

# On the syntax of pronominal clitics: A view from Greek

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## Abstract

This paper investigates pronominal clitics in Modern Greek and proposes that pronominal clitics involve the clitic left dislocation of null pronouns. This is argued to involve predication, whereby a null pronoun serves as subject of the predication. Such predications occur at the left periphery of a variety of smaller phrases as well as at the sentential level. Primary evidence for predication involves the distribution of pronominal clitics in a variety of phrase types and the relation between genitive case and clitics. An anti-locality condition regulates the clitic's distribution with respect to predication. A predication approach to clitics reveals that clitics can play a role in (dependent) case assignment.

*Keywords:* clitics, predication, anti-locality, dependent case, genitive case

## 1 Introduction

In her exploration of the left edge of the clause and its interaction with discourse related functions such as questions, topic and focus, Zubizarreta closely examined the frontier between TP and CP in Romance languages.\* One result of her research in this area was the discovery of a

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I would like to express my thanks and acknowledge my debt to Maria Luisa Zubizarreta. She has been both a professor and guide to me during my time as a student at USC and remains a deeply appreciated friend. Then and now, I find her work on matters related to clitics and agreement influential.

dedicated position in this region “whose function is to «externalize» an argument of a verb *v* with respect to the tense associated with *v*.” (Zubizarreta, 1999, p. 256). Zubizarreta called this projection the CL(itic)-phrase (1999) and later, the *phi-phrase* (2007). She proposed that “clitics and strong agr are the morphological manifestation of an abstract CL[itic] position.” (Zubizarreta, 1999, p. 272). That is, if pronominal clitics or strong agreement occur in a language, then CL occurs. Her work sheds light on the syntax of clitic left dislocated expressions, and other expressions on the left periphery such as preverbal subjects and wh-operators in languages that have pronominal clitics and/or strong agreement. However, because Spanish has clitics only for dependents of verbs, Zubizarreta’s proposal addresses only verbal arguments and thus only directly makes a claim about clitics that are related to the arguments of verbs. In addition, her investigation is restricted to clitics that co-occur with externalized arguments that have phonological content.

If pronominal clitics that are arguments of the verb are syntactically grounded in the information-structure oriented clausal left edge as Zubizarreta (1999, 2007) argues, what then is to be made of clitics related to dependents of heads of projections such as PP, AdjP, or DP? Zubizarreta’s work taken to its logical conclusion suggests that they are also related to externalized arguments. Such clitics do not co-occur with phonologically overt arguments in Modern Greek, the language that is investigated here, unlike clitics that correspond to the

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arguments of verbs in that language. Therefore, in order to investigate this question, I examine the syntax of pronominal clitics that identify null pronouns.<sup>1</sup> The idea I will pursue, based on the insights of Schneider-Zioga (1994, 1998), which, like Zubizarreta (1999, 2007), builds on Iatridou (1991, 1995), is that syntactic cliticization of pronominal clitics involves predication, or an externalization of the argument related to the pronominal clitic. Under this approach, pronominal cliticization<sup>2</sup> can be understood as clitic left dislocation of a null pronoun.

## 2 The Distribution of Clitics in Greek

Clitics are prosodically weak morphemes that must “lean on” a word that has prosodic structure. Therefore, clitics cannot occupy the same position that a thematically equivalent prosodically strong word does. To illustrate this for Greek, we can consider prosodically strong words that are arguments of verbs. Note that prosodically strong verbal arguments typically occur in post verbal position:

- (1) Protimo **tin** Anna  
prefer.1s the Anna  
‘I prefer Anna.’

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<sup>1</sup>The following abbreviations will be used in this paper: cl=clitic, gen=genitive, acc=accusative, nom=nominative, f=feminine, m=masculine, n=neuter, s=singular, 1=first person, 2=second person, 3=third person. The historical dative case has been lost in Modern Greek. It has been replaced by genitive case.

<sup>2</sup> Note that pronominal clitics in Greek can either indicate the presence of a pronominal argument, or they can “double” an overt argument as Greek allows both clitic left dislocation and clitic doubling. From this point on in this paper, the term “pronominal cliticization” is reserved for pronominal clitics that indicate pronominalization, rather than doubling.

This can be contrasted with pronominal verbal arguments that cliticize. In indicative clauses, the clitic precedes the verb and prosodically forms a unit with it:<sup>3</sup>

(2) a. **tin**-protimo

cl.acc.f-prefer.1s

‘I prefer her.’

b. **tis**-telefonisa

cl.gen.f-telephoned.1s

‘I called her (on the telephone).’

Cliticization is quite productive in Greek. As we saw, pronominal verbal complements can cliticize. In addition, in some cases, the pronominal complement of a preposition can cliticize onto the preposition:

(3) vlepi ton Ksenophon brosta-tu

see.3s the Xenophon ahead-cl.gen.m

‘He sees Xenophon in front of him.’

The standard of a comparative can cliticize onto the comparative adjective:

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<sup>3</sup> Note that pronominal clitics are very similar to determiners in Greek. Nonetheless, they are not identical to determiners across the paradigm.

- (4) i Anna ine megaliteri tu<sup>4</sup> (Holton, Mackridge, and Philippaki-Warburton 2004, p. 90)  
the Anna is bigg.er cl.gen.m  
'Anna is bigger than him.'

The complement/possessor of a noun can cliticize onto the noun:

- (5) i fotoghrafia-tis  
the picture-cl.gen.f  
'the picture depicting her'/'her picture (belonging to her)'

The complement/possessor of a noun can also cliticize onto a DP internal adjective (see, for example, Halpern, 1995), as illustrated below.

- (6) to kalo-tis palto  
the good-cl.gen.f coat  
'her good coat'

In short, the possibility of cliticization is widespread in Greek. In what follows, I will attempt to demonstrate that the distribution of cliticization in Greek falls out straightforwardly from the idea that cliticization involves a predication construction. Moreover, we will also see that the

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<sup>4</sup> I have altered the transliteration of the genitive case-marked clitic in this example from Holton, Mackridge, and Philippaki-Warburton (2004) to make it consistent with the transliteration used in other parts of this paper.

search for data bearing on this claim leads to the uncovering of a number of interesting facts that have either not been observed before or not yet been fully understood.

### 3 The Predication Hypothesis for Cliticization

In this section, I introduce the predication hypothesis for cliticization which I initially motivate through closely examining the distribution of pronominal cliticization in prepositional phrases, which I observe is closely tied to status of the phrase as a binding domain. I argue that the observed restrictions provide strong evidence that clitic constructions involve predication. I then demonstrate that this hypothesis accurately accounts for the distribution of clitics in TP and comparatives, as well.

#### 3.1 Prepositions and Their Dependents

I first consider the cliticization of arguments of prepositions. Only certain prepositions in Greek allow cliticization of their arguments. For instance, the prepositions *se* ‘to,’ *apo* ‘from,’ *ektos* ‘outside of,’ and *xoris* ‘without’, to name a few, do not allow cliticization of their arguments:

(7)

a.*se-ton	b.*apo-ton	c.*ektos-tu	d.*xoris-ton
to-cl.acc	from-cl.acc	outside.of-cl.gen	without-cl.acc
‘to him’	‘from him’	‘outside of it’	‘without him’

In contrast, in addition to *brosta* ‘in front of,’ cited in (3), a number of other prepositions allow their complements to be cliticized. A few examples are given below:

(8)

a. yiro-tu around.cl.gen 'around him'	b. eksetias-tu because.of-cl.gen 'because of him'	c. dhipla-tu next.to-cl.gen 'next to him'
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In short, some prepositions allow cliticization of their complements and some do not.

The restricted possibility of cliticization within Greek PPs has been independently noted in various grammars of Greek, as well as in scholarly works that explore the syntax of clitics.

The phenomenon has been addressed in Lechner and Anagnostopoulou (2005), Schneider-Zioga (1994, 1998), Terzi (1991, 2008, 2010), as well as Botwinik-Rotem and Terzi (2008).<sup>5</sup> We discuss these works in what follows, where relevant.

The Greek literature divides Greek prepositions into two main types: transitive and intransitive. The major transitive prepositions include *se* 'to,' *jia* 'for,' *me* 'with,' and *apo* 'from.' Such transitive prepositions, which assign accusative case, never accept cliticization of their complements:

(9) a. \*se ton/\*s'ton

to cl.acc.m

'to him'

b. \*jia ton

for cl.acc.m

'for him'

c. \*me ton

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<sup>5</sup>Schneider-Zioga (1998) discusses Terzi's (1991) proposed account of the restricted possibility of cliticization in prepositional phrases in Greek and addresses certain problematic aspects of it, so I will not discuss it here.

with cl.acc.m

d. \*apo ton

from cl.acc.m

‘from him’

The impossibility of clitics here cannot be for purely phonological reasons. The preposition ‘apo’ consists of a prosodic foot, so there is no possibility that it is too weak to host a clitic. Moreover, we can easily find examples of verbs that are prosodically similar or identical to the two monosyllabic prepositions given here, and they can easily host clitics:

(10) a. fa to!

eat cl.acc.n

‘Eat it!’

b. des tin!

look cl.acc.f

‘Look at her!’

Furthermore, the preposition *se* hosts definite articles, which are clitics:

(11) s’tin (=se+tin); as in: s’tin kopela

to-the.acc.f to-the.acc.f girl

‘to the’ ‘to the girl’

Therefore, we can rule out a prosodic/phonological reason for the inability of such prepositions to accept cliticization of their complement. I will return to transitive prepositions shortly.



I consider now intransitive prepositions.<sup>6</sup> Lechner and Anagnostopoulou (2005) focus on prepositions which are optionally intransitive and propose a division of such prepositions according to three dimensions and how they co-occur: (i) whether or not the preposition allows cliticization of its complement; (ii) whether it selects a DP, PP, or either, as its complement; and (iii) whether a tonic complement remains in a fixed position within the PP or whether it can move to a PP initial position.

Property (i) has already been well-illustrated in this work. Property (ii) can be illustrated by comparing a preposition such as *enantion* ‘against’ with a preposition such as *brosta* ‘in front of.’ *Enantion* takes a DP (12a). *Brosta*, in contrast, can be followed by a PP complement, in which case the complement’s preposition head is either *apo* ‘from’ or *se* ‘to’ (12b and c). Terzi (2008, 2010) notes the general semantic emptiness of *se* and *apo* especially in the context of complex prepositions as explored here. In particular, she observes that the two light prepositions are almost always interchangeable in this context.

- |      |   |               |
|------|---|---------------|
| (12) | a. <i>enantion</i> [DP <i>tu</i> <i>Yiorghu</i> ]         | DP COMPLEMENT |
|      | against            the <i>George.gen</i>                  |               |
|      | ‘against George’  |               |
|      | b. <i>brosta</i> [PP <i>apo</i> <i>tin</i> <i>porta</i> ] | PP COMPLEMENT |
|      | front            from the <i>door.acc</i>                 |               |
|      | ‘in front of the door’                                    |               |

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<sup>6</sup> In this section, I primarily focus on the analysis of Lechner and Anagnostopoulou (2005). However, I will later discuss in detail the influential analysis of locative prepositions put forth by Terzi in a series of papers (2008, 2010) and also Botwinik-Rotem and Terzi (2008).

- c. brosta [PP s' tin porta] PP COMPLEMENT  
 front se(to) the door.acc  
 'in front of the door'

I illustrate property (iii), the possibility of a complement to either precede or follow the adposition, with examples adapted from Lechner and Anagnostopoulou (2005):

- (13) a. [me ton Petro] mazi  
 with the Peter together  
 'together with Peter'
- b. mazi [me ton Petro]  
 together with the Peter  
 'together with Peter'
- (14) a. \*milise [[tu Janni] kata]  
 spoke.3s the Janni.gen against
- b. kata [tu Janni]  
 against the Janni.gen  
 'against Jannis'

On the basis of those characteristics, Lechner and Anagnostopoulou (2005) propose a tripartite division of prepositions in Greek. Their class I prepositions are those that allow cliticization and also allow movement of a tonic complement of the preposition to a pre-

preposition position. I note that these particular prepositions are the locative ones. The following are examples of their class I prepositions (Lechner and Anagnostopoulou 2005, = their [7]):

- (15) *mazi* ‘together’, *mesa* ‘inside’, *ekso* ‘outside’, *pano* ‘above’, *kato* ‘below’, *konta* ‘close’, *makria* ‘far’, *giro* ‘around’, *dipla* ‘near’, *brosta* ‘in front’, *piso* ‘behind’

Lechner and Anagnostopoulou’s class II prepositions are those that come from *katharevousa* (the formal Greek “high language,” which is strongly influenced by archaic forms and whose use follows diglossic conventions). These preposition allow cliticization, but not movement of their complement. The following prepositions are given in Lechner and Anagnostopoulou (2005) as examples of class II prepositions:

- (16) *iper* ‘for, in favor of,’ *kata*+gen<sup>7</sup> ‘against,’ *enantion* ‘against’ and *eksetias* ‘because of’

Their class III prepositions, in contrast, are those that allow neither cliticization nor movement of a tonic complement. Lechner and Anagnostopoulou (2005) offer the following examples of class III prepositions:

- (17) *meta* ‘after’, *prin* ‘before’, *ektos* ‘apart’ and *anti*<sup>8</sup> ‘instead’

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<sup>7</sup> This *kata* governs the genitive case. There is a different *kata* that governs accusative case.

<sup>8</sup> Lechner and Anagnostopoulou (2005) comment that *anti* ‘instead’ is actually a transitive preposition, but shares all other properties that they detected with class III prepositions.

Since one of the characteristics that shapes Lechner and Anagnostopoulou's (2005) tripartite division of prepositions is whether the complement of the preposition cliticizes, their classificatory schema gives a useful way of approaching the problem we are considering here, namely the question of whether and how the distribution of clitics can inform us of their syntax.

In the context of Lechner and Anagnostopoulou's (2005) work, and building on Schneider-Zioga (1994, 1998), I note an additional dimension of syntactic behavior that plays a role in predicting whether or not a preposition allows its argument to cliticize. Namely, syntactic cliticization of complements of prepositions correlates closely with complementarity between cliticization and reflexivization: syntactic cliticization to a preposition is possible if that preposition does not allow reflexivization of its complement.<sup>9</sup> Representative examples of this generalization are given in (18) below and summarized more schematically in (19):

(18) a. to ekane jia ton eafto tu/\*ton

it did.3s for the self his/\*him(cl)

'He did it for himself.'

b. O Yiorghos kategorise ollus ektos apo ton eafto tu/\*ektos ton/tu

the George accused all except from the.acc self his/\*except cl.acc.m/cl.gen.m

'George accused everyone except for himself.'

c. I Elenij idhe ena fidhi dhipla tis<sub>j/k</sub>/ \*diphla s'ton eafto tis

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<sup>9</sup> As briefly noted earlier, many Greek prepositions do not select a DP complement. They select a PP complement instead. Such PPs are headed by semantically light prepositions. Lechner and Anagnostopoulou (2005) suggest that the genitive clitic in PPs corresponds to a PP rather than a DP complement. I will have something to say about this later in this work, when I discuss differential case marking.

the Eleni saw a snake next cl.gen.f/ \*next to-the self her

‘Eleni<sub>j</sub> saw a snake near her<sub>j/k</sub>(self).’

- (19) a. jia ton eafto tu/ \*-ton *reflexive: ✓* *clitic: ✗*  
for the self his / \*cl.acc  
‘for himself’
- b. ektos apo ton eafto tu/ \*ektos-tu *reflexive: ✓* *clitic: ✗*  
except from the self his/ \*-cl.gen  
‘outside of himself’
- c. dhipla-tis/ \*(apo) ton eafto tis *reflexive: ✗* *clitic: ✓*  
next-cl.gen / \*(to) the self her  
‘next to her/\*next to herself’

This is not a fact about the distribution of pronouns per se because tonic pronouns are allowed in all of the environments from which pronominal clitics are banned:

- (20) a. jia afton *tonic: ✓* *clitic: ✗*  
for 3s.m.acc  
‘for him’
- b. ektos apo afton *tonic: ✓* *clitic: ✗*  
out of 3s.m.acc  
‘out of him’

Moreover, clitic and tonic expressions (except for reflexives) occur in the same environment:

- (21) dhipla –tu / se afton /s'ton Arjiri                      *tonic:* ✓                      *clitic:* ✓  
 next -cl.gen.m/ to him.acc/ to-the Arjiri.acc  
 ‘next to him/next to Arjiri’

In short, complementary distribution characterizes the relation between clitic pronouns and reflexive anaphors, but not between clitics and tonic expressions in general.

A reviewer questions the reflexive/clitic complementary distribution generalization by suggesting that the type I prepositions *mesa* ‘inside,’ and *ekso* ‘outside’ allow reflexives and cliticization. The following sentence from Joseph and Philippaki-Warburton’s (1987, p. 80) grammar illustrates the use of an anaphor with *mesa* (= their [26], transliteration adapted to conventions in this paper):

- (22) zi klismeni mesa s' ton eafto tis  
 lives.3s closed.f inside to-the self.acc her  
 ‘She lives closed within herself.’

The speakers I interviewed who accepted the above sentence found it poetic, if they accepted it.

All speakers found a similar sentence that lacks the evaluative *klismeni* to be ungrammatical.

- (23) \*zi mesa s' ton eafto tis  
 lives.3s inside to-the self.acc her  
 ‘She lives within herself.’

I propose that the reflexive anaphor in (22) is interpreted logophorically rather than through binding and therefore, falls outside of our generalization. *Mesa* ‘inside/within’ provides a special deictic context where the coincidence of the perspective of the subject of the sentence and the perspective of the utterer of the sentence can never be directly determined. For example, with respect to sentence (22), only the subject knows if she is really living within herself. An observer cannot independently confirm that, but can only learn that from the report of the subject. Anaphors that are exempt from the usual requirements of the binding theory must be anteceded by perspective centers, which are necessarily animate entities that can hold points of view (see Charnavel & Zlogar, 2016). That is, the notion of animacy is associated with logophoricity because only animate referents can have points of view that might be relevant also to the utterer of the sentence.

Terzi (2008, 2010) proposes that there is a requirement of animacy imposed on clitic pronominal referents that are complements of locative prepositions, although she does not invoke the notion of logophoricity in her discussion. She gives the following example, where the clitic pronoun which is the complement of *mesa* is ungrammatical because it refers to the inanimate *eklisia*: (= [9] in Terzi, 2010)

(24) \*I Eleni perimene brosta apo tin eklisiaj ke i Maria mesa tisj.

the E. was-waiting in-front of the church and the Mary inside she-cl-gen

Lit: ‘Eleni was waiting in front of the church and Mary inside it.’

In fact, while all of my consultants agree the clitic complement of *mesa* must be animate, they uniformly reject such a requirement for other prepositions (except perhaps *ekso*, discussed below, where the generalizations concerning animacy are quite murky). The clitic complement of *dhipla* and *brosta* can easily be inanimate:<sup>10</sup>

- (25) I eklisia<sub>j</sub> exi dhio spitia **dhipla** tis<sub>j</sub> ki' ena dhromo **brosta** tis<sub>j</sub>  
the church has two houses next it.cl.gen and one road front it.cl.gen  
‘The church has two houses next to it and one road in front of it.’

Animacy appears to be relevant to *mesa*, but not to other locatives. This contrast supports my proposal that the licensing of a reflexive as complement of *mesa*, but not other class I prepositions, is logophoric. My claim about complementarity of reflexives and clitics is relevant to reflexives subject to the binding theory.

As for *ekso*, none of my consultants allow it to have a reflexive anaphor as complement nor do grammars consulted for this investigation. Since the reviewer did not provide a possible sentence where *ekso* has a reflexive complement, I am unable to offer any further ideas here except to surmise that for some speakers, *ekso*, the converse of *mesa*, might introduce a deictic context that allows for exempt logophoric reflexives as complements along similar lines to *mesa* ‘inside.’

In short, we see that locative prepositions, which can cliticize a complement, cannot have a bound reflexive as complement. In contrast, class III prepositions, in so far as it is pragmatically feasible, do allow reflexives. Illustrative examples were given in (18)b. Recall,

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<sup>10</sup> I thank Stavroula Tsiplakou (p.c.) for the example and judgments.



moreover, that class III prepositions do not allow cliticization. These facts are in accord with the generalization proposed here that clitics and reflexives are in complementary distribution.

Let us turn now to class II prepositions which initially look problematic for the generalization that clitics and reflexives are in complementary distribution. Class II prepositions allow both cliticization and reflexivization, as the following examples illustrate:

(26) a. energhise enantion tu *clitic: ✓*

acted.3s against cl.gen.m

‘S/he acted against him.’

b. energhise enantion tu eafu tu *reflexive: ✓*

acted.3s against the self.gen his

‘He acted against himself.’

The exceptional nature of these prepositions has been noted for independent reasons in Lechner and Anagnostopoulou (2005). They suggest that class II prepositions<sup>11</sup> are different from other prepositions, which they attribute to their status as elements of *katharevousa*. It is widely observed in the literature that the relatively small and closed set of *katharevousa*-related lexical items have a unique syntactic behavior. This is similar to the Latinate vocabulary of English

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<sup>11</sup> With class II they also include *eksetias* ‘because of.’ It has the properties of a class II preposition in all ways except it cannot be intransitive.

where, for example, Latinate ditransitives (e.g., *donate*) do not undergo dative shift whereas Germanic ones (e.g., *give*) do.<sup>12</sup>

Lechner and Anagnostopoulou (2005, p. 7) point out that class II prepositions “are nominal in nature and involve phonological clitics”. In support of their claim, I note that all arguments of class II prepositions, tonic or clitic, receive genitive case:

- (27) a. energhise enantion tu     Yiorghu  
acted.3s against the George.gen  
‘S/he acted against George.’  
b. energhise enantion tu  
acted.3s against cl.gen.m  
‘S/he acted against him.’

This is exactly the type of case assignment that we find in DPs: both tonic and clitic arguments of the head noun must be genitive:

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<sup>12</sup> In fact, it can be noted that *katharevousa* lexical items have exceptional behavior with respect to clitics at the sentential level as well. Daskalaki and Mavrogiorgos (2016) discuss and provide an account for *katharevousa* locative predicates such as *iperiptame* ‘to fly over’ whose complements, which are obligatorily genitive, can neither undergo cliticization nor clitic doubling. This is in contrast to the complements of non-*katharevousa*-based verbs and in contrast to genitive arguments of non-*katharevousa* based verbs: all of which can cliticize and clitic double.

- (28) a. to vivlio tu Yiorghu  
           the book the George.gen  
           ‘George’s book’
- b. to vivlio tu  
           the book cl.gen.m  
           ‘his book’

Among the prepositions, only *katharevousa* prepositions follow this nominal pattern of case assignment, identical to the pattern found in DPs.

As additional support of the nominal character of class II prepositions, consider the following. Alexiadou and Stavrou (2001) note that within DPs, first and second person possessors occur only as clitics. The tonic forms are ungrammatical in this context ([29]a = their fn 3):

- (29) a. \*to vivlio emena /esena /emas  
           the book of mine/of yours /of ours
- b. to vivlio mu /su/ mas  
           the book my/your/our  
           ‘my/your/our book’

I observe that only class II prepositions follow this pattern found in nominals: first and second person clitic arguments are possible, but corresponding tonic elements are impossible:<sup>13</sup>

(30)	a. eksetias mu	enantion mu	yper	mu
	because cl.gen.1	against cl.gen.1	in.favor.of	cl.gen.1
	‘because of me’	‘against me’	‘in favor of me’	
	b.*eksetias emena	*enantion emena	*yper	emena
	because my/me	against my/me	in.favor.of	my/me

Consider next the proposal of Lechner and Anagnostopoulou (2005) that clitics arguments of class II prepositions are phonological (simple) clitics, as opposed to syntactic clitics, thus accounting for their exceptional behavior. As they note, the complement of a class II preposition cannot be preposed to a PP initial position (14), in contrast to the complement of a class I preposition (13). They relate this immobility to the nominal character of *katharevousa* prepositional phrases, pointing out that syntactic (non-focus related) displacement of arguments of the head of the noun phrase is also not possible. Since syntactic cliticization involves the clitic or related element moving away from its syntactic position, it is reasonable to expect that syntactic cliticization will not be possible under this condition.

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<sup>13</sup> Other classes of prepositions can express first and second person arguments tonically, embedded within a prepositional phrase. For example: *brosta apo emena* (front from me); *prin apo emena* (before from me). This is of course not possible for class II prepositions, which never select PPs as discussed by Lechner and Anagnostopoulou (2005).

This expectation can be confirmed when we consider cliticization within nominals. Alexiadou (2002) notes that clitics within nominals occur to the immediate right of a head with phi-features. Specifically, she proposes (=her [42]) that the following generalization holds regarding clitic placement with respect to nouns and adjectives:

(31) X may be X-cl only if X = X- $\Phi$  gender/number

This tells us that the clitic attaches as an enclitic to a tonic head with phi-features, which means it can attach either to the phi-feature bearing head noun itself or to a prenominal tonic element such as the adjective, which, we can note, agrees in phi-features with the head noun.

Furthermore, Alexiadou and Stavrou (2001) address that there are two distinct positions that possessive clitics within DPs seem to occupy: they can either follow the nominal head or follow the prenominal adjective, as exemplified earlier in (5) and (6). Schematically:

(32) [DP ...ADJ (clitic<sub>1</sub>) N (clitic<sub>2</sub>) ]

Notably, if the adjective has a complement, a clitic in post-adjectival *clitic<sub>1</sub>* position is not possible. Instead, only the post nominal *clitic<sub>2</sub>* position is possible (adapted from Alexiadou & Stavrou 2001, = their [12]):

(33) o [iperifanos (\*tis) jia ta pedhia tu] (\*tis) pateras (tis)  
 the [proud \*her for the children his] her father.gen her  
 ‘her father who is proud of his children’

If the post adjectival *clitic*<sub>1</sub> (recall (32)) occupies a head position between the head-noun and adjective phrase, as Alexiadou and Stavrou (2001) argue, then the above example can be accounted for if the clitic undergoes phonological cliticization. This means *clitic*<sub>1</sub> undergoes simple cliticization from the head to the immediately preceding element: the complement of the adjective. This would not meet the requirement in (31), which obligates the host of cliticization to be a head with phi-features, as long as we also require that all phi-features relevant to cliticization be related to the head of the projection that contains the clitic, in this case the head noun. Because syntactic cliticization does not occur in this context, the clitic cannot move and cliticize to the head of the pre-nominal adjective phrase to meet the requirement in (31). Therefore, only post-nominal cliticization (*clitic*<sub>2</sub>) is possible.

My investigation focuses on syntactic cliticization. Because of this, PPs headed by class II prepositions are excluded from consideration as they involve phonological cliticization. Likewise, phonological cliticization within DP falls outside the scope of the current study.

I return now to our statement about the distribution of clitics and reflexives and note that it can now be turned into a biconditional statement if we eliminate from consideration the clitics that Lechner and Anagnostopoulou (2005) identify as phonological rather than syntactic:

*Conditions that must hold for syntactic cliticization within PPs:*

- (34)    a. REFLEXIVE DP OK  $\leftrightarrow$  CLITIC FORBIDDEN  
           b. CLITIC OK  $\leftrightarrow$  REFLEXIVE DP FORBIDDEN

This generalization captures the behavior of transitive and intransitive prepositions alike. This means it is relevant to a larger class of prepositions than those discussed by Lechner and Anagnostopoulou (2005) who restricted their discussion to intransitive prepositions. Moreover, it encompasses a larger set of prepositions than those discussed by Botwinik-Rotem and Terzi (2008), whose account, which will be discussed in Section 4, is limited to locative prepositions.

### 3.2 Analysis

The complementary distribution between reflexives, which are not possible as complements of certain PPs, and clitic pronouns, which in the same environment are, and vice versa, is reminiscent of the complementarity of pronouns and reflexives that is captured by the binding theory. Therefore, I turn to the binding theory to shed light on this issue.<sup>14</sup> Specifically, I note that reflexives are ungrammatical as the complement of locative (class I) prepositions. Clitic pronouns (as well as a variety of tonic expressions) can occur in that same environment. Moreover, in terms of interpretation, clitic pronouns can freely refer to a c-commanding expression outside of the locative prepositional phrase in question as evident in sentences (18)c and (25) or the following example:

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<sup>14</sup> Greek nominal expressions have much in common with nominal expressions in English with the exception of having an anaphoric expression (*o idhios*) that might descriptively be called a pronominal reflexive. I refer the reader to works such as Anagnostopoulou and Everaert (1999), Iatridou (1986), and more recently Anagnostopoulou and Everaert (2013) and Chiou (2007) for an overview of binding facts in Greek and reflexives in particular (although Chiou's data is controversial in part).

- (35) I Maria<sub>j</sub> akouse thorivo piso apo aftin<sub>j/k</sub> / piso tis<sub>j/k</sub>  
 the Maria heard sound behind from her/ behind cl.gen.f  
 ‘Maria<sub>j</sub> heard noise behind her<sub>j/k</sub>’

In other words, a reflexive anaphor is ungrammatical in the same environment that a pronominal expression can occur and the pronoun in this context can refer to a c-commanding expression outside of the prepositional phrase. A straightforward account of these facts is possible if the locative PP constitutes a binding domain. If so, a clitic pronoun is correctly predicted to be able to refer outside of that domain. Moreover, reflexives that are complements of such prepositions cannot take antecedents from outside of that domain and PPs are unique domains in that they lack a possible antecedent for a reflexive within the phrase.

By contrast, from the point of view of the hypothesis offered here, the maximal projection of prepositions that accept reflexives as complements does not constitute a binding domain. This correctly captures the fact that reflexive complements of such prepositions (class III) can find antecedents outside of the maximal projection of the prepositions in question. It also correctly predicts that pronominal complements of such prepositions cannot refer to c-commanding expressions in the (immediate) larger clausal domain.

Additional evidence that the prepositional phrases that ban reflexives constitute binding domains and those that allow reflexives do not, can be found when the expression *idhios* ‘same’ is considered. Although much remains to be understood about its syntax, Iatridou (1986) has shown that at least non-subject *idhios* behaves like a pronoun in that it cannot be bound within the domain that its reflexive counterpart is bound within. Nonetheless, it must be bound. Therefore, it finds its antecedent outside of the minimal binding domain that contains it.



Judgments regarding the interpretation of *idhios* are difficult as evident from conflicting claims in the relevant literature. Therefore, I can report only preliminary findings in this area and I caution that not all speakers agree.<sup>15</sup> However, judgments fall out as we expect given our proposal that prepositional phrases headed by locative prepositions (class I—those that bar reflexives) constitute binding domains: *idhios* can refer to the subject of the clause containing the locative PP in question, or it can refer to the superordinate subject (36)a. Likewise, when *idhios* is contained within other prepositional phrases, of the types we have proposed do not count as binding domains such as class III, *idhios* cannot be coindexed with the subject of the clause containing the PP in question. Instead, it must find its antecedent outside of the immediately containing clause (36)b:

- (36) a. O Arjiris<sub>j</sub> ipe oti o Yiorghos<sub>k</sub> idhe ena fidhi makria apo **ton idhio**<sub>j/(?)k</sub>  
the Arjiris said that the George saw a snake far from the same  
‘Arjiris<sub>j</sub> said that George<sub>k</sub> saw a snake far away from him<sub>j/(?)k</sub>.’
- b. O Arjiris<sub>j</sub> ipe oti o Yiorghos<sub>k</sub> katagorai ollus ektos apo ton idhio<sub>j/\*k</sub>  
the Arjiris said that the George accuses all except from the same  
‘Arjiris<sub>j</sub> said that George<sub>k</sub> accuses everyone except for him<sub>j/\*k</sub>.’

One question remains: why do locative PPs constitute binding domains, but not other PPs? Locative prepositions are deictic, as independently pointed out by an anonymous reviewer. The deictic contexts that locatives introduce raise the issue of perceptual point of view as being

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<sup>15</sup> Experimental work that examines the possible construal of *o idhios* would be helpful in building consensus concerning the paradigm related to it.

relevant to the interpretation of the sentence that contains a deictic context. It is possible that locative prepositional phrases include a perceptual operator and its presence creates a kind of “Complete Functional Complex,” that is, a domain that contains all grammatical functions compatible with a predicate.<sup>16</sup> Other types of prepositional phrases appear to lack such an operator as they are not deictic, or at least not clearly so.

At this point, we can refine our empirical generalization concerning the distribution of reflexive anaphors and clitics as follows:

- (37) A preposition P a) bars a reflexive argument; b) accepts a clitic argument, iff its projection, PP, is a binding domain.

As indicated, pronominal clitics are sensitive to binding domains. A binding theoretic account of the distribution of clitic pronouns is possible if one adopts a predication hypothesis for pronominal cliticization (Schneider-Zioga, 1994, 1998). Alternately, along similar lines, one can assume that Zubizarreta’s (1999, 2007) CL structure extends to PPs by hypothesizing that there is a CL position on the left periphery of PP. Both of these approaches are inspired by Iatridou’s (1991, 1995) account of Clitic Left Dislocation (CLLD). Iatridou’s insight with respect to CLLD is that it represents a unique expression of argument structure. She analyzes it as a predication construction where the clitic left dislocated expression is the subject of a predication with the rest of the clause serving as predicate. She assumes that the usual locality constraints on predication hold: the subject and the predicate m-command each other. She proposes that the

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<sup>16</sup> Footnote 25 discusses some examples that demonstrate point of view is relevant to locative PPs.

clitic functions as a predicate variable, which creates an open position within the predicate so that predication is possible.

The predication approach to pronominal cliticization proposed here hypothesizes that pronominal cliticization (38) is akin to clitic left dislocation in that it involves a non-overt pronoun as the subject of predication/an externalized argument (39):

(38) yiro-tu<sub>j</sub>  
around-cl.gen.m  
'around him'

(39) pro<sub>j</sub> [yiro-tu<sub>j</sub> e<sub>j</sub>]  
around-cl.gen.m  
'around him'

Schematically then, I propose the following structural representation of pronominal clitics (to be refined):

(40) pro<sub>j</sub> [<sub>XP</sub> X-cl<sub>j</sub> e<sub>j</sub>]

This structure involves syntactic predication. The XP, which in the cases we are now considering = PP, functions as the syntactic predicate:

(41) [<sub>XP</sub> X-cl<sub>j</sub> e<sub>j</sub>]

A non-overt pronoun *pro* serves as the subject of the predication, as indicated above in **Error!**  
**Reference source not found..**

What role does the clitic itself play? Iatridou (1991, 1995) suggests that either the clitic on its own is a predicate variable or that the clitic plus the empty category in argument position, which she analyzes as *pro*, forms a discontinuous predicate variable. ‘Predicate variable’ is meant in her work in the sense of Williams (1981); that is, its function is to create an open position so that the XP can serve as a predicate and an external argument/subject can be added. Iatridou (1991, 1995) makes the important observation about predication that not only is there a tight locality imposed on the relation between the predicate and the subject of the predication, as argued in Williams (1981), but there is also a locality that holds between the subject of the predication and the predicate variable. She proposes that the clitic (predicate variable) must be contained in the minimal maximal projection that serves as the predicate.

Schneider-Zioga (1994, 1998) followed Iatridou (1991, 1995) in analyzing the clitic as a predicate variable and viewing the clitic left dislocated expression as being base generated on the left edge. In this paper, I extend Schneider-Zioga (1994, 1998) and incorporate the insights of Zubizarreta (1999). In particular, I maintain the view that CLLD involves predication, but I view the locality relation between the subject of the predication and the predicate as being mediated by Zubizarreta’s CL head, which I will understand as a relator in the sense of den Dikken (2006). Indeed, Zubizarreta’s description of the function of her proposed CL comes very close to saying that it functions like a relator in the style of den Dikken (2006). Whereas den Dikken (2006) proposes that a relator is a head whose function is to mediate the relation between a subject and predicate by taking them both as dependents—one as its specifier and the other as its complement, Zubizarreta (1999, p. 259) proposes that “[Cl’s] role is purely formal, namely

that of establishing a connection between a DP in its Spec and an argument-variable of the verb.”

In this light, we can view CL as a kind of copular/relator head that, following den Dikken’s (2006) analysis of predication, imposes locality on the relation between the clitic left dislocated phrase in its specifier position and the predicate, which by hypothesis is its complement.

As for the clitic itself, I maintain the idea that it is a predicate variable, which, as Iatridou (1991, 1995) notes, must be located quite high in the predicate of CLLD constructions.

Zubizarreta (1999), as mentioned earlier, suggests that the role of the clitic is to morphologically identify the phonologically silent CL. I develop the proposal of Schneider-Zioga (1994, 1998) that the clitic has a syntactic role to play in that its pronominal properties determine the distribution of clitic pronouns in a way that will be elaborated in what follows.

The refined proposal for the structure of clitic pronouns in Greek follows and generalizes Zubizarreta’s (1999) Cl-structure with the subject of the predication being a silent *pro*:

(42)  $pro_j CL_j [_{\text{predicate}} \dots clitic_j \dots e_j .. ]$

To see how the proposed structure accounts for the distribution of pronominal clitics in prepositional phrases, consider the following. The subject of the predication in question, that is, the null pronoun, and the clitic are co-indexed via the null CL relator. Recall that following Zubizarreta (1999), the subject stands in a specifier/head (formal) agreement relation with CL. Given that the clitic has pronominal binding properties and because pronouns must be free in the binding domain containing them, pronominal clitics will be barred from any predicate that does not constitute a binding domain (that is, domain within which the binding principles hold). This is because if the subject of the predication were to occur within the same binding domain as the

co-indexed pronominal clitic, the pronominal clitic would then ungrammatically be bound within its binding domain by the co-indexed subject of the predication and the configuration would violate the binding principles:

(43) \**proj* CL<sub>j</sub> [PP≠BD apo-ton<sub>j</sub> e<sub>j</sub>]

\*from-cl.acc.m

By contrast, the pronominal clitic would be free within the maximal projection immediately containing it, in accordance with the principles of the binding theory, just in case that maximal projection, in other words, the proposed predicate, were a binding domain. In that case, the coindexed null pronoun which is the subject of the predication would be located outside of the domain within which the clitic must be free, and the configuration would then correctly adhere to the binding principles:

(44) *proj* CL<sub>j</sub> [PP=BD yiro-tu<sub>j</sub> e<sub>j</sub>]

around-cl.gen.m

‘around him’

The distribution of pronominal clitics cannot be captured simply through the hypothesis that pronominal cliticization involves a non-overt pronoun that is in some way structurally higher than the clitic. For example, it would not work if the non-overt pronoun were simply in the CL position at the left edge of the sentence proposed by Zubizarreta (1999), rather than being in a predication relation with the PP in question. To see this, suppose, for instance, that the clitic which is the complement of a preposition were coindexed with a non-overt *pro* in clause initial position:

(45) *proj* CL<sub>j</sub> [<sub>y</sub> ... [<sub>z</sub> X-clitic<sub>j</sub> ... e<sub>j</sub> ... ]]

Furthermore, suppose  $z$  is not a binding domain but  $y$  is one, as  $y$  would be whenever  $y = TP$ . In that case, a clitic would always satisfy the binding theory and thus always be licensed. This would also mean that a reflexive could occur in the same position as a clitic pronoun as it could find an antecedent in the larger domain  $y$ . However, for prepositional phrases this is clearly the wrong result empirically: clitics and reflexive anaphors are in complementary distribution within the PP domain. It is only when the relation between *pro* and the predicate is as strictly local as that required by predication that we can account for the empirical facts: clitics are licensed where reflexives are banned within an XP that lacks any potential antecedents for reflexives. The correct results are obtained if we hypothesize that the non-overt dislocated pronominal is in a local relation to the relevant predicate, the locality being mediated by a CL relator at the left edge of the predicate.<sup>17</sup>

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<sup>17</sup> As we investigate further the depth of embedding of the clitic/predicate variable, the reader will have noted that in some constructions, the clitic is a proclitic, preceding the word to which it cliticizes, and in others it is an enclitic, following the word to which it cliticizes. In fact, the following generalization perfectly predicts its pro- or enclitic status: if the lexical head that provides prosodic support for the clitic inflects for person, the clitic is proclitic; if it does not inflect for person, the clitic is enclitic. This observation generalizes the insight of Mavrogiorgos (2009) who notes that the presence or absence of the feature “person” in the inflection of the clitic host predicts pro- or enclitic status of pronominal clitics when host verbs are concerned. No other lexical items (except for pronouns) encode person in Greek. Mavrogiorgos (2009) attempts to derive the pro- and enclitic status of clitics in Greek via movement of the verb. When there is enclisis, Mavrogioros (2009) and also Pancheva (2009) argue that the clitic occurs in a position that is above a person projection/EPP-person feature and the verb raises past person to a position higher than the clitic. In situations of proclisis, the feature *person* is checked by the verb. I tentatively propose that all syntactically derived enclitic orders involve raising of the lexical items (verb, preposition, adjective, etc.) above EPP/person. I leave this issue open to additional research.

Recall that Iatridou (1991, 1995) reports her discovery that not only must the subject and predicate be in a very local relation to each other. She also makes the important observation that the clitic, as predicate variable, cannot be too deeply embedded within the predicate.

Specifically, she proposes that it is contained in the minimal maximal projection that forms the predicate. Zubizarreta (1999) clarifies this locality requirement to some extent when she assigns a role to the clitic as a morphological identifier of CL. She emphasizes that the clitic is distinct from CL. However, she does not provide an explanation for this. Here, I suggest that one aspect of the relation between the clitic and the null CL relator is due to the pronominal properties of the clitic: its pronominal properties prevent it from being directly co-indexed with the subject, and thus bound by it, as it would be if the clitic itself occupied the head position of CL.

Nonetheless, while this explains why the clitic and the subject of the predication cannot be too close, it is still an open question as to why it cannot be too far/too deeply embedded within the predicate.<sup>18</sup>

### **3.3 Clitics Within TP**

Consider now TP. Recall that clitics are found corresponding to complements of verbs:

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<sup>18</sup> An anonymous reviewer notes that an interesting tension arises between the binding theoretic account of cliticization which “imposes a certain ‘distance’ on the relation between the subject of predication and the pronominal clitic; whereas Iatridou’s (1991, 1995) generalization imposes a ‘locality’ requirement on that relation, by observing that the pronominal clitic cannot be deeply embedded within the predicate.” I agree with the reviewer that this interesting tension would be important to explore. Unfortunately, I must leave the issue unresolved in this paper.



- (46) [TP tin-idha ]  
 cl.acc.f-saw.1s  
 ‘I saw her.’

There is no complementarity between clitics and reflexives that are complements of verbs, unlike what was described for the arguments of prepositions. Reflexives and clitic pronouns alike can correspond to the internal argument of a verb. Why does this lack of complementarity not prevent cliticization given what we have previously said? First, notice that TPs constitute binding domains, as reflexive facts demonstrate: reflexives are grammatically bound by an antecedent within the same TP. Furthermore, notice that the clitic is located higher than vP, in the realm of T. The following examples specifically illustrate the height of the clitic, where we see it is proclitic to the structurally higher tensed aspectual verb rather than the lower thematic verb:

- (47) a. tin-      exo      dhi  
 cl.acc.f- have.1s see  
 ‘I have seen her.’  
 b. \*exo      tin-dhi  
 have.1 cl.acc.f-see

The clitic left dislocated *pro*, which is co-indexed with the clitic pronoun via the predication relation mediated by CL, is located outside of the predicate, which is the binding domain within which the clitic must be free. Therefore, the clitic would not be bound within its binding domain by the subject of the predication, despite being co-indexed with it. Moreover, as already pointed

out, the external argument of the verb also occurs within the TP predicate, so a reflexive internal argument can find an antecedent that is sufficiently local.

Given the discussion concerning both the arguments of verbs and the arguments of prepositions, we can observe that the following generalization holds:

(48) A clitic is licensed iff the projection that immediately contains it is a binding domain.

This generalization makes the correct predictions for PPs as a particular case and is obviously correct when the clitic is an argument of a verb (where the projection immediately above the clitic = TP). However, because all TPs are binding domains with potential antecedents for reflexives that are internal arguments of the verb, the distribution of reflexives at the TP level does not give evidence either for or against the predication approach to cliticization. Nonetheless, it is clearly consistent with the predication analysis of clitic pronouns.

### **3.4 Clitics and Comparatives**

Finally, I consider the distribution of clitics in comparative constructions. Such constructions include a comparative operator, such as the suffix *-teri* ‘more’ in Greek, and a standard of comparison, which in many languages is introduced by a standard marker. Merchant (2009) notes two standard markers in Greek, one specialized for phrasal comparatives and the other for clausal comparatives. Merchant demonstrates that the standard marker for phrasal comparatives is the general-use preposition *apo* ‘from, by’ and the standard that it introduces is marked accusative. He shows that the standard marker for clausal comparatives is the complex expression *ap’oti*, which he notes consists of *apo* ‘from, by’ plus *oti* ‘free relative what, that.’

The standard that the clausal marker introduces displays whatever the appropriate case is for the correspondent in the main clause. Here is an example of a phrasal and clausal comparative respectively (= [9] and [19] respectively in Merchant, 2009, with glosses adapted):

- (49) a. I Maria pezi kithara kalitera **apo** ton Gianni  
the Maria.nom plays guitar better from.phrasal the Giannis.acc  
‘Maria plays the guitar better than Giannis.’
- b. I Maria pezi kithara kalitera **ap’oti** o Giannis  
the Maria.nom plays guitar better from.clausal the Giannis.nom  
‘Maria plays the guitar better than Giannis plays the guitar.’

Merchant (2012) notes a second type of phrasal comparative in Greek, namely one where the standard appears in genitive case. The following example is from Merchant (2012), (= his [6]):<sup>19</sup>

- (50) O pirgos tha ine psiloteris tu spitiu.  
the tower will be taller the house.gen  
‘The tower will be taller than the house.’

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<sup>19</sup> As I will discuss shortly, there is a register divide among speakers which seems to depend on age and possibly education level. My consultants who accept genitive comparatives uniformly accepted the sentence under discussion.

Consider now clitic standards in comparative constructions. Note that they lack a standard marker. Instead, they involve a genitive enclitic that is cliticized to the comparative form. Recall (4), repeated here as (51):

- (51) i Anna ine megaliteri tu (Holton, Mackridge, and Philippaki-Warburton 2004, p. 90)  
 the Anna is bigger cl.gen.m  
 ‘Anna is bigger than him.’

The question arises: what type of comparative construction do comparatives with clitic standards exemplify? First, it is easily confirmed that the clitic standard is related to phrasal, not clausal comparatives. This can be determined because i) a clausal comparative can have several phrases within the standard (52)a; ii) but a phrasal comparative cannot (52)b; iii) a comparative with a clitic standard cannot have any additional phrases within the standard (52)c:

- (52) a. To Savato, i Fotini itan kaliteri, **ap’oti** i Olga tin perasmeni Kyriaki  
 the Saturday, the F. was better from’CLAUSAL the Olga the past Sunday  
 ‘On Saturday, Fotini was better than Olga (was) last Sunday.’
- b. To Savato, i Fotini itan kaliteri **apo** tin Olga (\*tin perasmeni Kyriaki)  
 the Saturday, the F. was better from the Olga the past Sunday  
 ‘On Saturday, Fotini was better than Olga (\*last Sunday).’
- c. To Savato, i Fotini itan kaliteri tis (\*tin perasmeni Kyriaki)  
 the Saturday, the F. was better her (\*the past Sunday)  
 ‘On Saturday, Fotini was better than her.’

We can also establish that a clitic standard is not necessarily related to the (tonic) genitive standard comparative. Merchant (2012) identifies all instances of genitive clitic pronominal standards of comparison as being instances of the genitive comparative construction (where the tonic standard is in genitive case). But, there is a problem with his conclusion. As Merchant (2012) observes, the genitive tonic standard construction is heavily influenced by *katharevousa*. However, Merchant (2012) does not consistently keep in mind its status as belonging to a very high register of Greek. Due to this, he fails to notice that the genitive clitic standard cannot always be directly related to the high register tonic genitive standard construction and thus should be considered separately. Here is an example of the problem. My consultants uniformly reject the following as a possible (tonic) genitive comparative:<sup>20</sup>

- (53) \*I Anna ine psiloteri tu Yiorghu.  
           the Anna is     taller     the George.gen  
           ‘Anna is taller than George.’

Nonetheless, a genitive clitic can easily and naturally be the standard of comparison in a very similar sentence:

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<sup>20</sup> Animacy is not at play here as there are numerous examples of animate standards attested in Merchant’s (2012) paper. Instead, the content of the proposed sentence is too informal for this register.

- (54) I Anna ine psiloteri tu.  
the Anna is tall.er cl.gen.m  
'Anna is taller than him.'

The only directly related grammatical sentence with a tonic expression is one where the standard is marked by the all-purpose preposition *apo*:

- (55) I Anna ine psiloteri apo ton Yiorgo  
the Anna is taller from the George.acc  
'Anna is taller than George.'

Moreover, the comparative with a clitic standard is accepted by speakers I consulted who completely reject the high register tonic genitive standard.

This indicates that it would be hasty to make a statement about “genitive phrasal comparatives” by relying only on data from clitic standards or to build claims that rely only on clitics or only on tonic expressions. Furthermore, this data demonstrates that at least sometimes, and for speakers who reject tonic genitive standards of comparison, always, the clitic comparative cannot be analyzed as having an identical syntax with the (tonic) genitive construction—the tonic construction cannot be the clitic’s “source” in some sense. Otherwise, it would be difficult to explain why the tonic expression was never possible for the relevant speakers. Instead, it seems that the genitive clitic can alternate with a prepositional expression of the standard in a similar way to the alternation found with type I (locative) prepositions, where

the ground argument is either introduced by an all-purpose preposition or it is expressed as a genitive pronominal clitic (see (21) for examples).

The examples of comparatives with a clitic standard ((54), (52)c, and (51)) illustrate that the standard of comparison can cliticize onto a comparative predicate adjective. I note that the standard of comparison cannot, however, cliticize onto a comparative adverb (56). Instead a tonic expression is required (cf. Merchant [2012]’s [13]):

- (56) a. \*I Anna pezi kithara kalitera tu  
the Anna plays guitar better cl.gen.m  
‘Anna plays guitar better than him.’ (clitic pronoun)
- b. I Anna pezi kithara kalitera apo afton/apo ton Andrea  
the Anna plays guitar better from him.acc.m/from the Andreas.acc  
‘Anna plays guitar better than him/than Andreas.’

Merchant (2012) suggests, inaccurately, that genitive standards are not possible with adverbs. More specifically, because he has collapsed clitics and tonic expressions, he asserts: “[g]enitives of comparison ... do not attach to adverbs of any kind.” and concludes “The genitive of comparison ... must be adjacent to a synthetic degree adjective.” However, that is actually a fact about clitics, rather than genitive standards per se. A tonic genitive standard is possible when the comparative is an adverb. The following examples were judged grammatical by consultants who accept the high register:<sup>21</sup>

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<sup>21</sup> Ideally, judgments related to the genitive of comparison with tonic standards should be further investigated experimentally since sociolinguistic factors appear to play a significant role in acceptability.

- (57) a. I Fotini erevna to sigkritiko endhelexestera ton allon glosologhon  
the Fotini investigates the comparative thoroughly.more the other linguists.gen  
‘Fotini investigates comparatives more thoroughly than other linguists.’
- b. (?) O Syriza kiberna epipolaiotera ton alon komaton  
the Syriza governs frivolously.more the other parties.gen  
‘Syriza governs more superficially than the other parties.’

Considering the tonic genitive standard independently of the genitive clitic standard, as I do here, reveals that genitive standards are possible in Greek in more contexts than Merchant (2012) noted and brings them more in line with the distribution of genitive standards of comparison in languages with genitive standards such as Slavic.<sup>22</sup> The facts are summarized in the following table:

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<sup>22</sup> For instance, as discussed in Merchant (2012), both Greek and Russian have (tonic) genitive standards with comparative adjectives. This is also true regarding adverbs. Furthermore, neither languages allow periphrastic comparative constructions with genitive standards: clitic or tonic. Merchant (2012) suggests that, at least in Greek, this is due to the fact that only the synthetic degree affix assigns genitive case. I will address this in Section 4.1.2, where I discuss case in comparatives in more detail.

A reviewer draws attention to the fact that cliticization to a synthetic comparative does not seem possible with a number of adjectives. Relatedly, Merchant (2012) comments that cliticization seems restricted to comparative adjectives that occur with high frequency and difficult if not impossible with rarely occurring adjectives. I cannot at this point account for the preference that only certain comparative adjectives serve as a base for cliticization of the standard. In my preliminary investigation, I found that my speakers often dispreferred synthetic forms for less frequently occurring adjectives and instead preferred periphrastic comparatives in this case, which of course led to



(58)

<b>phrasal standard</b> <b>within →</b>	<b>comparative</b> <b>adjective</b>	<b>comparative</b> <b>adverb</b>
clitic pronoun:	✓	NO
tonic standard:		
<i>apo</i> +DP	✓	✓
DP.genitive	✓	✓

I note that the entire clause forms a binding domain in phrasal comparatives in Greek. Merchant (2009) points this out for *apo*+DP phrasal comparatives. I demonstrate this for (tonic) genitive phrasal comparatives as well. Note that when the standard is a tonic pronoun, it must be free in the entire clause:<sup>23</sup>

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the clitic being impossible. Moreover, while considering comparative adverbs, Stavroula Tsiplakou (p.c.) pointed out that tonic genitive standards sound far more natural when the adverbial root is a *katharevousa* one for which there is no non-*katharevousa* synonym. It is possible that genitive clitic standards are also influenced by the diglossic status of the adjectival comparative that it might cliticize to. In addition, for clitic standard examples that they rejected, consultants often commented the word seemed “too long” if the standard cliticized. This suggests there might be prosodic factors at play as well. It is well established that clitics are influenced by lexical and phonological and other non-syntactic factors, as appears to be the case here. An in-depth investigation of these restrictions is certainly in order. However, it lies outside the scope of this current paper.

<sup>23</sup> Merchant (2009) demonstrates binding domains with a reflexive anaphor. However, my consultants found it pragmatically quite odd to compare one to oneself. Therefore, I establish the binding domain with pronouns rather than anaphors.

- (59) a. i Anna<sub>j</sub> ine megaliteri apo aftin<sub>\*j/k</sub>  
the Anna is bigger from her.acc  
‘Anna<sub>j</sub> is bigger than her<sub>\*j/k</sub>.’
- b. i Anna<sub>j</sub> pezi kithara kalitera apo aftin<sub>k/\*j</sub>  
the Anna plays guitar better from her.acc  
‘Anna<sub>j</sub> plays guitar better than her<sub>k/\*j</sub>.’
- c. i Anna<sub>j</sub> dhiabase perisotera vivlia apo aftin<sub>k/\*j</sub>  
the Anna read more book.pl from her.acc  
‘Anna<sub>j</sub> read more books than her<sub>k/\*j</sub>.’
- (60) I Fotini<sub>k</sub> erevna to sigkritiko endhelexestera aftinis<sub>j/\*k</sub>  
the Fotini investigates the comparative thoroughly.more her.gen  
‘Fotini<sub>k</sub> investigates the comparative more thoroughly than her<sub>j/\*k</sub>.’

Recall that I have argued that a clitic is licensed iff the maximal projection that immediately dominates it constitutes a binding domain. This structural requirement is necessary so that the pronominal clitic’s co-indexation with the dislocated *pro* subject via CL does not create a binding violation. A clitic contained within a comparative adverb phrase that corresponds to an argument of the comparative adverb can clearly not be licensed because, as already established empirically, the comparative adverb phrase does not count as a binding domain, but instead the entire clause does. If the clitic is within the adverb phrase, it will be bound within its binding domain by the *pro* subject of predication via their relation to the local CL. The pronominal clitic essentially cannot cliticize elsewhere in the clause because, as Iatridou (1991, 1995) notes, the

relation between the pronominal clitic and the argument to which it is related as well as the pronominal clitic and the subject of the predication must all be quite local as discussed earlier. Consider now the comparative adjective phrase, where the standard can cliticize. By hypothesis, this means that the comparative adjective phrase must be a binding domain as binding facts related to pronouns indicate. Note that the comparative predicative adjective is the main predicate of the sentence. I accept a classical view of comparatives whereby the degree head and the standard form a constituent which specifies the gradable predicate: I assume that the external argument of the adjectival predicate is introduced by a small *a*, parallel to the small *v* for VP predicates.

(61) copula [<sub>aP</sub> DP<sub>subject</sub> [ a [<sub>AP</sub> [DEGREE PHRASE -more than .../DP ] [ [ predicate ]]]]]

The adjectival predicate, which agrees in features with the external argument, raises outside of aP into the inflectional domain to check those features, which results in enclisis. Given this structure for adjectival comparatives, data that shows the external argument (a potential antecedent for reflexives) is in the same binding domain with a nominal expression in the standard of the comparative adjective is consistent with either the entire clause or the larger predicative adjective phrase (aP) itself being a binding domain. That means that if the clitic occurs within aP and a co-indexed *pro* subject occurs (immediately) outside of aP, mediated by predication, then the pronominal clitic will adhere to the appropriate binding requirements on pronouns. In short, we can account for the distribution of clitic pronouns in comparative constructions in exactly the same way we accounted for the distribution of clitics in prepositional phrases: by positing that clitic constructions involve syntactic predication.

For completeness, I note that it is clear that syntactic rather than phonological cliticization is at play with predicative adjectival comparatives. Note that the standard can be preposed with either phrasal comparative:

- (62) i Anna, apo tin Eleni ine megaliteri  
the Anna from the Eleni is big.more  
'Anna is bigger than Eleni.'
- (63) o pirghos, tu spitiu (tha) ine psiloteros  
the tower, the house.gen (will) be taller

Following Lechner and Anagnostopoulou (2005) and the discussion in Section 3.1, this diagnostic indicates the possibility of syntactic cliticization.

Returning to the bigger picture of the relation between binding domains and cliticization, I have demonstrated that a predication approach to cliticization captures an important aspect of the distribution of clitics in comparative constructions.

#### **4 Case Related Evidence for a Predication Structure of Clitic Pronouns**

Earlier I presented binding-theoretic evidence for a predication-based analysis of cliticization. In this section, I argue that additional evidence for such a structure can be found when case assignment is considered. Specifically, I will argue that the occurrence of genitive case, relevant to clitic pronouns in differential case assignment constructions, provides an additional argument in support of there being a predication structure when clitics are involved.

## 4.1 Differential Case: PP-Genitive Alternations

### 4.1.1 Differential Case with Locatives

Initially, I consider what we might view as differential case marking in prepositional phrases that have clitics as arguments (class I/locative prepositions). By “differential case marking,” I mean the following: clitic pronouns bear genitive case, whereas tonic noun phrases, including tonic pronouns, are expressed prepositionally, marked by the semantically light prepositions *apo* and/or *se*.<sup>24</sup> This is exemplified schematically here:

- (64) a. preposition-clitic pronoun (genitive)  
b. preposition [apo(from)/se(to) DP ]  
c. \*preposition [DP (genitive)]

Actual examples that illustrate this pattern are given next:<sup>25</sup>

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<sup>24</sup> I am not claiming this is an instance of DOM (differential object marking), which also involves a meaning difference that predicts the morphology on the differentially marked objects.

<sup>25</sup> Some of my consultants find at least with some locatives a meaning difference or preferred interpretation that distinguishes prepositionally-marked phrases from clitics. This difference is related to point of view and choice of semantically light preposition as illustrated in the following examples:

- i. a. I Voula ine brosta apo ton Andrea  
the Voula is front from the Andreas  
‘Voula is in front of Andreas.’ (as described from point of view of viewer:  
Voula is standing in front of Andreas, not facing him.)  
b. I Voula ine brosta ston Andrea  
the Voula is front to-the Andreas

(65) a. brosta-tu

front -cl.gen.m

‘in front of him’

b. brosta [**apo** ton Arjiri]                      / [**apo** afton ]                      / [ **apo** tin eklesia]

front    from the Arjiris.acc / from him.acc (tonic)/ from the church.acc

‘in front of Arjiris/him/the church’

c. \*brosta tu Arjiri                      /aftu                      /tis eklesias

front    the Arjiri.gen/him.gen(tonic)/the church.gen

Botinik-Rotem and Terzi (2008) argue that this difference in case marking falls out from the prosodic properties of the expressions involved and from Terzi’s proposed structure of locatives. Specifically, Botinik-Rotem and Terzi (2008) follow Terzi’s proposal (2008, 2010) that the locative is not a preposition, but rather a modifier of a null nominal head *place*, and thus is

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‘Voula is in front of Andreas.’ (as described from the point of view of subject:

Voula. Voula is standing in front of Andreas, facing him)

When a clitic occurs instead of a PP, there is no longer a distinction in points of view, instead, the sentence is ambiguous:

ii. I Voula ine brosta tu

the Voula is front him

‘Voula is in front of him.’ (possibly, but not necessarily, facing him.)

If the meaning difference can be tied to case, the differential case assignment described here is not completely unrelated to known differential object marking type phenomena.

functionally similar to an adjective.<sup>26</sup> This complex structure is introduced by a null preposition, she/they argue. What seems to be the complement of a locative preposition (i.e., the reference object for location, also called the ‘ground’) is actually the possessor of a null “place” nominal under this view. Terzi interprets the genitive case of a clitic ground argument as support for her null nominal analysis because genitive case is assigned contextually to possessors in Greek. Here, I slightly modify Terzi (2008)’s example (15), which demonstrates the structure she proposes using the locative ‘preposition’ *piso* ‘behind’:<sup>27</sup>

- (66) [PPLoc [PLoc Ø [DP Ø [XP piso - tu [X [NP Place [DP ~~tu~~ ]]]]]]]  
 behind cl.gen.m  
 ‘behind him’

Botinik-Rotem and Terzi (2008) argue that the silent noun *place* cannot project the structure necessary for structural (genitive) case assignment as *place* lacks phi-features. Furthermore, the locative, as a modifier, cannot directly assign genitive case either. They propose that a clitic receives (genitive) Case at PF by virtue of forming a prosodic word with the locative expression. Tonic noun phrases, they observe, do not have the capability in Modern

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<sup>26</sup> While Terzi’s proposal specifically addresses Greek locatives, in a series of papers, she has argued that it might account for the syntax of locatives in a variety of languages.

<sup>27</sup> Note that If Terzi’s proposed structure of locatives is correct, then locatives, like class II prepositions, also have a nominal component. However, recall that Lechner and Anagnostopoulou (2005) presented evidence that syntactic cliticization takes place with clitics related to locatives. In fact, with locative (class I) prepositions, the case marking of the ground is NOT nominal-like; rather tonic and clitic expressions bear different cases. This suggests that properties of undifferentiated genitive case are behind phonological clitics rather than nominal character per se.

Greek to become part of the prosodic word headed by the locative, and therefore cannot receive genitive case via prosodic word formation. Instead, they suggest, the silent noun *place* has a second frame where a PP headed by a semantically light preposition occurs as complement of *place*. This provides an additional means for the ground argument to receive case. Botinik-Rotem and Terzi (2008) argue that clitics cannot be complements of a semantically light preposition because such prepositions do not have construct forms. Therefore, they argue, only tonic expressions occur in the prepositional frame and only clitics in the incorporation frame.

Their account does not however generalize across all relevant environments in Greek where we systematically find differential case marking involving genitive clitics and prepositional tonic expressions in the absence of null nominal heads. As will be illustrated shortly, exactly the same pattern of differential case is found with the standard in so-called phrasal comparatives: clitic pronouns corresponding to the standard are genitive; tonic expressions are prepositional. Differential case is also found with psych-predicates of the Italian ‘*piacere*’ type. Moreover, it occurs in double object/applied constructions when the theme is passivized across the goal.

I agree with Botinik-Rotem and Terzi (2008) that class I prepositions are incapable of assigning case. In particular, they are incapable of assigning genitive case in contrast to what we find with nominals and class II *katharevousa* prepositions. Nonetheless, genitive case is available for clitics despite the unavailability of case for tonic expressions. I propose this is because syntactic clitics involve predication and hence, provide an alternative expression of argument structure, as Zubizarreta (1999) emphasized. Thereby, they can actually enable case assignment because, through the high subject of predication position, it becomes possible for the subject to participate in dependent case assignment with respect to a lower (silent or pronounced) nominal



in the relevant domain. This idea will be developed in detail in Section 4.2. In brief, we can say the occurrence of syntactic clitics in locatives is a last resort strategy to compensate for the impossibility of direct inherent/lexical/unmarked case assignment.

#### 4.1.2 Differential Case in Comparatives

To see how wide-spread the differential case pattern is, consider differential case in comparatives. The facts are illustrated here, initially schematically and then with actual data:

- (67) a. adjective-clitic pronoun (genitive)  
 b. adjective [*apo*(from) DP ]  
 c.\*adjective [DP (genitive)]  
 d. adjective [DP (genitive)] (For some adjectives, by a certain sociolinguistically determinable class of speakers when a very high register is used. Recall discussion in Section 3.4.)

Data that illustrate this pattern are given next ((68)a repeats (4)):

- (68) a. i Anna ine megaliteri tu  
 the Anna is bigger cl.gen.m  
 ‘Anna is bigger/older than him.’  
 b. i Anna ine megaliteri [**apo** ton Arjiri] / [**ap**’ afton]  
 the.f Anna is bigger from the Arjiris.acc / from him.acc (tonic)  
 ‘Anna is bigger/older than Arjiris/him.’

- (69) a.\*i Anna ine megaliteri [tu Arjiri] / [aftu]  
 the Anna is bigger the Arjiris.gen / him.gen (tonic)  
 ‘Anna is bigger/older than Arjiris/him.’
- b. O pirgos tha ine psiloteros tu spitiu.  
 the tower will be taller the house.gen  
 ‘The tower will be taller than the house.’

Recall that there are speakers who accept genitive case marked standards as well as genitive clitics and positionally-marked standards. Recall furthermore that the comparative adjectives for which this is possible for those speakers are lexically limited, and the limitation appears related to the status of an adjectival root with respect to *katharevousa* and other factors that are not well understood at present. Therefore, I assume that the genitive case that appears on tonic standards for these words is a lexically determined case which is assigned optionally, as the standard can be marked by the all-purpose preposition *apo* for these speakers as well. Speakers who lack genitive tonic standards have lexical entries for these adjectives where they lack lexically specified case. More specifically, I propose that the comparative affix *-ter-* ‘more’ assigns lexically specified case when in a relation to an adjective with the appropriate case properties (and here in part follow Merchant, 2012). Genitive clitics are possible for all speakers, regardless of the lexical case assigning properties of the comparative adjective because, as will be argued in more detail shortly, dependent case is available through the predication syntax of the clitic.

#### 4.1.3 Differential Case Within vP/TP

In addition, a clitic/tonic difference in case assignment occurs within the TP realm in dyadic unaccusatives which parallel psych predicates of the Italian ‘piacere’ type: ([70]a = [25] in Anagnostopoulou & Sevdali, 2016)<sup>28</sup>

- (70) a. *Tu Petru tu aresi i musiki*  
 The Peter-gen cl-gen please-3sg the music-nom  
 ‘Peter likes music.’
- b. *ston Petro aresi i musiki*  
 to-the Peter.acc please-3sg the music-nom  
 ‘Peter likes music.’

The examples in (70) might appear to not involve a tonic/clitic case difference, but instead to simply illustrate clitic-doubling in (70)a. However, it would be a mistake to view this as a run-of-the-mill example of clitic doubling and thus as somehow falling outside our observation concerning the case alternation.<sup>29</sup> To see why this would be mistaken, consider the following. The literature documents that in a psych predicate environment of the ‘piacere’-type, a tonic genitive experiencer on its own is not possible:

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<sup>28</sup> See also Kordoni (2001) for additional discussion of psych predicates in Greek.

<sup>29</sup> Recall that the doubling of an argument by a clitic is only possible in Greek in the verbal/TP domain. Schneider-Zioga (1994) developed the idea that this is due to an anti-locality requirement on doubling: a case-marked expression must intervene between the subject of a predication and the clitic (predicate variable).

i. [ NP<sub>j</sub> [<sub>predicate</sub> NP [<sub>+case</sub> clitic<sub>j</sub> ....NP<sub>j</sub>....]]

She demonstrates how this also accounts for a number of unexpected contexts for clitic doubling.

- (71) \**Tu Petru aresi i musiki*  
 The Peter-gen please-3sg the music-nom

The genitive DP is only grammatical if it is ‘doubled’ by a genitive clitic as illustrated in (70)a. In contrast, in most other (potential) doubling contexts, a clitic is optional from the point of view of grammaticality:

- (72) a. *idha ton Arjiri*  
 saw-1sg the-acc Arjiri-acc  
 ‘I saw Arjiris.’  
 b. **ton** *idha ton Arjiri*  
 cl-acc saw-1sg the-acc Arjiri-acc  
 ‘I saw Arjiris.’

We note then that with psych-verbs, a genitive DP is not directly possible. The only route to genitive case in psych-verbs is through the clitic. In other words, psych predicates follow the pattern we have seen with prepositions and comparatives where genitive clitic pronouns alternate with tonic expressions marked by prepositions:

- (73) a. ...clitic pronoun (genitive)-psych verb  
 b. [*se* ‘to’ DP ]-psych verb  
 c. \*[DP (genitive)] psych verb

We can also include in this pattern cases of obligatory genitive clitics in passive ditransitive constructions, discussed by Anagnostopoulou (2003). In those instances, the occurrence of a genitive clitic is necessary just in case the theme has become the subject of a passive ditransitive sentence. The following examples are adapted from Anagnostopoulou (2003, p. 22) (based on her example [33]),

- (74) To vivlio      \*?(tis) charistike    (tis Marias)  
       the book-nom CI-gen award-Nact the Maria-gen  
       ‘The book was awarded to Mary’

Again, differentiated case marking is evident and passivization of the theme is possible in the presence of a prepositionally marked goal (= [51], in Anagnostopoulou, 2003, p. 29):<sup>30</sup>

- (75) To vivlio      dhothike stin    Maria apo    ton Petro  
       the book-nom gave-Nact to-the Maria from the Petros.acc  
       ‘The book was given to Mary by Peter’

We see then that the same pattern of differential case assignment exists in a number of contexts. From the point of view of Botinik-Rotem and Terzi’s analysis (2008), it does not seem

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<sup>30</sup> For Anagnostopoulou, clitics are obligatory in the above described contexts in order for the moved themes to bypass the intervening genitive argument. Here, I will argue they are necessary to express argument structure within applied constructions in a way that assures case is available for the applied argument.

plausible that structural genitive case assignment to tonic expressions in all these environments fails for the same reason direct case assignment of genitive to tonic expression in locative prepositional phrases fails. If we put together all of the domains where there is differential case marking, we see that the following descriptive generalization can be made: genitive case cannot be assigned directly in the absence of a local External Argument (EA). When a local EA is absent, genitive case is only available through the occurrence of a clitic. I will not attempt to derive the role of the EA here, but instead I cite these facts to establish that this behavior is independent of the syntax of locatives.<sup>31</sup>

## **4.2 Dependent Case and Clitics**

The above considerations support an alternative approach to case differentiation in Greek. First let us consider case in general. A standard idea of case in the Principles and Parameters framework is that it can be either structural or inherent/semantic/lexical. Structural case is assigned by virtue of the position a nominal occupies relative to the appropriate structural element in the syntax. That is, structural case is assigned to a nominal that stands in the right structural configuration relative to the relevant case assigner. Inherent/semantic/lexical case, in contrast, is case that is assigned by virtue of the thematic meaning of the nominal that is receiving case (for example, in some languages dative case is assigned to a benefactee) or as an idiosyncratic property of a particular word (for example, a particular preposition assigns a

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<sup>31</sup> As an additional advantage of the approach in this paper, I note that Botinik-Rotem and Terzi's approach (2008) attributes the ability to cliticize largely to lexical idiosyncrasies related to PF case assignment, namely, which heads allow incorporation. But the approach here predicts which prepositions can have clitics and which cannot, based on the behavior of an independent variable, namely the binding theoretic behavior of reflexives and tonic pronouns.

particular case to its complement). Dependent case is an alternative approach to structural case assignment where case does not depend directly on the position a nominal occupies but instead depends on the presence of another expression in the same spell out domain (phase) and the structural position they occupy with respect to each other.

We note that the clitics under investigation have genitive case. Agnagnostopoulou and Sevdali (2016) demonstrate that in the TP realm, genitive case in Modern Greek clearly behaves like a dependent case. They observe that there are sensation verbs whose experiencers receive genitive case (=their [28]b and a) just in case a structurally lower theme nominal is present (76)a. In the absence of a theme, the experiencer receives nominative case (76)b:

- (76) a. *Tu Jani tu ponai o lemos*  
the Janis-gen cl.gen hurt-3sg the throat-nom  
'Janis has a sore throat'
- b. *O Janis ponai*  
the Janis-nom hurt-3sg  
'Janis hurts.'

Based on this and related data concerning psych-predicates, Anagnostopoulou and Sevdali (2016) propose that genitive in Greek is a high dependent case whose presence relies on the occurrence of a lower nominal.<sup>32</sup> More specifically, they follow Baker's general rule schema for

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<sup>32</sup> This is true for psych-predicates and for sensation predicates. Sensation predicates do not however display differential case on the subject. This is certainly related to the fact that sensation predicates can be optionally intransitive, whereas psych-predicates are dyadic unaccusatives. We can then think of the differential case

dependent case and adapt his proposal for dependent dative case to genitive case in Modern Greek (from Anagnostopoulou & Sevdali, 2016, = their [23] and [24]): (Note that where Baker proposes “dative,” “genitive” must be substituted for the value of U in [78] for Greek)

*General Dependent Case rule (adapting Marantz 1991)* (Baker, 2015, p. 79, 111)

(77) If XP bears c-command relationship Y to ZP in local domain WP, then assign case V to XP.

*For Dative:* (Baker, 2015, p. 131)

(78) If XP c-commands ZP in VP, then assign U (dative) to XP

Anagnostopoulou and Sevdali (2016) convincingly establish the status of genitive as a high dependent case at the level of TP. From the point of view in this paper, note that this dependent genitive case is mediated by the (genitive) clitic. However, before we connect genitive case at the sentential level to the syntax of clitics per se, let us first return to the non-clausal phrases that are the main focus of this work. I first reconsider prepositional phrases from the perspective of dependent case theory. First I note that it is clear that we are not dealing with inherent case within PPs, which is connected to theta roles, because clitic pronominal arguments of a preposition/locative receive one case (genitive) and tonic pronominal arguments receive another (a prepositional case). These expressions obviously share the same thematic relation to the locative head, so we cannot tie a specific thematic relation to a single case.

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assignment as a type of object shift similar to that found in double object constructions. Double object constructions and hence object “shift” have been studied extensively for Greek by Anagnostopoulou (2003, 2005).



Returning to locative prepositional phrases, given a predication structure for clitics and Terzi's (2008) proposal that there is a complex nominal 'place' in locatives, it is easy to see how genitive case is available to clitics in locatives: there is a more generalized rule of dependent genitive case. Instead of VP being the only relevant domain as described above (78), PP is also subject to the rule. Moreover, the predication approach to clitics hypothesizes that when a clitic occurs, there is a predication structure such that the argument corresponding to the clitic has been introduced in a phrase initial externalized position. Therefore, a clitic indicates that there is an argument in a higher structural position than a corresponding tonic expression occupies. To see this more clearly, recall that the predication analysis for cliticization posits a relator CL at the left edge of the relevant phrase, here PP. The argument of *place* is externalized above PP, in a manner parallel to Zubizarreta's (1999) proposal that at the level of the clause, CL externalizes an argument above T. Moreover, following Terzi, there is a complex nominal within the locative phrase (I repeat (66)):

- (79) [PPLoc [PLoc Ø [DP Ø [XP piso [X [NP Place [DP/PP ... ]]]]]]]  
 behind  
 'behind (him/Arjiris)'

Therefore, the following structure is present:

- (80) *pro*<sub>j</sub> CL<sub>j</sub> [PP [DP X-clitic<sub>j</sub> [NP ... e<sub>j</sub> ... ]]

This clearly falls under a more generalized version of dependent case assignment (recall (78), above), as the externalized XP *pro* c-commands ZP, the complex nominal containing the covert *place*. This is the configuration for dependent assignment of genitive case. A tonic argument of *place* would be too low within the locative to receive genitive case via dependent case assignment. Therefore, it is not possible to have a non-prepositionally marked argument since, following the analysis of Botinik-Rotem and Terzi (2008), it would be a complement of *place*. Thus it would be too low within the locative PP to c-command a lower nominal. Therefore, the possibilities are either case assignment via a semantically light preposition—here either *apo* or *se*— or genitive via dependent case. This differential assignment is captured by the predication proposal. If instead of a predication structure, the clitic reached its structurally high position via movement, there would be no reason why tonic expressions could not do the same and thus also receive dependent genitive case.

Note that dependent case in comparative constructions would work in a similar way. We have already seen that the *pro* subject of predication in a clitic construction must be structurally higher than the first merged position of the DP external argument of the comparative adjective phrase.

We turn now to TPs. Recall our earlier observation that direct genitive case within TP (without a clitic) is only available when an EA occurs locally. A possible reason for this is that vTR(ansitive), which introduces the external argument, provides structurally determined genitive case for applied arguments (benefactives, experiencers, etc.), therefore, when it is missing, tonic genitive applied arguments are not possible due to lack of case. I propose that this restriction holds for all types of applied phrases in Greek and that clitics offer an alternative way of expressing argument structure via predication in line with Zubizarreta's (1999) proposal of the

role of CL in externalizing arguments and in this external position, dependent genitive case is available because, as within locatives and comparatives, the externalized argument meets the conditions of the rule in (78) and therefore can bear genitive case via dependent case marking.

In this section, I have provided additional evidence for a predication analysis of clitics based on behavior of clitics related to dependent case. The relation between clitics and case has long been of interest in the literature on clitics (and clitic-doubling). While it has often been suggested that clitics absorb case or somehow make case less accessible to a cliticized argument, the findings here related to dependent case suggest a possible case facilitating role for clitics.

## **5 Concluding Remarks**

In this work, I have proposed a predication analysis for clitic pronouns. This analysis builds on the earlier works of Iatridou (1991, 1995), Schneider-Zioga (1994, 1998), and Zubizarreta (1999), all of whom view predication as a key to constructions involving clitics. This work supports the conclusions of Zubizarreta (1999) that clitic left dislocation constructions should not be viewed as a type of specifier/head agreement construction. But instead, constructions involving clitics instantiate alternative ways of mapping argument structure into the syntax. Furthermore, I have argued that pronominal clitics have a syntax that involves clitic left dislocation of a silent pronoun. Moreover, I have re-introduced the relevance of the question of case to the study of clitics, an early interest in studies of cliticization and clitic doubling. Finally, I have shown that clitic left dislocation can take place at the level of smaller phrases, such as that of PP, as well at the sentential level.

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