

On implicit arguments and logophoricity: Accounting for exempt reflexives cross-linguistically

1. Introduction. As is well-known, there are certain occurrences of reflexive pronouns in English that do not appear to obey Principle A of the binding theory (Chomsky 1986), as illustrated in (1). In this case, the reflexives, *herself* in (1a) and *himself* in (1b), are licensed despite the absence of a local antecedent, (see Charnavel 2019, Charnavel and Bryant 2022 i.a. and references therein).

(1) a. Catherine_i boasted that the queen invited Andrew and herself_i for tea.

b. Tom_i believes that there is a picture of himself_i hanging in the post office.

These occurrences are called *exempt reflexives* (Charnavel and Sportiche 2016). Nevertheless, while English exempt reflexives are subject to certain constraints (Charnavel and Bryant 2022), they are still less restricted compared to exempt reflexives in other languages. This paper seeks to shed light on the licensing conditions of exempt reflexives by exploring a case exemplified by the Greek reflexive *o eaftos mu* ‘lit. the self mine.’ Specifically, while this reflexive requires a local c-commanding antecedent, as per Principle A (Iatridou 1988, Anagnostopoulou and Everaert 1999, Spathas 2010 i.a.), it differs from its English counterpart in that it does not allow exempt usages of *o eaftos mu* when it occurs as a verb’s argument, (2a). On the other hand, like (1b), an exempt usage of the reflexive is possible when embedded under a noun, (2b), that is, in a DP.

(2) a. *I K_i perifaneftike oti i vasilisa kalese ton A ce ton eafto tis_i ja tsai.
the K.NOM boasted that the queen.NOM invited the A.ACC and the self.ACC her.GEN for tea
‘K boasted that the queen invited A and herself for tea.’

b. O T_i pistevi oti iparhi mia fotografia tu eaftu tu_i kremasmeni s-to ghrafio.
the T.NOM believes that there.is a picture.NOM the self.GEN his.GEN hanging in-the office
‘T believes that there is a picture of himself hanging in the office.’

Why does one language allow exempt anaphora more liberally (English) while another only permits it to a limited extent (Greek)? To address this question, we introduce novel data that reveal a striking correlation between the distribution of exempt anaphora and implicit arguments in Greek and English.

2. Logophoricity. We follow Charnavel (2019) in assuming that exempt anaphors are plain anaphors licensed locally by a logophoric pronoun. Under this view, the domain in which an anaphor must be licensed is the Spell-out domain containing it, and the logophoric pronoun is the specifier of a logophoric operator heading a projection LogP. This projection is available in each phasal/Spell-out domain, e.g. v, D or C. For instance, in (1a), the reflexive bound by *pro*, occupies Spec,LogP, projected in the v-area.

(3) Catherine_i boasted that [_{TP} the queen_k [_{VP} tk...[LogP pro_i [Log’ Log [... invited Andrew and herself_i for tea]]]]]

In (2b), *o eaftos mu* is a logophor, as supported by the fact that just like logophors of English and other languages, it is licensed by a logophoric center, *o T* ‘T,’ an attitude holder, and it accepts split antecedents (Charnavel 2019, see also Helke 1970, Koster 1984 and Bouchard 1984 i.a.):

(4) O J_i ipe oti i E_i ithele na dhiksi tis kaliteres fotografies tu eaftu tus_{i+i} s-ton K.
the J said that the E wanted na show the best pictures the self their to-the K
‘J said that E. wanted to show the best pictures of themselves to K.’

3. Implicit Arguments. We introduce Collins’ (to appear) theory of implicit arguments in English (see Abdul-Razak 2022, Gotah 2022, Ndapo 2022, Storment 2022). Collins analyzes implicit arguments as pro-s lacking a structural Case feature ([uCase]), allowing them to occupy caseless argument positions like the Spec,vP of passive sentences and nominalizations. Furthermore, implicit arguments come in three types, generic (pro_{Gen}), existential (pro_{Ex}), and definite (pro_{Def}), each with distinct ϕ -features. Building on Michelioudakis (2020, 2021), Author et al. (to appear) propose that, like English, Greek has implicit arguments, but with an important difference: whereas English allows the full array of pronouns in the passive, Greek only allows pro_{Gen} and pro_{Ex}. Thus, the English passive in (5a) is grammatical, using pro_{Def} to refer to M. Tyson and license the reflexive *himself*. Conversely, the Greek passive prohibits pro_{Def}, making the corresponding sentence ungrammatical due to the absence of an antecedent for the reflexive, (5b):

(5) **Context:** Mike Tyson bought over 200 cars throughout his career, totaling at 4,5 million.

a. Many were pro_{Def-i} bought for himself_i and others as gifts for his friends and family.

b. *Pola aghorastikan ja ton eafto tu ce ala san dhora ja tus filus tu.
many were.bought for the self his and others as gifts for the friends his
‘Many were bought for himself and others as gifts for his friends.’

The prohibition of pro_{Def} in the Greek passive suggests that in contrast to English, this pronoun cannot be

syntactically projected in the v -phase. In sum, we have the following facts:

- (6) Possible Implicit Arguments in passives
 a. English: generic (pro_{Gen}), existential (pro_{Ex}), and definite (pro_{Def})
 b. Greek: generic (pro_{Gen}) and existential (pro_{Ex})

However, Greek does have pro_{Def} as the subject of finite clauses. In this case, pro_{Def} has [uCase]. We can explain the lack of pro_{Def} in passives (see 5b) by assuming that pro_{Def} in Greek always has a [uCase] feature. So, if pro_{Def} appears in Spec,VP in the passive, it would compete with the subject for nominative Case.

- (7) a. **English:** pro_{Def} lacks a [uCase] feature. b. **Greek:** pro_{Def} has a [uCase] feature.

4. Analysis. We propose that in a logophoric context, Charnavel's (2019, 2020) pro (in Spec,LogP) is an implicit argument in the sense of Collins (to appear), and therefore must lack a [uCase] feature in English. In addition, both in Greek and English, pro in Spec,LogP must have the same featural make-up as the implicit argument pro_{Def}, allowing it to refer to a discourse antecedent and license reflexives with various ϕ -features (1st, 2nd, 3rd person, \pm singular), resulting in a definite interpretation.

- (8) **English, Greek:** pro in Spec,LogP has the featural make-up of pro_{Def}.

Because English pro_{Def} lacks a [uCase] feature, it can occur in caseless positions like Spec,LogP. As LogP projects in different phases, English reflexives can be licensed as logophors in various syntactic contexts, such as vPs and DPs. From these assumptions it follows that pro_{Def} cannot appear in Spec,LogP of vPs in Greek. And from that, it follows that Greek cannot have structures such as (3), since there would be contradictory requirements on pro_{Def}. Here we elaborate on this conclusion. Consider example (3). In Greek, pro_{Def} has [uCase], resulting in two DPs, pro_{Def} and the external argument, carrying a [uCase] in the v -area. However, Greek's T is capable of assigning case to only one argument. As a result, pro_{Def} cannot be projected within the vP. This is because, in line with the hierarchy shown in (5), the external argument, which is merged higher than pro_{Def}, will have its case feature valued by T, leaving pro_{Def}'s case feature unvalued.

5. Exempt Anaphora in DPs in Greek. In line with English (Alexiadou 2009; Sichel 2009, 2010; Borer 2013), Greek nominalizations similarly feature a syntactically projected external implicit argument, as noted by Alexiadou et al. (2009, 2015). Author et al. (to appear) suggest that this implicit argument can be pro_{Def}, supported by its ability to license reflexives with varying ϕ -features, shown below with 3SG.M:

- (9) I sinehis pro_{Def-i} proothisi tu eaftu tu.
 the constant promotion.NOM the self.GEN his.GEN 'The constant promotion of himself.'

Nominals realize a D-phase (Charnavel 2019, Charnavel and Bryant 2022). Since pro_{Def} is allowed in this phasal domain, so is the logophoric pronoun. This explains why *o eaftos mu* can be licensed as a logophor in nouns, (2b). Let us now consider why pro_{Def} is allowed in nominals. In (2b), the antecedent of the reflexive, *o T* 'T' is not local to the reflexive. Yet, *o T* is an attitude holder, so it can serve as the antecedent of a logophoric pronoun/pro_{Def} inside the DP containing the anaphor, i.e. *mia fotoghrafia tu eaftu tu* 'a picture of himself,' as shown in (10). Here, the noun takes the reflexive as an internal argument. Pro_{Def} is in Spec,LogP, binds the reflexive locally, and its [uCase] is valued by D, allowing logophoricity inside DPs.

- (10) [_{DP} mia_D [_{LogP} pro_{Def} [_{Log} Log [_{NP} fotoghrafian [_{DP} tu eaftu tu]]]]]

(10) predicts that if a noun has an external argument, logophoric *o eaftos mu* should be blocked in DPs because as in v -phases of Greek, pro_{Def} will compete for case with the external argument. This is borne out:

- (11) **Context:** T believes that in the office, there is a picture of him that his ex-wife, M, took.

* O T_i pistevi oti iparhi mia foto tis M me ton eafto tu_i kremasmeni s-to ghrafio.
 the T believes that there.is a pic.NOM the M.GEN with the self.ACC his.GEN hanging in-the office
 'T believes that there is a picture of her's with himself, hanging in the office.'

(11) differs from (2b) in that the same DP containing the anaphor and pro_{Def} also contains an external argument, *tis M* 'M's,' shown in Spec,nP in (12). Like T, D can only value the case of the highest argument, i.e. the external argument. This results in (11)'s degraded status, as pro_{Def}'s [uCase] is unvalued.

- (12) [_{DP} mia_D [_{nP} [_{DP} tis_D M_N] [_n n [_{LogP} pro_{Def} [_{Log} Log [_{NP} foto_{NP} [_{PP} me_P [_{DP} ton eafto tu]]]]]]]]]

6. Discussion. An alternative is that *o eaftos mu* is blocked in logophoric contexts, as (2a) and (11), via competition by forms, e.g. *o idhios* 'the same,' which can be bound long distance. Indeed, *o idhios* can replace *o eaftos mu* in (2a) and (11). However, it can also replace *o eaftos mu* in (2b). Thus, a challenge of this alternative is to explain why competition with *o idhios* blocks *o eaftos mu* in (2a, 11), but not in (2b).