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Tena Gnjatović Ranko Matasović Filozofski fakultet Sveučilišta u Zagrebu Ivana Lučića 3, HR-10000 Zagreb tgnjatov@ffzg.hr rmatasov@ffzg.hr

SOME OBSERVATIONS ON VERBS WITH OBLIGATORY CONTROL IN CROATIAN

Obligatory control refers to the relation of obligatory coreference between one of the arguments in the matrix clause and an unexpressed argument of the subordinate infinitive. This paper provides examples of subject and object control in Croatian that reveal significant differences between these two constructions. Subject control is understood as a purely syntactic relation, while the analysis of object control requires the introduction of semantic macroroles. The two constructions are therefore based on different basic principles, which results in various asymmetries with regard to restrictions on possible syntactic realizations. Moreover, the limitations on scope interpretation of temporal adverbs resulting from word order changes in object control constructions suggest that the two verbs in object control might form a tighter unit than those in subject control constructions.

1. What is obligatory control?

Obligatory control is a syntactic relation holding between verbs in matrix and subordinate clauses. The matrix verb obligatorily controls the verb in the subordinate clause if one of its arguments must be coreferent with one of the arguments of the subordinate verb. It is usual to distinguish between subject and object control. In subject control, the subject of the matrix verb is obligatorily coreferent with the subject of the subordinate verb. Subject control is com-

mon with verbs of wishing (Croatian *željeti*, ex. (1)) and promising (Croatian *obećati*, ex. (2)):¹

(1)	<i>Želim</i> want-PRS.1SG	<i>pjeva</i> sing-IN			
	'I want to sir	U			
(2)	Ivan Ivan[NOM.SG]	je AUX-3SG	Petru Petar-DAT.SG	<i>obećao</i> promise-PST.SG	<i>pjevati.</i> sing-INF
	'Ivan promis			promise 101.00	Sing it ti

In object control, the direct or indirect object of the matrix verb is obligatorily coreferent with the subject of the subordinate verb. Object control is common with verbs of commanding (Croatian *zapovjediti*, ex. (3) and with causatives (Croatian *natjerati*, ex. (4)):

(3)	Ivan	je	Petru	zapovjedio	pjevati.
	Ivan[NOM.SG]	AUX-3SG	Petar-DAT.SG	order-PST.SG	sing-INF
	'Ivan ordered	Petar to sin	g'		
(A)	T	•	Deter		

(4)	Ivan	je	Petra	natjerao	pjevati.
	Ivan[NOM.SG]	AUX-3SG	Petar-ACC.SG	force-PST.SG	sing-INF
	'Ivan forced Pe	etar to sing'			

In (3), the unexpressed subject of the subordinate verb *pjevati* 'sing' must be coreferent with the indirect object of the matrix verb *zapovjediti* 'order, command', i.e. with *Petar*. Likewise, in (4), the single argument of the embedded infinitive *pjevati* must refer to the direct object of the matrix verb *natjerati* 'force to', i.e. to *Petar*. That means that the sentence (3) cannot be taken to mean that Ivan ordered anyone else but Peter to sing, i.e. there is obligatory coreference between an argument of the matrix verb, and an argument of the subordinate verb.²

¹ All the examples in this paper are invented. However, the grammaticality of these examples has been tested with native speakers, and analogous examples have been found in the electronic corpora of Croatian, the Croatian Language Repository (http://riznica.ihjj.hr/) and the Croatian National Corpus (http://www.hnk.ffzg.hr/), or using the Google search engine (unless otherwise indicated).

² In terms of the typology of control constructions presented in Matasović 2009, both subject and object control in Croatian belong to the Head-First type, since it is the matrix verb that determines the case marking of the shared (co-referent) argument.

However, unlike with subject control, with object control it is difficult to state the exact rules of coreference in purely syntactic terms. If we passivize the matrix verb taking object control, the syntactic relations of the arguments change, but their control properties do not:

(5)	Petar	je	natjeran	(od	Ivana)	pjevati.
	Petar[NOM.SG]	AUX-3SG	force-PTCP	(by	Ivan-GEN.SG)	sing-INF
	'Petar was for	ced to sing	g (by Ivan)'			

The sentence (5) shows that the Undergoer of a verb taking object control can be the subject of the (passive) matrix verb, and there is still obligatory coreference between it and the single argument of the subordinated infinitive. The semantic role of the controller (*Petar*), however, is the same in (4) and (5). Moreover, since verbs with object control take infinitives as complements, rather than talk about subjects of infinitives (and commit ourselves to "underlying" syntactic relations),³ we may prefer to formulate the rule in terms of semantic macroroles. Thus, we can state the rules for object control as follows:

In object control, there is obligatory coreference between the Undergoer of the matrix verb and the highest-ranking macrorole of the subordinate verb.

The concept of macrorole is taken from Role and Reference Grammar (e. g. Van Valin 2005). If we simplify matters somewhat, it can be stated that the highest-ranking macrorole is the Actor, if the verb has the Actor argument in its logical structure. If it does not, then the highest-ranking macrorole is the Undergoer. That it is not necessarily the Actor that has to be coreferent with the Undergoer of the matrix verb in Croatian constructions with obligatory control is shown by (6):

(6)	Petar	je	zapovjedio	Ivanu	spavati.
	Petar[NOM.SG]	AUX-3SG	order-PST.SG	Ivan-DAT.SG	sleep-INF
	'Petar order Ivan	to sleep'			

The verb *spavati* 'to sleep' in (6) does not have an Actor argument in its logical structure. As an intransitive stative verb, it rather takes the Undergoer as its single argument, so that this argument has to be coreferent with the Undergoer of the matrix verb in object control constructions. From this it follows that verbs

³ Kučanda (2000: 94) is equally reluctant to talk about the "implied subjects of infinitives".

with object control cannot take passive infinitives as their complements, since the highest-ranking macrorole (the Actor) is removed form the logical structure of the passive, and only the lower macrorole (the Undergoer) remains. This is shown in (7) and (8):

(7)	*Petar	je	zapovjedio	Ivanu	biti	udaren.
	Petar[NOM.SG]	AUX-3SG	order-PST.SG	Ivan-DAT.SG	be-INF	hit-PTCP
	'Petar ordered	d Ivan to l	be hit'			

(8)	*Petar	je	natjerao	Ivana	biti	ubijen.⁴
	Petar[NOM.SG]	AUX-3SG	force-PST.SG	Ivan-ACC.SG	be-INF	kill-PTCP
	'Petar forced	Ivan to b	e killed'			

In this respect constructions with object control differ from constructions with subject control in Croatian, which freely take passivized complements:

(9)	Ivan	je	želio	biti	voljen.
	Ivan[NOM.SG]	AUX-3SG	want-PST.SG	be-INF	love-PTCP
	'Ivan wanted	to be loved	,		
(10)	Petar Petar[NOM.SG]	<i>je</i> AUX-3SG	<i>obećao</i> promise-PST.SG	<i>biti</i> be-INF	<i>izabran</i> . elect-PTCP
	'Petar promis	sed to be ele	ected'		

In subject control constructions, then, there are no semantic restrictions on the identity of the argument of the subordinate verb that has to be coreferent with the subject of the matrix verb. It can be its Undergoer, as in (9) and (10), as well as its Actor, as in (1) and (2). The semantic role of the omitted coreferent argument is determined by the type of the construction, i.e. syntactically: it has to be the subject of the subordinate verb. In constructions with object control, the omitted argument is determined semantically, as the highest-ranking macrorole argument of the subordinate verb. It is the Actor if the logical structure of the verb has one, otherwise it is the Undergoer.

⁴ Sentences with subordinate reflexive verbs also sound odd when the matrix verb has object control, e.g. *?Ivan je Petra natjerao ubiti se*. 'Ivan made Petar kill himself'. We have not been able to find any examples of such constructions in the electronic corpus of Croatian. Note that verbs with subject control freely take reflexive verbs as complements, e.g. *Ivan se želio ubi-ti*. 'Ivan wanted to kill himself'.

Therefore, subject control in Croatian is a syntactic relation, whereas object control is primarily semantic. Moreover, given that subject control is primarily a syntactic relation, (11) is impossible:

(11) **Ivanu je obećano (od Petra) doći.* Ivan-DAT.SG AUX-3SG promise-PTCP (by Petar-GEN.SG) come-INF **Ivan was promised (by Petar) to come'*

This follows from the fact that the matrix verb of (11) does not have a subject. There is no such requirement with verbs having object control, as follows from the acceptability of (12):

(12)	Ivan	je	natjeran	(od	Petra)	doći.⁵
	Ivan[NOM.SG]	AUX-3SG	force-PTCP	(by	Petar-GEN.SG)	come-INF
	'Ivan was for	rced by Pet	ar to come'			

The sentence (12) is acceptable since it is the Undergoer (not necessarily the object) of the matrix verb that has to be coreferent with the omitted argument of the subordinate verb. Syntactically, it can be the subject (of the passive verb), as in (5) and (12), the direct object, as in (4), or the indirect object, as in (6).

2. Quirky case subjects in control constructions

Our claim that verbs with subject control require that the argument omitted in the subordinate clause be coreferent with the *subject* of the matrix clause needs some modification in light of the verbs having "dative subjects" as in (13), (14), and (15):

(13) <i>Ivanu</i>	se	hoće		piti	pivo.
Ivan-DAT.SG	REFL	will-PRS	S.3SG	drink-INF	beer-ACC.SG
'Ivan wants to	drink beer'				
(14) <i>Ivanu</i> Ivan-DAT.SG	<i>se</i> REFL	<i>ne</i> NEG	<i>da</i> give-PRS	5.38G	<i>spavati.</i> sleep-INF
'Ivan doesn't	feel like sleeping	,	e		1

⁵ Though this artificially constructed example may not sound completely acceptable, we found equivalent examples using the Google search engine, e.g. *Ondje je zarobljen te je u kolo-ni smrti natjeran ići sve do Pančeva.* 'He was imprisoned there and was forced to go all the way to Pančevo in a death march'.

(15) Petru	se	sviđa	svirati	glasovir.
Petar-DAT.SG	REFL	like-PRS.3SG	play-INF	piano[ACC.SG]
'Petar likes to	play the	piano'		

In the earlier language there is also the necessitative construction in which the ", dative subject" of the verb *biti* 'to be' occurs with the infinitive $(16)^6$:

(16) *Petru je bilo mrijeti.* Petar-DAT.SG AUX-3SG be-PST.SG die-INF 'Petar had to die'

It is questionable to which extent "dative subjects" in the preceding examples have subject properties, since the nominative is the default case of the subject in Croatian, and they are not indexed by person markers on the verb. However, they can bind reflexive pronouns, at least for most speakers (e.g. Kuna 2008, for a different view see Kučanda 1998, and Belaj and Kučanda 2007):

- (17) *Ivanu se sviða posjećivati njegove prijatelje.* Ivan-DAT.SG REFL like-PRS.3SG visit-INF POSS.3SG-ACC.PL friend-ACC.PL 'Ivan likes visiting his friends'
- Ivanusesviðagledati se.Ivan-DAT.SGREFLlike-PRS.3SGlook-INFREFL'Ivan likes looking at himself'
- (19) *?Ivanu se sviđa posjećivati svoje prijatelje.* Ivan-DAT.SG REFL like-PRS.3SG visit-INF POSS.REFL-ACC.PL friend-ACC.PL 'Ivan likes visiting his friends'

Also, two verbs taking "dative subjects" can occur in conjunction reduction constructions:

⁶ The verb *biti* 'to be' can also be used with a number of adverbs in constructions requiring obligatory control, e.g. *teško je* 'it is difficult', *dosadno je* 'it is boring', *drago je* 'to be glad' (see Kučanda 1998: 8).

(20) *Ivanu se nije sviđalo čitati ni dalo pisati.* Ivan-DAT.SG REFL AUX.NEG-3SG like-PST.SG read-INF nor give-PST.SG write-INF 'Ivan did not like to read nor felt like writing'

Obviously, conjunction reduction is possible only if both verbs take ,,dative subjects", but the same holds for regular nominative subjects as well.

Thus, ",dative subjects" have coding properties different from true subjects in Croatian, but they seem to share quite a few behavioral properties with nominative subjects, as in control constructions in (13–15), where we can only state that ",dative subjects" behave as true subjects indeed.

Constructions with subject control and "dative subjects" have another typologically interesting property, in that they show some uncertainty about case assignment rules in the subordinate clause, as follows from (21) and (22):

(21) Ivanu	se	sviđa	svirati	gitara.
Ivan-DAT.SG	REFL	like-PRS.3SG	play-INF	guitar-NOM.SG
'Ivan likes to	play the guitar'			
(22) Ivanu	Se	sviđa		gitaru. ⁷
Ivan-DAT.SG	<i>se</i> REFL play the guitar'	like-PRS.3SG		0

The Undergoer of the subordinate verb can be either in the nominative (21), or in the accusative (22), i.e. its case can be assigned both by the embedded infinitive (*svirati*) and by the matrix verb (*svidati se*). If there is no subordinated infinitive, the nominative is the only possibility (23):

(23)	Ivanu	se	sviđa	gitara	/	*gitaru.
	Ivan-DAT.SG	REFL	like-PRS.3SG	guitar-NOM.SG	/	*guitar-ACC.SG
	'Ivan likes the guitar'					

In some control constructions we also seem to have accusative case of the subject (see Dahm Draksic 1997: 19 ff.),⁸ e.g. with verbs such as *boljeti* 'to hurt', *smetati* 'to bother', *mučiti* 'to bother', and *plašiti* 'to scare', e.g. in (24) and (25):

⁷ The standard language allows only the construction in (22).

⁸ Again, the verb *biti* 'to be' occurs with some adverbs in such constructions taking "accusative subjects", e.g. *Sram me je priznati to* 'I am ashamed to admit this'.

(24) *Ivana* plaši gledati filmove strave. Ivan-ACC.SG scare-PRS.3SG watch-INF movie-ACC.PL horror-GEN.SG 'Ivan is afraid of watching horror movies', lit. 'It scares Ivan to watch horror movies'

(25) *Smeta me hodati po kiši.* bother-PRS.3SG 1SG-ACC walk-INF on rain-LOC.SG 'It bothers me to walk in the rain'.

Such "accusative subjects" also pass the reflexivization test of subjecthood ((26) and (27)) and the conjunction reduction test ((28), provided that both conjuncts take "accusative subjects"):

(26) Ivana	plaši	gledati	svoju	sliku
Ivan-ACC.SG	scare-PRS.3SG	watch-INF	POSS.REFL-ACC.SG	image-ACC.SG
u ogledal	' <i>u</i> .			

in mirror-LOC.SG

'Ivan is scared of looking at his image in the mirror'

- (27) *Petra smeta šišati se tupom britvom*. Petar-ACC.SG bother-PRS.3SG cut.hair-INF REFL blunt-INS.SG razor-INS.SG 'It bothers Petar to cut his hair with a blunt razor'
- gledati (28) Ivana boli Petrovu nesreću hurt-PRS.3SG misfortune-ACC.SG Ivan-ACC.SG watch-INF Peter's-ACC.SG i smije govoriti. što ne o tome smeta and bother-PRS.SG that NEG may-PRS.3SG about it-LOC.SG talk-INF 'It hurts Ivan to look at Peter's misfortune and bothers him that he cannot talk about it'

Subject control in Croatian thus seems to comprise both dative and accusative "subjects", which show subject properties equivalent to nominative subjects in other constructions as well, such as reflexivization and conjunction reduction.

3. Coreference of arguments in constructions with finite subordinate verbs

It is usually claimed that obligatory control can exist only in constructions with infinite complements, and this is, strictly speaking, true. Since Croatian is a Pro-drop language, the person of the subject is expressed by the verbal ending on finite verbs, and this can, in principle, refer to anyone in the world:

- (29) *Ivan je Petru obećao da ću doći.* Ivan[NOM.SG] AUX-3SG Petar-DAT.SG promise-PST.SG that AUX-1SG come-INF 'Ivan promised Petar that I would come'
- (30) Ivan li Petrov doći. se bojao hoće sin Ivan[NOM.SG] REFL fear-PST. AUX-PRS.3SG Q Petar's-NOM.SG son[NOM.SG] come-INF Ipak. Petar ти je obećao da će doći. however Petar[NOM.SG] 3SG-DAT AUX-3SG promise-PST.SG that AUX-3SG come-INF 'Ivan was concerned about whether Petar's son would come. However, Petar promised him that he would.'

In (29), the subject of the subordinate verb is the speaker (indexed as the 1sg ending on the verb), while the subject of the matrix verb is *Ivan*, so there is no subject control. In (30), the context makes it clear that the subject of the embedded second clause is not coreferent with the subject of the matrix verb (i.e. with *Petar*), but rather with *Petrov sin*, the subject of the subordinate verb in the preceding sentence.

However, it can still be claimed that verbs with obligatory control retain their control properties with finite complements by default (Van Valin 2005, Kučanda 2000: 93), i.e. that there is coreference between the subject of the matrix verb and one of the arguments of the subordinate verb, unless pragmatic factors determine otherwise. Interestingly, subject and object control verbs show notable differences in their control properties with finite complements:

- (31) *Ivan je obećao da će doći*. *Ivan*[NOM.SG] AUX-3SG promise-PST.SG that AUX-3SG come-INF 'Ivan promised that he would come'
- (32) *Ivan je Petru zapovjedio da pjeva.* Ivan[NOM.SG] AUX-3SG Petar-DAT.SG order-PST.SG that sing-PRS.3SG 'Ivan ordered Petar to sing'

In (31), the default interpretation is that the subject of the finite verb in the subordinate clause (*doći*) is *Ivan*, the Actor/subject of the matrix verb (*obećati*), while in (32), the Actor of the finite subordinate verb (*pjevati*) *must* be coreferent with the Undergoer of the matrix verb (*zapovjediti*), i.e. with *Petar*. Also, the subordinate verb with person markers indexes a different SAP than the Undergoer of the matrix verb:

(33) <i>??Ivan</i>	je	Petru	zapovjedio	da	pjevam.		
Ivan[NOM.SG]	AUX-3SG	Petar-DAT.SG	order-PST.SG	that	sing-PRS.1SG		
'Ivan ordered Petar that I sing'							

(34) ??*Ivan me je natjerao da pjeva*. Ivan[NOM.SG] 1SG-ACC AUX-3SG force-PST.SG that sing-PRS.3SG 'Ivan forced me that he sings'

In our opinion, the oddity of sentences like (33) and (34) is not a consequence of a syntactic rule of obligatory coreference between the (unexpressed) subject of subordinate verb and the Undergoer of the matrix verb. It rather follows from the semantics of verbs having object control constructions: one cannot naturally order someone if the order is to be obeyed by someone else. However, with the verb *zamoliti* 'to ask, to ask for', the lack of coreference between the matrix and the subordinate clauses sounds much less unnatural:

(35) *Ivan je Petra zamolio da dođem.* Ivan[NOM.SG] AUX-3SG Petar-ACC.SG ask-PST.SG that come-PRS.1SG 'Ivan asked Petar that I come'

The example (35) is possible if the context makes it clear that the Undergoer of the matrix verb, *Petar*, is somehow in charge of the action of the subordinate verb, or if it is a member of the causal chain of which the subject of the subordinate clause is the end-point.

Verbs that can have obligatory object control usually introduce their finite complement clauses with the all-purpose subordinator *da*, but they also occur in constructions with *neka*. *Neka* is primarily a particle that can also function as a subordinator (e.g. Silić and Pranjković 2007: 256, Hudeček and Mihaljević 2008: 186), introducing object clauses such as (36):

(36) *Ivan je zamolio Petra neka dođe*. *Ivan*[NOM.SG] AUX-3SG ask-PST.SG Petar-ACC.SG that come-PRS.3SG 'Ivan asked Petar to come'

An interesting feature of subordinate object clauses introduced by *neka* is the fact that this subordinator seems to restrict the possible subordinate verb forms. Namely, the subordinate verb is typically in the third person, and occasionally in the first person, while the second person either singular or plural appears to be completely impossible with this subordinator, as we can see in (37):

(37) <i>*Ivan</i>	vas	je	zamolio	neka	dođete.
Ivan[NOM.SG]	2PL-ACC	AUX-3SG	ask-PST.SG	that	come-PRS.2PL
'Ivan asked you to come'					

This rather surprising restriction on verbal forms that can occur with *neka* seems to result from the meaning and use of *neka* as a particle used with third person imperatives, as in e.g. *neka dođe* 'let him come', and the first person adhortatives, as in *neka umrem* 'may I die'. The ungrammaticality of second person forms in these constructions thus makes them typologically rather unusual, since subordinators generally do not restrict the person forms of embedded verbs. The status of the particle *neka* therefore presents a challenge for the theory of lexical classes.

4. Semantic classes of verbs with object control

In Croatian, verbs having object control constructions have causative logical structures, i.e. they can be roughly paraphrased as 'X caused Y to do Z'. They can be divided into two groups: coercives/jussives/prohibitives and facilitatives/permissives/adhortatives.⁹ The semantic criterion distinguishing them is the presence of physical and/or verbal coercion.

The type of coercion is not necessarily specified with some verbs, e.g. *natjerati* 'force', which may mean both to force someone to do something (physical coercion) or to make someone do something by threatening or orders (verbal coercion). However, some jussive verbs lexically do specify the nature of coercion

⁹ A special problem is presented by precative verbs such as *moliti/zamoliti* 'ask, pray' which used to have object control constructions, but which now almost exclusively take finite subordinate clauses as their complements (*Zamolio sam ga da dođe.* is now strongly preferred to *Zamolio sam ga doći.* 'I asked him to come').

(*zapovjediti* 'to order, command'). Facilitatives/permissives are characterized by the lack of coercion. They can, in principle be distinguished by the degree of involvement of their Actor argument: with facilitatives such as *omogućiti* 'enable' it is higher than with permissives such as *dopustiti* 'allow, permit'.

Here is a tentative list of verbs in both categories:

A) jussives/prohibitives: nagnati/nagoniti/naganjati 'constrain', narediti/ naređivati 'order', natjerati/natjeravati/tjerati 'force, compel', ?navesti/navoditi 'lead', ?obvezati/obvezivati 'oblige', ?potaknuti/poticati 'prompt, inspire', primorati/primoravati 'compel', prinuditi/prinuđivati 'coerce', siliti/prisiliti/prisiljavati 'force', ?staviti/stavljati 'put', ?ostaviti/ostavljati 'leave', učiti/naučiti 'teach', zabraniti/zabranjivati 'forbid', zapovjediti/zapovijedati 'command'

B) facilitatives/permissives/adhortatives: *dati/davati* 'let, allow', *dozvoliti/ dozvoljavati* 'allow', ¹⁰ *dopustiti/dopuštati* 'allow', *olakšati/olakšavati* 'facilitate', *omogućiti/omogućavati* 'enable', *podsjetiti/podsjećati* 'remind', *po-moći/pomagati* 'help', *pustiti/puštati* 'let'.

With some verbs the object control construction sounds less natural than with others, i.e. the finite subordinate clause is strongly preferred. These verbs are marked with a question mark.

5. Semantic classes of verbs with subject control

Verbs with subject control are semantically a somewhat more heterogeneous category than verbs with object control, but they can nevertheless be classified into several groups according to some semantic features. Possibly the most numerous class of subject control verbs are those expressing cognitive processes (especially *verba sentiendi*), but the category also comprises verbs of promising, some modal verbs, and verbs denoting the start/end of an activity.

Here is a list of subject control verbs classified according to semantic criteria. The number of subject control verbs in Croatian is fairly big, so that the list will have to remain incomplete.

A) Verbs denoting cognitive processes, especially verba sentiendi: zavoljeti/voljeti 'love', htjeti 'want', poželjeti/željeti 'wish', znati 'know', odlučiti/ odlučivati 'decide', bojati se 'fear', namjeravati 'intend', naučiti 'learn'

¹⁰ *Dozvoliti/dozvoljavati* 'allow' is not, strictly speaking, a verb of Standard Croatian. It is found in substandard varieties and in Serbian.

B) verbs of promising: obećati/obećavati 'promise', reći/govoriti 'say'11

C) modals: moći 'can', morati 'must', trebati 'need', imati 'have'

D) inceptive (and terminative) verbs: *početi/počinjati* 'start', *stati* 'stop', *odustati/odustajati* 'give up', *prestati/prestajati* 'quit, finish', *uhvatiti se* 'take on'

E) conative verbs: *uspjeti/uspijevati* 'manage', *pokušati/pokušavati* 'attempt', *uznastojati/nastojati* 'strive', *potruditi se/truditi se* 'try', perhaps also *gledati* 'see'¹².

6. Word order and the scope of temporal adverbs in control constructions

In subordinate clauses with finite complements, word order plays a crucial role in determining the scope of temporal (and other) adverbs:

- (38) *Ivan je obećao da će danas doći*. Ivan[NOM.SG] AUX-3SG promise-PST.SG that AUX-3SG today come-INF 'Ivan promised that he would come today'
- (39) *Ivan je danas obećao da će doći*. Ivan[NOM.SG] AUX-3SG today promise-PST.SG that AUX-3SG come-INF 'Ivan promised today that he would come'

In (38), the temporal adverb *danas* 'today' has scope over the subordinate verb, while in (39) it has scope over the matrix verb, and this clearly follows from its position in the sentence.

However, the interpretation of temporal adverbs in control constructions is not always unproblematic; the non-finite complements of subject control verbs can easily be modified with a temporal adverb, while in the case of object control this appears to be much more difficult. Let us take, for example, a sentence such as (40):

(40)	Ivan	je	obećao	danas	doći.
	Ivan[NOM.SG]	AUX-3SG	promise-PST.SG	today	come-INF
	'Ivan promi				

¹¹ The verb *reći* 'say' can appear in both subject and object control construction. As an object control verb it means 'to order', while in subject control constructions its meaning is similar to that of the verb 'to promise'.

¹² As in *Gledaj to sutra napraviti*. 'See that you do it tomorrow'.

In (40), the position of the adverb immediately before the subordinated infinitive makes it clear that its scope is over the subordinate verb rather than over the matrix verb. If we put the adverb before the matrix verb, as in (41), the default interpretation is that the matrix verb is modified by it, i.e. that the promising, rather than the coming, is going to happen today:

(41) *Ivan je danas obećao doći.* Ivan[NOM.SG] AUX-3SG today promise-PST.SG come-INF 'Today Ivan promised to come'

The alternative interpretation is possible only if there is a strong stress on the adverb *danas* (i.e. if it is focal), in which case the sentence can be taken to mean that the coming of *Ivan* would happen today.

However, the situation with object control constructions seems to be somewhat asymmetrical. In (42) and (43) we have finite complements of verbs that can have object control, and the position of the adverb determines its scope, as was the case with finite complements of subject control verbs (see (38) and (39)):

- (42) *Ivan je Petru naredio da danas dođe*. Ivan[NOM.SG] AUX-3SG Petar-DAT.SG order-PST.SG that today come-PRS.3SG 'Ivan ordered Petar to come today'
- (43) *Ivan je Petru danas naredio da dođe*. Ivan[NOM.SG] AUX-3SG Petar-DAT.SG today order-PST.SG that come-PRS.3SG 'Today Ivan ordered Petar to come'

It is questionable, however, whether the position of the temporal adverb changes the sentence meaning in true object control constructions. For example, in (44) the adverb modifies the matrix verb, i.e. Ivan's ordering is the event that is to happen today. If the adverb is adjacent to the infinitive, as in (45), we get a sentence of significantly lower acceptability. This raises the question of whether it is possible to modify the infinitive in an object control construction with a temporal adverb, or whether the adverb is necessarily interpreted as modifying the matrix verb and should therefore not be positioned next to the infinitive.

(1) Ivan je Petru danas naredio doći. Ivan[NOM.SG] AUX-3SG Petar-DAT.SG today order-PST.SG come-INF 'Today Ivan ordered Petar to come'

(44) *?Ivan je Petru naredio danas doći.* Ivan[NOM.SG] AUX-3SG Petar-DAT.SG order-PST.SG today come-INF 'Ivan ordered Petar to come today'

Such sentences are even less acceptable if the subordinate verb is transitive:

(45) ??*Majka je sina natjerala danas naučiti gramatiku.* mother-NOM.SG AUX-3SG son-ACC.SG force-PST.SG today learn-INF grammar-ACC.SG 'The mother made her son learn grammar today'

From this it would follow that subject control constructions in Croatian indeed have a different structure from object control constructions, and, more specifically, that the two verbs in object control constructions form a tighter syntactic unit than the matrix and the subordinate verb in subject control constructions. In terms of Role and Reference grammar, we could argue that in Croatian subject control constructions the two verbs remain in separate Cores, which enables them to be modified separately, while in object control constructions, the linked verbs form a single Core, which has to be modified as a unit.¹³ This might be independently confirmed by the fact, noted above, that object control constructions cannot take passivized complements (examples (7) and (8)), and perhaps reflexive complements as well (footnote 4).

7. Conclusion

We have seen that, though subsumed under the common term *control*, subject and object control seem to function according to different principles in Croatian. More specifically, subject control can be explained in purely syntactic terms, using the notion of the grammatical relation of subject, while the analysis of object control constructions requires the introduction of semantic notions, i.e. macroroles. This difference is reflected in various object vs. subject control asymmetries, manifested in argument realization restrictions both in the matrix and in the subordinate clause. For example, the matrix argument coreferent with the unexpressed subordinate argument has to be the subject in subject control, while in object control it is not necessarily the object, but rather the Undergoer, syntactically realized differently in different constructions, e.g. as the object of an active transitive verb, or the subject of a passive verb. With quirky-

¹³ In Role and Reference Grammar, temporal adverbs are Core operators, and their default scope is the Core of the sentence (Van Valin 2005).

-case subjects, the coreferent argument syntactically behaves like the nominative subject, although its coding properties are obviously different. Asymmetries exist with respect to the unexpressed argument in the subordinate clause as well. This argument is in subject control constructions always the subject, with no restrictions as to its macrorole status. It can thus be the subject of an active verb, the subject of a stative verb, or the subject of a passive verb. In object control, on the other hand, the unexpressed subordinate verb argument is subject to additional semantic restrictions, i.e. it has to be the highest-ranking macrorole in the logical structure of the verb.

The scope of temporal adverbs modifying verbs within control constructions reveals another difference between subject and object control in Croatian. While the repositioning of the adverb from the matrix to the subordinate clause changes its scope in subject control constructions without affecting sentence acceptability, examples with temporal adverbs placed next to the subordinate verb in object control constructions are generally rated as less acceptable. We believe this to be a consequence of the fact that verbs in object control constructions are syntactically more closely linked, thus triggering the interpretation according to which the temporal adverb modifies the matrix verb, i.e. the entire sentence. The lower degree of acceptability for sentences in which the adverb is adjacent to the subordinate infinitive therefore results from the conflict that arises because of this default scope interpretation for object control constructions and the word order that typically triggers a different interpretation.

List of abbreviations

1 – first person
2 – second person
3 – third person
ACC – accusative
AUX – auxiliary
DAT – dative
GEN – genitive
INF – infinitive
INS – instrumental
LOC – locative
NOM – nominative
PL – plural

POSS – possessive pronoun POSS.REFL – possessive reflexive pronoun PRS – present PST – past PTCP – participle Q – question particle REFL – reflexive SG – singular

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O glagolima s obveznom kontrolom u hrvatskome

Sažetak

Obvezna kontrola označava odnos obvezne korefencije između jednog od argumenata u glavnoj surečenici i neizrečenog argumenta subordiniranog infinitiva. U ovom se radu na primjerima objektne i subjektne kontrole u hrvatskome otkrivaju i opisuju značajne razlike između ovih dviju konstrukcija. Subjektnu kontrolu smatramo isključivo sintaktičkim odnosom, dok je za analizu objektne kontrole potrebno uvesti pojam semantičkih makrouloga. Ove dvije konstrukcije, dakle, počivaju na različitim temeljnim načelima, posljedica čega su razne asimetrije koje proizlaze iz ograničenja mogućih sintaktičkih realizacija. Povrh toga, ograničenja u interpretaciji dosega vremenskih priloga kao rezultat promjena u redu riječi upućuju na zaključak da su glagoli u konstrukcijama s objektnom kontrolom sintaktički čvršće povezani od onih u konstrukcijama sa subjektnom kontrolom.

Key words: obligatory control, macroroles, Role and Reference Grammar, scope, Croatian Ključne riječi: obvezna kontrola, makrouloge, gramatika uloga i referenci, doseg, hrvatski