

Idiomatic Reduplicative Imperatives in Greek¹

Despina Oikonomou

Humboldt University of Berlin

despina.oikonomou@hu-berlin.de

Abstract

This paper discusses Reduplicated Imperatives (RIs) which, unlike canonical imperatives, do not have a directive function and they are dependent on a matrix clause for which they provide explanation. Building on Kallergi (2013), I present the basic morpho-syntactic properties of this construction and its relation with the matrix clause. RIs are treated as propositional *non-at-issue* modifiers. They presuppose that the RI-eventuality temporally precedes the eventuality described by the main predicate. The causal/explanation link between the RI and the matrix clause is inferred due to the temporal precedence relation and the iterative interpretation of the RI.

Keywords: Non-canonical Imperatives, Reduplication, Iterative Aspect, Temporal precedence, Free Adjuncts

1. Introduction

The imperative form typically conveys a directive speech act (e.g. *command*, *advice*, *invitation*):

- (1) Fae to gliko!
 Eat.IMP.2SG the sweet!

¹ This paper was greatly benefited from the discussion at ISTAL24 conference. I am especially grateful to Anastasios Tsangalidis for his feedback and for pointing me to Haritini Kallergi's research on reduplication. Also many thanks to RUESHeL group members for their feedback and discussion. This work has been funded by AL 554/8-1 (DFG Gottfried Wilhelm Leibniz Preis 2014 to Artemis Alexiadou).

However, when the imperative is reduplicated, a different, non-directive, interpretation becomes possible. The reduplicative imperative (henceforth, RI) combines with a proposition and conveys an iterative action which brings about the main eventuality (Kallergi 2009, 2013). The RI in (2) expresses that the speaker gained weight by eating all the time sweets.

- (2) [Fae (*fae) glika] pahina pali.²
 Eat.IMP eat.IMP sweets I-got-fat again...
 ‘By eating all the time, I became fat again.’

This paper discusses the properties of RIs as in (2). I show that they convey an iterative situation which precedes the situation described by the main event. The next section focuses on the internal structure and meaning of RIs. In Section 3, I discuss the relation of the RI with the matrix clause. It is shown that they pattern with *since*- and *as*-clauses in that they contribute *non-at-issue*, backgrounded information. Section 4 provides an analysis treating RIs as free adjuncts conveying a temporal precedence relation with the matrix predicate. Section 5 summarizes and points to some questions raised by RIs for the general properties of imperative constructions.

2. Reduplicative Imperatives: Internal Structure and Meaning

As their name suggests, RIs can have this idiomatic interpretation only if they are reduplicated. However, the reduplicate can be a semantically related verb, such as the antonyms in (3) and the semantically related verbs in (4) (Inkelas & Zoll 2005; Kallergi 2013). Notice that it is always possible, though not obligatory, to have a second-step reduplication.

- (3) Aneva kateva (aneva kateva) kurastika...
 go-up.IMP go-down.IMP go-up.IMP go-down.IMP tired.1SG
 ‘By going up and down all the time, I got tired.’
- (4) Plekse rapse (plekse rapse) ponesan ta matia mu...
 Knit.IMP sew.IMP knit.IMP sew.IMP hurt.PAST.3PL the eyes my

² For the rest of the paper, the 2nd singular imperative form will be glossed as V.IMP and the RI will be enclosed in brackets in order to distinguish it from the main clause.

‘By knitting and sewing all the time, my eyes hurt.’

Reduplication results in an iterative interpretation (Kallergi 2013).³ As noticed by Tatesosov (2003), iterative aspect has been used as a cover term for various interpretations. Following Xrakovskij (1989), Tatesosov (2003) defines iterative aspect as involving “situations occupying different time spans, i.e., making up a set of situations rather than a single situation” (Tatesosov 2003: 332). Although reduplication in RIs can have this interpretation as clearly shown in (5), it is also possible that RIs emphasize the long duration of a single situation as in (6) or a repeated situation within a single time span as in (7) which is called the *multiplicative reading* by Tatesosov (2003). Throughout the paper we will keep the term iterative as a cover term for all the aforementioned interpretations.

(5) [Vlepe vlepe tileorasi kathe mera] ematha elinika... (Repetitive)
watch.IMP watch.IMP TV every day learned.1SG Greek

‘By watching TV every day, I learned Greek.’

(6) [Vlepe vlepe tileorasi olo to proi] apohavnothika... (Durative)
watch.IMP watch.IMP TV all the morning dizzy-got.1SG

‘By watching TV all morning, I got dizzy.’

(7) [Vlepe vlepe sintages olo to proi] mu anikse i oreksi (Multiplicative)
watch.IMP watch.IMP recipes all the morning me opened the appetite

‘By watching recipes all the morning my appetite opened.’

Crucially, although the verbs in RIs are aspectually marked, aspectual marking is semantically vacuous, i.e. in all the aforementioned examples, the perfective (*des – des* ‘see.PERF.IMP – see.PERF.IMP’) can replace the imperfective (*vlepe – vlepe*) without changing the interpretation. Kallergi (2013) provides empirical evidence that both forms are equally accepted by native speakers (Kallergi 2013:180-182).

In light of these facts it could be argued that Reduplication is the actual exponent of Iterative aspect (Haugen & Harley 2010, Haugen 2011). However, there are certain cases which cannot be subsumed by simply treating reduplication as an *aspect-exponent*. In (8) there are two different but semantically related vPs conveying a complex situation

³ Kallergi (2013), who discusses in detail patterns of reduplication in Greek, classifies *Iterativity* as one of the basic functions of reduplication. Moreover, she shows that iterativity is not specific to RIs, but it also appears with noun and finite verb reduplication. Crucially, iterative interpretation requires a certain intonation pattern, which is common in RIs and reduplicated nouns (Kallergi 2013: 279-280).

consisting of simplex situations. In this case, there is no reduplication in the strict sense, although as reviewer points out there is semantic reduplication similar to the example in (4).

- (8) [Kerna ouza o Manolis vale mezedes i Maria] liarda giname...
Treat.IMP ouza the.NOM Manolis put.IMP snacks the.NOM Maria drunk became.3PL
‘As Manolis was treating ouzo and Maria was putting snacks, we became drunk.’

Furthermore, it is possible to have a single imperative form in RIs as long as there is an alternative construction indicating an iterative interpretation as in (9):

- (9) [Mila mia ston enan mia ston alon], kuduni egina...
Talk.IMP once to-the one once to-the another, dizzy became.1SG
‘By talking once to one person and another time to another, I became dizzy.’

These data seem to be better captured under Inkelas & Zoll’s (2005) *Morphological Doubling Theory* in the sense that their analysis suggests that Reduplication is not copying in the phonology but rather the result of double insertion of morphological (or even syntactic) constituents in the morphosyntax. In this sense, all the above patterns can be considered as a certain doubling pattern, which extends beyond the typical reduplication cases. While the morphophonological analysis of these patterns is very interesting, I will not attempt to provide an analysis in this paper, which is concerned more with the semantic contribution of RIs. For the rest of this paper, I will postulate that there is a head in the syntax conveying the iterative interpretation as a result of reduplication or doubling which can involve two distinct vPs (see (29)).⁴

The possibility for two distinct vPs (and therefore different agents) is further illustrated in (10) where there are two different agents in the RI, distinct from the subject of the main clause ‘Peter’ (see Kallergi 2013: 225).

- (10) [Pes i Ana pes i Maria], pistike o Petros
say.IMP the.NOM Ana say.IMP the.NOM Maria got-concivced.1SG the.NOM Peter
‘By having Ana and Maria talking to him all the time, Peter was convinced.’

At this point it must be emphasized that the *nominative-marked* subjects in RIs should not be taken as evidence for the availability of a T/Agr layer. As Tsimpli (2000) discusses

⁴ I assume that little-*v* introduces the external argument. Alternatively, we could use the term VoiceP.

for *-ondas* gerunds, the nominative case in Greek can be the default case in some environments or licensed from a different head than T/Agr.

As Kallergi (2013) observes, RIs bear many similarities with Greek gerunds in *-ondas*. In the absence of an overt subject, the understood agent of RIs usually (but not obligatorily) corresponds to the subject of the main verb as in (11) (similarly to Greek gerunds, Philippaki-Warburton & Catsimali 1999; Tsimpli 2000).

- (11) [Pes pes] ton epis-**a/-es/-e/-ame/-ate/-an...**
 say.IMP say.IMP him.CL convinced.1-2-3SG/1-2-3PL
 ‘By talking to him all the time, I/you/she/we/you/they convinced him.’

The lack of person restriction in the subject of RIs indicates that the 2nd singular imperative form is deprived of person/number agreement features. This conclusion is further enforced by the fact that the 2nd plural imperative form is not licensed in RIs even when the subject is 2nd plural (12).

- (12) *Trekste trekste idrosate
 run.IMP.2PL run.IMP.2PL sweated.2pl

[Kallergi 2013: 194]

Similarly, negated imperatives which have *person*-agreement cannot form RIs (Kallergi 2013: 193):

- (13) *[Min tros, min tros], san odondoglifida egina.
 Not eat.2SG not eat.2SG as toothpick become.1SG
 Intended: ‘By not eating, I became very thin.’

Relatedly, although temporal adverbials are licensed in RIs as shown in (14), this by itself does not prove the existence of a TP. Temporal adverbials have been shown to be licensed lower (Alexiadou 1997) as also shown for temporal adverbials with gerunds (Tsimpli 2000).

- (14) [Pies pies htes oli mera], halia niotho simera...
 Drink.IMP drink.IMP yesterday all day terribly feel.1SG today
 ‘By drinking yesterday the entire day, I feel terribly today.’

The reduced size of RIs is instantiated by the fact that no focus or topic materials are licensed within the RI (Kallergi 2013: 470).

- (15) [*Psemata pes pes], pistike o Nikos...

lies say.IMP say.IMP convinced.3SG the Nick
Intended: ‘By telling LIES, Nick was convinced.’

To sum up this section, RIs are vPs which encode one or two iterated eventualities comprising a complex matrix situation. The next question concerns the relation of RIs with the main clause.

3. RIs, manner, cause and *afu/since*-clauses

As Kallergi (2013) shows, in many environments, RIs are interchangeable with *ondas-*gerunds and PP- modifiers conveying that ‘*by eating all the time I gained weight*’ (16):

- (16) a. [Fae fae] pahina pali.
Eat.IMP eat.IMP became.fat.1SG again
- b. [Trogon das oli tin ora] pahina pali.
Eating all the time became.fat.1SG again
- c. [Me to na troo oli tin ora] pahina pali.
With the SUBJ eat.1SG all the time became-fat.1SG again

A natural question arises as to whether they have a similar semantic contribution. In the following, we show that RIs are different from manner or cause modifiers whereas they share common properties with *afu/since*-clauses.

First, RIs cannot answer *how*-questions:⁵

- (17) Pos emathe elinika? ‘How did he learn Greek?’
- a. #Aku aku tragudia.
listen.IMP listen.IMP songs
- b. √Akugondas tragudia.
listening songs
- c. √Me to na akui tragudia.
with the SUBJ listen.3SG songs

Secondly, their position with respect to the matrix clause is different than the position of manner modifiers. As shown in (18a) the RI doesn’t have to be in the scope of

⁵ Notice that RIs can be embedded under a Preposition in the same way as the subjunctive in (19c) (Kallergi). In this case, we could argue that they are manner modifiers indeed as they pattern with the other prepositional phrases. This shows that there is no issue with reduplication per se but with the RI being really a free adjunct.

pali ‘again’. The sentence is fine although the context indicates that previously the mask was destroyed in a different way. By contrast, the *gerund*-modifier has to be in the scope of *pali*. This is because *pali* ‘again’ has been argued independently to obligatorily attach above VoiceP (Lechner et. al. 2015) yielding a repetitive reading. The felicity of (18a) can be explained if the RI merges above the VoiceP, thus outside the scope of *pali*.

(18) Repetitive context: *Markos made a paper-mask for Melina, however Melina is very careless and she threw some water-color on it... Markos fixed it, and gave it back to Melina. Melina was very excited and she put it on and off all the time. The result was that the mask was torn... Then Markos can say...*

a. Pali ti halases ti maska [vale vgale]... RI > again
again it.CL destroyed.2SG the mask put-on.IMP take-off.IMP

~ By putting it on and taking it off all the time, you destroyed the mask again.

b. #Pali ti halases ti maska vazontas tin (oli tin ora) again > gerund
again it.CL destroyed.2SGthe mask putting it on (all the time)

‘You destroyed the mask again by putting it on all the time.’

Moreover, unlike manner and cause modifiers and similarly to *afu/since*-clauses, RIs cannot be in the scope of negation of the matrix clause (Charnavel 2019; Kalokerinos 2004; Zobel 2019). Unlike (19b), (19a) cannot mean that the reason/manner that the dirt cleaned is not the scrubbing. The only possible interpretation, which goes against world knowledge, is that the reason the dirt didn’t clean *is* the scrubbing. As we will see, the outscoping of negation by the RI is due to presupposition projection of the RI. Notice that if a reduplicated imperative is embedded under the preposition *me* ‘with’, it behaves indeed like a manner modifier.

(19) a. #Den katharise o lekes [tripse tripse]...

not cleaned the dirt scrub.IMP scrub.IMP

Intended: *The dirt didn’t clean because of scrubbing (but because of sth else)*

b. Den katharise o lekes trivondas / me to na trivume / epidi trivame.

not cleaned the dirt scrubbing/ with the SUBJ scrub.1PL because scrubbed.1PL

‘The dirt wasn’t cleaned because we scrubbed.’

c. Den katharise o lekes me to tripse tripse.

Not cleaned the dirt with the scrub.IMP scrub.IMP

The projection of RIs is further illustrated with modal operators. The RI cannot be in the scope of the modal operator, i.e. it cannot mean that a possible reason / manner that cleaned the dirt is scrubbing (similarly to *afu/since*-clauses, Kalokerinos 2004). This reading becomes possible with the *because*-clause (20b), with gerunds and PP-modifiers (20c).

- (20) a. Bori [tripse tripse] na katharise o lekes.
 may scrub.IMP scrub.IMP SUBJ cleaned the dirt
 √ *As a result of scrubbing, it's possible that the dirt cleaned.* (RI > may)
 ✗ *The dirt cleaned possibly due to/as a result of scrubbing .* *(may > RI)
- b. Bori epidi to tripsame na katharise o lekes.
 may because it.CL scrubbed.1PL SUBJ cleaned the dirt
- c. Bori me to tripse tripse na katharise o lekes.
 May with the scrub.IMP scrub.IMP SUBJ cleaned.3SG the dirt
 √ *As a result of scrubbing, it's possible that the dirt cleaned.*
 √ *The dirt cleaned possibly due to/as a result of scrubbing.*

Finally, RIs cannot be in the scope of a question operator. Similar to *afu/since*-clauses, they cannot be part of a question, i.e. they are always *not-at-issue* / *backgrounded* (Charnavel 2019; Kalokerinos 2004). (21a) is infelicitous because the only possible interpretation is that the speaker is not certain whether his own hand hurts. Again, the causal modifier (21b) and the PP-modifier (21c) are fine under this reading.

- (21) a. #Mipos [grafe grafe] ponese to heri mu?
 QUEST.PRT write.IMP write.IMP hurt.3SG the hand my?
 √ *As a result of writing a lot, do you think my hand hurt?*
 ✗ *Do you think that it is writing that caused my hand to hurt?*
- b. √Mipos epidi egrafa oli tin ora ponese to heri mu?
 QUEST.PRT because wrote.1SG all the time hurt.3SG the hand my
- c. √Mipos me to grafe grafe ponese to heri mu?
 QUEST.PRT with the write.IMP write.IMP hurt.3SG the hand my?
 Do you think that it is writing that caused my hand to hurt?

In addition, Kalokerinos (2004) shows that the performative character (*promise*) is lost due to the backgrounding effect of the *afu*-clause.

(22) $\delta\epsilon\eta\ \theta\alpha\ \textit{ime}\ \textit{pia}\ \textit{sta}\ \textit{po}\delta\textit{ja}\ \textit{sas},\ \textit{afu}\ \textit{paretume}.$

Not FUT be.1SG anymore in-the feet your since resign.1SG

‘I will no longer be in your way, since I am resigning’

(Kalokerinos 2004: (98))

We notice that RIs yield a similar effect:

(23) [Duleve duleve kathe mera] den tha sas enohlo pja...

Work.IMP work.IMP every day not FUT you bother anymore

‘As/Since I will be working all the time every day, I will not bother you anymore.’

The association of RIs with *afu/since*-clauses is further attested by the fact that RIs have a preference to be embedded under epistemic/doxastic predicates (Kalokerinos 2004).

(24) Kurastika... / I’m tired...

a. ee... [Aneva kateva] logiko itan (na kurastis).

eh go-up.IMP go-down.IMP, it was expected/ it’s reasonable...

b. afu anevokatevenes oli tin ora logiko itan...

since you were going up and down all the time, it’s reasonable...

c. *epidi anevokatevenes oli tin ora logiko itan....

because you were going up and down all the time, it’s reasonable...

Similarly, as we notice below the critical factor licensing the RI is the *doxastic* component and not the *subjunctive – indicative* distinction. Therefore, (25a) and (25b) are fine although the first embeds an indicative and the second a subjunctive complement. By contrast, RIs are not good under the emotive *herome* ‘I am glad’ and the desiderative *thelo* ‘want’ in (25c) and (25d).

(25) a. $\sqrt{\text{Nomizi/lei}}\ \textit{oti}\ [\textit{pes}\ \textit{pes}]\ \textit{ton}\ \textit{pisane}\ \textit{ton}\ \textit{patera}\ \textit{tus}...$

thinks/says.3SG that say.IMP say.IMP him.CL convinced.3PL the father their

‘He thinks that, since they were asking him all the time, they convinced their father.’

b. $\sqrt{\text{Elpizi}}\ [\textit{pes}\ \textit{pes}]\ \textit{na}\ \textit{pisune}\ \textit{ton}\ \textit{patera}\ \textit{tus}...$

hopes.3SG say.IMP say.IMP SUBJ convince.3PL the father their

‘He hopes that, since they are asking him all the time, they will convince their father.

c. * # Theli pes pes na pisune ton patera tus...
wants.3SG say.IMP say.IMP SUBJ convince.3PL the father their

*‘He wants, by asking him all the time, to convince their father.’

d. ?# herete pu pes pes ton pisane ton patera tus...
glad.3SG that_{Factive} say.IMP say.IMP him.CL convinced3PL the father their

*‘He is glad that, by asking him all the time, they convinced their father.’

These data suggest that RIs convey backgrounded/presupposed information about an iterative situation which brings about the event described in the main clause. However, it is also important to notice that RIs are not identical with *afu/since*-clauses. The main difference is that *afu/since*-clauses can simply provide justification for the claim of the speaker without any causal relation existing between the *afu/since*-clause and the main clause. This is not possible with RIs. For example, (26a) provides justification for the speaker’s hypothesis, the speaker observes somebody eating soups all the time and he infers that he must like soups (evidential interpretation of *afu/since*-clauses). This reading is not available with the RI in (26b) which enforces a causal/explanation link between eating soups and liking them (i.e. the only possible interpretation is that eating soups all the time will result in liking soups).

(26) a. Afu troi supes oli tin ora, ipotheto oti tha tu aresun.

Since eat.3SG soups all the time suppose.1SG that FUT him.CL like.3PL

‘Since he eats soups all the time, I suppose he will like them.’

b. #[Troge troge supes oli tin ora], ipotheto oti tha tu aresun.

Eat.IMP eat.IMP soups all the time suppose.1SG that FUT him.CL like.3PL

In the next section, we attempt a preliminary analysis capturing the properties of RIs.

4. RIs & the justification link: Towards an analysis

In the previous sections we saw i) that RIs cannot be analysed as run-of-the-mill manner or cause modifiers and ii) that they pattern more like *afu/since*-clauses in that they convey *non-at-issue* content. Moreover, we saw that the RI is interpreted as causing the eventuality

in the main clause. The question arising is how this causal link is encoded in the semantics. Three different possibilities arise; i) the cause/explanation is part of the RI-meaning, which means that the RI is a causal modifier of some sort, ii) that there is a covert operator outside the RI and the main clause which acts as a link between the two and finally iii) that there is no link in the semantics but the causal link is inferred pragmatically. We will follow the third possibility, showing that the relation between the RI and the associate clause is regulated by the context. In this way, we preserve Kallergi's (2013) insight that the main meaning encoded by RIs is iterativity and all other interpretations somehow follow from this.

The idea that there is a pragmatic relation, not encoded at the LF component between two propositions is not novel at all. At the level of discourse there is vast literature on the discourse relations (e.g. *cause, explanation, concession*) between two independent propositions (see Asher & Lascarides 2003 i.a.). RIs are different in that they are not independent clauses but they are similar to free adjuncts (*as*-clauses as in (27)) which Zobel (2019) analyses as having a pragmatic causal link with the main clause. In what follows, I briefly outline Zobel's (2019) main points.

Zobel (2019) suggests that the causal relation between the *as*-clause and the main-clause as in (27) is not part of the semantics but rather inferred in the pragmatics. However, the two clauses are strongly related. The *as*-clause takes as its argument the entire proposition and presupposes a co-temporal relation with the eventuality denoted by the main clause.

(27) As a cat owner, Peter owns two cats.

Zobel (2019) shows that this co-temporal relation usually results in a causal link between the two sentences but this is not obligatory as revealed under certain contexts.

The analysis I pursue for RIs builds on Zobel's analysis in that the RI combines with the main clause and contributes a presupposition. The syntax for a sentence as in (28) is illustrated in (29). As discussed in Section 2, the internal structure is only roughly analysed as involving reduplication/doubling in the context of an iterative head. The IterP merges above the Voice/AspP. Its semantic contribution is illustrated in (30). The iterative takes as its arguments two functions from times to truth values and establishes a precedence relation between the two. As shown in (30a), the Iter-head introduces a presupposition that

there is an iterative situation conveyed by the embedded vP (RI) at a time t that precedes the time of the main eventuality. The meaning we end up with in (30d) says that *it's presupposed that there is an iterative situation of saying events prior to the event of convincing Peter*.

(28) [Pes i Ana pes i Maria], pistike o Petros.
 Say.IMP the.NOM Ana say.IMP the.NOM Maria got-convinced.3SG the.NOM Peter.

(29) TP
 3
 T_{past} AspP₂
 3
 IterP AspP $\langle i, t \rangle$
 3 3
 Iter vP $\langle 1+2 \rangle$ Asp vP
 3 6
 vP₁ vP₂ pistike o Petros
 6 6
 pes i Ana pes i Maria

- (30) a. $\llbracket Iter \rrbracket = \lambda p_{\langle i, t \rangle}. \lambda q_{\langle i, t \rangle}. \lambda t'. \exists t > t': p(t)(s) = 1. q(t')$
 b. $\llbracket IterP \rrbracket = \lambda q_{\langle i, t \rangle}. \lambda t'. \exists t > t':$ *There is an iterative situation at time t preceding t' that consists of Ana-saying and Maria-saying events.* $q(t')$
 c. $\llbracket AspP_2 \rrbracket = \lambda t'. \exists t > t':$ *There is an iterative situation at time t preceding t' that consists of Ana-saying and Maria-saying events.* There is a convincing event where the theme in this event is Peter and the time of the event is t'
 d. $\llbracket TP \rrbracket = \exists t > t':$ *There is an iterative situation at time t preceding t' that consists of Ana-saying and Maria-saying events.* There is a convincing event where the theme in this event is Peter and the time of the event is t' preceding the utterance time.

Therefore, under this analysis it is predicted that the precedence relation is enforced by the semantics whereas the causal relation is not. This prediction seems to be born out. (31a) has a causal relation but doesn't satisfy the precedence and thus it is infelicitous. (31b) which is minimally different in satisfying the precedence relation is acceptable.

- (31) a. #[Duleve duleve oli mera (avrio)] mesa sta nevro ine simera.
 work.IMP work.IMP all day tomorrow inside the nerves is today
 ‘Since/because he works all way tomorrow, he is nervous today.’
- b. [Duleve duleve oli mera avrio] mesa sta nevro tha nai otan girisi.
 work.IMP work.IMP all day tomorrow inside the nerves will be when he-returns
 ‘Since/because he works all way tomorrow, he’ll be nervous when he comes back.’

Furthermore, a co-temporal interpretation is also not allowed with RIs (Kallergi 2013: 473).

- (32) [Ðiplose ðiplose to forema], prosekse ton leke
 Fold.IMP fold.IMP the dress noticed the stain
 ‘By folding the dress again and again, she came to notice the stain.’

In addition, we can find examples in which there is no causal relation and the RI is licensed. This is clearly illustrated in (33) in which the arrival of the day cannot be attributed to story-telling. Although our understanding is that time came by relatively easily by saying stories, we cannot establish a causal link between the two propositions.

- (33) [Pes pes istories apo ta palia] ksimerose.
 Say.IMP say.IMP stories from the past the sun rose
 ‘By telling stories from the past, the sun rose.’

Finally, different interpretations than causal are possible. When the main clause is future oriented or counterfactual, RIs are understood as conditional statements (see also Kallergi 2013: 477). Notice that in these cases the presupposition of RI is not projected (see Karttunen’s (1973) presupposition filters).

- (34) a. Isos [pline pline] na katharisi o lekes..
 Perhaps wash.IMP wash.IMP SUBJ clean the dirt...
 ‘Perhaps if we wash it many times, the dirt will clean.’
- b. [Pes pes] tha ton iha pisi...
 say.IMP say.IMP FUT him.CL had.1SG convinced

‘If had talked to him a lot/many times, I would have convinced him.’

Another possible link is a concessive interpretation facilitated with the particle *ke pali* ‘and still’ in (35):

- (35) [Tripse tripse] ke pali den katharise...!
scrub.IMP scrub.IMP and again not cleaned
‘Although we scrubbed it a lot, it didn’t clean.’

Unsurprisingly, these interpretations are the discourse relations independent clauses. Similar interpretations are reported for free adjuncts and gerunds in Greek.

5. RIs: Implications for the morphosyntax of imperatives

In conclusion, RIs behave like modifiers with presupposed content. Building on Kallergi’s (2013) insight that the iterative is the basic interpretation from which the other interpretations are derived, I outlined an analysis under which the main function of RIs is to provide an iterative situation which by presupposition precedes (at least partially) the occurrence of the main event.

The present account can be extended to similar cases of noun reduplication as in (36).

- (36) *Dulia dulia kurastika...*
work work I-got-tired
‘Working all the time I got tired’

The commonality between the two cases is the preference for unmarked constructions in terms of their functional structure. This brings us to the next question concerning the inflectional status of the imperative form.

Under the present account the imperative form in RIs lacks inflectional features. The question is if this is true in general for the so-called “2nd singular” imperative. Additional evidence towards this direction comes from another non-canonical imperative construction which conveys difficulty as in (37). Similarly to RIs, it is possible that the understood subject is 1st or 3rd person (Oikonomou 2016, Demirok & Oikonomou 2018).

- (37) Context: *As a tourist, I visit a library and I see some poor students trying to study in the noisy environment and then I can say to my partner:*
Ande diavase tora me afto to thorivo.

PART read.IMP now with this the noise

‘It’s difficult to study with this noise...’

Furthermore, reduplicated imperatives can appear outside the construction examined here, embedded in a DP (38) or as a predicate (39):

(38) a. To mbes vges tu mu ti dini sta nevra.

The get-in.IMP get-out.IMP his gets on my nerves

‘The fact that he was getting in and out all the time gets on my nerves.’

(39) Htes itane oli tin ora aneva kateva o kaimenos...

Yesterday was all the time get-up.IMP get-down.IMP the poor-guy

‘Yesterday, the poor guy got up and down all the time.’

These data suggest that in canonical imperatives the 2nd singular is not morphologically encoded. Instead, the imperative mood imposes a presuppositional restriction that the property conveyed by the VP is restricted to the addressee (Oikonomou 2016; Zanuttini et. al. 2012).

Finally, it is worth pointing out that RIs are present not only in other Balkan languages (e.g. Turkish, Bulgarian, Serbian) but also in Italian despite the fact that there is an infinitive, which is considered to be inflectionless. This may be due to the fact that the imperative is phonologically shorter than the infinitival form thus presenting a better candidate for reduplication.

Several questions remain open. For example, the internal structure of RIs and the morphosyntactic mechanism associated with the iterative interpretation. Additionally, the pragmatic mechanism deriving the causal, concessive or conditional link needs to be further defined, and similar interpretations with gerunds need to be investigated in Greek.

References

- Alexiadou, A. (1997). *Adverb placement: A case study in antisymmetric syntax* (Vol. 18). John Benjamins Publishing.
- Asher, N. and A. Lascarides (2003). *Logics of Conversation*. Cambridge, UK: Cambridge University Press
- Charnavel, I. (2019). Perspectives in causal clauses. *Natural Language and Linguist Theory*, 37:389–424.
- Demirok, Ö. and D. Oikonomou (2018). Difficult imperatives in Turkish. In T. Bondarenko, C. Davis, J. Colley, and D. Privoznov (eds.), *Proceedings of the 14th Workshop on Altaic Formal Linguistics (WAFL14)*, MIT Working Papers in Linguistics #90, 49-56.
- Haugen, J. D. (2011). Reduplication in distributed morphology. *Coyote Papers: Working Papers in Linguistics*, Linguistic Theory at the University of Arizona.

- Haugen, J.D. & H. Harley (2013). Head-marking inflection and the architecture of grammatical theory. *The Persistence of Language: Constructing and confronting the past and present in the voices of Jane H. Hill*, 8, 133.
- Inkelas, S. & C. Zoll (2005). *Reduplication: Doubling in morphology* (Vol. 106). Cambridge University Press.
- Kallergi, H. (2009). Grammaticalization, lexicalization and total reduplication: An example from Modern Greek. In A. Tsangalidis (ed.). *Selected Papers from the 18th international Symposium on Theoretical and Applied Linguistics, Thessaloniki, 4-6 May 2007*. Thessaloniki: Monochromia Publishing, 177-184
- Kallergi, H. (2013). *Reduplication at the word level: The Greek facts in typological perspective*. Doctoral dissertation, Aristotle University of Thessaloniki.
- Kalokerinos, A. (2004). The justifying connection, mostly in Greek. *Journal of Greek Linguistics* 5, 27–80.
- Karttunen, L. (1973). Presuppositions and compound sentences. *Linguistic Inquiry* 4(2):169-193.
- Lechner, W., G. Spathas, A. Alexiadou, & E. Anagnostopoulou (2015). On deriving the typology of repetition and restitution. *Presented at GLOW 2015*, Paris. April 15-17.
- Oikonomou, D. (2016). *Covert modality in root contexts*. Doctoral dissertation, Massachusetts Institute of Technology.
- Philippaki-Warbuton, I. & G. Catsimali. (1999). On Control in Greek. In A. Alexiadou, G. Horrocks & M. Stavrou (eds), *Studies in Greek Syntax*:153–168.
- Tatevosov, S. (2003). The parameter of actionality. *Linguistic Typology* 6, 317–401.
- Tsimpli, I. M. (2000). Gerunds in Greek. *Journal of Greek Linguistics* 1: 133–169.
- Xrakovskij, V. S. (1989). *Tipologija iterativnyx konstrukcij*. Typology of iterative constructions. Leningrad: Nauka.
- Zanuttini, R., M. Pak, & P. Portner (2012). A syntactic analysis of interpretive restrictions on imperative, promissive, and exhortative subjects. *Natural Language & Linguistic Theory*, 30(4), 1231-1274.
- Zobel, S. (2019). Accounting for the “causal link” between free adjuncts and their host clauses. *Proceedings of Sinn und Bedeutung* 23, 491–508.