



A feature-inheritance approach to scalar-focus object preposing in English, Mandarin Chinese and Spanish

Jiahui Yang

Departamento de Filología Inglesa (Lengua Inglesa), Universidad de Sevilla  

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ENG Abstract: This paper discusses the syntax of scalar-focus object preposing, which is found compatible with constituent-adverbs but not with adverbs with a sentential scope. Meanwhile, languages such as English and Mandarin Chinese are found to differ in the position to which the scalar-focus object can be preposed. To account for such cross-linguistic structural differences in a unified way, this paper proposes that such an object carries an interpretable [*i*-Max]-feature and agrees with a head to value its uninterpretable discourse-feature, before moving to the specifier position of the latter. Based on the theory of Feature Inheritance, it has been further argued that in English, the head in question is C, because the discourse-feature is retained by it, while in Mandarin Chinese this head is T, because it inherits the discourse-feature from C. The potential issue of subject-object ordering in this approach has been dealt with by considering the nature of movement and the licensing condition of multiple specifiers. Additionally, the universality of the current proposal has been demonstrated by extending the same approach to Spanish.

Keywords: scalar focus; object preposing; feature inheritance; information structure

ES Un enfoque de herencia de rasgos para la anteposición de objeto como foco escalar en inglés, chino mandarín y español

ES Resumen: Este artículo analiza la sintaxis de la anteposición de objeto como foco escalar, que se encuentra compatible con adverbios constituyentes, pero no con adverbios con alcance oracional. Mientras tanto, se observa que lenguas como el inglés y el chino mandarín difieren en la posición a la que puede anteponerse el objeto que funciona como foco escalar. Para dar cuenta de tales diferencias estructurales interlingüísticas de manera unificada, este artículo propone que tal objeto lleva un rasgo interpretable de [*i*-Max] y concuerda con un núcleo para valorar su rasgo discursivo no interpretable, antes de moverse a la posición del especificador del último. Basándose en la teoría de la Herencia de Rasgos, se argumenta además que en inglés, el núcleo en cuestión es C, porque este retiene el rasgo discursivo, mientras que en chino mandarín este núcleo es T, porque este hereda el rasgo discursivo de C. El problema potencial del ordenamiento sujeto-objeto en este enfoque se ha resuelto teniendo en cuenta la naturaleza del movimiento y la condición de licencia de los especificadores múltiples. Adicionalmente, se ha demostrado la universalidad de la propuesta actual extendiendo el mismo enfoque al español.

Palabras clave: foco escalar; anteposición de objeto; herencia de rasgos; estructura informativa

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1. Introduction

Focus refers to the element or phrase that represents the most salient part of the conveyed information in a sentence, and it can be encoded both in and ex situ. While an in-situ focus relies on a pitch accent on it, an ex-situ focus involves movement of the constituent, a process frequently referred to as focalisation.

In languages such as English, a focalised element typically appears in clause-initial position, as illustrated in (1). However, in languages like Mandarin Chinese, focalisation targets clause-internal position, as seen in (2).

- (1) I made a lot of sweetbreads. **A couple of pounds** I think I made for her.
(Birner and Ward 1998, 84)
- (2) Zhangsan (shenzhi) (lian) **zhe-ben shu** dou du-guo.
Zhangsan even LIAN this-CLF book DOU read-EXP
'Zhangsan has read even this book.'

It is important to note that in Mandarin Chinese, not all types of focused elements can undergo focalisation. For example, preposing a Contrastive Focus to clause-initial or -internal position is impossible in this language.

- (3) A: Tingshuo Zhangsan mai-le diannao.
hear.of Zhangsan buy-PFV computer
'I've heard that Zhangsan bought a computer.'
- B: Bu, Zhangsan mai-le **shouji** (mei mai diannao).
no Zhangsan buy-PFV mobile.phone not buy computer
'No, Zhangsan bought a mobile phone (and not a computer).'
- B': # Bu, **shouji** Zhangsan mai-le (diannao mei mai).
B'': # Bu, Zhangsan **shouji** mai-le (diannao mei mai).

Unlike the focused element in (3), the preposed focus in (2) involves scalarity:¹ on a scale of (un)likelihood, *zhe-ben shu* 'this book' stands out as the most unlikely alternative among all possible ones. This kind of focus can be termed as Scalar Focus (SF), which is frequently associated with some focus-sensitive particles such as *even* in English, (*lian*)...*dou*² '(including)...all' in Mandarin Chinese, and *incluso/aun/hasta* 'even' in Spanish. The present study is concerned with the cross-linguistic differences in the structural positions that the preposed SF object occupies, with the intention to provide a unified account for scalar-focus object preposing (SFOP). To this end, the rest of the paper is organised as follows. Section 2 and Section 3 analyse the structural properties of SFOP in English and in Mandarin Chinese, respectively, based on which, in Section 4 a feature-inheritance approach to SFOP is proposed, together with some discussion on the side issue of subject-object ordering. In Section 5, the same approach is extended to Spanish to strengthen the universality of the current proposal. Finally, Section 6 concludes the whole paper.

2. Scalar-focus object preposing in English

2.1. Two types of even

As mentioned earlier, the SF in English is frequently associated with the focus-sensitive particle *even*. According to Anderson (1972), Jackendoff (1972), Taglicht (1984), Quirk et al. (1985), König (1991), among others, *even* generally presents the following distributional picture:

- (4) a. *Even* John gave his daughter a new bicycle.
b. John gave *even* his daughter a new bicycle.
c. John gave his daughter *even* a new bicycle.
d. John *even* gave his daughter a new bicycle.
(Jackendoff 1972, 248)

The placement of *even* in these sentences may boil down to three situations: to the left of the subject as shown in (4a), after the subject and before the main verb as illustrated by (4d), and after the main verb as in (4b) and (4c). But with regards to the placement of the SF associated with *even*, the situation seems to be

¹ It is worth noting that the notion of scalarity may cause some confusion here due to the extensive and varied use of the term scale in different research and discussion (see Nevalainen 1991), but the type of scale that pertains to the current discussion is the pragmatic one (see Schwenter 1999), which is evoked by pragmatic entailments derived from speaker expectations about the world (Fauconnier 1975a; 1975b; Hirschberg 1985).

² In addition to *dou*, *ye* 'also' can also be used together with *lian* to express 'even' in Mandarin Chinese, and the two are oftentimes considered to be interchangeable (Paris 1979). However, Hole (2004) points out that *dou* and *ye* may function differently with respect to universal/existential quantification over domains of alternatives. A detailed discussion of their distinction is beyond the scope of this study, and only (*lian*)...*dou* construction would be taken into account in the present paper.

more complicated. The following examples are taken from Jackendoff (1972, 248–49), where the (intended) SF has been marked in boldface:³

- (5) a. ^{ok} *Even* **John** gave his daughter a new bicycle.
 b. * **gave**
 c. * **his**
 d. * **daughter**
 e. * **new**
 f. * **bicycle**
- (6) a. * **John** gave *even* his daughter a new bicycle.
 b. * **gave**
 c. ^{ok} **his**
 d. ^{ok} **daughter**
 e. * **new**
 f. * **bicycle**
- (7) a. * **John** gave his daughter *even* a new bicycle.
 b. * **gave**
 c. * **his**
 d. * **daughter**
 e. ^{ok} **new**
 f. ^{ok} **bicycle**
- (8) a. ^{ok} **John** *even* gave his daughter a new bicycle.
 b. ^{ok} **gave**
 c. ^{ok} **his**
 d. ^{ok} **daughter**
 e. ^{ok} **new**
 f. ^{ok} **bicycle**

The above data highlight a two-part scenario: when *even* precedes the main verb but follows the subject, as in (8), either the subject or any constituent following this particle may be interpreted as the SF; by contrast, when *even* precedes the subject or follows the main verb, only the adjacent constituent to its right (or part of it) can be interpreted as the SF.⁴ Assuming the scope of *even* to be its c-command domain (see Rooth 1985; 1992), the different patterns of association with focus shown by (5)–(8) seem to be unexpected. To address this problem, Erlewine (2014) proposes that when *even* has a sentential scope, it associates with the lower copy of the subject within *vP*, assuming the *vP*-internal subject hypothesis (Koopman and Sportiche 1985; Fukui and Speas 1986; Kitagawa 1986; Kuroda 1988). Evidence in favour of this analysis comes from the raising-control asymmetry:

- (9) a. A **professor** seems [_{TP} to *even* [_{vP} ~~professor~~ be at the party]].
 b. * A **professor**_i wants [_{TP} pro_i to *even* [_{vP} be at the party]].
 (adapted from Erlewine 2014, 13)

With the control verb *want*, the matrix subject is generated within the main clause, so no copy of the subject can be found in the lower *vP*, and accordingly, it is out of the scope of *even*.

With this being said, such an analysis cannot be applied to SFOP constructions. As shown in the following example, for an object which has been preposed to the left of the subject, the SF reading seems to be unavailable:⁵

³ The label “ok” and the asterisk (*) are used to mark grammaticality judgements. The former indicates that the construction is considered well-formed, and the latter that it is ungrammatical.

⁴ The analysis presented in this paper mainly concerns narrow syntax, and thus does not address prosodic factors such as intonation and stress. It is important to note, however, that according to Chomsky (1971), Jackendoff (1972), Zubizarreta (1998, 2014) and Reinhart (2006), the nuclear stress (or, in other terms, intonation centre, highest stress or main stress) of a sentence must fall on the focused constituent. Therefore, the boldfaced words in (5)–(8) already indicate where the Nuclear Stress is placed.

⁵ In fact, Erlewine (2014) considers sentences such as (i), which is basically of the same structure as that of (10b), to be well constructed:

(i) *Mary*_i, John even saw ____i at the party.

- (10) a. I *even* hate to bother **Max**.
 b. * **Max**_i I *even* hate to bother _____i.
 (adapted from Jackendoff 1972, 251)

By contrast, the preposing of the SF object to the clause-initial position is possible when *even* is adjacent to it:

- (11) [*Even Max*]_i I hate to bother _____i.
 (adapted from Jackendoff 1972, 251)

Taking into consideration the different behaviours of *even* in terms of the association with the SF, I would like to propose that we are faced with (at least) two types of *even* here. The post-subject and pre-verbal one could be considered as a *vP*-adverb, whose scope is its *c*-commanding domain; the other *even* that is either pre-subject or post-verbal may adjoin to the SF constituent and has been grammaticalised into an additive marker which can evoke a likelihood scale. Crucially, *vP-even* cannot scope over a preposed DP (see Footnote 5).

2.2. Movement-properties of the clause-initial SF object in English

To get a clear picture of the derivation of constructions such as the one in (11), the first question to consider is whether the dislocated *even*-object undergoes movement or is base-generated. In this respect, the movement-analysis seems to gain more credibility, given the various island effects shown by sentences of this kind:

- (12) *Wh*-island
 a. * [*Even this book*]_i he wonders [who has read _____i].
 b. He wonders [who has read *even this book*].
- (13) Complex NP island
 a. * [*Even this book*]_i John made [the claim [that he had read _____i]].
 b. John made [the claim [that he had read *even this book*]].
- (14) Adjunct island
 a. * [*Even this book*]_i John was impressed [because Paul had read _____i].
 b. John was impressed [because Paul had read *even this book*].

Examples (12)–(14) demonstrate that the *even*-object cannot be extracted from a *wh*-phrase, a noun phrase with a appositive clause, or a causal adjunct, which is expected if the preposed *even*-phrase is indeed derived by movement.

Another piece of evidence in favour of the derivation by movement comes from reconstruction effects, as illustrated in (15):

- (15) a. John_i doesn't trust *even* himself_i.
 b. [*Even himself*]_j John_i doesn't trust _____i.
 c. * Himself_i doesn't trust *even* John_i.
 d. * [*Even John*]_j himself_i doesn't trust _____i.

Conditions A and C of the Binding Theory state that an anaphor must be bound in its binding domain and an R-expression must be free (Chomsky 1981; 1986), so that for sentence (15b) to be well formed, where *himself* seemingly precedes *John*, the reflexive anaphor must be reconstructed to the pre-movement position for interpretation. Furthermore, the ungrammaticality of sentences (15c) and (15d) shows that the reconstruction is obligatory in this case, with *John* incorrectly bound by *himself* in the pre-movement position in (15d), and that the movement of the *even*-phrase does not feed binding relations. This suggests that SFOP in English may involve A'-movement (see Lebeaux 1988; 2009; Chomsky 1993; 1995; Fox 1999; Takahashi and Hulsey 2009).

In addition, SFOP also exhibits other A'-properties in English.

- (16) a. Kim thinks [*Sandy criticised even this book*].
 b. [*Even this book*]_i Kim thinks [*Sandy criticised* _____i].
 (adapted from Hukari and Levine 1991, 98)

However, the pause represented by the comma between the preposed object and the rest of the sentence may indicate that the object has been topicalised, instead of being focalised. Leaving aside the details of the semantic analysis explored in Erlewine (2014) concerning logical contradiction, he also claims that *even* cannot associate leftwards with an entire preposed DP.

In sentence (19), any constituent following *shenzhi* can be interpreted as the SF.⁷ Crucially, just like *vP-even* in English, *shenzhi* cannot license SFOP in Mandarin Chinese:

- (20) a. *Zhangsan *shenzhi* **zhe-ben shu** du-wan-le.⁸
 Zhangsan even this-CLF book read-finish-PFV
- b. ***Zhe-ben shu** Zhangsan *shenzhi* du-wan-le.
 this-CLF book Zhangsan even read-finish-PFV
 (int.) 'Zhangsan even finished reading this book.'

For the object to have an SF reading, it must be encapsulated between (*lian*)...*dou* 'including...all', where *lian* is claimed to be optional (Ding et al. 1961).

- (21) a. (*Lian*) **Zhangsan** *dou* kan-guo zhe-ben shu.
 LIAN Zhangsan DOU read-EXP this-CLF book
 'Even Zhangsan has read this book.'
- b. Zhangsan (*lian*) **zhe-ben shu** *dou* kan-guo.
 Zhangsan LIAN this-CLF book DOU read-EXP
 'Zhangsan has read even this book.'
- (adapted from Shyu 2018, 164)

On the other hand, as observed in (21), *lian*, if present, is adjacent to the SF object and is compatible with SFOP, which makes it quite similar to constituent-*even*. On this account, it might be assumed that *lian* is a constituent-adverb as well, and it evokes a set of alternatives, with the phrase that precedes *dou* standing out as the most unexpected or least likely one among them. In (21a) the subject is interpreted as SF, and in (21b) it is the preposed object. It is worth noting that, in the latter case, object preposing is obligatory, targeting a post-subject and pre-verbal position.

- (22) a. *Zhangsan *dou* kan-guo *lian* zhe-ben shu.
 Zhangsan DOU read-EXP LIAN this-CLF book
 (int.) 'Zhangsan has read even this book.'
- b. (*Lian*) zhe-ben shu Zhangsan *dou* kan-guo.
 lian this-CLF book Zhangsan DOU read-EXP
 'Even this book, Zhangsan has read it.'
- (Shyu 2018, 164)

Although it is also possible to have the object in clause-initial position as seen in (22b), following Shyu (1995; 2014) and Chu (2003), I would like to argue that the clause-initial object does not have the status of SF, but is rather a topic.

- (23) A: Zenme le?
 how COS
 'What happened?'

⁷ However, unlike *vP-even* in English, *shenzhi* fails to associate backwards with the subject in (19a). For the subject to have a SF reading, *shenzhi* must precede the subject.

(i) (Shenzhi) **Zhangsan** *(*dou*) gei-le ta nü'er yi-liang xin zixingche.
 even Zhangsan DOU give-PFV his daughter one-CLF new bicycle
 'Even Zhangsan gave his daughter a new bicycle.'

Furthermore, in this case, the subject is obligatorily followed by *dou*, while *shenzhi* is optional. Consequently, such an SF reading of the subject is probably related to *dou*, instead of *shenzhi* (also see Footnote 8). As noted by an anonymous reviewer, if the *vP*-internal subject hypothesis also holds for Mandarin Chinese, Erlewine's (2014) analysis may not account for the ungrammaticality of (19a), as the lower copy of the subject is always under the scope of *shenzhi*. The issue of backwards association may deserve further investigation in a dedicated paper, and for now I shall proceed on the assumption that *shenzhi* is a sentential adverb, presumably located in TP, based on its structural position and the placement of its focus associate.

⁸ When the adverb *shenzhi* co-occurs with (*lian*)...*dou*, as illustrated in (i), the preposing of the scalar-focus object is possible.

(i) Zhangsan (*shenzhi*) (*lian*) **zhe-ben shu** *dou* du-wan-le.
 Zhangsan even LIAN this-CLF book DOU read-finish-PFV
 'Zhangsan has finished reading even *Syntactic Structures*.'

However, in this case, *shenzhi* is not obligatory, but it is for *dou*; on the other hand, no constituent other than the object in (i) can receive a SF reading, which is not the pattern of association with focus presented by *shenzhi* in (19). Based on these observations, it seems more reasonable to attribute the SFOP in (i) to the presence of *dou*, as argued later in this section, rather than relating it to *shenzhi*.

- B: Xiaogou (lian) fan dou bu chi.
 little-dog LIAN food DOU not eat
 'The little dog doesn't eat even the food.'
- B': # (Lian) fan xiaogou dou bu chi.
 LIAN food little-dog DOU not eat
 'Even the food, the little dog doesn't eat.'
 (adapted from Shyu 2014, 118)

It is shown in (23) that, while clause-internal object can occur in an out-of-blue context, where the information of *fan* 'food' has not been introduced, having the object in clause-initial position leads to an infelicitous answer. This indicates that in the latter case, the referent of the object must be activated information in the discourse, that is, a topic (see Lambrecht 1994). Therefore, in Mandarin Chinese, the construction that actually pertains to SFOP is of the type represented in (21b), where the SF object is preposed to clause-internal position together with *dou*, preceding the verb.

With *lian* in Mandarin Chinese being the counterpart of constituent-*even* in English, the obligatory presence of *dou* in SFOP constructions seems intriguing. But first of all, it should be pointed out that *dou*, apart from being used with SFs, can also serve to denote universal quantification or emphasis on a relevant state, where the uses of *dou* are radically different from its use in SFOP constructions (hereafter referred to as SF-*dou*).⁹

In the recent generative syntactic literature, SF-*dou* has been treated as a head of a functional phrase (FP) between *v*/VP and TP, with the SF moving to the specifier position of the FP. Specifically, Gao (1994) and Shyu (1995) consider SF-*dou* to head a focus phrase (FocusP), Constant and Gu (2010) propose that it is the head of MaxP (due to its maximality-operator status, see, e.g., Giannakidou and Cheng 2006), and Badan and Del Gobbo (2015) argue that it heads its own projection *dou*P. However, in a departure from these previous analyses, I would like to follow Hole (2004) and argue that SF-*dou* is actually a focus-agreement marker,¹⁰ which will be discussed in more detail in Section 4.

3.2. Movement-properties of the clause-internal SF object in Mandarin Chinese

As for the question whether SFOP in Mandarin Chinese involves movement, the following examples exhibiting island effects seem to offer a clear answer.

⁹ The quantifier *dou* (Q-*dou*) evokes a distributive reading of the entity that precedes it, whose meaning resembles *all* in English:

- (i) Tamen dou mai-le yi-bu chezi.
 they Q-DOU buy-PFV one-CLF car
 'They all bought a car.'
 (J.-W. Lin 1998, 201)

But the distributive nature of Q-*dou* requires that the preceding entity to be inherently plural, in contrast with SF-*dou*, which is compatible with a singular entity:

- (ii) a. *Ta dou mai-le nei-ben shu.
 (s)he Q-DOU buy-PFV that-CLF book
 (lit.) *(S)he all bought that book.'
- b. (Lian) ta dou mai-le na-ben shu.
 LIAN (s)he SF-DOU buy-PFV that-CLF book
 'Even (s)he bought that book.'
 (adapted from N. Zhang 1997, 261)

The emphatic use of *dou* (Emp-*dou*) always requires a sentence-final particle *le*, whose presence is argued to be the signal of a "currently relevant state" (C. N. Li, Thompson, and McMillan Thompson 1982):

- (iii) Mama dou liushi-duo-sui-de ren le, hai rang ta dai haizi.
 mum EMP-DOU sixty-more-year.of.life-ATTR person SFP still make she look.after child
 'Mum is a person of more than sixty years already, and you still have her look after the kids!'
 (Hou, 1998, as cited in Hole 2004, 23)

Unlike SF-*dou*, whose preceding element bears the SF reading, with Emp-*dou*, it is the element following it that receives the emphasis. Following Alleton (1972), Sybesma (1996), N. Zhang (1997), R. Zhang (2000), and Hole (2004), I argue that SF-*dou* should be differentiated from other *dous* in Mandarin Chinese as an independent linguistic sign. For opposite views, see, for example, Shyu (1995), Huang (1996), Lin (1996), and Mok and Rose (1997).

¹⁰ Note that Hole (2004) considers SF-*dou* (parametric *dou* in his terminology) to be a marker of focus-background agreement between the verb and the SF, which means that it is in the verbal domain. But in the current proposal, I will argue that SF-*dou* is the overt realisation of the maximality feature on T.

(24) Complex NP island

- a. * Zhangsan lian Mali_i dou taoyan [[kuajiang _{-i} de] ren].
 Zhangsan LIAN Mary SF-DOU dislike praise ATTR people
- b. Zhangsan taoyan [[lian Mali_i dou kuajiang _{-i} de] ren].
 Zhangsan dislike LIAN Mary SF-DOU praise ATTR people
 'Zhangsan dislikes the people who praise even Mary.'
 (Shyu 1995, 70)

(25) Adjunct island

- a. * Zhangsan lian Wangwu_i dou [yinwei Lisi piping-le _{-i}].
 Zhangsan LIAN Wangwu SF-DOU because Lisi criticise-PFV
 hen bu gaoxing.
 very not happy
- b. Zhangsan [yinwei Lisi lian Wangwu_i dou piping-le _{-i}].
 Zhangsan because Lisi LIAN Wangwu SF-DOU criticise-PFV
 hen bu gaoxing.
 very not happy
 'Because Lisi criticized even Wangwu, Zhangsan is not happy.'
 (Shyu 1995, 71)

(26) Sentential subject island

- a. * [Lisi mei kan _{-i}] lian [nei-ben shu]_i dou ling ta
 Lisi not read LIAN that-CLF book SF-DOU make him
 bu gaoxing.
 not happy
- b. [Lisi lian [nei-ben shu]_i dou mei kan _{-i}] ling ta
 Lisi LIAN that-CLF book SF-DOU not read make him
 bu gaoxing.
 not happy
 'The fact that Lisi didn't read even that book makes him unhappy.'
 (adapted from Shyu 1995, 73)

As observed in examples (24)–(26), the SF object cannot be extracted from a complex NP island, an adjunct island or a sentential subject island. Therefore, it seems plausible to claim that, just like the proposed *even*-object in English, the clause-internal SF object in Mandarin Chinese is derived by movement as well.

Nevertheless, in contrast with SFOP in English, which has been involve A'-movement, SFOP in Mandarin Chinese seems to exhibit a series of A-properties, as has been argued at length in Shyu (1995; 2001) and Badan (2007), which are summarised as follows:

First to come, it is noted that a preposed SF object cannot undergo hyperraising:

- (27) a. Zhangsan renwei [Lisi lian Mali_i dou bu xihuan _{-i}].
 Zhangsan think Lisi LIAN Mary SF-DOU not like
 'Zhangsan thinks that Lisi doesn't like even Mary.'
- b. * Zhangsan lian Mali_i dou renwei [Lisi bu xihuan _{-i}].
 Zhangsan LIAN Mary SF-DOU think Lisi not like
 (Shyu 1995, 80)

While the SF object can occur in post-subject position within the embedded clause in (27a), moving the SF object into the matrix clause is impossible in (27b). As discussed earlier in Section 2.2, this contrast suggests that the clause-internal SF object in Mandarin Chinese cannot use the lower [Spec,CP] as an escape hatch for successive cyclic movement due to Ban on Improper Movement, and consequently, such an object is supposed to occupy an A-position.

Second, the preposed SF object in Mandarin Chinese does not obligatorily undergo reconstruction, as is expected with an element derived by A'-movement, which is capable of modifying binding relations (Lebeaux 1988; 2009; Chomsky 1993; 1995; Fox 1999; Takahashi and Hulsey 2009).

- (28) a. Wo bei Zhangsan_i qiang-zou-le [yi-ben guanyu ziji_i de shu].
I by Zhangsan rob-away-PFV one-CLF about self ATTR book
(lit.) 'I was robbed by Zhangsan_i of a book about himself_i.'
- b. *Wo lian [yi-ben guanyu ziji_i de shu]_j dou bei
I LIAN one-CLF about self ATTR book SF-DOU by
Zhangsan_i qiang-zou-le
Zhangsan rob-away-PFV
(lit.) 'I was robbed of even a book about himself_i by Zhangsan_i.'
(adapted from Shyu 1995, 83)

In accordance with condition A of the Binding Theory (Chomsky 1981; 1986) mentioned earlier, the anaphor *ziji* 'self' in Mandarin Chinese must be bound by an antecedent within the anaphor's binding domain, such as *Zhangsan* in (28a). When the element that contains the anaphor is the SF and undergoes preposing, as shown in (28b), the resulting sentence is ungrammatical, because in this case the anaphor precedes its potential binder, and more importantly, the preposed SF object does not reconstruct and it is interpreted in the post-movement position.

Third, SFOP in Mandarin Chinese seems to bleed Weak Crossover (WCO) effects, which according to Frank et al. (1996), is due to the fact that A-movement can license binding of the pronoun by the quantifier.

- (29) a. Wo lian meimei_i dou bei [xihuan ta_i de ren]
I LIAN sister SF-DOU by like her ATTR person
qiang-zou-le
rob-away-PFV
(lit.) 'I was robbed of even my sister_i by the person that likes her_i.'
- b. *Wo bei [youguai ta_i de ren] pian-zou-le [meige
I by abduct him ATTR person kidnap-away- PFV every-CLF
haizi]_i.
child
(lit.) 'I was affected by [every child]_i being kidnapped by the person who abducted him_i.'
(Shyu 1995, 84, 107)

In (29b), the QP *meige haizi* 'every child' presumably undergoes quantifier raising at LF, and A'-binds the variable left by it; consequently, the co-indexation between the pronoun and the QP is ruled out based on the Leftness condition (Chomsky 1976) or Bijection Principle (Koopman and Sportiche 1982). By contrast, preposing the SF object to clause-internal position in (29a) does not give rise to WCO effects, which suggests that the trace left by the object is not a A'-bound variable.

By comparing the A- and A'-movement of SFOP in Mandarin Chinese and in English, we may come to an initial conclusion that the preposed SF object targets an A'-position in English, but an A-position in Mandarin Chinese. However, the reason behind their difference still remains to be clarified. To this end, I will propose an approach to SFOP based on the theory of Feature Inheritance (Chomsky 2008), which may offer a unified account for this phenomenon in both languages.

4. A feature-inheritance approach

4.1. Inheritance of the discourse-features

Before discussing the landing site of the preposed SF object in the two languages, it is important to consider what motivates the movement of the SF object. In both English and Mandarin Chinese, SFOP appears to be optional, as noted in (30) and (31).

- (30) English
a. John is incapable of answering even **this simple question**.
b. Even **this simple question** John is incapable of answering.

- (31) Mandarin Chinese
a. Zhangsan shenzhi du-guo **zhe-ben shu**.
Zhangsan even read-EXP this-CLF book.
b. Zhangsan (shenzhi) (lian) **zhe-ben shu** dou du-guo.
Zhangsan even LIAN this-CLF book SF-DOU read-EXP
'Zhangsan has read even this book.'

Nevertheless, according to Chomsky (2008), no movement is truly optional, and internal merge yields discourse-related properties. This suggests that SFOP may be related to the agreement between the SF object and a certain functional head in a discourse(δ)-feature. However, in Chomsky (1998; 2001) and subsequent works, agreement has been isolated from movement, indicating that agreement occurs at a distance without requiring a local Spec-Head configuration. If so, movement must be motivated independently.

According to Miyagawa (2010), the motivation of movement can be related to the semantic and information-structure interpretation of functional relations. He points out that agreement serves to establish a functional relation, but if a probe agrees with a goal to value the uninterpretable features and subsequently delete them¹¹, the computation system (C_{HL}) would never know the existence of these uninterpretable features, let alone the established functional relation. Therefore, the goal moves to unite with the probe to “keep a record of functional relations for semantic and information-structure interpretation” (Miyagawa 2010, 33). From this perspective, it can be assumed that the SF object moves to the specifier position of a functional head to keep a record of the functional relation established between the object and the functional head, which allows the C_{HL} to interpret the object as an SF.

Consequently, the different landing sites for the preposed SF object in English and Mandarin Chinese observed in (30) and (31) actually suggest that the SF object agrees with distinct functional heads in the two languages. Such an assumption is far from implausible. According to the theory of Feature Inheritance (FI) (Chomsky 2008)¹² and subsequent works within this framework (among others, Jiménez-Fernández 2010; 2011; Jiménez-Fernández and Miyagawa 2014; Miyagawa 2010; 2017), unvalued ϕ - and δ -features both start at C, and they are inherited by T in those languages with discourse-prominent properties, while retained by C in those lacking such properties. This implies that cross-linguistically two potential heads can agree with the SF object, namely C and T, and the choice between them depends on if the relevant δ -feature undergoes C-to-T inheritance in a specific language. Importantly, the specifier of C is considered a typical A' position, whereas that of T is generally viewed as an A-position, aligning well with the A-/A'-distinction observed previously.

Accordingly, the following derivations for SFOP can be assumed. Constituent adverbs such as *even* and *lian* evoke a likelihood scale, and the SF object enters Numeration with an interpretable δ -feature. Meanwhile, an uninterpretable δ -feature is retained by C in English but inherited by T in Mandarin Chinese.¹³ Consequently, the SF object agrees with C in English and with T in Mandarin Chinese, and ends up moving to the specifier position of C and T, respectively, to keep a record of the functional relation for the interpretation of the object as an SF.

With respect to which δ -feature is in question, it is necessary to pick up the issue of SF-*dou* in Mandarin Chinese. As anticipated in Section 3.1, I follow Hole (2004) to assume that it is an agreement-marker. At the same time, semantically, as argued in Giannakidou and Cheng (2006), Xiang (2008), and Constant and Gu (2010), SF-*dou* imposes maximality to a set of alternatives ordered on a scale of unexpectedness/likelihood evoked by *lian* (explicit or implicit) and picks out the maximal degree, that is, the most unexpected (the least likely) one. Considering both the syntactic status and the semantic property of SF-*dou*, I would like to propose that it is the overt realisation of the maximality feature on T. Consequently, in Mandarin Chinese, the SF object agrees with T in maximality, which values the uninterpretable [u -Max]-feature inherited by T from C, and the SF object moves to [Spec,TP] to keep a record of the functional relation for the interpretation of the SF.

If this analysis is on the right track, the same could be extended to English: in a SFOP construction, *even* evokes a likelihood scale and the SF object enters Numeration with an [i -Max]-feature, which values the [u -Max]-feature retained by C in English. However, it is important to note that, unlike SF-*dou* in Mandarin Chinese, the maximality feature is not overtly marked in English.

4.2. Movement as a record

Although the feature-inheritance approach explored above offers a unified explanation to the distinct structural properties of SFOP in English and of that in Mandarin Chinese, a remaining question to be answered is why the subject and the SF object have to be ordered in a fixed manner. In English, the preposed SF object always precedes the subject, as shown in (32). In Mandarin Chinese, the preposed SF object always occur in clause-internal position, as seen in (33) (the clause initial *lian*-phrase is a topic, see Section 3.1).

(32) English

- a. Even **this simple question** John is incapable of answering.
- b. * John even **this simple question** is incapable of answering.

¹¹ In conformity with Full Interpretation (Chomsky 1986), uninterpretable features must be deleted before reaching the representational interfaces as they are illegible.

¹² See Miyagawa (2005) for a similar approach.

¹³ Some authors claim that Mandarin Chinese lacks TP projection (e.g., Hu, Pan, and L. Xu 2001; J.-W. Lin 2003b; 2003a; 2006; 2010; Smith and Erbaugh 2005), and the main consideration is that there is no overt grammaticalised tense in this language. However, the reader is referred to, among other, C.-T. J. Huang (1982), Y. A. Li (1985), C.-C. J. Tang (1990), T.-C. Tang (2000), Sybesma (2007), and T. J. Lin (2011; 2012; 2015) for arguments in favour of the postulation of a TP in Mandarin Chinese. Theoretically speaking, assuming the existence of TP in this language just like in others provides a more uniform account for Human Language (i.e., the Uniformity Principle in Chomsky 2001).

(33) Mandarin Chinese

- a. Zhangsan (shenzhi) (lian) **zhe-ben shu** dou du-guo.
 Zhangsan even LIAN this-CLF book SF-DOU read-EXP
 'Zhangsan has read even this book.'
- b. (Shenzhi) (lian) [zhe-ben shu]_{TOP} Zhangsan dou du-guo.
 even LIAN this-CLF book Zhangsan SF-DOU read-EXP
 'Even as for this book, Zhangsan has read it.'

Here the strict O-S order in SFOP constructions in English will be dealt with first, and the case of Chinese is saved for later discussion. One may wonder if (32b) can be achieved by topicalising the subject and moving it across the SF object to the CP area. However, local topicalisation of subjects is generally considered to be impossible in English (see Lasnik and Saito 1992). A possible explanation to this may be related to the nature of movement. As mentioned earlier, movement is assumed to be motivated by the need to keep a record of functional relations for semantic and information-structure interpretation. In English, a DP is identified as the grammatical subject of a clause by being assigned nominative Case through the ϕ -agreement between the DP and T (assuming Case assignment and Agree work in tandem, see Adger and Harbour 2008). However, nouns are not inflected for cases in Modern English, so if a DP agrees with T but does not move to its specifier position to keep a record of the Case-assignment relation, the C_{HL} would be unable to identify the DP as the grammatical subject.

Consequently, in (32), *John* agrees with T in ϕ -features and must move to [Spec,TP] to keep a record of the functional relation so as to be identified as the grammatical subject of the clause. Now, if *John* continued to undergo topicalisation to a higher position, as seen in (32b), the movement of *John* to [Spec,TP] would turn out to be pointless: the C_{HL} would again lose track of the functional relation established between *John* and T, which serves to identify this *John* as the grammatical subject of the clause.

A challenge to this assumption arises with subject pronouns in English. Unlike nouns, pronouns have an inflected case system in English. Considering derivational economy, one would expect that the nominative pronoun does not need to move to [Spec,TP] to be identified as the grammatical subject. Moreover, topicalising it over the SF object should be possible. However, neither of these expectations holds true:

- (34) a. Even **this simple question** he is incapable of answering.
 b. * He even **this simple question** is incapable of answering.

It is important to note that pronouns, as deictic elements, refer to given entities in the discourse. This pragmatic property of pronouns may prevent them from occurring at the end of the clause, because generally, a postponed subject is informationally heavier (less familiar) than the fronted element (cf. Birner 1996). Therefore, pragmatic constraints may force the subject pronoun to leave its base-generated position and move to the canonical subject position in English, [Spec,TP].

As far as pronoun topicalisation is concerned, it has been noticed that accusative pronouns, instead of nominative ones, may occur in the grammatical subject position in English. In such contexts, the pronoun bears a topic reading:

- (35) a. What, *me* worry?
 b. *Him* wear a tuxedo?! (Sure.)
 (Akmajian 1984, 2)

In fact, (35) demonstrates that the topicalisation of the subject impedes the nominative Case assignment of the subject; this explains why the pronoun in (35) takes on the default case, which aligns with the form of accusative in English. Furthermore, in (35) the verb does not agree with the grammatical subject in person and number. These observations conform to the previous assumption that moving the subject away from [Spec,TP] causes the C_{HL} to lose track of the functional relation (Case assignment) between the grammatical subject and T.

4.3. Multiple specifiers or recursion

In Mandarin Chinese, the previous analysis of the A-properties of the preposed SF object has suggested that Chinese SFOP may target [Spec,TP], a position typically occupied by the subject.¹⁴ This raises the

¹⁴ One might wonder if the subject would move to the CP area in this case, but there is evidence suggesting otherwise. As discussed later in Section 5, constructions with a moved element targeting [Spec,CP] are supposed to exhibit root phenomena (Haegeman 2006; 2010; Jiménez-Fernández and Miyagawa 2014), but this is not what has been observed here:

- (i) Ta founen [Zhangsan (shenzhi) (lian) zhe-ben shu dou du-guo].
 3SG deny Zhangsan even LIAN this-CLF book SF-DOU read-EXP
 'He denies that Zhangsan has read even this book.'

The grammatical result in (i) suggests that the embedded subject cannot occupy [Spec,CP]. Consequently, the subject in (36a) is most likely to be situated in the typical subject position, [Spec,TP].

question of the structural relation between the subject and the preposed object. Two possibilities can be considered here:

- (i) The subject and the preposed SF object are multiple specifiers of the same head T.
- (ii) The subject and the preposed SF object are specifiers of two different Ts.

However, the fixed clause-internal position of the preposed SF object may indicate that option (i) is not the correct choice. According to Jiménez-Fernández (2011), not only terms of the edge of HP are equidistant from probe P, but terms of the edge of HP are also equidistant from goal G. This suggests that when HP has more than one specifier, a moving category can freely choose between these edge positions (also see Bobaljik and Jonas 1996, 200). From this perspective, if the subject and the SF object in (33a) are indeed multiple specifiers of T, their relative positions are supposed to be free, which is contrary to the fact. Therefore, I will argue that option (ii) is the correct choice for constructions such as (33a), that is, the subject and the SF object are specifiers of two separate T heads.

Crucially, if the subject and the SF object are not within the same maximal projection, they can no longer be considered as equidistant. Under this analysis, the fixed clause-internal position of the preposed SF object in Mandarin Chinese can be explained in a principled way by referring to Shortest Move (Chomsky 1993) and Relativised Minimality (Rizzi 1990). Consider the following schematic structures of two potential derivations:

(34) * $[...[_{TP1} O T_1 [_{TP2} S T_2 [_{VP} S V \Theta]]]]$

(35) $[...[_{TP1} S T_1 [_{TP2} O T_2 [_{VP} S V \Theta]]]]$

In view of Shortest Move, movement (a) precedes movement (b) in both cases, because the subject is closer to the two specifier positions. However, if the subject moves to the specifier of T_2 , as shown in (34), it blocks the subsequent movement of the object to the higher TP, due to Relativised Minimality, so this derivation is correctly ruled out; by contrast, if the subject moves to the specifier of T_1 first, as in (35), no intervention effect arises, and the object can successfully move to the lower TP, following the subject as expected.

The proposal presented here goes beyond a simple stipulation. The recursion of TP has been argued for possessor raising in Mandarin Chinese. Kuo (2009) observes that sentential adverbs such as *xianran* 'apparently' can intervene between a clause-initial possessor without *-de* and the possessee that follows it.

(36) Geruisen (xianran) baba (xianran) xihuan Sala.
Grissom apparently father apparently like Sara
'Apparently, Grissom's father likes Sara.'

On a par with the multiple assignments of nominative Case in Korean (J. Xu 2003; 2005), Kuo (2009) suggests that both the possessor and the possessee receive nominative Case from T in Mandarin Chinese. Therefore, the intervention of the sentential adverb indicates that the two cannot be part of the same constituent and are assigned nominative by two different Ts. The same reasoning applies to SFOP constructions in Mandarin Chinese.

(37) Zhangsan xianran (lian) zhe-ben shu dou du-guo.
Zhangsan apparently LIAN this-CLF book SF-DOU read-EXP
'Zhangsan apparently has read even this book.'

In (37), the adverb *xianran* can occur between the subject and the SF object. If they were multiple specifiers of the same T head, the intervention of *xianran* could not be explained. Therefore, the proposal that Chinese SFOP involves a recursive TP structure is further supported.

A further question to consider is what decides if a functional head H can have multiple specifiers. In this connection, it should be noted that multiple-specifier configuration is possible in other object preposing constructions in Mandarin Chinese, as shown in (38).

(38) a. Wo jiu bu he le.
I liquor not drink cos
b. Jiu wo bu he le.
liquor I not drink cos
'I don't drink liquor any more.'
(Ernst and Wang 1995, 235–36)

As discussed in Qu (1994) and Shyu (1995; 2001), the dislocated object is located in an A-position in both (38a) and (38b), which I assume to be [Spec,TP] (cf. Yang 2024). It can be noticed that in (38), the subject and

the preposed object can be freely ordered without altering the meaning of the sentence. This is naturally expected if the subject and the preposed object are multiple specifiers of T.

So, the question is what differs (37a) from (38). As suggested by L. Xu and Langendoen (1985), Lee (1986), C.-C. J. Tang (1990), and J.-W. Lin (1992), among others, both the subject *wo* 'I' and the clause-internal object *jiu* 'liquor' in (38a) may have the status of topic. If the same applies to (38b), then (38) actually involves multiple topics. However, in (37a), only the SF object, but not the subject, can bear the focus reading. Based on these considerations, I propose that multiple specifiers are licensed for H if H enters into the same agreement relation multiple times. In multiple-topic constructions, T agrees with each of the topics, and enters into the same agreement relation every time by valuing the uninterpretable δ -feature on T against the interpretable topic feature carried by each topic. By contrast, in Chinese SFOP, T forms different agreement relations with the SF object and the subject, since only the object carries the [*i*-Max]-feature, which values the [*u*-Max]-feature on T. Consequently, multiple specifiers are present in multiple-topic constructions but are not possible in SFOP constructions in Mandarin Chinese.

5. Extension to Spanish

So far, it has been demonstrated that SFOP constructions in English and in Mandarin Chinese may both be accounted for in a satisfactory way within the framework of Feature Inheritance (FI). In this section, the same general idea will be extended to the case of Spanish, which could potentially strengthen the explanatory power of the current proposal.

SFs in Spanish are generally associated with particles such as *incluso*, *aun* and *hasta*, which can all be roughly translated as *even* in English. Just like the case of *even*, the relative positions between these focus-sensitive particles and the SF generally present two patterns. Taking *incluso* as an example, when it occurs after the subject and before the main verb, either the subject or any constituent following it can be the SF.¹⁵

- (39) a. **Yo** *incluso* algunas veces acepté algunas cosas.
 I even some times accept-PST.1SG some things
 'I even sometimes accepted some things.'
 (adapted from Torres Santos 2021, 58)

- (40) Juan *incluso* dio una nueva bicicleta a su hija.
 Juan even give-PST.3SG a new bicycle to his daughter
 'Juan even gave his daughter a new bicycle.'
- a. ^{ok} Juan *incluso* **dio** una nueva bicicleta a su hija.
 b. ^{ok} **nueva**
 c. ^{ok} **bicicleta**
 d. ^{ok} **su**
 e. ^{ok} **hija**

In comparison, when *incluso* precedes the subject or follows the main verb, only the constituent adjacent to *incluso* or part of it can receive a SF reading:

- (41) a. ^{ok} *Incluso* **Juan** dio una nueva bicicleta a su hija.
 b. * **dio**
 c. * **nueva**
 d. * **bicicleta**
 e. * **su**
 f. * **hija**

¹⁵ By contrast, it seems that *hasta* can only precede the SF:

- (i) *Alba y Lucas tienen **yates** *hasta*.
 Alba and Lucas have-PRS.3PL yachts even
 (int.) 'Alba and Lucas have even yachts.'
 (Torres Santos 2021, 58)

I shall leave this problem aside here due to limited space.

- (42) a. * **Juan** dio *incluso* una nueva bicicleta a su hija.
 b. * **dio**
 c. ^{ok} **nueva**
 d. ^{ok} **bicicleta**
 e. * **su**
 f. * **hija**

- (43) a. * **Juan** dio una nueva bicicleta *incluso* a su hija.
 b. * **dio**
 c. * **nueva**
 d. * **bicicleta**
 e. ^{ok} **su**
 f. ^{ok} **hija**

Therefore, on a par with English *even*, it seems plausible to distinguish two types of *incluso*, namely, the *vP-incluso* and constituent-*incluso*, with first to be a *vP*-adverb and the latter as a constituent-adverb. Likewise, in the case of object preposing, *vP-incluso* cannot scope over the dislocated object, and constituent-*incluso* must be used for the preposed object to have a SF reading:

- (44) a. *Incluso este libro* ha leído Juan.
 even this book have-PRS.3SG read Juan
 'Even this book Juan has read.'
 b. * *Este libro incluso* ha leído Juan.
 this book even have-PRS.3SG read Juan

On the other hand, Focus Fronting (FF) in Spanish has been traditionally assumed to involve the T-to-C movement of the verb (see Torrego 1984; Uriagereka 1988; Quer 2002; Gallego 2007; Leonetti and Escandell-Vidal 2009). If this is true, the fronted focus is expected to be located in the CP area. However, evidence against this assumption can be found in the contrast between the following sentences in English and Spanish.

- (45) a. * Andrew was surprised that [**this tablet** she bought (and not the cheaper one)].(English)
 b. A Juan le molesta que [**este libro** haya elegido (Spanish)
 to Juan CL bother-PRS.3SG that this book have-SBJV.3SG chosen
 Mariano (y no aquél)].
 Mariano and not that.one
 'It bothers Juan that Mariano has picked up this book (and not that one).'
 (Camacho-Taboada and Jiménez-Fernández 2014, 40)

According to Haegeman (2006; 2010) and Jiménez-Fernández and Miyagawa (2014), constructions with a moved element targeting [Spec,CP] are supposed to exhibit root phenomena, because embedded clauses that do not constitute root-like indirect discourse embeddings (RIDEs, Emonds 1970; 1976; 2004) contain an event operator that presumably needs to move to [Spec,CP], thereby blocking any other elements targeting the same position. In consequence, if FF in English targets [Spec,CP], the ungrammaticality of (45a) is expected: as non-asserted predicates such as 'be surprised' introduce non-RIDEs (see Hooper and Thompson 1973), the fronted Contrastive Focus Fronting would compete with the event operator for the same position, [Spec,CP]. However, as shown in (45b), the same root phenomenon does not arise in Contrastive Focus Fronting in Spanish. This contrast suggests that, while FF targets [Spec,CP] in English, it may not target the same position in Spanish.

Recent studies, especially those in the framework of FI (e.g., Camacho-Taboada and Jiménez-Fernández 2014; Jiménez-Fernández 2013; 2015; Ruiz-Villaécija 2014), haven shown that Spanish FF may be an instance of A-movement, with the fronted focus targeting [Spec,TP]. This appears to apply to the fronted SF object in Spanish as well, given the absence of reconstruction as shown in the following example.

- (46) a. * Sus_i lectores pueden criticar incluso [**al mejor escritor del mundo**]_i.
 his readers can-PRS.3PL criticise even to.the best writer of.the world
 (lit.) '*His_i readers can criticise even [the best writer in the world]_i.'

- b. Incluso [al mejor escritor del mundo]_i lo pueden criticar
 even to.the best writer of.the world CL can-PRS.3PL criticise
 sus_i lectores.
 his readers
 ‘Even [the best writer in the world]_i can be criticised by his_i readers.’

In (46a), Conditions A and C of the Binding Theory are violated because the possessive anaphor *c*-commands the co-indexed SF object, which is an R-expression. This results in the anaphor being unbound by its antecedent and the R-expression not being free. In comparison, preposing the SF object to the left of the possessive anaphor renders the sentence acceptable, as shown in (46b). This indicates that SFOP in Spanish is capable of modifying binding relations. Importantly, it is necessary to interpret the preposed SF object in its post-movement position without reconstruction. As previously mentioned, this aligns with characteristics of A-movement.

In line with the analysis for SFOP in English and Mandarin Chinese, if it is true that the preposed SF object occupies [Spec,TP] in Spanish, the following derivation could be assumed for Spanish SFOP: *incluso* evokes a likelihood scale and the SF object enters Numeration with an [*i*-Max]-feature, which values the uninterpretable [*u*-Max] that T has inherited from C; after that, the object moves to the specifier of T, in order to preserve the established functional relation for the interpretation of the object as an SF.

This being said, Spanish SFOP presents a very different structure from the English and Chinese ones: while the SF object is preposed to clause-initial position in Spanish, the subject has to follow the verb; moving the subject to a pre-verbal position yields undesirable results:¹⁶

- (47) a. *Incluso este libro* ha leído Juan.
 even this book have-PRS.3SG read Juan.
 b. * *Incluso este libro* Juan ha leído.
 even this book Juan have-PRS.3SG read
 c. * Juan *incluso este libro* ha leído.
 Juan even this book have-PRS.3SG read
 ‘Even this book Juan has read.’

Assuming the FI-based analysis for Spanish SFOP, one might wonder why the same recursive TP as argued for SFOP in Mandarin Chinese cannot apply here, in which scenario the subject could move to the specifier of the higher T (as has been argued in Section 4.3, (47b) can be ruled out based on Shortest Move and Relativised Minimality), resulting in a structure similar to (47c).

As mentioned earlier, in the current framework movement is motivated by the need to keep a record of functional relations for semantic and information-structure interpretation. However, as argued in Yang (2023), this motivation of movement is conditioned by derivational economy. In this sense, it is possible to argue that (47b) and (47c) are ruled out because the movement of the subject violates Last Resort (Chomsky 1993).

Just as in English, it is generally assumed that in Spanish, T agrees with a DP that plays role of grammatical subject in ϕ -features, and this DP receives nominative Case. In English, this DP has to move to unite with T at [Spec,TP] to keep a record of the Case-assignment relation which identifies this DP as the grammatical subject of the clause. However, unlike English, Spanish is a typical differential-object-marking (DOM) language, in which an animate and specific direct object is preceded by a marker *a*. Accordingly, if a DP has an animate and specific referent and appears without the marker *a*, it can only be interpreted as the grammatical subject.¹⁷ Consequently, the DP *Juan* in (47) is already identified as the grammatical subject of the clause, because it has an animate and specific referent and at the same time is not marked by *a*, and there is no need to move this DP to unite with T to keep a record of the functional relation. In other words, movement of

¹⁶ Jiménez-Fernández (2015) shows that the fronted focus is not obligatorily adjacent to the verb in Southern Peninsular Spanish (specifically, Andalusian and Extremaduran varieties), but can be followed by a subject with the status of Given Topic. Here I do not take into account the potential microparametric variation in Spanish and will only analyse data in Standard Spanish.

¹⁷ In a transitive Spanish sentence where both argument DPs have non-animate or non-specific referents, the object DP can also be marked with *a*. Crucially, when the object DP is preposed, *a*-marking becomes obligatory:

- (i) a. El entusiasmo vence (a) la dificultad.
 the enthusiasm conquer-PRS.3SG to the difficulty
 b. *(A) la dificultad la vence el entusiasmo.
 to the difficulty CL conquer-PRS.3SG the enthusiasm
 ‘Enthusiasm conquers difficulties.’
 (García García 2007, 68)

This is consistent with the analysis in the present paper. The DP *el entusiasmo* ‘the enthusiasm’ stays in situ in (i-b), because the preposed DP *la dificultad* ‘the difficulty’ is marked with *a*, which excludes it as the grammatical subject of the clause. In other words, the post-verbal DP is already identified as the grammatical subject without the need for movement.

the grammatical subject, whose status is already identified without movement, violates economy principles of derivation.

6. Conclusions

The present study revolves around the phenomenon of SFOP, and based on its structural properties in different languages, explores the nature of SFOP within the theoretical framework of Feature Inheritance.

According to the analysis presented in this paper, SFOP is related to constituent-adverbs such as *even* in English, *lian* in Mandarin Chinese, and *incluso* in Spanish, whose primary function is to invoke a likelihood scale on which a set of alternatives can be ordered. However, cross-linguistic difference has been observed in terms of the structural position the preposed SF object may occupy, by virtue of the A-/A'-properties it shows in different languages; it has been argued that SFOP targets [Spec,CP] in English, but [Spec,TP] in Mandarin Chinese and Spanish. To account for the structural difference in a unified way, the present paper proposes that SFOP is derived by movement, which is motivated by the need to preserve the functional relation between the SF object and the functional head that carries an unvalued δ -feature; the first enters Numeration with an interpretable [*i*-Max]-feature, and the functional head in question is C in English, and T in Mandarin Chinese and Spanish. From the perspective of Feature Inheritance, the δ -feature is found in distinct functional heads in these languages because, assuming the δ -feature starts at C, it is inherited by T from C in Mandarin Chinese and Spanish but is retained by C in English.

On the other hand, the current proposal may bring about the potential issue of subject-object ordering, but it has been argued that this problem could be satisfactorily dealt with by referring to the Last-Resort nature of movement, which serves to keep a record of functional relations for semantic and information-structure interpretation, and by setting apart multiple-specifier and recursive configurations, which depends on if the functional head in question enters into the same agreement-relation multiple times.

By analysing the structure and nature of SFOP, as well as its interaction with other mechanisms, this paper is expected to contribute to a better understanding of the cross-linguistic differences in information structure.

Abbreviations

1 = first person, 3 = third person, ATTR = enclitic deriving adnominal modifier, CL = clitic, CLF = classifier, COS = change of state, EXP = experiential aspect, PFV = perfective, PL = plural, POSS = possessive, PRS = present, PST = past, SBJV = subjunctive, SFP = sentence-final particle, SG = singular

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