

THE CYPRIOT GREEK *EMBU* AND CLEFT SENTENCES: AN INVESTIGATION OF THEIR (NON-)EXHAUSTIVE PROPERTIES

NATALIA PAVLOU, EVELINA LEIVADA & ELENA PAPADOPOULOU
University of Chicago, Universitat de Barcelona & University of Essex

The present research addresses exhaustivity effects in Cypriot Greek from an experimental point of view. It presents acceptability judgments of 187 native speakers, who were asked to provide answers that indicated exhaustivity effects in clefts and sentences employing the *embu*-strategy '(it-)is-(it-)that'. Our results suggest that *embu* is in the process of syntactic change which leads to receiving non-exhaustive interpretations of it. This finding implies that *embu* might not be analyzed as an underlying form of cleft, but rather as a fossilized item (Papadopoulou, in progress). The second finding is that clefts in Cypriot Greek are not unequivocally eliciting an exhaustive interpretation across speakers either. We discuss these results in relation to previous literature on *embu* and clefts in Cypriot Greek (Grohmann et al. 2006, Panagidou 2009), as well as by establishing cross-linguistic comparisons with the status of clefts in other languages.

1 Introduction

This paper aims to provide a detailed examination of exhaustivity effects in cleft sentences and *embu*-structures in Cypriot Greek (hence, CG) in order to further assess claims related to their grammatical properties from a theoretical point of view. We first investigate the hypothesis that the CG *embu* has an underlying cleft structure (it)-is-(it)-that (Grohmann et al. 2006), which could possibly appear with an exhaustivity property that clefts are usually assumed to carry.¹ Contrasting the *embu*-structures with cleft sentences on the basis of exhaustivity, the results aimed to show the differences between the two based on speaker's judgments. More specifically, a written task using acceptability judgments based on short stories was carried out online. The results showed an unexpected variation of exhaustivity effects not only in relation to *embu*-structures, but also with respect to cleft sentences. Challenging the availability of bona fide clefts in CG, this paper will present experimental evidence in order to support the claim that prototypically exhaustive structures vary cross-linguistically.

It could be said that 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 CG is the variety of Modern Greek spoken in the southern territories of Cyprus. This variety has been frequently described as a dialect of Modern Greek and further classified as a southeastern dialect of Greek (Contossopoulos 2000). It is not constitutionally recognized as an official language, hence the use of Standard Modern Greek in certain high registers.

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

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

In the examples above, the ‘man’ is the unique individual that is reported by the speaker as being the object of the ‘seeing action’ in (2), while he is the individual identified as playing football in (1). This means that one cannot make an assumption that a ‘man’, a ‘woman’ or anyone else can be assumed to participate in the described events.

Embu ‘(it-)is-(it-)that’ is an element that appears optionally in *wh*-questions as well as declarative sentences, as in (3)-(4).

(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.’

Its syntactic representation has been addressed in two ways in the literature of CG syntax. 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. Agouraki (2010) treats examples like (3) and (4) as clefts with pre-copular clefted constituents, which would be re-written as (5) and (6), while what will be referred to in this paper as *embu* in *wh*-question is suggested in her words as a case of *wh*-clefts (7).

(5) O Yannis en pu eklotsisen tin mappan.
the.NOM John.NOM is that kicked.3SG the.ACC ball.ACC
 ‘It is John that kicked the ball.’

(6) Tin mappan en pu eklotsisen o Yannis.
the.ACC ball.ACC is that kicked.3SG the.NOM John.NOM
 ‘It is the ball that John kicked.’

(7) Pcus en pu θoris?
who is.3SG that see.2SG
 ‘Who is it that you see?’

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 show these properties. Papadopoulou suggests that *embu* has been grammaticalised as a fossilized focus element merged directly in C⁰.

The syntactic explorations of *embu* in CG have left the issue unresolved, as there are different reasons for supporting one or the other analysis from a theoretical point of view. The experiment presented here aimed at providing a novel test for understanding how *embu* works, by taking into consideration speaker's judgments. If clefts, according to standard assumptions, are taken to always be exhaustive, then exhaustivity is a valid argument to support or not the hypothesis that *embu* forms a cleft.

In the following sections, we will discuss a cross-linguistic investigation of exhaustivity in clefts in pre-verbal positions, as has been reported in the literature so far. We challenge the standard claims about exhaustivity in such positions by presenting arguments pointing towards the direction of non-exhaustive clefts in CG. In Section 3, we will present the experimental material used, the methodology adopted and the results that support the idea that CG clefts should not be assumed as strictly exhaustive. The experimental approach followed is innovative for a linguistic study asking judgments in a written form from speakers of a variety without standard orthography, hence defining this study as very informative from different points of view.

2 Exhaustivity

The semantic composition of 'it'-clefts in CG was proposed to consist of: a) the cleft clause that denotes a complex property, b) the property of the cleft clause that is saturated by the cleft constituent, c) the interpretation of the clefted constituent as new information, d) a vacuous copula (Agouraki 2010). Delin & Oberlander (1995, 2005) support the idea that clefts are argued to convey uniqueness/exhaustive listing and presuppositional readings. We will, however, consider here the property of exhaustivity in CG clefts in an attempt to validate the current experiment as the one addressing the underlying structure of the CG *embu*.

The concept of exhaustivity in cleft structures discussed here is often referred to in the literature as the presuppositional (or 'Focus-driven') reading of the cleft. In fact, clefts are only one of the many environments such as focus positions, aspectual verbs, *again*, *too* etc. associated with presupposition. We will retain the term 'exhaustivity' though for clarification purposes as presuppositions can be used in many ways as well as be associated with many different structural positions. Exhaustivity, therefore, is the property identified in the interpretation of a sentence in which there is (usually) an individual x such that x is the unique salient individual in the domain of discourse that participates in the described event. In case that an individual y is also participating in the described event, then the interpretation of the sentence as exhaustive should be impossible or, in other words, the truth conditions of the proposition should come out as false. For example, in the following sentence, 'John' is the unique individual in the domain such that 'John' is the argument of the function of 'eating cake'.

- (8) It is John that ate a cake.

Exhaustivity is often related, if not confused at times, with focus. Focus, however, can exist without exhaustivity. Kiss (1998) identified two types of focus, namely identificational and informational focus. One of them is expressing quantification-like operation, and the other expressing non-presupposed information. In her paper, she claims that identificational

focus expresses exhaustive identification, but information focus marks the non-presupposed nature of the information it carries. Exhaustive identification can be expressed only by a constituent that is given in the preverbal identificational slot. Based on examples from Hungarian, it is argued that preverbal identificational focus expresses the exhaustive set of focused items/individuals, whereas postverbal focus does not express exhaustive identification. Identificational focus is defined as:

(9) Identificational focus

It represents a subset of the set of contextually or situationally given elements for which the predicate phrase can potentially hold; It is identified as the exhaustive subset of this set for which the predicate phrase actually holds.

(Kiss 1998, p. 249)

A further test is given in Kiss (1998), where the Hungarian example can be contradicted with the sentence in (10b), but the same would not apply to an English cleft, prototypically thought as exhaustive:

- (10) a. Mari EGY KALAPOT nezett ki maganak
Mary a hat.ACC picked out herself.DAT
 b. Nem, egy kabatot is kinezett
no a coat.ACC also out-picked

CG clefts can also take this contradiction, possibly suggesting that exhaustivity is not very strong.

- (11) a. En to kapelo pu egorasen i Maria.
is the.ACC hat.ACC that buy.3SG the.NOM Maria.NOM
 ‘It is the hat that Maria bought.’
 b. Oi, egorase tzie sakuin.
no, buy.3SG and coat.ACC
 ‘No, she bought a coat, too.’

Another well-known test is the ‘among others’ use with the focused phrase.

- (12) Péter többek között MARIT csókolta meg.
Peter among others Mary.ACC kissed PRF
 ‘Peter kissed Mary, among others’ (Onea & Beaver 2011, p. 17)

The pre-verbal focus here is clearly not exhaustive, as the focused argument is found with the ‘among others’ phrase, which clearly defined the existence of more individuals than the specified argument claims to be. Similarly, the CG cleft would succeed in this test:

- (13) En tin Maria anamesa/mazi me alus pu efilisen
is.3SG the.ACC Mary.ACC between/together with others that kiss.3SG
 o Petros
the.NOM Peter.NOM
 ‘It is Mary among others that Peter kissed’.

It-clefts in CG have been studied in the past (Agouraki 2010) as constructed by ‘late’ merging of the clefted constituent that completes the missing part of the property denoted by the cleft sentence. Agouraki also notes that it-clefts in CG do not necessarily mark presuppositions, contrary to the general accepted assumption. These claims are based on the fact that cleft sentences can be uttered in contexts without any presupposition of already existent information or contradiction to already known information. Gryllia and Lekakou (2006) and Fotiou (2009) though support the claim that clefted constituents can have new information or contrastive information.

A challenge on the semantic properties of CG clefts which suggests that the clefted XP is not always linked to an exhaustive interpretation (Panagidou 2009: 18), follows 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, 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.

The discussion above shows that there is a complex interplay between focus and exhaustivity. In fact, exhaustivity is often related to a separate feature that performs identification (Kenesei 1986, Szabolcsi 1994) or an Exhaustive Identification Operator merged with a focus phrase (Horvath 2005) that takes place in the syntax-semantics interface. Exhaustivity can be thought as part of focus, given that the latter functions as a main predicate specifying the reference of the set as defined by the backgrounded focus expressed (Kiss 1998).

There are certain environments that exhaustivity can be restricted, such as the one with the distribution of adverbs. Bende-Farkas (2009) discusses that the appearance of focus structures in the clause provide semantic partition, which can be tested with the placement of an adverb in the focus position. Following a Focus-frame-Focus-division approach, the appearance of an adverb in the focus position restricts focus to strict exhaustivity, while its absence allows the clefted constituent to be non-exhaustive. We give a similar example to the one cited in Bende-Farkas (2009), but in CG:

- (14) a. En ton Yanni pu nika sti mappa
is.3SG the.ACC John.ACC that win.3SG to-the.ACC football.ACC
 i Maria.
the.NOM Maria.NOM
 ‘It is John that Maria beats in football.’
- b. En panda ton Yanni pu nika sti
is.3SG always the.ACC John.ACC that win.3SG to-the.ACC
 mappa i Maria.
football.ACC the.NOM Maria.NOM.
 ‘It is always John that Maria beats in the football.’

According to this observation, it should not be the case that (14a) defined *Yanni* as the only person beaten by *Maria*, but *Maria* can be the winner of a football game with other people, too (perhaps, in a different time and place setting). The use of the *panda* ‘always’ in (14b)

restricts the exhaustivity property in the use of *Yanni* only; any assumption of other individuals beaten by *Maria* should give the wrong truth conditions for the sentence.

A further observation with regard to exhaustivity and adverb placement can be seen in (15). The post-verbal placement of adverbs can have narrow scope as in (15b), where the interpretation of the sentence is that *Maria* beats *Yanni* always in football, but not necessarily in other sports. However, *Yannis* cannot form the exhaustive set of individuals beaten by *Maria* in football; In fact, we cannot know who else is beaten by her. In (15a) though, the exhaustivity on *Yannis* as the unique individual beaten by *Maria* is still existent, even though a short pause before the adverb in the same sentence changes the scope of the adverb and gives it a narrow scope over *Maria*. A third interpretation scoping over football is given if *sti mappa* ‘at football’ is pronounced with focus, hence contradicting the lack of availability of other sports in our domain.

- (15) a. En ton Yanni pu nika sti mappa
is.3SG the.ACC John.ACC that win.3SG to-the.ACC football.ACC
 panda i Maria.
always the.NOM Maria.NOM.
 ‘It is John that Maria always beats in the football’.
- b. En ton Yanni pu nika panda sti mappa
is.3SG the.ACC John.ACC that beat.3SG always to-the.ACC football.ACC
 i Maria.
the.NOM Maria.NOM
 ‘It is John that Maria always beats in the football.’

More recent work has focused not only on isolating the environments in which exhaustivity exists without any doubt, but also showing that some languages do not necessarily have exhaustivity with pre-verbal focus. More specifically, Onea & Beaver (2011) show that Hungarian speakers tend not to deny utterances with pre-verbal foci when the associated exhaustivity claim is false (does not correspond to the truth conditions of the event), hence contradicting previous claims for the direct link between exhaustivity and pre-verbal focus (Kiss 1998, among others).

Pursuing this argument shows that research on exhaustivity and its different distribution throughout the clause is yet understudied and that common assumptions, such as the one standardly assumed about focus and exhaustivity especially in the environment of a cleft is significantly challenged. Our experimental approach aims not only to address language-specific exhaustivity patterns with reference to the variety in question, but also to make a contribution to the literature of cross-linguistic discussion on exhaustivity.

3 Our experimental approach

In an attempt to test the hypothesis mentioned in section 1 above we have designed the Cypriot Greek Exhaustive (*Embu) Clefts (CyGEEC) experiment. This truth value judgement task focused on teasing apart *embu* and cleft structures’ exhaustivity through the presentation of 6 stories. A description of the participants is found in section 3.1 with a brief description of the methodology used in section 3.2, followed by a detailed description of the results in section 3.3.

3.1 Participants

CyGEEG was administered to 187 participants aged 18 – 45+, who were divided in three age groups (AG). 148 participated in the youngest AG (age range of 18-30) namely AG1, 25 in the second AG (age range of 30-45) namely AG2, and, 14 in the third AG (age range of 45+) namely AG3 (Table 1 below). Most participants across AGs were female, 115 in total, and 128 in total have had university level education.

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
	Total	187	72	115	50	9	128

Table 1. Participants

Since number of participants across AGs was not balanced, a proportional approach is provided in section 3.3 below.

3.2 Methodology

The CyGEEG experiment involved the presentation of six stories, namely, three object (O) and three subject (S) stories, with 40 test and 12 control items, across three pairs of verbs, agents and nouns (see Leivada et al. 2013 for a detailed description of the experiment and the stimuli presented). The six stories were divided in three categories namely,

- (i) 2, one S and one O, stories that allowed for *embu* (non)exhaustive interpretations as in (16a) and (16b) respectively
- (ii) 2, one S and one O, stories that allowed for cleft (non)exhaustive interpretations as in (17a) and (17b) respectively
- (iii) 2, one S and one O, stories that allowed for both *embu* and cleft (non)exhaustive interpretations.

(16) a. I Lena embu epetaksen tin mappan mes
the.NOM Lena.NOM (it)-is-(it)-that throw.3SG the.ACC ball.ACC in
 ton kalathon.
the.ACC bin.ACC
 ‘It is Lena that threw the ball in the bin’

b. Tin mappan *embu* epetaksen mes ton kalathon
the.ACC ball.ACC (it)-is-(it)-that throw.3S in the.ACC bin.ACC
 i Lena.
the.NOM Lena.NOM
 ‘It is the ball Lena threw in the bin’

- (17) a. **En** i Lena **pu** epetaksen tin mappan mes
is.3SG the.NOM Lena.NOM that throw.3SG the.ACC ball.ACC in
 ton kalathon.
the.ACC bin.ACC
 ‘It is Lena that threw the ball in the bin.’
- b. **En** tin mappan **pu** epetaksen mes ton kalathon
is.3SG the.ACC ball.ACC that throw.3SG in the.ACC bin.ACC
 i Lena.
the.NOM Lena.NOM
 ‘It is the ball that Lena threw in the bin.’

All conditions were distributed within age groups and randomized, resulting in 5 test items and 2 controls for categories (i) and (ii) above and 10 test items and 2 controls for category (iii).

Participants were presented with a story and then were asked to judge whether the sentence following was ‘true according to the story’ or not. One sentence corresponding to one interpretation (exhaustive or not) was showed on the screen at a time. The task was administered online through the research tool Survey Monkey (<http://www.surveymonkey.com>) and promoted through social networking, mainly Facebook. For this reason the Facebook writing, a rather spontaneous orthographical system used by Greek Cypriot speakers, was used. In particular, this is represented by the Latin alphabet with the simplest phonological adaptation with regard to more complex sounds in CG, while at the same time avoiding any possible effects from written CG and the non-existence of an official CG-writing system (see Leivada et al. 2013 for a detailed description).

3.3 Results

This section provides a description and a short analysis of the results obtained. All graphs and tables are divided in the three AGs mentioned in section 3.1, namely, AG1 18-30, AG2 30-45 and AG3 45 and above and all scores correspond to percentage calculated for the “Correct according to the story” answers. Number of the story always corresponds to the order of presentation of each story with story 1 being the first story and story 6 being the last one presented to the participants. Stories are always presented in pairs according to the three categories mentioned in the previous section (category (i) refers to stories 1 and 6, category (ii) to stories 2 and 4 and category (iii) to stories 3 and 5) and the items correspond to the actual item order presentation. Following Figure 1 and the options available, story items were re-coded according to the number of nouns serving as subjects or objects (either Ss or Os) involved in the action. Precisely, when one subject or one object was involved in the action (as already given in the brief story setting provided to the speakers) the item was renamed as *embu* 1 (E1) or cleft 1 (C1), when two nouns were used *embu* 2 (E2) and cleft 2 (C2) and when 3 nouns were involved were renamed as *embu* 3 (E3) and cleft 3 (C3).

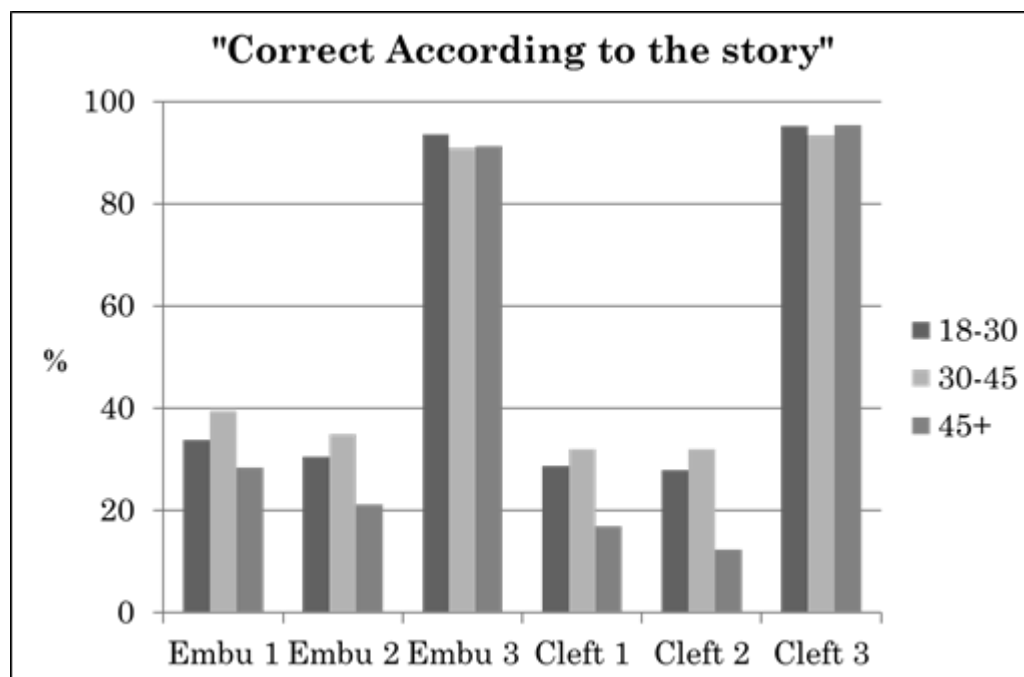


Figure 1. Overall acceptance in all stories

As expected, all participants across all stories accepted *embu 3* and *cleft 3* at the highest rate, since these are the exhaustive interpretations and are always true according to the story. AG1 and AG2 accept at similar rates (28% - 39.5%) *embu 1*, *embu 2*, *cleft 1* and *cleft 2* whereas, AG3 accepts less all conditions (13% - 29%) with all conditions involving two nouns, namely *embu 2* and *cleft 2*, always being lower than *embu 1* and *cleft 1* respectively.

Even though, AG3 accepts *embu 1* less than any other two AGs as depicted in Figure 1 above, in the overall acceptance of all stories, it seems to be the group with the highest (64.2%) acceptance for the first appearance of *embu 1* in the first story (Story 1) of the experiment (Table 2).

Condition		E1	E2	E3	E2	E1		
Item order		1	2	3	4	5		
Story 1	18-30	58.8	44.6	93.2	38.5	40.5		
	30-45	56	44	96	44	44		
	45+	64.2	50	86	21	29		
Condition				E3	E2	E1	E1	E2
Item order				1	2	3	4	5
Story 6	18-30			95.3	25.7	25.7	26.4	27.7
	30-45			92	32	36	36	36
	45+			93	14.2	14.2	21	21

Table 2. Category (i) – Stories 1 and 6

The first *embu* 1 appearance receives the highest acceptance rates (58.8% for AG1, 56% for AG2 and 64.2% for AG3) of all other *embu* 1 and *embu* 2 of the two stories of category (i); since it is the only item that is not biased by any other option. All other *embu* 1 and *embu* 2 instances are of lower acceptance rates than the first *embu* 1 and *embu* 2 appearance. All *embu* 2 instances are lower than *embu* 1 cases across all AGs and all stories. This alone suggests participants are more eager to accept non-exhaustive interpretation for *embu* rather than an exhaustive one; for category (i) stories.

Importantly, acceptance rates for cleft 1 and cleft 2 are lower than *embu* acceptance rates across all AGs, with AG2 showing the highest acceptance, 36% for Cleft 2, story 5 (Table 3 below) suggesting a possible difference between *embu* and cleft structures. Again AG3 seems to be the most conservative of the three groups by accepting Cleft 1 at maximum 14.2% and Cleft 2 at maximum 21%. As noted earlier the sentence with 3 nouns, namely, cleft 3 is accepted at nearly 100% (95.9% -100%).

Condition		C3	C2	C1	C1	C2						
Items order		1	2	3	4	5						
Story 3	18-30	95.9	25.7	25.7	25.7	25.7						
	30-45	96	32	32	32	32						
	45+	100	7.1	7.1	7.1	7.1						
Condition					C1	C2	C3*	C2	C1			
Item order					1	2	3	4	5			
Story 5	18-30					29.7	27.7	8.8	28.4	28.4		
	30-45					32	36	23	32	32		
	45+					14.2	21	14.2	14.2	14.2		

*This item had 3 nouns but it had the wrong ones hence it had to be noted as wrong.

Table 3. Category (ii) Stories 3 and 5

Category (iii) stories (Table 4 below) with both *embu* and cleft structures within the same story did not deviate from previous results with *embu* 1 and 2, and cleft 1 and 2, receiving the lowest acceptance rates across all AGs when compared to *embu* 3 and cleft 3. AG3 seems to be again the most conservative group of all hence accepts as true less any *embu* 1 and 2 and cleft 1 and 2 option.

Condition		C1	E1	C2	C1	E1	E2	C3	E1	E3	C2
Items order		1	2	3	4	5	6	7	8	9	10
Story 2	18-30	32.4	27	29.1	30.4	29.7	27	93.9	27.7	91.9	28.4
	30-45	32	28	28	32	36	32	92	40	84	32
	45+	36	7.1	0	21	21	14.2	93	36	93	7.1
Condition		E1	C2	E2	E1	C1	C2	E3	C1	C3	E2

Item order	1	2	3	4	5	6	7	8	9	10
18–30	32.4	27.7	26.4	29.1	29.7	30.4	93.9	27	95.9	27.7
Story 4 30-45	36	32	36	32	28	32	92	36	92	28
45+	21	21	21	21	14.2	21	93	21	93	21

Table 4. Category (iii) – Stories 2 and 4

The data indicate a complex approach to clefts and the CG *embu* as exhaustive or non-exhaustive that varies depending on the age groups involved in the experiment. The interpretation of these data with regard to the underlying syntax of clefts and *embu* in CG as well as the contribution to the literature of exhaustivity will be discussed in the following section.

4 Discussion

The starting point of this research was to provide a valid means of challenging the two syntactic hypotheses for the underlying structure of the Cypriot Greek *embu*, as these have been described in section 1. Surprisingly enough, not only the results presented in the previous section put us in a crossroad of possible scenarios, but also provided much more implications about the possible interpretations of these sentences by Greek Cypriot speakers. This section will be structured in a way that first addresses the main point of this paper, namely, the consequences of our finding for the syntax of *embu* and clefts in CG. We will then expand on possible external factors, as these seem to appear in the data presented. Last, one of the key contributions of this research is considered to be the finding that clefts in CG do not necessarily appear as exhaustive, hence validating some of the previous research mentioned in Section 2.

The two hypotheses regarding the underlying structure of *embu* in CG, an element optionally appearing in both wh-questions and declarative sentences, were contradictive with regard to the underlying structure of it. Grohmann et al. (2006) supported the idea that *embu* is an underlying form of a cleft, by assuming a more complex structure in a bi-clausal form. A much simpler account (Papadopoulou, in progress) wants this interesting phenomenon in CG to be a fossilized form of a more complex structure, possibly a cleft, which occupies a focus position and acts as a focus marker. While different theoretical arguments favor different approaches, our results suggest that, from a synchronic point of view, the analysis offered in Papadopoulou (in progress), whose claims are based on the unacceptability of an inflected copula in the *embu* form (lit. *en + pu* ‘is+ that’), could perhaps be a simpler way to explain the issue at stake. Other factors, however, might also intervene such as the labelling of that copula as ‘vacuous’ (Agouraki 2010), which might suggest that semantic restrictions can also impose morphosyntactic restrictions, such as inflections.

Our hypotheses were based on the exhaustivity condition as prototypically assumed to exist in clefts. If clefts in CG are exhaustive, then *embu* has an underlying form of a cleft, if speakers always provide the exhaustive set of possible individuals (incl. persons and objects) as a response to that utterance. If speakers do not follow this pattern, then *embu* is not necessarily exhaustive and hence, the theory might lead us to claim that *embu* is a fossilized

focus complementizer as argued by Papadopoulou (in progress). The question still remains: Do we have strong evidence to support one theory over another?

The results presented in Section 3 may lead the reader to think that the answer to this question is still not clear. In these results, one can observe a very interesting pattern. Older populations of Greek Cypriot speakers have shown a tendency for the acceptance of *embu* as exhaustive (Figures 2.1 and 2.2), hence supporting an underlying cleft analysis. Younger populations though tend to take *embu* as non-exhaustive, suggesting its possible fossilization or simplification. This leads us to think of a possibly syntactic change for *embu*, from a more complex cleft structure to a more simplified lexical item. If this claim is valid, then both theories are accordingly on the right way, with the Grohmann et al. (2006) study observing the similarity of *embu* with a cleft structure and Papadopoulou (in progress) carefully considering restrictions of *embu* in the clausal domain.

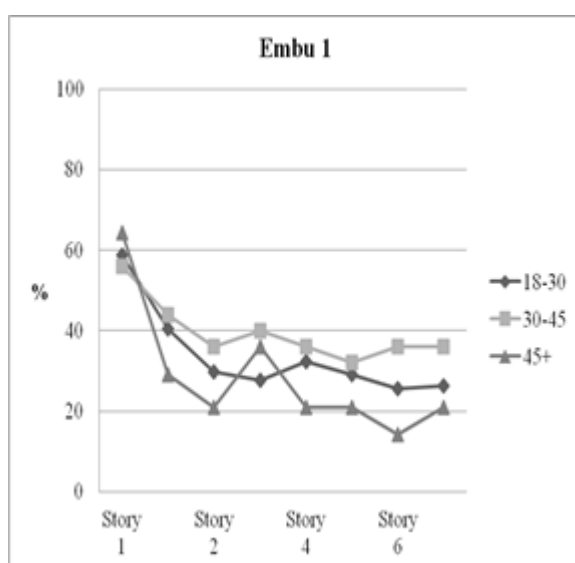


Figure 2.1 Embu 1

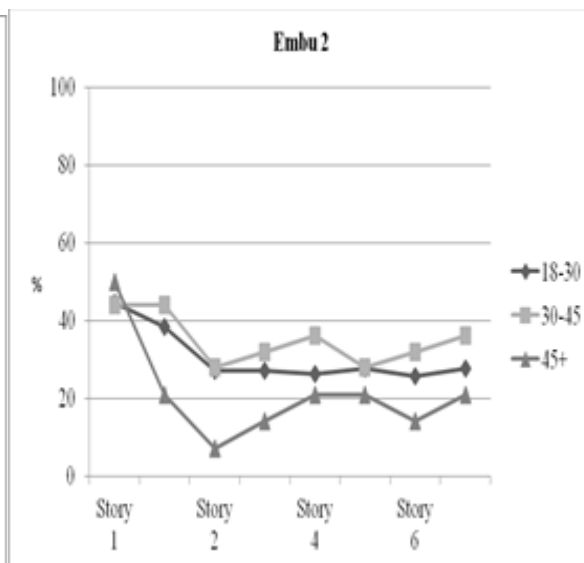


Figure 2.2 Embu 2

The story, however, does not end here, as our data suggest that clefts are not what we might have assumed them to be. In other words, clefts in CG are shown to be both exhaustive and non-exhaustive. As indicated in Figures 4.3 and 4.4 below it is clear that 45+ accept less non-exhaustive clefts with one (cleft 1) and/or two (cleft 2) arguments, whereas 18-30 and 30-45 accept at similar rates both cleft 1 and cleft 2.

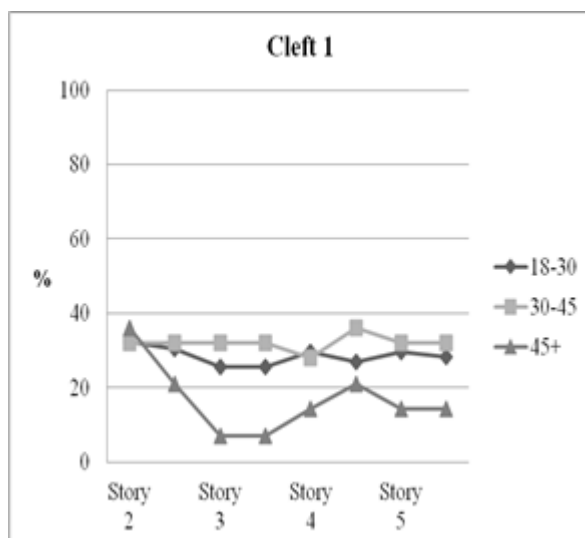


Figure 2.3 Cleft 1

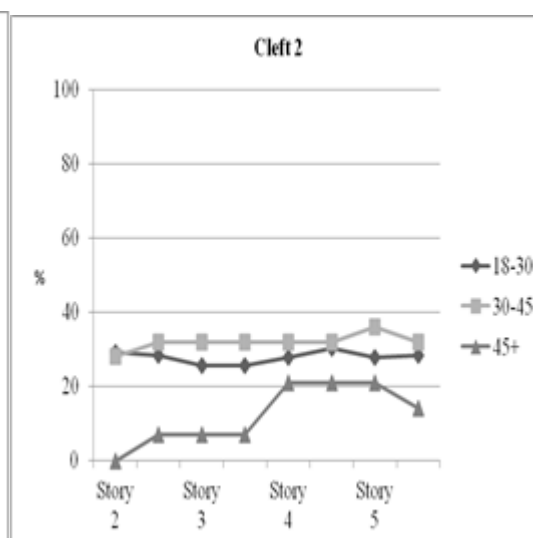


Figure 2.4 Cleft 2

While this has not been clearly indicated before for CG, it has certainly been a claim for languages like Hungarian. The discussion on the relation of focus, clefts and exhaustivity in Section 2 comes to play its role here. Pre-verbal focus has been shown to be non-exhaustive in Hungarian and clefts form an example of well-attested pre-verbal focus. The data in this paper provided the ground for our second major claim; that is, clefts in CG are not necessarily exhaustive, but variation seems to exist among the speakers. This related to the case of Hungarian, where exhaustivity is not found in structural positions prototypically assumed as the first candidates. This consequently leads to the following question: If exhaustivity is not a necessary property of clefts in CG, what are the positions that obligatorily impose the exhaustivity conditions (if there are any)? A more general question should also address the similarities between Hungarian and Cypriot Greek in allowing optionality in the appearance of the exhaustivity condition in pre-verbal focus positions, such as clefts or the degree to which similar analyses can be provided for other languages, as well.

In fact, recent work (Destruel 2012) has shown that French clefts are non-exhaustive either. Following Onea & Beaver (2011), Destruel studied the meaning and use of French *C'est* clefts and showed that exhaustivity in the particular constructions is not as strong as in an exclusive canonical sentence. These supports only confirm the initial observation for the lack of association of exhaustivity and pre-verbal focus in Hungarian for other languages, too; In fact, it would not be surprising if clefts do not show a strong expression of exhaustivity in other languages than those already mentioned.

The study started out by investigating a language-specific structure using a universal condition as its measurement, but the results strongly suggest that exhaustivity is incorrectly perceived as a condition often associated with particular syntax. Exhaustivity appears to be much more complex than simply word orders and structure, given that prosody can also intervene with it- as in the case of *wh*-questions, and also different degrees of its use by speakers.

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. 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 hypotheses were targeting to show that 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. Second, if *embu* is an underlying form of cleft, it should only allow for an exhaustive interpretation. Given the lack of previous literature on acceptability of cleft sentences in CG, the initial hypothesis was that the structure 'it is XP that YP' is a bona fide 'English type' cleft and it should only allow for an exhaustive interpretation. If both 'it is XP that YP' and *embu* allow for non-exhaustive interpretation, then neither of them could arguably be analyzed as a bona fide cleft.

The results showed that 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 the first hypothesis that since 'it is XP that YP' is not a bona fide 'English type' cleft, it does *not only* allow for an exhaustive interpretation. Given this finding, the universality of the exhaustivity condition as always present in cleft structures is challenged and the exploration of the different interpretations in terms of exhaustivity effects that speakers give, as well as the hypothesis that particular syntactic configurations can predict, remains to be further studied.

References

- Agouraki, Yorgia. 2010. It-clefts and stressed operators in the preverbal field of Cypriot Greek. *Lingua* 120, 527-554.
- Bende-Farkas, Ágnes, 2009. Adverbs of quantification, it-clefts and Hungarian focus. In Katalin É. Kiss (ed), *Adverbs and Adverbial Adjuncts at the Interfaces*. Berlin: Mouton de Gruyter.
- Contossopoulos, N. 2000. *Διάλεκτοι και Ιδιώματα της Νέας Ελληνικής* [Dialects and Idioms of Modern Greek]. Athens: Grigoris.
- Delin, J. & Oberlander, J. 1995. Syntactic constraints on discourse structure: The case of it-clefts. *Linguistics* 33(3).
- Delin, J. & Oberlander, J. 2005. *Cleft constructions in context: Some suggestions for research methodology*. Ms., University of Stirling.
- Destruel, Emilie. 2012. The French c'est cleft: an empirical study of its meaning and use. In Christopher Piñon (ed.) *Empirical Issues in Syntax and Semantics* 9.
- 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.
- 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., 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.
- 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.
- Horvath, Julia 2005. Is 'Focus Movement' Driven by Stress? In *Approaches to Hungarian* 9, eds. Christopher Piñón & Péter Siptár, 131-158. Budapest: Akadémiai Kiadó.
- Kenesei, István 1986. On the Logic of Word Order in Hungarian. In *Topic, Focus, and Configurationality*, eds. Werner Abraham & Sjaak de Meij, 143-159, Amsterdam: John Benjamins.
- Kiss, Katalin E. 1998. Identificational focus versus information focus. *Language* 74(2), 245-273.
- Leivada, Evelina, Elena Papadopoulou and Natalia Pavlou. 2013. The gray area of acceptability judgments: Clefts and exhaustivity in Cypriot Greek. In K. E. Ithemere (ed.). *Language Contact: A Multidimensional Perspective*, 59-86. Newcastle-upon-Type: Cambridge Scholars Publishing.
- Onea, Edgar and David Beaver. 2011. *Hungarian focus is not exhausted*. In Ed Cormany, Satoshi Ito & David Lutz (eds.), *Proceedings of semantics and linguistic theory (SALT)* 19, 342-359, e-Language.
- Panagidou, Frini. 2009. *Clefts and wh-question formation in Cypriot Greek*. MA thesis, University of Utrecht.
- Papadopoulou, Elena. In progress. *Acquisition of wh-questions: Evidence from Cypriot Greek*. Doctoral dissertation, University of Essex, Colchester.
- Prince, Ellen F. 1978. A comparison of wh-clefts and it-clefts in discourse. *Language* 54(4),

883-906.

Szabolcsi, Anna 1994. All Quantifiers are not Equal: The Case of Focus. *Acta Linguistica Hungarica* 42, 171-187.