

Greek object clitic pronouns: A typological survey of their grammatical properties

In this paper, we review the basic morphosyntactic and phonological properties of object clitic pronouns in Standard Greek. More specifically, we discuss the constraints on the combinatorial properties of clitic clusters and present evidence in support of the out-of-cycle adjunct status of clitic-doubled DP-objects. We then account for the distribution of object clitics with respect to the verb by means of a cliticization movement rule. Finally, we show that there is an asymmetry in the way object clitics are prosodically organised, depending on their position in relation to the verb. Being always a part of the *phonological word* of their verbal host, enclitics choose to incorporate to it whereas proclitics opt for prosodic adjunction.

Η εργασία αυτή παρουσιάζει τα βασικά μορφοσυντακτικά και φωνολογικά χαρακτηριστικά των κλιτικών αντικειμένων της Κοινής Νέας Ελληνικής. Εξετάζουμε τους περιορισμούς που καθορίζουν τους συνδυασμούς των κλιτικών σε συμπλέγματα και παρουσιάζουμε τα επιχειρήματα σχετικά με τη λειτουργία των κλιτικά διπλασιασμένων ΟΦ-αντικειμένων ως προσαρτήματα. Κατόπιν, αποδίδουμε την κατανομή των κλιτικών σε σχέση με το ρήμα στη διαδικασία της μετακίνησης κλιτικού. Τέλος, επισημαίνουμε την ασυμμετρική προσωδιακή συμπεριφορά μεταξύ εγκλιτικών και προκλιτικών, όπως αυτή υποδεικνύεται από μια σειρά φωνολογικών κανόνων που έχουν πεδίο εφαρμογής την φωνολογική λέξη αλλά και ανώτερα προσωδιακά συστατικά, ότι, δηλ. τα εγκλιτικά ενσωματώνονται στην φωνολογική λέξη ενώ τα προκλιτικά προσαρτώνται σε αυτήν επαναδρομικά.

1. Introduction and background

The Greek pronominal system has a set of strong forms and a set of weak forms (see Appendix). In contrast to their strong counterparts, weak pronouns are prosodically dependent on an adjacent host and constitute clitic elements. Pronominal clitics function as (a) (in)direct objects to verbs (1), (b) complements to nouns, adjectives, determiners and quantifiers (2), and (c) complements to adverbs (3) (HOLTON *et al.* 1997: 303-307):

(1) *mu to éstile*
CLT.1:SG.GEN CLT.3:N.SG.ACC send:PST.3.SG
'S/he sent it to me'

(2) a. *o patéras mas* 'our father'
the father:NOM.SG CLT.1:PL.GEN
b. *mikróteros mas* 'younger than us'
younger:NOM.SG CLT.1:PL.GEN
c. *énas mas* 'one of us'
one CLT.1:PL.GEN
d. *óli mas* 'all of us'
all CLT.1:PL.GEN

(3) *end'ón mas* 'against us'
against CLT.1:PL.GEN

In this paper, we confine our examination to object clitic pronouns, the position of which in the clause is subject to dialectal variety. More specifically, three basic types are attested (REVITHIADOU & SPYROPOULOS (RS) 2006, based on PAPPAS 2001, *et seq.*¹): (a) second position (2P) clitics, (b) standard (non-2P) clitics and (c) postverbal phrasal suffixes.

2P clitics appear before the verb form only when a function word² is present in the clause and they prosodically attach to this function word. Otherwise, they are post-verbal and encliticize on the verb form. These clitics are therefore 2P elements in the sense that they always appear in the second position in the prosodic constituent headed by the verb form. Representative examples of this pattern are Cypriot, Cappadocian and the Dodecanese dialects.

(4) Cypriot Greek 2P clitics

- a. *pu na to θkjavási*
 COMP SUBJ CLT.3:N.SG.ACC read:3.SG
 ‘that s/he could read it’
- b. *ípen óti to eθkjavásen*
 say:PST.3.SG COMP CLT.3:N.SG.ACC read:PST.3.SG
 ‘S/he said that s/he has read it’
- c. *eθkjavásén to*
 read:PST.3.SG CLT.3:N.SG.ACC
 ‘S/he read it’

Standard clitics are non-2P clitics. They always precede the non-imperative verb form which constitutes their prosodic host, regardless of whether a function word is present in the clause or not. With imperative forms and gerunds, they are always postverbal. This is the pattern exhibited by Standard Greek:

(5) Standard Greek non-2P (standard) clitics

- a. *pu na to ðjavási*
 COMP SUBJ CLT.3:N.SG.ACC read:3.SG
 ‘that s/he could read it’
- b. *ípe óti to ðjaváse*
 say:PST.3.SG COMP CLT.3:N.SG.ACC read:PST.3.SG
 ‘S/he said that s/he has read it’
- c. *to ðjaváse*
 CLT.3:N.SG.ACC read:PST.3.SG
 ‘s/he read it’
- d. *ðjaváse /ðjavázo"das to*
 read:2.SG.IMP / read:GER CLT.3:N.SG.ACC
 ‘Read it!’/ ‘While reading it’

¹ For a somewhat different view on clitic typology see CONDORAVDI & KIPARSKY (2001).

² The term function word is used pretheoretically here to refer to (stressed and unstressed) complementizers, wh-elements, modal and negation particles.

Pontic Greek completes the typology with the third type. Pronominal clitics in this dialect are always post-verbal and behave as phrasal suffixes:

(6) Pontic phrasal suffixes (DRETTAS 1997: 252-253)

- a. *síro-sen* /síro esen/
 drag:PRS.3.SG-CLT.2:SG
 ‘S/he drags you’
- b. *filít-æton* /filíte aton/
 kiss:PRS.2.PL-CLT.3:M:SG
 ‘S/he kisses him!’

This typology reflects aspects of the diachronic development of clitic pronouns in Greek (see PAPPAS 2005 and RS 2006). The relaxation of the Wackernagel Law, which demanded clitics to strictly appear in second position within the domain of the clause during the Late Classical and early Post-Classical period (4th – 2nd c. BC) led to the emergence of two subsystems. According to the first subsystem, pronominal clitics retained their 2P status, which was then defined within the domain of the phrase, thus causing the proximity of the clitic to the verb. According to the second subsystem, pronominal clitics were attached to the verb form as enclitics. These two subsystems developed into two main grammars by the Early Medieval Period (8th – 15th c. AD). The first grammar employed 2P clitics, analogous to the pattern found in contemporary Cypriot Greek, whereas the second one assigned them the status of phrasal suffixes. Pontic is the descendant of this second venue of development. Subsequently, the non-2P clitics of Standard Greek developed out of the 2P system at the end of the Medieval Period and the beginning of the Modern period (15th c. AD onwards) by means of a radical prosodic reanalysis which associated the pronominal clitic with the non-imperative verb form as a proclitic. This reanalysis was triggered by the completion of the major grammaticalization processes that affected the morphosyntax of the verb group (see HORROCKS 1997, ROBERTS & ROUSSOU 2000, PHILIPPAKI-WARBURTON & SPYROPOULOS 2004, among others). These grammaticalization processes created the preverbal subjunctive particles *na* (*ína* ‘COMP’ → *na* ‘SUBJ’) and *as* (*áfes* ‘let’ → *as* ‘SUBJ’) and the modal/future particle *tha* (*thélo ina* ‘want to...’ → *tha* ‘FUT’). These particles carry no stress and procliticize to the non-imperative verb form. Given that pronominal clitics used to encliticize to the particle, the procliticization of the cluster particle+clitic to the verb facilitated the reanalysis of the pronominal clitic as a proclitic to the non-imperative verb form: ...=cl [V]_{PW}]_{PW} → ...cl=V]_{PW}.

In the remainder of the paper, we offer a typological survey of the basic morphosyntactic and phonological properties of object clitic pronouns in Standard Greek. More specifically, Section 2 presents their clustering restrictions and the properties of clitic-doubling/dislocation constructions. Section 3 addresses the issue of their syntactic status and the derivation of their distribution. Section 4 examines their phonological characteristics with special emphasis on the patterns of prosodic organization they participate in with the verb, as these are revealed by both metrical and segmental rules. Section 5 discusses the role of phonological

constraints in the cross-dialectal typology of clitics in Greek. Section 6 concludes the paper and poses some interesting research questions.

2. Morphosyntactic properties

Clitic pronouns inflect for the accusative and the genitive cases. Direct object clitics appear in accusative (7a), whereas indirect object clitics normally appear in genitive (7b), with the exception of constructions involving verbs which take indirect DP-objects in the accusative (e.g. *kernáo* ‘treat’ and *ðiðásko* ‘teach’). In such constructions, the indirect object clitic is marked by the accusative (8):

- (7) *éðosa to vivlío sto jáni*
 give:PST.1.SG the book:ACC to.the John:ACC
 ‘I gave the book to John’
 a. *to éðosa sto jáni*
 CLT.3:N.SG.ACC give:PST.1.SG to.the John:ACC
 ‘I gave it to John’
 b. *tu éðosa to vivlío*
 CLT.3:M.SG.GEN give:PST.1.SG the book:ACC
 ‘I gave him the book’

- (8) a. *ðiðásko ta peðjá xoró*
 teach:1SG the child:PL.ACC dance:ACC
 ‘I teach the children dancing’
 b. *ta ðiðásko xoró*
 CLT.3:N.PL.ACC teach:1.SG dance:ACC
 ‘I teach them dancing’

Direct and indirect object clitics may appear in clusters. In such clusters the order of clitics is fixed, i.e. the genitive clitic must precede the accusative one:

- (9) a. *tu to éðosa*
 CLT.3:M.SG.GEN CLT.3:N.SG.ACC give:PST.1.SG
 ‘I gave it to him’
 b. **to tu éðosa*
 CLT.3:N.SG.ACC CLT.3:M.SG.GEN give:PST.1.SG

In addition to this case order constraint, there are certain person restrictions on the possible combinations between indirect and direct object clitics (WARBURTON 1977, *et seq.*, HOLTON et al. 1997: 192-194, ANAGNOSTOPOULOU 2003). More specifically, the direct object clitic must always be 3rd person, whereas the indirect may be of the 1st, 2nd, 3rd persons:

(10)	{	<table style="border: none;"> <tr><td><i>mu</i></td><td>CLT.1:SG.GEN</td></tr> <tr><td><i>su</i></td><td>CLT.2:SG.GEN</td></tr> <tr><td><i>tu</i></td><td>CLT.3:M/N.SG.GEN</td></tr> <tr><td><i>tis</i></td><td>CLT.3:F.SG.GEN</td></tr> <tr><td><i>mas</i></td><td>CLT.1:PL.GEN</td></tr> <tr><td><i>sas</i></td><td>CLT.2:PL.GEN</td></tr> <tr><td><i>tus</i></td><td>CLT.3:M/F/N.PL.GEN</td></tr> </table>	<i>mu</i>	CLT.1:SG.GEN	<i>su</i>	CLT.2:SG.GEN	<i>tu</i>	CLT.3:M/N.SG.GEN	<i>tis</i>	CLT.3:F.SG.GEN	<i>mas</i>	CLT.1:PL.GEN	<i>sas</i>	CLT.2:PL.GEN	<i>tus</i>	CLT.3:M/F/N.PL.GEN	}	+	{	<table style="border: none;"> <tr><td><i>*me</i></td><td>CLT.1:SG.ACC</td></tr> <tr><td><i>*se</i></td><td>CLT.2:SG.ACC</td></tr> <tr><td><i>ton</i></td><td>CLT.3:M.SG.ACC</td></tr> <tr><td><i>tin</i></td><td>CLT.3:SG.F.ACC</td></tr> <tr><td><i>to</i></td><td>CLT.3:N.SG.ACC</td></tr> <tr><td><i>*mas</i></td><td>CLT.1:PL.ACC</td></tr> <tr><td><i>*sas</i></td><td>CLT.2:PL.ACC</td></tr> <tr><td><i>tus</i></td><td>CLT.3:M.PL.ACC</td></tr> <tr><td><i>tis</i></td><td>CLT.3:F.PL.ACC</td></tr> <tr><td><i>ta</i></td><td>CLT.3:N.PL.ACC</td></tr> </table>	<i>*me</i>	CLT.1:SG.ACC	<i>*se</i>	CLT.2:SG.ACC	<i>ton</i>	CLT.3:M.SG.ACC	<i>tin</i>	CLT.3:SG.F.ACC	<i>to</i>	CLT.3:N.SG.ACC	<i>*mas</i>	CLT.1:PL.ACC	<i>*sas</i>	CLT.2:PL.ACC	<i>tus</i>	CLT.3:M.PL.ACC	<i>tis</i>	CLT.3:F.PL.ACC	<i>ta</i>	CLT.3:N.PL.ACC	}
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Such facts are well accommodated under the strong version of the well-established and widely attested *Person-Case Constraint*:

- (11) The Person-Case Constraint (BONET 1994: 48)
 If DAT-PERS, then ACC-3rd.

Although the effects of this constraint were noticed quite early in the course of generative grammar (PERLMUTTER 1970, KAYNE 1975, Warburton 1977), it is only recently that it has attracted the focus of examination (BONET 1991, 1994, BÉJAR & REZAC 2003, HASPELMATH 2004, BIANCHI 2006, among others). Thus, the exact status and the limits of this constraint as well as of the *genitive + accusative* case order template are not properly as yet understood. Just to mention some complications, in constructions with gerunds and imperatives, in which the object clitics follow the verb form, the order *genitive + accusative* may be reversed, but the PCC must always be respected. For instance, no matter what the relative position of the accusative clitic is, it has to be a 3rd person clitic:

- (12) a. *ðóse mu to*
 give:2.SG.IMP CLT.1:SG.GEN CLT.3:N.SG.ACC
 b. *ðóse to mu*
 give:2.SG.IMP CLT.3:N.SG.ACC CLT.1:SG.GEN
 ‘Give it to me!’

Let us now consider clitic-doubling/dislocation constructions. Object clitics in Greek can double an overt DP-object in clitic-doubling/dislocation constructions, in which the clitic and the doubled DP-object share the thematic role of the predicate and the relative case. The clitic-doubled DP-object can appear in clause initial, medial or final position:

- (13) *(to axláði) to éfa je (to axláði)*
 (the pear:ACC) CLT.3:N.SG.ACC eat:PST.3.SG (the pear:ACC)
o kóstas (to axláði)
 the Kostas:NOM (the pear:ACC)
 ‘As for the pear, Kostas ate it’

It is well-established that clitic-doubled DP-objects acquire a topicality reading and resist focalization (PHILIPPAKI-WARBURTON 1975, 1985 *et seq.*, among others). The basic issue regarding clitic-doubling/dislocation refers to the syntactic status of the doubled DP-object, namely whether the doubled DP-object is syntactically an argument or an out-of-cycle element adjoined to the structure.³ There are three basic arguments in favour of the out-of-cycle view. The first argument comes from the fact that a clitic-doubled DP-object can never be focused, which constitutes an indication that it is deprived of its argument status. Given that focalization can be realized in situ, there would be no reason why a clitic-doubled DP could never be focused in clause medial construction if it were an argument. Second, no extraction is allowed from within a clitic-doubled DP-object:

- (14) **pjaní_i mu ípes óti to éfa je*
 who:GEN CLT.1:SG.GEN say:PST.2.SG COMP CLT.3:N.SG.ACC eat:PST.3.SG
 [_{DP} *to axláðī t_i*] *o kóstas?*
 the pear:ACC the Kostas:NOM
 ‘Whose did you say to me that Kostas has eaten the pear?’

Example (14) shows that clitic-doubled DP-objects exhibit *Condition on Extraction Domain* effects, which are a typical property of non-arguments (HUANG 1984, CHOMSKY 1986) and more specifically of out-of-cycle elements (NUNES & URIAGEREKA 2000, STEPANOV 2001). The third argument comes from the prosodic behavior of clitic-doubled elements in clause medial position. RS (2005, to appear) have shown on the basis of prosodic evidence that in *cltVOS* constructions the clitic-doubled DP-object is always mapped onto a separate prosodic constituent, i.e. the phonological phrase (ϕ). Crucially, it is never phrased with the verb, even if the prosodic requirements for doing so are met. For instance, in (15a) the blocking of voicing assimilation clearly indicates that the *cltV* string is not grouped together with the DP-object into a binary and hence more balanced phonological phrase:

- (15) a. [*to éfa yan*] ϕ [*to axláðī*] ϕ [*TA PEðjÁ*] ϕ
 CLT.3:N.SG.ACC eat: PST.3.PL the pear:ACC the child:PL.NOM
 ‘As for the pear, THE CHILDREN ate it’
 b. [*éfa yan do axláðī*] ϕ [*TA PEðjÁ*] ϕ
 eat:PST.3.SG the pear:ACC the child:PL.NOM
 ‘THE CHILDREN ate the pear’

Notice that in *VOS* constructions the DP-object can, and in fact does, prosodify with the verb into a single phonological phrase (15b), as indicated by the application of voicing assimilation. RS explain this behaviour as the result of the out-of-cycle status of the clitic-doubled element; such elements are assumed to be assembled and processed in a separate derivational work-space (URIAGEREKA

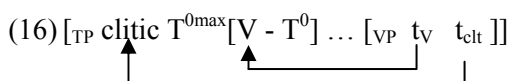
³ See PHILIPPAKI-WARBURTON & SPYROPOULOS (1999), PHILIPPAKI-WARBURTON *et al.* (2004), for the adjunct view and DRACHMAN (1997), ANAGNOSTOPOULOU (1999) for the argument view, among others.

1999). Thus, they are mapped onto phrases independently from the rest of the derivation.

3. The syntactic status of clitics and the derivation of clitic structures

PHILIPPAKI-WARBURTON & SPYROPOULOS (1999) have provided a number of phonological and morphological evidence that clitics do not have the properties of affixes,⁴ as well as syntactic evidence that clitics are syntactically active in the sense that they behave as the arguments proper of the clause and participate in certain syntactic operations. Nevertheless, the crucial evidence for the syntactic status of the clitic comes from the out-of-cycle status of the clitic-doubled DP-object, as explained above.⁵ That clitic-doubled DP-objects in Greek behave as out-of-cycle elements and do not exhibit argument properties indicates that in clitic-doubling/dislocation constructions, the object role is undertaken by the clitic, which functions as the syntactic argument proper by being generated at the relevant theta/argument position.

In formal terms, the distribution of clitics with respect to the verb form is derived by means of a cliticization movement rule. The clitic is base-generated as an argument at the relevant theta-position in the VP and it then targets the IP layer to which it moves overtly. Given that in Greek the verb overtly moves to the T functional head in order to license its tense and subject-agreement features, the clitic ends up as a proclitic on the verb form.



On the other hand, clitics follow the imperative verb forms as a side effect of the licensing of the imperative mood. In Greek clause structure, moods are assumed to be licensed in a functional category Mood (MD) on the left of the T in the following sequence (PHILIPPAKI-WARBURTON 1998, among others):

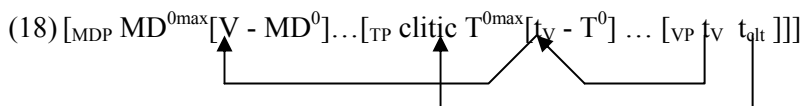
(17) $[_{MDP} MD [_{NEGP} NEG [_{FUTP} FUT [_{TP} T [_{VP} V]]]]]]$

a. indicative:	\emptyset	(<i>den</i>)	(<i>tha</i>)	<i>yrafi</i>	t_V
		not	will	write:3.SG	
b. subjunctive:	<i>na/as</i>	(<i>min</i>)		<i>yrafi</i>	t_V
	SUBJ	not		write:3.SG	
c. imperative	-affix				
	<i>yraf-e</i>			t_V'	t_V
	write:2.SG.IMP				

⁴ For a different view on the issue see JOSEPH (2002) and CONDORAVDI & KIPARSKY (2001).

⁵ See PHILIPPAKI-WARBURTON *et al.* (2004), RS (2005, to appear) for a complete argumentation.

The imperative, being the only affixal mood in Greek, requires the overt movement of the verb form to the MD functional head. Such a head movement operation leaves behind the clitics in the TP, deriving the reverse order:



Revithiadou (2006) has proposed that the theoretical formulation of such a cliticization movement rule in terms of the copy theory of movement (CHOMSKY 1995) and the recent assumptions about the prosodic linearization of chains (FRANKS 2000, BOŠKOVIĆ 2001, NUNES 2004, among others) can in fact provide a viable explanation of the distributional properties of the 2P and non-2P dialects. More specifically, she proposes that 2P and non-2P cliticization patterns share the movement operation that moves the clitic from its argument position to the TP projection and creates a chain with two copies. Phonology then decides on which copy will be pronounced. Section 5 discusses some interesting aspects of this analysis for the cross-dialectal typology of object clitics.

4. Phonological properties

As shown above, in Standard Greek, the object clitic pronoun procliticizes to non-imperative verb forms and encliticizes to imperatives and gerunds. This difference in adjunction sites yields some interesting patterns of prosodic organization of the clitic plus host constructions.⁶ More specifically, enclitics incorporate into the *phonological word* (PW) of their verbal host, whereas proclitics are less coherent and opt to adjoin recursively to the PW. In light of Selkirk's (1995) prosodic typology, enclitics are *internal* (20a) whereas proclitics are *affixal* (20b):

(19) prosodic typology for Standard Greek clitics

- a. $[_{V} \text{clt} (\text{clt})]_{PW}$ internal clitics
- b. $[(\text{clt}) \text{clt} [_{V}]_{PW}]_{PW}$ affixal clitics

We proceed to reviewing the empirical evidence that supports the proposed prosodic typology, starting from enclitic constructions. A fundamental property of stress in Standard Greek is the three-syllable restriction, which bans outputs stressed beyond the antepenultimate syllable (APU). For instance, the form **kátalaveno* is ungrammatical because it is stressed on the fourth syllable from the end of the word. Interestingly, cliticization may challenge the window, as shown by examples such as, for instance, /katalávetē me/ 'You should understand me!', /sístise mu ton/ 'Introduce him to me'. To salvage the window, a rhythmic trochaic foot is constructed post-lexically. The examples in (20) and (21) are telling in this

⁶ The prosodic structure of clitics in Standard Greek is also discussed by NESPOR & VOGEL (1986, 1989), ARVANITI (1991), MALIKOUTI-DRACHMAN & DRACHMAN (1992a,b) *et seq.*, TZAKOSTA (2005), PAPAACHARIOU (2007), among others.

respect. There is a dispute in the literature regarding which one of the two stresses is primary (see NESPOR & VOGEL 1986, 1989, ARVANITI 1991, among others). Primary prominence is usually carried out by the rightmost foot of the word, e.g. *kata(láve)(té me)*, but it remains an open question what the effects of phrasing, intonation and, in general, information structure are on determining the relevant prominence between lexical and post-lexical stress.

(20) APU-stressed verb - CLT

- a. *kata(láve)(té me)* /kataláve te me/
 understand:2.PL.IMP CLT.1:SG.ACC?
 ‘You should understand me!’
- b. *(sísti)(sé me)* /sístise me/
 introduce:2.SG.IMP CLT.1:SG.ACC
 ‘Introduce me!’

(21) verb - CLT CLT

- a. *(sísti)(sé mu) ton* /sístise mu to/
 introduce:2.SG.IMP CLT.1:SG.GEN CLT.3:M.SG.ACC
 ‘Introduce him to me!’
- b. *(ðjáva)(sé mu) to* /ðjávase mu to/
 read:2.SG.IMP CLT.1:SG.GEN CLT.3:N.SG.ACC
 ‘Read it to me!’
- c. *(páre) (mú to)* /páre mu to/
 take:2.SG.IMP CLT.1:SG.GEN CLT.3:N.SG.ACC
 ‘Take it for me!’

A second argument for the internal status of enclitics comes from *s*-voicing assimilation and resyllabification. The examples in (22a-b) demonstrate that the final consonant of the verb assimilates to the voicing value of the neighboring nasal or fricative and then it resyllabifies as an onset to the syllable formed by the clitic, (22a-c). In this case, the sibilant is ambisyllabic (indicated in boldface). It should be noted that both rules obligatorily apply within the PW domain only, e.g. /ʎeras-ménos/ *jerazménos* and not **jeras.ménos* ‘aged’.

- (22) a. *péz mu* /pés mu/
 tell:2.SG.IMP CLT.1:SG.GEN
 ‘Tell me!’
- b. *vréz mu* /vrés mu/
 find:2.SG.IMP CLT.1:SG.GEN
 ‘Find for me!’
- c. *vrés to* /vrés to/
 find:2.SG.IMP CLT.3:N.SG.ACC
 ‘Find it!’

Crucially, resyllabification is blocked in proclitic constructions (23), suggesting that there is a PW-boundary at the left edge of the verb which prevents the proclitic

between the two constructions. More specifically, they claim that recursion is not an inherent property of phonology, but rather the result of its interface with morphosyntax. The grammar requires recursive morphosyntactic structures to be *mirrored* in phonology in the most parsimonious way possible. According to this approach then, the recursive phonological shape of proclitics is due to their adjunct status; these elements procliticize to the verb form because they syntactically adjoin to the T projection to which the verb form moves (see (16)). This morphosyntactic ‘recursion’ is mirrored in phonology as recursion at the level of the PW. Enclitics, on the other hand, prosodically incorporate into the PW of their verbal host, because they do not adjoin to the verb form syntactically. These elements are stranded behind by the movement of the imperative verb form from the T functional projection to the MD head.

5. The role of phonology in the 2P vs. non-2P clitic typology

As mentioned in Section 3, the movement operation creates a series of copies of the object clitic which, according to REVITHIADOU (2006), are subject to PF interpretation. The decision on which copy will be pronounced and which one will be silenced rests upon different PF constraints, depending on their relevant ranking in a given system. In non-2P dialects, PF constraints have only a limited processing power over the syntactic output. It is simply the highest copy that is selected by default for pronunciation. In 2P dialects, on the other hand, the PF constraints are high-ranking and hence more forceful to leave their imprint on the output. In these systems, the lower copy is pronounced at the expense of the higher one in situations where the pronunciation of the latter would violate certain constraints that pertain to phonological wellformedness. Let us clarify this point with the help of a set of constructions which are abstract representations of the relevant attested data (see examples (4) and (5)). In (29), two output syntactic strings with multiple copies of the clitics are presented. In (29b) the string consists of the verb flanked by the copies of the clitic, whereas in (29a) a stressed function word (*fñc*) is also present in the clause.

- (29) *syntactic output*
 a. *fñc* clt verb clt
 b. clt verb clt

The prosodic outputs of both strings in 2P and non-2P dialects are shown in (30) and (31), respectively.

- (30) *2P dialect*
 a. [*fñc* clt]_{PW} [verb]_{PW} ~~clt~~
 b. ~~clt~~ [verb clt]_{PW}

(31) *non-2P dialect*

- a. [fñc]_{PW} [clt [verb]_{PW}]_{PW} €†
- b. [clt [verb]_{PW}]_{PW} €†

What is evident from the prosodic structures in (30) is that the higher copy of the clitic surfaces only when there is a stressed function word to host it; otherwise, it deletes and the lower copy materializes instead. Crucially, in 2P systems, the clitic never groups with the verb into a recursive PW when a stressed function word is present in the clause. That is, output (31a) is unattested in 2P dialects. This means that the need to mirror morphosyntactic structure in 2P systems is superseded by the PF requirement to preserve the crispness of the PW boundaries of the lexical constituent, i.e. the verb. In other words, it is better for the clitic to group together with the other non-lexical item of the clause into one prosodic unit, leaving the left side of the verb intact. This is because the relevant constraints occupy a high-rank in the constraint system from which they can easily exercise their force. When no such function word is present in the word, the alternative is to realize the lower copy because the right side of PWs is more lenient to incorporate material than the left edge (BYE & DE LACY 2000) and, consequently, encliticization and prosodic incorporation of the clitic are preferred to procliticization and prosodic recursion. On the contrary, the relevant PF requirements are idle in non-2P dialects, with the expected result: the highest copy is always pronounced by default. Even with imperatives and gerunds, the highest copy is the one that survives. The enclitic effect is caused by the movement of the verb to the MD functional head.

6. Conclusions

The weak forms of Greek pronouns are clitic elements with various functions such as (in)direct objects to verbs, complements to nouns, adjectives, adverbs, and so on. The focus of this paper was on object clitic pronouns in Standard Greek and their basic morphosyntactic and phonological properties. With respect to the former, we discussed the constraints and wellformedness templates that control the combinatorial properties of preverbal clitic clusters and pointed out some complications with clitic ordering in gerund and imperative constructions. We also examined clitic-doubling/dislocation constructions and reviewed the evidence in support of the adjunct status of clitic-doubled DP-objects. Given the syntactic status of object clitics in Greek, their distribution with respect to the verb form was attributed to a cliticization movement rule. Regarding their phonological characteristics, we showed an asymmetrical prosodic behaviour of enclitics and proclitics, on the basis of segmental and metrical rules. In particular, we argued that although object clitics belong to the PW domain of their verbal host, they differ in the way they prosodically attach to it: enclitics choose to incorporate to it whereas proclitics opt for prosodic adjunction.

There are several research questions, pertaining to the morphosyntactic and phonological behaviour of Greek pronominal clitics, which require further investigation. Although space limitations do not allow us to fully address them

here, we would like to point out a few of them. First, the restrictions and constraints that dictate the ordering of object clitics need to be re-evaluated and re-defined in order to construct a theory that attains more explanatory power. Second, future research should also attempt to reveal the nature and phonetic characteristics of primary and secondary stress as this is attested in various varieties of Standard Greek. Finally, by extending the scope of the analysis, the mobility of clitics in noun phrases with adjectives, e.g. *to koⁿdó mu fórema*, *to koⁿdó foremá mu* ‘my short dress’ is a rather complex issue, which can only be explained by means of an intricate interplay of syntactic and phonological parameters.

Appendix

Table: The paradigm of weak pronominal forms in Standard Greek

	SG					PL				
	1	2	3			1	2	3		
			M	F	N			M	F	N
NOM			(<i>tos</i>)	(<i>ti</i>)	(<i>to</i>)			(<i>ti</i>)	(<i>tes</i>)	(<i>ta</i>)
GEN	<i>mu</i>	<i>su</i>	<i>tu</i>	<i>tis</i>	<i>to</i>	<i>mas</i>	<i>sas</i>	<i>tus</i>	<i>tus</i>	<i>tus</i>
ACC	<i>me</i>	<i>se</i>	<i>ton</i>	<i>ti(n)</i>	<i>tu</i>	<i>mas</i>	<i>sas</i>	<i>tus</i>	<i>tis/tes</i>	<i>ta</i>

Abbreviations

ACC = accusative; CLT = clitic; COMP = complementizer; DAT = dative; F = feminine; FUT = future; GEN = genitive; I = inflection; IMP = imperative; IPFV = imperfective; M = masculine; MD = mood; NEG = negation; NOM = nominative; N = neuter; PERS = person; PL = plural; PRS = present; PST = past; PW = phonological word; SG = singular; SUBJ = subjunctive; T = tense; V = verb; ϕ = phonological phrase

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