

Greek psychological verbs of alternating syntactic structure: the interface between syntax and semantics

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Abstract

Psychological verbs or psych verbs are verbs that denote an emotion or a psychological state. What characterizes these verbs is that one of their two arguments is always an experiencer. Although the θ -role of the experiencer remains stable, these verbs have the capacity to interchange their syntactic structure according to the syntactic position in which the experiencer is realized.

Belletti and Rizzi's (1988) classification of Italian psychological verbs into three main categories (Object experiencer, Subject experiencer and *piacere* verbs) has been widely used in the description of psych verbs cross-linguistically: among others Bouchard (1992) for French, Arad (1996, 1998a,b, 2002) for Hebrew, Marin and McNally (2011) for Spanish and Anagnostopoulou (1996, 1999) for Greek. In order to analyze psych verbs and their syntactic properties, these studies focus on different aspects of psych verbs, i.e., syntactic (e.g., Belletti & Rizzi 1988), morphological (e.g., Pesetsky 1995), semantic (e.g., Jackendoff 1990, Arad 1996, 1998a, b, 2002, Alexiadou & Iordachioaia 2014, Verhoeven 2010, Kordoni 2002) and pragmatic aspects (e.g., Tantos 2005).

The purpose of the present study is twofold: first, to propose a new classification of Greek psychological verbs based on whether the same verb takes part in the alternation between the subject experiencer and the object experiencer structures or not and second, to analyze the category of Greek psych verbs that take part in this alternation focusing on the aspectual ambiguity these verbs present in their object experiencer structure.

More specifically, first, I propose that psych verbs be classified into two main categories: a) those with alternating syntactic structure (*tromazo* 'frighten'-*tromazo* 'be frightened', *eknevrizo* 'irritate'-*eknevrizome* 'be irritated'), and b) those with stable syntactic structure (*apolamvano* 'enjoy', *erotevome* 'fall in love'). Second, in accordance with Arad (1996, 1998a,b, 2002) and Alexiadou & Iordachioaia (2014) I claim that what influences the syntactic behavior of psych verbs and explains their peculiar "psych properties" are certain features of their event structure and their lexical aspect. In other words, the study of the semantic and the aspectual features of these verbs, such as telicity, boundedness, agentivity, volitionality and change of state in the experiencer can help us interpret their syntactic behavior.

Keywords: psychological verbs, experiencer, voice morphology, lexical aspect, event structure, causative, anticausative, syntax-semantics interface.

1. Introduction

The present paper aims at describing and analyzing the syntactic behavior of Greek psychological verbs (psych verbs). In doing so, I will attempt to determine whether this behavior can be explained by some well-known studies for psychological verbs of other languages or by some studies that have been proposed for the Greek data. The specific aspects on which I will focus during my analysis are (i) the issue of classifying psych

verbs into categories and of whether the present classification is enough for describing Greek data, (ii) the issue of causativity, that is whether the verb is a prototypical transitive verb and its argument structure contains an argument that denotes the cause of the event or state expressed by the verb and an entity undergoing change, (iii) the aspectual ambiguity presented by psych verbs in their object experiencer form and (iv) the relationship of semantic features of psych verbs with their syntax.

The paper is structured as follows: in section 2 I define psychological verbs and present some well-known studies for these verbs in Italian, English and Greek. Then, in section 3 I propose a new classification of Greek psychological verbs based on their syntactic structure and the morphological marking of the voice. In section 4, I describe and analyze the semantic and syntactic behavior of a particular class of psych verbs, those which alternate their syntactic structure between object experiencer and subject experiencer and draw important conclusions about the interaction between semantic features and the syntactic realization of the verb's arguments. In section 5, I conclude my study and briefly present some future work I intend to do on the issue.

2. Theoretical background

Psychological verbs denote an emotion or a psychological situation. Their argument structure is traditionally claimed to contain two arguments: one with the thematic role of the Theme and another one with the thematic role of the experiencer (Belletti & Rizzi 1988), though not all researchers completely agree with that. For example, Pesetsky (1995) suggests that the theta role of the Theme in psych verbs can be analyzed in three different thematic roles: a) the Target, b) the Subject Matter and c) the Causer. According to this analysis, the subject of psych verbs with the experiencer in the object position is not a Theme as Belletti & Rizzi suggest, but it is always a Causer, that is the entity that brings about the change of the psychological state of the experiencer. Accordingly, the object of the psych verbs with the experiencer in the subject position always bears one of the two thematic roles: Target of Emotion, that is the target of the emotion that the experiencer feels, or Subject Matter of Emotion, that is the object of that emotion.

The seminal word of Belletti and Rizzi (1988) about psych verbs in Italian demonstrates that psych verb structures with the argument of the experiencer in the object position are anticausative, which means they have no external argument. In these structures the argument of the Theme is generated in the position of the internal argument and is moved to the surface subject position through A-movement, thus being syntactically realized as the subject of the verb. According to this analysis, the syntactic structure of a sentence with the argument of the experiencer in the object position will look like this¹:

- (1) I ikonomiki katastasi stenahor_i e_i to Jani.
the financial situation.Nom bother.3Sg.Act the John.Acc
The financial situation bothers John.

¹ I use the following abbreviations: Nom: 'nominative', Acc: 'accusative', Act: 'active voice', NAct: 'non-active voice', 3Sg: '3rd person singular', 3Pl: '3rd person plural', OE: 'object experiencer', SE: 'subject experiencer'.

As a result, in the cases of object experiencer psych verbs, even though superficially the Thematic Hierarchy² is violated since the experiencer should be realized higher in the structure than the Theme, Belletti & Rizzi (1988) claim that the problem is solved. That is, in the Deep Structure the Thematic Hierarchy is preserved, since the Theme is in fact generated in a lower position than the experiencer.

Grimshaw (1990) agrees with Belletti and Rizzi (1988) in that object experiencer psych verbs do not have an external argument. However, she does not agree with the fact that the Theme is base-generated in the position of the internal argument and that these psych verbs license movement of the internal argument to the surface position of the subject. According to Grimshaw, these verbs are in fact causative verbs, since their event structure contains the argument that denotes the cause of the change of the psychological state of the experiencer. However, when this argument that is the cause does not have the semantic characteristic of being animate, then although it is a subject in the Deep Structure, it does not qualify as an external argument. This can be explained in the frame of the a-structure theory and the theory of prominence that Grimshaw poses and according to which the external argument is the argument which is the most prominent both in the thematic hierarchy and in the aspectual hierarchy. In the case of these psych verbs the Cause is the most prominent in the aspectual hierarchy, but it is not the most prominent in the thematic hierarchy, that is why it is not realized as an external argument. As a result, these verbs do not have an external argument, since there is no argument that is the most prominent in both hierarchies.

Accordingly, Anagnostopoulou (1996, 1999) supports that Greek psych verb structures with the experiencer as the object are invariably causative structures. She distinguishes between two categories of these verbs: a) those with the psychological meaning in which the argument of the Theme lacks the semantic characteristic of being animate and b) those with the agentive meaning in which the argument of the Theme has the semantic characteristic [+animate]. She believes that when the psych verb has the agentive meaning, the argument in the subject position is in fact an agent and is thus an external argument, while when the psych verb has the psychological meaning the argument in the subject position is not the agent but rather the Cause and thus, it does not qualify as an external argument.

For Arad (1996, 1998a,b, 2002) and Alexiadou & Iordăchioaia (2014) psych verbs do not form a specific category as far as their semantic and syntactic properties are concerned. Rather, what is special about these verbs and differentiates them from other verb classes is not that their argument structure contains the experiencer, but that they usually present an ambiguity between several regular patterns. One such regular pattern in their behavior is that they can receive three interpretations depending on their aspectual features: the agentive, the eventive and the stative. Another regular pattern is

² There is a diversity of proposals as far as the order of the thematic roles in the Thematic Hierarchy is concerned. Here, I cite two versions which include the theta role of the Experiencer: Grimshaw's (1990) version of the Thematic Hierarchy is Agent>Experiencer>Goal/Source/Location>Theme, and Bresnan & Kanerva's (1989) version is Agent>Benefactive>Recipient/Experiencer>Instrument>Theme/Patient>Location. For a more detailed presentation of the versions of the Thematic Hierarchy, see Rappaport Hovav & Levin (2007).

what Alexiadou & Iordăchioaia call *the psych causative alternation*, that is the ability of psych verbs to take part in the causative-anticausative alternation resembling transitive verbs. The above present evidence for the claim that there is a systematic relationship between a) the value of the lexical aspect of a psych verb, b) the preposition of the prepositional phrase of a SE psych verb and c) the event structure of the verb. It is this interrelation that I will try to elaborate in my analysis, reinforcing the claim that semantic features are visible to the syntax of psych verbs.

In the next section, I will present a classification of Greek psych verbs based on their syntactic structure and their voice morphology.

3. Greek psychological verbs: classification on the basis of syntax and morphology

While Belletti and Rizzi's (1988) classification of psych verbs into three main categories (Object experiencer, Subject experiencer and the *piacere* verbs) has been widely used in the description of psych verbs, including Greek psych verbs (Anagnostopoulou 1996, SE 1999), here I propose a new classification based on the syntactic structure of the verb in combination to its voice morphology. I claim that this classification captures better the nature of this category of verbs and the alternations in which they often take part. More specifically, if we investigate the class of Greek psych verbs and the syntactic structures which they form, we will see that there are certain verbs which cannot be classified under any of the three categories proposed by Belletti & Rizzi (1988). For example, as we see below, there are verbs which can form both a SE structure and an OE structure:

- (2) a. O thórivos trómakse to pedí.
the noise.Nom scared.3Sg.Act the child.Acc
The noise scared the child.
- b. To pedí trómakse apo/me ton thórivo.
the child.Nom scared.3Sg.NAct by/with the noise.Acc
The child was scared by/with the noise.
- (3) a. To diayónizma ánxose ton mathití.
the test.Nom stressed.3Sg.Act the student.Acc
The test stressed the student.
- b. O mathitís anxóthike me to diagónisma.
the student.Nom stressed.3Sg.NAct with the test.Acc
The student got stressed with the test.

Apart from the fact that the same verb participates in two different syntactic structures at the same time, there is another factor which perplexes things even more for Greek data: the voice morphology of the verb. In the examples in (2) the verb *tromakse* which is in the active voice forms an OE structure in (2a) and the same verb in the same voice forms a SE structure in (2b). This means that the same verb can form two different syntactic structures without a change in the voice morphology. However, in the examples in (3) the verb *ánxose* which is in the active voice forms an OE structure in (3a) and the same verb in the non-active voice *anxóthike* forms a SE structure in (3b).

This means that some psych verbs form two different syntactic structures while at the same time they change their voice morphology from active to non-active and vice versa. As can be deduced, these verbs cannot fit into one of the three categories proposed by Belletti & Rizzi (1988), because they do not form only a SE structure or only an OE structure, but they form both with or without a change in their voice morphology. It seems to me, therefore, that a new classification is needed in order to describe fully the different cases of Greek psych verbs. Below, I analyze the new classification I propose.

To begin with, there are two main categories of Greek psych verbs: a) those with alternating transitivity/syntactic structure and b) those with stable transitivity/syntactic structure. The first category (examples in (4)) contains verbs that can alternate their syntactic structure from OE to SE (*tromazo* ‘frighten’-*tromazo* ‘be frightened’, *eknevrizo* ‘irritate’-*eknevrizome* ‘be irritated’), and the second category (example in (5)) includes verbs that can have only one syntactic structure, the SE structure (*apolamvano* ‘enjoy’, *erotevome* ‘fall in love’, *agapo* ‘love’). The differentiation between the two categories is illustrated in the following examples:

- (4) a. Afti i kathisterisi eknevrise ti Maria. (OE)
this the delay.Nom irritated.3Sg.Act the Maria.Nom
This delay irritated Mary.
- b. I Maria eknevristike me afti tin kathisterisi. (SE)
the Maria.Nom irritated.3Sg.NAct with this the delay.Nom
Mary was irritated by this delay.
- (5) O Kostas nostalyi tin patrida tou. (SE)
the Kostas.Nom miss.3SgAct the homecountry.Nom his
Kostas misses his homecountry.

In this article, I will discuss the verbs that alternate their syntactic structure from OE to SE and vice versa. As can be seen from the examples in (4) the alternation between syntactic structures can be accompanied by an alternation in the voice morphology of the verb from active to non-active. However, the alternation between OE and SE syntactic structures can happen even if there is no alternation in the voice morphology of the verb, as can be seen in the examples in (6):

- (6) a. I arahnes tromaksan ta koritsia. (OE)
the spiders.Nom frightened.3Pl.Act the girls.Acc
The spiders frightened the girls.
- b. Ta koritsia tromaksan me tis arahnes. (SE)
the girls.Nom frightened.3Pl.Act with the spiders.Acc
The girls got frightened by the spiders.

Considering this, psych verbs which alternate their syntactic structure from OE to SE and vice versa can be further classified into two subcategories, according to their voice morphology: a) the ones that do not alternate voice morphology (examples in (6)) and b) the ones that alternate their morphology from active to non-active (examples in (4)).

So far, we have seen that Greek psych verbs can be classified into two broader categories: a) the ones that can alternate their syntactic structure between OE and SE and b) the ones that do not participate in such an alternation in syntactic structures. The

first category can be further divided into two subcategories: a) the ones that along with an alternation in syntactic structures change their voice morphology and b) the ones that while alternating their syntactic structure do not change their voice morphology. In the next section, I will focus on the first category of psych verbs, the ones that can form two syntactic structures either while changing their voice morphology or while keeping it stable and I will describe how verbs of this category behave semantically and syntactically.

4. Psych verbs with alternating syntactic structure: the interface between syntax and semantics

In this section I will talk about psych verbs which alternate their syntactic structure between OE and SE. I will describe their semantic and syntactic behavior and I will show how specific semantic characteristics of psych verbs can influence the argument realization of these verbs and the reading of the psych verb structure.

First of all, following the work of Arad (1996, 1998 a, b, 2002) and Alexiadou & Iordăchioaia (2014), I claim that these verbs are basically similar to other well-known verb classes (see also Pesetsky 1995). What seems to be special about them is their property to present an ambiguity between several regular patterns in their behavior. More specifically, firstly, psych verbs in their OE structure may have three possible readings according to two properties: a) whether there is an agent and b) whether there is a change of mental state in the experiencer. Secondly, in their change of state reading Greek psych verbs take part in what Alexiadou & Iordăchioaia call *a psych causative alternation*, that is they instantiate a causative alternation as described in, e.g., Levin & Rappaport-Hovav (1995) (see also Kalamida 2015).

To begin with, as described in the works of Arad, in their OE structure psych verbs can have three possible interpretations according to the existence of a) an agent and b) a change of state in the experiencer. The three possible readings of psych verbs are the following.

- i. The agentive reading. In this reading, the psych verb structure contains an agent who deliberately brings about a change of state in the experiencer:

- (7) O Petros enohlise tin Eleni skopima
the Petros.Nom annoyed.3Sg.Act the Eleni.Acc deliberately
Peter annoyed Helen deliberately.

In this case the grammatical subject is generated as an external argument and the grammatical object is a canonical object. Therefore, in this reading psych verbs present similarities with the transitive verbs which have the agentive reading, while they have no psych properties at all.

- ii. The eventive reading. In this reading there is somebody or something that brings about a change in the mental state of the experiencer, but without intending to. Here there is, also, a change of state in the experiencer, but no intentional agent:

- (8) a. I Maria tromakse tin Eleni kata lathos.
the Maria.Nom frightened.3Sg.Act the Eleni.Acc accidentally
Mary frightened Helen accidentally.
b. O thorivos tromakse tin Eleni.
the noise.Nom frightened.3Sg.Act the Eleni.Acc
The noise frightened Helen.

The argument in the subject position is the Causer (see also Pesetsky 1995) and it is an external argument as in the agentive reading. The argument in the object position can be either a canonical object as in the agentive reading or a non-canonical object, as in the stative reading as we will see below and this depends on the specific language. In Greek, when the argument which is the grammatical subject of OE verbs is [-animate] it is compulsory that the object be clitic doubled:

- (9) O thorivos */?(tin) tromakse tin Eleni.
the noise.Nom her frightened.3Sg.Act the Eleni.Acc
The noise frightened Helen.

Clitic doubling is generally compulsory when there is an indirect object, that is an object in the oblique case or in the form of a prepositional phrase. Therefore, OE verbs have an indirect object even though it is in the accusative case and not a canonical one that can be found in the agentive reading of OE verbs or in a transitive structure. On the other hand, when the argument in the subject position is [+animate], then the psych verb structure has undoubtedly the agentive reading:

- (10) O Kostas enohli ti Maria.
the Kostas.Nom annoy.3Sg.Act the Maria.Acc
Kostas annoys Mary.

In such a structure as the one above, clitic doubling would be compulsory if there was an adverb which emphasizes on the non-volitionality of the subject, such as *kata lathos* ‘accidentally’.

- iii. The stative reading. According to Arad, this is the typical psychological reading, where there is no agent and no change of state in the grammatical subject. Rather, it involves the perception of some stimulus (realized as the subject) by the experiencer (realized as the object). This perception triggers some mental state in the experiencer:

- (11) I ikonomiki katastasi anisihi to Jani.
the financial situation.Nom worry3Sg.Act the John.Acc
The financial situation worries John.

The characteristics of this reading are the following:

- (i) there is no agent, as the emotional state of the experiencer is not caused volitionally. The fact that the stimulus causes a specific emotion to the experiencer is something inherent in it and out of its control. There is a

specific characteristic of the stimulus that creates the mental state of the experiencer. This means that even when the subject of an OE structure is [+animate], we cannot consider that this entity does something volitionally in order to create this emotion to the experiencer,

- (ii) there is no change in the mental state of the experiencer. The experiencer is at a specific mental state as long as he/she perceives the stimulus (or has it on his/her mind),
- (iii) while in the agentive and the eventive readings the stimulus is not part of the event of mental state but only causes it, in the stative reading the stimulus is an inherent part of the event of mental state. This means that the existence of the emotional state of the experiencer depends on it. When the stimulus is not perceived by the experiencer anymore, then the mental state of the experiencer ceases to exist, and
- (iv) the subject is generated in a non-external position, that is why in this reading we have A-movement. This makes OE verbs in this reading present some similarities with the passive structures and the anticausative verbs. The object in this reading is non- canonical.

The following table summarizes the syntactic behavior of OE psych verbs in each of the three readings analyzed above (Arad, 1998b:202):

Stative reading	Eventive reading	Agentive reading
All psych properties universally	Some psych properties depending on the language	No psych properties universally
Subject: internal	Subject: external	Subject: external
Object: non-canonical	Object: canonical or non-canonical depending on the language	Object: canonical

Table 1: The three readings of OE psych verbs and their characteristics

According to Alexiadou & Iordachioaia (2014), when OE psych verbs have the eventive reading, i.e. when there is a change of state in the experiencer, they can take part in the causative-anticausative alternation (or causative-inchoative alternation or ergative alternation). This means that OE psych structures can alternate with SE psych structures and the morphology in the two structures resembles the morphology of the verbs which take part in the causative-anticausative alternation. In Greek the causative-anticausative alternation usually employs non-active voice morphology and realizes causers with the preposition *me* ‘with’ both with non-psych verbs (in (12b)) and with psych verbs (in (13b)):

- (12) a. O Kostas ekapse to fayito.
the Kostas.Nom burnt.3Sg.Act the food.Acc
Kostas burnt the food.
- b. To fayito kaike me ti dinati fotia.
the food.Nom burnt.3Sg.NAct with the strong fire.Acc
The food burnt from the strong fire.

- (13) a. O thorivos enohlise to Jani.
the noise.Nom annoyed.3Sg.Act the John.Acc
The noise annoyed John.
- b. O Janis enohlithike me to thorivo.
the John.Nom annoyed. 3Sg.NAct with the noise.Acc
John got annoyed with the noise.

The verb constructions in (12) and the psych verb constructions in (13) form a causative and a psych-causative alternation respectively which is morphologically marked, since the voice morphology changes from active to non-active. In the examples below we see a morphologically unmarked alternation both in the causative alternation and in the psych-causative alternation:

- (14) a. I supa aidiase to Jani.
the soup.Nom disgusted.3Sg.Act the John.Acc
The soup disgusted John.
- b. O Janis aidiase me ti supa.
the John.Nom disgusted. 3Sg.Act with the soup.Acc
John was disgusted with the soup.
- (15) a. O aeras stegnose ta mallia mou.
the air.Nom dried.3Sg.Act the hair.Acc my
The air dried my hair.
- b. Ta mallia mou stegnosan me ton aera.
the hair.Nom my dried.3Pl.Act with the air.Acc
My hair dried with the air.

Considering the similarities between the (anti)causative alternation and the psych-causative alternation, Alexiadou & Iordachioaia treat the latter as a subcase of the former. However, as they note, not all cases of the morphological OE-SE alternation form examples of a causative alternation, as the OE-SE alternation may also be displayed by stative verbs, as we see below:

- (16) a. To podosfero ??(ton) endiaferi to Jani.
the football.Nom him interest.3Sg.Act the John.Acc
Football interests John.
- b. O Janis endiaferete ja to podosfero.
the John.Nom interest. 3Sg.NAct for the football.Acc
John is interested in football.

Such cases do not involve a change of state and do not form causative-anticausative pairs. The OE-SE pairs that form a causative alternation involve a change of state in the experiencer and a causer, as do verbs which participate in the causative alternation crosslinguistically (*break, close, freeze, melt, open, widen*, etc).

A central characteristic of this causative alternation is that the only argument of the intransitive use bears the same semantic relation to the verb as the object of the transitive use. In the case of psych verbs, the argument which is the subject in the

intransitive structure has the same theta role as the object in the transitive structure, that is the theta role of the experiencer.

As can be deduced from the above, in order for a verb to undergo the alternation it must, first of all, express a change-of-state. In addition, there are further meaning components associated with individual change-of-state verbs which determine the verb's behavior (Schäfer 2009). Change-of-state verbs are considered to have a complex event structure as in (17a, b). The same is true for Greek psych verbs. Intransitive change-of-state verbs involve a result state predicated over the theme and a BECOME predicate that takes a resultant state as its argument. Transitive change-of-state events have, in addition, a cause predicate that takes the BECOME predicate as one argument and also introduces a causer argument:

- (17) a. [BECOME [y <STATE>]]
 b. [x CAUSE [BECOME [y <STATE>]]]

As a result, psych verbs which form the causative alternation can be said to have the same event structure as the change-of-state verbs which undergo the causative alternation.

Depending on the theoretical framework, the relation between causative and anticausative forms is accounted for in different ways (see Schäfer 2009 for an overview). I follow Levin and Rappaport Hovav's (1995) proposal, according to which all verbs undergoing the causative alternation are inherently transitive and have the causative lexical- semantic representation seen below:

- (18) [x DO-SOMETHING] CAUSE [y BECOME <STATE>]]

These verbs, which Levin and Rappaport Hovav call externally caused verbs, are meant to "imply the existence of an external cause with immediate control over bringing about the eventuality denoted by the verb" (Levin and Rappaport Hovav 1995: 92). The same causative lexical-semantic representation can be said to apply to psych verbs:

- (19) *tromazo* 'frighten': [[x DO-SOMETHING] CAUSE [y BECOME <FRIGHTENED>]].

The verb *tromazo* 'frighten' both in its transitive and in its intransitive use has a complex lexical semantic representation that contains the predicate CAUSE, just like another predicate that takes part in the causative alternation, like *spao* 'break'. In other words, the meaning of the verb is represented as being comprised of two subevents, each of which is an argument of the predicate CAUSE (this analysis was also proposed by Pustejovsky 1991). The two subevents are the subevent that causes the feeling of fear to the experiencer and the second subevent is the central subevent that is connected to the emotional change that the experiencer undergoes. Each of the verb's arguments is linked to each one of the subevents; the causer is linked to the causing subevent and the experiencer is linked to the central subevent. Finally, the anticausative alternant is derived from the transitive one via a process of detransitivization.

Having said the above about the semantic and syntactic behavior of Greek psych verbs, let us now summarize the semantic and syntactic characteristics of psych verbs which seem to play an important role in the choice of the syntactic structure of the verb and to determine its reading. These characteristics have to do with (i) the value of the lexical aspect of the verb, (ii) the value of its grammatical aspect, (iii) its event structure, (iv) the semantic features of the non-experiencer argument, (v) the existence of change of state in the experiencer, and (vi) the prepositional marking of the non-experiencer argument in the SE structure.

More specifically, a psych verb structure has the agentive reading when the following criteria among others (which due to lack of space could not be described here) are met: (i) the non-experiencer argument in the subject position is [+animate] and [+volitional], (ii) there is a change of state in the experiencer which is realized in the object position, and (iii) there is no clitic doubling of the experiencer in combination with the animacy of the non-experiencer argument. A psych verb structure has the eventive reading when the following characteristics exist: (i) the aspectual value of the verb is telic, (ii) the event described by the verb is temporarily bounded, (iii) it has no internal structure, as described in Jackendoff (1990), (iv) the grammatical aspect of the verb is perfective, (v) the non-experiencer argument has the θ -role of the causer, (vi) there is not and there cannot exist clitic doubling of the experiencer in the accusative case, (vii) there is a change of emotional state in the experiencer, and (viii) the preposition which introduces the prepositional phrase of the non-experiencer argument in the SE structure is the preposition *me* 'with'. A psych verb structure has the stative reading when the following are true: (i) the aspectual value of the verb is atelic, (ii) the process described by the verb is unbounded, (iii) it has an internal structure, (iv) the grammatical aspect of the verb is non-perfective, (v) the non-experiencer argument has the θ -role of the object of emotion, as described by Pesetsky (1995), (vi) clitic doubling of the experiencer in the object position and in accusative case is obligatory, (vii) there is no change of emotional state in the experiencer, (viii) the non-experiencer argument in the subject position is [-volitional], and (ix) the preposition which introduces the prepositional phrase of the non-experiencer argument in the SE structure is the preposition *ja* 'for'.

In this section, I presented the three readings that psych verbs can have and discussed the psych causative alternation displayed by OE verbs that undergo a change of state. Also, I elaborated more on the semantic and syntactic features of psych verbs that determine the verb's structure and reading. In this process, I supported the claim made by Arad and Alexiadou & Iordachioaia that the change-of-state alternating psych verbs form a subclass of the causative alternation in Greek. Besides employing the typical morphology found in the causative alternation, the non-agentive causer is realized with unambiguous prepositional phrases and both OE and SE cognates of the pair have a complex event structure made up of an event and a state.

More generally, the facts described above about psych verbs which alternate their syntactic structure from OE to SE show that there is a systematic relationship between the aspectual value of the verb, the prepositional marking of the arguments in the SE structure and the event structure of the verb. Consequently, as Arad concludes, the aspectual properties of a psych verb influence the argument realization of its arguments.

5. Conclusion

In the previous sections I proposed a new classification for Greek psych verbs based on the morphological marking of the voice and the syntactic realization of the verb's arguments. Also, I described the semantic and syntactic behavior of Greek psych verbs which can alternate their syntactic structure from OE to SE and I concluded that there are certain facts which enrich the claim made, among others, by Arad (1996, 1998a, b, 2002) and Alexiadou & Iordăchioaia (2014) that aspectual features influence the syntax of psych verbs. Therefore, this description of Greek psych verbs draws an important connection between the two well-documented but independently addressed issues in the previous studies on psych verbs: their aspectual ambiguity and the syntactic realization of the verb's arguments.

Finally, in the future I plan to study psych verbs structures in real authentic texts extracted from corpora in order to elaborate more on the way the interaction between aspectual features of psych verbs and their syntax is manifested in Greek data and to create a typology for these verbs.

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