The Gray Area of Acceptability Judgments: Clefts and Exhaustivity in Cypriot Greek

Evelina Leivada (Universitat de Barcelona, Cyprus Acquisition Team),
Elena Papadopoulou (University of Essex, University of Cyprus, Cyprus Acquisition Team),
Natalia Pavlou (University of York, Cyprus Acquisition Team)

Cyprus Acquisition Team
Department of English Studies
University of Cyprus
75 Kallipoleos
PO Box 20537
1678 Nicosia
Cyprus

Email: evelina@biolinguistics.eu

Phone: (+357) 99534823

Fax: (+357) 22895067

title: The Gray Area of Acceptability Judgments: Clefts and Exhaustivity in Cypriot Greek[1]

running title: Clefts and Exhaustivity in Cypriot Greek

Abstract
This paper aims at investigating the hypothesis that *embu '(it-)is-(it-)that'* is an underlying form of cleft as well as deciphering exhaustivity effects between cleft and *embu*-structures in Cypriot Greek (CG) and addressing the credibility of acceptability judgments provided by native speakers in experimental settings. CG is a variety that lacks recognition as official language in Cyprus and, as a result, it is heavily influenced by the use of Standard Modern Greek, which is one of the two official languages in Cyprus. In a written task carried out online, 187 participants were asked to judge whether 12 declarative sentences were true in relation to each of 6 stories provided. Our findings, apart from providing insights with respect to the mixed behaviour of participants when it comes to judging the test items as acceptable or not, challenge the availability of *bona fide* clefts in CG, since all participants in approximately 50% of all stories and across all conditions allow for non-exhaustive interpretation with 'it is XP that YP' clefts, despite the fact that this construction has been argued to carry typical properties attributed to clefts, such as exhaustivity. What the results reveal is wide intra-dialectal variation, since all sentences elicited mixed responses with respect to their status as true or false. This variation can be attributed to morphosyntactic change in progress. Older forms of CG, for example the poem "9 July 1821" (Michaelides 1873), involve both clefts of the sort 'It is XP that YP' and *embu*-clefts possibly due to language contact with French and English, which both display the first type of clefts. The change towards a non-exhaustive reading of CG clefts could be the effect of language contact with Standard Modern Greek, which does not have either *bona fide* or the *embu*-type clefts.

Key words: acceptability judgments, clefts, Cypriot Greek, embu, exhaustivity, language change

word count: 6.470

1. INTRODUCTION

Cypriot Greek (henceforth, CG) is the variety of Modern Greek that is spoken on the island of Cyprus. Lacking the status of an official and codified variety, the use of CG co-exists with the sociolinguistically 'high' variety of Greek that is spoken in Cyprus, Standard Modern Greek (henceforth, SMG). SMG is the official language and also the variety spoken in mainland Greece and the different values attached to each variety as well as the different registers that facilitate the use of each one of them affect the way they are eventually put in use, since there is a two-way relation between attitudes towards different varieties and language change (Tsiplakou 2004).The simultaneous use of SMG and CG as well as the status of the latter in relation to the former mainly in sociolinguistic terms has been the object of inquiry in many studies (see, *inter alios*, Papapavlou 1998, Papapavlou & Pavlou 1998, Tsiplakou 2004) and certainly the dynamics behind this co-existence are in a position to influence the way native speakers of CG adjust their linguistic performance in certain tasks and registers and, in the long run, modify the use of the most marked aspects of their native variety towards the direction of the standard.

The co-existence of two[2] varieties that are linguistically related results to a complex interplay between certain morphosyntactic properties that belong to the two varieties and, as a result, it also fades away the boundaries between the different varieties and their respective grammars, thus giving rise to a linguistic continuum. Similar to the findings reported in Grohmann et al. (2012), for the acquisition of object clitic placement in different child populations residing in Cyprus, where the results showed a mixed[3] placement pattern in both child and adult populations, focus strategies and complementisers in CG elicited mixed results in terms of acceptability judgements (i.e. in terms of semantic acceptability qua their status as true or false) in the present experiment. The attested focus constructions and complementisers are CG specific (i.e. they are not felicitous in SMG) and, as such, they are not found in the performance of a monolingual speaker of SMG. In CG, however, their existence is a well-known fact, already discussed in the literature (see, for example, Grohmann et al. 2006, Fotiou 2009, Panagidou 2009), and their presence makes available a range of different cleft sentences, some of which prima facie resemble the typical cleft construction in English 'it is XP that YP' and as such, they have been linked to typical properties attributed to clefts cross-linguistically, such as exhaustivity (following Kiss 1998). Under standard assumptions the interpretation of a subject cleft (1) and an object cleft (2) should be exhaustive and presume that only the denotation of XP participates in the YP event.

(1) En ton andra pu ides.
is.3SG the.ACC man.ACC that saw.2SG
'It is the man that you saw.'

(2) En o andras pu pezi mappa.
is.3SG the.NOM man.ACC that play.2SG football.ACC
'It is the man who plays football.'

Embu '(it-)is-(it-)that', an element that appears optionally in *wh*-questions and declarative sentences (3)–(4), has received two different syntactic accounts. In interrogative environments, Grohmann et al. (2006) adopt a split-CP analysis with a focus projection FocP whose specifier is filled by the cleft where the matrix clause is the complement of the C-head. The CP-domain remains empty and *pu* 'that' introduces the matrix clause in declarative contexts. As argued by Papadopoulou (in progress), this analysis becomes problematic when

we take into consideration that *embu* cannot inflect for Tense (*itabu 'was-(it-)that') or be negated (*ennembu 'not-is-(it-)that') in *wh*-questions, even though the copula in cleft sentences can.

Papadopoulou suggests that *embu* has been grammaticalised as a fossilized focus element merged directly in C^0. The different properties of clefts and embu-structures are presented in more detail in subsections 2.1. and 2.2. respectively.

(3) O Yannis embu eklotsisen tin mappan.
the.NOM John.NOM embu kicked.3SG the.ACC ball.ACC
'It is John that kicked the ball.'

(4) Tin mappan embu eklotsisen o Yannis.
the.ACC ball.ACC embu kicked.3SG the.NOM John.NOM
'It is the ball that John kicked.'

A recent account on the semantic properties of CG clefts suggests that the clefted XP is not always linked to an exhaustive interpretation (Panagidou 2009: 18), following similar claims made by Prince (1978) and Doetjes et al. (2004) for English and French. Following Prince's terminology, Panagidou provides examples of "informative-presupposition clefts" that intend to present statements as facts without an exhaustive interpretation. However, this absence of exhaustivity is not an argument to be linked to the inexistence of proper clefts in CG, because Panagidou's examples of non-exhaustive clefts involve PP rather than DP as the clefted constituent. Yet, following standard assumptions, these PPs denote properties of entities and not entities in the discourse world; therefore the non-exhaustive interpretation in the aforementioned clefts can be explained away by the syntactic and semantic nature of the clefted XP constituent.

Alongside with exploring the different syntactic and semantic properties of the *embu*-structures and the 'it is XP that YP' form of clefts in CG, the two main goals of this paper are to test the hypothesis that *embu* is an underlying form of cleft and to decipher exhaustivity effects between cleft and *embu* structures. 187 participants were asked to judge whether 12 declarative sentences were true in relation to each of the 6 stories provided (3 subject and 3 object). The task was written and administered through "Facebook writing" with the aim of avoiding possible influence from SMG, since CG is mainly used orally. It lacks official orthographic codification[4] and some of its sounds do not correspond to letters existing in the Greek alphabet. As a result, these sounds are written in different ways by different people and there is no uniformity and/or consensus with respect to their representation. When CG is used in a written form, usually the Latin alphabet is employed together with the simplest phonological adaptation (i.e. in Facebook, text messages or other social networks).

The working hypotheses of the experiment give rise to four possible scenarios:

i. If *embu* is a focus Complementizer, it should allow for a non-exhaustive interpretation. In case it unequivocally allows for a non-exhaustive interpretation then it should be analysed as a grammaticalised focus Complementiser in line with what Papadopoulou (in progress) has proposed.

ii. If *embu* is an underlying form of cleft, it should only allow for an exhaustive interpretation.

iii. If 'it is XP that YP' is bona fide 'English type' cleft, it should only allow for an exhaustive interpretation.

iv. If both 'it is XP that YP' and *embu* allow for non-exhaustive interpretation, then neither of them can be analyzed as a bona fide cleft.

2. EXHAUSTIVITY IN CYPRIOT GREEK

In this section, we review different structures that according to the claims made so far in the literature should elicit an exhaustive reading in CG, paying special emphasis to the two kinds of syntactic environments that were attested in our experiment in relation to exhaustivity effects.

2.1. Cleft Structures

The discussion on clefts lays emphasis both on the syntactic and semantic interpretation of clefts following standard assumptions find in the literature. Clefts were firstly discussed by Jespersen (1927) who notes that the DP in the cleft is so definite that it cannot be further restricted so as to call the 'that'-clause a relative clause. In later work, Jespersen (1937) analyzes this relative clause as a special kind of "parenthetic clause", namely a cleft. On the semantic side, clefts express a single proposition in a bi-clausal structure. Adding to this point, Jackendoff (1972) transforms Chomsky's term of "natural" responses to utterances with meaning and defines them as "*focus"* and "*presupposition"*. Despite the fact that more specific and recent suggestions exist in the literature illustrating syntactic explanations for clefts, we will not provide a detailed theoretical analysis of clefts at this stage, but instead focus on their distribution and patterning with the exhaustivity condition.

Cypriot clefts are argued to be focus structures or existential clauses with a non-restrictive relative clause (for further discussion, see Grohmann et al. 2006, Gryllia and Lekakou 2006, Fotiou 2009, Agouraki 2010). In CG cleft structures, there is fronting of the focused constituent expressing either a person or an object or a concept and embedding of a secondary clause introduced with *pu* 'that', as shown in (5) and (6) below.

(5) En ton andran pu ides.
is.3SG the.ACC man.ACC that saw.2SG
'It is the man that you saw'

(6) En o andras pu pezi mappa.
is.3SG the.NOM man.NOM that play.3SG football.ACC
'It is the man who plays football.'

Clefts have been argued to display exhaustivity properties (Kiss 1998), which means that they exhaust the fronted constituent with the relevant property given by the secondary clause.

(7) En to milon pu efaen o andras.
is. 3SG the apple.ACC that ate.3SG the man.NOM
'It is the apple that the man ate.'

In this case, the exhaustive interpretation of the cleft requires that the man has eaten only an apple. In the case that the man has also eaten a banana and a peach, then this sentence should be odd for the given context and the clause in (8) should be produced:

(8) En to milon, tin mbanana tzie to rodakinon.
is.3SG the.ACC apple.ACC, the.ACC banana.ACC and the.ACC peach.ACC
pu efaen o andras.
that ate.3SG the.NOM man.NOM
'It is the apple, the banana and the peach that the man ate.'

The exhaustivity property appears to be late acquired by children, who go through a non-exhaustive stage in questions (Seymour et al. 2005, Roeper et al. 2006a, 2006b) and clefts (Heizmann 2007).

Following previous assumptions on the exhaustivity expressed through clefts, we have included cleft sentences in our experiment to compare them with the focused particle *embu* (Papadopoulou, in progress) that is presented further on. There are no previous studies regarding the exhaustive interpretation of clefts by Greek Cypriot adults or children, except simple production of clefts by children in the context of a more complex experiment (Pavlou 2010), so this study is firstly examining whether these assumptions also hold for CG and secondly whether the same effect appearing in clefts, also appears in the *embu*-particle.

2.2 *Embu*

CG questions and cleft structures bear morphological resemblance to their SMG counterparts with minor pragmatic-semantic and morpho-phonological differences (Fotiou 2009) as well as substantial formation differences with respect to the *embu* '(it-)is-(it-)that' strategy analysed further down and the different *wh*-words employed.

Embu is usually found in *wh*-questions and it optionally appears after the *wh*-word. CG *wh*-words involve the quantifiers *pcos*[5] 'who/which', *posos* 'how much/many', *ti* 'what', and *inda* 'what' as well as the adverbs *pote* 'when', *pu* 'where', *jati* 'why', *pos* 'how', *inda* 'why', and *indalo(i)s* 'how' (Simeonidis 2006: 217; cf. Holton et al. 1997 for SMG). The quantifier *inda* 'what', and the adverbs *inda* 'why' and *indalo(i)s* 'how', are dialect-specific to CG (for a more detailed description see Grohmann and Papadopoulou 2010, 2011, Papadopoulou, in progress) and as discussed in Simeonidis (2006: 217), the *wh*-quantifier *inda* initially derived from the interrogative pronoun *tinda* 'what' used in Asizes,[6] literally *ti ine afta* 'what are these'.

The theoretical account for the status of the *embu*-strategy, as Grohmann et al. (2006) refer to, stands in contrast to Papadopoulou's claim (in progress) for the fossilization of *embu* in questions. This contrast brings together two opposing views on how *embu*-questions are formed. According to Grohmann et al. (2006), the *embu*-strategy involves a split-CP analysis with a focus projection (FocP), whose specifier is filled by the cleft and a C-projection, which takes the matrix clause as its complement deriving questions such as (9) and (10) below. On the other hand, Papadopoulou (in progress) argues for the existence of only the C-position, arguing for a fossilized *embu*.[7]

(9) Ti embu θcavazi o andras?
what.ACC is-it-that read.3SG the.NOM man.NOM
'What is the man reading?'

(10) Pco vivlio embu θcavazi o andras?
which book is-it-that read.3SG the.NOM man.NOM
'Which book is the man reading?'

Embu also appears in declarative clauses, where it is argued to express focus:

(11) Ton Yannin embu agapa i Maria.
the.ACC John.ACC embu loves.3SG the.NOM Mary.NOM
'It is John that Mary loves.'

The fronted constituent usually (i.e. unless it comes with a bare nominal) needs to appear with a determiner, expressing contrastive focus and suggesting that *embu* might be a focus particle. On a par to what one observes in clefts (section 2.1), the focus expressed by *embu* denotes an exhaustivity condition, which sets the fronted constituent as the only item that has been eaten by John:

(12) To psomin embu efaen o Yannis.
the.ACC bread.ACC embu ate.3SG the.NOM John.NOM
'It is the bread that John ate.'

We have presented two structures that share the property of focus and as a result they are assumed to also share the property of exhaustivity. Clefts have been cross-linguistically portrayed as exhaustive (see Kiss 1998 and references cited therein) and in the absence of argumentation suggesting otherwise are assumed to be exhaustive in CG as well. In parallel, *embu*-declaratives, which appear to express focus can be argued to be exhaustive. In our study, we have included both clefts and *embu*-declaratives in an attempt to compare the two structures based on the same criterion; the exhaustivity condition.

3. THE PRESENT STUDY

This section introduces and describes in detail the Cypriot Greek Exhaustive (*Embu) Clefts (CyGEEC) experiment designed to tease apart the interpretative quirks mentioned in section (2.2) above.

3.1. Participants

CyGEEC was administered to 187 monolingual Greek Cypriot adults from all over Cyprus with the aim to be administered and adapted later on to child populations. Participants were divided into three age groups namely 18 – 30 years old for AG1, 30 – 45 years old for AG2 and 45 years old and above for AG3 (Table 1).

Age group	Age range	Number of participants	Gender		Education		
			male	*female*	*Lyceum*	*College*	*University*
AG1	18 – 30	148	33	115	39	5	104
AG2	30 – 45	25	32	68	1	3	21
AG3	45 +	14	7	7	10	1	3

Table 1: Participants

Most participants across all three age groups were female and have received university education with the majority being 18 – 30 years old, hence not allowing for a 'valid' comparison between and within groups for gender and education. Even though number of participants across AGs was not balanced a proportional comparison is provided in section 4.3 of the results.

3.2. Methodology

For the investigation of *embu* and cleft dis -or association in CG CyGEEC was conducted. The task involved a total of 40 test items and 12 controls, divided in three object (O) and three subject (S) stories (see Figure 1 for a story example), across three pairs of verbs, agents and nouns (Appendix I, Table 1).

All conditions, *embu* and cleft exhaustive and non-exhaustive interpretations along with S and O stories and verb-noun (V/N) pairs were distributed within groups and randomized as depicted in Table 2 (Appendix I). The six stories created involved either *embu* only structures and/or (only) cleft structures as those in (5) and (6) respectively (repeated as (13) and (14) below) resulting in some stories having 5 test items and 2 controls and the others having 10 test items and 2 controls.

(13) En ton andran pu ides.
is.3SG the.ACC man.ACC that saw.2SG
'It is the man that you saw.'

(14) En o andras pu pezi mappa.
is.3SG the.NOM man.NOM that play.3SG football.ACC
'It is the man who plays football.'

The stories were presented to each participant in the exact order presented in Table 2 (Appendix I). The task was administered online through Survey Monkey (http://www.surveymonkey.com), a research tool for creating online surveys. The instructions given at the beginning of the task were in CG. Investigating preference rather than only grammar in the interpretation of the attested structures, we were interested in the spontaneous reaction to the story, hence participants were not allowed to change their answer once answering a question. This was considered necessary since following items could have triggered a possibly different answer to the items already presented.

With respect to the representation of the stimuli, the Latin alphabet was used and the simplest phonological adaptation was applied across test structures. For instance 'ball' in CG was written as *mappa* rather than μάππα. Also 'teddy bear' was written as *pulukkuin* rather than *πουλουκούιν* which if it was to be written orthographically using the Latin alphabet,

should have been *pouloukkouin*. In order to establish this Facebook 'norm' we have asked 4 persons aged 21 – 28 to write one of the stories as if they were writing in Facebook. Such a norm was considered necessary since CG does not have an official unified writing coding system – while there has been a recent attempt by Papadima et al. (2011) to create one – and in order to avoid possible effects of SMG writing on CG (see discussion in section 1 for SMG influence on CG and the linguistic environment of Cyprus).

An example of a story as presented to participants translated in English can be found in Figure 1 below – the story in CG is provided in the Appendix II. This is the first story provided with *embu*.

> Lena had a ball, a pencil case, a teddy bear and a box. She threw the ball in the dustbin. She threw the pencil case in the dustbin. She threw the teddy bear in the dustbin.
>
> 1. The ball (embu) Lena threw in the dustbin.
> 2. The ball and the pencil case (embu) Lena threw in the dustbin.
> 3. The teddy bear Lena threw in the dustbin.
> 4. The ball, the pencil case and the teddy bear (embu) Lena threw in the dustbin.
> 5. The pencil case and the teddy bear (embu) Lena threw in the dustbin.
> 6. The box Lena threw in the dustbin.
> 7. The pencil case (embu) Lena threw in the dustbin.

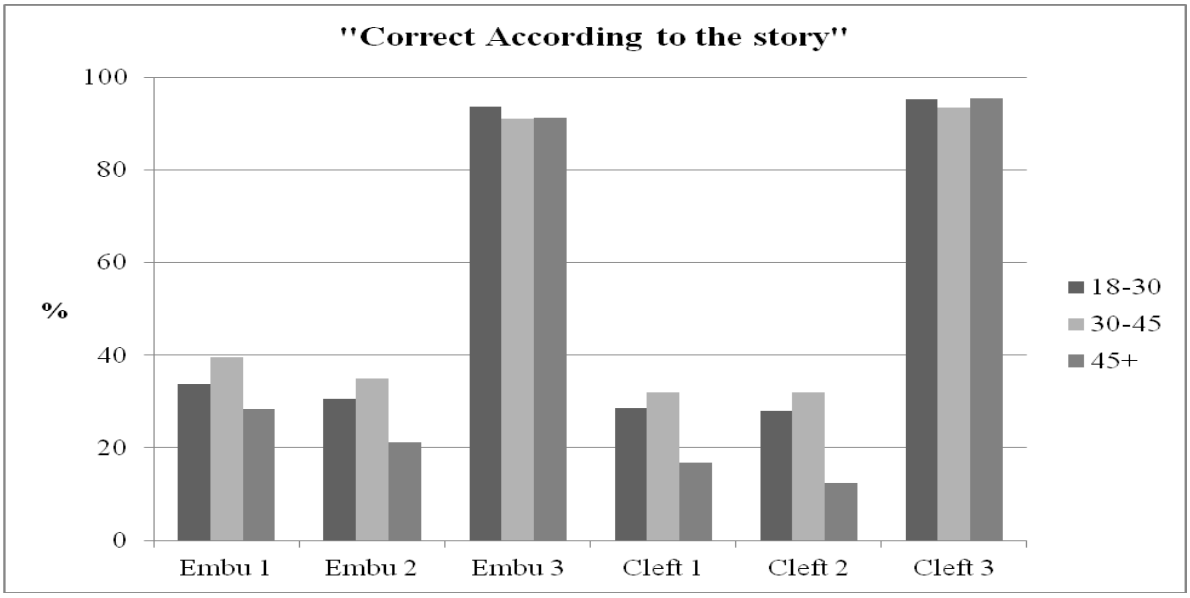
Figure 1: Story 1

Participants were given the story (first two lines) and then each numbered option, one at a time. They were not allowed to trace back and change any answers facilitating in this way spontaneous response to each item rather than comparison between all possible conditions.

3.3. Results

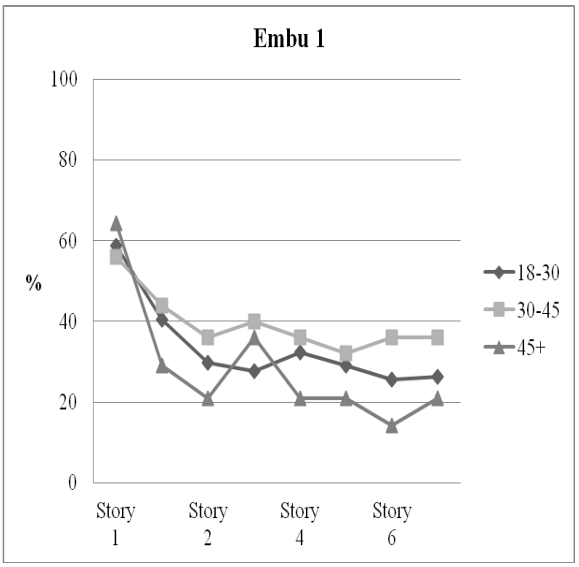
This section provides a description and analysis of the results in three age groups. All scores correspond to "Correct according to the story" answers given by the participants, divided in the three age groups, namely AG1 18-30, AG2 30-45 and AG3 45 and above. Since not all stories (Appendix I, Table 2) had the same number and type – cleft or *embu* – of items the number of the story is always provided and the results are presented not in the exact order of presentation during the experiment, but rather in pairs depending on the type of items. Precisely, Story 1 is compared to Story 6, Story 2 compared to Story 4 and Story 3 to Story 5. Following Figure 1 and the options available, within story items 1-7 were re-coded depending on the number of nouns involved in the action. In particular, when one noun was involved the item was renamed as *embu* 1 or cleft 1, when two nouns were mentioned *embu* 2 or cleft 2 and when three nouns were used they were renamed as *embu* 3 and cleft 3.

All participants answered all questions since they were not allowed to continue unless they answered whether the sentence was true (option 1), false (option 2), or don't know (option 3) according to the story. Overall, all participants across all stories accepted *embu* 3 and cleft 3 to be the most 'correct' answer according to the story allowing for an exhaustive interpretation and accepted much less the *embu* 1 and 2 as well as the cleft 1 and 2 (Graph 1, & Appendix III for a different presentation). Participants aged 45 and above accepted more the exhaustive than all other possible interpretations.

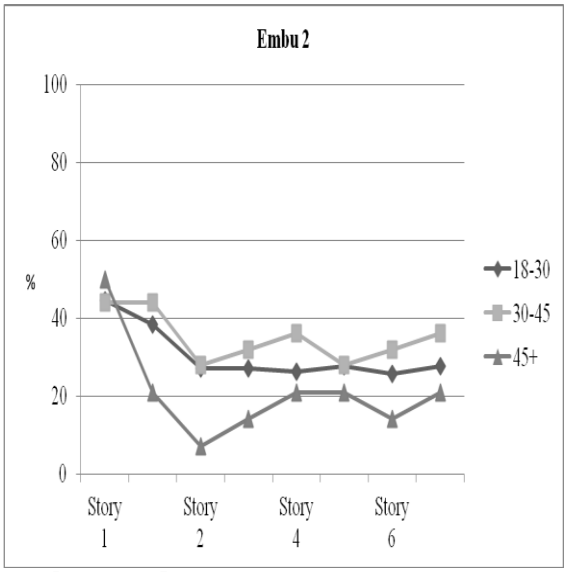


Graph 1: Overall acceptance in all stories

Once separating *embu* 1 and *embu* 2 in different stories, results become more clear-cut. Acceptance rates for both *embu* 1 and *embu* 2 are higher for story 1 for all AGs (Graphs 2 and 3) but the younger the group the higher the acceptance, with AG1 and AG2 accepting at a higher rate potentially non-exhaustive interpretations. AG3 (45 +) is much more conservative throughout both *embu* 1 and *embu* 2 compared to the two younger groups, with only an interesting high acceptance of the second appearance of *embu* 1 in story 2 (Graph 2). First appearance of *embu* 1 and *embu* 2 in story 1 are much more highly accepted than any other, but this high acceptance fades away when clefts are introduced in story 2. That is, participants are much more eager to accept a non-exhaustive interpretation for *embu* rather than an exhaustive one if there are no clefts in the story.



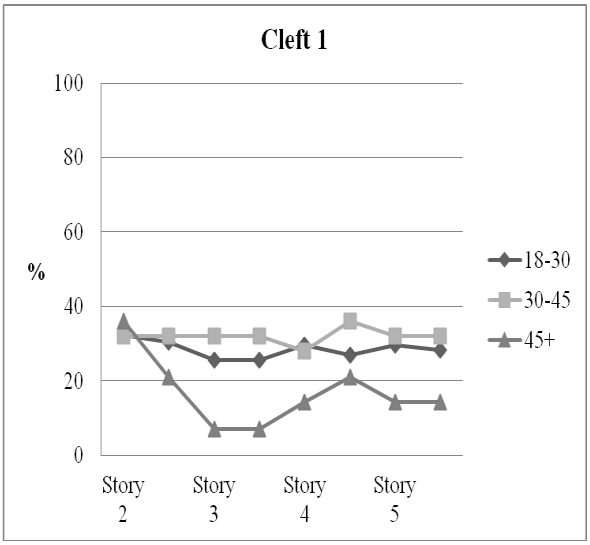
Graph 2: Embu 1



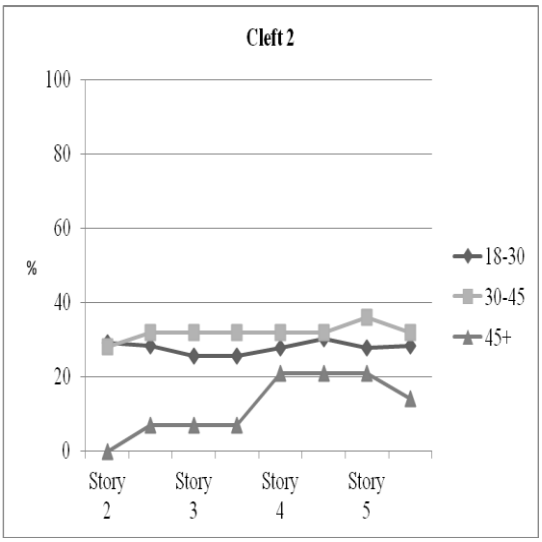
Graph 3: Embu 2

Interestingly, acceptance rates for cleft 1 and cleft 2 do not exceed 39% in all cases for all AGs in contrast to *embu* 1 and *embu* 2 possibly projecting a potential difference between *embu* and cleft structures (Graphs 4 and 5). AG3 is much more conservative across

all stories, whereas AG1 and AG2 could easily be fused into one AG since they function very alike with AG2 being more open to acceptance.

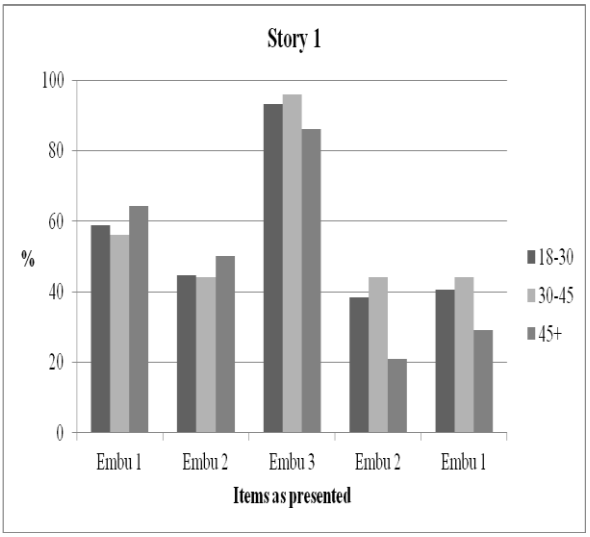


Graph 4: Cleft 1

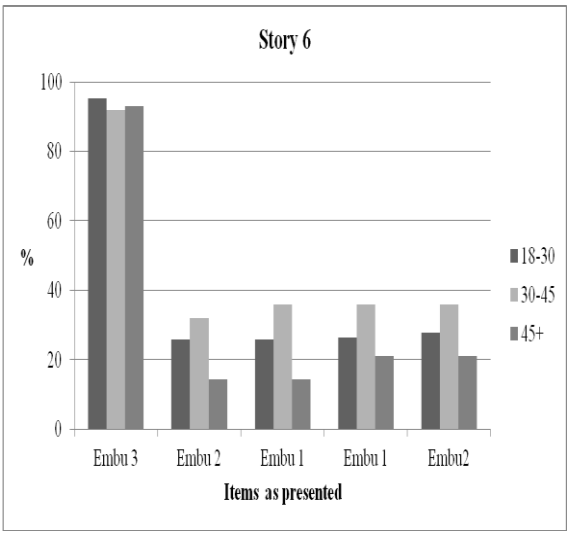


Graph 5: Cleft 2

Within story, *embu* analysis (Graphs 6 and 7) confirms the observations made for Graphs 2 and 3 above, demonstrating a high acceptance of the first appearance of *embu* 1 in story 1, while it is reduced almost by 50% in story 6 – which is the last story of the experiment. Acceptance rates for first appearance of *embu* 1 and *embu* 2 are above and near 50-60 % in story 1, but less than 30% in story 6. AG 3 (45 +) is again the most conservative in relation to the other two group's acceptances at a higher rate in *embu* 1 and 2.



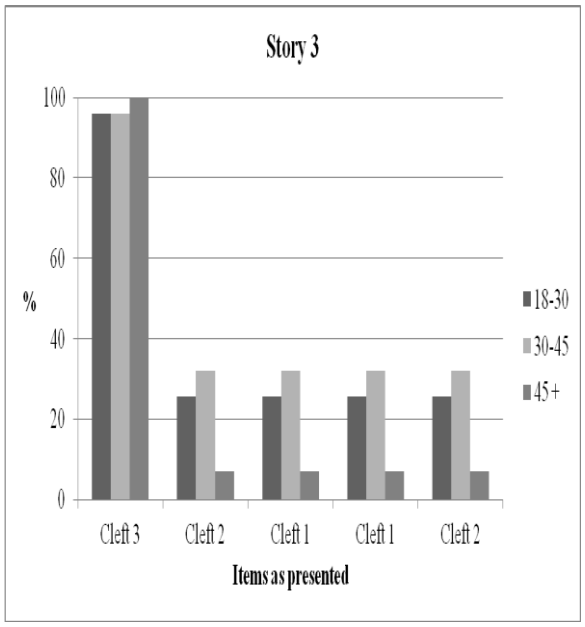
Graph 6: Story 1



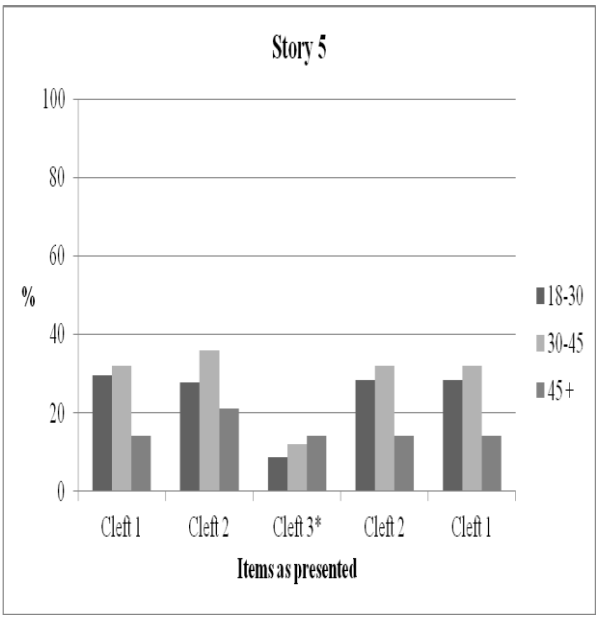
Graph 7: Story 6

A totally different pattern is observed for within story cleft analysis. Clefts are less accepted as "true according to the story" by all AGs when compared to *embu* items. Strikingly, AG3 nearly accepts cleft 1 and 2 with the highest acceptance rate being no more than 12% (Graphs 8 and 9). Cleft 3 in story 5 gets a very low rate of acceptance since the

wrong noun was used as N3 hence the item was false indicating that participants did not develop a strategy of accepting any item with three nouns, but rather indeed concentrate on the interpretation provided.

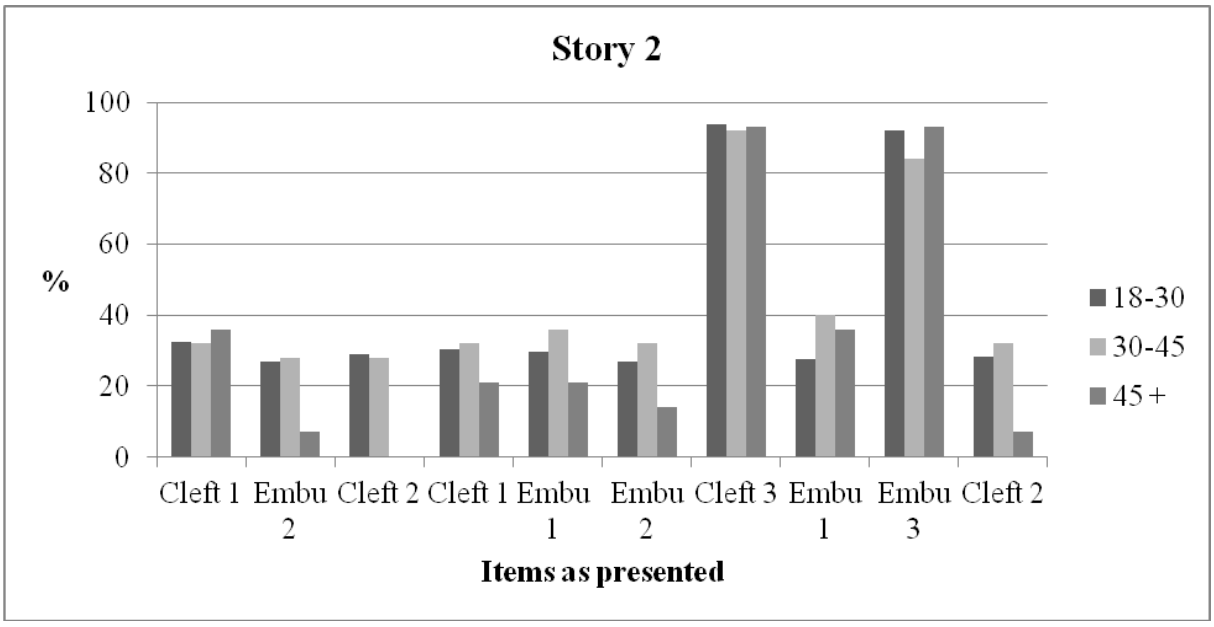


Graph 8: Story 3

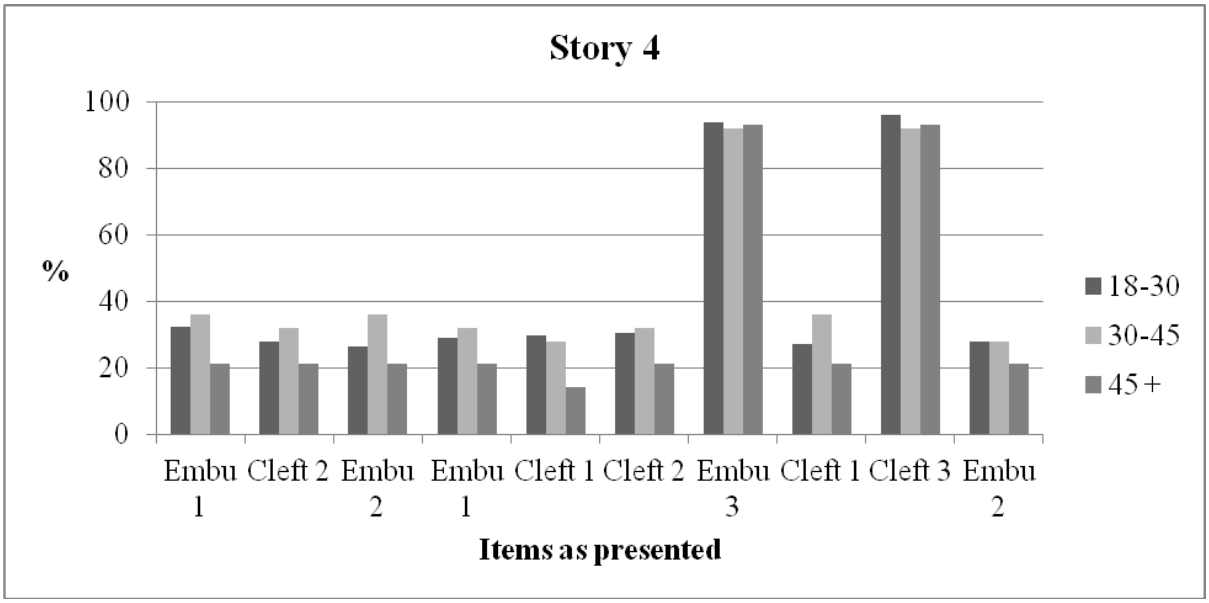


Graph 9: Story 5

In the stories with both *embu* and cleft structures, the results did not deviate from the previous observations with cleft 1 and 2 as well as *embu* 1 and 2 being accepted less than cleft 3 and *embu* 3 (Graphs 10 and 11).



Graph 10: Story 2



Graph 11: Story 4

As it can be inferred from the results above, AG1 and AG2 are less 'conservative' than AG3 possibly suggesting a language change. Both *embu* and cleft structures were most probably bona fide clefts in the past (see Grohmann et al. 2006, Pavlou 2010), but now they seem to allow for different interpretations in the specific experiment (see section below for further discussion), hence supporting a complementiser analysis for *embu* (Papadopoulou, in progress).

4. DISCUSSION

Teasing apart the relation of the above findings to the arguments for the existence of *bona fide* clefts in CG, the interpretative quirks in the responses elicited by the test structures point out three things.

First, there is great microdialectal variation across speakers of CG for both *embu* and cleft structures. All test structures across stories and conditions elicited mixed responses. This is suggestive of the so-called heterogeneity of the dialect and further supports the argument for the existence of a linguistic continuum in Cyprus rather than a mere co-existence of two varieties, CG, SMG and/or Standard Cypriot Greek.

Second, the importance of priming effects of such experiments should be highlighted. The first test structure in the first story elicited quite high percentages of acceptance as being correct according to the story that preceded it. These percentages dropped significantly once the really exhaustive test structure – that is, the one that involved all three items or individuals – was made available. In other words, the performance of the participants in the first story and particularly in the first test structure of the first story is probably the most credible and important one with respect to not attributing an exhaustive interpretation to *embu* structures, since participants were unaffected at this point and had no knowledge of whether a sentence that made available all three items/individuals (exhaustive) was following.

The same accounts for the first appearance of cleft 1 in Story 2. That is, this instance shows the highest acceptance of cleft 1 as being 'true according to the story'. What is more, apart from the age effect observed, is the within story carry over effect of exhaustive interpretation on any other option following. Only *embu* 1, following cleft 3 in Story 2 (Graph 10) shows the reverse pattern. The effect observed suggests participants' answers were affected by the fully exhaustive items (cleft 3 and *embu* 3) provided. Accordingly, any conclusions drawn regarding the acceptability or not of (non)exhaustive cleft and *embu*-declaratives should rely initially on the first appearance of *embu* 1 and *embu* 2 in Story 1 and cleft 1 & 2 before item 7 in Story 2.

Third, it should be noted that acceptability judgments[8] form a gray area and individuals might not be consistent in their responses when asked whether an utterance is acceptable in their native variety or not. In our study, participants belonging to different groups show diverse behaviour across stories. This could receive a sociolinguistic explanation that boils down to the phenomenon of syntactic change in progress, yet this explanation would account only for interspeaker variation, whereas our findings point out to the existence of *intraspeaker* variation as well. The conceptualization of E(xternal)-language in natural languages lacks precision when viewed in comparison to the one existing in formal languages. If in the case of the latter, the contents of an E-language are unequivocally accepted and defined by stipulation, in the case of the former it is emprically impossible to precisely define the contents of an E-language that corresponds to any natural language, so sometimes, it is equally impossible to classify an utterance as unequivocally unacceptable. Assuming that E-language is viewed as a set of well-formed formulas/sentences, it is a relatively uncontroversial fact that an individual (qua Internal-language) is in a position to generate a set of sentences but it is less clear whether s/he is also in a position to generate a distinguished E-language. If s/he could, the area of acceptability judgements would not appear to be so dubious and would not elicit different answers across speakers of the same language. Following Chomsky (1955), generative linguists often assume varying degrees of acceptability of judgments and they accordingly classify linguistic categories in non-discrete scales "more often than not" (Fanselow et al. 2006: 1).

Different examples in our stories, come with different degrees of acceptance, despite the fact that they correspond to the same syntactic structure, and such gradience illegitimizes a view of E-language as a set of well-formed formulas/sentences. It seems that natural languages lack a notion of well-formedness that corresponds fairly to the one found in formal languages: Chomsky & Lasnik (1993) portray this as an empirical fact in the sense that when we think of Mary as a speaker of English, it is easy to translate this into the part that relates to I-language (i.e. Mary has a mental state L, and L=English), but is much more difficult to flesh out its empirical implications (i.e. L corresponds or gives rise to a set of acceptable expressions which is conventionally called English). The lack of a distinguished E-language behind the label 'English' is proven by the lack of consensus with respect to acceptability judgements across speakers of English. At this point, the notion of 'idiolect' enters the equation, but even if our conceptualization of English is narrowed down in reflecting only Mary's idiolect, the concept of Mary's distinguished E-language would still lack a solid basis because the idiolect itself is subject to change and might result to elicitation of different acceptability judgments across different occasions, especially if one targets a sentence that is neither well-formed or ill-formed. The standard anecdotal piece of evidence for this that linguists use is their own inability to provide judgements for such sentences: Having heard

them so many times, they start looking more and more acceptable (see Snyder 2005 for issues pertinent to this phenomenon of 'satiation'). The findings of this study add the factor of priming in the equation, since our participants modified their responses according to the stimuli they received: First appearance of *embu* 1 and *embu* 2 in story 1 are more accepted as exhaustive than the ones that follow them, even if the structure behind the test item is identical.

One of the main points explored in this paper is the validity of judgments provided by native speakers and the extent to which these can be taken into account for the given analysis. As claimed in section 3.3 the implications of the data collected may suggest that language change may be in progress for the true nature of the dialectal element *embu* in Cypriot Greek. *Embu* may have started out with a more complex structure, such as a cleft (Grohmann et al. 2006), but the judgments of the native speakers in the CyGEEC suggested that younger populations prefer the interpretation of a simple syntactic illustration of *embu*, that of a Complementiser (Papadopoulou, in progress). Early sociolinguistic research (Labov 1984) has dealt with the methods for approaching a speaker and the goals of an interview so as to achieve an objective response. This has brought to surface the doubt of objectivity in the collection of data labeled as the 'observer's paradox' or otherwise the 'experimenter effect'. The CyGEEC experiment was given in the form of a link on Facebook, so there was no contact between the experimenters and the participants. The design of the experiment did not allow the participants to go back to their previous judgments and change them once they had proceeded to the next test question, so there could not be any effect related to their change of their first decisions. It is, however, possible that such a change could take place in the absence of a certain syntactic structure, as seen in the results. As already pointed out appearance of *embu* 1 and *embu* 2 in story 1 are much more highly accepted than any other, but this high acceptance fades away when clefts are introduced in story 2. If no cleft sentences were introduced to the experiment, then the results could have been very different from the ones presented in this paper. What is also challenged is the fact that populations like the one participating in CyGEEC and involving a wide range of possible parameters (rural vs. urban speech, possible effect from SMG etc.), are difficult to give a clear-cut distinction with regard to their acceptability of structures like *embu*, which may be the result of an ongoing change.

At this point, the suggestion of ongoing language change is the closest scenario to explain the acceptability rates in the data discussed. Given the Cypriot sociolinguistic context as well as previous studies suggesting that Cypriot Greek undergoes syntactic changes or moves towards a linguistic continuum, we believe that several changes in all the levels of the specific variety could appear at this stage. Similarly to this case, Pavlou (2011) argues that the Cypriot-specific wh-word *inda mbu* 'what/why' undergoes a syntactic change, which appears in young populations as *inda mbu*-allomoprhs. More particularly, the wh-words *nambu, innambu, tambu* and *ambu* have been identified as allomorphs of the *inda mbu*, but show restricted syntactic distribution in comparison with *inda mbu*. In this study, questionnaires were given to elicit acceptability judgments in a 5-grade scale and the results indicated a higher preference of *inda mbu* in older populations than younger populations. This led to the conclusion of a syntactic change in progress on the basis of the acceptability judgements collected. We base this study on the argument that acceptability judgments can suggest language change and in some cases they can possibly depict the distinction of the age groups to suggest change in progress, or otherwise known 'the apparent-time construct'. But

we acknowledge the fact that variation in the different age groups can either indicate change in progress or simply 'stable variation' based on other sociolinguistic factors.

Attempting a comparison of the performance across the different age groups, a language change seems to be in course. According to the responses elicited, *embu* in older ages seems to be analyzed as a cleft (in line with Grohmann et al. 2006), whereas in younger groups it seems to be analyzed as a fossilized lexical item (Papadopoulou, in progress). It should be made clear that this claim assumes that clefts in Cypriot Greek show exhaustivity properties and that based on the *embu*-analysis (Grohmann et al. 2006) presented above which sets *embu* as a form of cleft, exhaustivity was expressed in both clefts and in *embu* in older generations. This will only be once a larger number of participants is tested for all groups as well as compared to a younger group of children who are still in the course of acquisition.

5. CONCLUSION

This paper aimed to address the hypothesis that *embu '(it-)is-(it-)that'* is an underlying form of cleft as well as deciphering exhaustivity effects between cleft and *embu*-structures in CG. 187 participants were asked to judge, in an online written task, whether 12 declarative sentences were true in relation to each of 6 stories provided. The four attested hypotheses are the following:

i. If *embu* is a focus Complementizer, it should allow for a non-exhaustive interpretation. In case it unequivocally allows for a non-exhaustive interpretation then it should be analysed as a grammaticalised focus Complementiser in line with what Papadopoulou (in progress) has proposed.

ii. If *embu* is an underlying form of cleft, it should only allow for an exhaustive interpretation.

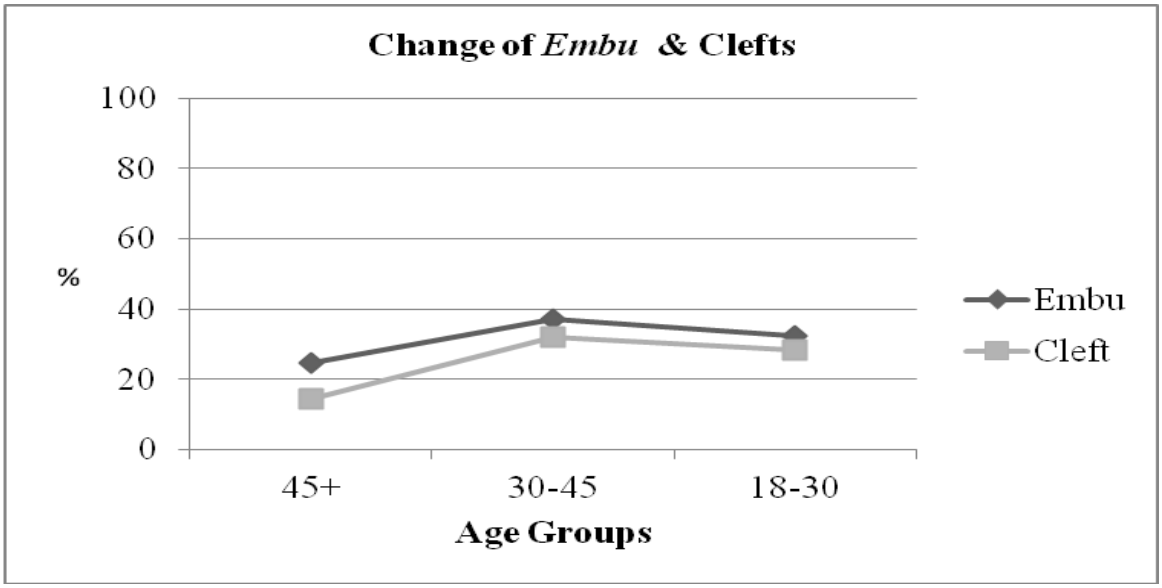
iii. If 'it is XP that YP' is bona fide 'English type' cleft, it should only allow for an exhaustive interpretation.

iv. If both 'it is XP that YP' and *embu* allow for non-exhaustive interpretation, then neither of them can be analyzed as a bona fide cleft.

Starting off from (iv), both 'it is XP that YP' and *embu* allow for non-exhaustive interpretation, hence neither can be analyzed as a bona fide cleft. This finding relates to (iii); since 'it is XP that YP' is not a bona fide 'English type' cleft, it does *not only* allow for an exhaustive interpretation. The same is observed with respect to (ii); relating this observation to (i), *embu* can be analysed as a grammatical focus complementiser (Papadopoulou, in progress).

The claim set out in the current paper focuses on the sociolinguistic assumption of language change, and more specifically change in progress or apparent-time construct. Change follows prototypically a path where some variant in the speech of an older group in a community appears more frequent in the speech of the middle generation and even more in the youngest generation. Following the Labovian (1984) model, it is expected that the analyzed results should be similar to the prototypical S-curve line for language change. An S-curve is assumed to illustrate the three different stages met in an assumed change of a

linguistic feature (morphology, syntax or phonology) by identifying the *initial stasis*, the *rapid rise* and *tailing off* of the phenomenon. Even though, the S-curve is often discussed in quantitative studies, it can be rarely found as it needs to capture all different stages based on the different age groups studied. For our study, the results are summarized in Graph 12 below:



Graph 12: Change in Progress

Graph 12 shows the mean of the percentages for each age group regarding the two different syntactic structures, that of *embu*-clauses and that of clefts. As indicated, an S-curve does not appear, but based on the low performance and percentages observed, it could be argued that this is only the beginning of the assumed change in progress. In fact, after comparing similar studies in CG (Pavlou 2010), one can easily observe that the same pattern as in Graph 12 also appears in other structures which are assumed to undergo language change. In Pavlou (2010), *inda mbu* 'what' is the structure undergoing change to *nambu*. The data show that the same pattern is observed with the only difference being that the small increase is observed in the group of 45-60, and not 30-45 as in this study. It should be pointed out though that the population in that study was divided in 4 age groups, namely '60+', '45-60', '30-45' and '18-30'. Given also that the structure studied in Pavlou (2010) is a wh-word, it can be argued that frequency is a significant factor for determining the 'when' of the beginning of language change. *Embu*, on the other hand, is an optional element. It is therefore expected that the sociolinguistic factors driving language change will first target those elements that are frequent in speech and in later stages, any other elements appearing less frequently. What is, however, striking is the similarity of the two phenomena studied in different points in time and still showing the same pattern of the first stage or otherwise called 'initial stasis'. Precisely for this reason, the outlook of this paper is that not only older populations should be tested to complete our pool of data, but also populations younger than 18, since these are expected to show a rise of exhaustivity interpretations with *embu* and provide further support for a claim of change in progress in CG.

Pending further testing rounds that will involve child populations, we take the results of this experiment to reveal intra-dialectal variation, since all sentences elicited mixed

responses with respect to their status as true or false. This variation is expected if one takes into account that the dialect is largely heterogeneous. The cause of this variation can be related to morphosyntactic change in progress, a hypothesis that as mentioned above, seems to receive initial support from the different behavior of different age-groups. Older forms of CG, for example the poem "9 July 1821" (Michaelides 1873), involve both clefts of the sort 'it is XP that YP' and *embu*-clefts possibly due to language contact with French and English, which both display the first type of clefts. The change towards a non-exhaustive reading of CG clefts could be the effect of language contact with Standard Modern Greek, which does not have either bona fide or the *embu*-type clefts.

APPENDIX I

O/S	Pair	Verb		Noun			
O	1	*krato* hold	*petasso* throw	*Mappan* Ball	*kasettinan* pencil case	*pulukkuin* teddy bear	*kashian* box
	2	*vrisko* find	*pino* drink	*Nero* Water	*gala* milk	*krasin* wine	*ximos* juice
	3	*agorazo* buy	*troo* eat	*Vazanin* Aubergine	*peponin* watermelon	*kapira* toast	*portokalin* orange
S	1	*krato* hold	*petasso* throw	*Mappan* Ball	*kasettinan* pencil case	*pulukkuin* teddy bear	*kashian* box
	2	*vrisko* find	*pino* drink	*nero* water	*gala* milk	*krasin* wine	*ximos* juice
	3	*agorazo* buy	*troo* eat	*vazanin* aubergine	*peponin* watermelon	*kapira* toast	*portokalin* orange

Table 1: Conditions

Story	S/O	V/N Pair	Embu / Cleft	Items											
1	O	1	E	1	2	C_T	3	4	C_F	5					
2	S	3	C + E	1_C	4	2_C	C_F	5_C	1	2	3_C	C_T	5	3	4_C
3	O	2	C	3_C	C_T	2_C	1_C	C_F	5_C	4_C					
4	S	1	E + C	1	4_C	2	5	1_C	C_F	2_C	3	5_C	3_C	C_T	4
5	O	3	C	1_C	C_T	2_C	3_C	C_F	4_C	5_C					
6	S	2	E	3	2	C_T	1	5	C_F	4					

C_T = True control (referring to N3)
C_F = False control (referring to N4)
1 = embu (non exhaustive interpretation with N1)
2 = embu (non exhaustive interpretation with N1 & N2)
3 = embu exhaustivity (all 3 Ns)
4 = embu (non exhaustive interpretation with N2 & N3)
5 = embu (non exhaustive interpretation with N2)
1c = cleft (non exhaustive interpretation with N1)
2c = cleft (non exhaustive interpretation with N1 & N2)
3c = cleft exhaustivity (all 3 Ns)
4c = cleft (non exhaustive interpretation with N2 & N3)
5c = cleft (non exhaustive interpretation with N2)

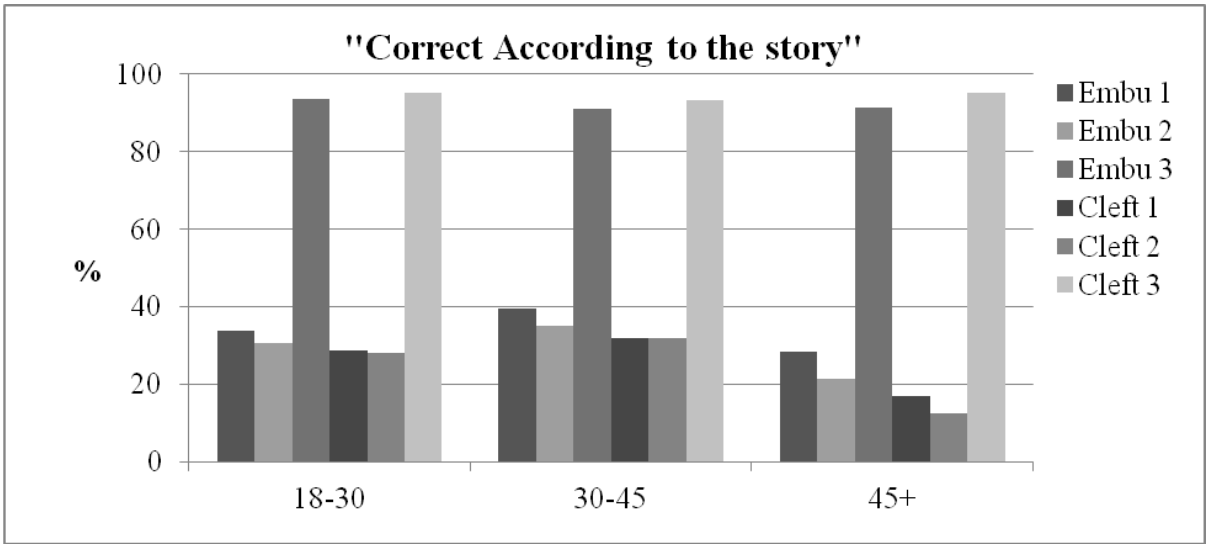
Table 2: Randomization

APPENDIX II

I Lena epiaen mian mappan, mian kasettinan, enan pulukkuin tze mian kashian. Epetaksen mes ton kalathon tin mappan. Epetaksen mes ton kalathon tin kasettinan. Epetaksen mes ton kalathon tze to pulukkuin.

1. Tin mappan embu epetaksen mes ton kalathon i Lena.
2. Tin mappan tze tin kasetinan embu epetaksen mes ton kalathon i Lena.
3. To pulukkuin epetaksen mes ton kalathon i Lena.
4. Tin mappan, tin kasettinan tze to pulukkuin embu epetaksen mes ton kalathon i Lena.
5. Tin kasettinan
   tze to pulukkuin embu epetaksen mes ton kalathon i Lena.
6. Tin kashian epetaksen mes ton kalathon i Lena.
7. Tin kasettinan embu epetaksen mes ton kalathon i Lena.

APPENDIX III



NOTE

[1] We are grateful to the audience of the 2nd Westminster Linguistics Conference of valuable feedback. Thanks are also due to members of the Cyprus Acquisition Team, and especially to Kleanthes Grohmann, for comments and suggestions. We also acknowledge financial support from the Gen-CHILD Project (no. 8037–61017, awarded to Dr. Kleanthes K. Grohmann by the University of Cyprus).

[2] There is no consensus with respect to the variety that one finds when moving towards the acrolectal pole of the Cypriot linguistic continuum. According to standard assumptions one would expect this variety to be SMG, however there are indications that what gets classified as Standard is in many cases much different from the SMG that one finds in Greece (Leivada et al. 2012). Therefore, the acrolectal pole could be taken to involve "Cypriot Standard Greek" (Arvaniti 2002, 2006) rather than SMG.

[3] The attested environment was indicative sentences which are proclitic in SMG but enclitic in CG. Mixed performance boils down to the gradient nature of the morphosyntactic properties that pertain to each variety (Grohmann and Leivada, in press), viewing gradience from the perspective of syntactic variants existent within and affected by a dialect-standard continuum (cf. Cornips 2006 for the case of Standard and Heerlen Dutch).

[4] For a recent take on the need to standardize orthographic codification, see Armostis et al. (forthcoming).

[5] *Pcos* 'who/which' is also found as *pjos* 'who/which' in literature (Grohmann et al. 2010)

[6] Asizes is series of texts referring to the dialect which used to be spoken on the island around the 10th–11th century (see Simeonidis 2006: 150 for further details).

[7] See Grohmann et al. 2006 and Papadopoulou (in progress) for further discussion.

[8] We employ the term 'acceptability judgments' rather than the commonly used 'grammaticality judgments' first because we tested the semantic interpretation of the attested structures and not their syntactic status (although a difference in semantics possibly reflects a different syntactic analysis of *embu*) and second because the term 'grammaticality judgments' is a misnomer, since no individual has a precise knowledge of what part of her system of grammar accepts or rules out an utterance (Boeckx 2010).

REFERENCES

Agouraki, Yorgia. 2010. It-clefts and stressed operators in the preverbal field of Cypriot Greek. *Lingua* 120, 527-554.

Armostis, Spyros, Kyriaci Christodoulou, Marianna Katsoyannou, and Charalambos Themistocleous. Forthcoming. Writing in Cypriot Greek: The need for standardisation and its importance for dialectal lexicography. In *Dialogue on Dialect Standardization*. Cambridge: Cambridge Scholars Publishing.

Arvaniti, Amalia. 2002. The maintenance of diglossia in Cyprus and the emergence of Cypriot Standard Greek. Ms., University of California, San Diego.

Arvaniti, Amalia. 2006. Linguistic practices in Cyprus and the emergence of Cypriot Standard Greek. *San Diego Linguistic Papers* 2, 1–24.

Boeckx, Cedric. 2010. *Language in Cognition: Uncovering Mental Structures and the Rules Behind them*. Malden, Massachusetts: Wiley-Blackwell.

Chomsky, Noam. 1955. The logical structure of linguistic theory. Ms., Harvard University/ Massachusetts Institute of Technology. [Published in part as *The Logical Structure of Linguistic Theory*, New York: Plenum, 1975.]

Chomsky, Noam and Howard Lasnik. 1993. Principles and Parameters Theory. In Joachim Jacobs, Arnim von Stechow, Wolfgang Sternefeld, and Theo Vennemann (eds.), *Syntax: An International Handbook of Contemptorary Research*, 506–569. Berlin: Walter de Gruyter.

Cornips, Leonie. 2006. Intermediate syntactic variants in a dialect-standard speech repertoire and relative acceptability. In Gisbert Fanselow, Caroline Féry, Ralf Vogel and Matthias Schlesewsky (eds.), *Gradience in Grammar: Generative Perspectives*, 85–105. Oxford: Oxford University Press.

Doetjes, Jenny, George Rebuschi and Annie Rialland. 2004. Cleft sentences. In Francis Corblin and Henriëtte de Swart (eds.), *Handbook of French Semantics*, 529–552. Stanford, California: CSLI.

Fanselow, Gisbert, Caroline Féry, Ralf Vogel & Matthias Schlesewsky. 2006. Gradience in grammar. In Gisbert Fanselow, Caroline Féry, Ralf Vogel & Matthias Schlesewsky (eds.), *Gradience in Grammar:* 30 *Generative Perspectives*, 1–22. Oxford: Oxford University.

Fotiou, Constantina. 2009. Focusing strategies in Cypriot Greek. In Kleanthes K. Grohmann & Phoevos Panagiotidis (eds.), *Selected Papers from the 2006 Cyprus Syntaxfest*, 63-91. Newcastle-upon-Tyne: Cambridge Scholars Publishing.

Grohmann, Kleanthes K. and Evelina Leivada. In press. Interface ingredients of dialect design: Bi-x, socio-syntax of development, and the grammar of Cypriot Greek. In Anna Maria Di Sciullo (ed.), *Towards a Biolinguistic Understanding of Grammar*. Amsterdam: John Benjamins.

Grohmann, Kleanthes K., Phoevos Panagiotidis and Stavroula Tsiplakou. 2006. Properties of wh-question formation in Cypriot Greek. In Mark Janse, Brian Joseph and Angela Ralli (eds.), *Proceedings of the Second International Conference of Modern Greek Dialects and Linguistic Theory*, Patra: University of Patras.

Grohmann, Kleanthes K. and Elena Papadopoulou. 2011. Question(able) issues in Cypriot Greek. *Linguistic Analysis* 37, 1-35.

Grohmann, Kleanthes K. & Elena Papadopoulou. 2010. Cypriot anomalies in *wh*-in situ structures. In A. Ralli, B. D. Joseph, M. Janse and A. Karasimos (eds.), *e-Proceedings of the 4th International Conference on Modern Greek Dialects and Linguistic Theory (Chios, Greece: 11–14 June 2009)*, 74–105.

Grohmann, Kleanthes K., Eleni Theodorou, Natalia Pavlou, Evelina Leivada, Elena Papadopoulou and Silvia Martínez-Ferreiro. 2012. The development of object clitic placement in Cypriot Greek and the Romance connection. In Sadrine Ferré, Phillipe Prévost, Laurie Tuller and Rasha Zebib (eds.), *The Romance Turn*, 128–152. Newcastle-upon-Tyne: Cambridge Scholars Publishing.

Gryllia, Stella and Marika Lekakou. 2006. Syntax reflects information structure: Evidence from Cypriot Greek. Paper presented at the 27th Annual Meeting of the Department of Linguistics, Aristotle University of Thessaloniki.

Heizmann, Tanja. 2007. Child acquisition of exhaustivity in clefts. In Heather Caunt-Nulton, Samantha Kulatilake and I-hao Woo. *Proceedings of the 31st Annual Boston University Conference on Language Development*, 298-309. Somerville, Massachusetts: Cascadilla.

Holton, David, Peter Mackridge, and Irene Philippaki-Warburton. 1997. *Greek: A Comprehensive Grammar of the Modern Language*. London: Routledge.

Jackendoff, Ray. 1972. *Semantic Interpretation in Generative Grammar*. Cambridge, Massachusetts: MIT Press.

Jespersen, Otto. 1927. *A Modern English Grammar on Historical Principles, Part III, Syntax, vol. 2*. Heidelberg: Winter.

Jespersen, Otto. 1937. *Analytic Syntax*. London: Allen and Unwin.

Kiss, Katalin E. 1998. Identificational focus versus information focus. *Language* 74(2), 245–273.

Leivada, Evelina, Maria Kambanaros and Kleanthes K. Grohmann. 2012. Evaluating teachers' grammatical competence in dialect and standard language. Paper presented to *Bilingual and Multilingual Interaction*, ESRC Centre for Research on Bilingualism in Theory & Practice, Bangor University.

Labov, William. 1984. Field methods of the Project on Linguistic Change and Variation. In J. Baugh & J. Sherzer (eds.), *Language in Use*. Englewood Cliffs: Prentice Hall.

Michaelides, Vassilis. 1873. *Η 9η Ιουλίου του 1821* [9th July 1821]. Retrieved from http://kypros.org/Poetry/Enati/.

Panagidou, Fryni. 2009. Clefts and wh-question formation in Cypriot Greek. MA thesis, University of Utrecht.

Papadima, Aspasia, Ioli Ayiomamitou and Stelios Kyriacou. 2011. A harmonized orthographic system for the Greek Cypriot dialect. Paper presented at the 20th International Symposium on Theoretical and Applied Linguistics (ISTAL) 20, Thessaloniki, Aristotle University.

Papadopoulou, Elena. In progress. Acquisition of wh-questions: Evidence from Cypriot Greek. Doctoral dissertation, University of Essex, Colchester.

Papapavlou, Andreas. 1998. Attitudes towards the Greek Cypriot dialect: Sociocultural implications. *International Journal of the Sociology of Language* 13, 15–28.

Papapavlou, Andreas and Pavlos Pavlou. 1998. A review of the sociolinguistic aspects of the Greek Cypriot dialect. *Journal of Multilingual and Multicultural Development* 19, 212–220.

Pavlou, Natalia. 2010. Inda mbu, nambu or ine ti pu? Acquiring complex structures in Cypriot Greek. In Antonis Botinis (ed.), *Proceedings of Tutorial and Research Workshop in Experimental Linguistics*, 141-144. Athens: University of Athens, University of Adger & University of Wisconsin-Madison.

Prince, Ellen F. 1978. A comparison of wh-clefts and it-clefts in discourse. *Language* 54(4), 883–906.

Roeper, Tom, Petra Schulz, Barbara Z. Pearson and Ina Reckling. 2006a. From singleton to

exhaustive: The acquisition of Wh-. In M. Becker and A. McKenzie (eds.), *Proceedings of SULA 3*. GLSA, University of Massachusetts.

Roeper, Tom, Barbara Zurer Pearson and Uri Strauss. 2006 . The acquisition path of the determiner quantifier *every*: Two kinds of spreading. In Tanja Heizmann (ed.), *UMOP (University of Massachusetts Occasional Papers) 34*. GLSA, University of Massachusetts, Amherst.

Seymour, Harry, Tom Roeper and Jill de Villiers. 2005. Development and validation of a language test for children speaking non-standard English: A study of children who speak Black English. National Institute on Deafness and Other Communication Disorders under Contract # N01 DC8-2104 to Harry N. Seymour, P.I.

Snyder, William. 2000. An experimental study of syntactic satiation effects. *Linguistic Inquiry* 31, 575–582.

Simeonidis, C. P. 2006. Ιστορία της Κυπριακής Διαλέκτου [History of the Cypriot Greek Dialect]. Nicosia: Holy Monastery of Kykkos Centre of Research.

Tsiplakou, Stavroula. 2004. Στάσεις απέναντι στη γλώσσα και γλωσσική αλλαγή: Μια αμφίδρομη σχέση; [Attitudes towards language and language change: A two-way relation?] In Georgia Catsimali, Alexis Kalokairinos, Elena Anagnostopoulou and Ioanna Kappa (eds.), *Proceedings of the 6th International Conference on Greek Linguistics*. Rethymno: Linguistics Lab e-book.