, pp. 9-40
- HORNSTEIN, Norbert 1999: "Movement and Control." In: Linguistic Inquiry 30, pp. 69-96
- KAHNEMOOYIPOUR, Arsalan 2003: "Syntactic Categories and Persian Stress." In: *Natural Language & Linguistic Theory* 21, pp. 333-337
- KARIMI, Simin 2005: A Minimalist Approach to Scrambling: Evidence from Persian. Berlin: Mouton de Gruyter
- 2008: "Raising and Control in Persian." In: Simin KARIMI, Vida SAMIIAN, Donald L. STILO (eds.): Aspects of Iranian Linguistics. Newcastle upon Tyne: Cambridge Scholars Publishing, pp. 177-208
- KRAPOVA, Iliyana 1998: "Subjunctive Complements, Null Subjects and Case Checking in Bulgarian." In: University of Venice Working Papers in Linguistics vol. 8.2, pp. 73-93
- 2001: "Subjunctives in Bulgarian and Modern Greek." In: Maria Luisa RIVERO, Angela RALLI (eds.): Comparative syntax of Balkan Languages. Oxford: Oxford University Press, pp. 105-126
- LANDAU, Idan 2000: Elements of Control: Structure and meaning of infinitival constructions [Studies in natural language and linguistic theory]. Dordrecht: Kluwer Publishers
- 2004: "The Scale of Finiteness and the Calculus of Control." In: *Natural Language and Linguistic Theory* 22, pp. 811-887
- 2006: "Severing the Distribution of PRO from Case." In: Syntax 9(2), pp. 153-170
- 2008: "Two Routes of Control: Evidence from case transmission in Russian." In: *Natural Language and Linguistic Theory* 26, pp. 877-924
- LAZARD, Gilbert 1992 / 2005: A Grammar of Contemporary Persian. Costa Mesa, California: Mazda Publications 1992 [quoted from the Persian translation by Mahasti Bahreini: Dæstur-e Zæban-e Farsi-e Moaser. Tehran: Hermes
- LEE, Kim Yung 2009: Finite Control in Korean. PhD dissertation, University of Iowa
- MAHOOTIAN, Shahrzad, and Lewis GEBHARDT 1997: Persian [Descriptive Grammars]. London: Routledge
- MARTIN, Roger 2001: "Null Case and the Distribution of PRO." In: Linguistic Inquiry 32, pp. 141-166
- O'NEIL, John 1997: *Means of Control: Deriving the properties of PRO in the Minimalist Program.* PhD dissertation, Harvard University
- PIROOZ, Mohammadreza 2008: Persian Control Constructions. PhD dissertation, University of Tehran
- PORTNER, Paul 2009: Modality. Oxford: Oxford University Press
- POTSDAM, Eric, and Maria POLINSKY 2007: "Missing Complement Clause Subject in Malagasy." In: Oceanic Linguistics 46, pp. 277-303

RIZZI, Luigi 1997: "The Fine Structure of the Left Periphery." In: Lilianne HAEGEMAN (ed.): *Elements* of Grammar. Dordrecht: Kluwer, pp. 281-337

ROUSSOU, Anna 2009: "In the Mood for Control." In: Lingua 119, pp. 1811-1836

- SEDIGHI, Anousha 2005: Subject-Predicate Agreement Restrictions in Persian. PhD dissertation, University of Ottawa
- SIGURÐSSON, Halldór Ármann 1991: "Icelandic Case-marked PRO and the Licensing of the Lexical Argument." In: *Natural Language and Linguistic Theory* 9, pp. 327-63

2008: "The Case of PRO." In: Natural Language and Linguistic Theory 26, pp. 403-450

SPYROPOULOS, Vassilios 2008: "Finiteness and Control in Greek." In: William D. DAVIES, Stanley DUBINSKY (eds.): New Horizons in the Analysis of Control and Raising. Dordrecht: Springer, pp. 159-183

TALEGHANI, Azita H. 2008: Modality, Aspect and Negation in Persian. Amsterdam: John Benjamins

- TERZI, Arhonto 1997: "PRO and null Case in finite clauses." In: *The Linguistic Review* 14, pp. 335-360
- USSERY, Cherlon 2008: "What it Means to Agree: The behavior of case and phi features in Icelandic control." In: Charles B. CHANG, Hannah J. HAYNIE (eds.): *Proceedings of the 26th West Coast Conference on Formal Linguistics*. Somerville, MA: Cascadilla Proceedings Project, pp. 480-488
- WITKOS, Jacek 2007: "Movement-based control, Agree-Based Control, and Polish infinitives." In: *Studies in Polish Linguistics* 4, pp. 27-60

WURMBRAND, Susi 2001: Infinitives: Restructuring and Clause Structure. Berlin: Mouton de Gruyter

# Table of Contents

Editors' Preface	7
Part I. Historical and Comparative Iranian Syntax	
Definite Articles in Bactrian SALOUMEH GHOLAMI	11
Differential Object Marking in Bactrian NICHOLAS SIMS-WILLIAMS	23
The Emergence and Development of the Sogdian Perfect ANTJE WENDTLAND	39
Pronouns as Verbs, Verbs as Pronouns: Demonstratives and the Copula in Iranian AGNES KORN	53
Counterfactual Mood in Iranian ARSENIY VYDRIN	71

# Part II. The Morpho-Syntax of Lesser-known Iranian Languages

A Glance at the Deixis of Nominal Demonstratives in Iranian Taleshi DANIEL PAUL	89
Valence Sensitivity in Pamirian Past-tense Inflection: A Realizational Analysis	
GREGORY STUMP, ANDREW HIPPISLEY	103
Participle-Converbs in Iron Ossetic: Syntactic and Semantic Properties OLEG BELYAEV, ARSENIY VYDRIN	117
On Negation, Negative Concord, and Negative Imperatives in Digor Ossetic DAVID ERSCHLER, VITALY VOLK	135

6	Table of Contents	
Part III. Linguistics of Moder	n Persian	
Reducing the Number of Farsi Epe NAVID NADERI, MARC VAN OOST	enthetic Consonants ENDORP	153
On Direct Objects in Persian: The Case of the Non- <i>râ</i> -Marked D SHADI GANJAVI	Os	167
Finite Control in Persian MOHAMMADREZA PIROOZ		183
Bilingual Speech of Highly Profic FARZANEH DERAVI, JEAN-YVES D	ient Persian-French Speakers OMMERGUES	197
List of Contributors		213