

# HOW TO MISS YOUR PREPOSITION

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## Abstract

In this paper we discuss so-called P-drop, i.e. the omission of the preposition *se* ‘at’ in certain locative and directional contexts in Greek. We highlight the relevance of the simultaneous omission of the definite determiner and bring out the syntactic and semantic properties that the phenomenon at hand shares with pseudo-/semantic incorporation. We observe that P-drop is only possible with nouns that denote stereotypical locations, i.e. locations which are moved to or spent time at regularly, in order to perform there an institutionalized activity. Our proposal is to treat P-drop in Greek as another instance of pseudo-incorporation, which we implement syntactically as LF movement of the bare noun to the verb. The account derives the cluster of properties observed, while at the same time doing away with unpronounced P and D heads in the construction.

## 1 Introduction

The topic of this paper is the phenomenon of the (apparently) optional omission of the preposition (P) *se/s* ‘at’ in Greek, which is illustrated in (1). In (1a) the omitted P heads a complement to a directional verb, whereas (1b) involves a locative context. The choice between the two versions of (1a) and (1b) is contingent upon an interpretive difference, as we discuss in this paper.<sup>1</sup>

- (1) a. Pame (stin) paralia?  
go-1PL at.the beach-ACC  
‘Shall we go to the beach?’  
b. Tha mino (stin) paralia.  
FUT stay-1SG at.the beach-ACC  
‘I will stay at the beach.’

We adopt the term P(reposition)-drop from Ioannidou & den Dikken (2009).<sup>2</sup> Note, however, that strictly speaking P-drop is a misnomer: as noted by Ioannidou & den Dikken (op.cit.) and Terzi (2010), P-drop is contingent on D-drop: for P to go missing, D also has to be absent (but not the other way round). As (2a) shows, omitting only the preposition leads to ungrammaticality. Omitting only the determiner leads to a different interpretation, namely that of an indefinite noun (‘to/at a beach’).

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<sup>1</sup> The interpretive difference holds between bare nouns and regular definites. So-called weak definites share many properties with the bare nouns that appear in P-drop and with bare singular nouns in other languages (see, for instance, Carlson et al. 2006; Aguilar Guevara & Zwarts 2011). Throughout this paper, we will ignore the weak definite interpretation that a limited class of definite noun phrases can have in particular contexts, and highlight the interpretive differences between bare nouns and regular (in)definite nouns.

<sup>2</sup> From a cross-linguistic perspective, P-drop is rather exceptional. It has also been reported for some Northern Italian dialects like Veneto (Longobardi 2001) and Bellinzonese and Paduan (Cattaneo 2009), as well as Kiezdeutsch, a sociolect spoken in German urban areas (Wiese et al. 2009). Furthermore, Myler (2011) reports that in some British English dialects, P can be dropped in particular environments, though this is not contingent on D-drop. We will only discuss the properties of the Greek construction here.

- (2) a. Pame se / \*tin paralia?  
go-1PL at / the beach-ACC  
'Shall we go to a beach?'
- b. Tha mino se / \*tin paralia.  
FUT stay-1SG at / the beach-ACC  
'I will stay at a beach.'

We propose an analysis that capitalizes on what we take to be two key properties of the phenomenon, namely (a) the correlation between P-drop and D-drop and (b) the interpretative resemblance of P-drop to that of incorporated properties (on which see below). Regarding the (b) property, we concur with Valioui & Psaltou-Joycey (1994) that P-drop involves a relation between verb and bare noun that is tighter than the one between verb and noun in non-P-drop contexts: (1a) is a suggestion for beach-going. Technically speaking, we propose that P-drop is an instance of pseudo-incorporation (in the sense of Massam 2001; Dayal 2011).

Pseudo-incorporation is the term used for a family of phenomena which resist an analysis along the lines of Baker (1988), in terms of syntactic head-to-head movement, but which at the same time instantiate a cluster of properties that suggest a non-canonical transitive syntax and semantics (see, among others, Farkas & de Swart 2003 for Hungarian; Dayal 2011 for Hindi; Espinal & McNally 2011 for Catalan and Spanish). This is illustrated by (3a) for Spanish and Catalan (Espinal & McNally 2011), and by (3b) for Hungarian (Farkas & de Swart 2003). Note the occurrence of bare nouns in these contexts, a hallmark property of pseudo-incorporation and a notable similarity with P-drop.

- (3) a. Busco piso. / Busco pis. (Spanish / Catalan)  
look.for-1SG apartment / look.for-1SG apartment  
'I am looking for an apartment.' (i.e. I am apartment-hunting.)
- b. Mari bélyeget gyűjt. (Hungarian)  
Mari stamp-ACC collects  
'Mari is collecting stamps.' (i.e. Mari 'stamp-collects'.)

Our proposal for (1) departs from the syntactic angle taken by the two existing treatments of the phenomenon in Greek (Ioannidou & den Dikken 2009, Terzi 2010). For reasons of space, we cannot offer a full-blown comparison between our analysis and these alternatives. The main point of syntactic divergence is that the aforementioned analyses rely on structure that is present but unpronounced, namely silent P and D heads, whereas our analysis requires their absence.

The structure of the paper is the following. Section 2 addresses restrictions on P-drop, bringing out the properties that set P-drop apart from non-P drop, and those that P-drop shares with cases of pseudo-incorporation. Section 3 contains our semantic proposal, which builds on existing literature on pseudo-incorporation, as well as a way to implement it syntactically. Finally, section 4 summarizes and outlines avenues for future research.

## 2 P-drop as pseudo-incorporation

In this section we outline the main properties of P-drop, thereby highlighting whenever relevant the similarities with pseudo-incorporation.

## 2.1 Lexical restrictions

First, as has been recognized by Terzi (2010), the only preposition that partakes in P-drop is *se* ‘at’, e.g. (1). No other (locative or directional) Ps can be dropped, as witnessed in (4).

- (4) a. Efiga \*(apo to) spiti / grafio.  
left-1SG from the home-ACC / office-ACC  
‘I left home/the office.’  
b. Imun \*(kato apo tin) karekla.  
was-1SG under from the chair-ACC  
‘I was under the chair.’

Second, not every noun can appear in the context of P-drop. Terzi (2010) notes that P-drop is possible with nouns that can be interpreted as locations, e.g. *house*, *school*, *beach*, *university*, as in (5).

- (5) a. Pao jimnastirio / sxolio / grafio / eklisia.  
go-1SG gym-ACC / school-ACC / office-ACC / church-ACC  
‘I go to (the) gym / school / office / church.’  
b. Emina jimnastirio / sxolio / grafio / eklisia mexri arga.  
stayed-1SG gym-ACC / school-ACC / office-ACC / church-ACC until late  
‘I stay at (the) gym / school / office / church until late.’

P-drop, according to Terzi, is not possible with nouns that do not denote locations, such as means of transportation (e.g. ‘car’, ‘plane’), as in (6a). It is also not possible with parts of locations (e.g. ‘garage’, ‘balcony’, ‘garden’), as shown in (6b).

- (6) a. \*Pao/ime treno / leoforio / plio / aeroplano.  
go-1SG / be-1SG train-ACC bus-ACC ship-ACC airplane-ACC  
b. \*Imun balkoni otan ejine o sismos.  
was-1SG balcony-ACC when occurred the earthquake  
intended: ‘I was at the balcony when the earthquake occurred.’

We essentially follow Terzi in assuming that the noun has to be able to be interpreted as a location in order to appear in P-drop. We amend this statement slightly in section 2.2.

Third, not all verbs can appear in P-drop. In particular, the verbs that are acceptable are (a) verbs of directed motion that take PP-arguments, such as *pao/pijeno* ‘go’, *erxome* ‘come’, *ftano* ‘arrive’, *beno* ‘enter’, *epistrefo* ‘return’, *ferno* ‘bring’; see (1a), (5a), (7a,b); and (b) verbs of location that take PP-arguments, eg. *ime* ‘be’, *meno* ‘stay’; see (1b), (5b), (7c).

- (7) a. Ftano panepistimio.  
arrive.1SG university.ACC  
‘I am arriving at the university.’  
b. Epistrefume kendro.  
return.1PL centre.ACC  
‘We are coming back downtown.’

- c. Ime tualeta.  
Am toilet.ACC  
'I am in the loo.'

In other words, there is a restriction against PP-adjuncts (cf. Ioannidou & den Dikken 2009; Terzi 2010). This restriction is illustrated in (8a). Moreover, no manner-of-motion verbs are allowed, as shown in (8b).<sup>3</sup>

- (8) a. \*Sinithos troo jimnastirio / sxolio / grafio.  
usually eat-1SG gym-ACC / school-ACC / office.ACC  
intended: 'I usually eat at (the) gym/ school/ office.'
- b. \*Perpatisa / xorepsa / periplanithika jimnastirio / sxolio /  
walked / danced / meandered-1SG gym-ACC / school-ACC /  
grafio / eklisia.  
office.ACC / church.ACC  
intended: 'I walked/danced/meandered at (the) gym/ school/ office/  
church.'

## 2.2 Semantic properties of P-drop

Turning to semantic properties of the phenomenon, we observe that P-drop in Greek displays hallmark properties of incorporation (cf. Mithun 1984; Baker 1988; van Geenhoven 1998; Chung & Ladusaw 2003; Dayal 2011, among others). First, the noun obligatorily takes narrow scope with respect to quantificational elements in the clause. Consider the examples in (9).

- (9) a. I Anna de tha pai paralia.  
the Anna NEG FUT go.3SG beach.ACC  
'Ana will not go to the beach.'
- b. Exun oli pai paralia.  
have.3PL all.PL gone beach.ACC  
'They have all gone to the beach.'

The sentence in (9a) can only mean that Anna will not go to any beach, where the negation takes scope over beach, and not that there is a specific beach that Anna will not go to. Similarly, example (9b) allows for different beaches that each one went to, where the universal quantifier takes wide scope again.

Second, the noun in P-drop does not introduce a discourse referent. For instance, it cannot support pronominal anaphora, as shown in (10), except possibly via accommodation (see Espinal & McNally 2011 for discussion of this strategy). In this way, it contrasts sharply with regular definite (and indefinite) noun phrases, as can be seen by the English translation, which is perfectly fine.<sup>4</sup>

<sup>3</sup> Since Greek is a verb-framed language, manner of motion verbs can only combine with PP adjuncts, so this restriction is in fact subsumed by the ban on PP-adjuncts. See Section 3 for discussion of verb-framed languages.

<sup>4</sup> Ioannidou & den Dikken (2009) report that pronominal anaphora in (10) is fine. The speakers we have consulted do not agree on this judgment, however. As noted in the main text, we believe that, to the extent that (10) is tolerable, it is due to accommodation. Ioannidou & den Dikken claim that the noun in P-drop introduces a discourse referent. This may have to do with the fact that the most natural

- (10) Pao paralia. #Tin episkeptome sixna.  
 go.1SG beach.ACC her.CL visit.1SG often  
 intended: ‘I am going to the beach. I visit it often.’

A third similarity between P-drop and pseudo-incorporation is that the noun in P-drop cannot be modified by run-of-the-mill intersective modifiers, such as (some) adjectives and restrictive relative clauses; see (11a) and (11b). The only possibility for modification that exists (for some speakers) is type/kind modification, such as relational adjectives as in (12), i.e. modification that yields sub-kinds of the kind denoted by the noun.

- (11) a. \*Pigame kondini paralia / kenurjio jimnastirio / omorfi eklisia.  
 went.1PL nearby beach.ACC new gym.ACC beautiful church.ACC  
 intended: ‘We went to the nearby beach/new gym/beautiful church.’  
 b. \*Exun pai taxidromio to opio apexi elaxista apo do.  
 have.3PL gone post-office.ACC which is.away least from here  
 intended: ‘They have gone to the post office which is very close to here.’
- (12) Ichame pai arxeolojiko musio / kendriko taxidromio.  
 had.1PL gone archaeological museum.ACC central post-office.ACC  
 ‘We had gone to the archaeological museum/central post office.’

Finally, a typical property of incorporation (Mithun 1984; Dayal 2011) is that the verb and the noun together name an institutionalized activity or state. We believe the same is going on in P-drop, namely the bare noun has to refer to an institutionalized location, namely to a location that is moved to or spent time at on a regular basis, in order to perform there some institutionalized activity. This relates to the lexical restriction to certain nouns, discussed in section 2.1.

Summing up, P-drop displays a number of semantic properties (narrow scope, lack of discourse referent, no token modification) that align it with incorporation. Note that in all the above-noted respects, the bare nouns in P-drop differ from (in)definite noun phrases. This will be important in light of the syntactic proposal we will defend in section 3.

### 2.3 Syntactic properties of P-drop

Finally, let us turn to syntactic properties of P-drop. The crucial observation is that P-drop is more permissive than syntactic incorporation à la Baker (1989), in a way that is reminiscent of pseudo-incorporation (see Massam 2001 on Niuean, Farkas & de Swart 2003 on Hungarian, Dayal 2011 on Hindi). Concretely, strict adjacency between the verb and the bare noun is not required: the noun can be topic- or focus-preposed, as in (13a). It can be separated from the verb by adverbials, as in (13b), or by a direct object noun phrase as in (13c).

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translation into English is with a definite NP. However, the English definite nominals in question are weak definites (see also footnote 1), which do not introduce discourse referents or support discourse anaphora, either. The English grammatical translation in (10), in fact, only has the regular definite interpretation.

- (13) a. Paralia tha pao, sxolio omos oxi.  
beach.ACC FUT go.1SG school however no  
'To the beach I will go, but to school not.'
- b. Tha pao sigura / avrio paralia.  
FUT go.1SG definitely tomorrow beach.ACC  
'I will (definitely) go to the beach (tomorrow).'
- c. Pigame ton Kosta nosokomio.  
took.1PL the Kosta.ACC hospital.ACC  
'We took Kosta to the hospital.'

These facts suggest that the relation between bare noun and verb in P-drop is syntactically looser than what it would be if the former were treated as covertly incorporating into the latter (as a head). At the same time, the noun is case-marked for accusative. Again, in this respect P-drop seems similar to pseudo-incorporation in some languages: in Hungarian, pseudo-incorporated nouns also bear accusative case (see Farkas & de Swart 2003).

### 3 The proposal

Based on the empirical observations from the previous section we propose to analyze P-drop in Greek as involving pseudo-incorporation (in the sense of Massam 2001). Building on insights from Krifka (1998) and Zwarts (2005), we assume the lexical semantics of a directed motion verb like *go* in (14).

- (14)  $go = \lambda x \lambda y \lambda e [go(e) \ \& \ \text{THEME}(e) = y \ \& \ \text{TRACE}(e)(1) \text{ is at } x]$

In particular, a motion event described by *go* involves a theme (*y*) undergoing a change of location. At the final point (i.e. 1 in (14)) of the trace of such a directed motion event, the theme is located at a location to be provided (*x*).

Pseudo-incorporation, then, involves incorporation of a property (denoted by the bare noun) into the event predicate, resulting in  $go_{inc}$  in (15) (building on Dayal 2011).

- (15)  $go_{inc} = \lambda P \lambda y \lambda e [P-go(e) \ \& \ \text{THEME}(e) = y],$   
where  $\exists e [P-go(e)] = 1$  iff  $\exists e_0 [go(e_0) \ \& \ \exists x [P(x) \ \& \ \text{TRACE}(e_0)(1) \text{ is at } x]]$

The second line ensures that, e.g., an event of beach-going entails an event of going with a beach as its final location.

With respect to the syntax, we propose that the bare noun in P-drop contexts in Greek is an NP, which adjoins to VP at LF, as shown in (16).

- (16)  $[_{IP} \ I \ [_{VP} \ [_{NP} \ \text{beach} ] \ go ]]$

This approach to P-drop straightforwardly accounts for some of the empirical facts discussed in the previous section. Since the bare noun is treated as a predicate, denoting a property rather than an individual, it cannot introduce a discourse referent and thus not be the antecedent of pronominal anaphora. Similarly, in the absence of an individual-denoting entity, token modification cannot take place. Kind modification, on the other hand, is available, since it does not modify an individual

(as a first-order modifier), but is a predicate modifier that serves to restrict the property denoted by the bare noun (see, for instance, McNally & Boleda 2004). Furthermore, we could interpret the second line of (15) in a way that a condition has to be met that there exists an event of the appropriate kind, from which it could follow that only nouns that name locations at which institutionalized activities take place are acceptable in P-drop contexts.

Our proposal also accounts for the fact that only Ps from PP-arguments, and not from PP-adjuncts, can be dropped, given that both are base-generated in different positions (see Hoekstra 1999, and many others): PP arguments are base-generated within the VP, whereas PP adjuncts are generated outside the VP. Incorporation can only take place within the VP. Finally, by treating the incorporated noun as a phrase rather than as a head, we can account for the fact that it moves as a phrase in P-drop (e.g. it can prepose as a topic or focus) and is in general syntactically freer than syntactically incorporated nouns in the contexts discussed by Baker and others.

An initial worry that this account might provoke is that pseudo-incorporation is commonly assumed to target direct objects, but in our examples the target seems to be the complement of a preposition. For pseudo-incorporation to be possible, then, no D or P head can be syntactically realized. In the following, we will argue that this is indeed the case, and that P-drop does not involve structurally represented (but phonetically unpronounced) P or D heads (contra Ioannidou & den Dikken 2009; Terzi 2010).

### 3.1 On the absence of D

As we have already seen, bare nouns in P-drop contexts do not behave like run-of-the-mill (in)definites. The examples in (9) above showed that such nouns take narrowest scope with respect to scope-taking elements like negation or universal quantifiers. Furthermore, example (10) showed that a bare noun in P-drop contexts is discourse opaque, i.e. it does not introduce a discourse referent, since it cannot be picked up by pronominal anaphora. This is unexpected behavior, if one assumes that the bare noun in P-drop projects a D-layer.

In fact, independently of P-drop, Alexopoulou & Folli (2011) (henceforth A & F) have argued extensively that Greek bare nouns do not involve an unpronounced (definite or indefinite) D head. The argumentation of A & F is based on a number of semantic differences between bare and non-bare nouns, which do not follow if both kinds of nominals involve a D head and the only difference relates to whether this head is pronounced or not. For instance, A & F observe that examples like (17a) with an indefinite are ambiguous between a *de dicto* or opaque reading and a *de re* or transparent reading. In contrast, examples like (17b) with a bare noun only admit the opaque reading. If (17b) involved an unpronounced D head, we would expect the same set of interpretations as those available for (17a), since the null hypothesis is that pronounced and unpronounced heads only differ in terms of PF. As (17) shows, this is not the case.

- (17) b. I Maria theli na pandrefthi enan Italo. (ambiguous)  
 the Maria want-3SG subj marry.3SG one.ACC Italian  
 ‘Maria wants to marry an Italian.’

- a. I Maria theli na pandrefthi Italo. (only opaque)  
 the Maria want-3SG SUBJ marry.3SG Italian  
 ‘Maria wants to marry an Italian’

A & F show that this kind of asymmetry is general in Greek and holds outside of intensional contexts. Although we cannot go through their entire argumentation, we concur with these authors that there is no evidence for an unpronounced D head in Greek bare nouns.

A & F explicitly dismiss an incorporation approach (along the lines of e.g. Espinal & McNally 2011) for Greek bare nouns; they argue instead that the bare nouns they examine are semantic and syntactic arguments. For instance, as can be seen from the continuation in (18), the Greek bare nouns they discuss are discourse-transparent. As we have already seen, introducing a discourse referent is characteristic of arguments, and not of incorporated properties.

- (18) Telika vrike dada; ti gnorisame xtes sto party tis Yotas.  
 finally found-3SG nanny her.CL met-1PL at.the party the-GEN Yota-GEN  
 ‘S/he finally found a nanny; we met her yesterday at Yota’s party.’

Apart from the possibility of introducing a discourse referent, their bare nouns allow token modification, as seen in (19a). Moreover, they are not number neutral, which is a property usually associated with incorporated properties (Farkas & de Swart 2003), as shown in (19b). If noun incorporation were involved in (19b), the bare singular would be expected to be possible, even in the presence of a predicate that requires a semantically plural object. Instead, (19b) shows that the noun in such a position needs to be marked for number. Both (19a) and (19b) are taken from A & F.

- (19) a. Agorasa akrivo aftokinito.  
 bought-1SG expensive car  
 ‘I bought an expensive car.’  
 b. Mazevi \*gramatosimo/gramatosima.  
 gathers stamp/stamps.  
 ‘S/he collects stamps.’

If bare nouns in Greek are arguments and not incorporated properties, and if at the same time no unpronounced D head is involved, then one may ask what is responsible for turning NP-predicates into arguments in Greek. A & F propose that in Greek the relevant head is not D but Number. So, according to these authors, Greek bare nouns are Num(ber)Ps.

Importantly for our purposes, there exist systematic differences between the bare nouns that A & F focus on and the bare nouns that appear in P-drop. As we have already discussed, the bare noun in P-drop is discourse-opaque (modulo accommodation). Moreover, the bare noun in P-drop only allows type modification; token modification is impossible, as was shown in (11a). And finally, the singular bare noun in (20b) seems to be number neutral, since it is also compatible with a plural interpretation (not only a singular/atomic one).



- (20) To proi pigame paralia: i misi sto Marvovuni ki i ali  
 the morning went.1PL beach the HALF.NOM to.the Mavrovuni and the other  
 misi sta Trinisa.  
 half.nom to.the Trinisa  
 ‘In the morning we went to the beach: half of us to Mavrovuni and the other  
 half to Trinisa.’

Two options are in principle available at this point. Either all bare nouns in Greek are NumPs, but only some incorporate, i.e. our cases, which would align these bare nouns with the Hindi bare nouns that incorporate, for which Dayal (2011) argues in detail that they are NumPs. Alternatively, some bare nouns in Greek are NPs and only they incorporate, whereas other bare nouns are NumPs and do not incorporate. In either case, the landscape of bare nouns in Greek is not uniform. (See Lazaridou-Chatzigoga 2011 for a preliminary discussion of the different classes of bare nouns in Greek.) We do not at this point have an empirical argument in favor of one or the other solution, but will continue to characterize the bare noun in P-drop as an NP. We leave it to future research to determine what the most adequate way is to capture the full set of facts.

To resume our main point, we adopt the argumentation offered by A & F concerning the absence of a D layer in Greek bare nouns. Since this argument is based on argument-denoting bare nouns, it holds *a fortiori* for predicate-denoting bare nouns, such as the ones we argue are present in P-drop.

We now turn to arguments against empty P heads in P-drop contexts.

### 3.2 On the absence of P

The structure of locative and directional PPs is commonly assumed to minimally involve a PlaceP (headed by a locative P), and for directional PPs a PathP on top of that (headed by a directional P) (Jackendoff 1983, and many others) (cf. Asbury et al. 2008). We believe that both layers are structurally missing in P-drop contexts. Let us first turn to arguments against PathP.

#### 3.2.1 On the absence of PathP

We assume that in Greek, in the description of a directed motion event the verb lexicalizes part of the path structure normally associated with prepositions, even in the context of overt PPs headed by *se* ‘at’. This is so because Greek is a verb-framed language (in the sense of Talmy 1985) (see, e.g., Horrocks & Stavrou 2007), in which motion verbs conflate motion and Path: the Path meaning is part of the verbal meaning (cf. Gehrke 2008). Note that this is already reflected in the lexical representation of a directed motion verb like *go* in (14). In particular, directed motion or Path verbs, as change of location verbs, fall under Rappaport Hovav & Levin’s (2010) result verbs, which specify a scalar change, i.e. change along one ordered dimension. In the case of Path verbs, the scale is the path, and the verbs lexically provide the path. Final locations (i.e. goals) are expressed by locative PPs in combination with such verbs.

This view makes sense of the restriction of P-drop to particular verbs: Path verbs, such as *go*, *reach*, *return*, allow P-drop whereas manner of motion verbs, such

as *swim*, *dance*, *meander* do not (recall (7b)). This is so because manner of motion verbs cannot combine with Path expressions to refer to a directed motion event in verb-framed languages. PPs headed by *se* ‘at’ in combination with such verbs can only refer to the location of the entire event (they are PP adjuncts) and cannot be interpreted as referring to the goal of a directed motion event, i.e. as PP arguments (see also Horrocks & Stavrou 2007). For example, (21) shows, based on the examples discussed in (7b), that a PP headed by *se* cannot be dropped in the context of manner of motion verbs, and furthermore, that it can only receive a locative interpretation, as referring to the location of the entire event (of walking or dancing), never as the final location (the goal) of a directed motion event.<sup>5</sup>

- (21) Perpatisa / xorepsa \*(sto/stin) gymnastirio / sxolio / grafio / eklisia.  
 walked/danced-1SG at-NEU/FEM gym-ACC school-ACC office-ACC church-ACC  
 ‘I walked/danced at/in/\*to the gym/school/office/church.’

Given these observations, we conclude that in verb-framed languages, there is no need or motivation to treat even the overt PP as a PathP. In particular, we follow Terzi (2010) in treating Greek *se* ‘at’ as unambiguously locative and as heading a PlaceP (see also Alexiadou & Anagnostopoulou 2011 on this point). Contra Terzi, however, we argue that no (silent) PathP is projected above *se*, also not when *se* is overt. If there were a silent PathP it would be puzzling why such PPs cannot be interpreted as directional PPs in all contexts, on a par with English PPs headed by *to*. Our treatment of *se* is consistent with the observation made by Terzi (2010) that, if at all, only those languages allow P-drop that use the same P for directional (TO) and locative meanings (AT). This is, again, very common for verb-framed languages (e.g. Italian, on which see Folli 2002), but not for satellite-framed languages (e.g. English).

To conclude, we have shown that even in the context of overt PPs headed by *se* there is no need or motivation for an empty PathP (contra Ioannidou & den Dikken 2009, Terzi 2010). In the following, we want to go one step further and argue that in P-drop contexts, a PlaceP is absent as well.

### 3.2.2 On the absence of PlaceP

Contra the previous accounts, we believe P-drop involves the radical absence of PlaceP, not a silent version thereof. Recall from the discussion in Section 2.3 that only

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<sup>5</sup> The fact that *se* can only receive a locative interpretation when combined with atelic manner of motion verbs is discussed in detail by Alexiadou & Anagnostopoulou (2011). Unlike us and unlike Horrocks & Stavrou (2007), Alexiadou & Anagnostopoulou argue that some manner of motion verbs can combine with directional PPs, headed by, e.g., *mexri/eos* ‘up to’, *apo* ‘from, off’, to form resultatives. This would entail that Talmy’s typological distinction between verb-framed and satellite-framed languages does not hold. It is not clear to us, however, whether a preposition with the meaning ‘up to’ can be seen as a directional preposition on a par with English *to*. The alternative would be that e.g. Greek *mexri* or *eos* are rather related to a preposition with the meaning ‘until’, which commonly heads a PP adjunct (as is the case for, e.g., Dutch *tot*, Spanish *hasta*; see Gehrke 2008 for discussion). Furthermore, it is not entirely clear that the verbs that combine with *apo* are not resultative themselves, or that they do not actually take complements headed by *apo*. In any case, even under the weaker assumption that Talmy’s distinction should be recast in terms of categories of prepositions (rather than categories of languages), the main point of this paper, which concerns *se*, remains: *se* can only receive a locative interpretation in combination with manner of motion verbs, and hence can only head a PP adjunct, not a PP argument. And since only *se* can be dropped, other Ps with manner of motion verbs do not enter the picture.

*se* ‘at’ can be dropped, but that any other P (e.g. with the meaning ‘under’, ‘behind’, ‘in front of’, ‘above’ etc.) has to be spelled out. We follow Zwarts (2008, 2010) and others in assuming that the prepositional meaning AT involves the most basic and the most semantically bleached locative meaning. Other locative Ps encode additional lexical meanings, such as containment (*in(side)*), support (*on*), or projective meanings (*under, behind, in front of, next to*) (see also Zwarts & Winter 2000).

One might wonder, then, where the meaning of location (AT) comes from. One option could be that, since AT is part of the lexical specification of directed motion verbs (recall (14)), it does not have to be overtly expressed in terms of a PP. However, in that case we would expect P-drop to be much more widespread cross-linguistically. Hence, we suggest instead that AT is contributed by the noun, which is interpreted as a location (cf. Terzi 2010). We furthermore note that *se* can be dropped only in case the noun can be interpreted as a location that is moved to (or spent time at in the case of stative predicates like (1b)) on a regular basis, in order to perform some institutionalized or prototypical activity in that location. Our ‘Holy Grail’-question, then, is what makes a good institutionalized location. The answer may not be strictly linguistic. We have to leave this for future research.

A concern brought up by Ioannidou & den Dikken (2009) regarding, in general, the analytical option that no P is projected in syntax is how the noun receives its thematic role: if P is altogether absent, they argue, an unaccusative verb like *go* would have to turn into a transitive verb in P-drop contexts, which cannot be the case given that the noun cannot be medialized or passivized. We do not think this warrants rejecting the no-P hypothesis as yet. There is an alternative explanation for why nouns in P-drop cannot be medialized or passivized, having to do with the fact that they are non-referential. In this respect too, they behave on a par with pseudo-incorporated direct objects, which also cannot be passivized (cf. Espinal & McNally 2011). Regarding the theta-theoretic worry Ioannidou & den Dikken express, it could be argued that in the relevant cases (namely, argument-taking location and motion verbs), it is indeed not the P but the verb itself that assigns a goal or location theta role to the noun itself. In general, the P is required in order to turn the Ground into a location, its *eigenspace* (cf. Wunderlich 1991). But in P-drop contexts, this is not necessary, because the nouns themselves can be interpreted as locations.<sup>6</sup>

To conclude, then, we assume that in P-drop, P is truly absent, and the noun alone provides the (stereotypical) location.

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<sup>6</sup> What remains unresolved is how the noun gets case in P-drop contexts. Although we leave for future research a fuller exploration of case assignment in Greek, what we could tentatively suggest at this point is that accusative case in Greek is assigned in a particular structural configuration, possibly under sisterhood with the verb (see also Myler 2011 on case assignment inside an unaccusative vP). That accusative case inside PPs does not necessarily have to be analyzed as being assigned by P is independently argued for by Arsenijević & Gehrke (2009), among others. Note that case is also a concern for Ioannidou & den Dikken (2009) who, assuming that null Ps and unaccusative verbs are case-featureless, rely on a last resort mechanism, namely Spec-Head agreement of the noun with the D, after movement of the former into Spec, DP. However, as Lechner & Anagnostopoulou (2005) observe, Spec,DP is only occupied by possessors in Greek. Moreover, it can be argued that possessors do not occur there as a result of movement, but rather as a result of base-generation. This undermines the crucial assumption made by Ioannidou & den Dikken regarding an EPP property of Greek D, as well as the connection with case assignment. (Another problem for this account is the lack of evidence for a D layer in P-drop.) In all, it is fair to say that case assignment in P-drop remains an open question.

## 5 Conclusion

Although it has been shown that syntactic incorporation can target not just nouns in direct object position but also other VP-internal elements, pseudo-incorporation has so far only been discussed for nouns in direct object position. Our data show that it is feasible to extend this account also to nouns that otherwise appear in argument PPs. Pseudo-incorporation in P drop contexts is a means to describe an institutionalized activity/state/motion.

Several open questions remain. The first is why is P-drop so rare. It seems to be a necessary condition that a language is verb-framed in order to allow P-drop, but this cannot be a sufficient condition, since most other verb-framed languages do not seem to allow it (apart from some Northern Italian dialects). Another open issue concerns the exceptionality of *home* or Greek *spiti* ‘house’. In particular, other languages (also satellite-framed ones) allow something like P-drop only with the noun *home* (e.g. German *(da)heim*, Russian *doma / domoj*) (cf. Jackendoff 1993; Collins 2007, on English). Furthermore, in Greek only *spiti* allows modification by possessives (cf. Terzi 2010), as evidenced by (22a), and only *spiti* defies the restriction against adjuncts, as seen in (22b).

- (22) a. Ime spiti mu / tu / tis.  
be-1SG home-ACC my his her  
‘I am at my/his/her/etc. place.’  
b. Sinithos troo spiti.  
usually eat.1SG home-ACC  
‘I usually eat (at) home.’

A final issue concerns the proper treatment of Greek bare nouns in general. As discussed above, Alexopoulou & Folli (2011) have argued against an incorporation account of bare nouns in direct object position. Our treatment of P-drop raises the question whether bare nouns in Greek form a homogeneous group (see also Lazaridou-Chatzigoga 2011), and if not, whether more sub-classes can be analyzed as involving pseudo-incorporation after all, along the lines proposed here for P-drop.

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