

## **“A cross-linguistic perspective on the Greek perfect”**

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### 1. Introduction

The PERFECT has been a topic of extensive academic research, since it constitutes a puzzling issue in various linguistic aspects, regarding either typology or semantic-pragmatic meaning. From a typological standpoint, the PERFECT usually involves the possessive construction, e.g. “have” + ‘past participle’ (Dahl & Velupillai, 2013), yet its syntactic behavior is not clearly defined either as a prototypical type of aspect nor as a prototypical kind of tense, as it seems to bear features of both categories.

The PERFECT gram can have configurations for all the three main time dimensions, past (Past Perfect), present (Present Perfect) and future (Future Perfect). Despite the fact that the future and the past perfect seem to have clear-cut uses cross-linguistically, this does not hold for the present perfect construction. From now on, our discussion focuses only on the grammatical construction of the present perfect, which from now on I will refer to as ‘perfect’.

From a semantic-pragmatic perspective, some readings/functions of the perfect have been documented to occur on a cross-linguistic level (Dahl, 1985). However, there seems to be a great variation regarding the perfect use outside of these ‘cross-linguistic perfect’ readings, as some versions of the perfect, like the French *Passe Compose*, exhibits uses that are more similar to those of a perfective past than to those of a perfect (Lindstedt, 2000). On the other hand, Greek is a language, where most of the ‘cross-linguistic perfect’ functions can be conveyed either by a perfect (*Parakimenos*) or by a perfective past (*Aorist*) construction (Moser, 2003). This paper aims to answer the question of whether there is a use/function that is conveyed strictly by the perfect cross-linguistically. The focus is drawn on Greek, due to the aforementioned interchangeability between the *Aorist* and *Parakimenos* constructions.

In Section 2, I present the existing literature on the perfect and I introduce a new terminology, which will be helpful for our discussion of the perfect on a cross-linguistic level. In Section 3, I go through the methodology that was implemented for the corpus research in this paper, while in Section 4, I present and discuss the results of the used

corpora from a quantitative and a qualitative point of view. In Section 5, I argue that the perfect tense can only be determined in relation with the past and the present tenses and this is the reason why it has been a linguistic form, which has been unstable and hard to define cross-linguistically. Section 6 serves as the conclusion of this paper.

## 2.Theoretical background

### *2.1. Introduction*

It has been claimed that the primary use and meaning of the perfect is to express the anteriority of an event with respect to a reference time, which in our discussion is identified as the time of speech. Some readings of the perfect that are deemed to be valid cross-linguistically are the following:

#### **Resultative/Stative Perfect:**

- 1) Mary has *already* arrived

#### **Existential (Experiential) Perfect:**

- 2) I have *never* been to Paris.

#### **Continuative (Universal) Perfect:**

- 3) Mary has lived in London *for* five years.

#### **Recent past ('Hot news') Perfect:**

- 4) The Orioles have *just* won

It has been argued that the perfect is a cross-linguistic category and the prototypical perfect uses found cross-linguistically are the resultative and the existential readings (Dahl, 1985). What is more, the existential readings, which can be found in construction other than the perfect in some languages, usually occur in non-affirmative contexts, such as questions or negations (example 2).

Attempts for semantic definition of the perfect have also taken into account the contexts in which the perfect cannot be used. For example, a fundamental feature of the perfect is that it cannot be modified by definite temporal adverbials that refer to past eventualities (example 5).

- 5) \* Maria has left at six o'clock

Instead, the present perfect can co-occur with temporal adverbials that express past eventualities in relation with the time of speech (*already, yet*) or adverbials that express unbounded situations/states (*for, since, still*). This is evident when looking at examples (1) and (3) respectively.

## 2.2 Perfect theories

Plenty of theories have been developed in order to explain the central meaning of the perfect construction cross-linguistically. What these theories have in common is that due to the fact that the perfect has such a broad usage, each of the theories focuses in a specific feature of the perfect and try to account for it on the basis of syntactic, semantic or pragmatic arguments (Ritz, 2012). In this paper, we are going to focus on the most influential semantic theories of the perfect, such as the Extended Now (XN) and the Result State theory.

The XN theory states that the semantics of the perfect tense involves a time interval that extends from the event time (E), specifically from the moment that an eventuality occurs until the time of speech (S) (now), which also coincides with the reference time (R) of this event (Portner 2003, Iatridou et al., 2003 to name a few). In a simple Reichenbachian time axis, the theory can be represented in Picture 1 below:



Picture 1: Representation of the XN interval of the Perfect in the time axis

However, there is a problem when the perfect is used with non-stative verbs which refer to time intervals that do not last until the moment of speech (example 6).

- 6) Since 2012, Mary has moved to another house and I have changed jobs.

On the other hand, the “result state” theory postulates that the perfect operator will coerce a non-stative verb into a result state, after the completion/culmination of the eventuality that the verb expresses (Moens & Steedman, 1988). For instance, in (1) the past eventuality of reading *Middlemarch* was eventive until its completion (event time). In the time of speech (reference time), it is viewed as a completed event, thus as a

resultative “perfect state”. However, this framework cannot account for instances of the perfect that do not express a temporal precedence of the eventuality or when a result state cannot be inferred, as in the experiential uses of the perfect (example 7).

7) It has snowed twice already this year

The fact that the previously mentioned theories could not account for all the various uses of the perfect in a unified way has led researchers like Nishiyama & Koenig (2010) to claim that the temporal semantics of the perfect is underspecified. Instead, they enrich the “perfect state” theory of the Discourse Representation Theory (DRT) framework (Kamp & Reyle, 1993) with pragmatic principles/constraints. In particular, they attempt to describe the uses of the perfect based on the pragmatic inferences of a sentence in perfect, by adding the “perfect state” as a free variable. The mechanisms for providing the pragmatic inference are based on the informativeness or I-principle (Levinson, 2000), where a speaker chooses the less informative utterance if there is a choice, and the hearer enriches it to derive the most specific information, based on world knowledge. For example, sentence (8) can have two different readings and the interpretation chosen is based on the pragmatic context.

8) Ken has broken his leg. (= q)

a) Ken has broken his leg and as a result Ken’s leg is broken

(Lexically entailed resultative perfect reading) (p)

b) Ken has broken his leg and as a result Ken is behind in his work

(Con conversationally implicated resultative reading) (p’)

What is more, Nishiyama & Koenig (2010) did a corpus research on the use of the English present perfect in various contexts of discourse, e.g. newspapers, novels and conversations. What they found was that the perfect serves several discourse functions, such as introduction and negotiation of a topic, which goes against the assumption that the perfect provides an answer to a presupposed question (Portner, 2003). In the following section, we discuss if these features can also be found in perfect constructions cross-linguistically.

### 2.3. *The Perfect cross-linguistically*

As mentioned earlier, a vital feature of the perfect is that it is not compatible with definite past time adverbials, since the reference time is overlapping with the speech time, as noted in example (5), repeated here as (9a). This is a significant restriction for the occurrence of the English perfect, but the perfect configurations in French (9b) and Dutch (9c) allow this without a problem.

9a) Maria (\*has) left at six o'clock

9b) Maria est partie à six heures.

9c) Maria is om zes uur vertrokken.

To make matters worse, languages like French and German have a more liberal use of the perfect compared to the English one, as it can be licensed for narration of (definite) events without a problem. In fact, *L'etranger* written by Camus is a novel which uses the French perfect in order to narrate a story of the past. This fact is contradictory to Lindstedt's (2000) claims that the perfect cannot be used as a narrative tense.

De Swart (2007) has delved into this problem by comparing translations of *L'etranger*, which uses the French perfect as a narrative tense. The narrated parts of the perfect are analyzed with the help of the Segmented Discourse Representation Theory (SDRT), developed by Lascarides & Asher (1993) and it is concluded that the sentences in the perfect are linked with the rhetorical relations of Continuation and Elaboration, which are neutral to temporal ordering. In addition, it is shown that languages like French and German allow a temporal relation between eventualities, unlike English or Dutch for example, thus narration becomes possible. This is also the case for World Englishes; Ritz (2010) has noted the use of the English present perfect in narrations in spoken Australian English discourse, which make the narration more vivid.

Schaden (2009) classifies languages according to tense selection regarding past-time reference, using the parameter of 'semantic markedness' as a criterion. What is more, he accounts for this puzzle by proposing a competition-driven theory, according to which the uses of the perfect compete with the uses of the simple past across languages (i.e. narrativity in our case).

It is evident that there are various ways that we can look at the problem of the perfect in a cross-linguistic sense. The issue of a prototypical perfect that most studies attempt to resolve is by investigating either English, as an example of a language with

a restricted perfect use, or generally languages with a broad perfect distribution (French & German). What all these languages have in common is that the distribution of the perfective past rarely overlaps with the perfect distribution. However, it has been noted that there is an underlying competition regarding tense use in Greek (Moser, 2003; Dahl & Hedin, 2000), as the Aorist can replace the perfect in several contexts with little or no change in meaning. It is therefore vital to focus on the Greek language and attempt to delve into this issue.

#### 2.4. *The Greek Perfect*

The Greek perfect construction involves the use of the possessive auxiliary verb “exo” (“have”) and the perfect participle (“diavasi”) in (10). The latter is a non-finite form and bears a non-past perfective morphological marking<sup>1</sup>.

##### *Resultative*

- 10) O Yanis **exi** **diavasi** to Middlemarch  
 The Yanis have.3SG.PRES read.PFV.PTCP the Middlemarch  
 ‘John has read Middlemarch.’

Compared to the four aforementioned “prototypical” uses (examples 1-4) established for the English perfect (Portner, 2003; McCoard, 1978 among others), the only available uses of the Greek perfect are the resultative (10) and the existential reading (11).

##### *Existential*

- 11) **Exo** **taksidesei** stis IPA dio fores  
 Have.1SG.PRES. travel.PFV.PTCP at.the USA two times  
 ‘I have traveled/been in the USA twice.’

The perfective aspect of the perfect participle does not allow any continuative reading of the perfect (Iatridou et al., 2003; Tsouloucha 2017). Instead, Greek licenses the present tense construction for this perfect reading (12).

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<sup>1</sup> The perfect participle of a verb is identical with the third person singular of the perfective infinitive (Holton et al., 2004).

*Continuative*

- 12) I Maria **zi** sto Londino edo ke pente xronia  
 The Maria live.3SG.PRES. in.the London for five years  
 ‘Mary has lived in London for five years.’

Regarding the recent past reading, Greek mostly prefers the perfective past/aorist construction (13) (Moser & Bella, 2003).

*Recent Past*

- 13) I Tselsi molis **nikise**.  
 The Chelsea just win.3SG.PST.PFV  
 ‘Chelsea has just won.’

However, the Perfect has been purported to be used in very rare circumstances, such as oral narrations, which use the ‘historical Present’ as the main narrative tense (14) (Tsouloucha, 2017).

*Recent Past*

- 14) Prospiume pos molis **exo** **vgi**  
 Pretend.1SG.PRES that just have.1SG.PRES exit.PFV.PTCP  
 apo to grafio tou dikigoru,  
 from the office of.the lawyer  
 ‘I pretend to have just walked out of the lawyer’s office.’

The perfect configuration in Greek can thus be licensed only for the resultative and the existential use. Tsouloucha (2017) studied the use of the Greek perfect in both oral and written Greek corpora and adopted the account of Nishiyama & Koenig (2010) in order to analyze her findings. She divided the perfect uses accordingly into three categories, the entailed resultative (ER), the implicated resultative (IR) and the non-resultative/existential (NR) reading and found out that most perfect constructions had an ER reading, while the NR use was the least frequent one.

In an attempt to describe the semantics of the Greek perfect, Moser (2003) compares its use with that of the Aorist (perfective past). She claims that neither the

Aorist nor Parakimenos (Greek perfect) constitute prototypical cases of the universal typological forms they are part of; specifically, the Aorist has an even broader use than the usual Aorist/perfective past uses found across several languages (Thieroff, 2000), while Parakimenos has a very narrow distribution compared to the perfect uses cross-linguistically (Dahl & Velupillai, 2013). In fact, she observes that except for the existential reading, the uses of Parakimenos are interchangeable with the Aorist, without any difference in meaning (15).

- 15) Den iksera oti o papus tus  
 Not know.1SG.PST.IPFV that the grandfather their  
 exi pethani / pethane.  
 have.3sg.PRES die.PFV.PRCP/ die.3sg.PST.PFV  
 ‘I didn’t know that their grandfather has died/died.’

Sentences like (15) usually prefer a perfect rather than a preterite construction cross-linguistically. In an attempt to determine whether the interchangeability of Parakimenos with the Aorist can be resolved, we should not investigate sentences in isolation, but look at the pragmatic contexts that they occur. In fact, the comparison with a ‘prototypical’ cross-linguistic perfect would give us a better insight on this issue.

### 2.5. *Exploring the cross-linguistic perfect domain*

The overall aim of this paper is to study the uses of the Greek perfect in relation with the prototypical cross-linguistic perfect uses. The aforementioned ‘prototypical’ uses have been centered mostly around the uses of the English perfect, as they could not account for the broader distribution of the perfects in French, Dutch (example 9) and German. What are, therefore, the prototypical perfect uses, the instances where the perfect construction can be licensed across languages? In order to answer this question, we need to look at sources, which allow the comparison of the same instances in all languages, namely pieces of written/spoken language with available translations in other languages. The cross-linguistic comparison can be facilitated with the use of digital methods, namely multilingual/parallel corpora. One such existing corpus, for example is the Europarl corpus (corpus of European Parliament), which contains pieces of spoken language in all the official languages of the European Union. Regarding

written language, literary texts that have been translated into other languages can function as valuable sources of this cross-linguistic comparison.

As already discussed, Parakimenos constitutes a version of the perfect that deviates from the “prototypical” category, whose core is deemed to be the English version (Portner, 2003; Iatridou et al., 2003; Nishiyama & Koenig, 2010 to name a few). The question that arises, then, is which instances license strictly a perfect construction in Greek and how do these differ from such instances of a prototypical ‘cross-linguistic perfect’.

It should be mentioned that the languages that are inquired in this paper are seven: Greek as the focus of the paper, three Germanic (English, German, Dutch) and three Romance languages (French, Spanish and Italian). In line with the relevant literature (Dahl & Velupillai, 2013; de Swart, 2007 among others) it is assumed that English, Spanish and Greek are languages with a restricted use of the perfect, whereas the perfect in the remaining four languages has a broader distribution.

At this point, I introduce new terminology which is going to be crucial for our discussion further. A prototypical ‘cross-linguistic perfect’ cannot be defined, as the perfect is not a stable category cross-linguistically. What can be defined though for the sake of this study is the **cross-linguistic perfect context**, namely an instance which licenses the perfect construction for the vast majority of the tested languages. A sentence where there is perfect configuration in at least 5 of the 7 tested languages is named a **typical** cross-linguistic perfect context, while a **core** cross-linguistic perfect context is defined as a sentence where all languages license a perfect construction.

### 3. Methodology

In line with de Swart (2007), the most fitting source for tracing instances of the perfect cross-linguistically is the French novel *L’etranger* for several reasons. First of all, narration is moving forward with the use of the French perfect; this facilitates the comparison of the contexts in which the perfects can occur. Secondly, it is a famous literary text, which has been translated into many languages, thus there is abundant availability of official translations in languages other than the source language (French).

The original text and its official translations are converted into electronically readable documents and they are aligned according to the structure of the original text. The perfect forms from the source text are collected either by manual annotation or by

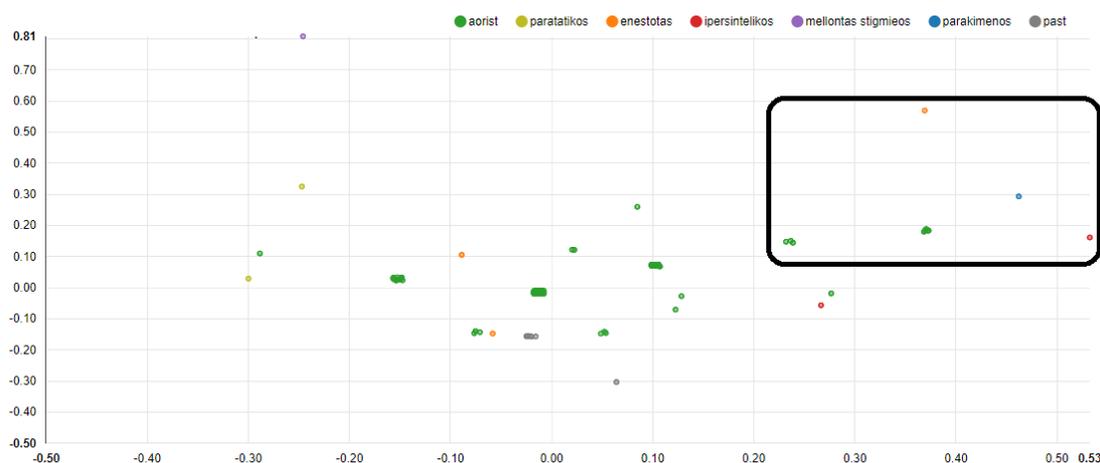
the PERFECT EXTRACTOR, an algorithm that can extract perfect forms automatically. Sentences that contain a perfect form in the source language are aligned with their translated equivalents in the aforementioned tested languages.

The results of the annotated corpora are available in the form of descriptive statistics (Table 1), as well as points in a semantic map (Picture 2). The semantic map is a result of (dis)similarity matrices: If certain instances are very similar regarding tense use on a cross-linguistic level, they will form a cluster in the map. The method adopted for the visualization of the data is called “Translation Mining” (van der Klis et al., 2017) and

Tense	Count
aorist	286
past	7
enestotas	3
ipersintelikos	2
paratatikos	2
mellontas stigmieos	1
parakimenos	1

Table 1: Descriptive statistics of the Greek tenses in *Passe Compose* contexts

is based on the Multi-Dimensional Scaling (MDS) proposed in Walchli & Cysouw (2012). What is crucial for the discussion of the results is that the variety of the tense selection has been marked in different colors among languages. Thus, the perfect is marked in blue, the perfective past in green, the imperfective past in yellow, the present in orange, the pluperfect in red and the past<sup>2</sup> in grey color.



Picture 2: Visualization of the Greek tenses in *Passe Compose* contexts in semantic map

<sup>2</sup> *Past* is a category that was created only for the Greek data. This applies to the verbs that do not have a morphological distinction between the imperfective and the perfective past forms (for further discussion see Horrocks & Stavrou, 2003; Τσαγγαλίδης, 2012).

## 4. Results

### 4.1. Camus corpus

The total *Passe Compose* contexts in the first three chapters of *L'etranger* were 302. The descriptive statistics of the tense selection for the Greek data in these contexts (Table 2), as well as the visualization of the data in the semantic map (see Picture 2 above) indicate that 'Parakimenos' is very rarely used (in fact, only 1 instance!). The *typical* cross-linguistic perfect contexts for the Camus corpus are 10 sentences and can be seen in the black domain of Figure

Aorist	7
Perfect	1
Pluperfect	1
Present	1

Table 2: Greek tenses for cross-linguistic perfect contexts (Camus corpus)

3. It is evident that these contexts were mostly translated into the Aorist. The following examples are *typical* cross-linguistic perfect contexts of the corpus and are presented in the following order: Greek (a), English (b), German (c), French (d), Dutch (e), Italian (f), Spanish (g). Example (15) licenses a Past construction, while (16) licenses the only perfect construction found in this corpus:

- 15a) Στη σκάλα , μου εξήγησε : « Τη **μεταφέραμε** στο μικρό μας νεκροθάλαμο .  
(**Past**<sup>3</sup>)
- b) On our way downstairs he explained , ' We **'ve transferred** her to our ' little mortuary.  
(Perf)
- c) Auf der Treppe hat er mir erklärt : « Wir **haben** sie in unsere kleine Leichenhalle **gebracht** .  
(Perf)
- d) Dans l' escalier , il m' a expliqué : « Nous l' **avons transportée** dans notre petite morgue .  
(Perf)
- e) Op de trap vertelde hij mij : ' Wij **hebben** haar naar ons lijkenhuisje **gebracht** .  
(Perf)
- f) Scendendo le scale , mi ha spiegato : " L' **abbiamo trasportata** nel nostro piccolo obitorio .  
(Perf)
- g) En la escalera me explicó : « La **hemos transportado** a nuestro pequeño depósito .  
(Perf)

<sup>3</sup> The tenses marked in bold constitute non-perfect configurations of the cross-linguistic perfect. The analysis of the examples in languages other than Greek are beyond the scope of this paper.

- 16a) Εδώ κι οχτώ χρόνια δεν **έχουν αλλάξει** διαδρομή . (Perf)
- b) In eight years they **haven 't changed** their route . (Perf)
- c) Seit acht Jahren **haben** sie ihre Route nicht **geändert**. (Perf)
- d) Depuis huit ans , ils n' **ont** pas **changé** leur itinéraire . (Perf)
- e) In al die acht jaar **hebben** zij hun wandelroute niet **veranderd** . (Perf)
- f) Da otto anni non **cambiano** il loro itinerario . (Pres)
- g) Al cabo de ocho años , no **han cambiado** de itinerario . (Perf)

(15) is a typical example of an entailed resultative reading in Nishiyama & Koenig's terminology, while (16) is an existential reading of the perfect. Moser's claim that the Aorist can replace the uses of Parakimenos except for the existential one seems to be confirmed.

Although *L'etranger* is a source for an abundance of perfect contexts in languages with a broad perfect distribution, this does not hold for the occurrence of cross-linguistic perfect contexts. The Camus corpus brought very few *typical* (10 occurrences) and no *core* cross-linguistic perfect contexts, compared to the total perfect instances of the source text (302 instances). This can be explained in terms of plain narrative temporal progression, divided by a limited number of dialogue, which was marked in quotation marks. French and German can license the use of the perfect in order to allow temporal progression in a narrative text, but that does not hold for Dutch and English, as noted by de Swart (2007). Instead, the latter group of languages license the perfective past construction for this purpose and narrate the story in a classical storytelling mode, without being able to capture the special flavor that the perfect in French and German convey. What is noteworthy though, is that most of the cross-linguistic perfect contexts found in the Camus corpus were instances of limited dialogue throughout the text, such as (15).

The first part of this research confirmed our hypothesis that the use of the Greek perfect is restricted, a view shared in Dahl & Velupillai (2013). In particular, the perfect shows the narrowest distribution in Greek than any other language tested in this corpus. Greek, thus, aligns better with English and Spanish as far as the uses of the Perfect are concerned, as these languages show a rather constrained use of this grammatical construction compared to the more liberal uses of the perfect in languages such as French and German (de Swart, 2007).

It could be argued that tenses which are used in a limited number of contexts, such as the French *Passé Simple*, have a tendency to eventually fall out of use. Despite the very rare instances of *Parakimenos* in the Camus corpus, this claim would be tenuous, as the literature surrounding the Greek Perfect provides a lot of uses (Tsouloucha 2017; Iatridou et al., 2003 to name a few). A follow-up corpus research is therefore necessary in order to determine the comparative semantic-pragmatic use of the perfect in cross-linguistic perfect contexts. However, there should be an inclusion of non-narrative discourse context (dialogue), which we assume is going to provide us with more information and feedback on the status of *Parakimenos*.

#### 4.2. *Harry Potter Corpus*

The selected source for the comparison of cross-linguistic perfect contexts is the book *Harry Potter and the Philosopher's Stone*. The selection of this book serves many purposes for our research.

To begin with, the Harry Potter books have been translated into many languages, so translations of the European languages that we focus are available. What is more, the original language of this book is English, which unlike French, has a more restricted use of the perfect. It is therefore expected that the results will indicate a noteworthy number of cross-linguistic perfect contexts, some of which will also be *core*.

The Harry Potter book is a narration of a mythical universe (narrative discourse) which provides a lot of instances with dialogue (non-narrative discourse). The existence of both discourse contexts can turn out to be a resourceful source for comparison regarding tense selection at the discourse level.

Last but not least, the Harry Potter book is much more contemporary unlike *L'etranger*. Consequently, the translations of the book will be much more consistent in terms of tense selection, since there is only one official translation per language. One significant problem that arose with *L'etranger* as a source was the existence of multiple translations in the same language. This can be grounded on the fact that the official translation might not represent the contemporary language use anymore or the special writing style of Camus, that resembles a diary. On the contrary, the Harry Potter book is written in the classical storytelling way, namely following a logical temporal sequence of the events.

### 4.2.1 Results

For the study of the Harry Potter corpus, we looked in more detail at two sample chapters, the first one and the last one. The Harry Potter corpus research revealed several interesting results regarding the occurrence of the Perfect cross-linguistically.

First of all, it should be noted that no instances of the perfect configuration were found in the narrative discourse context for any language. This finding indicates that at least at the level of written discourse, the perfect is a non-narrative tense in the typical sense (Lindstedt, 2000), namely that it cannot be used to narrate a story in the classical temporal anaphoric sequence that is discussed in Partee (1984). It is also implicated that the writing style of Camus in *L'etranger* provides an odd reading experience to the readers of the original text due to the exceptional use of the perfect in narration. On the contrary, the readers of the translated versions, where the perfective past is adopted for the main narration of the story, will not have this experience.

The non-narrative discourse (dialogue) context is in this case, the only discourse type for determining the perfect cross-linguistically. The statistics for each tested language can be found in Table 3. The numbers depicted in the table confirm the more liberal use of the perfect in the top languages (French, Italian, German) and the more restricted use in the bottom languages (Spanish, English,

Language	Perfect instances
French	77
Italian	75
German <sup>4</sup>	59
Dutch	49
English	22
Spanish	17
Greek	6

Table 3: Instances of perfect cross-linguistically in HP corpus

Greek). It is noteworthy that the Greek language shows much fewer instances of the perfect compared to English and Spanish which also license the perfect in limited contexts. The fact that Greek is an outlier regarding the restricted use of the perfect has therefore been confirmed in both corpus studies of this paper.

The total cross-linguistic perfect contexts found were 19: 17 *typical* and 2 *core*. In fact, there were 6 instances where all languages had a perfect construction except for

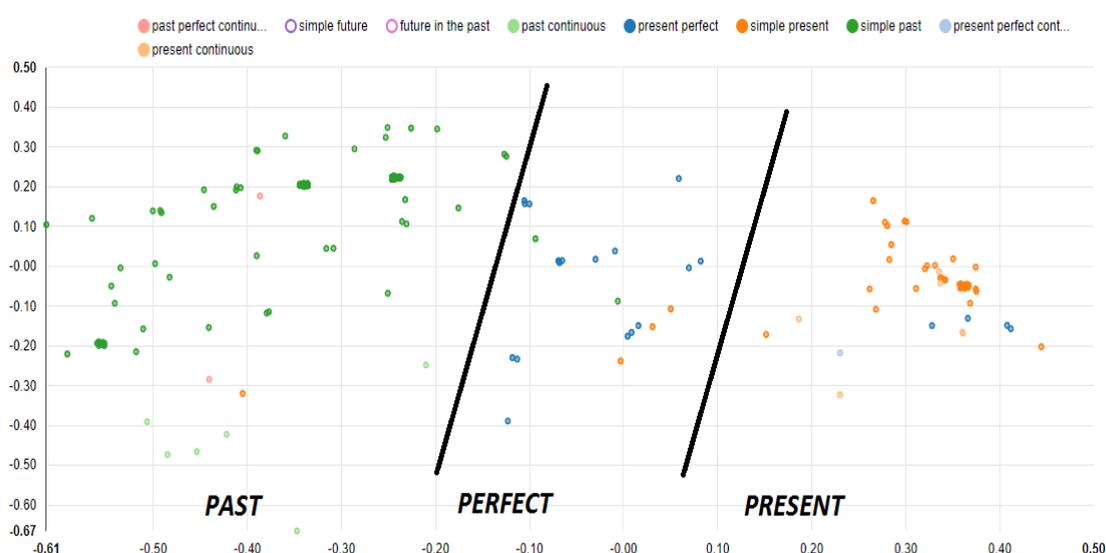
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<sup>4</sup> German is not included in the formation of the semantic maps in Pictures (3-5), that are discussed on the next pages.

Greek which opted for the Aorist (4) or for the imperfective past (2). I look further at these examples as well as the 2 instances of *core* cross-linguistic perfect contexts and I also discuss those in later sections.

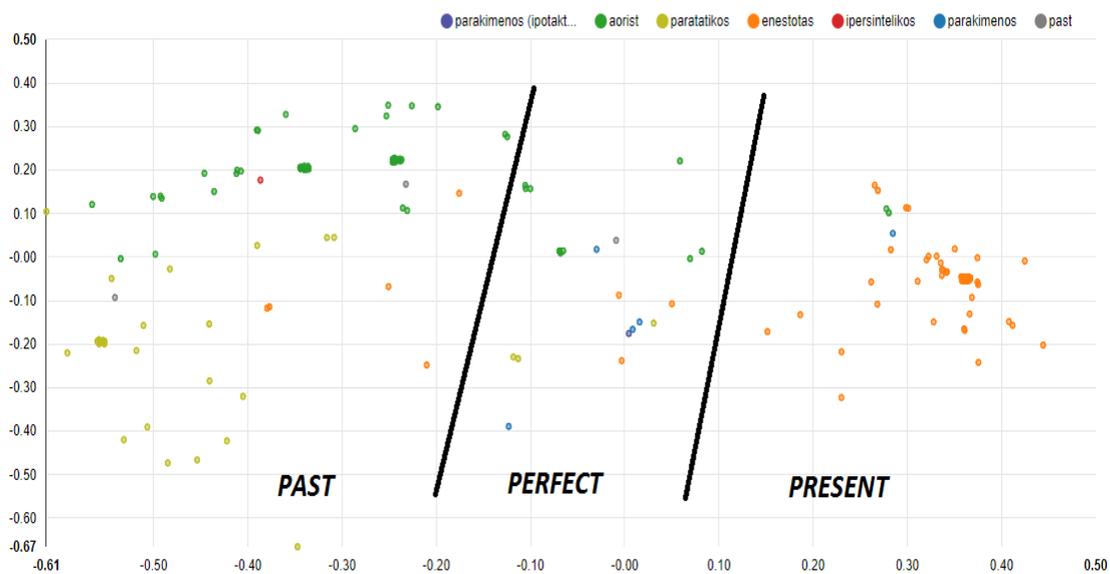
In spite of the fact that the statistics give a rough overview of the question in discussion, the visualization of the cross-linguistic variation of the perfect in semantic maps provides an innovative insight in the comparison of this variation. In fact, most dots of the same color appear at a specific part of the map, creating clusters. This gives us the opportunity to speak of assumed ‘prototypical’ TENSE domains of use. The PERFECT is the domain where all the cross-linguistic perfect contexts were found and it is the link between the PRESENT and the PAST domains. The demarcation lines of the domains in the following semantic maps are drawn based on the place of occurrence of the cross-linguistic perfect contexts.

The semantic map of English (Picture 3) shows that the English perfect is very similar to an alleged ‘prototypical’ perfect, since it is mostly licensed within the PERFECT domain (blue dots). Still, it is evident that there are perfect constructions in English that belong to the PRESENT domain.



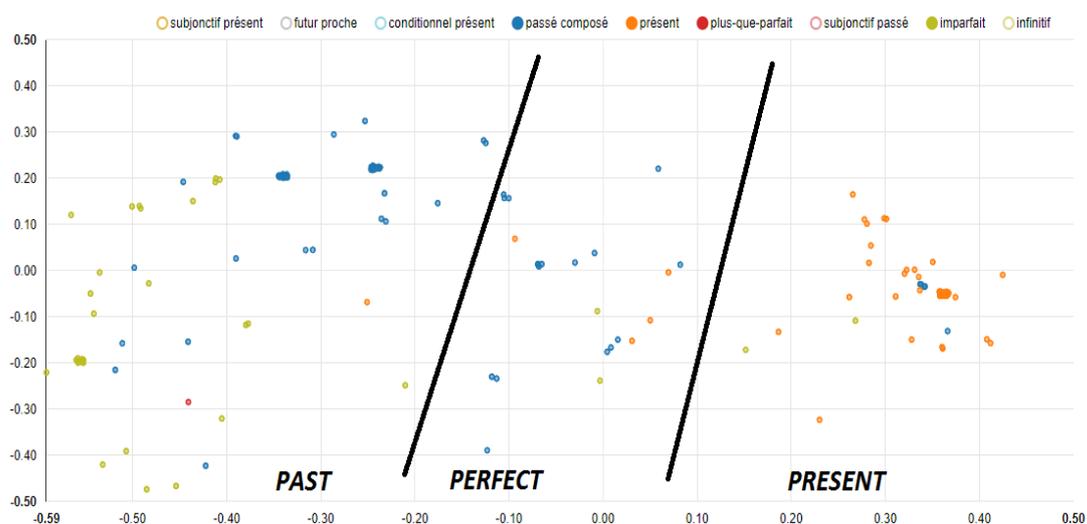
Picture 3: Semantic map of dialogue instances in HP corpus for English

The semantic map of Greek (Picture 4) and French (Picture 5) are completely different from each other. What happens in Greek, is that the Aorist (green dots) takes up most of the PERFECT domain, while the perfect instances are barely visible.



Picture 4: Semantic map of dialogue instances in HP corpus for Greek

On the contrary, in French the perfect instances are not only constrained in the PERFECT domain, but they are frequently used in the PAST domain, as well. It can be stated that the perfect (Passe Compose) has replaced the use of the perfective past (Passe Simple) in dialogue, as there were no instances of the latter in this context (Picture 5).



Picture 5: Semantic map of dialogue instances in HP corpus for French

If we pay closer attention at the semantic maps of the languages with the most (French), the least (Greek) and the average (English) perfect instances it is evident that there is

an underlying competition. The competition regarding the division of labor between the perfect and the perfective past is clear for languages like Greek and French, while the competition between the perfect and the present is more subtle for English. In the following section, I will offer an analysis of the cross-linguistic perfect contexts and we can see whether this competition can be noted in other languages as well.

#### 4.3 Analysis

The focus of this section is to look in more depth at cross-linguistic perfect contexts, which occur at the PERFECT domain in my attempt to describe the Greek perfect. In section 4.3.1, I examine the *core* perfect contexts found and try to establish a common ground for all perfects. In section 4.3.2 & 4.3.3, I look at the *typical* perfect contexts, where Greek opts for the Aorist, in order to compare the uses between Parakimenos and the Aorist in Greek in a sentence level (4.3.2) and in a discourse level (4.3.3). In section 4.3.4, I present the *typical* perfect contexts, where Greek does not license a Parakimenos or an Aorist construction.

##### 4.3.1 Discussion of Greek Perfect examples

Let us first have a look at the *core* cross-linguistic perfect contexts. the sentences that allow a Perfect configuration for all languages. These instances are 2 and consist of one existential and one resultative reading.

Sentence (17) is an existential perfect reading, which is mostly found on non-assertive contexts (Dahl, 1985). This is an example of a negative existential Perfect with the addition of the negative marker *never* occurs in all languages. It should also be noted that a case of negative existential reading was the only configuration of the Greek Perfect attested in the Camus corpus (see example 16 above).

- 17a) Αγαπητή μου καθηγήτρια! Ποτέ δεν **έχω ξαναδει** γάτα να κάθεται τόσο ακίνητη.  
(Perf)
- b) My dear Professor, I **ve never seen** a cat sit so stiffly (Perf)
- c) Mein lieber Professor, ich **habe** noch nie eine Katze so steif dasitzen **sehen**.  
(Perf)
- d) Mon cher professeur, je n' **ai jamais vu** un chat se tenir d' une manière aussi raide.  
(Perf)
- e) M'n beste professor , ik **heb** nog nooit een kat zo stijfjes **zien** zitten . (Perf)

- f) Ma, mia cara professoressa, non **ho mai visto** un gatto seduto in una posa così rigida. (Perf)
- g) Mi querida profesora , **nunca he visto** a un gato tan tieso . (Perf)

In Nishiyama & Koenig's (2010) terminology (18) is an example of an entailed resultative reading, namely that the perfect reading entails a resultant stative element X. Thus, the entailed resultant state X is *He (Voldemort) ceased to exist*<sup>5</sup>.

- 18a) Τουλάχιστον , Ντάμπλντορ , ελπίζω ο Ξέρεις-Ποιος **να έχει** πραγματικά **εξαφανιστεί**.. (Perf)
- b) I suppose he really **has gone**, Dumbledore ? (Perf)
- c) Ich nehme an , er **ist** wirklich **verschwunden**, Dumbledore? (Perf)
- d) J' imagine qu' il **a** vraiment **disparu** , n' est-ce pas , Dumbledore ? (Perf)
- e) Hij **is** toch echt **verdwenen** , Perkamentus ? (Perf)
- f) Ma siamo proprio sicuri che se n' **è andato** , Silente ? (Perf)
- g) Porque realmente **se ha ido** , ¿ no , Dumbledore ? (Perf)

It can be claimed that Parakimenos is in a subset relation of an alleged set of cross-linguistic perfect uses, which is supported by our findings in the Camus corpus (see discussion in section 3.2 earlier), as well as the Harry Potter corpus (see Table 3). Since the *core* perfect contexts constitute a tiny sample size and we cannot draw any sound conclusions, we should relax our criterion of *coreness* and look at perfect contexts, that are almost *core*, i.e. instances of 6 perfect distributions in 7 languages. Due to our focus on Greek, the perfect contexts that are useful are the ones whose only different distribution is in a language other than Greek. Besides, there is an extended discussion on the different distribution of Greek in *typical* perfect contexts in the following sections (4.3.2 & 4.3.3)

The contexts that meet the criteria are three, two resultatives and one existential reading. (19) is an example of an entailed resultative reading and the resultant state X that is entailed is the same as (18), i.e. *He (Voldemort) is gone*. The present tense construction in German (19c) focuses only on the result state, which holds during the time of utterance.

<sup>5</sup> The meaning of *has gone* is translated to *disappear* in Greek and the overall meaning is that “he does not exist anymore”.

- 19a) Όπως έλεγα , όμως , ακόμη κι αν ο Ξέρεις-Ποιος **έχει** πραγματικά **εξαφανιστεί** ... (Perf)
- b) As I say , even if You-Know-Who **has gone** – (Perf)
- c) Wie ich schon sagte , selbst wenn Du-weißt-schon- wer wirklich fort **ist**- (Pres)
- d) Je vous disais donc que même si Vous-Savez-Qui **est** vraiment **parti** ... (Perf)
- e) Zoals ik al zei , zelfs als Jeweetwel inderdaad **is verdwenen** – (Perf)
- f) Come dicevo , anche se Lei-Sa-Chi se ne **è andato** veramente ... (Perf)
- g) Como le decía , aunque Quien-usted-sabe **se haya ido** .. (Perf)

(20) is an example of a conversationally implicated resultant state. The resultant entailed state  $X = a \text{ letter is written}$  is also available, but the perfect has a pragmatic function in this sentence. In fact, a possible implicated resultant state  $X' = \text{Everything is explained in the letter}$  is different than the entailed  $X$  and can be inferred by the reader with the help of the given contextual information (excerpt 21).

- 20a) Τους **έχω γράψει** ένα γράμμα . (Perf)
- b) I **ve written** them a letter . (Perf)
- c) Ich **habe** ihnen einen Brief **geschrieben** . (Perf)
- d) Je leur **ai écrit** une lettre . (Perf)
- e) Ik **heb** ze een brief **geschreven** (Perf)
- f) **Ho scritto** loro una lettera (Perf)
- g) Les **escribí** una carta (Pret)

(21) *‘It’s the best place for him,’ said Dumbledore firmly. ‘His aunt and uncle will be able to explain everything to him when he’s older. **I’ve written them a letter.**’*

Last but not least, (22) is a negative existential perfect reading:

- 22a) Γιατί **έχω γίνει** κατακόκκινος κι αυτό **έχει να** μου **συμβεί** από τότε που η κυρία Πόμφρι μου είπε πόσο της άρεσε ο σκούφος μου ... (Perf)
- b) I **haven't blushed** so much *since* Madam Pomfrey told me she liked my new earmuffs. (Perf)
- c) So rot **bin** ich **nicht** mehr **geworden** , *seit* Madam Pomfrey mir gesagt hat , ihr gefielen meine neuen Ohrenschtützer . (Perf)
- d) Je n' **ai jamais** autant **rougi** *depuis* le jour où Madame Pomfresh m' a dit qu' elle trouvait

- mes nouveaux cache-oreilles ravissants . (Perf)
- e) Ik **heb niet** meer zo **gebloosd** *sinds* madame Plijster zei dat ze mijn nieuwe oorwarmers zo mooi vond . (Perf)
- f) **Non arrossivo** tanto *da quella volta* che Madama Chips mi disse quanto le piacevano i miei nuovi paraorecchi. (Imp)
- g) **No me he ruborizado** tanto *desde que* la señora Pomfrey me dijo que le gustaban mis nuevas orejeras . (Perf)

However, this is a puzzling example for Greek, since it is the only language that does not have a negated construction (negation in bold), although all translated elements have the adverbial ‘since’ (italics). Let us look at (23), which is the glossing of the Greek example in (22a):

23)	Γιατί	<b>έχω</b>	γίνει	κατακόκκινος	κι	αυτό
	Because	have.1SG.PRES	become.PFV.PRPCP	very.red	and	that
	<b>έχει</b>	<b>να</b>	μου	<b>συμβεί</b>	<i>από τότε</i>	που ....
	have.3SG.PRES	to	to.me	happen.3SG.PFV.INF	since	when...

‘Because I have blushed a lot and this hasn’t happened to me since...’

Apparently, for the Greek example (23), it can be stated that there are two perfect constructions that need to be spelled out in order to convey the meaning of the English original (22b). The first perfect construction (*έχω γίνει*) follows the regular morphological paradigm that was introduced in section 2.4 and its reading is an implicated resultant state.

The second grammatical construction (*έχει να συμβεί*) raises a typological problem for Greek. Although in this sentence it can be translated as a negative existential perfect in English, it can have two possible readings depending on the context. This morphological paradigm (have to + perfective infinitive) is used mainly with a modal function in order to mark obligation (same as in English). It can also be

used to convey a tense function, specifically conveying a negative existential perfect reading (as in this case) <sup>6</sup>.

The fact that a construction without a negative construction or marker is used to convey a negative reading is really puzzling. For this reason, I assume that it can be used in cases where the experience/realization of the denoted event is presupposed to occur at least once.

It is strange that all languages license one perfect construction, while Greek, opts for two. As Nishiyama & Koenig (2010) state, some existential readings may fall either to the category of non-resultatives or to the category of the implicated resultative perfect readings. For the case of the 5 languages that license perfect constructions, it can be claimed that there is a result state that is not entailed, therefore it can only be implicated by pragmatic knowledge ( $X' = I \text{ am blushing}$ ). However, in Greek the same result state  $X'$  is entailed by the first perfect configuration, i.e. in (23), the gloss '*I have become red*' entails the result state  $X = I \text{ am blushing}$ <sup>7</sup>. The second perfect construction conveys the negative existential reading of the original in English and has a non-resultative reading.

#### 4.3.2 Discussion of Aorist examples

The generated semantic maps (Pictures 3-5) of the dialogue instances indicate that the perfect tense is in constant competition with either the present or the past tenses, regarding its use. The competition with the perfective past is more obvious, especially when focusing on the Greek language, where the Aorist and the Parakimenos construction compete in cross-linguistic perfect contexts (Table 4). The examples that are going to be presented will emphasize on the similarity of these contexts.

	Tense	Perfect	Aorist
Perf. Use			
Resultative		3	9
Existential		2	1
Total		5	10

Table 4 : Tense selection in cross-linguistic perfect contexts and their perfect use in Greek

<sup>6</sup> Based on my intuitions as a native speaker, the tense function is mostly for negative existential perfect readings, like (22). To my knowledge, there is no literature discussing this extensively.

<sup>7</sup> It can be supported that it is a matter of lexical semantics, since 'blushing' in Greek is viewed as a telic event, whose final endpoint is the result state of 'blushing', i.e. the moment the face becomes red.

(20) (repeated here as (24)) is an instance of a cross-linguistic perfect context with a result state that is implicated through contextual factors (discussion in 3.3.1). For this context, Greek licenses a Parakimenos construction (24a), while the only language that differs is Spanish, that opts for a Preterite (24g).

- 24a) Τους **έχω γράψει** ένα γράμμα . (Perf)  
 b) I **ve written** them a letter . (Perf)  
 c) Ich **habe** ihnen einen Brief **geschrieben** . (Perf)  
 d) Je leur **ai écrit** une lettre . (Perf)  
 e) Ik **heb** ze een brief **geschreven** (Perf)  
 f) **Ho scritto** loro una lettera (Perf)  
 g) Les **escribí** una carta (Pret)

(25) is a cross-linguistic perfect context with an entailed result state ( $X = I \text{ have come}$  entails  $I \text{ am here}$ ). Greek opts for an Aorist construction, while Dutch licenses a Present construction.

- 25a) **Ἦρθα** για να φέρω τον Χάρι στο θείο και τη θεία του . (Aor)  
 b) I **ve come** to bring Harry to his aunt and uncle (Perf)  
 c) Ich **bin gekommen**, um Harry zu seiner Tante und seinem Onkel zu bringen. (Perf)  
 d) Je **suis venu** confier Harry à sa tante et à son oncle (Perf)  
 e) Ik **kom** Harry afleveren bij zijn oom en tante (Pres)  
 f) **Sono venuto** a portare Harry dai suoi zii (Perf)  
 g) **He venido** a entregar a Harry a su tía y su tío (Perf)

Contra to Moser (2003), the Aorist can be licensed even in cases of existential perfect use (Table 4). Nevertheless, there is a strong relationship between the existential non-resultative reading and Parakimenos, in the analysis that follows.

(26) is a perfect context where the perfect is licensed in all languages, except for Greek, which opts for the Aorist. If we look at sentence (26) in isolation, it can be said to have two possible readings – a resultative and a non-resultative.<sup>8</sup>

<sup>8</sup> It can also be claimed that there is a Recent Past reading, yet this reading can be declined due to the lack of a recent past construction in French and Spanish, as well as the lack of the adverbial that marks it (*just*). The recent past reading is discussed in 3.3.5

- 26a) Γιατί ... γιατί κέρδισα το πρωτάθλημα για λογαριασμό του Γκρίφιντορ... (Aor)
- b) I - I've won the House Cup for Gryffindor . (Perf)
- c) Ich ... ich hab den Hauspokal für Gryffindor gewonnen . (Perf)
- d) J ' ai ... j ' ai fait gagner la coupe à Gryffondor. (Perf)
- e) Ik - ik heb de afdelingsbeker veroverd voor Griffioendor . (Perf)
- f) Io ... ho appena fatto vincere a Grifondoro la coppa del campionato. (Perf)
- g) Yo ... he ganado la copa de la casa para Gryffindor . (Perf)

In this case, however, the use of the Aorist in Greek blocks a non-resultative existential reading (e.g. *I have won once*). A Parakimenos construction in Greek would also make the two possible readings available, but unlike Aorist, the non-resultative reading would be favored. The following excerpt (27) reveals that (26) is a case of an entailed resultative reading ( $X = \textit{be the winner of the House Cup}$ ) and this result state is linked to the (unreal) present/time of utterance (*see*).

- (27) *Come here,' Quirrell repeated. 'Look in the Mirror and tell me what you see.'*  
*Harry walked towards him.*  
*'I must lie,' he thought desperately. 'I must look and lie about what I see, that's all.'* [...] *'Well?'* said Quirrell impatiently. *'What do you see?'*  
*Harry screwed up his courage.*  
*'I see myself shaking hands with Dumbledore,' he invented. 'I - I've won the House Cup for Gryffindor.'*  
*Quirrell cursed again.*

(17) (repeated here as (28)) is a *core* perfect context of a negative existential reading with a non-resultative reading, as it was discussed earlier.

- 28a) Αγαπητή μου καθηγήτρια! Ποτέ δεν έχω ξαναδει γάτα να κάθεται τόσο ακίνητη. (Perf)
- b) My dear Professor, I've never seen a cat sit so stiffly (Perf)
- c) Mein lieber Professor, ich habe noch nie eine Katze so steif dasitzen sehen. (Perf)
- d) Mon cher professeur, je n' ai jamais vu un chat se tenir d' une manière aussi raide. (Perf)

- e) M'n beste professor , ik **heb** **nog** **nooit** een kat zo stijfjes **zien** zitten . (Perf)
- f) Ma, mia cara professoressa, non **ho** **mai** **visto** un gatto seduto in una posa così rigida. (Perf)
- g) Mi querida profesora , nunca **he visto** a un gato tan tieso . (Perf)

(29) is also an example of a negative existential perfect context with a non-resultative and like (28), almost all languages use the negative adverbial *never*. It comes as no surprise that in French, where *never* is not used, the preferred construction is not the perfect; yet, Greek opts for an Aorist, despite the existence of *ποτέ*.

- 29a) Εγώ, προσωπικά, δε **βρήκα** ποτέ τον παραμικρό λόγο να μην τον λέω με το όνομα του: Βόλντεμορτ. (Aor)
- b) I **have** never **seen** any reason to be frightened of saying Voldemort 's name. (Perf)
- c) Ich **habe** nie **eingesehen** , warum ich Angst davor haben sollte, Voldemorts Namen auszusprechen . (Perf)
- d) Je ne **vois** aucune raison d' avoir peur de prononcer le nom de Voldemort. (Pres)
- e) Ik **heb** nooit **begrepen** waarom het zo beangstigend is om Voldemorts naam uit te spreken . (Perf)
- f) Non **ho** mai **capito** per quale ragione bisognasse avere tanta paura di pronunciare il nome di Voldemort. (Perf)
- g) Nunca **he encontrado** ningún motivo para temer pronunciar el nombre de Voldemort. (Perf)

Despite the fact that (28) and (29) are both negative existential perfect contexts, where *never* is also used, there is a small detail that distinguishes between the two. If we look more carefully at (28), it can be pointed out that in Greek, German and Dutch there is an adverbial (in bold). The adverbials ‘nog’ (Dutch) and ‘noch’ (German) can be translated as ‘still’, while the Greek morpheme/adverbial ‘ξανά’ can be translated as ‘again’. The use of this adverbial in these languages, as well as the use of the deictic comparative particle ‘so’ in all languages, implies that the negation of the occurrence of the event ( $e_1 = see\ a\ cat$ ) does not hold until the time of speech. Instead, in (29) the absence of these adverbials in these languages is an indication that the negation of the occurrence of the event ( $e_2 = find\ a\ reason$ ) holds indeed until the time of speech.

An equivalent translation of this examples in English would be the addition of the adverbial *before*, as presented in sentences (30a) and (30b):

30a) My dear Professor, I 've never seen a cat sit so stiffly (*before*)

30b) I have never seen any reason to be frightened of saying Voldemort 's name (#*before*<sup>9</sup>).

The difference between the presupposed meaning of these examples is presumably an indication of what kind of existential uses accommodate an Aorist rather than a Parakimenos construction. This issue needs to be discussed in more depth by future research.

#### 4.3.3. *Discourse-level competition*

Returning to the examination of the core perfect readings there are some interesting findings regarding the function of the perfect on the discourse level. For example, it has already been shown that (18) and (19) convey the same result state. As a matter of fact, they occur in the same discourse context, as can be noted in the following excerpt (31), which is a discussion between Professor McGonagall and Dumbledore both (18) and (19) are uttered by Professor McGonagall.

31) *'A fine thing it would be if, on the very day You- Know-Who seems to have disappeared at last, the Muggles found out about us all. I suppose he really has gone, Dumbledore?'*

*'It certainly seems so,' said Dumbledore. 'We have much to be thankful for. Would you care for a sherbet lemon?'*

*'A what?'*

*'A sherbet lemon. They're a kind of Muggle sweet I'm rather fond of.'*

*'No, thank you,' said Professor McGonagall coldly, as though she didn't think this was the moment for sherbet lemons. 'As I say, even if You-Know-Who has gone -'*

It is evident from the above excerpt that the *core* resultative perfect readings have a function that belongs to the pragmatic-discourse domain of repeating a topic that has

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<sup>9</sup> The symbol '#' indicates that the adverbial *before* changes the meaning of the sentence, as it presupposes the occurrence of the event, as discussed earlier.

already been introduced. This has already been brought up by de Swart (2007) and Tsouloucha (2017) in that the perfect cross-linguistically can be used in order to convey the rhetorical relation of Elaboration in Lascarides & Asher's (1993) SDRT framework.

However, the same discourse function can also be adopted by the Aorist in Greek (as well as the Preterite in Spanish) and more specifically even in the same sentence:

- 30a) Μετά απ' όσα **έκανε** ... τους ανθρώπους που **σκοτώσε** ... ο Βόλντεμορτ δεν κατάφερε να σκοτώσει αυτό το αγοράκι ; (Aor)
- b) After all **he 's done** ... all the people he **'s killed** ... he couldn 't kill a little boy? (Perf)
- c) Nach all dem , was er **getan hat** - nach all den Menschen , die er **umgebracht hat** - ,konnte er einen kleinen Jungen nicht töten ? (Perf)
- d) Après tout ce qu' il **a fait** ... tous les gens qu' il **a tués** ... il n' a pas réussi à tuer un petit garçon ? (Perf)
- e) Na alles wat hij **gedaan heeft** ... alle mensen die hij **heeft vermoord** ... kon hij één klein jongetje niet aan ? (Perf)
- f) Dopo tutto quel che **ha fatto** ... dopo tutti quelli che **ha ammazzato** ... non è riuscito uccidere un bambino indifeso ? (Perf)
- g) Después de todo lo que **hizo** ... de toda la gente que **mató** ... ¿ no pudo matar a un niño? (Pret)

Although the perfect cross-linguistically seems to have a specific function on the discourse level, this cannot be supported for Greek (and Spanish), as the same function can be conveyed with the use of the Aorist. This is another issue that needs to be discussed in future research.

#### 4.3.4 Extraordinary cases

Despite the evident competition between the perfect and the preterite forms in the cross-linguistic perfect contexts, there were few extraordinary cases that were found in the imperfective past, as in (31) and (32):

- 31a) Ε ... Πετούνια ... μήπως **είχε** τελευταία  
 Hmm.. Petunia.. (whether) **have.PST.IPFV.2sg** lately

τίποτα νέα από την αδελφή σου ;  
any news from the sister yours?

b) Er - Petunia , dear - you **haven't heard** from your sister lately , have you ?

32a) Μην ξεχνάς πως δεν **είχαμε** τίποτα να γιορτάσουμε  
Don't forget that not **have.PST.IPFV.1pl** nothing to celebrate  
τα τελευταία έντεκα χρόνια ...  
the last eleven years..

b) We **ve had** precious little to celebrate for eleven years

This can be explained on the grounds of the lexical semantics of the selected verb *exo* ('have'). This is a stative verb, which has a defective imperfective stem (Holton et al., 2004), therefore it can only allow tense configurations that formed with the imperfective stem. The perfect as well as the aorist construction license the perfective stem of the verb, thus the only available past construction for this verb is the imperfect in both instances.

#### 4.4. Recent past

Another reading that is frequently assigned to the perfect construction, especially to the English perfect, is that of the recent past (Portner, 2003; Mccawley, 1981 to name a few). From a historical linguistics perspective, it is interesting to note that Greek used to license the perfect for this function, as well, e.g. The famous *Eureka* by Archimedes is a recent past reading of the perfect. This reading holds for the perfect construction in English, but in languages such as French or Spanish, there is a distinct grammatical construction, which is used solely for this purpose.

Due to the absence of this construction in the Harry Potter corpus, an attempt to trace these readings was made by looking at the reporting verbs of the Europarl corpus. In more detail, I found the sentences marked with the French *Passe Recent* and looked at the selected tenses of their translations in English and Greek. Despite the small sample size, the tense selection is consistent for all the attested instances of recent past. Table 5 shows the number of the recent past instances and there is an example of this reading below in all three languages.

(33) is a typical example of a recent past reading. While in French, this is overt by the use of the *passe recent* (33c), in Greek (33a) and English (33b) the recent past is marked by the adverbials *μόλις* and *just* respectively.

Language	Tense	Instances
French	<i>Passe recent</i>	7
English	Present Perfect	7
Greek	Aorist <sup>10</sup>	7

*Table 5: Instances of recent past reading in Europarl corpus*

33a) Εσείς , κυρία Schreyer , *μόλις αναφέρατε* το Συμβούλιο λέγοντας πως υπήρξε κάποιο κράτος μέλος που αντιτέθηκε στη θέσπιση ενός Ευρωπαϊού Εισαγγελέα .

b) Mrs Schreyer , you *have just mentioned* the Council , saying that there was a Member State that opposed the creation of a European Prosecutor .

c) Madame Schreyer , vous *venez de citer* le Conseil en disant qu' un État membre s' est opposé à la création d' un procureur européen .

In line with the relevant literature, our findings suggest that this use of the perfect has been completely taken over by the Aorist over time. Nevertheless, there should be an extensive research on that function, as the focus on perfect research revolves mainly around the competition of the two forms regarding the resultative and the existential uses.

## 5.Discussion

The nature of our research facilitates the discussion of the competition of the perfect use in two different scopes, namely the comparison on a cross-linguistic level as well as within a language (Greek).

On a cross-linguistic level, our findings suggest that the use of the perfect is not always consistent across languages, as there are different criteria for the licensing of a perfect construction, either at a sentential or a discourse level. What is of utmost

<sup>10</sup> In fact, the selected tenses were two: Aorist and Past (see footnote 2 above). However, all these instances have a telic/bounded reading, therefore they can all be interpreted as an Aorist.

importance, though, is the fact that the domain of perfect uses (the PERFECT domain) constitutes a battlefield, since it is the link between the PRESENT and the PAST domains of tense.

The perfect tense is in constant competition mostly with the past tenses (Greek & Spanish), as well as with the present tenses (rare instances of the present) regarding the uses within the PERFECT domain in all languages with a perfect construction. This competition will never cease to exist, since a language will always go through various changes over time. As Lindstedt (2000) notes, there is a trend of the perfect in languages like French and Italian to be used like perfective pasts. However, this trend cannot be generalized for all languages, as our account on Greek supports. Instead, the outcome of this competition for Greek indicates that the perfective past (Aorist) behaves like a perfect in several occasions. Hence, a linguistic phenomenon, which is subject to language change, like the competition between the perfect and the perfective past is not unidirectional for all languages.

What can be concluded from the visualized data (see Pictures 3-5 in section 3) is that the competition between the perfect and the other tenses is not restricted in the PERFECT domain. As a matter of fact, in languages with liberal perfects (French, Italian) the competition between the perfect and perfective past tense is extended to the PAST domain. On the other hand, the case of the English perfect suggest that this battle can also extend to the PRESENT domain, as the continuative perfect reading suggests.

The data presented in this paper suggest that the Greek perfect shows the narrowest distribution among the 7 languages investigated by a wide margin (see Table 3 above).

Based on the perfect uses/readings suggested in the beginning of the paper, added with the terms used by

<b>Tense</b>	<b>Perfect readings/uses</b>
Enestotas [Present]	Continuative/Universal
Aorist/ (Parakimenos <sup>11</sup> )	Recent past/Hot news
Parakimenos/Aorist	(Implicated/Entailed) Resultative
Parakimenos/ (Aorist)	Non-resultative (Existential)

*Table 6: Tense selection for the prototypical perfect uses in Greek*

Nishiyama & Koenig (2010), the distribution of the perfect uses in Greek shows that

<sup>11</sup> Although there were no instances of recent past readings of Parakimenos in our study of the multilingual corpus, very rare examples have been attested in a monolingual corpus (see Tsouloucha, 2017)

the Greek perfect does not have a clear-cut use without the emergence of the Aorist (Table 6).

As earlier mentioned, due to the fact that Greek has the narrowest distribution of the perfect of the investigated languages, it can be purported that it is a subset of an alleged ‘prototypical’ cross-linguistic perfect. The fact that the Greek perfect does not have a temporal function which would deem the use of another tense as ungrammatical leads to the claim that a cross-linguistic PERFECT domain can be determined only in relation to the PRESENT and the PAST temporal domains of the languages tested.

As far as the perfect tense use is concerned, there are very few points that lead to the definition of a ‘cross-linguistic perfect’. First of all, it should be pointed out that the perfect tense cannot be used to replace the perfective past in a typical narrative context in written discourse, as our data from the Harry Potter corpus suggest. This shows how unusual was the storytelling in *L’etranger*. Another interesting finding of this paper is the underlying distribution of readings between the Aorist and Parakimenos in cases where there are more than one available readings in other languages, as in the examples (28) and (29), when found out of context. This might indicate an underlying central perfect reading that has not yet been brought to light; however, this is a topic that needs further and more detailed research.

## 6.Conclusion

In this paper, we focused at the case of the perfect tense in Greek, whose use has been thought to be interchangeable with the use of the Aorist in cases, where other languages license predominantly a perfect construction. For this reason, we searched instances in *L’etranger* and *Harry Potter and the Philosopher’s Stone*, which would favor the perfect use in the majority of languages and we compared those to Greek.

First of all, we can conclude that there are specific indications of what kind of linguistic environment might (dis)favor a perfect use cross-linguistically. Based on our results, the non-narrative discourse type (dialogue) is the linguistic environment that accommodates perfect tense use in all languages. On the contrary, the narration of events in a written classical storytelling way disfavored the perfect construction and instead opted for a simple/perfective past in all languages.

The visualization of the semantic maps has also provided some new insights on the study of the perfect use cross-linguistically. We have, thus, assumed ‘prototypical’ domains of tense use, based on the occurrence of the cross-linguistic perfect contexts,

in order to compare the deviation of the perfect use across languages. These domains indicate that the perfect tense is hard to define, since it is in constant competition with the past and present tenses. As a result of this competition, the perfect may behave like a perfective/simple past in some languages (e.g. French, Italian), while in others the perfective/simple past may behave like a perfect tense (e.g. Greek).

Regarding the competition between Aorist and Parakimenos in Greek, this study showed that the use of the former was more frequent than the use of the latter in cross-linguistic perfect contexts. Regarding their interchangeability in similar contexts, there were few instances which indicated that Parakimenos was favored in non-resultative perfect contexts. Further study of the Greek perfect from a cross-linguistic standpoint can shed more light not only on these preliminary conclusions, but also on the study of the perfect cross-linguistically.

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