"Double" floating quantifiers in Modern Greek and Pontic^{*}

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ABSTRACT

The purpose of this paper is twofold: on the one hand to examine the nature of the dependency between object clitics and floating quantifiers and compare it to those typically referred as clitic doubling constructions, and on the other hand, to examine what permits and constrains the attested cross-linguistic variation. I argue that the underlying relationship between the clitic and the floating quantifier is not identical to that between a clitic and its co-referent DP. In addition, it is argued that the cross-linguistic variation stems from the differences in the object-drop properties of a language.

$1\ \square$ Clitic Doubling and related constructions

1.1 © CLITIC DOUBLING VERSUS CLITIC RIGHT DISLOCATION

Clitic doubling is the construction in which a clitic co-occurs with a full DP in argument position forming a discontinuous constituent with it, as is illustrated in the examples (1) and (2) from Greek and Rioplatense Spanish, respectively.¹

- (1) Tin efage ti supa o Jiannis. (Standard Modern Greek) *it-cl-sg-fem-acc ate-3SG the soup.FEM.ACC the John.NOM* 'John ate the soup.'
- (2) Lo vimos a Juan. *bim-cl saw-we John* 'We saw John..'
 (Rioplatense Spanish)

On the other hand, right dislocation is a construction in which a clitic co-occurs with a phrase to its right as illustrated in (3) and (4) with examples from Pontic, a Greek dialect, and French respectively:

(3)	efae 'ten	(o	Jior	jika	us), ti supa.	(Pontic)
	ate-3 rd CL.S	G.FEM.ACC the	Geor	ge-n	nom thesoup.1	FEM.ACC
	'George a	te the soup.'				
(4)	Jeľ	ai	vu,	ľ	assassin.	(French) (from Jaeggli 19

(4) Jel' ai vu, l'assassin. (French) (from Jaeggli 1986) *I him.CL.ACC have-1SG seen the murderer*'I have seen the murderer.'

Given the similarity between right dislocation of objects and clitic doubling, there was a long debate in the literature of clitics as to whether the two constructions have the same or a different structural analysis. Following Strozer (1976), Rivas (1977), Jaeggli (1982, 1986), and Borer (1984) and much later literature, I assume that the DP-object is

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¹ There is a long literature on clitic doubling. See many among others, Strozer 1976; Rivas 1997; Aoun 1981, 1999; Jaeggli 1982, 1986; Drachman 1983; Borer 1984; Suñer 1988; Philippaki-Warburton 1987; Fykias 1988; Dobrovie-Sorin 1990; Sportiche 1993; 1996; 1998; Massey 1992; Anagnostopoulou 1994, 2003; Uriagereka 1988, 1995; Torrego 1998; Bleam 1999; Petkova Schick 2000; Kallulli 1999.

generated as a complement of the verb in clitic doubling constructions, while it is an adjunct (to VP or IP) in right dislocations.²

It is important to note for the purposes of this study that right dislocation is found in all clitic-languages and although it can be easily mistaken for doubling, there are no instances of obligatory right dislocation constructions. Thus, while clitic doubling of full DPs is in certain cases obligatory (see the discussion in the following section), right dislocation takes place with DP objects of any kind.³

In short, doubled objects have the intonation and distribution of arguments, while right dislocated objects have the intonation and distribution of peripheral elements. These differences can be accounted for by an analysis according to which, the former occupy argument position and the latter are right-adjoined elements.

In the table below I present the typology of clitic-languages with respect to their clitic doubling properties. The main interest in our discussion lies in the difference between Modern Standard Greek and Pontic with respect to clitic doubling.

Clitic Doubling	
Standard Greek	yes
Romanian	yes
Bulgarian	yes
Albanian	yes
Spanish	yes
Argentinean Spanish	yes
Pontic	no
Italian	no
French	no
Catalan	no
Serbo-Croatian	no

Table (1): Typology of clitic languages

1.2 CASES OF OBLIGATORY CLITIC DOUBLING

In the literature on clitic doubling there are several cases of obligatory clitic doubling discussed.⁴ For example, in Argentinean Spanish an indirect pronominal object (5) has to be doubled by a clitic (e.g. Suner 1988) and in Romanian specific indefinites (6) must be doubled by a clitic (e.g. Dobrovie-Sorin 1990). Moreover in Standard Modern Greek obligatory clitic doubling occurs with epithets (7), psych verbs (8), *seem*-constructions (9) and passive constructions (10) (e.g. Anagnostopoulou 1994, 1999, 2003), as well as with indirect objects of first and second person pronouns in dative (11) (Tsakali 2006).

² According to a different view (Hurtado 1984; Aoun 1981, 1999; Philippaki-Warburton 1987, and much later literature), there is no formal difference between clitic doubling and right dislocation. In both constructions, the phrase associated with the clitic is an adjunct.

³ For a summary of the differences between clitic doubling and clitic right dislocation, see Anagnostopoulou 2002.

⁴ Obligatory clitic doubling can be understood in two ways: a) an NP that needs to be doubled by a clitic in order to be licit, and b) a clitic that needs an overt associate NP in order to be felicitous. However, for present purposes, whenever I use the term *obligatory clitic doubling* I refer to constructions where a DP is doubled by a clitic.

- (5) *(lo) vimos a el. (Argentinean Spanish) him.CL.ACC saw-1PL a him.ACC 'We saw him.'
- (6) *(l)-am vazut pe Popescu. (Romanian) *CL.him.ACC have.1SG seen pe Popescu* 'I have seen Popescu.'
- (7) *(ton) katedosa ton vlaka stin astinomia him.CL.ACC turn.1SG.PAST in the stupid.ACC to the police
 'I turned him in.'
 (Standard Modern Greek)
- (8) *(tis) aresi tis marias to fagito.
 her.CL.DAT like.3SG themaria.DAT the food.ACC 'Maria likes the food.'
- (9) *(tu) fenete tu petru hazo to ergo. *him.CL.DAT seem.3SG the peter.DAT stupid the movie.NOM*'The movie seems stupid to Peter.'
- (10) *(tu) tahidromithike tu petru to grama htes.
 him.CL.DAT post.3SG.PAST the peter.DAT the letter.NOM yesterday
 'The letter was posted to Peter yesterday.'
- (11) *(mu) tilefonise emena htes. *me.CL.DAT call.3SG.PAST me.FULL PRONOUN yesterday* 'He/She called me yesterday.'

In all the above examples, the presence of the clitic is compulsory. In addition to constructions (5)-(11) let us consider example (12) which seems, at a first sight, to be somehow similar to (5)-(11).

(12) a.	*(tus)	idha	olus.	(Standard Greek)
b.	*(los)	vi	todos.	(Argentinean Spanish)
	them.CL.ACC	saw-1SG	all.ACC	
	'I saw them a	all.'		

(12) appears to be one more instance of obligatory clitic doubling, as the quantifier *all* (todos/olus) needs to be doubled by a clitic in languages like Standard Modern Greek and Argentinean Spanish.

2 OBLIGATORY CLITIC DOUBLING WITH FLOATING QUANTIFIERS?

The first question that arises from (12) concerns the nature of the relationship between *todos/olus* and the clitic. That is, are we dealing in (12) with a genuine case of Clitic Doubling?

I argue that construction (12) is not a typical instance of clitic doubling and despite appearances, it should not be analysed as a genuine instance of clitic doubling (see also Sportiche 1996 and Kayne 2000 for a different reasoning on the basis of French).⁵ Instead, I will show that (12) is an instance of a single clitic construction, which has the underlying structure of (13) and not (14). In other words, example (12) is syntactically akin to (15) and not to (16), which is representative of structure (14).

(13) $[cl[_{VP}V [[all]pro]]]$

 $^{^5}$ Both Sportiche (1988, 1996) and Kayne (2000) analyze the same structure in French as a non-doubling construction.

(14) [cl [V [all]]]

(15)	tus _i <i>them.CL.ACC</i> 'I saw them.'	idha [p1 saw-1SG	rø] _i .		(Standard Modern Greek)
(16)	Ta _i <i>them.CL.ACC</i> 'I saw them.'	idha <i>saw-1SG</i>	[ta <i>the</i>	pedhia] _i . <i>kiðs.ACC</i>	(Standard Modern Greek)

Two are the main arguments that rule structure (14) out. The first argument is that the quantifier *olus* in Standard Modern Greek can carry informational focus as in (17), a property that is systematically incompatible with doubled objects as shown in (18) (e.g. Tsimpli 1995).

(17)	tus	idha	OLU	JS.	(Standard Modern Greek)
	<i>them.CL.ACC</i> 'I saw them	заw-1SG ALL.'	all.A	CC	
(18)	*to <i>it.CL.ACC</i> 'I read it. T	dhiavasa <i>read-1SG</i> HE BOOI	TO the K.'	VIVLIO. book.ACC	(Standard Modern Greek)
	i icaŭ il, i	TIE DOOI			

The second argument against an analysis along the lines of structure (14) comes from crosslinguistic comparison, namely the observation that the quantifier *todos/olus* needs to be accompanied by a clitic in many clitic languages, which do not have clitic doubling, like French/Italian in (19a) and (19b) respectively, and Pontic in (20), a dialect of Greek which lacks clitic doubling as mentioned in Section 1.

(19) a.	Jean *(les)		a	invite	tous.	(French)
	Jean them.CL	ACC	has-3SG	invited	all.ACC	
	'Jean has inv	rited th	em all.'			
b.	*(li)	ho	visti	tutti.		(Italian)
	them.CL.ACC	have.1	SG seen	all.ACC		
	'I've seen the	m all.'				
(20)	idha-ts		oluts.			(Pontic)
	saw.1SG them.0	CL.ACC	all.ACC			× /
	'I saw them a	ll.'				

Therefore, the fact that languages which do not have clitic doubling will obligatorily double their floating quantifiers, makes us suspicious as to whether we should analyse the clitic-floating quantifiers dependencies as typical instance of clitic doubling. What these constructions rather suggest is that the clitic is bound to [all+ pro] (in the spirit of Sportiche's (1988) proposal that floating quantifiers can be sisters to certain types of empty categories, including DP-traces and to (arbitrary or controlled) PRO). Such a proposal offers a straightforward account of the following example:

(21)	$OLUS_i tus_k$	idha [t _i pro] _k	htes.
	all.ACC them.C.	LACC see.1SG.PAST	yesterдау
	'I saw them all	yesterday.'	

In (21) *olus* has moved/floated to a sentence initial position, preceding the clitic, without creating an intonational pause from the rest of the sentence as it always happens with moved objects from the canonical object position to the left periphery as shown in (22).

(22) TA PEDHIA_k#ta_k idha t_k htes. *the kids them.CL.ACC see.ISG.PAST yesterday* 'I saw them, the kids, yesterday.'

Thus the comparison between (21) to (22) shows that while (22) is an example of clitic left dislocation, (21) does not have the intonational properties of a sentence containg left dislocated elements.

However, it would be in principle possible to somehow defend a position suggesting that (17) is a proper clitic doubling construction if it was the case that floating quantifiers need to be doubled in all clitic-languages. In the next section I look into some clitic-languages which show that doubling of floating quantifiers is not compulsory.

3 DO FLOATING QUANTIFIERS NEED TO BE ACCOMPANIED BY A CLITIC IN ALL CLITIC-LANGUAGES?

There seem to be clitic-languages that do not follow the discussed pattern, that is, they do not need to clitic double a floating quantifier. These are the cases of Brazilian Portuguese, European Portuguese and Quiteno Spanish, which do not pattern with Standard Greek, Pontic, Argentinean Spanish, Italian, French and Catalan. In example (23), the identical of (17), the clitic can appear optionally but it is not obligatory.

(23) a.	(les)	vi	a todos.	(Quiteno Spanish)
b.	(os)	vi	todos.	(EuropeanPortuguese/BrazilianPortuguese)
	them.CL.ACC	saw.1SG	all.ACC	
	'I saw them a	all.'		

The question then that arises is: why is the clitic necessary in (17), (19) and (20)? In other words how Quiteno Spanish, European and Brazilian Portuguese differ from the other clitic-languages?

My proposal is that the obligatory presence of the clitic in (17), (19) and (20) depends on the object-drop properties of the language. More precisely, *todos/olus* needs to be obligatorily accompanied by a clitic when the language does not permit definite object drop. As illustrated in (24), in Standard Modern Greek and in Argentinean Spanish, the definite DP-object cannot be omitted, unlike the indefinite NP-object, which can be dropped, illustrated in (25) (e.g. Dimitriadis 1994).

(24) a.	agorases [ta vivlia] _i ?	*(ta) agorasa [<i>pro</i>] _i	. (Standard Modern Greek)
	'Did you buy the books?.'	'I bought them.'	
b.	Viste la pelicula?	*(La) vi.	(AS)
	'Did you see the movie?.'	'I saw it.'	
(25) a.	Agorases vivlia?	B: agorasa [pro].	(Standard Modern Greek)
	'Did you buy books.'	'I bought.'	
Ь.	Viste gente?	Vi.	(Argentinean Spanish)
	'Did you see (any) people?.'	'I saw.'	

The clitic that obligatorily appears in (24) replaces the definite object and is bound to *pro* as discussed above regarding example (15).

It is crucial to note that todos/olus can only modify definite DPs in all the aforementioned languages that group together with Standard Modern Greek. Examples (26) and (27), from Standard Modern Greek and Pontic respectively, show that only the [FQ+DP] is a grammatical pair, while [FQ+NP] is ungrammatical. Given now that floating quantifiers modify/refer to definite DPs, it is then expected that the clitic will appear obligatorily with the quantifier in the languages that lack definite object omission (Standard Greek, Pontic, Argentinean Spanish, French, Italian, and Catalan).

(26) a.	ola	ta vivlia.	(Standard Modern Greek)
	all	thebooks	
b.*	ola	vivlia.	
	all	books	
(27) a.	olts	ti fotitas.	(Pontic)
	all	thestudents	
b.*	olts	fotitas.	
	all	students	

By the same token, the prediction is that in languages that can omit definite objects (Brazilian and European Portuguese(EP/BP) and Quiteno Spanish (QS)) as in (28) (see Raposo 1986, Suner and Yepez 1988), the presence of the clitic will no longer be compulsory in *todos/olus* constructions.

(28) a.	Quem	e	que v	iu	a filme?	O M	Ianel	viu.	(EP/BP)	
	who	was.3SG	that so	aw.3SG	the film-	the M	lanel	saw.3	SG	
	'Who sa	aw the fil	m? Mai	nel saw	' it.' (Rapos	o 198	6)			
b.	Cuando	quieres	que	te	mande	las	tarjet	tas?		
	when	want.2sc	G that	уои	send.1SG	the	cards			
	Puedes	mandar	me man	ana?			(Ç	QS)		
	can.2SG	зепд те	toma	prrow?						
	'When o	do you w	ant me	to send	l you the ca	rds? (Can yo	ou sen	d them to n	ne
	tomorro	ow?' (Su	ner and	Yepez	1988)					

This prediction is borne out in these languages, where the presence of the clitic in *todos* constructions is optional as already illustrated in example (23) repeated here as (29).

(29) a. (les) vi a todos. (Quiteno Spanish)
b. (os) vi todos. (EuropeanPortuguese/BrazilianPortuguese) them.CL.ACC saw.1SG all.ACC
'I saw them all.'

4 □ ON THE NATURE OF THE RELATIONSHIP BETWEEN THE FLOATING QUANTIFIER AND THE NP

The discussion so far generates a new question: Why can't *todos/olus* be a DP by itself, the way that nominalised adjectives can as in (30)?

(30) a.	theli <i>want.3SG</i>	ta kok <i>the red.</i> /	ina <i>pro</i> . I <i>CC</i>		(Standard Modern Greek		
Ь.	'He wants Il veut <i>he want.350</i> 'He wants	the red les <i>the</i> the red	ones.' rouges <i>red.ACC</i> ones.'	pro.	(French)		

The observation is that certain quantifiers in the languages that show the *clitic-todos* dependency, that is the Standard Modern Greek-group cannot behave like DPs despite the agreement for gender number and case between the floating quantifier and the DP.

In order to account for this difference I propose that despite the observed agreement between the FQ and the DP it modifies, the relationship between the FQ and the DP is one of adjunction, as in (31).

 $(31) \qquad [_{\mathrm{DP}} \mathrm{FQ} [\mathrm{DP}_{1}]]_{2}$

In this respect I depart from analyses that suggest that floating quantifiers start inside the DP and can float out of it (Sportiche 1998, 1996, Shlonsky 1991 and many other proponents of the stranding analysis).

The main reason for this approach is that structure (31), correctly predicts certain elliptical phenomena, i.e. a clitic can replace either the whole QP (*'all the students.'*) or just the DP (*'the students.'*), stranding the adjoined FQ (32).

- (32) A: Idhes [_{QP} olus [_{DP} tus fitites]_k]_i? (Standard Modern Greek)
 'Did you see all the students?'
 - B: Tus idha $[_{QP} pro]_i$ / tus idha olus $[_{DP} pro]_k$ 'I saw them all.'

Moreover, such an option seems to exist in VP ellipsis constructions, like in (33), where VP adjuncts can be optionally stranded.

- (33) a. Bill [bought the books]_i on Tuesday and Mary [did so]_i on Wednesday.
 - b. Bill [bought the books on Tuesday]; and Mary [did so];

The prediction then from my proposal is twofold:

- a) The class of elements that modify the entire DP, as opposed to the NP, illustrated in (34), will behave like *todos/olus*, that is, will not be able to replace a definite object. This class coincides in natural languages with quantifiers that can float. And,
- b) in case the language is also a non-definite-object drop language, pseudo-clitic doubling will occur with floating quantifiers.

Additional evidence for the proposed relationship between the clitic and the floating quantifier comes from French data that exhibits the same 'clitic doubling.' pattern (35) with respect to the floating quantifier 'each.' (*chacun*).

- (34) a. [_{OP} ola [_{DP} ta pedhia]]
 - b. todos los ninos
 - c. olts ti fotitas
 - 'all the kids'

(Standard Modern Greek) (Argentinean Spanish) (Pontic)

(35) Je *(les) ai vus chacun (un par un).(French) *I.NOM them.CL.ACC bave.1SG seen every.ACC* 'I have seen each of them (one by one).'

CONCLUSIONS

In summary I have argued against an analysis that groups the clitic-DP dependency together with the clitic-FQ dependency. I have shown that the presence of the clitic in constructions with FQ is only indirectly linked to the properties of the quantifier, but directly linked to the properties of object drop in the language. This is supported crosslinguistically at a macro- and micro-variation level. The prediction of this paper is that *the apparent 'clitic doubling.' of quantifiers will happen only with floating quantifiers.* Moreover, these constructions shed light on the relations between certain quantifiers and the NPs they modify.

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