Squibs and Discussion

On the CP Analysis of Persian Finite Control Constructions Negin Ilkhanipour University of Tehran Darzi (2008), with a critical look at Ghomeshi's (2001) arguments for the vP analysis of Persian subject control constructions, suggests that these constructions involve an embedded CP projection headed by the complementizer ke 'that'. This can be represented as in (1).

(1) [TP subject_i [VP control verb [CP (ke) [TP PRO_i [VP_unbinguity . . .]]]]]

After a short summary of Cinque's (1999, 2004) hierarchy of adverbial specifiers and clausal functional heads, which is the diagnostic tool here, the present squib takes up the following three objectives:

- Objective 1: To provide evidence from temporal adverbs to show that the complement to control predicates in Persian is a constituent larger than vP—namely, a TP.
- Objective 2: To question the CP analysis of Persian control constructions on the basis of evidence from the distribution of speaker-oriented adverbs.
- Objective 3: To show that the complement to Persian control predicates is a *defective CP* that lacks value(s) on mood and modal projections.

1 Control Complements in Persian: A Warm-Up

Following Wurmbrand (1998) and Landau (1999), Ghomeshi (2001) builds up some arguments to show that the embedded clause in Persian control constructions lacks CP and TP projections and that the syntactic category of the complement in these constructions is vP. This section reviews Ghomeshi's (2001) lack-of-tense-clash argument and Darzi's (2008) counterevidence for that.¹

I wish to express my gratitude to Ali Darzi for his insightful comments on the first manuscript of this squib. Also, I would like to thank two anonymous *LI* reviewers for their very thoughtful suggestions.

¹ Another argument by Ghomeshi (2001) is based on restructuring and scrambling. For a summary and counterarguments, see Darzi 2008:105–108.

Ghomeshi (2001:25–26) observes that unlike in noncontrol constructions (as in (2a)), conflicting temporal modifiers are not possible between the matrix and the embedded clause in Persian control constructions (as in (2b)). This observation leads her to conclude that control complements in Persian are untensed.²

(2) a. bizæn diruz goft (ke) færda Bijan yesterday say.pst.3sg (that) tomorrow mi-r-e DUR-go-3sg 'Bijan said yesterday he'd go tomorrow.' (Ghomeshi 2001:26, (39f)) b. *bizæn diruz mi-tunest (ke) færda Bijan yesterday DUR-can.PST.3SG (that) tomorrow be-r-e sbj-go-3sg "*Bijan could yesterday go tomorrow." (Ghomeshi 2001:26, (39a))

Darzi (2008:110) provides two pieces of evidence that run counter to Ghomeshi's (2001) argument. First, he reiterates Taleghani's (2006) counterexample to Ghomeshi's analysis. This is shown in (3), where the control verb *tæsmim gereftæn* 'to decide' allows tense clash.

(3) sara diruz tæsmim=gereft (ke) færda Sara yesterday decision=take.psr.3sg (that) tomorrow be-r-e sbJ-go-3sg 'Sara decided yesterday to go tomorrow.' (Taleghani 2006:114, (51b))

Second, Darzi (2008:110) shows that tense clash may render a complex sentence ungrammatical even in noncontrol constructions, as exemplified in (4).

(4) *?u diruz mane? = ∫o-d ke mæn she/he yesterday prevention = become-pst.3sg that I færda be-r-æm xune tomorrow sBJ-go-1sg home '*She/He prevented me yesterday from going home tomorrow.'

(Darzi 2008:110, (18b))

Section 3 provides another argument to show that contrary to Ghomeshi's (2001) claim, control complements in Persian are not untensed

² The glosses of examples from other works may be slightly modified for consistency. I use the following abbreviations: DUR: durative, EZ: ezafe, OM: object marker, PL: plural, PST: past, SBJ: subjunctive, SG: singular.

2 A Brief Summary of Cinque 1999, 2004

Contra the adjunction approach to adverbial syntax, Cinque (1999, 2004) puts forward the ''location-in-specifier'' hypothesis whereby adverb phrases (AdvPs) are the overt manifestations of the specifiers (Specs) of distinct functional projections (FPs) and not accessory appendices to the clause structure (i.e., adjuncts). His main evidence for considering AdvPs as integral parts of FPs comes from the crosslinguistic observation that there is a systematic one-to-one mapping between AdvPs and the clausal functional heads to which they are associated. Cinque (1999:106), then, proposes a rich universal hierarchy of FPs from VP up to CP. (5) presents the part of this hierarchy to be employed in this squib.

(5) Cinque's hierarchy (irrelevant projections omitted)³ [fortunately Mood_{evaluative} [probably Mod(al)_{epistemic} [then T [always Asp

Each adverb-related FP in this hierarchy comes with two values: an "unmarked" (or "default") value and a "marked" one. Regarding the epistemic modal head, for instance, the commitment of the speaker to the truth of the proposition is considered to be the default value and must be explicitly denied (with adverbs such as *probably* and *presumably*) if the speaker does not want to commit her- or himself (Cinque 1999:128–130).⁴

3 Aspectual and Temporal Adverbs: Complements Larger Than vP

As is clear from (6)–(9), constituents embedded under a control predicate in Persian can take aspectual adverbs, as in (6)–(7), as well as temporal adverbs, as in (8)–(9).

- (6) ?una mi-tun-æn (ke) dobare mive be-xær-æn they DUR-can-3PL (that) again fruit sBJ-buy-3PL 'They can/are able to buy fruit again.'
- (7) to hæq=dar-i (ke) hæmise tu ?aspæzxune you right = have-2sg (that) always in kitchen bas-i sbj.be-2sg
 - 'You have the right to be always in the kitchen.'
- (8) ?una mi-tun-æn (ke) ?un-mouqe be ?in resturan they DUR-can-3PL (that) then to this restaurant be-r-æn SBJ-go-3PL 'They can/are able to go to this restaurant then.'

³ Cinque's hierarchy further differentiates positions for various tenses and aspects. This squib remains agnostic as to the need for further differentiation.

⁴ A detailed specification of default and marked values of FPs can be found in Cinque 1999:130, table 6.1.

(9) to hæq = dar-i (ke) færda nahar bo-xor-i you right = have-2sG (that) tomorrow lunch sBJ-eat-2sG 'You have the right to have lunch tomorrow.'

Since, in accordance with Cinque 1999, 2004, the aspectual adverbs *dobare* 'again' and *hæmife* 'always' and the temporal adverbs *?un-mouqe* 'then' and *færda* 'tomorrow' are generated in Spec,AspP and Spec,TP, respectively, the ability of these AdvPs to occur in the embedded constituent of Persian control constructions ensures that the complement to the control predicate in Persian is larger than vP and insofar as TP is higher than AspP, it is a TP.⁵

4 Speaker-Oriented Adverbs: CP Complements?

Evaluative and epistemic adverbs are two instances of speaker-oriented AdvPs.⁶ As shown in (10) and (11), the evaluative adverb *xofbæxtane* 'fortunately' and the epistemic adverb *?ehtemalæn* 'probably' can be used normally in Persian CPs.

- (10) xo∫bæxtane mæn bæstæni xor-d-æm fortunately I ice.cream eat-PST-1sG 'Fortunately I had ice cream.'
- (11) ?ehtemalæn to zijad mi-xor-i probably you a.lot <code>DUR-eat-2sg</code> 'Probably you eat a lot.'

Darzi (2008, 2011) and Darzi and Motavallian (2010) presume that the complement to control predicates in Persian is a CP. This suggests that, if we change the verbal mood to subjunctive, the CPs in (10) and (11) can be embedded in control constructions; yet (12) and (13) are in fact ungrammatical.

- (12) *mæn mi-tun-æm (ke) xoʃ bæxtane bæstæni
 I DUR-can-1sg (that) fortunately ice.cream
 bo-xor-æm
 sBJ-eat-1sg
 '*I can/am able to fortunately have ice cream.'
- (13) *to hæq = dar-i (ke) ?ehtemalæn zijad bo-xor-i you right = have-2sg (that) probably a.lot sbJ-eat-2sg '*You have the right to probably eat a lot.'

⁵ The data presented in this section (unlike the ones in section 4) are not new, yet the argument has not been pointed out in the related literature and can be added to Darzi's (2008) counterarguments to Ghomeshi's (2001) vP analysis of Persian control constructions.

⁶ These adverbs, as well as temporal adverbs, have been studied as "high adverbs" by Karimi (2005:125–127).

It should be noted that the evaluative adverb *xofbæxtane* 'fortunately' and the epistemic adverb *?ehtemalæn* 'probably' can modify the matrix clause of control constructions, as shown in (14) and (15).

- (14) xo∫bæxtane mæn mi-tun-æm (ke) bæstæni fortunately I DUR-can-1sG (that) ice.cream bo-xor-æm sBJ-eat-1sG
 - 'Fortunately I can/am able to have ice cream.'
- (15) ?ehtemalæn to hæq=dar-i (ke) zijad bo-xor-i probably you right=have-2sg (that) a.lot sbJ-eat-2sg 'Probably you have the right to eat a lot.'

Interestingly, deleting the speaker-oriented adverbs from (12) and (13) renders these sentences grammatical, as shown in (16) and (17).

- (16) mæn mi-tun-æm (ke) bæstæni bo-xor-æm
 I DUR-can-1sG (that) ice.cream sBJ-eat-1sG
 'I can/am able to have ice cream.'
- (17) to hæq=dar-i (ke) zijad bo-xor-i you right=have-2sG (that) a.lot sbJ-eat-2sG 'You have the right to eat a lot.'

Looking with favor upon Cinque's (1999:128–133) proposal that even where particular projections are not overtly realized, they are structurally present in the syntax, these data suggest three potential hypotheses on the CP analysis of Persian finite control constructions:

- Hypothesis 1: The complement to Persian control predicates is not a CP but an FP smaller than that.
- Hypothesis 2: The complement to Persian control predicates is a full CP whose internal structure is semantically affected by the control predicate.
- Hypothesis 3: The complement to Persian control predicates is a defective CP that lacks value(s) on mood and modal projections.

5 Persian Control Complements: Defective CPs

Refuting the first two hypotheses, this section attempts to uphold hypothesis 3 as the most responsive to the data presented above.

5.1 Rejecting Hypothesis 1

To begin with, it bears emphasizing that the confirmation of hypothesis 1, much in Ghomeshi's favor, rules out the possibility that *ke* 'that' is a complementizer. Ghomeshi's (2001) account of this particle as an enclitic, however, faces Darzi's (2008:113–115) three counterarguments based on the distribution of temporal adverbials, *ke*-cliticization in the literary register of Persian, and parenthetical phrases. Following

Darzi (2008), the present squib adopts the idea that *ke* is a complementizer heading a CP complement to Persian control predicates. Darzi's supporting argument based on the behavior of parenthetical phrasal constituents is summarized here.

According to Darzi (2008:114–115), while parenthetical phrases are not expected to intervene between a clitic and its host in Persian, as shown in (18), they can appear between the control predicate and ke, as in (19). This ensures that, contra Ghomeshi (2001), ke cannot be treated as a verbal clitic.

- (18) *mæn mi-bær-æm be sinæma-∫

 I DUR-take-1sG to cinema-her/him
 'I will take her/him to the cinema.'

 (Darzi 2008:115, (37b))
- (19) ?u mi-tun-e *be goman-e mæn* ke to ro dær she/he DUR-can-3sG to opinion-EZ I that you om in moqubel-e digæran særzæne∫ = bo-kon-e front-EZ others blame = sBJ-do-3sG
 'In my opinion, she/he can blame you in front of others.'
 (Darzi 2008:114, (36))

5.2 Rejecting Hypothesis 2

In stark contrast to hypothesis 1, hypothesis 2 postulates that the complement to Persian control predicates is a full CP whose internal structure is semantically affected by the control predicate. Concerning Mod_{epistemic}P, for instance, hypothesis 2 suggests that the interpretation of the epistemic modal projection in the control complement is restricted by the semantics of the matrix verb. For control predicates that encode modality, like the ones in (20) and (21), this semantic restriction is definable in terms of Kratzer's (1991, 2012) "modal force." The control predicates *qoul dadæn* 'to promise' and *tunestæn* 'can/to be able', encoding "necessity" and "possibility," respectively, do not allow a conflicting modal force on the Modenistemic P of their complement; the complement to *qoul dadæn* 'to promise' is only compatible with hætmæn 'certainly', which encodes 'necessity,' and not with *?ehtemalæn* 'probably', which expresses 'weak necessity' (hence the contrast in (20a-b)). The control predicate tunestæn 'can/ to be able', on the other hand, allows only complements with "possibility" on the epistemic modal head and is therefore ungrammatical with both hætmæn 'certainly' and ?ehtemalæn 'probably', as shown in (21a-b).8 This lack of modal force clash, however, should not lead

 $^{^{7}}$ Germane to this discussion is Hashemipour's (1989:280–281) and Lazard's (1992:218) proposal that the complementizer ke is indeed a subordinator or a clause linker merely signaling the subordination relationship. The idea is not taken up here, yet the issue merits further investigation.

⁸ Note that under this view, the Spec,Mod_{epistemic}P in the complement to *tunestæn* 'can/to be able' cannot be occupied by an epistemic adverb since in Persian, no epistemic adverb encodes ''possibility.''

us to conclude that the CP complement lacks the epistemic modal projection, since the epistemic adverb *hætmæn* 'certainly' in (20a) is base-generated in Spec,Mod_{epistemic}P.

- (20) a. to qoul=dad-i (ke) hætmæn nahar you promise=give.psr-2sg (that) certainly lunch bo-xor-i sbJ-eat-2sg
 - 'You promised to certainly have lunch.'
 - b. *to qoul = dad-i (ke) ?ehtemalæn nahar you promise = give.psr-2sg (that) probably lunch bo-xor-i sbJ-eat-2sg '*You promised to probably have lunch.'
- (21) a. *to mi-tun-i (ke) hætmæn nghar bo-xor-i you DUR-can-2sg (that) certainly lunch sBJ-eat-2sg '*You can/are able to certainly have lunch.'
 - b. *to mi-tun-i (ke) ?ehtemalæn nahar bo-xor-i you DUR-can-2sg (that) probably lunch sBJ-eat-2sg '*You can/are able to probably have lunch.'

While this line of inquiry into epistemic modality in Persian control complements is open to dispute, the major problem with hypothesis 2 comes from mood projections. As shown in (22) and (23), the complements to *qoul dadæn* 'to promise' and *tunestæn* 'can/to be able' are utterly incompatible with evaluative adverbs; that is to say, whatever the idiosyncratic semantic properties of the control predicates are, unlike in the case of the epistemic modal projection, neither the default value nor the marked value of the evaluative mood can appear and be interpreted in the complement. This fact, thus, casts doubt on the idea that the complement to Persian control predicates is a full nondefective CP.

(22) *to qoul = dad-i (ke) xofbæxtane/ you promise = give.psr-2sg (that) fortunately/ mote?æssefane nahar bo-xor-i unfortunately lunch sbJ-eat-2sg '*You promised to fortunately/unfortunately have lunch.'

⁹ The very same argument is applicable with regard to "speech act" and "evidential mood" projections whose specifiers provide the necessary positions for the relevant adverbs (see Cinque 1999:84–86). Evidential adverbs (with default or marked value), for instance, are not compatible with control complements, as illustrated in (i).

⁽i) a. *to mi-tun-i (ke) zuheræn bæstæni bo-xor-i you DUR-can-2sg (that) apparently ice.cream sBJ-eat-2sg '*You can/are able to apparently have ice cream.'

b. *to mi-tun-i (ke) be gofte-je ?und bæstæni bo-xor-i you DUR-can-2sg (that) as they said ice.cream sbJ-eat-2sg '*You can/are able to have ice cream, as they said.'

(23) *to mi-tun-i (ke) xo∫bæxtane/mote?æssefane you DUR-can-2sG (that) fortunately/unfortunately nahar bo-xor-i lunch sBJ-eat-2sG '*You can/are able to fortunately/unfortunately have lunch.'

5.3 Confirming Hypothesis 3

Thus far, it has been argued that the complement to Persian control predicates is neither an FP smaller than CP (as claimed in hypothesis 1) nor a CP with a full array of FPs (as claimed in hypothesis 2). In the following paragraphs, it is shown that hypothesis 3 is tenable so long as *defectivity* is defined as lack of value(s) on FPs.

Returning to the sentences that are problematic for hypothesis 2, the ungrammaticality of (22) and (23) will be straightforwardly explained if the embedded clause is considered as a defective CP that lacks Mood_{evaluative}P: the required position for evaluative adverbs is not projected. This explanation cannot be borne out for Mod_{epistemic}P, though. While *tunestæn* 'can/to be able' altogether fails to take a complement with Mod_{epistemic}P (i.e., neither with the default value nor with the marked one; see (21a–b)), the control predicate *qoul dadæn* 'to promise' allows the default interpretation of the epistemic modal head in its complement, expressed by *hætmæn* 'certainly' in Spec, Mod_{epistemic}P (as in (20a)).

To solve this puzzle, it suffices to define defectivity, the notion at the core of hypothesis 3, as lack of value(s) on FPs (and not as lack of FPs). According to this proposal, the CP complement to *qoul dadæn* 'to promise' lacks the marked value of the epistemic modal head (hence the ungrammaticality of (20b) in contrast to the grammaticality of (20a)), whereas the CP complement to *tunestæn* 'can/to be able' lacks both the default and the marked values of the epistemic modal (hence the ungrammaticality of both (21a) and (21b)). ¹⁰

Defining defectivity as lack of value(s) also accounts for the ungrammaticality of (22) and (23); the CP complements to *qool dadæn* 'to promise' and *tunestæn* 'can/to be able' lack both the default and the marked values of the evaluative mood.

Thus, in light of the data presented here, the complement to Persian control predicates can arguably be considered as a defective CP that lacks value(s) on mood (evaluative mood, in particular) and modal (epistemic modal, in particular) projections.

6 Conclusions

Positing Cinque's (1999, 2004) idea that adverbs are base-generated in the specifiers of distinct FPs, the present squib argued first that the

¹⁰ While the reason for this difference may be tentatively traced back to the idiosyncratic properties of the control predicates (see section 5.2), it is desirable to further investigate the technical reasons that motivate the lack of value(s) on FPs in Persian control complements (i.e., in defective CPs).

complement to control predicates in Persian is a constituent larger than vP—specifically, a TP—since the embedded clause is compatible with temporal adverbs and these adverbs are base-generated in Spec,TP (objective 1). Next, on the basis of evidence from the distribution of evaluative and epistemic adverbs, it showed that one must remain skeptical about the CP analysis of Persian control constructions (objective 2). This skepticism led to three hypotheses, two of which (hypotheses 1 and 2) turned out to be untenable for theoretical and empirical reasons. Finally, the squib argued that hypothesis 3 can explain the (un)grammaticality of the data provided that defectivity is defined as lack of value(s) on FPs. The squib concluded that the complement to Persian control predicates is a defective CP that lacks value(s) on mood and modal projections (objective 3).

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