ПСЕВДОСОЧИНИТЕЛЬНЫЕ КОНСТРУКЦИИ С *РІЈЕНО* 'ИДТИ' В НОВОГРЕЧЕСКОМ ЯЗЫКЕ: ПРИЗНАКОВЫЙ ПОДХОД^{*}

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В статье обсуждаются глагольные псевдосочинительные конструкции в новогреческом языке, первой частью которых выступает глагол *pijeno* 'идти'. В отличие от сходных конструкций других языков, новогреческие псевдосочинительные конструкции схожи с биклаузальными полипредикативными структурами в отношении дистрибуции видимых эспонентов словоизменительной морфологии. В данной статье, используя ряд синтаксических и семантических диагностик, я делаю следующие выводы: (i) новогреческие псевдосочинительные конструкции являются подчинительными и (ii) эти конструкции озвучиваются как монопредикативная синтаксическая структура. Я анализирую морфологическую специфику исследуемой конструкции в рамках признаковой модели Распределенной Морфологии.

Ключевые слова: псевдосочинение, глаголы движения, Распределенная Морфология, означивание признаков, моноклаузальность, новогреческий язык.

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PSEUDO-COORDINATE CONSTRUCTIONS WITH PIJENO 'GO' IN GREEK: A FEATURE-BASED ACCOUNT*

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The paper discusses verbal pseudo-coordinate constructions in Greek (GPCs) which involve the motion verb *pijeno* 'go' as the initial verb. In contrast to similar constructions in other languages, GPCs seem to resemble a biclausal syntactic structure with respect to the distribution of overt inflectional material. In this paper, I argue based on a series of syntactic and semantic tests that: (i) GPCs are analyzed as instances of syntactic subordination (ii) GPCs are mapped into a monoclausal syntactic structure. Finally, I propose a feature-based analysis within the framework of Distributed Morphology in order to account for the morphological idiosyncrasies of these constructions.

Keywords: pseudo-coordination, motion verbs, Distributed Morphology, feature valuation, monoclausality, Greek.

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1. Introduction

Pseudo-coordinations are broadly defined as inflected double verb constructions which, even though they superficially resemble a coordination in the verbal system, they otherwise exhibit distinct semantic and syntactic properties. The phenomenon has been attested in a variety of languages and has been discussed by several scholars, see [Cardinaletti, Giusti 2001] for Marsalese; [Lødrup 2002; Wiklund 2007] for Scandinavian languages; [de Vos 2005] for English and Afrikaans; [Heycock, Petersen 2012] for Faroese, among others. Despite documented cross-linguistic differences, there is a general consensus that the construction displays properties which distinguish it from ordinary verbal coordination, such as the possibility of asymmetric extraction, shared morphology and a restricted number of verbs that can occupy the initial verb slot. Another common assumption regarding pseudo-coordinate constructions is that the initial verb does not contribute its full lexical semantics, but rather appears to have undergone "semantic bleaching", which is described as "a process whereby parts of the lexical meaning of the verb are deaccented" [de Vos 2005: 32]. Consider the following examples of ordinary coordination of verbs and pseudo-coordination in English:

- (1) John sang and danced.
- (2) Mary went and addressed her audience.

In (1), the events described in each conjunct, namely of singing and dancing, are viewed as distinct from each other. In addition, the order of conjuncts does not necessarily correspond to the temporal order of events and may be freely inversed without affecting the truth conditions of the sentence. On the other hand, a reading under which each verb is interpreted as an independent event can hardly be maintained in (2). In this case, the motion verb go does not necessarily denote an act of movement but is more likely interpreted as some sort of inchoative aspect. This enables a complex event reading of the construction under which the second verb denotes the type of action that characterizes the event as a whole, while the verb go explicitly codes the build-up to the action. Note that in this case, due to the high degree of semantic dependency attested between the two verbs, their order cannot be freely inversed without dissociating the components of the complex event. I will henceforth refer to the complex event reading associated with pseudo-coordination as "pseudo-coordinate"

reading in order to differentiate it from the "independent-event" reading associated with ordinary coordination.

1.1. A pseudo-coordinate construction with go in Greek

Greek pseudo-coordinate constructions with *go* (henceforth, GPCs) are formed with the verb *pijeno* 'go' as the initial verb¹ (V1), while the slot of the second verb (V2) may be occupied by a wide range of lexical verbs. The two verbs are joined by the conjunction coordinator *ke* 'and', as illustrated in (3):

(3) pij-e ke $pro\delta$ -os-e tin apofasi tis epitropis go-PST.PFV.3SG and betray-PST.PFV-3SG the decision of committee 'He/she (went and) betrayed the decision of the committee.'

Similarly to English examples, the motion verb in the GPC appears to be reduced with respect to its semantic contribution. According to [Svorou 2018a], the original lexical template associated with the motion verb *pijeno* is suppressed within these constructions, since the latter is considered to be "depredicativized" in terms of the meaning it conceptualizes. This can be seen in (3), where *pijeno* is devoid of any notion of movement and instead only encodes a sense of intentionality attributed by the speaker to the shared subject participant with regard to carrying out the action described by V2.

While pseudo-coordinations with the motion verb go in English and other Indo-European languages have widely been discussed within the literature, relevant phenomena in Greek have remained largely unaddressed. [Ingria 2005], who has posited an account on the polysemous behavior of the coordinator ke within the framework of Generative Lexicon, has noted in his study that within certain verbal coordinations with the motion verb pijeno as the initial verb, the conjunction coordinator appears to function as a clausal complementizer that introduces an embedded purpose clause. The existence of GPCs has also been documented in studies that examine syntactic phenomena related to pseudo-coordination under a cross-linguistic point of view. [Ross 2013] observes that similarly to English pseudo-coordinations with go, GPCs are not restricted in terms of the morphological forms of their verbs. [Bjorkman 2016] discusses

¹ It has been documented that pseudo-coordinate constructions in Greek can also be formed with the posture verb *kathome* 'sit' occupying the V1 slot. However, these constructions are to be distinguished from the GPCs discussed here not only on the basis of their semantics (the verb *kathome* can receive multiple aspectual interpretations as V1 of a pseudo-coordinate construction) but also in terms of their morphological and syntactic properties, see [Svorou 2018b].

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go get constructions in English and provides a feature-based account on their inflectional properties. In her study, she reports that Greek attests similar constructions which involve the motion verb pijeno immediately preceding a lexical verb. These constructions can surface without the presence of the conjunction coordinator ke (essentially resembling a serial verb construction) and are limited only to morphologically imperative clauses. A more detailed account on Greek pseudo-coordination comes from [Svorou 2018a], who in a recent study examines the properties of said constructions within the framework of Reference Grammar. [Svorou 2018a] argues that due to the high degree of semantic and syntactic integration that can potentially be attested between the verbs of a verbal coordination, the former can display juncture-nexus relations associated with core cosubordination. This is assumed to occur when a restricted set of verbs, such as the motion verb pijeno, occupy the first conjunct which on themselves do not express an event but rather have aspects of their semantic structure frame the event expressed by the second conjunct. This results in the verbal coordination being interpreted as a pseudo-coordination.

1.2. Morphological Sameness Condition

It is cross-linguistically assumed that verbs involved in a pseudo-coordination exhibit a strong degree of dependency, in that they are required to share the same morphological specification. This is captured by [de Vos 2005: 46] under the Morphological "Sameness" Condition (MSC), which posits that "both verbs of a pseudo-coordinative construction must have the same type of morphological marking i.e. both verbs must be either bare or morphologically marked with present, past, participle or similar", as demonstrated below:

(4) From [de Vos 2005: 87]

- a. The warders have gone and watched the convict continuously.
- b. *John has gone and behave.
- c. *I wonder how John will go and behaved.

In (4a), the tense auxiliary *have* takes scope over both verbs which are both marked with an identical past tense inflectional morphology. If one of the verbs surfaces with a different tense suffix or if a tense auxiliary takes scope only over one of the verbs of the construction (as in (4b) and (4c)), then the construction either becomes ungrammatical or is interpreted as a sequence of two independent events. A similar observation is made for pseudo-coordinate constructions with *go* in languages with alternating perfect auxiliary selection,

such as Danish. In these languages, verbs are often distinguished in terms of perfect auxiliary selection based on unergativity/unaccusativity. In Danish, unergative verbs select the perfect auxiliary *have* (have) and unaccusative verbs select the perfect auxiliary *være* 'be'. According to [Kjeldahl 2010], while Danish pseudo-coordinations may generally inflect for perfect tense, the latter is not possible if there is a conflict regarding perfect auxiliary selection between V1 and V2. Consider the following examples:

- (5) *Louise er gået ud og hentet avisen.

 Louise is gone out and fetched paper

 Int.: 'Louise has gone out and fetched the paper.' [Kjeldahl 2010: 53]
- (6) *Louise har gået ud og hentet avisen.

 Louise has gone out and fetched paper

 Int.: 'Louise has gone out and fetched the paper.' [Kjeldahl 2010: 53]
- (7) *Hvad er Louise gået ud og har hentet for aviser.

 What is Louise gone out and has fetched for papers

 Int.: 'What has Louise gone and has fetched?' [Kjeldahl 2010: 53]

In (5), the perfect auxiliary *er* 'be' selected by the motion verb gå 'go'² is incompatible with *hente* 'fetch' as V2. In (6), the perfect auxiliary *have* 'have' selected by *hente* is incompatible with *gå* as V1. At the same time, the possibility of each verb selecting its own auxiliary is excluded within the pseudocoordinate construction, as in (7). This suggests that perfect auxiliary selection does not override the requirement for morphological "sameness" imposed by the pseudo-coordinate construction the verbs take part in.

Turning to the GPC, it is important to note that, similarly to other languages of the Balkan Sprachbund, the grammatical categories of mood and tense in Greek are often not specified in the inflectional morphology of the verb but are rather realized through overt inflectional material such as subjunctive markers, future particles or tense auxiliaries. With regard to the category of mood, the features that have an affix-like character are distinguished between +IMPERATIVE and -IMPERATIVE. -IMPERATIVE inflection is further specified as indicative or subjunctive by the choice of particle. That said, indicative mood is

 $^{^2}$ The motion verb $g\mathring{a}$ patterns with unaccusative verbs in terms of perfect auxiliary selection. Although, motion verbs differ from prototypical unaccusative verbs in the sense that they involve some sort of agentivity, they respond to unaccusativity tests and are thus also considered to be unaccusative, see [Kjeldahl 2010] and references therein.

assumed to be associated with a zero morpheme, while subjunctive mood is associated with the subjunctive marker na [Philippaki-Warburton, Spyropoulos 2004]. Thus, in contrast to Romance languages which morphologically distinguish between subjunctive and indicative, Greek subjunctive can only be realized through the mood marker na attaching to a verb otherwise inflected for –IMPERATIVE. With regard to the category of tense, future tense is not reflected in the inflectional morphology of the verb but is expressed through the future particle θa^3 attaching to a verb inflected for –IMPERATIVE. Finally, perfect tense is formed periphrastically, through the use of the perfect auxiliary exo 'have' and a dependent non-finite verb form.

While in English and Danish pseudo-coordinations, the MSC is satisfied through having elements assigned to the extended inflectional layer of the verb, such as tense auxiliaries, taking scope over both V1 and V2, in the GPC, morphological sameness is achieved through these elements being individually repeated for each verb of the construction. This demonstrated below:

```
(8)
    i-tan
                anamenomeno
                                na
                                      ex-un
                                             pai
     be-PST.3SG expected
                                 SUBJ PERF-3PL go.PFV
                ex-un \thetaimi\thetai
     ke
                                      tis
                                            askisis
          na
          SUBJ PERF-3PL remember.PFV the
     'It was expected for them (to have gone and) to have remembered the ex-
     ercises.'
```

Given that in overt syntax, morphemes associated with mood or tense are realized as heads of the respective functional categories, the presence of separate instances of overt inflectional material on each verb indicates that in contrast to languages like English or Danish, pseudo-coordination in Greek is mapped into a biclausal syntactic structure that involves V1 and V2 being headed by a distinct functional domain. Finally, the grammatical category of voice appears to be exempt from the MSC in Greek, as V2 may surface with a passive voice inflection without affecting the pseudo-coordinate reading associated with the GPC:

(9) *i-tan* neos ke pij-e ke skoto-θik-e be-PST.3SG young and go-PST.PFV.3SG and kill-PST.PFV.PASS-3SG 'He was young and he (went and) got killed.'

³ Due to its complementary distribution with the subjunctive marker *na*, *tha* has also been analyzed as an indicative mood marker associated with Mood⁰ [Rivero, Terzi 1995].

This exception with regard to voice is also observed in relevant constructions in other languages. As demonstrated by [Kjeldahl 2010], V2 in Danish motion verb pseudo-coordinations may project its own passive auxiliary without being required to match the active voice specification associated with the motion verb in V1:

(10) Peter går ud og bliver fotograferet.

Peter go.PRS.3SG out and become.PRS.3SG photographed

'Peter (goes and) is photographed.' [Kjeldahl 2010: 76]

The goal of the present paper is to provide an account on the syntactic derivation of the GPC based on Wurmbrand's [2012] Reverse Agree model on feature valuation and the framework of Distributed Morphology (DM). More specifically, I will demonstrate that the morphological doubling of overt inflectional material, which occurs as a result of satisfying the MSC, does not necessarily imply the presence of two distinct functional domains, but is accounted for if we assume that V1 and V2 are c-commanded by a single functional domain from which they receive an identical feature valuation. My approach is structured as follows. In section 2, I will argue based on some of the universal properties of pseudo-coordination and on certain facts from Greek that the GPC should not be treated as an instance of ordinary verbal coordination but rather as a subordinate structure in which V2 is realized as a complement of V1. In section 3, I will demonstrate through a series of semantic and syntactic tests that the GPC represents a monoclausal⁴ syntactic structure. In section 4, I will present my analysis on the syntactic derivation of the GPC and describe the implementation of the Reverse Agree model. Finally, in section 5, I will summarize the main aspects of my analysis and discuss relevant topics which could be pursued in future research.

2. GPC as a subordinate structure

In this section, I will demonstrate based a series of semantic and syntactic tests that GPCs are syntactically analyzed as subordinate constructions rather than cases of ordinary coordination of verbs. More concretely, I will argue that in these constructions the verb *pijeno* 'go' selects for a verbal complement in the form of the lexical verb that occupies the V2 slot.

⁴ In the present study, the term "monoclausal" refers to a syntactic structure with a single functional domain as opposed to "biclausal" syntactic structures which involve two distinct functional domains.

2.1. Verb restrictions

As has been pointed for similar constructions in other languages [de Vos 2005; Wiklund 2007; Cardinaletti, Giusti 2001], pseudo-coordinations are restricted only to a specific subclass of verbs in terms of their V1 slot, whereas verbal coordinations can productively occur with a wide range of verbs in their first conjunct. Consider the reading obtained by the following constructions:

- (11) pij-e ke $pro\delta$ -os-e tin apofasi tis epitropis go-PST.PFV.3SG and betray-PST.PFV-3SG the decision of committee 'He/she (went and) betrayed the decision of the committee.'
- (12) e-tre-x-e ke pro δ -os-e tin apofasi tis epitropis PST-run-PFV-3SG and betray-PST.PFV-3SG the decision of committee 'He/she_i ran and he/she_i betrayed the decision of the committee.'
- (13) perpat-is-e ke proδ-os-e tin apofasi tis epitropis walk-PST.PFV-3SG and betray-PST.PFV-3SG the decision of committee 'He/she_i walked and he/she_i betrayed the decision of the committee.'

Whereas the presence of *pijeno* in the V1 slot accounts for a pseudo-coordinate reading of the construction in (11), the motion verbs in examples in (12)–(13) do not display any semantic integration. Instead, the constructions in which they occur can be only interpreted as sequences of independent events and are thus unambiguously considered ordinary coordinations of verbs. That said, if the GPC was to be analyzed as an ordinary coordination of verbs, it would have to be explained why other verbs are inhibited from occupying its first conjunct as well as why a restriction regarding verb selection applies to only one of the conjuncts. However, under a subordination analysis that involves V2 being realized as a complement of V1, the restriction on V1 being limited only to a specific set of verbs follows more naturally.

2.2. Subject restrictions

Unlike ordinary coordination, in the GPC, both verbs obligatorily share the same subject referent. In addition, the shared subject referent cannot be phonetically realized more than once within the construction. If one of the verbs displays a different subject agreement morphology (as in (14)) or if a second overt coreferential subject is introduced (as in (15)), then the pseudo-coordinate reading is dissociated and instead an independent-event reading is imposed on the construction:

- (14) * 5 pij-a ke pro δ -os-e tin apofasi tis epitropis go-PST.PFV.1SG and betray-PST.PFV-3SG the decision of committee Int.: 'I went and he/she betrayed the decision of the committee.'
- (15) *aftos pij-e ke aftos pro δ -os-e tin apofasi he go-pst.pfv.3sg and he betray-pst.pfv-3sg the decision

tis epitropis

of committee

Int.: 'He; went and he; betrayed the decision of the committee.'

The restriction on overt subject subjects is sensible under a subordination analysis that involves V2 being embedded under V1. However, it can be argued that an analysis of the GPC as a VP coordination could also account for this restriction. While a treatment of V1 and V2 as conjuncts of a coordination is disfavored on the basis of the arguments mentioned in this section, there is a further issue that needs to be addressed. As was pointed out in section 1.2., the MSC in the GPC is satisfied through syntactic elements such as mood markers, future particles and tense auxiliaries being realized separately for both V1 and V2. Given that these elements are analyzed as realizations of functional heads such as Mood° or T°, if we take into account the hierarchical order of functional heads in Greek [Alexiadou 1997; Philippaki-Warburton 1998], we can conclude that the size of V1 and V2 cannot be smaller than a MoodP. I will return to this issue in section 4, where I will propose that overt inflectional material in the GPC is syntactically empty and only realized post-syntactically as a result of Late Insertion.

2.3. Subcategorization requirements

As shown in (16), outside the context of the GPC, the verb *pijeno* may select for an embedded complement introduced by the subjunctive marker *na*.

(16) pij-e na $pro\delta$ -os-i tin apofasi tis epitropis go-PST.PFV.3SG SUBJ betray-AOR-3SG the decision of committee 'He/she was about to betray the decision of the committee.'

⁵ In the present study, (*) does not only always indicate that the marked example is ungrammatical, but rather that it is inconsistent with a pseudo-coordinate reading. It may well be the case that certain examples marked with (*) are considered acceptable within specific discourse contexts. For instance, example (14) could be acceptable in a discourse context in which the location to which the speaker went is implicit.

(17) pij-e ke $pro\delta$ -os-e tin apofasi tis epitropis go-PST.PFV.3SG and betray-PST.PFV-3SG the decision of committee 'He/she (went and) betrayed the decision of the committee.'

If we compare (16) to (17) we observe that the non-motion interpretation of *pijeno* associated with a pseudo-coordinate reading is sustained in both constructions. That said, the difference in terms of semantic interpretation between the instances of pseudo-coordination in (17) and of subjunctive complementation in (16) is attributed to the different mood specification of the respective complement. The subjective mood specification yields an irrealis interpretation under which the embedded verb is realized as potential and not as an event that has actually taken place. However, in (17), the indicative mood specification of V2 accounts for the event of betraying being reported as an actual fact. Provided that the semantic content of *pijeno* remains consistent in both GPC and subjunctive complementation, we would expect the subcategorization requirements of the verb to be satisfied in both instances. In the case of the GPC, the former is possible if V2 is analyzed as a complement of V1 and not as the second conjunct of a coordinate structure.

2.4. Adjacency requirements

In ordinary coordinations, there is no restriction regarding the syntactic material that occurs between the coordinator ke and the verb in the second conjunct. In GPC on the other hand, there are restrictions with regard to the syntactic material that may intervene between ke and V2, which indicates that there is a certain degree of adjacency that needs to be satisfied for a pseudocoordinate reading to be obtained. As demonstrated in (18)–(19), syntactic material which could normally intervene between the coordinator and the second conjunct, such as arguments or adverbials, is not acceptable in the GPC:

```
(18) pij-e ke (*efkola/xθes) proδ-os-e
go-PST.PFV.3SG and easily/yesterday betray-PST.PFV-3SG

tin apofasi tis epitropis
the decision of committee
'He/she went and easily/yesterday betrayed the decision of the committee.'
```

(19) *pij-e ke tin apofasi tis epitropis $pro\delta$ -os-e go-PST.PFV.3SG and the decision of committee betray-PST.PFV-3SG Int.: 'He/she $_i$ went and the decision of the committee he/she $_i$ betrayed.'

The only syntactic material that is acceptable are either elements that belong to the extended inflectional layer of V2 (as was shown in (8)) or object clitics, as seen in (20):

(20) pij-e ke tin $pro\delta$ -os-e go-PST.PFV.3SG and CLI betray-PST.PFV-3SG 'He/she (went and) betrayed her.'

The data provided here suggests that in these constructions *ke* has possibly undergone a change with regard to its original syntactic status as a conjunction coordinator and instead is reduced to a marker that attaches to the edge of the inflectional layer of V2 similarly to a clitic. An observation along those lines is made by [Kjeldahl 2010] for pseudo-coordinations in Danish, where the conjunction coordinator *og* 'and' is assumed to be present only at PF and to have the status of an enclitic that obligatorily attaches to its preceding word due to its syntactic emptiness.

2.5. Violation of the Coordinate Structure Constraint (CSC)

It has been well established that "in a coordinate structure, no conjunct may be moved, nor may any element contained in a conjunct be moved out of that conjunct" (CSC) [Ross 1967: 161]. Extraction instead has to proceed in an across-the-board-fashion (ATB), namely by having the same constituent be extracted from all the conjuncts simultaneously. The CSC is demonstrated in (21):

- (21) o fititis tre-x-i ke xore-v-i baxata the student run-prs-3sg and dance-prs-3sg bachata 'The student runs and dances bachata.'
- (22) * ti_j tre-x-i o fititis ke xore-v-i t_j what run-PRS-3SG the student and dance-PRS-3SG Int.: 'What does the student run and dance?'

Since the first conjunct is occupied by an unergative verb, the complement DP can only be realized as an argument of the verb in the second conjunct. As shown in (22), asymmetric *wh*-extraction out of the second conjunct is not licensed. However, in terms of the GPC, the internal argument of V2 may be asymmetrically *wh*-extracted without yielding ungrammatical results:

(23) ti_j pij-e ke $pro\delta$ -os-e t_j what go-PST.PFV.3SG and betray-PST.PFV-3SG 'What did he (go and) betray?'

A coordination analysis of the GPC would have to stipulate that asymmetric extraction out of the second conjunct is licensed only in specific of cases of verbal coordination, while blocked in others. However, under a subordination analysis of the GPC, the availability of asymmetric extraction is expected.

3. GPC as a monoclausal structure

In this section, I will demonstrate that the semantic and syntactic properties associated with the GPC cannot be captured under a biclausal syntactic structure that involves each verb projecting its own functional domain. Instead, I will argue that based on clause union effects attested in the GPC, the latter is amenable to a monoclausal treatment under which V1 and V2 are headed by a single functional domain.

3.1. Lack of embedded negation

Data based on negation placement suggests that the GPC does not have a distinct functional projection that licenses negation of the embedded verb. Instead, negation markers can only occur within the matrix domain and take an unambiguous wide scope interpretation. Consider the following examples:

```
(24) Sen pa-s ke \theta im-a-se

NEG go.PRS-2SG and remember-PRS-2SG

tis askisis teleftea stijmi
the exercises last moment

'You don't (go and) remember the exercises in the last moment.'
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```
(25) pa-s
                ke
                      δen
                           θim-a-se
     go.PRS-2SG
                and
                      NEG
                            remember-PRS-2SG
     tis
           askisis
                      teleftea
                                 stijmi
           exercises
                      last
                                 moment
     the
     'You, go and you, don't remember the exercises in the last moment.'
```

```
(26) \deltaen pa-s
                       ke
                            δen
                                  θim-a-se
           go.PRS-2SG
     NEG
                      and
                            NEG
                                  remember-PRS-2SG
           askisis
     tis
                       teleftea
                                  stiimi
           exercises
                                  moment
     'You, don't go and you, don't remember the exercises in the last moment.'
```

In (24), if the negation marker receives a narrow scope interpretation, then the construction is interpreted only under an independent event reading that involves the subject participant not going to an unspecified or implicit location in addition to remembering the exercises in the last moment. That said, a pseudo-coordinate reading is only accessible if the matrix negation marker takes an unambiguous wide scope over both V1 and V2. In (25), the negation marker takes scope only over the embedded verb which results in the pseudo-coordinate reading being eroded and to V1 and V2 being interpreted as a sequence of two independent events. Finally, in (26), the presence of two separate negation markers each taking scope over a different verb again results in an independent event reading of the construction. Based on the presented data, I conclude that the GPC has only a single functional projection that licenses negation situated in the matrix domain.

3.2. Event modification

Another argument in favor of a monoclausal analysis of the GPC comes from how the construction behaves in the presence of event modifiers. As evidenced by the following examples, V1 and V2 have to be collectively targeted by event modifiers in order for a pseudo-coordinate reading to be sustained:

- (27) pa-s ke θ im-a-se tis askisis δ io fores go.PRS-2SG and remember-PRS-2SG the exercises two times 'You (go and) remember the exercises twice.'
- (28) pa-s (* δ io fores) ke θ im-a-se tis askisis go.PRS-2SG two times and remember-PRS-2SG the exercises 'You go twice and remember the exercises.'
- (29) *pa-sδίο fores ke θim-a-se tis askisis tris fores go.PRS-2SG two times and remember-PRS-2SG the exercises three times Int.: 'You go twice and remember the exercises three times.'

In (27), the embedded event modifier cannot individually target V2 without giving rise to an independent event reading, but rather has to scope over both V1 and V2. In (28), the event modifier in the matrix domain cannot be licensed under a pseudo-coordinate reading, since this would result in *pijeno* being interpreted strictly as a motion verb. In (29), the presence of a matrix and an embedded event modifier yields an independent event reading under which the subject participant goes to an unspecified or implicit location twice and also

remembers the exercises three times. The presented data suggests that for a pseudo-coordinate reading to be sustained, event modifiers have to target both verbs of the construction as a unit. Assuming a close correspondence between meaning and phrase structure, the single event description associated with the GPC is straightforwardly mapped into a monoclausal syntactic structure⁶.

3.3. Inverse quantifier scope

It is generally assumed that while indefinites have an unbounded inverse scope, universal quantifiers can only take scope within their clause boundary. This distinction is often employed as a diagnostic test for restructuring in complements selected by partial control and exhaustive control predicates respectively [Grano 2015; Modesto 2016]. Whereas universal quantifiers in exhaustive control complements can take inverse scope over the matrix domain, in partial control complements, inverse scope is blocked by the embedded clause boundary. This is demonstrated in (30)–(31) for finite complements in Greek:

- (30) kapios fititis kser-i na li-n-i ka θ e provlima some student know-prs.3sg subj solve-prs-3sg every problem 'Some student knows how to solve every problem.' $\exists > \forall / \forall > \exists$ [Grano 2015: 193]
- (31) kapios fititis piste-v-i oti e-li-s-e ka θ e provlima some student believe-PRS-3SG that PST-solve-PFV-3SG every problem 'Some student believes that he solved every problem.' $\exists > \forall /* \forall > \exists$ [Grano 2015: 194]

Whereas (31) can only be interpreted as "some student believes that he solved every problem", (30) is scopally ambiguous and can be interpreted both as "some student knows how to solve every problem" and as "for every problem, there is a student that knows how to solve it". The fact that in (30) the embedded universal quantifier can take scope outside its embedded domain, suggests that clause union effects apply. A similar conclusion can be reached

⁶ It has to be noted that monoclausal syntactic structures are not always limited to a single event description. As has been shown for German long passives [Wurmbrand 2001], predicates in restructuring constructions can under certain circumstances be individually targeted by event modifiers. While this suggests that monoclausal syntactic structures are not necessarily linked to a single event description, in absence of empirical data on biclausal syntactic structures restricted to a single event description, I consider monoeventivity as evidence in favor of monoclausality for the purposes of my analysis.

regarding the embedded V2 in the GPC, which in terms of quantifier scope patterns with complements selected by exhaustive control predicates:

(32) *kapios fititis pa-i ke li-n-i ka\thetae provlima* some student go.prs-3sg and solve-prs-3sg every problem 'Some student (goes and) solves every problem.' $\exists > \forall / \forall > \exists$

Based on the availability of an inverse scope reading in (32), under which "for every problem, there is a student that (goes and) solves it", I conclude that there is no clause boundary between V1 and V2.

3.4. Licensing of Negative Polarity Items (NPIs)

The NPI *kanena* 'any' is interpreted as a universal negative when bearing emphatic stress or as an existential quantifier when unstressed. While both interpretations are licensed by sentential negation, licensing of the emphatic interpretation can only occur within the same tense domain [Giannakidou, Quer 1997]. According to [Grano 2015], this distinction can accurately predict the structural differences between complements selected by exhaustive control and by partial control predicates respectively. Consider the following examples of NPI licensing:

- (33) o Jianis & kser-i na li-n-i KANENA provlima the John NEG know-PRS.3SG SUBJ solve-PRS-3SG any problem 'John doesn't know how to solve ANY problem.' [Grano 2015: 190]
- (34) o Jianis δ en ip-e oti e-li-s-e the John NEG say.PST.PFV-3SG that PST-solve-PFV-3SG

{kanena/*KANENA} provlima any problem

'John didn't say that he solved any/ANY problem.' [Grano 2015: 190]

As seen in (33) and (34), the emphatic meaning of *kanena* can only be licensed in exhaustive control complements, which in turn suggests that the latter exhibit clause union effects. Turning to the GPC, an emphatic interpretation of the embedded NPI is also enforced in the presence of sentential negation:

(35) o Jianis Sen pij-e ke e-li-s-e KANENA provlima the John NEG go-PST.PFV.3SG and PST-solve-PFV-3SG any problem. 'John didn't (go and) solve ANY problem.'

Given that licensing of the emphatic interpretation can only occur within the same tense domain, I conclude that the GPC has only a single available functional projection that licenses Tense.

4. A feature-based account

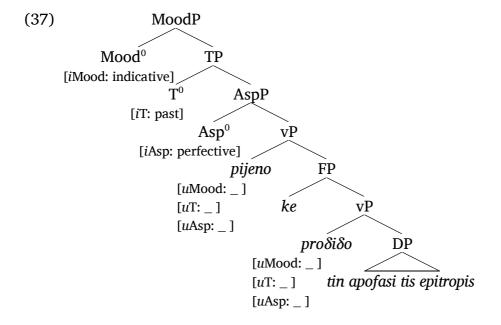
The data examined in sections 1.2 and 3 points towards an ambiguity with regard to the clausal structure of GPCs. On one hand, in section 1.2, it was shown that with respect to satisfying the MSC, the GPC may resemble a biclausal syntactic structure in the sense that overt inflectional material is individually repeated for both V1 and V2. On the other hand, in section 3, it was demonstrated through a series of diagnostic tests that the GPC exhibits clause union effects and can thus be considered a monoclausal syntactic structure. In this section, I will propose that the surface realization of separate instances of overt inflectional material within the same construction does not necessarily imply the presence of two distinct functional domains but can rather be interpreted as the result of both verbs receiving an identical feature-valuation by a single functional domain. In order for the current account to be put in place, two important assumptions have to be made. First, given that my account will include a single functional domain asymmetrically c-commanding both V1 and V2, the inflectional morphology on each verb cannot be accounted under the traditional assumption that verbal affixes are directly realized through functional heads to which the verb moves [Pollock 1989]. Rather, a more refined approach has to be pursued which enables multiple inflectional realizations of the same morphological category to be licensed by a single functional projection. The former can be found in Wurmbrand's [2012] Reverse Agree model postulated for verb clusters in Germanic languages and also adopted in Bjorkman's [2016] study on go get constructions in English. Secondly, I will assume that the derivation is comprised of two distinct components, namely a syntactic component which is responsible for the form of complex syntactico-semantic expressions and a morphological component which involves the mechanisms that produce the corresponding morphological expressions [Halle, Marantz 1993]. Following the framework of DM, I will consider syntactic categories as purely abstract within syntactic derivation and exclusively composed of syntacticosemantic features drawn from a set made available by UG. The syntactic component is assumed to produce a representation whose terminal elements are morphosyntactic features, which is then subject to morphological operations that account for non-isomorphic mappings from syntactic terminals to morphophonological constituents. That said, the word constituents which are realized post-syntactically do not necessarily correspond to syntactic entities and instead are inserted during the morphological component of the derivation as a result of Late Insertion.

Having outlined the ingredients of my analysis, I will now turn to Wurmbrand's Reverse Agree model of inflectional licensing and to its implementation on the GPC. In her account, [Wurmbrand 2012] distinguishes between sets of interpretable (*iF*) and uninterpretable features (*uF*) (e.g. features that carry information necessary to the interpretation and features that are irrelevant for semantics but may be realized morphologically) and valued (F: val) and unvalued features (F: _) (e.g. features that are specified and features that are unspecified for a specific semantic value). Functional heads are assumed to be associated with specific sets of valued and interpretable features with which they value the corresponding unvalued and uninterpretable features on the verbal heads in a downward fashion. In that sense, Reverse Agree departs from standard Agree, where feature transfer is conducted upwards, namely from commanded goals to c-commanding probes [Chomsky 1998]. The mechanism of Reverse Agree is defined as follows:

- (36) A feature [F: _] on α is valued by a feature [F: val] on β , iff:
 - i. β asymmetrically c-commands α AND
 - ii. There is no γ , γ distinct from β , with a valued interpretable feature of the same type ([iF: val]) such that γ c-commands α and is c-commanded by β . [Wurmbrand 2012: 135]

Provided that feature valuation onto a c-commanded head is blocked only in case a head with identical valued and interpretable features intervenes between the probe and its goal, Reverse Agree in principle allows a single functional head to license inflectional features on multiple verbal heads. This offers an elegant solution with regard to feature licensing for verbal constructions that display multiple inflectional agreement within a single monoclausal syntactic structure, such as the GPC. Following an account based on Reverse Agree, I assume that V1 and V2 are c-commanded by the same mood, tense and aspect projections from which they receive their feature valuation in a downward manner. Regarding the category of voice, differences between V1 and V2 seem to be acceptable, since, as was shown in (9), V2 may be passivized. This suggests that V1 and V2 are headed by a distinct voice domain. Following previous research on the syntactization of voice [Alexiadou et al. 2006; Folli, Harley 2007],

I consider this category to be encoded above VP either inside little v or VOICE, if we assume an articulated vP projection. A derivation of the GPC would then be described as follows. *Pijeno* is merged in the verbal domain along a vP-sized V2 in complement position. The complement is headed by *ke*, which will for convenience be represented as the head of a functional projection FP. Both verbs then raise up to their respective vP projection in order to check their voice features. At this point both verbs still bear unvalued and uninterpretable inflectional features associated to tense, mood and aspect and can thus be selected as potential targets for Reverse Agree by the respective functional heads. Structure building proceeds with Merge of the aspectual domain. The unvalued and uninterpretable aspectual features on V1 and V2 are assumed to simultaneously establish an Agree relation with the valued and interpretable aspectual feature of the higher head, which licenses their top-down feature valuation. A similar process is then repeated for the categories of tense and mood. A sample derivation for the GPC illustrated in (3) based on Reverse Agree is given below:



Having adopted a DM framework that involves a distinction between the syntactic and the morphological component of the derivation, allows us to also account for instances in which overt inflectional material is repeated as a result of satisfying the MSC. Within the current approach, surface morphemes such as mood markers, tense auxiliaries and future particles are not interpreted as elements present within the syntactic derivation, but rather as collections of features which receive their morphological realization post-syntactically. Given that these features receive an identical realization for both V1 and V2, their

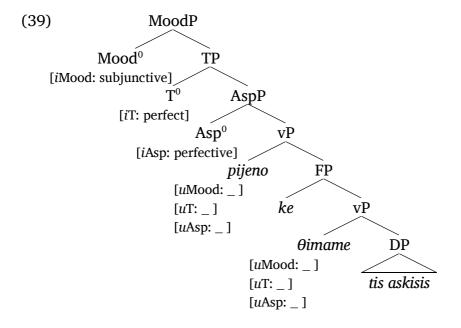
syntactic derivation can also be captured under the top-down feature valuation mechanism instigated by Reverse Agree. Take for example the GPC shown in (8), repeated below as (38):

(38) *i-tan* anamenomeno na ex-un pai ke be-pst.3sg expected subj perf-3pl go.pfv and

na ex-un $\theta imi\theta i$ tis askisis subj perf-3pl remember.pfv the exercises

'It was expected for them (to have gone and) to have remembered the exercises.'

Following the assumption that functional heads have an interpretable valued feature, which corresponds to the semantic value of the head [Wurmbrand 2012], perfect tense can be encoded as an [iF: perfect] associated with T⁰, whereas subjunctive mood can be encoded as an [iF: subjunctive] associated with Mood°. These heads enter into an Agree relation with V1 and V2, which is instantiated through top-down valuation of their respective uF: _ features. Once inflectional features have been manipulated by the syntactic component, the morphological component becomes responsible for the insertion of the morphological markers associated with perfect tense and subjunctive mood. This results in two distinct surface realizations of the mood marker na and of the tense auxiliary exo. The syntactic derivation for (38) is demonstrated below:



5. Conclusion

In this paper I discussed the formal properties of GPCs and provided a featurebased account on their syntactic derivation. The main issue that was brought into attention concerns the way overt inflectional material is distributed due to the morphological dependency attested between the verbs of these constructions (as captured by the MSC). Whereas GPCs respond to tests that are indicative of clause union, in terms of the distribution of overt inflectional material they resemble a biclausal syntactic structure. I argued that this structural ambiguity is superficial and brought into existence as the result of the mechanism responsible for inflectional licensing that underlies these constructions. More specifically, I demonstrated that the morphological dependency attested between V1 and V2 can be captured under an account that involves both verbs being c-commanded by a single functional domain from which they receive their feature valuation in a top-down manner. Assuming a distinction between the syntactico-semantic component and the morphological component of the derivation, the distribution of overt inflectional material was interpreted as the result of post-syntactic processes that account for the insertion of the morphological material corresponding to the identical feature value of both verbs.

The current paper approaches the phenomenon of pseudo-coordination from a synchronic perspective and provides an analysis rooted on contemporary language data. That said, there is still plenty of room to be explored in regard to relevant constructions in Greek. A diachronic perspective on the issue is deemed of high significance for future research since it would reveal important data on the grammaticalization path along which the components of these constructions have been developed as well as the semantic change associated with V1. Finally, the motion verb *pijeno* is also encountered in serial verb constructions which are analog to *go get* constructions in English. While the relation between *go get* constructions and pseudo-coordinations has extensively been discussed for English (see [Shopen 1971; Pullum 1990; Bjorkman 2016]), a similar research has yet to be conducted for Greek. A collective study on these constructions could provide important information on their degree of approximation and possibly also motivate a unitary analysis on these phenomena.

Abbreviations

1, 2, 3 — 1st, 2nd, 3rd person; AOR — aorist; CLI — clitic pronoun; IPFV — imperfective aspect; NEG — negation; PASS — passive voice; PERF — perfect auxiliary; PFV — perfective aspect; PL — plural; PRS — present tense; PST — past tense; SG — singular; SUBJ — subjunctive.

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