



University of Cyprus  
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**BOUND MORPHOLOGY OF THE TURKISH  
LOAN VERBS IN GREEK:  
Morphological and Semantic Functions**

**Master Thesis**

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## **ABSTRACT**

The Greeks had historical contacts with their neighboring people, through intermarriage and mutual influences. The Greek-Turkish language contacts, however, were more intensive since for centuries Greece was part of the Ottoman Empire. The latter dominated Greece for almost five Centuries. During this period and due to the intensive contact, a plethora of Turkish vocabulary adopted and assimilated into the Greek, including nouns, adjectives, and verbs, which they are in use until the present days in standard Greek as well as in other dialectical varieties of Greek.

During the last two decades, the studies on Greek - Turkish language contacts have increased, mainly investigating the assimilation of the Turkish loanwords (nouns, adjectives, and verbs) in the Greek varieties of Minor Asia as well as in Standard Greek. However, the bound morphology of the Turkish loan verbs in Greek has not received a systematic attention in the Greek studies. Therefore, the following thesis aims to thoroughly investigate this generally neglected field.

**Keywords:** Language Contacts, Turkish Loan verbs, Bound Morphology

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## **Introduction**

### **Language Contacts in General**

From antiquity to the present day, humanity has been experiencing events and dramatic changes that have shaped the world. Migration, trade, warfare, neighboring countries all require contacts. Through contacts people share and transfer their ideas, habits, knowledge, traditions, and they can also transfer words from one language to another. Language contacts has been the subject of several studies since the late 19<sup>th</sup> century whose aim was to explain the process in which a language adopts words from another language, a process well known as *borrowing*.

Although the term is widely used in research, remains controversial. For instance, Jespersen (1905) inserts the term *imitation* as an alternative for *borrowing*, while decades later, Haugen (1950, p. 211) declares his objection about the definition of *borrowing* as an “absurd metaphor”. Following Haugen’s opposition to the term *borrowing*, Johanson (2002) introduces the term *copying*, a term which is preferable also by Haspelmath (2009) but it seems that *borrowing* even if it “is a conventional term, it is almost in universal use” (Dunkirk, 2009, p. 133).

For Weinreich (1968), languages are in contact when they are used alternately by the same speakers, and this alternation is called *bilingualism*. The way in which bilingual speakers transfer elements of one language to the other is called *interference*.

Paul (1891) identifies two main ways of *borrowing*: a) the adoption of a foreign material into the language, b) the adoption of a foreign material with the employment of a native material, and further, Haugen (1950) classifies the following types of *borrowings*: a) Loan words, b) Loan blends,

c) Loan shifts, and d) Calques. Wichmann & Wohlgemuth (2008) propose for the first time an alternative way of loan words assimilation, introducing four accommodation strategies: the *direct insertion*, the *indirect insertion*, the *light verb strategy*, and the *paradigm transfer*.

But what can be adopted from one language to another? Witney (1881) was the first scholar who presented a *borrowing scale*, claiming that some elements of the languages, specifically the free morphemes, are borrowed more frequently, such as nouns or adjectives, while bound morphemes such as suffixes which attach to nominal and verbal roots, are unlikely to be borrowed.

“Roots are considered the foundation of the word which convey the main meaning of the word such as noun, adjectives, and verbal roots... bound morphemes such as suffixes, they never stand alone as words. They attach to roots and modify their meaning in some way” (Mithum, 2019, p. 82).

Contrary to Witney's *borrowing scale*, Thomason & Kaufman (1988) proposed a *borrowing scale* based on contact intensity, in which the borrowing of verbs, inflectional and derivational suffixes demand an intensive contact situation.

These *borrowing scales* based on contact intensity and frequency, led to a general view that the *borrowing* of bound morphology is uncommon, a view that gradually changed through the years.

For instance, Thomason (2001, p. 63) states that “anything can be borrowed”. A statement which seems broad and simplified, since Weinreich (1968, p.32) refers to “the congruence in structure between two languages” as a prerequisite for the transfer of bound morphemes.



Following Weinreich's claiming for structural congruence, Field (2002) proposes a *System of Compatibility*, i.e., a set of properties which facilitates the *borrowing* and the *assimilation* of a bound morpheme of a language into the other, such as phonetical or structural similarities between languages. The importance of structural congruence as a primary factor for the *borrowing* of bound morphology is also noted in Johanson (2002), Winford (2005), Matras (2007), Johanson & Roberts (2012), Matras (2015), and Aikhenvald (2006).

The general view in present days on what is borrowable between languages can be summarized as follows: "while some types of forms are more resistant to borrowing than others, words from all classes – including possibly surprising categories, such as numerals, personal pronouns, prepositions, conjunctions, and discourse markers – can be borrowed, as can affixes and other grammatical elements". (Aikhenvald, 2019, p. 320)

The following section will provide an overview of the Turkish and Greek studies related to the Turkish – Greek language contacts.

### **Turkish – Greek Language Contacts in Turkish and Greek Sources**

Yücel (2020) provides an extensive overview, in which he classifies the researches which were contacted on the *Turkisms* in Greek in general. From a total of 196 studies, 56 are on borrowing factors mostly done by Turkish, German, and Greek scholars.

The observation through this research is that most of the Turkish works were concentrated in the borrowed lexicon between the two languages, such as words of daily and social life, religious terminology and phrases, common cultural ethics in literature as well as common toponyms.

Some of these works are: (Balaban & çağlayan 2014; Islamoğlu, 1994; Kelağa, 2007, 2016; Millas, 2018), and Öztürk (2005) who records the Turkish loan verbs in Cypriot alongside with some phonological observations.

On morphology, the studies are less limited, however, Önder (2022) investigates the loan structures in Cappadocian Greek and identifies the use of the Turkish intensive adjectives, the use of yes/no particle MI, the gender loss influenced from Turkish, while he observes some morphosyntactic structures as well. A list with the Turkish loanwords is included in the second section of his research.

The previous research on Turkish - Greek language contacts in the Greek studies was confined in the recording of the Turkish borrowed words in Greek in dictionaries, glossaries, and grammars, while the theory on the issue was reflected in general views. For instance, Τριανταφυλλίδης (1941, p. 40) states that, «Πολλές λέξεις της γλώσσας μας είναι ξένες. Μπήκαν στην γλώσσα μας σε διάφορες εποχές από άλλες γλώσσες και πολλές χρησιμοποιούνται και σήμερα», while Ανδριώτης (1992, p. 139) claims that, « Χαρακτηριστικό των

λέξεων ξένης καταγωγής στα Νέα Ελληνικά είναι ότι, όλες σχεδόν έχουν αφομοιωθεί φωνητικά και μορφολογικά από την Ελληνική Γραμματική και κλίνονται όπως οι αντίστοιχες Ελληνικές».

During the last two decades, the studies on Greek - Turkish language contacts have increased, mainly investigating the assimilation of the Turkish loanwords (nouns, adjectives, and verbs) in the Greek varieties of Minor Asia as well as in Standard Greek.

The most complete work on the assimilation of the Turkish loanwords in Greek belongs to Κυραννούδης (2009), who fills with his research a vast gap in the Greek bibliography regarding the Turkish language contacts. He examines the integration of the Turkish nouns, Turkish adjectives, and Turkish derivational suffixes not only in Standard Greek but also in every dialect.

Studies dealing with the adaptation of the Turkish nominal loanwords and loan verbs in dialects spoken in Asia Minor as well as in dialects of Standard Greek are attributed to Melissaropoulou (2011, 2016), Ralli (2016, 2021) and Chairetakis (2019), whose work will be mentioned extensively in the State of the Art, since their investigation correlates with the aim of the present study, which is the bound morphology of the Turkish loan verbs in Greek.

### **Aim and Research Questions**

The previously summarized studies on the Turkish – Greek language contacts in Turkish and Greek sources, indicate the focus on recording common words between the two languages as well the assimilation of the Turkish nominal loanwords and loanverbs in Greek dialects.

The bound morphology of the Turkish loanverbs in Greek, has not received a systematic attention in the Greek area, therefore, the aim of the thesis is to thoroughly investigate this generally neglected field by posing the following research questions:

1. What morphemes are transferred into the Greek along with verbal root?
2. What is their morphological and semantic function in Greek?

The thesis is structured as follows:

The section 1 presents the State of the Art on the bound morphology in Greek.

The section 2 consists of the Methodological Framework which describes:

- The selection of the data from written sources in Standard Greek and spoken varieties of Greek such as Cretan, Cypriot, and Kalymnian as well as primary sources which preserve rare loanverbs in Greek during the Greek Revolution.
- The classification of the data that will take place:

according to their assimilation in Greek, following Wichmann & Wohlgemuth (2008) Accommodation Loan verb Strategies and according to the Turkish suffix which is attached to their root. In addition, examples of loanverbs in use in the daily speech in Greek, will facilitate the understanding of the morphological and semantic function of the bound suffixes under the process of Reanalysis.

The section 3 constitutes the Analysis of the thesis in which the findings will be presented. After the Analysis section, the Results in section 4, as well as the Conclusions and Discussions in section 5 will finalize the purpose of the present study.

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## 1. State of the Art

### 1.1 On the Bound Morphology of Turkish Loanverbs in Greek Sources

As already mentioned, the general view regarding the Turkish loan words in Greek sources was vague and, in some cases, falsely interpreted.

For instance, Ανδριώτης (1992, p. 131) mentions that « Τα ρήματα σε -ντίζω, προέρχονται από τον Αόριστο των τουρκικών ρημάτων σε -dim, όπως το ρήμα καζαντίζω, καβουρντίζω», disregarding the fact that the -d consonant occurs also in native verbs i.e., *φροντίζω* and it is not exclusively a *borrowing* indication.

Nevertheless, in the present days there is an increasing interest for the Turkish – Greek language contacts, and although there are limited studies for the bound morphology of the Turkish loan verbs, still they provide an important basis for the purpose of the present work.

More specifically, Melissaropoulou (2011)), investigates the Turkish loan verb adaptation from data provided by Greek dialectical variation (i.e., Pontic, Cappadocian, Aivaliot). Cappadocian as an example of heavy *borrowing* in which there is a degree of bilingualism is contrasted with Aivaliot and Pontic, where the cultural pressure was not intensive at such point.

Following Wichmann & Wohlgemuth (2009) loan verb adaptation strategies (direct – indirect insertions), Melissaropoulou examines the possible divergence across these dialectal varieties regarding the chosen accommodation strategies. Her findings indicate that the level of contact intensity with Turkish it is not a crucial factor for the chosen strategy, since in each dialect there is a systematic alternation between direct and indirect insertion. The selection strategy depends on structural factors in each dialect

and more specifically in similarities between Turkish and Greek, i.e., the equivalence between the Turkish Definite Past which coincides with the Greek Perfective allomorphic -i stem. Furthermore, the adaptation of the Turkish loan verbs, is mostly realized with the use of the suffix -iz, while in Pontic the suffix -evo is employed as well.

Aivaliot, Pontic, Cappadocian, Lesbian, Cretan, and Cypriot is also the subject investigated by Ralli (2012, 2016, 2021) and Bağriacık & Ralli, et al. (2015). Following Wichmann & Wohlgemuth (2008) loan verb accommodation strategies, they point out the random selection between the indirect and direct insertion, which is the result of the existence of several alternative types in each dialect, while factors of forming the Turkish loan verbs are internal, according to the word formation properties of Greek, and the structural compatibility between the Turkish and Greek.

Furthermore, the suffix -iz is the most productive and the Past Tense Marker -DI, is re-analyzed into non-tensed and opaque in every examined dialect.

Chairetakis (2019) as well, in his research for the Turkish loan verbs in Cretan dialect argues that the structural compatibility between the donor and the recipient language, i.e., the Turkish and the Cretan dialect, is crucial for the outcome of the borrowing process, while the intense contact with Turkish for about two centuries played an important role as well. The loan verbs in the Cretan dialect are assimilated both with direct and indirect insertions, with the verbalizers -iz and -evg. The Past Tense Marker -DI lost its function as well.

Summarizing the studies above, the results regarding the Turkish loan verb accommodation in the investigated Greek dialects, can be listed as follows:

- The accommodations strategies vary between direct and indirect insertions.
- The structural compatibility between the Turkish and Greek is a major factor which facilitates the process of assimilation of the Turkish loan verbs in Greek.
- The -iz suffix is the most productive for the accommodation of the loan verbs.
- The Past Tense Marker -DI re analyzed as an opaque and lost its function in every dialect.
- The studies above are focusing on the accommodation of the Turkish loan verbs in Greek and the functions of the Past Tense Marker -DI.

The present study aims a further investigation for possible Turkish bound morphemes in the Standard Modern Greek as well as in the dialects of Crete, Kalymnos, and Cyprus.



## 2. Methodological Framework

### 2.1 The verbal Suffixes in Greek

Greek is a fusional language and member of the Indo – European family in which there is a large variety of inflectional morphemes regarding their number as well as the meaning they hold. On the contrary, Turkish is an agglutinative language in which a particular morpheme expresses one lexical or grammatical concept.

Even so, the typological divergence between Turkish and Greek does not affect the *borrowing* process from Turkish. “When the donor is an agglutinating – type language and the recipient fusional no typological limitations hold in *borrowing*” (Field, 2002, p.103) and

Thomason (2015, p. 33) also argues that “Greek has fusional inflection while Turkic inflection is agglutinative, but clearly that difference is not sufficient to block morphological transfer”.

According to Τριανταφυλλίδη (1941) the verb in Greek is consisted of the root, i.e.:

**στηρ –**

the verbalizer, i.e., a suffix that turns words into verbs:

**-ιζ**

the ending for personal inflection, i.e.:

**-ω, -εις/ας etch.**

thus:

**Στηρ- ιζ- ω**

There is a variety of verbalizers in Greek:

**-άζ-** → κοιτ - **άζ** - ω

**-ιάζ** - → νοικ **-ιάζ** - ω

**-ίζ-** → στηρ - **ίζ** - ω

**-εύ-** → δουλ **-εύ** - ω

**-ών-** → τελει **-ών** -ω

**-αίν-** → μακρ- **αίν**-ω

However, the Turkish verbs, may bear certain types of suffixes attached to their root, such as voice suffixes, tense, and mood markers which cannot stand as free units. As a result, when Turkish verbs borrowed into the Greek, these bound morphemes are transferred along with the verbal root and integrated into the Greek verbal system.

In this case what it is needed in order to examine the bound morphemes of the Turkish loanverbs is the employment of linguistic data, which will be discussed in the following sections.

## 2.2 Data Collection

For the purpose of this research, the data are consisted of Turkish loan verbs since they are essential for examining the morphemes wich attach on their root.

The data was collected from already existing written sources wich diachronically and intra – dialectally reflect the status of the loan words in Greek, such as memoirs, glossaries, and dictionaries of Standard Greek and of the dialects of Cyprus, Crete, and Kalymnos Island wich located on the southeastern of the Aegean Sea.

- As primary sources, Memoirs by Μακρυγιάννης (1989, 2003) is a typical example of spoken language during the Greek Revolution (1821), mixed with foreignisms including rare Turkish lexicon.
- The glossaries of Μπόγκας (1952, 1959), Κουκίδης (1960), and Σαραντάκος (2020), provide a rich linguistic material of rare Turkish loanverbs.
- Ορφανός (2020), records a plethora of Turkish words in the Cretan dialect.
- The glossaries of Γιαγκουλής (1988) and Μιλτιάδου (1990), include Turkish lexicon in Cypriot, such as Σκανδαλίδης (2013) concerning the dialect of Kalymnos.
- The dictionaries of Τριανταφυλλίδης (1998), Δημάση & Νιζάμ (2004), Παμπούκης (1988) formed an important source for the Turkish lexicon in Standard Greek.

### 2.3 Data Classification

The classification of the data is related with the accommodation of the Turkish loan verbs in Greek according to Wichmann & Wohlgemuth (2008) loan verb accommodation Strategies, which is a simplified system for understanding the loan verb assimilation process in a language:

- **Indirect Insertion:** The loan verb is accommodated with the use of a native affix. i.e., the *-iz* verbalizer in Greek, which is followed normally by the inflection endings, i.e., *-ω*.
- **Direct Insertion:** The loan verb is accommodated directly into the Greek grammar without morphological accommodation. i.e., without the employment of a verbalizer.
- **Paradigm Transfer:** The loan verb is borrowed along with its morphological and semantic functions without accommodation into the Greek.

As already described in the State of the Art, the researchers dealing with the Turkish loan verb accommodation in Greek conclude with the same results, i.e., the accommodation strategy varies between direct and indirect insertion. The motivation for this classification which differentiates this research from the previous ones relies to the question if the existence of a Turkish bound morpheme is related to a certain accommodation strategy.

The following stage from this classification will be the description of the bound morphemes which is attached to Turkish verbal roots, with the employment of examples of loanverbs in use in the daily speech in Greek, aiming to facilitate the understanding of their morphological and semantic function under the process of Reanalysis.

“Reanalysis is a historical process whereby a morphosyntactic device acquires a different structure from the one it originally had, with little or no change to its surface form or semantics” (Aikhenvald, 2006, p. 10).

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### 3. Bound Morphology of The Turkish Loanverbs in Greek

#### 3.1 Past Tense Marker -DI- Indirect Insertion:

“It occurs in various languages of the Balkan peninsula, and Western Asia Minor. In the case of - D(I), the selection is determined by the type of base that is operative in the recipient language for word formation purposes” (Gardani & Arkadiev, 2015, p. 5).

The following scheme demonstrates the borrowing process as well as the loan verb accommodation with the use of Greek suffix -ίζ, i.e., indirect insertion.

**Turkish verbal root** → **3SG.Past** → **Greek suffix** → **Greek inflection**

<b>kazan</b>	<b>-DI</b>	<b>-iz</b>	<b>-o</b>
<b>καζαν</b>	<b>-τ</b>	<b>-ίζ</b>	<b>-ω</b>

#### 1. SMG

#### Turkish

- |                             |                   |
|-----------------------------|-------------------|
| a) <b>καβουρ- vt- ίζ- ω</b> | <b>kavur -du</b>  |
| b) <b>κουνουσ- τ-ίζ-ω</b>   | <b>konus - tu</b> |
| c) <b>σαβουρ- vt- ίζ-ω</b>  | <b>savur -du</b>  |
| d) <b>βαριεσ-τ-ίζ-ω</b>     | <b>vazgeç -ti</b> |

(Data collected from: Μπόγκας, 1959; Παμπούκης, 1988; Δημάση & Νιζάμ, 2004)

<b>2. Cypriot</b>	<b>Turkish</b>
a) παγλα-τ-ίζ-ω	bağla -d <sub>ı</sub>
b) σαρ-τ-ίζ-ω	sar-d <sub>ı</sub>
c) γιναν-τ-ίζ-ω	ınan-d <sub>ı</sub>
d) ασ-τ-ίζ-ω	az-d <sub>ı</sub>

(Data collected from: Μιλτιάδου, 1990; Γιαγκουλής, 1988)

<b>3. Cretan</b>	<b>Turkish</b>
a) μπασαρ-ντ-ίζ-ω	başar-d <sub>ı</sub>
b) κασ-τ-ίζ-ω	kas-t <sub>ı</sub>
c) αλίσ-τ-ίζ-ω	alış-t <sub>ı</sub>
d) ατλα-ντ-ίζ-ω	atla-d <sub>ı</sub>

(Data collected from: Ορφανός, 2020)

<b>4. Kalymnian</b>	<b>Turkish</b>
a) καπα-ρδ-ίζ-ω	kabar-d <sub>ı</sub>
b) κισ-δ-ίζ-ω	kız-d <sub>ı</sub>
c) παϊ-ρδ-ίζ-ω	bayıl-d <sub>ı</sub>
d) χταρ-δ-ίζ-ω	aktar-d <sub>ı</sub>

(Data collected from: Σκανδαλίδης, 2013)

### 3.2 Past Tense Marker -DI- Direct Insertion

The following scheme demonstrates the borrowing process as well as the loan verb accommodation without the employment of a Greek suffix.

**Turkish verbal root** → **3SG.Past** → **Greek suffix** → **Greek inflection**

<b>kazan</b>	<b>-DI</b>	<b>x</b>	<b>-o</b>
<b>καζαν</b>	<b>-τ</b>	<b>x</b>	<b>-ώ</b>

#### 1. SMG

#### Turkish

a) καζαν-τ-ώ	kazan- <b>di</b>
b) σαβουρ-ντ-ώ	savur- <b>du</b>
c) νταγιαν-τ-ώ	dayan- <b>di</b>

(Data collected from: Τριανταφυλλίδης, 1998; Δημάση & Νιζάμ, 2004)

#### 2. Cypriot

#### Turkish

a) σικκιρ-τ-ώ	sıkıl- <b>di</b>
b) μπελλε-τ-ώ	bele- <b>di</b>

(Data collected from: Μιλτιάδου, 1990; Γιαγκουλή, 1988)

#### 3. Cretan

#### Turkish

a) γιουρου-ντ-ώ	yürü- <b>dü</b>
b) βαργεσ-τ-ώ	vazgeç- <b>ti</b>

(Data collected from: Ορφανός, 2020)



**4. Kalymnian**

Πεεv-τ-ώ

**Turkish**beğen-**di**

(Data collected from: Σκανδαλίδης, 2013)

The examples above indicate two strategies of loanverb accommodation, with direct and indirect insertion, in which the loan verbs bear on their root the Past Tense Marker -DI. The majority of the examples point out that there is a preference for the indirect insertion with the suffix -iz, which is noted from Ralli and Melissaropoulou as the most productive suffix in every dialect.

What is also mentioned from the previous studies is that -iz is preferred in each dialect due to the existence of -DI which coincides not only with allomorphic perfective stem -i, i.e., *af-i-no*, *zograf-i-zo* etc. in Greek but with the suffix as well.

As for the examples with direct insertion Melissaropoulou (2011, p. 7) claims that “the variation between the two schemes is triggered by the fact that this perfective allomorphic stem in -i can be part of both *dayando* and *dayandizo*”. Thus, the similarities between -DI and Greek favors both accommodation strategies.

### 3.3 Present Tense –(A)r – direct Insertion

“Present, the so – called Aorist is the general Present Tense and expresses habitual actions and general events, thus coming close to Universal Tense”

(Kornfilt, 1997, p. 336)

The following scheme demonstrates the borrowing process as well as the loan verb accommodation with direct insertion.

**Turkish verbal root** → **3SG.PR** → **Greek suffix** → **Greek inflection**

<b>bağla</b>	<b>- r</b>	<b>x</b>	<b>-o</b>
<b>μπαγλά</b>	<b>-ρ</b>	<b>x</b>	<b>-ω</b>

#### 1. SMG

μπαγλά-ρ- ω

#### Turkish

bağla-r

#### 2. Cypriot

κουρκ – άρ - ω

kork-ar

#### 3. Kalymnian

κατσ – άρ – ω

kaç-ar

(Data from: Μιλτιάδου, 1990; Δημάση & Νιζάμ, 2004; Σκανδαλίδης, 2013)

The case of Present Tense should be considered questionable, and the reason of this doubt is due to the fact that Greek includes a suffix -ar- “originating from the Italo romance infinitival marker -ar(e)”. (Ralli, 2016, p. 103).

The Greek fusional system allows the incorporation and the combination of many foreign elements in a point that the distinction between the foreignisms is not always possible.

If the Present Tense is the case in the examples above, then the accommodation is facilitated with direct insertion. Nevertheless, this hypothesis demands further investigation.

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### 3.4 Causative + Past Tense -D(I) – Indirect Insertion

“A causative verb is formed by attaching a special causative suffix **-Dir** to the stem of the verb. Causative increases the valency of the verb”

(Kornfilt, 1997, p. 331)

The following scheme demonstrates the borrowing process as well as the loan verb accommodation of **Causative** along with the **Past Tense -DI** with the use of Greek suffix **-ίζ**.

Turkish verbal root → CAU → 3SG.Past → Greek suffix → Greek inflection

kan	-dir	-d	-iz	-o
καν	-ντιρ	-ντ	-ίζ	-ω

#### 1. Cypriot

a) πιτ-τιρ -τ-ίζ-ω

b) γιατ – ιρ -τ – ίζ - ω

#### Turkish

bit-ir-di

yat-ır-dı

(Data collected from: Μιλτιάδου, 1990; Γιαγκουλής, 1988)

#### 2. Cretan

γιαπ -τιρ -ντ -ίζ -ω

#### Turkish

yap-tır-dı

(Data collected from: Ορφανός, 2020)

**3. Kalymnian**κουσ-**τουρ-δ-ίζ-**ω**Turkish**koş-**tur-du**

(Data collected from: Σκανδαλίδης, 2013)

**4. Rare SMG**a) ισλε **-τιρ-ντ-ίζ-**ωb) ουταν- **ντιρ-ντ-ίζ-**ω**Turkish**işle-**tir-di**utan-**dır-dı**

(Data from: Κουκίδης, 1960)

The combination of causative and the Past Tense Marker -D(I) in the dialects of Greek is accommodated with the suffix -iz, i.e., indirect insertion, due to the presence of -DI, which is crucial for the accommodation in Greek. The causative seems that does not affect the accommodation strategy since it is perceived as a part of the verbal root.

### 3.5 Paradigm Transfer

Accommodation strategy in wich - as it is already mentioned - the loanverb is borrowed along with its morphological and semantic functions without accommodation.

#### Imperative

##### 1. SMG

a) βούρ!

b) ντούρ!

##### Turkish

vur!

dur!

##### 2. Cretan

κόρκουμα!

##### Turkish

korkma!

#### Optative

##### 1. Cretan & Kalymnian

μπακαλούμ

##### Turkish

bakalım

Although is a rare case in Greek and the examples are very limited, still they are an important finding since they retain Mood (Imperative and Optative) as well as person agreement as it will be seen in the following Chapter.

#### 4. Morphological and Semantic Functions of the loan verbs in Greek - examples

##### 4.1 Past Tense Marker -DI

###### 1. SMG

- a) μόλις **καβουρντίσω** το φαγητό θα σου τηλεφωνήσω.
- b) δεν καζαντίζεις τίποτα αν δεν κάνεις οικονομία.

(OLD)

- a) i will call you when I roast the food.
- b) you don't gain anything without savings.

###### 2. Cypriot

- a) **αστίζει** τον σκύλον του πάνω μου άμαν με δει.
- b) ένα μαντήλιν πουλιαστόν στην μέσην μου **σαρτίζω**.

(Data from: Γιαγκουλής, 1988, σς. 11, 56)

- a) he commands his dog to jump on me every time he meets me.
- b) I wrap around my waist a colorful scarf.

### 3. Cretan

Δεν **μπασαρντίζω** μπλιο την κοιλιά σας να μαγεροτσικαλιάζω

(Data from: Ορφανός, 2020, σ. 188)

I cannot handle to cook for all of you all day long.

### 4. Kalymnian

- a) λάζε α μη **κισδίσει** το σίερο και κάψεις τα ρούχα.
- b) ε μπορώ α **βαρυκιστώ** άλλο με τα καμώματά σου.

(OLD)

- a) watch out so the iron does not get hot and burn the clothes.
- b) I cannot get frustrated anymore with you.

The examples above of daily speech in every dialect, confirm the previous research regarding the function of -DI and its reinterpretation as an opaque in every Greek dialect, since -DI occurs in the Greek Present Tense.

In any case, the importance of -DI relies in its function as a link between the Turkish verbal root, and the Greek suffixes and inflections, wich favors the *borrowing* process.



## 4.2 Causative + Past Tense -D(I)

### 1. Kalymnian

Μην **κουστουρδίζεις**, θα πέσεις χάμω.

Don't run, you are going to fall

(OLD)

### 2. Cretan

The verb **γιαπιρντίζω**, as Ορφανός (2020, σ. 43) claims, is no longer in use in the present days. A unique example of its use was found in a personal diary of the 19<sup>th</sup> century, with the meaning *to request from someone to make something*:

Έστειλε ο κουνιάδος μου από την Κριτσά τεσκερέ να **γιαπιρντίσω** της θυγατρός του ένα ζιπόνι.

My brother-in-law requested from me to sew a skirt for his daughter.

### 3. Cypriot

Ο σκύλος με τον γέρακα **εκαντιρντίσαν** τον λαό μέστον γιαλόν να δώσει.

(Data from: Γιαγκουλής, 1988, σ. 24)

A saying which compares the Authorities of Cyprus as dogs and hawks and forced the people to “drown” in the sea, i.e., they destroyed their lives.

4. Ισλετιρντίζω – *to put someone in a job*

Ουταντιρντίζω - *to make someone feel ashamed.*

(Data from Κουκίδης (1960, σς. 32, 75

The case of causative constitutes a very interesting case. In the Kalymnian dialect the causative is reanalyzed as a part of the verbal root, fully subordinated in the Greek inflectional system.

On the contrary, in the Cretan, Cypriot, as well as in the data from Κουκίδης, it seems that the causative retains its morphological function as a causative which is demonstrated from the examples above, since the meaning is clearly *to make someone to do something*.

It must be noted that those cases above with exception the Kalymnian dialect, in which *κουστουρδίζω* is in use in the present days, in Cretan the *γιαπιρντίζω* is totally lost from the dialect, while in Cypriot and in Κουκίδης recordings those loan verbs must be also rare types.

In either case, the examples indicate a sort of bilingualism in Crete and Cyprus, and it seems that the realization of causative was possible, even if its related with earlier stages of *borrowing*.

### 4.3 Paradigm Transfer

The cases of paradigm transfer in Standard Greek and in Cretan dialect shows the maintenance of the Turkish 2SG in Greek as well as the Maintenance of the Turkish Imperative. While the case of *bakalim* both in Cretan and in the Kalymnian dialect maintain the 1PL of the Turkish Optative as well as its functions.

#### 1. Standard Greek

**Ντούρ!** μην βιάζεσαι..

Stop! don't rush...

(OLD)

#### 2. Cretan

Η δουλειά σου πάει καλά και **κόρκουμα!**

Everything is alright, don't be afraid!

(OLD)

#### 3. Cretan/Kalymnian

Άντε μπακαλούμ, πότε θα βρεθούμε μας ελειψες!

Let's see when we will meet you, we missed you!

## 5. Results

The aim of the research was to examine the bound morphemes of the Turkish loanverbs in Greek by posing the research questions:

1. What morphemes are transferred along with the Turkish Verb root?
2. What is their morphological and semantic function in Greek?

Initially, a classification took place according to Wichmann & Wohlgemuth accommodation Strategies (2008) in order to examine if the Turkish bound morphemes affect the selection strategy. The results confirm the previous studies regarding the structural compatibility between Turkish and Greek as a key factor which favors both direct and indirect insertions. Furthermore, with exception of the most investigated Past Tense Marker -DI, the present investigation identified additional Turkish morphemes along with the verbal root:

- The Marker for Present Tense -(A)r., although it coincides with the Italo-romance suffix -ar(e)), and the distinction seems problematic.
- A combination of the Causative Suffix and the Marker for Past Tense
- -D(I), which is conceived as a part of the verbal root and it doesn't affect the accommodation since -DI operates as intermediate which favors the accommodation.
- Cases of Optative and imperative (paradigm transfer), without accommodation.

Afterwards, the employment of examples of daily speech from the Greek dialects was essential for understanding the morphological and semantic function of the Turkish bound morphemes in Greek.

The Past Tense -DI re analyzed as a part of the root without any morphological value, while the Causative with exception the Kalymnian indicates a maintenance on its functions at least in early stages of the *borrowing* process as it can be seen from the examples.

The examples of paradigm Transfer which are inserted in Greek without accommodation, are cases which preserve the Turkish Mood (Imperative/Optative) as well as the person agreement.

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## **6. Conclusions & Discussions**

Previous research on the issue on the Turkish bound morphology in Greek is very limited and focused mainly on the assimilation of the Turkish loanverbs in Greek.

The present study contributes to a neglected research field related to the Turkish language contacts by identifying bound Turkish morphemes, on which previously no attention was given, such as the causative suffix *wich* is brought up by this research and indicates a former knowledge of its function from a part of Greek speakers in earlier stages of the Turkish – Greek language contacts, which should be an idea for further investigation.

Furthermore, this thesis, proposes the investigation for the Turkish Present Tense, which could be a possible transferred element in Greek.

Since it is coinciding with another foreign suffix and it cannot provide safe results, and it was intentionally excluded from the examples in the chapter 4.

Nonetheless, some possible loan verbs including the Turkish Present Tense were presented in chapter 3, and it can stand as a starting point for further investigation.

**ABBREVIATIONS**

<b>CAU</b>	<b>CAUSSATIVE</b>
<b>PAST</b>	<b>PAST TENSE</b>
<b>PL</b>	<b>PLURAL</b>
<b>PR</b>	<b>PRESENT TENSE</b>
<b>SG</b>	<b>SINGULAR</b>
<b>SMG</b>	<b>STANDARD MODERN GREEK</b>

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