Glossa a journal of general linguistics

Kanikli, Antri and George Tsoulas. 2019. 'Embu' *Wh*- questions in Cypriot Greek: A comparative study. *Glossa: a journal of general linguistics* 4(1): 95. 1–24. DOI: https://doi.org/10.5334/gjgl.788

RESEARCH

'Embu' *Wh*- questions in Cypriot Greek: A comparative study

Antri Kanikli[1] and George Tsoulas[2]

[1] University of Central Lancashire Cyprus, Pyla, Larnaka, CY

[2] University of York, Heslington, York, UK

Corresponding author: Antri Kanikli (AKanikli@uclan.ac.uk)

This paper proposes a novel syntactic analysis for *embu Wh*- questions in Cypriot Greek; a *Wh*- question variant which is similar to the *est-ce que* interrogatives in French and the *é que* interrogatives in European Portuguese. The paper examines properties of the *embu* questions which have not been addressed in the literature and investigates the asymmetries these interrogatives are assumed to display. Adopting a Split-CP analysis, we argue that *embu* is a *Wh*- head; an analysis which accounts for the examined syntactic and semantic properties of these questions. Given the similarities of these structures to the *é que* interrogatives in European Portuguese and the *est-ce que* interrogatives in French, the paper reviews the disagreements in the literature with regards to the analysis of these *Wh*- questions and explores whether the analysis that is proposed for *embu* questions could accommodate these data as well.

Keywords: *embu* questions; *Wh*-; *est-ce que*; *é que*

1 Introduction

Questions using the so-called *est-ce que* strategy are found in many languages, but the full extent of their properties remains to be investigated. In this paper, we focus on the syntax of these questions in Cypriot Greek (henceforth CG). They involve the element *embu*, hence the name, *embu Wh*- questions. We propose a mono-clausal analysis of *embu* questions where *embu* instantiates a *Wh*- head. We furthermore show that the behaviour and positional restrictions of the element *embu* with respect to other left peripheral elements lead us to postulate certain processes of reanalysis. Given that the *embu Wh*- questions display similarities with their French and European Portuguese counterparts, we demonstrate that the analysis plausibly extends to these languages too. The paper is organised as follows: Section 2 presents the basic data on *embu questions* and briefly reviews their French and European Portuguese counterparts, as well as the different approaches in the literature to the syntactic status of *est-ce que* and *é que*. In section 3, we offer arguments against a bi-clausal analysis of *embu* questions. Our analysis is presented in section 4. In section 5, we return to European Portuguese and French. Section 6 concludes the paper.

2 The *embu/est-ce que/é que* strategy

In this section, we provide the empirical motivation for our proposal. Although we focus on the CG case, we show that the relevant strategy goes well beyond CG. We briefly present similar constructions in French and European Portuguese and review the disagree-

ments in the literature with respect to the status of the *embu* counterparts in French and European Portuguese.

2.1 The embu *questions in Cypriot Greek*

CG displays two patterns of *Wh*- question formation with no semantic difference. They both involve movement. One of the two patterns, which is only attested in CG and not in Standard Mainland Greek, includes the element *embu* following the *Wh*- word. Consider examples (1)–(4).

(1) a. **Pcos** (embu) emilise?
who.NOM spoke.3.SG
'Who has spoken?'

b. **Pcon** (embu) aɣapas?
who.ACC love.2.SG
'Who do you love?'

c. **Pcu** (embu) to eðoses?
who.GEN CL gave.2.SG
'To whom did you give it?'

d. **Pote** (embu) irtes?
when came.2.SG
'When did you come?'

e. **Pu** (embu) isun?
where were.2.SG
'Where have you been?'

f. **Inda** ('mbu) irtes?
why came.2.SG
'Why did you come?'

g. **Indalos** (embu) irtes?
how came.2.SG
'How did you come?'

h. **Inda** *('mbu) θelis?
what want.2.SG
'What do you want?'

i. **Inda** *('mbu) estenaxorisen to moro?
what upset.3.SG the.ACC baby.ACC
'What has upset the baby?'

(2) **Pco vivlio** (embu) θelis?
which.ACC book.ACC want.2.SG
'Which book do you want?'

(3) **Me pcon** (embu) milas?
with whom talk.2.SG
'With whom do you talk?'

(4) **Inda ðoron** (embu) θelis?
what present want.2.SG
'What kind of present do you want?'

The examples in (1)–(4) show both *Wh-* patterns in CG, the dialectal one, which involves *embu* and the Standard Mainland Greek one, which does not.[1]

The syntactic status of *embu* is unclear. According to Grohmann, Panagiotidis & Tsiplakou (2006) (henceforth GPT) and Agouraki (2010), *embu* is the contracted form of the copula *en* 'is' and the complementiser *pu* 'that'. This is reminiscent of the *est-ce que* strategy in Romance languages. Nevertheless, *embu* displays a number of syntactic peculiarities, which we need to attend to first, before we settle on a particular analysis.

2.1.1 Optionality

Embu is optional in *Wh-* questions (cf. (1a)–(1g) and (2)–(4)), except for *Wh-* arguments introduced by the dialectal *Wh-* word *inda* 'what' (cf. (1h) and (1i)), where it is obligatory in the contracted form *'mbu* (GPT). Note further that *embu/'mbu* is not obligatory with other dialectal *Wh-* words/phrases in CG. It is also not obligatory with *inda Wh-* adjuncts (cf. (1f) and (1i)).

With complex *inda Wh-* phrases, *'mbu* cannot occur between *inda* and the noun (5). As (4) (repeated below as (6)) shows, *embu*, but not *'mbu*, can optionally occur in a position following the complex *Wh-* phrase.

(5) ***Inda 'mbu** *ðoron* θelis?
what present want.2.SG

(6) **Inda ðoron** (embu) θelis?
what present want.2.SG
'What kind of present do you want?'

The *embu*-strategy with the same asymmetric optionality characteristics is also used in embedded interrogatives. Consider the following:

(7) Erotisa tin **pcon** (embu) iðen o
asked.1.SG CL.ACC who.ACC.SG saw.3.SG the.M.NOM.SG
Jannis.
Jannis.NOM
'I asked her who Jannis saw.'

(8) Erotisa tin **inda** *('mbu) θeli o Jannis.
asked.1.SG CL.ACC what want.3.SG the.M.NOM.SG Jannis.NOM
'I asked her what Jannis wants.'

(9) Erotisa tin **inda** ('mbu) klei i Maria.
asked.1.SG CL.ACC why cry.3.SG the.F.NOM.SG Maria.NOM
'I asked her why Maria is crying.'

Note that, not only the use of *embu* is the same in root and embedded questions, but, also, subject-verb inversion applies in both root and embedded *embu Wh-* questions (cf. (7) vs. (10) below).

(10) Pcon (embu) iðen o Jannis.
who.M.ACC.SG saw.3.SG the.M.NOM.SG Jannis.NOM
'Who did Jannis see?'

[1] (1f)–(1i) and (4) include dialectal *Wh-* words (namely *inda* 'what' and *indalos* 'how') which do not occur in Standard Mainland Greek.

The *embu* strategy also occurs in Yes/No questions. In these interrogatives, a non-*Wh*-element appears in the position preceding *embu* (cf. (11)).

(11) **Esi** embu etilefonises?
you called.2.SG
'Is it you who made a phone call?'

Embu may not be used in Yes/No questions in which no such element precedes *embu* (cf. (13)).

(12) Etilefonises tu Janni?
called.2.SG the.GEN.SG Janni.GEN
'Did you call Janni?'

(13) ***Embu** etilefonises tu Janni?
called.2.SG the.GEN.SG Janni.GEN

The *embu* strategy, therefore, may be used to form a Yes/No question provided that an element appears in the clause-initial position preceding *embu* as in the case of *Wh-* words.

2.1.2 *Embu* in declaratives

Embu may also appear in declaratives under certain conditions. There is, however, a disagreement in the literature regarding the status of the relevant data. On the one hand, Gryllia & Lekakou (2007), Fotiou (2009) and Agouraki (2010) have proposed that the *embu* strategy also occurs in focalizing constructions. GPT, on the other hand, take these cases to be rather marginal. They claim that (14) is ungrammatical, because movement of the focused clefted element is not allowed in CG clefts.

(14) *O HAMBIS embu efie.
the.M.NOM.SG Hambis.NOM left.3.SG
'Hambis is the one who left.'

Although we tend to concur with GPT regarding the status of (14), similar sentences seem much improved, especially when a quantificational adverb precedes *embu*. (15) is such an example.

(15) O Jannis **panda** embu eðian.
the.M.NOM.SG Jannis.NOM always gave.3.SG
'Jannis was always giving (money for charity).'

O Jannis is a topic in (15). In section 4.2.2, we will propose a unified analysis for these cases.

2.1.3 The status of *embu*

Although it is tempting to follow GPT, Panagidou (2009) and Agouraki (2010) in seeing *embu* as a contracted form of the copula *en* and the complementiser *pu*, there is a set of properties of this element that need to be looked at, before providing a syntactic analysis for it.

First, one would expect the putative copula in *embu* to inflect for tense, number and person as in standard copular sentences, contrary to fact (cf. Agouraki 2010; Kanikli 2011a; Papadopoulou 2014).

(16) Pcon embu iðen i Maria?
who.ACC.SG saw.3.SG the.F.NOM.SG Maria.NOM
'Who did Maria see?'

(17) ??/*Pcon itun/itan pu iðen i Maria?
who.ACC.SG was that saw.3.SG the.F.NOM.SG Maria.NOM
'Who was it that Maria saw?'

The alleged copula in *embu* does not inflect for past tense in (16). If, indeed, *embu* is the contracted form of the copula *en* and the complementiser *pu*, the copula appears only in the *en* form, which is the present tense form of both singular and plural third person in CG.

The same holds for the *embu* Yes/No question in (11), where *embu* does not agree for person and number with *esi* 'you' (cf. *embu* (11) instead of *ise* 'are.2.SG' *pu* 'that' in (18)).

(18) ??/*Esi ise pu fonazis?
you are that scream.2.SG

Moreover, Kanikli's (2011b) study showed that the inflection of *en* for tense results in highly degraded sentences (see Kanikli 2011b for a more detailed discussion).

It must be noted, though, that there is a discrepancy in the literature as to whether *embu* may or may not bear inflection. GPT and Panagidou (2009) argued that *embu* may inflect for tense, whereas we argue, on a par with Agouraki (2010), Kanikli (2011a) and Papadopoulou (2014), that *embu* may not inflect for tense (cf. (17)). The case is reminiscent of a similar disagreement, which exists in the literature of *est-ce que* interrogatives in Romance languages.

Obenauer (1977), Harris (1978), Lefebvre (1982), Blanche-Benveniste et al. (1984), Rooryck (1994), Cheng & Rooryck (2000) and others argue that *est-ce que* is inert for inflection, whereas others, such as Langacker (1965), maintain that *est-ce que* may bear inflection (cf. (22) and (28)). Munaro & Pollock (2005) claim that *est-ce que* is inert for inflection only in embedded interrogatives and *que*, *pourquoi* and *comment* root interrogatives.

As far as European Portuguese *Wh*- questions are concerned, Duarte (2000) argues that *é que* cannot bear inflection (cf. (19) and (21)), whereas Soares (2003) suggests that it can.

The following sections present the *est-ce que* Romance interrogatives and the different approaches to the status of *est-ce que* and *é que* in these structures.

2.2 The é que Wh- *questions in European Portuguese*

Wh- questions in European Portuguese, both root and embedded, can be formed using the *é que* structure (cf. examples (19a) and (19b) quoted from Soares 2003: 153, 159). *É que* questions alternate with interrogative structures which do not involve *é que* (cf. examples (20a) and (20b) quoted from Soares 2003: 148, 158). The case is reminiscent of the CG data, where *embu* questions alternate with questions, which do not involve the *embu* structure.

(19) a. O que **é que** a Maria leu?
what the Mary read
'What did Mary read?'

b. Eu perguntei o que **é que** a Maria leu.
I asked what the Mary read
'I asked what Mary read?'

(20) a. O que leu a Maria?
what read the Mary
'What did Mary read?'

b. Eu perguntei o que a Maria leu.
I asked what the Mary read
'I asked what Mary read?'

É que questions share many properties with the CG *embu* questions. *É* is the third person singular present tense form of the copula *ser* 'be' and *que* is a complementiser (cf. *embu* in CG). According to Duarte (2000), and Costa & Duarte (2001), the copula assumed to be involved in *é que* lacks tense and agreement features (21).[2] *É que* appears invariably in this form in all interrogatives. On these grounds, Duarte (2000) argued for a mono-clausal analysis of *é que* questions.

(21) *Quem **foi que** a Maria encontrou?
Who was that the Mary met
'Who was it that Mary met?'

Nevertheless, as already noted, there is a discrepancy in the literature of *é que* questions, similar to the one of the CG *embu* questions, as to whether *é que* may inflect for tense. Soares (2003) argues, contra Duarte (2000), that *é que* can bear inflection in interrogatives. On this basis, she proposes that *é* occupies a different position from *que*. However, she does not assume that *é* occupies I^0. Although she maintains that *é* can be inflected for tense, she assumes that it is "directly generated in the CP" (Soares 2003: 155).

In section 5, we return to the status of *é que* in European Portuguese questions. We examine syntactic properties of *é que* questions, which are similar to *embu* questions and have not been addressed in the literature, and explore whether the analysis proposed for the CG interrogatives can be applied to the European Portuguese data. We now turn to French *est-ce que* questions.

2.3 The est-ce que Wh-*questions in French*

The *est-ce que* question formation strategy is optionally used in some interrogatives (22), whereas it is obligatory in some others. Consider examples (23) and (24).

(22) Qui **(est-ce qui)** arrive?
who arrives

(23) *Que arrive?
what arrives?

(24) Qu' **est-ce qui** arrive?
what arrives

Est-ce que must co-occur with *que* 'what' in (24) (cf. (23)). Up to this point, the French data appears to be strikingly similar to the CG one. Note, though, that there is a significant difference in between the obligatoriness of *est-ce que* in *que* 'what' *Wh-* questions and the obligatoriness of *embu* in *inda* 'what' *Wh-* questions. *'Mbu* is obligatory in both *inda Wh-* objects and *Wh-* subjects (cf. examples (1h) and (1i)). *Est-ce que*, though, is obligatory only in *que Wh-* subjects.[3]

[2] Thanks to João Costa for the European Portuguese data discussed in the remainder of this paper, as well as for his judgments on *é que* questions.

[3] An anonymous reviewer notes that this does not hold for structures that involve long extraction of a subject, such as the examples below.

(25) Qu' **est-ce que** tu aimes?
what you like
'What do you like?'

(26) Qu' **as-tu** aimé?
what have you like
'What do you like?'

(27) Qu' a aimé Pierre?
what has like Pierre
'What did Pierre like?'

The examples in (25), (26) and (27) are *Wh-* objects. Obviously, *est-ce que* is optional in these interrogatives. A *que Wh-* object can be formed using the *est-ce que* structure (cf. (25)), Subject Clitic Inversion (SCLI) (cf. (26)) or Stylistic Inversion (cf. (27)) (Munaro & Pollock 2005). In CG *inda Wh-* arguments, though, *inda* may occur only with *'mbu*.

Another property that *est-ce que* interrogatives share with *embu* interrogatives in CG is the invariant form in which the copula assumed to be involved in these interrogatives appears (Obenauer 1977; Lefebvre 1982; Plunkett 2004 among others) (cf. example (28) quoted from Plunkett 2004: 155).

(28) *Qu' **était-ce que** c' était?
what-was-it that it was

(28) shows that inflecting *être* for tense is ungrammatical. Note that the copula may inflect for tense in interrogatives which involve a cleft (cf. example (29) quoted from Plunkett 2004: 155). On this basis, it has been argued that the so-called *est-ce que* interrogatives should not be analysed as bi-clausal (Obenauer 1977; Lefebvre 1982 among others).

(29) **C' était quoi** comme maquillage que tu avais?
it-was what as make-up that you have-IMPERF

Nevertheless, as already noted, there is a disagreement in the literature as to whether *est-ce que* structures should be analysed as bi-clausal or not. In particular, Obenauer (1977), Harris (1978), Lefebvre (1982), Blanche-Benveniste et al. (1984), Rooryck (1994), Cheng & Rooryck (2000) and others argue that *est-ce que* cannot inflect for tense, thus the structures should be analysed as mono-clausal, whereas others such as Langacker (1965) claim that it can. There is also Munaro & Pollock's (2005) analysis, according to which the inflection of *être* for tense is banned only in embedded interrogatives and *que* 'what', *pourquoi* 'why' and *comment* 'how' root interrogatives. On these grounds, Munaro & Pollock (2005) argue that only the aforementioned interrogatives should be analysed as mono-clausal, whereas the other should be analysed as bi-clausal.

It is evident that the ability of *est-ce que* and *é que* to inflect for tense was crucial to the pursuit of a bi-clausal or a mono-clausal analysis by the authors. The same holds for the

---

(i) **Que** crois-tu **qui** __ s'est passé?
what believe-you that REFL. is happened
'What do you think happened?'

(ii) **Qui** crois-tu **qui** __ est arrivé?
who believe-you who is arrived
'Who do you think arrived?'

This shows that there may be other factors at play in long distance extraction. We set this property aside for this paper.

CG data. In order to explore a syntactic analysis for *embu* questions, the synchronic status of *embu* must be clarified.

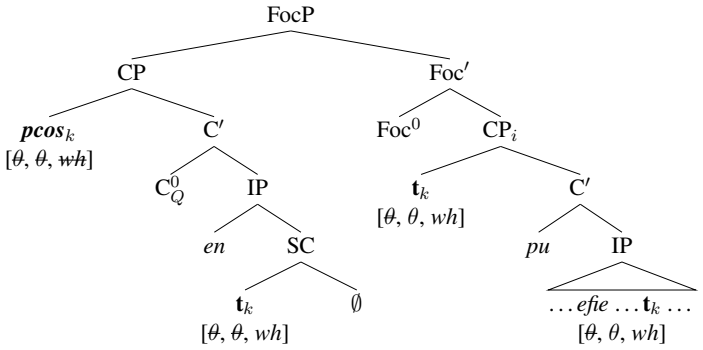
The following section argues that the distribution of sentential adverbs and negative markers in *embu Wh-* questions provides evidence that *embu* is a C head and these structures are mono-clausal.

3 Against a bi-clausal analysis of *embu* questions

In this section, we provide arguments against a bi-clausal analysis. Based on these arguments, we formulate a mono-clausal analysis in section 4.

A relatively standard bi-clausal analysis of *embu* interrogatives is that proposed by GPT and involves an embedded clause and a copula as in (30) (quoted from GPT: 91).

(30)



There are, however, several issues with this approach.[4] We detail them in what follows.

3.1 The position of sentential adverbs in embu *Wh- questions*

The first argument against approaches that analyze *embu* interrogatives as bi-clausal structures is the fact that nothing can intervene in between *en* and *pu* in *embu* interrogatives. This is shown by the distribution of adverbs in *embu* interrogatives (Kanikli 2011a; Papadopoulou 2014). In particular, an adverb may not intervene either between the *Wh-* word and *embu* (31), or between the copula *en* and the complementiser *pu* of the embedded clause (32) (cf. the grammatical (33) and (34)).

(31) *Pcon **extes** embu iðen i Maria?
who.ACC.SG yesterday saw.3.SG the.F.NOM.SG Maria.NOM
'Who did Maria see yesterday?'

(32) *Pcon en **extes** pu iðen i Maria?
who.ACC.SG is yesterday that saw.3.SG the.F.NOM.SG Maria.NOM

(33) Pcon embu iðen **extes** i Maria?
who.ACC.SG saw.3.SG yesterday the.F.NOM.SG Maria.NOM
'Who did Maria see yesterday?'

(34) Pcon embu iðen i Maria **extes**?
who.ACC.SG saw.3.SG the.F.NOM.SG Maria.NOM yesterday
'Who did Maria see yesterday?'

The adverb *extes* 'yesterday' is an adjunct to IP. On the assumption that the examples in (31) and (32) include a copula, we take it that an IP projects above the copula in *embu* structures. If we assume that *en* occupies I^0, *extes* should be able to precede *embu*. If we

[4] cf. also Agouraki (2010: 553) for a bi-clausal analysis of *embu* questions.

consider that *en* further moves to a C projection, it should be able to follow *en*. This, however, does not hold. As the examples in (31) and (32) show, a sentential adjunct cannot precede or follow the copula assumed to be involved in *embu* (cf. (33) and (34)).

GPT assume that *en* cliticizes to *pu* in *embu* questions. One could assume that this explains why *extes* may not intervene between *en* and *pu* in (32). However, even if we assume that *en* cliticizes to *pu* in *embu* questions, it should not be able to do so in the presence of an intervening element such as *extes*.

In fact, assuming that *en* cliticizes to *pu* resulting in the contracted form *embu*, is also problematic under Chomsky & Lasnik's (1978) approach to contraction (cf. also Hornstein 1999; Boeckx 2000 and others). According to this approach, two elements may not contract in the presence of an intervening copy. All the bi-clausal analyses proposed for *embu Wh-* questions in the literature (GPT; Panagidou 2009; Agouraki 2010) assume that there is a copy of the *Wh-* element involved in the structure between *en* and *pu*—which are taken to contract into *embu*. The *Wh-* element is assumed to be either externally (Agouraki 2010) or internally (GPT; Panagidou 2009) merged in a position between *en* and *pu*, and then is taken to further move to the clause initial position leaving a copy behind. Under Chomsky & Lasnik's (1978) approach to contraction, the intervention of the *Wh-* copy between *en* and *pu* should not allow their contraction into *embu*. On these assumptions, arguing that *embu* is the contracted form of *en* and *pu* is problematic; therefore, it may not account for the constraints on the distribution of sentential adjuncts in *embu Wh-* questions.

By contrast, the ungrammaticality of (31) and (32) follows naturally from the proposal that *embu* does not involve a copula. On an approach that takes *embu* to be base generated in the C domain without contraction, a sentential adjunct would only be able to adjoin to the single IP in the structure as the data in (33) and (34) confirm.[5]

The syntactic positions a sentential adjunct may occupy in *embu* questions support a mono-clausal analysis of *embu* questions. In the next section, we turn to the position of negation.

3.2 The position of negation in embu Wh- *questions*

A further property of *embu Wh-* questions which undermines the bi-clausal clefting analysis is the fact that negation cannot precede *embu* in *Wh-* questions (35), while it can in clefts (36) (Kanikli 2011a; Papadopoulou 2014). This asymmetry casts doubt on the analysis of *embu* questions as deriving from a cleft structure, as in that case negation would be able to precede the copula in *embu* questions (cf. (30)), as it does in clefts.

[5] Note that *extes* 'yesterday' cannot precede the verb in a *Wh-* question (cf. (i)).

(i) *Pcon (embu) **extes** iðen o Jannis?
who.ACC.SG yesterday saw.3.SG the.M.NOM.SG Jannis.NOM

The fact that a sentential adjunct such as *extes* 'yesterday' may only follow the verb (cf. (33) and (34)), suggests that the verb moves to C in CG *Wh-* questions triggering subject-verb inversion.

[6] We are indebted to an anonymous reviewer who points out that the same holds for similar structures in English and French (cf. the examples below).

(i) *Who isn't it that came?

(ii) *Qui n'est–ce pas qui est venu?
who not is-it not that came
'Who isn't it that came?'

In yes/no questions, though, the negative markers have a similar distribution as the one in clefts.

(iii) Isn't it Peter that came?

(iv) N'est-ce pas Pierre qui est venu?
is-it not Pierre that came
'Isn't it Pierre that came?'

(35) *Pcon **en** *embu* esinandisen o Petros?[6]
who.ACC.SG not met.3.SG the.M.NOM.SG Petros.NOM
'Who did not Petros meet?'

(36) **En** en tin Marian pu esinandisen o
not is the.F.NOM.SG Maria.ACC that met.3.SG the.M.NOM.SG
Petros.
Peter.NOM
'It is not Maria that Petros met.'

Negation may only follow *embu* in *Wh-* questions. Consider the example in (37).

(37) Pcon *embu* **en** esinandisen o Petros?
who.ACC.SG not met.3.SG the.M.NOM.SG Petros.NOM
'Who did not Petros meet?'

We take negation to occupy NegP above IP (cf. Roussou 2000). As a result, the fact that *en* 'not' may not precede *embu* in (37) suggests that *embu* does not involve a copula.

The ungrammaticality of (35) is unproblematic under a mono-clausal analysis of *embu* questions. Given that there is only one IP projection in *embu* interrogatives, there is only one syntactic position available for negation, the one following *embu*.

To sum up, the constraints on the distribution of sentential adjuncts and negation in *embu* questions suggest that *embu* does not involve a copula. Therefore, *embu* questions should be analysed as mono-clausal.

4 *Embu* questions and the left periphery in Cypriot Greek

Having shown that the bi-clausal analysis faces a variety of empirical obstacles, we will now formulate a mono-clausal analysis starting with the syntax of *embu Wh-* questions, and argue for a Split-CP analysis of the left periphery in CG (Rizzi 1997).

4.1 Wh-*movement and subject inversion*

Wh- movement is accompanied by subject inversion, which, as already noted, is obligatory in both root ((38a) and (38b)) and embedded interrogatives ((39a) and (39b)).

(38) a. Pcon (embu) iðen o Petros?
who.ACC.SG saw.3.SG the.M.NOM.SG Petros.NOM
'Who did Petros see?'

b. *Pcon (embu) o Petros iðen?
who.ACC.SG the.M.NOM.SG Petros.NOM saw.3.SG
'Who did Petros see?'

(39) a. Erotise pcon (embu) iðen o Petros.
asked.3.SG who.ACC.SG saw.3.SG the.M.NOM.SG Petros.NOM
'He/she asked who Petros saw.'

b. *Erotise pcon (embu) o Petros iðen.
asked.3.SG who.ACC.SG the.M.NOM.SG Petros.NOM saw.3.SG
'He/she asked who Petros saw.'

Consider first the triggers for *Wh-* movement and subject inversion.

[6] These cases offer further support for the idea that the structures in (i) and (ii) do not involve a cleft structure. Clefts express exhaustive identification (Kiss 1998), which appears to be incompatible with the semantics of *Wh-* elements (see also Kanikli 2016).

Rizzi (1996) argued that *Wh-* movement and subject inversion in interrogatives are triggered by the need to satisfy the *Wh-* Criterion. According to Rizzi (1996), I^0 carries the *Wh-* feature, which marks the clause as interrogative in main *Wh-* questions. Therefore, I^0 must move to C^0 in order to create the required configuration, in which the head bearing the *Wh-* feature hosts in its specifier the *Wh-* operator. This analysis may capture the non-*embu* questions, but not their *embu* counterparts (cf. (38a)). In *embu Wh-* questions, *embu* intervenes between the *Wh-* operator and the verb destroying the Spec-Head configuration that verb movement is taken to create in order to satisfy the *Wh-* Criterion. As a result, it is not possible to claim that *Wh-* movement and subject inversion are triggered by the *Wh-* Criterion.

In the following section, we show that inversion and *Wh-* movement are independently triggered.

4.1.1 *Wh-* movement and subject inversion are independently triggered

As already argued, verb movement to C[7] could not be triggered by the need to satisfy the *Wh-* Criterion. A relatively standard account runs as follows: verb movement to C is triggered under agreement by an EPP feature (Chomsky 2004; 2005). We assume that C bears an *u*T feature (Pesetsky & Torrego 2001) and an EPP feature in both root and embedded interrogatives in CG. T, agrees with C checking *u*T, and moves to C satisfying its EPP feature.

Wh- movement is also triggered under agreement with C by EPP on C. Chomsky (2000; 2001) proposes that the *Wh-* element bears an *u*Wh feature and a Q(uestion) feature. C bears a *Wh-* feature and an *u*Q(uestion) feature. The *Wh-* element Agrees with C checking its *u*Wh feature and the *u*Q feature on C. Assuming *Wh-* movement and I-to-C movement to be independently triggered offers an insight into languages where the fronted *Wh-* element may occur with an overt complementiser, but I-to-C movement is banned (see the nonstandard Italian and French varieties data discussed in Benincà 2001); languages where the fronted *Wh-* element may occur with an overt complementiser and I-to-C movement is obligatory (e.g. CG *embu* questions); languages where the fronted *Wh-* element may not occur with an overt complementiser and I-to-C movement is obligatory; and languages where the fronted *Wh-* element may not occur with an overt complementiser, and I-to-C movement is banned. This analysis also accounts for asymmetries between root and embedded interrogatives in the occurrence of I-to-C movement by attributing a different feature specification to root and embedded C.

Despite the advantages of this analysis, the trigger of *Wh-* movement and I-to-C movement as described above is problematic. Assuming a single C projection and assuming that an EPP feature is the only element capable of inducing movement, entails that the *u*T and the *u*Wh feature on C are accompanied by an EPP feature, which triggers under agreement verb and *Wh-* movement respectively in CG. This could mean that either the features *u*T, *u*Wh bear another feature; an option generally excluded by the theory, as it would amount to a reintroduction of the concept of feature strength; or that the EPP feature on C may be multiply satisfied, as in multiple subject constructions. This solution, though viable, is inelegant in that there is no way to specify exactly how many times the EPP feature on C could be satisfied. It would also require to independently rule out multiple *Wh-* movement in languages that have inversion, but are not multiple *Wh-* movement languages (say, English).

[7] Recall that the distribution of sentential adjuncts in CG *Wh-* questions suggests that the verb moves to C triggering subject-verb inversion (cf. footnote 5). The fact that object clitics precede the verb in *Wh-* questions (cf. (1c)) suggests that either the movement of the verb to C is for some reason blocked in the presence of a clitic or that cliticisation precedes movement to C. We will leave a more in-depth analysis of this for future work. Note further that in CG, proclisis occurs in *Wh-* questions, subjunctive clauses, structures with negation and a small set of preverbal stressed elements (quantifiers (except for universal quantifiers), *only*-phrases and other) (cf. Agouraki 2010). In all the other structures, the object clitic is enclitic to the verb.

A more viable solution to this problem would be to assume that CP does not consist of a single C head, but an array of functional heads which may bear EPP features capable of inducing movement of heads or maximal elements to the CP. On this assumption, the EPP feature which triggers *Wh*- movement and the one which triggers subject inversion are carried by two different C projections. This approach can be formally captured in terms of Rizzi's (1997) theory of a Split-CP. The following section defends a corresponding analysis for the CG data.

4.2 A Split-CP analysis

Following Rizzi (1997), we are assuming that the CP consists of an array of functional projections (40) which host different elements. Such an analysis accounts for the strict ordering between left periphery elements (see Rizzi 1997 for a more detailed discussion).

(40) Rizzi (1997: 297)
Force (Top*) (Foc) (Top*) Fin IP

The Force-Finiteness system is considered to be the necessary part of the C domain and thus, is assumed to occur in every non-truncated clause except ECM ones. On the contrary, the Topic and Focus system occurs only if it is activated; that is, when an element carries Top or Foc features (Rizzi 1997: 287–8). In this case, topics and foci will be placed in between Force and Finiteness.

Rizzi (1997) argued that *Wh*- elements occupy Spec, Foc in root interrogatives. This was taken to explain why *Wh*- question elements and focalized constituents cannot co-occur in main questions. Thus, we could assume that *embu* is a realization of Foc^0. This assumption is nevertheless problematic, as it fails to account for the fact that a DP cannot undergo focus movement and occupy the pre-*embu* position (14). In fact, focus movement of a DP to a clause initial position is illegitimate in CG.

4.2.1 Focus movement in Cypriot Greek

Consider the example in (41).

(41) *TO VAZO espasa.
the.N.ACC.SG vase.ACC broke.1.SG
'I broke THE VASE.'

The constituent *to vazo* 'the vase' in (41) can receive neither a contrastive nor an information focus interpretation. In fact, the movement of this element to a clause initial position leads to ungrammaticality, an observation also pointed out by GPT, Fotiou (2009) and Agouraki (2010).[8]

In CG an element is eligible to be interpreted as information focus in its base position. Consider the following example.

(42) Espasa **to vazo**.
broke.1.SG the.N.ACC.SG vase.ACC
'I broke the vase.'

[8] Recall that an *embu* structure such as the one in (i) is also ungrammatical.

(i) *TO VAZO embu espasa.
the.N.ACC.SG vase.ACC broke.1.SG
'I broke THE VASE.'

As already argued, the movement of a DP, such as *to vazo* 'the vase', to the pre-*embu* position results in ungrammaticality (14) (cf. GPT).

The structure in (42) can be an answer to the question *Ti espases*? 'What did you break?'. Nevertheless, it would be infelicitous if it was uttered as expressing identificational focus (cf. Kiss 1998). In CG an element may receive an identificational focus interpretation only by being hosted in a cleft structure (cf. Kanikli 2016). Consider the example in (43).

(43) En **to** **vazo** pu espasa.
is the.N.ACC.SG vase.ACC that broke.1.SG
'It is the vase that I broke.'

Although a DP cannot undergo movement to a clause fronting position in CG, quantifiers can (cf. Agouraki 2010). Compare the example in (41) with the example in (44).

(44) **Kati** ekama.
something did.1.SG
'I did something.'

Note that the only non-*Wh-* element that we found to occur in the pre-*embu* position was the quantifying adverb *panda* 'always' (15).

It seems that the elements which may undergo movement to a clause fronting position in non-*embu* structures, may do so in *embu* structures as well, qualifying for the pre-*embu* position. *Wh-* elements and quantifiers may move to a clause fronting position in non-*embu* structures, and they may do so in *embu* structures as well. DPs may not (41), so they may not do so in *embu* structures either (14). The question which arises is why DPs cannot move to a clause fronting position in CG.

One could assume that DPs cannot move to a clause initial position in CG, because they do not bear a focus feature. As already noted, the Focus projection in the CP is activated only when there is an element bearing a Foc feature (Rizzi 1997). The proposal, however, that DPs do not undergo focus movement in CG is contradicted by the fact that they actually do in clefts. Focalized DPs in clefts display binding effects, which suggest that they are not base-generated in the cleft clause, but move there from their base position in the embedded clause. Consider the example in (45).

(45) En *me* *to* *aftokinito* *tis* pu epien i Maria.
is with the car her that went.3.SG the.F.NOM.SG Maria.NOM
'It is in her car that Maria went there.'

The clefted constituent in (45) is a PP which involves the pronoun *tis* 'her'. The pronoun is bound by the DP *i Maria*. This suggests that the clefted constituent originates inside the *pu* clause, where it can be bound by the subject *i Maria*. DPs, therefore, undergo focus movement in CG, but they may do so only in clefts.

In view of these facts, we cannot assume that *embu* is a realization of a Foc head in Rizzi's (1997) array of C projections. If this was the case, DPs should be able to move to the pre-*embu* position.

4.2.2 *Wh-* movement and the Qu feature

The idea that *Wh-* elements are quantifiers is certainly not a novel one. Chomsky (1977) and a wealth of subsequent syntactic work have shown that they behave like operators. The semantics of questions based on Karttunen's (1977) seminal work also analyses *Wh-* elements as existential quantifiers. Given the fact that only *Wh-* elements and some quantifiers may move to a clause initial position in CG, we propose that the C head

lexicalised by *embu* bears an uninterpretable quantification feature[9] (*u*Qu) and an EPP feature. This allows *Wh-* elements, which bear quantification (Qu) features as part of their lexical specification (Dobrovie-Sorin 1990), to agree with the C head and move to its specifier to satisfy the EPP.

Under this analysis, DPs cannot undergo raising to a clause fronting position in CG, because they are not lexically defined as quantificational. Nevertheless, they may undergo focus movement in clefts, as the structure where a DP can be structurally defined as a syntactic quantifier is provided (Dobrovie-Sorin 1990).[10]

Apart from an *u*Qu and an EPP feature, we propose that the C head lexicalised by *embu* bears an interpretable interrogative feature: Q. The *Wh-* element bears, apart from a Qu feature, an uninterpretable interrogative feature in *Wh-* questions, *u*Q, which renders it active in the derivation. C Agrees with the *Wh-* element and the *Wh-* element moves under agreement to its specifier position in order to satisfy its EPP feature. Given Chomsky's (2000; 2001) activity condition, we predict that in an interrogative structure like (46), in which a quantifier and a *Wh-* element co-occur, the *Wh-* element, which bears *u*Q, will move, under agreement with the relevant C projection.

(46) Inda 'mbu efaan ulli?
what ate.3.PL all.M.NOM.PL
'What did everyone eat?'

The above analysis further accommodates the fact that quantifiers stay *in situ* in some structures, whereas in others they move to clause initial positions in CG. The analysis predicts that in the latter case, the quantifiers bear *u*features related to discourse related interpretation such as *u*Emphasis (cf. Agouraki 2010).[11]

Having accounted for the properties of the CG data with respect to which elements are eligible to move to a clause initial position, and having stated which features we assume to be involved in *Wh-* movement in (*embu*) *Wh-* questions in CG, the following section proceeds to provide a structural analysis for the *embu* questions.

4.2.3 The structure of *embu* questions

Consider the example in (47) and the associated structure in (48).

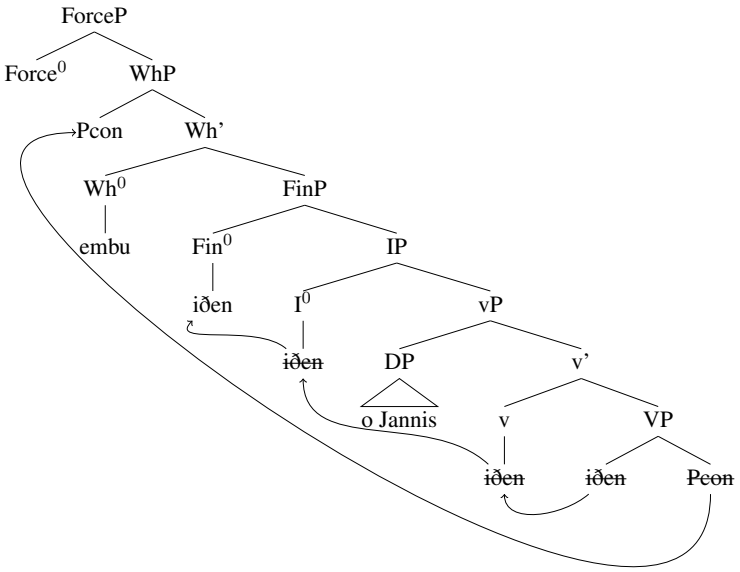
(47) Pcon embu iðen o Jannis?
who.ACC.SG saw.3.SG the.M.NOM.SG Jannis.NOM
'Who did Jannis see?'

[9] Cf. Dornisch (2000) who argues that *Wh-* movement in Polish is driven by a "quant" feature. Cf. also Duarte (2000) who argues that *Wh-* elements in European Portuguese move to a Quantified Focus projection in interrogatives.

[10] According to Dobrovie-Sorin (1990), an element may be lexically or structurally defined as a syntactic quantifier. Lexically defined quantifiers are those which inherently bear quantification features (e.g. bare quantifiers). Structurally defined quantifiers are those defined as quantifiers by the position they occupy and not by their inherent features (see also Cinque 1986). Dobrovie-Sorin (1990) argues that Romanian lacks structural quantifiers, which is why, according to her, Romanian lacks clefts. It could be the case, therefore, that clefts in CG provide the structure where a DP can be structurally defined as a syntactic quantifier. Examining how exactly this is achieved falls beyond the scope of this paper (see Dobrovie-Sorin 1990; Cinque 1986 for a detailed discussion).

[11] Although movement may affect emphatic properties of quantifiers, it does not force, on its own, a specific scope reading. We assume the approach to scope based on selective spell-out, following Tsoulas and Yeo (2017).

(48)



The subject *o Jannis* in (47) occupies Spec,*v*P as V-to-I movement satisfied the EPP on I^0 (Alexiadou & Anagnostopoulou 1998). Apart from the subject, all the other elements in (47) are in the CP domain. This accounts for the fact that sentential adjuncts may only follow the verb in *embu Wh-* questions (see section 3.1).

We propose that the verb occupies the lowest C projection in Rizzi's (1997) array of functional projections: Fin^0 (see (40)). We consider that Fin^0 bears an *u*T feature (Pesetsky & Torrego 2001) and an EPP feature. I^0, where the verb is hosted, bears an interpretable T feature. I^0 Agrees with Fin^0 valuing its *u*T feature and, under agreement, I^0 (and concomitantly the verb) moves to Fin^0 to satisfy its EPP feature.

As already proposed, *embu* is a single C head. We argue against an analysis of *embu* as consisting of two C heads (cf. the analysis Soares 2003 proposed for the European Portuguese *é que*). Such an analysis is undermined by the fact that nothing may intervene between *en* and *pu* (assumed to be contracted to *embu*). Moreover, the fact that nothing may intervene between the *Wh-* element and *embu* suggests that they "doubly-fill" the same projection. We take *embu* to be base generated in the head position of a *Wh-* projection and the *Wh-* element *pcon* to move to its specifier. As previously argued, the *Wh-* projection bears an interrogative feature (the Q feature), an uninterpretable quantification feature (the *u*Qu feature) and an EPP feature. The *Wh-* element *pcon* bears an uninterpretable interrogative feature (uQ) and an interpretable quantification feature (Qu). *Pcon* in (47) Agrees with the *Wh-* projection and under agreement moves to its specifier position to satisfy its EPP feature.

In terms of Rizzi's (1997) array of functional projections (40), the *Wh-* projection occupies a position higher than Fin^0 and lower than $Force^0$.[12]

According to the analysis defended above, *embu* is an overt *Wh-* head. The difference, therefore, between the two *Wh-* variants in CG boils down to whether the *Wh-* head is null or overt respectively. This accounts for the fact that *embu* and non-*embu Wh-* structures share the same syntactic properties. As shown, they both involve subject inversion.

[12] Note that when a Topic projection is activated, a *Wh-* element cannot precede a topic, whereas a topic may precede a *Wh-* element in CG. Rizzi (1997) argued that this is due to the *Wh-* Criterion. As already shown, such an analysis cannot extend to the CG data. An anonymous reviewer suggests that this could be derived from a theoretical principle that rules out structures in which a topic intervenes between the *Wh-* phrase and the variable it strongly binds (e.g. modifying the ECP to apply only to Op-vbl chains).

They interact with other left periphery elements in the same way and the distribution of adverbs is the same in both *Wh-* structures.

On the assumption that *embu* is an overt *Wh-* head, what still remains obscure is why *'mbu* occurs obligatorily in *inda Wh-* arguments. In other words, why a C head must be obligatorily realized in a certain interrogative, whereas in others its overt realization is optional. The next section addresses the asymmetry in the obligatory occurrence of *'mbu* and proposes an account for it in the light of the syntactic behavior of *inda Wh-* arguments in sluices.

4.3 Sluicing and the embu *asymmetries*

As already emphasized, *Wh-* questions in CG appear to exhibit an asymmetry with respect to the compulsory presence of *embu*. In particular, while *embu* is optional in any other *Wh-* question, *'mbu*, the presumed allomorph of *embu*, seems to be obligatory with *Wh-* arguments introduced by *inda* 'what'. In this section, we argue that the apparent asymmetry actually derives from the reanalysis of *inda* into *indambu* 'what', which should be analysed as a single *Wh-* word. Under this analysis, the syntactic behavior of *inda Wh-* arguments in sluices is accounted for.

4.3.1 The asymmetry in sluices

When we consider sluicing, we observe that while *embu* is banned in sluices (cf. (50a) and (53a), *'mbu* occurs obligatorily along with *inda* as a sluicing remnant (cf. (52a) and (54a)).

(49) Kapcos efie.
someone.NOM.SG left.3.SG

(50) a. *Pcos embu [~~efie~~]?
who.NOM.SG left.3.SG

b. Pcos [~~embu efie~~]?
who.NOM.SG left.3.SG

(51) Kati ejinice.
something happened

(52) a. (I)nda 'mbu [~~ejinice~~]?
what happened

b. *Inda [~~'mbu ejinice~~]?
what happened

(53) a. *I Maria esinantisen kapcon, alla en
the.F.NOM.SG Maria.NOM met.3.SG someone.ACC.SG but not
iksero pcon embu [~~esinantise~~].
know.1.SG who.ACC.SG met.3.SG

b. I Maria esinantisen kapcon, alla en
the.F.NOM.SG Maria.NOM met.3.SG someone.ACC.SG but not
iksero pcon [~~embu esinantise~~].
know.1.SG who.ACC.SG met.3.SG
'Maria met someone, but I don't know who.'

(54) a. I Maria ivren kati, alla en iksero
the.F.NOM.SG Maria.NOM found.3.SG something but not know.1.SG.
inda 'mbu [~~ivre~~]?
what found.3.SG

b. *I the.F.NOM.SG Maria Maria.NOM ivren found.3.SG kati, something alla but en not iksero know.1.SG.
inda what [~~'mbu ivre~~ found.3.SG]?
'Maria found something, but I don't know what.'

The above examples are sluices in matrix ((50) and (52)) and embedded clauses ((53)–(54)) (Merchant 2001).[13] Following a deletion approach to sluicing, sluices involve *Wh-* interrogatives where a part of the structure is deleted. In the examples in (50) and (53), *embu* cannot be pronounced. In other words, it belongs to the part of the structure which must be deleted. On the contrary, *'mbu* in the sluiced *inda Wh-* arguments in (52) and (54) cannot be deleted. Its deletion results in ungrammaticality as the examples in (52b) and (54b) show. Therefore, *'mbu* is not part of the structure which undergoes deletion in sluices.

In our analysis, *embu* is a C head, namely, Wh^0. The data in (50) and (53), therefore, suggest that sluices are *Wh-* interrogatives where only the element occupying the Spec,CP (namely the Spec,WhP) is allowed to be a sluicing remnant. The rest of the structure must be deleted (see the ungrammaticality in (50a) and (53a)). This fact, however, is at odds with deletion approach assumptions regarding sluicing. According to Merchant (2001), sluices are *Wh-* structures where IP is deleted. The data in (50a) and (53a), though, suggest that apart from IP, the complementiser *embu* must be deleted.

The above data is not the only problematic data for an approach to sluicing as IP deletion. There is cross-linguistic evidence that elements which move to C (e.g. I-to-C movement), as well as base-generated complementisers are not allowed to be pronounced in sluices (cf. *li*, the overt interrogative C in Serbo-Croatian, Boškovic 1997, which is also illegitimate as a sluicing remnant, Ochi & Hsin 1999). In order to account for these data Merchant (2001: 62) put forward the Sluicing-COMP generalization, according to which, 'no non-operator material may appear in COMP' in sluicing.[14] The generalization captures the data in (50) and (53), where only the *Wh-* element is eligible to occur as a sluicing remnant.

4.3.2 The reanalysis hypothesis

Granted that only the element occupying Spec,WhP may occur as a sluicing remnant in *Wh-* sluices, the fact that *'mbu* can occur along with *inda* in the *Wh-* sluices in (52a) and (54a) undermines the idea that *'mbu* is an allomorph of *embu*, and suggests that *inda* and *'mbu* are in fact a single *Wh-* word: *indambu*. On this assumption, the obligatory occurrence of *inda* with *'mbu* in *Wh-* arguments is accounted for. *Inda* and *'mbu* were reanalysed into a single *Wh-* word, *indambu*, that is why *inda* cannot occur without *'mbu* neither in *Wh-* arguments nor in *Wh-* sluices. Therefore, there is no syntactic asymmetry between CG *Wh-* questions with respect to the occurrence of *embu* (Wh^0), simply because *'mbu* in *(i) ndambu* (and the other contracted forms *nambu*, *ambu*) is not a *Wh-* head.

Having proposed an analysis for the *embu Wh-* questions, the following section shows how the analysis extends to French and European Portuguese interrogatives.

[13] Following Merchant (2001), we argue that the structures in (50) and (52) are main-clause sluices and should be kept separate from fragment *Wh-* questions. As Merchant (2001: 63–64) shows, the *Wh-* phrases of fragment questions in echo functions have different pitch contours from the *Wh-* phrases of matrix sluices, which request information. Moreover, *really* may precede a matrix sluice, whereas this is not possible in echo fragment questions (Merchant 2001: 64). Finally, *Wh-* phrase-preposition inversion occurs in matrix and embedded sluices, but not in echo-*Wh-* fragments (Merchant 2001: 65).

[14] See also Kanikli (2011b) for an analysis of sluicing drawing on Phase Theory.

5 Extending the analysis

5.1 Portuguese é que Wh- *questions*

Section 2.2 presented the disagreement in the literature as to whether *é que* may inflect for tense. The distribution of negative markers and sentential adjuncts in *é que* questions suggests that it may not.

Negation may not adjoin to *é que* in European Portuguese *é que* questions (55).

(55) *Quem **não** é que a Maria encontrou?
who not the Maria met
'Who did not Maria meet?'

The case is strikingly similar to the CG *embu* questions where negation cannot adjoin to *embu* (cf. (56) which is the CG counterpart of (55)).[15]

(56) *Pcon **en** embu esinandisen i Maria?
who not met the Maria
'Who did not Maria meet?'

Again, the fact that negation may not precede *é que* in European Portuguese *Wh-* questions suggests that *é que* does not involve a copula and concomitantly an IP projection, which a NegP may precede.

Moreover, as is the case with CG *embu* questions, a sentential adjunct cannot occupy a position in between the assumed copula *é* and the complementiser *que* (57).

(57) *Quem é **então** que a Maria encontrou?
who yesterday the Maria met
'Who did Maria meet yesterday?'

The ungrammaticality of the example in (57) further supports a mono-clausal analysis of the *é que Wh-* questions. Granted that there is no copula in the *é que* structure in (57), there is no IP projection to which a sentential adjunct may adjoin occurring between the assumed copula *é* and the complementiser *que*.

Taking into consideration the above data, it seems safe to conclude, on a par with Duarte (2000), that *é que* in European Portuguese *Wh-* questions realizes a C head projection. Such an analysis is further supported by Brazilian Portuguese data. Brazilian Portuguese also has these *e que Wh-* questions. However, in the 20th century, *e*, which appeared in this invariant form, started to be omitted (Kato 2015), yielding the reduced *Wh-* clefts which involve only *que* (cf. Kato & Raposo 1996).

It must be noted that Soares's (2003) analysis also considers that *é que* is generated in the CP, although she claims that it can be inflected for tense. Nevertheless, Soares (2003) further argues that *é que* consists of two C heads: *é* is considered to be the lexicalized Foc feature of a *Wh-* head and *que* an overt Fin head. In order to prove that *é* and *que* occupy different projections in the CP, additional evidence is needed. It seems that they cannot be

[15] Notice that the only difference between example (55) and example (56) is that the CG *embu* question shows subject-verb inversion, whereas the European Portuguese *é que* question does not. Notice also that the European Portuguese root *Wh-* question in (20a) which does not involve *é que*, shows subject-verb inversion. Soares (2003) argues that *é que* questions also display subject-verb inversion. However, unlike root non-*é que Wh-* questions, it is optional. Following Costa (1998), she assumes that when *é que Wh-* questions show subject-verb inversion, the verb does not move to C, as in the case of root non-*é que* questions, but to I^0, and the subject stays in situ. She argues that such an analysis is supported by the distribution of sentential adjuncts, which cannot precede the verb in root non-*é que Wh-* questions, but they may do so in *é que Wh-* questions which show subject-verb inversion (see Soares 2003 for a more detailed discussion).

separated by an intervening element, which undermines such an analysis. Moreover, the idea that *é* is a lexicalized Foc feature in *é que* questions is also problematic. *Wh*- elements are taken to move to the specifier of the projection that *é* occupies. Still, focus movement of a DP to a clause initial position in European Portuguese yields ungrammatical structures (see Barbosa 1995; Costa 1998; Ambar 1999 among others).[16]

Granted that focus movement of a DP to a clause initial position in European Portuguese generates, similar to CG, ungrammaticality, we could adopt an analysis for the European Portuguese *Wh*- questions similar to the one proposed for the CG questions. In particular, we could assume that *Wh*- movement is triggered by the need to satisfy an uninterpretable quantification feature (the *u*Qu feature) and an EPP feature on a C projection: *Wh*^{0} (*é que* is an overt *Wh*^{0}). *Wh*- elements, which we consider to bear an interpretable quantification feature (Qu) and an uninterpretable interrogative feature (*u*Q), Agree with the *Wh*- projection, which also bears an interpretable interrogative feature (Q), and under agreement move to its specifier position to satisfy its EPP feature.[17] As in the case of the CG data, such an analysis explains why *Wh*- elements and quantifiers may undergo movement to a clause initial position, whereas other elements may not (cf. sections 4.2.1 and 4.2.2).

5.2 French est-ce que Wh- *questions*

As far as the disagreement about the syntactic status of *est-ce que* is concerned, the distribution of negation in *est-ce que* questions provides support for a mono-clausal analysis of these questions as well. Negation cannot adjoin to the copula assumed to be involved in *est-ce que* questions (cf. example (58) quoted from Plunkett 2004: 155) (Obenauer 1977; Lefebvre 1982 and others).

(58) *Que **n'est-ce (pas) que** c'est?
what ne-is-it (not) that it-is

The argument is the same as the one put forward for the CG and the European Portuguese data: if *est-ce que* involved the copula *être*, it should be able to appear in negative form.

In the light of the above data, it seems that Rooryck's (1994) approach, according to which *est-ce que* is a complex C^0, is on the right track (cf. also Rowlett 2007). Such an analysis could explain the distribution of negative markers. It could also account for the fact that a lexical element may not intervene between the *Wh*- element and *est-ce que*, although as shown by Elsig (2009), this was possible before.

Bearing in mind that, as is the case in CG and European Portuguese, focus movement of a DP to a clause initial position in French generates ungrammaticality[18] (Zubizarreta 2001), it seems that the analysis proposed for the CG *embu* and the European Portuguese

[16] An anonymous reviewer notes that European Portuguese allows Contrastive Focus Fronting (CFF), as argued by Costa & Martins (2011). Nevertheless, as Costa & Martins (2011: 218) note "there is no consensus regarding its availability in European Portuguese". They argue that this is due to variation across speakers. In particular, they claim that in European Portuguese, there is Grammar A, which is less restrictive with respect to which elements may undergo CFF, and Grammar B, which allows only for deictic expressions and PPs and AdvPs that include deictics to undergo CFF. It must be noted that the Grammar A examples of CFF constituents which Costa & Martins (2011) give include only quantifiers, indefinite DPs, PPs, deictic proforms and a DP including the adjective *grande* 'big'.

[17] Cf. Duarte (2000) who argues that *Wh*- elements in European Portuguese move to a Quantified Focus projection in interrogatives.

[18] An anonymous reviewer notes that, according to Authier & Haegeman (2018), French allows Mirative Focus Fronting (MFF). Authier & Haegeman (2018: 6) claim that, although "the prevalent view in the literature is that French NPs/DPs cannot be fronted in the absence of clitic resumption", there is a special type of fronting that may occur in French. Nevertheless, they argue that it should not be considered as a type of Contrastive Focus Fronting, which is not legitimate in French. MFF, which is restricted to main clauses, expresses new and unexpected information and has a similar information structure with *Wh*- exclamatives. It must be noted that MFF appears to be restricted to a small set of elements, as the MFF examples,

é que Wh- questions, could carry over to the *est-ce que Wh-* questions in French.[19] In other words, we could assume that *est-ce que* in French *Wh-* questions is an overt Wh^0, which bears an uninterpretable quantification feature (the *u*Qu feature), an interpretable interrogative feature (Q) and an EPP feature which triggers under agreement, the movement of a *Wh-* element (carrying a Qu and an *u*Q feature) to its specifier.[20]

Under this analysis, most of the syntactic properties of the *est-ce que* interrogatives discussed above are explained. An issue remaining unresolved is the obligatory presence of *est-ce que* in *que Wh-* subjects. A reanalysis account similar to the one proposed for *indambu* in CG is undermined by the fact that *est-ce que* is not obligatory in *Wh-* objects. This plausibly leads one to think that the change may be in progress in French.[21] To ascertain whether *qu'est ce que* indeed undergoes reanalysis into a *Wh-* word, one requires much more data,[22] and crucially data from different sources. This is beyond the scope of the present paper, thus we leave this as an open issue for further work.

6 Conclusion

This paper proposes an analysis for CG *Wh-* questions. It addresses properties of *embu Wh-* questions which have not been previously addressed and analyses asymmetries that occur in *embu* interrogatives.

The paper argues that *embu* questions should be analysed as mono-clausal. We show that such an analysis receives support from the distribution of sentential adjuncts and negation. Adopting a Split-CP analysis, we propose that *embu* is a *Wh-* head. We assume, based on the properties of *Wh-* elements and quantifiers, that *Wh-* elements carry an

---

which Authier & Haegeman (2018) give, include fronted quantifiers (mostly proportional quantifiers), *even-* phrases and indefinite DPs.

[19] As pointed out by an anonymous reviewer, a clefted constituent may precede *é que* in European Portuguese, whereas this is not the case in CG and French, where the clefted constituent occurs in between the copula (*en* in CG and *est* in French) and the complementiser (*pu* in CG and *que* in French). We argue that *é que* clefts involve different features from the ones involved in *é que Wh-* questions, which we do not assume to be derived from a cleft structure. Therefore, a different structural analysis should be pursued for *é que* clefts.

The reviewer also notes that *é que* may be used as an explicative discourse marker (cf. example (i)), whereas this does not hold for *est-ce que* and *embu*.

(i) Posso usar o teu telemóvel? **É que** perdi o meu.
'May I use your phone? It's just that I lost mine.'

We argue that, although, *é que* in *Wh-* questions and the explicative discourse marker in (i) have the same form, they have different syntax and semantics. Therefore, they should be analysed differently.

[20] It must be noted that a significant difference between the *est-ce que*, the *é que* and the *embu* question formation strategy is that *é que* cannot occur in Yes/No questions, *est-ce que* can occur in a clause-initial position in Yes/No questions (cf. (i)), whereas *embu* can occur in a Yes/No question only when it is preceded by another element (cf. (ii) and (iii)).

(i) **Est-ce que** tu aimes Marie?
you love.2.SG Marie
'Do you love Marie?'

(ii) *__Embu__ aγapas tin Maria?
love.2.SG the Maria

(iii) Esi **embu** aγapas tin Maria?
you love.2.SG the Maria
'Is-it you that loves Maria?'

Another analysis needs to be pursued for *est-ce que* Yes/No questions in French, as *est-ce que* in these questions must bear different features.

[21] An anonymous reviewer points out that in Quebec French, the elements *kossé* and *quesse*, which are contracted forms of *qu'est ce que*, are used in interrogatives. This provides support for a reanalysis hypothesis of *qu'est ce que* at least in Quebec French.

[22] An important argument for proposing a reanalysis account for the CG *indambu* was the fact that it qualifies as a sluicing remnant. *Qu'est ce que*, though, does not qualify as a sluicing remnant.

interpretable Qu(antification) feature and an uninterpretable interrogative feature (*u*Q) in *Wh*- questions. Assuming that *Wh*- elements are lexically specified as quantificational (bearing an interpretable Qu feature) accommodates the fact that *Wh*- elements and quantifiers can move to clause initial positions in non-clefting structures in CG, whereas DPs cannot. We argue that the *Wh*- projection bears an interrogative feature (the Q feature), an uninterpretable quantification feature (the *u*Qu feature) and an EPP feature. *Wh*- elements Agree with the *Wh*- projection in interrogatives and under agreement move to its specifier position to satisfy its EPP feature.

With respect to the apparent asymmetries in the optional occurrence of *embu* between CG *Wh*- questions, we argue that these can be formally accounted for. We propose that the obligatory occurrence of *'mbu* in *inda Wh*- arguments and sluices derives from the fact that *'mbu*, unlike *embu*, is not a *Wh*- head. We argue that *inda* and *'mbu* have been reanalysed into a *Wh*- word, *indambu*.

Finally, we show that CG *embu* questions share syntactic properties with *é que Wh*- questions in European Portuguese and *est-ce que Wh*- questions in French. The examination of these properties suggests that the analysis advocated for the CG *embu* questions can extend to these data as well.

Abbreviations

1.SG = first person singular morphology, 2.SG = second person singular morphology, 3.SG = third person singular morphology, 3.PL = third person plural morphology, ACC = accusative, GEN = genitive, NOM = nominative, F = feminine, M = masculine, N = neuter, CL = clitic, IMPERF = imperfective, REFL = reflexive

Acknowledgements

We are grateful to Glossa's three anonymous reviewers for their comments and suggestions. We also wish to thank the audiences at the Recent Issues in the Syntax of Questions workshop and the 19th International Symposium on Theoretical and Applied Linguistics. Thanks also to João Costa for discussion of the Portuguese data and to Norman Yeo for discussing earlier drafts with us as well as for technical help with the images.

Any remaining errors are ours.

Competing Interests

The authors have no competing interests to declare.

References

Agouraki, Yeoryia. 2010. *It*-clefts and stressed operators in the preverbal field of Cypriot Greek. *Lingua* 120. 527–554. DOI: https://doi.org/10.1016/j.lingua.2008.10.011

Alexiadou, Artemis & Elena Anagnostopoulou. 1998. Parametrizing Agr: Word order, V-movement and EPP-checking. *Natural Language & Linguistic Theory* 16(3). 491–539. DOI: https://doi.org/10.1023/A:1006090432389

Ambar, Manuela. 1999. Aspects of the syntax of focus in Portuguese. In Georges Rebuschi & Laurie Tuller (eds.), *The grammar of focus*, 23–53. Amsterdam: John Benjamins. DOI: https://doi.org/10.1075/la.24.02amb

Barbosa, Pilar. 1995. *Null Subjects*. Cambridge, MA: MIT dissertation.

Benincà, Paola. 2001. The position of topic and focus in the left periphery. In Guglielmo Cinque & Giampaolo Salvi (eds.), *Current studies in Italian syntax: Essays offered to Lorenzo Renzi*, 39–64. Amsterdam: North-Holland.

Blanche-Benveniste, Claire, José Deulofeu, Jean Stéfanini & Karel van den Eynde. 1984. *Pronom et syntaxe*: *L'approche pronominale et son application au français*. Paris: SELAF.

Boeckx, Cedric. 2000. A note on contraction. *Linguistic Inquiry* 31. 357–66. DOI: https://doi.org/10.1162/002438900554389

Boškovic, Željko. 1997. Superiority effects with multiple wh-fronting in Serbo-Croatian. *Lingua* 102(1). 1–20. DOI: https://doi.org/10.1016/S0024-3841(96)00031-9

Cheng, Lisa Lai-Shen & Johan Rooryck. 2000. Licensing wh- in situ. *Syntax* 3. 1–19. DOI: https://doi.org/10.1111/1467-9612.00022

Chomsky, Noam. 1977. On Wh-movement. In Peter W. Culicover, Adrian Akmajian & Thomas Wasow (eds.), *Formal syntax*, 77–132. New York: Academic Press.

Chomsky, Noam. 2000. Minimalist inquiries: The framework. In David Michaels, Roger Martin & Juan Uriagereka (eds.), *Step by step: Essays on minimalist syntax in honor of Howard Lasnik*, 89–155. Cambridge, MA: MIT Press.

Chomsky, Noam. 2001. Derivation by phase. In Michael Kenstowicz (ed.), *Ken Hale: A life in language*, 1–52. Cambridge, MA: MIT Press.

Chomsky, Noam. 2004. Beyond explanatory adequacy. In Adriana Belletti (ed.), *Structures and beyond the cartography of syntactic structures* 3. 104–131. Oxford: Oxford University Press.

Chomsky, Noam. 2005. Three factors in language design. *Linguistic Inquiry* 36(1). 1–22. DOI: https://doi.org/10.1162/0024389052993655

Chomsky, Noam & Howard Lasnik. 1978. A remark on contraction. *Linguistic Inquiry* 10. 268–74.

Cinque, Guglielmo. 1986. Bare quantifiers, quantified NPs and the notion of operator at S-Structure. *Rivista di Grammatica Generativa* 11. 33–63.

Costa, João. 1998. *Word order variation: A constraint-based approach*. Leiden: Leiden University dissertation.

Costa, João & Ana Maria Martins. 2011. On focus movement in European Portuguese. *Probus* 23(2). 217–245. DOI: https://doi.org/10.1515/prbs.2011.006

Costa, João & Inês Duarte. 2001. Cleft strategies in Portuguese: A unified approach. *Paper presented at the 11th Colloquium on Generative Grammar*, Zaragoza, Spain, 4th–6th April.

Dobrovie-Sorin, Carmen. 1990. Clitic doubling, Wh-movement, and quantification in Romanian. *Linguistic Inquiry* 21(3). 351–398.

Dornisch, Ewa. 2000. Overt quantifier raising in Polish. *Proceedings of GliP-1: Generative Linguistics in Poland*, 47–58.

Duarte, Inês. 2000. Sobre interrogativas-Q em Português Europeu e Português Brasileiro. *Paper presented at the Congresso Internacional 500 Anos da Língua Portuguesa no Brasil*, Évora, Portugal, 8th–13th May.

Elsig, Martin. 2009. *Grammatical variation across space and time: The French interrogative system*. Amsterdam: John Benjamins. DOI: https://doi.org/10.1075/silv.3

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

Grohmann, Kleanthis, Phoevos Panagiotidis & Stavroula Tsiplakou. 2006. Properties of wh-question formation in Cypriot Greek. *Proceedings of the 2nd International Conference of Modern Greek Dialects and Linguistic Theory (Mytilene, Greece, 30 September–3 October 2004)*, 83–98.

Gryllia, Stella & Marika Lekakou. 2007. Clefts in Cypriot Greek. *Studies in Greek Linguistics* 27. 136–148.

Harris, Martin. 1978. *The evolution of French syntax*. London & New York: Longman.

Hornstein, Norbert. 1999. Movement and control. *Linguistic Inquiry* 30. 69–96. DOI: https://doi.org/10.1162/002438999553968

Kanikli, Antri. 2011a. Sluicing and asymmetries in the Cypriot-Greek wh-question formation. *Proceedings of the 19th International Symposium on Theoretical and Applied Linguistics (Thessaloniki, Greece, 3 April-5 April 2009)*, 243–251.

Kanikli, Antri. 2011b. *The syntax of wh-questions in Cypriot Greek and its consequences*. York: University of York dissertation.

Kanikli, Antri. 2016. The distribution of quantifiers in clefts. *Lingua* 171. 24–36. DOI: https://doi.org/10.1016/j.lingua.2015.11.004

Karttunen, Lauri. 1977. Syntax and semantics of questions. *Linguistics and Philosophy* 1. 3–44. DOI: https://doi.org/10.1007/BF00351935

Kato, Mary Aizawa. 2015. Two focus positions in the history of Brazilian Portuguese. *ReVEl. Special edition 10*, 19–41.

Kato, Mary Aizawa & Eduardo Raposo. 1996. European and Brazilian word order: Questions, focus and topic constructions. In Claudia Parodi, Carlos Quicoli, Mario Saltarelli & María Luisa Zubizarreta (eds.), *Aspects of Romance Linguistics*, 267–277. Washington, DC: Georgetown U. Press.

Kiss, É. Katalin. 1998. Identificational focus versus information focus. *Language* 74. 245–273. DOI: https://doi.org/10.1353/lan.1998.0211

Langacker, Ronald. 1965. French interrogatives: A transformational description. *Language* 41(4). 587–600. DOI: https://doi.org/10.2307/411526

Lefebvre, Claire. 1982. Qui qui vient ou Qui vient: voilà la question. In Claire Lefebvre (ed.), *La syntaxe comparée du français standard et populaire: Approaches formelle et fonctionnelle*, 47–101. Québec: Office de la Langue Française.

Merchant, Jason. 2001. *The syntax of silence: Sluicing, islands, and identity in ellipsis*. Oxford: Oxford University Press.

Munaro, Nicola & Jean-Yves Pollock. 2005. Qu'est-ce que (qu)-est-ce que? A case study in comparative Romance interrogative syntax. In Guglielmo Cinque & Richard Kayne (eds.), *The Oxford handbook of comparative syntax*, 542–606. New York: Oxford University Press.

Obenauer, Hans-Georg. 1977. Syntaxe et interprétation: que interrogatif. *Le francais moderne* 45. 305–341.

Ochi, Masao & Tien-Hsin Hsin. 1999. The syntax of adjunct WH-NPs. *Proceedings of the 23rd. Annual Penn Linguistics Colloquium*.

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

Papadopoulou, Elena. 2014. *The acquisition of wh-questions by Cypriot-Greek children*. Essex: University of Essex dissertation.

Pesetsky, David & Esther Torrego. 2001. T-to-C movement: Causes and consequences. *Current Studies in Linguistics* 36. 355–426.

Plunkett, Bernadette. 2004. Locutionary inversion in Modern French. *York Papers in Linguistics Series* 2(1). 151–179.

Rizzi, Luigi. 1996. Residual V-second and the Wh-criterion. In Adriana Belletti & Luigi Rizzi (eds.), *Parameters and functional heads: Essays in comparative syntax*, 63–90. Oxford: Oxford University Press.

Rizzi, Luigi. 1997. The fine structure of the left periphery. In Liliane Haegeman (ed.), *Elements of grammar*, 281–337. Dordrecht: Kluwer. DOI: https://doi.org/10.1007/978-94-011-5420-8_7

Rooryck, Johan. 1994. On two types of underspecification: Towards a feature theory shared by syntax and phonology. *Probus* 6. 207–233. DOI: https://doi.org/10.1515/prbs.1994.6.2-3.207

Roussou, Anna. 2000. On the left periphery: Modal particles and complementisers. *Journal of Greek Linguistics* 1. 65–94. DOI: https://doi.org/10.1075/jgl.1.05rou

Rowlett, Paul. 2007. *The syntax of French*. New York: Cambridge University Press. DOI: https://doi.org/10.1017/CBO9780511618642

Soares, Carla. 2003. The C-domain and the acquisition of European Portuguese: The case of wh-questions. *Probus* 15. 147–176. DOI: https://doi.org/10.1515/prbs.2003.002

Tsoulas, George & Norman Yeo. 2017. Scope assignment: From *wh-* to QR. *Glossa: A Journal of General Linguistics* 2(1): 87. 1–33. DOI: https://doi.org/10.5334/gjgl.308

Zubizarreta, Marie Luisa. 2001. The constraint on preverbal subjects in Romance interrogatives: A minimality effect. In Aafke Hulk & Jean-Yves Pollock (eds.), *Subject inversion in Romance and the theory of Universal Grammar*, 183–204. Oxford: Oxford University Press.

How to cite this article: Kanikli, Antri and George Tsoulas. 2019. 'Embu' *Wh-* questions in Cypriot Greek: A comparative study. *Glossa: a journal of general linguistics* 4(1): 95. 1–24. DOI: https://doi.org/10.5334/gjgl.788

Submitted: 24 August 2018 **Accepted:** 18 June 2019 **Published:** 12 August 2019

]u[*Glossa: a journal of general linguistics* is a peer-reviewed open access journal published by Ubiquity Press.

OPEN ACCESS