科技部補助專題研究計畫報告

口語英語中隱性主語的語法

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中 文 摘 要 ： 在眾所周知的空主語語言（pro-drop 或null subject languages,
縮寫為NSLs）當中，限定子句的主語大多可以省略，如西班牙語、
義大利語、希臘語等。雖然英語不屬於空主語語言，卻不乏隱性主
語的例子，尤以英語口語為常見，如例（1）所示：
(1)a. Can't wait to see you.
b. Seems that he's having fun.
c. Looking good!

從語法的觀點檢視這些句子如(1a)，便產生了一個疑點：時式中心
語是否投射出標誌語，以滿足時式詞的廣義投射原則。不過有學者
指出（參見如Rizzi 1994、Haegeman 2013）這些例子中音韻上未被
體現的空語類小代號pro能滿足此原則。

在本文中我將小代號pro導向正確的分析，並發現基於「特徵繼承假
說」的主張─時式中心語所呈現「呼應」的特徵承繼自補語詞（參
見如Chomsky 2008 、Epstein et al. 2015等），此假說顯而易見
地足以說明補語詞在上述子句中不須顯現的現象。我也進一步提出
，就小代號pro的解讀而言，上述例子中的小代號pro和華語、日語
等語言當中的空語類相似，意即先前學者所提出「含有小代號pro」
以及「缺乏句法上呼應的特徵」（參見Holmberg 2005）之特性。然
而，我檢驗時式中心語展現句法呼應的例子並提出新證據─時式中
心語和空主語之間存在著人稱的呼應；這對Chomsky的特徵繼承假說
而言是有問題的，但這在Chou 和 Fernández-Salgueiro 2020對該
假說的獨立論證當中卻可以被預測，在此論證之下，人稱的特徵是
時式詞所固有的，而承繼自補語詞的只有數的特徵。為了闡明前述
「呼應」的現象，我主張小代號pro需要語法呼應的特徵並且定值時
式中心語的人稱特徵。

此外，我也主張基於格位需求，這樣的分析能解釋虛位成分it在英
語口語中能夠被省略（如1b），而虛位成分there卻不能的現象，這
也是前人文獻中鮮少論及的對比。最後，我提出未發音成分更多的
結構如(1c)只含有動詞詞組之分層結構，小代號pro則存在於標誌語
的位置。

中 文 關 鍵 詞 ： 英語口語、語法、空語類、代詞脫落、空主語、特徵繼承

英 文 摘 要 ： As is well known, pro-drop or null subject languages
(henceforth NSLs) are those in which the subject of a
finite clause can generally be omitted, like Spanish,
Italian, or Greek, among many others. Although English is
not an NSL, examples can be found in which the subject is
implicit, especially in colloquial English, as shown in
(1):

(1)a. Can't wait to see you.
b. Seems that he's having fun.
c. Looking good!

From the syntactic point of view, the question that immediately arises regarding sentences like (1a) is whether the Tense head projects a specifier that satisfies the so-called EPP requirement on Tense. It has been claimed (e.g., Rizzi 1994 and Haegeman 2013) that in these examples the phonologically empty category pro satisfies this requirement.

In this report I take the pro analysis to be on the right track and note that the feature inheritance hypothesis (see e.g., Chomsky 2008 and Epstein et al. 2015, among others), which claims that the agreement features on a Tense head are inherited from C, readily accounts for why C needs to be absent in these clauses. I also show that in terms of its interpretation, pro in these examples is similar to empty categories in languages like Chinese and Japanese, which have also been argued to involve pro and to lack agreement features (see Holmberg 2005). However, I examine examples in which the Tense head displays agreement features and provide novel evidence that there is person agreement between the Tense head and the null subject. This is problematic for Chomsky's feature inheritance hypothesis but it is predicted by the version of this hypothesis independently argued for by Chou and Fernández-Salgueiro 2020, under which the person feature is inherent to Tense and only the number feature is inherited from C. In order to account for the agreement phenomena just mentioned, I claim that pro acquires agreement features and values the person feature of the Tense head.

I also argue that this analysis provides an explanation, based on Case requirements, for the fact that expletive it can be dropped in colloquial English (see (1b) above) while expletive there cannot, a contrast that has barely been discussed in the literature. Finally, I argue that examples like (1c), in which a larger amount of structure is unpronounced, involve only the vP phase, with pro in its specifier position.

THE SYNTAX OF IMPLICIT SUBJECTS
IN COLLOQUIAL ENGLISH
MOST PROJECT (109-2410-H-003-103-) REPORT

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The focus of my research during this last academic year has been the study of implicit subjects in colloquial English, from the point of view of theoretical syntax. In this report I provide details on the results of my research.

1 Analyzing null subjects in a non-null subject language

As is well known, *pro*-drop or *null subject languages* (henceforth NSLs) are those in which the subject of a finite clause can generally be omitted, like Spanish, Italian, or Greek, among many others. Although English is not considered to be an NSL, examples can be found in which the subject is implicit. Consider (1) below:

(1)   *Implicit subjects in English*

      a. Imperatives: Go to your room.

      b. Conjunction reduction: John has left Taipei and is living abroad now.

      c. With the conjunction *as*:   As is well known, …

      d. With an auxiliary verb: Can't wait to see you.

      e. Expletive drop: Seems that he's having fun.

      f. Sentence fragments: Looking good!

The first three examples illustrate the very specific syntactic contexts in which implicit subjects are found in standard English. The examples in (1d), (1e), and (1f) however, illustrate more general syntactic contexts in which native speakers of English tend to find implicit subjects natural and idiomatic in colloquial registers. The purpose of the present study is to examine the syntactic properties of these contexts in detail and attempt to provide an explanation for why the surface effect of an implicit subject can obtain even in a non-NSL like English. In what follows I use the term 'null

subject' to refer to these subjects that are not pronounced but are still implicitly understood and accepted in naturally occurring speech by speakers of the language. The present project thus studies properties of colloquial (i.e., not academic or standard) English with the same theoretical syntactic tools that are often wrongly perceived as too abstract to deal with language as spoken in real-life situations and serves as a complement to other recent efforts in this respect, like Radford's (2018, 2019) recent monographs on the syntax of different aspects of colloquial English.

2 Null subjects in colloquial English

2.1 Previous approaches[1]

Consider the following examples containing an implicit subject in the presence of an auxiliary verb (see also (1d) above):

(2)   a. Can't hear a word they're saying.
        b. Didn't finish my training.
        c. Couldn't tell you.

The question that immediately arises regarding these clauses (which, again, are natural and idiomatic in colloquial English) is whether the Tense head, occupied in these examples by the different auxiliary verbs, projects a specifier that satisfies the so-called EPP requirement on Tense.[2] Moreover, given that subjects are generally understood to originate in a lower position in the structure and then move to the specifier of Tense, it comes as no surprise that the examples in (2) have been analyzed as involving the phonologically empty pronoun *pro*, albeit in a structure in which the C head is not present (see Haegeman 2013, for instance, which is based on Rizzi's 1994 analysis of null subjects in child English). It should also be noted that involving *pro* is by no means an *ad hoc* analysis for these types of sentences, since the *pro* analysis has also been applied to imperatives and conjunction reduction in standard English (see e.g., Holmberg 2005, Bennis 2006, and Zanuttini *et al.* 2012).

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[1] Here I provide a brief (though updated) review of the literature, since this report focuses on the results of my research. The reader is referred to the original proposal for more details on the literature of null subjects in NSLs and in standard English (see also Holmberg 2005, Biberauer *et al.* 2010, and D'Alessandro 2015, among others).

[2] Even though there has been attempt to reduce the EPP to other independently-motivated principles of the grammar (see Epstein and Seely 2006, Boeckx 2008, Fernández-Salgueiro 2020), the fact that T needs to project a specifier (the so-called EPP effect) is standardly assumed.

Strong evidence for claiming that null subjects in English occur in structures with no C head comes from the observation that once these examples are embedded the result is completely ungrammatical, as show in (3):

(3) a. *I think that can't hear a word they're saying.
     b. *I told you that didn't finish my training.
     c. *I know that couldn't tell you.

As I discuss below, this property has implications for Chomsky's feature inheritance hypothesis, which claims that the agreement features on a Tense head are inherited from C (see e.g., Richards 2007, Chomsky 2008, and Epstein *et al*. 2015, among others). As I show in section 2.3 below, the general idea behind Chomsky's feature inheritance hypothesis will be instrumental in understanding the properties of the syntactic contexts in which null subjects are possible, although there are both theoretical and empirical reasons to follow the modified version of this hypothesis proposed by Chou and Fernández-Salgueiro 2020 (see also Fernández-Salgueiro 2021).

Examples like those in (2) can be used to show the role of pragmatics in interpreting the subject's (*pro*) features. Though the conditions allowing null subjects in English seem to be syntactic, the recovery of the subjects' features (that is, their interpretation) may well be related to pragmatic issues (see Cole 2000). Notice that in the above examples, the null subject is interpreted as first person singular. However, when they're given a question intonation (cf. *can't hear a word they're saying?*), they tend to be interpreted as second person singular (see also Wagner 2018 and references therein). This situation resembles the interpretational properties of null subjects in the so-called radical/discourse NSLs (cf. Chinese, Japanese, Korean), which have also been analyzed as involving *pro* (see Holmberg 2005 and Fernández-Salgueiro 2020; see also Paul 2017 for a different analysis). It also relates, as one of the reviewer indicates, to recent approaches to null subjects and their licensing properties in imperatives and other structures (see McFadden & Sundaresan 2018 and Stegovec 2019).

Finally, it should be noted that examples like those in (2) and examples that lack an actual auxiliary verb but display tense morphologically (cf. *got distracted*, *really tried to make it*) should be included in the same group, since this is only a morphological difference, not really a syntactic one; past tense can be expressed with bound inflectional morphemes in English, while future tense or

modality, for example, are expressed with free morphemes (see 2.3.3 below). For the remainder of this discussion, I will refer to all of these examples that display a null subject in the presence of tense-related properties as 'core cases' (see section 2.3.1).

Interestingly, expletive *it* is also frequently dropped in colloquial English (cf. *seems that he's having fun*), although this type of example is probably the one that has received the least attention in the literature, perhaps because it does not seem particularly different from the ones that I have just mentioned. Notice, however, that there are two types of expletives in English, *it* and *there*. To the best of my knowledge, the fact that expletive *there* tends not be dropped (cf. ??*seems to be a problem here*, **remain several issues*, **was a problem with your proposal*) has not been addressed in the literature. In section 2.3.2 I will show that the approach that I develop here provides an account for this asymmetry between expletive *it* and expletive *there*.

Sentence fragments examples are more complex, since they may involve more implicit categories than just the subject, as shown in (4):

(4)   Looking good! (cf. you are looking good!)

Examples like (4) have been analyzed as involving only the structure needed for the elements involved to converge followed by spell-out (see Fortin 2007). As one of the reviewers of the original proposal points out, other researchers such as Merchant (2014) and Simpson (2015) have analyzed sentence fragments as involving focus fronting followed by deletion of the TP, which would generate many of the expressions discussed in Fortin (2007).

Since sentence fragments may involve not only an implicit subject but also different categories, several examples could be analyzed either as a sentence fragment or as involving a null subject only. Notice that many examples containing a tensed verb (cf. *got distracted*) should be understood as belonging with the core cases in (2) above, as already argued. This entails that a number of examples that appear to be sentence fragments actually belong to the core cases that I have just mentioned. I discuss these issues in detail in section 2.3.3.

2.2 Methodological issues

Syntactic theory is generally concerned with providing a principled explanation for why certain strings of words are perceived by native speakers as idiomatic while others are not, which means that grammaticality judgments play a crucial role.

There has been a lot of controversy in recent years regarding the validity of grammaticality judgments, as evidenced by the debate between researchers like Edward Gibson and Jon Sprouse. While Gibson and Fedorenko (2013) argue that linguistic theory needs to abandon grammaticality judgments and move towards the kind of quantitative methods used in other areas of cognitive science, Sprouse *et al.* (2013) and Sprouse and Almeida (2013) demonstrate that the traditional grammaticality judgment method yields remarkably robust data (they do suggest, however, that the field could potentially benefit from more emphasis on quantitative methods). In the case of the present study, a large portion of the data has been discussed previously in the literature, so it has been filtered, so to speak, by previous authors and reviewers, which is actually one of the factors that Sprouse *et al.* argue contributes to the quality of the data.

In the previous section I mentioned that the data may be less clear in the case of expletive drop, since examples without expletive *it* (cf. *seems that he's happy*) seem to me to be more idiomatic than some examples without expletive *there* (cf. ??*seems to be a problem here*), and definitely much more natural than unaccusative and existential sentences without expletive *there* (cf. **remain several issues*, **was a problem with your proposal*). As I mentioned in my original proposal, the present project could benefit from more comprehensive grammaticality judgments from native speakers.

To this end, I conducted an informal survey containing critical items (directly related to the aspect of the grammar under investigation, that is, examples containing null subjects) and also fillers (sentences unrelated to the aspect of interest). I shared a Google form with a group of twelve native speakers that included both American and British English speakers. I provided a list of sentences and asked them to rate them from 1 to 7, as illustrated below:

(5)　　*Please rate the following sentences on a scale of 1 to 7, where 1 means 'really unacceptable/unnatural' and 7 means 'fully acceptable/natural' in colloquial speech. Thank you!*

　　　(i)　　Seems to be a problem with your proposal　　　1 2 3 4 5 6 7

It should be stressed that this is just intended to be an informal survey and thus I am not providing a thorough discussion of the materials, their distribution, or details of the statistics. Consider first the critical items that I used in the survey and their average scores:

(6)   *Critical item*   *Average score*

      a. Couldn't care less about that, really.   6.33

      b. Seems that John won't be coming tonight.   6.33

      c. Thinks he's funny, doesn't he?   6.08

      d. Looks like you're gonna have to come with us.   6.75

      e. Seems that they are enjoying the party.   5.75

      f. Can't tell you how happy I am.   6.50

      g. Seems to be a problem with your proposal.   5.16

      h. Aren't many people at the meeting, right?   3.58

      i. Seem to be many kids here.   3.50

      j. Was a problem with my credit card, so I couldn't buy the shirt.   2.83

      k. Is a party tonight. Are you coming?   1.50

      l. Remain several issues to be discussed.   1.50

As can be seen, (6a-f) obtain rather high scores, especially considering that these examples are not considered grammatical in standard English. As expected, these include core cases and examples with a null expletive *it*. Example (6g) is interesting as it does receive a relatively high score, considering the discussion above. However, a couple of the participants commented, after completing the survey, that they did not understand the missing subject as a null version of expletive *there*, but as a regular pronoun (cf. *it/that seems to be a problem with your proposal*) and mentioned that they would not consider the sentence natural with a null expletive *there*. (6h) also receives a relatively high score, but I did realize later that it could also be interpreted as a regular yes/no question (that is, synonymous with *isn't it the case that there are many people at the meeting?*). I was expecting an even lower score for sentence (6i), which can only be interpreted as null *there*. Some of the participants, especially the British ones, do find it grammatical. The scores for (6j-l), however, are indeed not a surprise.

Given the results of this informal survey, it seems accurate to say that the core cases and the examples with null expletive *it* are perceived as very natural and idiomatic by native speakers, while dropping expletive *there* yields expressions that range from degraded to non-idiomatic. [3] I now turn to detailed discussion of the syntactic properties of these types of clauses containing null subjects.

2.3 Main Results

2.3.1 Core cases

In the original proposal, I mentioned that studying the *pro* approach discussed above from the point of view of more recent work in syntactic theory regarding feature inheritance (Chomsky 2008) and the properties of Phases (Chomsky 2001) raises the two research questions in (7) below. In this section I discuss the answers to these questions as well as a number of other related issues that arise once they are explored in detail.

(7)   i. Can the *pro* approach be maintained once the feature inheritance hypothesis is adopted?

         ii. Could the absence of C somehow explain why *pro* is possible in examples like those in (2)?

As already discussed, the very fact that an expression like *can't wait to see you* is possible is surprising since it seems to violate the EPP requirement on the Tense head. The *pro* analysis mentioned in section 2.1 above in principle solves this problem by claiming that the EPP requirement is satisfied by *pro*, which was the type of solution given for *pro*-drop/NSLs in the Government and Binding framework (see Rizzi 1982). The question that arises, however, is how *pro* is licensed in these cases given that English is not an NSL.

In what follows, I argue that the *pro* analysis (Rizzi 1994 and Haegeman 2013) mentioned in section 2.1 is essentially on the right track, and together with the main idea behind Chomsky's feature inheritance and Holmberg's (2005) approach to null subjects in contexts in which agreement features are absent, they do account for the main properties of many of the core cases, especially the fact that they are only possible in a main clause with no C head.

However, idiomatic examples of null subjects in clauses that do display agreement properties indicate that the above hypotheses have to be slightly modified in order to account for the range of

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[3] I leave the difference between American and British English that can be observed in (6i), and possibly (6g), which suggests parametric variation in this very specific syntactic property, for future research.

data. I will argue that Chou and Fernández-Salgueiro's (2020) independently motivated modification of Chomsky's feature inheritance hypothesis helps provide a better account of the properties of null subjects in colloquial English and actually finds additional empirical support.

Under Chomsky's (2008) feature inheritance hypothesis, the Phase heads C and *v* contain the features that drive syntactic operations in the phase. As for the CP phase, this entails that the agreement (person and number) features of Tense are not inherent to Tense but are inherited from C.[4] These features, which are unvalued, would then get a value from the person and number features of the closest nominal element under Agree in the syntax; failure to provide a value for unvalued features would result in ungrammaticality (see Chomsky 2001 for discussion of Agree).

What is relevant for our purposes is that if this hypothesis is on the right track, a Tense head does not display full agreement features if C is not present in the structure. Notice that this is precisely the syntactic context in which a null subject can be found in English: a matrix clause without a C head. As shown in (3) above, null subjects are not possible in embedded clauses, since an embedded clause is headed by a C head.

If the above is correct, examples like those in (8), repeated from (2) above, involve a Tense head does not contain full agreement features:

(8)   a. Can't hear a word they're saying.
        b. Didn't finish my training.
        c. Couldn't tell you.

This property would seem to make these examples similar to regular sentences found in languages like Japanese and Chinese in which agreement features are absent. In this respect, Holmberg (2005) argues that *pro* is actually the empty category responsible for null subject phenomena in these languages. Since *pro* does not display person and number features, Holmberg claims that *pro* is only possible in syntactic configurations in which no agreement features need to be valued. As I show below, however, there is evidence that indicates that *pro* in English acquires agreement features and there is also evidence that the Tense head displays at least a person feature in clauses with null subjects.

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[4] Discussing the theoretical motivations for Chomsky's hypothesis would lead us too far afield. The reader is referred to Chomsky (2008) for the original arguments and to Richards (2007), Epstein *et al*. (2015), and Chou and Fernández-Salgueiro (2020) for discussion.

Clauses containing null subjects in English and regular sentences in Chinese or Japanese do seem to be similar with respect to their null subjects in terms of their interpretational properties. As mentioned in section 2.1, the null subjects in examples like the ones in (8) are interpreted as first person singular, but when they're given a question intonation (cf. *can't hear a word they're saying?*), they are interpreted as second person singular. As can be seen in (9), the same is true of Chinese:

(9)   a. mingtian   yao   shangban   b. mingtian   yao   shangban ma

           tomorrow   want   work   tomorrow   want   work   Q

           'I have to work tomorrow'   'Do you have to work tomorrow?'

Things can get more complicated. As illustrated in (10), when a different participant is mentioned in the discourse, the null subject can refer to it instead:[5]

(10)   - Why didn't she go to the party?

        - Didn't feel like it.

However, the main complication for an analysis based on Chomsky's feature inheritance comes from the fact that when the null subject refers to a participant mentioned in the discourse, agreement is actually possible. Consider (11):

(11)   - Why doesn't she drink?

        - Doesn't like it, I guess.

An example like (11) shows that Chomsky's version of feature inheritance, under which both person and number features are inherited by the Tense head from C, cannot account for the agreement properties in all examples with null subjects. It also shows that Holmberg's (2005) analysis of null subjects in Chinese and Japanese is too restrictive to account for the properties of the English examples.

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[5] The null subject can also refer to a participant mentioned in a tag question, as in the following example mentioned in section 2.2 (Michelle Sheehan, personal communication):

    (i)   Thinks he's funny, doesn't he?

Together with Professor Chou, I have recently worked on a different version of feature inheritance under which only number features are inherited, person features being inherent to the Tense head (see Chou and Fernández-Salgueiro 2020 and Fernández-Salgueiro 2021). In what follows, I show that this version of feature inheritance helps provide a more accurate account of null subject phenomena in colloquial English and finds additional empirical support in this domain.

Evidence for this modified approach to inheritance comes from the fact that the infinitival Tense head *to* in raising clauses behaves differently from the one in Exceptional Case Marking (ECM) clauses with respect to VP ellipsis, which is a syntactic operation that has been used as a diagnostic for agreement properties. This is shown in (12) (the elided material is indicated in angle brackets):

(12)   a. He said he doesn't like her much, but he does seem to *<like her much>*.   (Raising)
        b. *I consider Pam to like soccer, and I believe Rebecca to *<like soccer>* as well. (ECM)

Following independent evidence from Saito and Mirasugi (1990) and Lobeck (1990) (see also Epstein and Seely 2006 for thorough discussion) in that ellipsis of a constituent requires that the head that selects it agree with the head's specifier, (12a) indicates that there is agreement between the Tense head *to* and the copy of the subject in the specifier position in raising. Notice, however, that it is standardly assumed that there is no C head in the embedded clause in either raising or ECM (see Chomsky 2001 and Epstein and Seely 2006, among others), which entails that whatever agreement property is licensing ellipsis in raising does not depend on the presence of C. Based on Boeckx's (2008) observation that the person feature is the one responsible for EPP effects and thus for the presence of a constituent in the specifier position (see also Chomsky 2000: 124 for the related suggestion that infinitival *to* contains a person feature), the most reasonable hypothesis is that *to* in raising contains a person feature (only) that the DP in its specifier position agrees with.[6]

This modified version of feature inheritance in Chou and Fernández-Salgueiro (2020) obviously has implications for the approach to null subjects that I develop here. Recall that an example like (11) shows that null subjects in English are found in a clause that lacks a C head but displays agreement. If the approach in Chou and Fernández-Salgueiro (2020) is correct, the prediction would be that agreement in clauses with null subjects can only be person agreement, since

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[6] In Boeckx's (2008: 173) words, "person checking amounts to the EPP effect."

full (person and number) agreement would imply that C is present. There is actually evidence that in clauses with null subjects the Tense head does agree with the null subject. Consider (13) below:

(13)   - Can you make it to the party?

        - Probably can't *<make it to the party>*.

As can be seen, a clause with a null subject licenses VP ellipsis. This indicates that there is person agreement involved even in the absence of C, just as Chou and Fernández-Salgueiro (2020) claim in the case of an infinitival Tense head in raising.[7]

      Examples like those in (11) and (13) also indicate that *pro* can value the person feature of the Tense head. One way to formalize this is to claim that even though *pro* lacks agreement features in the lexicon, it acquires person and number features which correspond to its interpretation. As we have mentioned above, this interpretation can be based on sentence type; a first person singular feature would be acquired in a declarative clause and a second person singular feature would be acquired in a question. Additionally, *pro*'s features can also be determined by another participant mentioned in the discourse (recall (10) and (11)). If this is correct, the properties of *pro* are not that different from the properties of PRO (the empty subject of infinitives), which also acquires the agreement features of the nominal element that controls it or default third person features when interpreted as arbitrary (see also work by McFadden and Sundaresan 2018, mentioned by one of the reviewers, for related ideas).

      Finally, if only person agreement is possible in the absence of C, it must be the case that an example like (11) involves just person agreement, despite the fact that *does* is obviously a third person singular form. This would mean that singular morphology is realized by default, and not due to an agreement operation (see Nevins 2011, among others, for the idea that singular is the default value for number agreement). In this respect, it seems that singular agreement with a finite form of *be*, which is the only example in which plural agreeing forms on the verb are marked in English, sounds more natural than plural agreement:
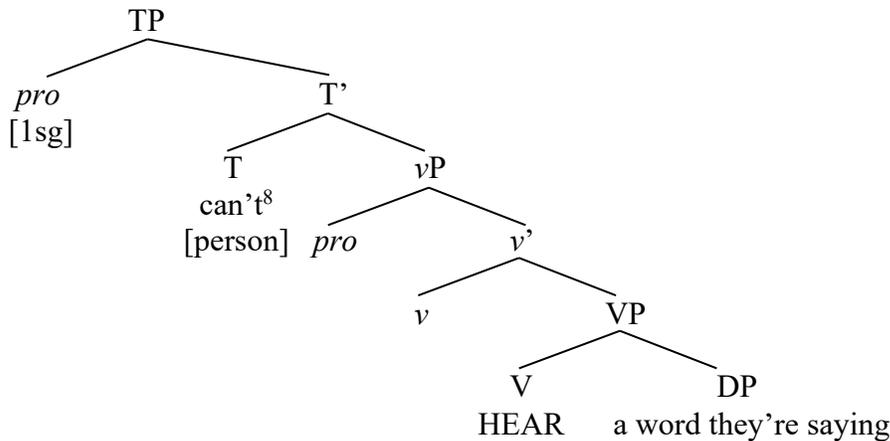
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[7] It also indicates that *pro* has moved to the specifier of the Tense head. This conforms to independent evidence from NSLs that *pro* is only possible in the specifier position of Tense (see Fernández-Salgueiro 2011 and references therein for discussion).

(14)   a. - Why didn't you come to the event?   b. - Why didn't you guys come to the event?

         - Wasn't interested, really.   - ??Weren't interested, really.

To summarize, consider (15):

(15)   Can't hear a word they're saying.

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                        TP
              ┌──────────┴──────────┐
            pro                     T'
           [1sg]            ┌────────┴────────┐
                            T                 vP
                          can't8        ┌──────┴──────┐
                         [person]      pro            v'
                                              ┌────────┴────────┐
                                              v                 VP
                                                          ┌──────┴──────┐
                                                          V             DP
                                                        HEAR    a word they're saying
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Under the analysis that I have developed here, the person feature of Tense attracts *pro* to its specifier. *Pro* acquires agreement features (in this case, first person singular) and then its person feature values the person feature of Tense.

        A final question that arises is the status of *pro* with respect to Case theory. Under the standard assumption that Case valuation requires full agreement, we are forced to assume that *pro* does not need Case, since under the present approach full agreement with the Tense head does not take place in the examples that have been discussed. In this respect, notice that a number of approaches to null subjects within Minimalism have claimed that null subjects are caseless, an idea that actually predates Rizzi's (1982) original approach to *pro*, although they are required to move to a Case position (see Holmberg 2005 and Fernández-Salgueiro 2011, among others). As one of the reviewers points out, this could have implications for PRO and a possible return to an analysis of PRO as a caseless DP, as in the Government and Binding framework. I leave this issue for further research.

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[8] For expository purposes, I am taking *can't* to be a single head in the syntax, thus abstracting away from the fact that *can* and *not* first occupy different positions in the structure.

12

2.3.2 Expletive drop

As mentioned in the original proposal, examples with null expletive elements raise an important question that to the best of my knowledge has not been addressed in the literature:

(16) Why is it that expletive *it* can be generally dropped in colloquial English but expletive *there* cannot?
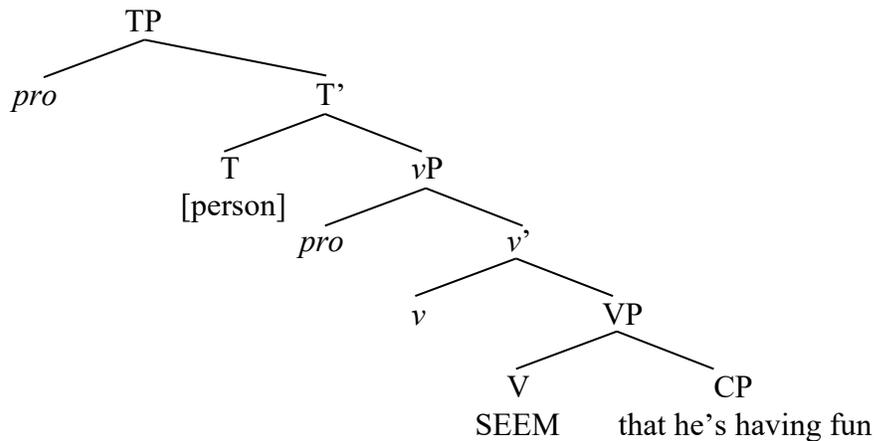
The results reported in section 2.2 above confirmed my initial intuition that clauses with null expletive *it* sound much more natural and idiomatic than clauses with expletive *there* (cf. *seems that he's having fun* vs. ??*seems to be a problem with your proposal*). This contrast seems to be difficult to explain under approaches that have appealed to phonological and prosodic properties of English to determine when the subject of a clause (and other elements as well) can become null (see e.g., Weir 2008 and Radford 2020).

As already mentioned, dropping *there* sounds especially unnatural with unaccusative verbs and existentials:

(17)   a. *Remain several complications.   (cf. There remain several complications)
       b. *Is a party tonight.   (cf. There is a party tonight)
       c. *Are many people here.   (cf. There are many people here)

One advantage of the approach to null subjects that I have developed here is that it does provide a principled explanation for why clauses in which expletive *there* is null like those in (17) are ungrammatical, while clauses that drop expletive *it* are acceptable. Let us consider expletive *it* first:

(18)   Seems that he's having fun.

```
                    TP
         ┌──────────┴──────────┐
        pro                    T'
                        ┌──────┴──────┐
                        T             vP
                     [person]    ┌────┴────┐
                                pro        v'
                                     ┌─────┴─────┐
                                     v           VP
                                            ┌────┴────┐
                                            V         CP
                                          SEEM   that he's having fun
```

As can be seen in the tree, the person feature of Tense attracts *pro* to the specifier position. As for the question of how the person feature of Tense gets a value, there are two possibilities, which are based on two different approaches to sentences with expletive *it* that have been developed in the literature (see Epstein and Seely 2006: 86). One possibility is that it is the expletive that provides the value, in which case we would have to assume that *pro* in (18) acquires third person singular features (as discussed in the previous section with respect to referential *pro*).[9] The other possibility is that the Tense head gets a value from the CP. Regardless of which analysis is correct, the verb will be spelled out as *seems* (since the Tense head is valued as third person) and its complement can also be spelled out even though no Case valuation has applied, as CPs do not require Case.

Consider now the structure associated with an example like (17a) with a null expletive *there*:[10]

---

[9] This analysis does capture the intuition that speakers are recovering the features of the missing subject *it*, but it is also possible that only referential *pro* acquires agreement features. I leave this issue open here.

[10] I am abstracting away from the discussion about the properties of *v*. As one of the reviewers claims, whether *v* is defective in unaccusative clauses is controversial.

(19)   *Remain several complications.

```
              TP
           ／     ＼
        pro        T'
                 ／   ＼
               T        vP
            [person]  ／   ＼
                   pro      v'
                          ／   ＼
                        v        VP
                             ／      ＼
                           V            DP
                        REMAIN   several complications
                                   NO CASE
```
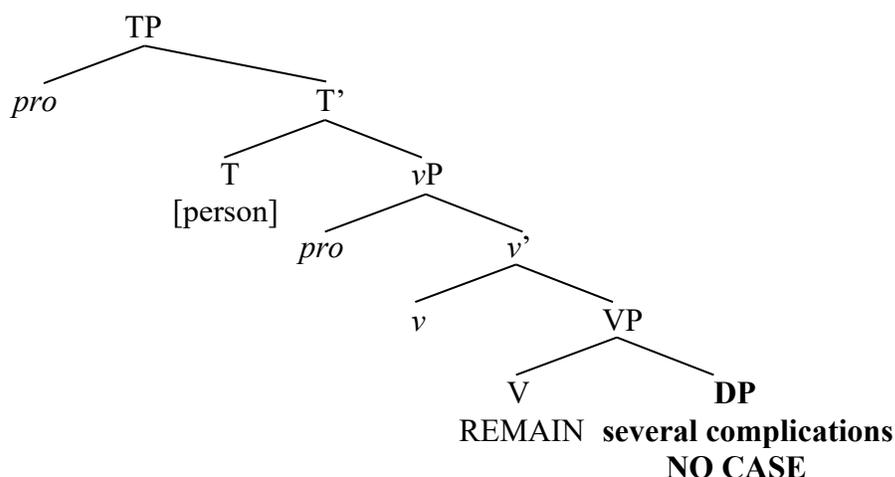
It is usually assumed that in structures with expletive *there*, the Tense head agrees in person with the expletive and also with the DP in number (see e.g., Radford 2004), although for this case it is possible that only agreement with the DP applies, since *pro* is not referential (see above). Regardless of which option is correct, the Tense head can get a value for its person feature (though notice that we predict that the verb would be spelled out as *remains* in this case). Most importantly, however, the DP *several complications* cannot get a Case value since Case valuation requires full agreement. As can be seen, although the fact that (18) involves *pro* is not directly related to why the example is ungrammatical, the presence of *pro* does entail that there is no C head. If there is no C, the Tense head does not display full agreement that will ultimately provide the DP with a Case value, thus violating the Case requirement on DPs.

2.3.3 Notes on sentence fragments

In the original proposal I raised the following two related questions regarding sentence fragments:

(20)   i. Can the sentence fragment analysis (with only VP projecting) be extended to examples involving agreement or Tense on the verb?
ii. Can this analysis be taken as evidence for a lexicalist view of morphology under which all the verb forms of a lexeme are present in the lexicon?

These are questions that examples like (21), repeated from (4) above, immediately raise:

(21)   Looking good!

As mentioned in section 2.1, an example like (21) could be analyzed as involving just the VP, as long as it can be shown that the syntactic object built contains no unvalued features (for example, unvalued Case on a DP). Recall that Fortin's (2007) analysis is couched within a strong derivational approach to syntax (Epstein *et al*. 1998, Epstein and Seely 2006), under which the output of every merge operation can in principle be spelled out and constitute its own linguistic expression.
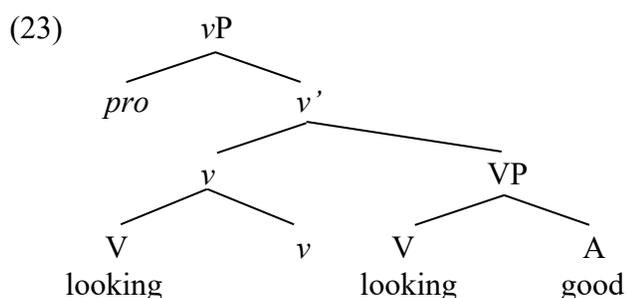
As already mentioned, one of the reviewers of the original proposal points out that other researchers such as Merchant (2014) and Simpson (2015) have analyzed sentence fragments as involving focus fronting followed by deletion of the TP, which would generate many of the expressions discussed in Fortin (2007). However, this analysis is only applicable to examples that constitute an answer to a question, and not to examples like (21) above.

In the original proposal, I provided a tentative analysis of (21) based on the idea that a VP is the constituent that is transferred when the CP phase is completed, as shown below:

(22)
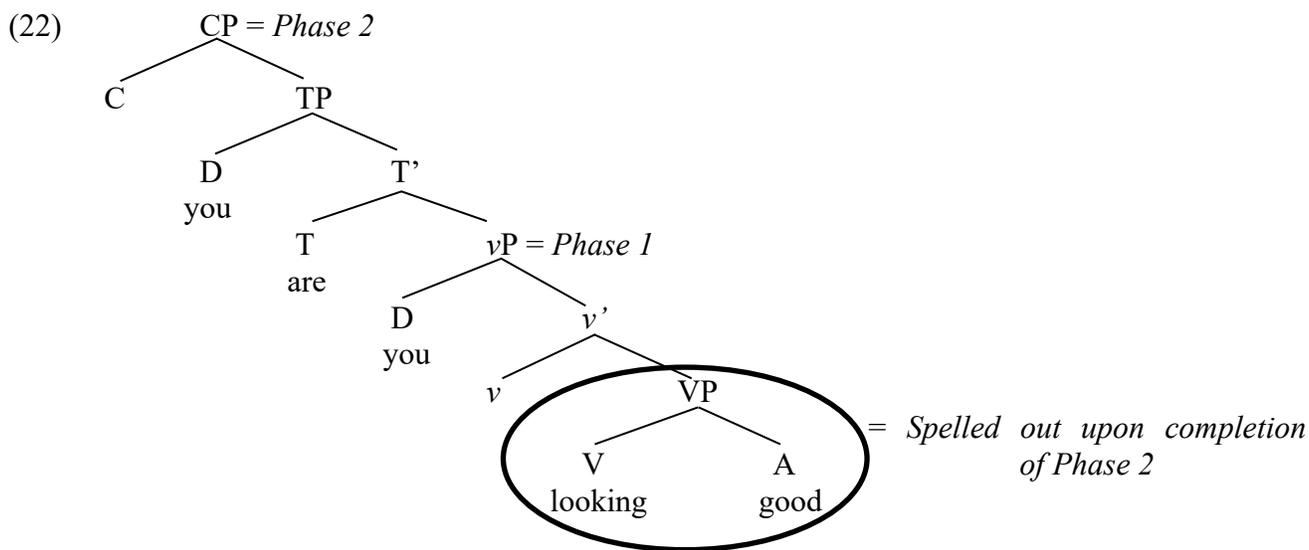
I have found several problems with this analysis, however. The analysis is based on Chomsky's (2001) version of phases. Most approaches to phases, though, assume that the VP is spelled out when the *v*P is completed (see especially Epstein *et al*. 2015 and references therein). A more serious problem is that it is standardly assumed that V moves to *v*, especially when an external theta role is

assigned.[11] If correct, this indicates that the fragment *looking good* is actually (at least) a *v*P fragment. Notice, however, that if this is the case, the external argument should also be part of the fragment, as external arguments occupy the specifier position in the *v*P. Moreover, the *v*P would not be spelled out until the next (CP) phase is completed, since only complements of phases undergo spell-out, under standard assumptions. To address these problems, I would like to propose that the specifier of the *v*P in these examples is also *pro*, and also that the vP is allowed to undergo spell-out because there is no CP phase.[12] This analysis is illustrated in (23):

(23)

```
              vP
            /    \
         pro      v'
                /    \
               v      VP
             /  \    /  \
            V    v  V    A
         looking   looking good
```

With this updated analysis in mind, let us discuss the questions in (20). The logic of an approach like Fortin's could in principle allow an example containing a tensed verb (cf. *got distracted*) to be analyzed as just the spell out of a *v*P (not as the spell out of the VP alone, given V-to-*v* movement). In section 2.3.1, I mentioned that these examples are best analyzed as examples of null subjects, and as such they belong to the core cases that are the focus of this project.

Evidence that examples with a tensed verb must include the TP as well comes from the fact that negation cannot just be added to the left of the verb, though it can be added to the left of a fragment containing an adjective phrase, for example, as shown in (24):

(24)   a. *Not got distracted.   b. Not sure about that.

This follows from the fact that syntactically speaking, the Tense head always constitutes a separate element in the structure, and only when Tense head and the verb are adjacent in the morphological component can the tense affix become part of the verb. This means that examples like *got distracted*

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[11] See Caponigro and Schütze (2003) for evidence that in passive clauses V-to-*v* movement does not apply.
[12] Since I am assuming that the *v*P is the end of the derivation in these cases, the *v*P must be allowed to undergo spell-out. See Radford (2004: 284) for a similar argument applied to the CP phase.

do not involve less structure than, say, *might get distracted*. More general evidence that in English a past tense form on the verb is the result of a late morphological process that requires adjacency between Tense and the verb comes from well-known properties of the syntax of negation and questions, in which the verb cannot be tensed, as shown in (25):

(25)   a. He did not get distracted.   (cf. *He not got distracted/*He do not got distracted)
       d. Why did he get distracted? (cf. *Why he got distracted?/*Why do he got distracted?)

The analysis I provided in (23) would seem to contradict this, since I am assuming that no structure above the *v*P is projected even though the verb does display the *–ing* ending associated with progressive aspect. There is a crucial difference, however, between past tense and the *–ing* ending on verbs. Even though the *–ing* form is associated with progressive aspect (which corresponds to a higher projection), it is syntactically independent from the Aspect head. Notice that, as a consequence, the *–ing* form behaves differently from the past tense form with respect to the tests just discussed; negation can be added directly to the sentence fragment (26a) and the verb displays an *–ing* ending in negative clauses (26b) and questions (26c):[13]

(26)   a. Not looking good.
       b. You are not looking good.
       c. Are you looking good?

This means that while the lexicon need not contain past or present verb forms, as they are created in the morphological component, it must contain the *–ing* form of the verb so that it can be introduced in the derivation. In this respect, notice also that the *–ing* form does not necessarily entail progressive aspect but it is also present in gerunds.

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[13] An interesting consequence of this difference that to the best of my knowledge has not been analyzed in detail is that many verbs show irregular past tense forms, yet no verb shows an irregular –ing form.

3 Conclusions and significance

In this report I have provided an analysis of null subjects in colloquial English and the properties of the clauses in which they are possible. I have adopted Rizzi's (1994) and Haegeman's (2013) *pro* analysis of null subjects as a starting point and have noted that Chomsky's (2008) feature inheritance hypothesis readily accounts for why C needs to be absent in clauses with null subjects. Additionally, I have shown that null subjects in colloquial English and empty categories in the so-called discourse NSLs, which have also been argued to involve *pro* and to lack agreement features (see Holmberg 2005), behave in a similar fashion with respect to their interpretation. I have also observed that examples in which the Tense head displays agreement features are problematic for Chomsky's feature inheritance hypothesis. This is not the case for Chou and Fernández-Salgueiro's (2020) independently motivated version, under which the person feature is inherent to Tense and only the number feature is inherited from C. I have also provided novel evidence that there is person agreement between the Tense head and the null subject and have argued that *pro* acquires agreement features and values the person feature of the Tense head. This analysis also provides an explanation, based on Case requirements, for the fact that expletive *it* can be dropped in colloquial English while expletive *there* cannot. Finally, I have argued that sentence fragments in which the Tense head is also omitted involve only the *v*P phase, with *pro* in its specifier position.

Null subjects constitute a classic research topic in syntactic theory and the null subject parameter is perhaps the most widely discussed parameter in the literature. The present study contributes to the literature on this topic by asking a slightly different question, namely, which syntactic properties may allow null subjects in a non-NSL language like English. I believe that far from involving a contradiction, the analysis of these cases helps with our understanding of null subject-related phenomena.

More general questions regarding the study of language as a capacity and property of human minds should not be ignored either. It is undeniable that native speakers of different languages have strong intuitions about whether null subjects are possible in their language, and if so, in which syntactic structures and in which pragmatic contexts. Thus, although English speakers know intuitively that their language is a non-NSL, they do tend to find implicit subjects idiomatic in the syntactic contexts discussed above. This is also relevant in terms of acquisition and the fact that these are properties of the language that are naturally acquired, that is, without explicit instruction. In this respect, it should be noted that explicit English grammar instruction cannot explain the phenomena

discussed in this project, as implicit subjects in English are always considered incorrect or improper. The research reported here thus has implications for the theory of universal grammar and how abstract syntactic principles are acquired by speakers and yield the grammatical properties that are found in a specific language (English in this case). In this respect, Chomsky's feature inheritance hypothesis (especially Chou and Fernández-Salgueiro's 2020 version) has proved to be crucial in determining the properties of the syntactic contexts in which null subjects are allowed in English.

As is clear from the above discussion, these syntactic conditions are not simple or obvious, and some of the examples discussed above, even the core cases, have been difficult to analyze, especially because the analysis requires the combination of previous proposals made by different authors that are motivated independently. Also, I have found the discussion of the sentence fragment examples more challenging than initially anticipated, mainly because of the disparity between the elements that are spelled out and the structure that is assumed to be necessary for them to converge.

Turning now to more practical aspects, the present report relates to what is by far the most widely spoken language in the world, once both native and non-native speakers are considered. English is also the most popular foreign language in Taiwan, and is used daily in the country in many informal contexts. This means that the results of the proposed research are relevant to not only teachers and learners of more academic English but also to people that learn and use this language in the country outside academia. The present project thus serves as a complement to other recent efforts in this respect, like Radford's (2018, 2019) recent monographs on aspects of the syntax of colloquial English.

4 Output: journal articles and talks

I am currently working on a manuscript that discusses the results reported here and their theoretical implications. At present, I am considering submitting the manuscript to either *Glossa: a journal of general linguistics* or *English Language and Linguistics* and will make a decision once the manuscript is finished. I am also planning to submit my work to the upcoming Generative Linguistics in the Old World (GLOW) in Asia XIII conference, which is one of the most prestigious syntax conferences in Asia. In order to receive additional feedback about my work, I am giving a brown bag lecture in my department on this topic, which is already scheduled for December. It should also be mentioned that the research reported here (more specifically, its implications for the feature inheritance hypothesis) has also inspired the writing of a related manuscript this year that is currently

being considered for publication in the Canadian Journal of Linguistics (see Fernández-Salgueiro 2021 in the reference section).

5 Contributions to academic research, teaching, extensions, and popular science

I firmly believe in integrating my research results into my own teaching. All the courses that I teach are linguistics courses, which means that I will have plenty of chances to include discussion of these issues in my lectures. Moreover, this year I am planning to propose a course on syntactic approaches to the study of colloquial English.

I also hope that the results reported here can inspire research on related issues in different languages. French, for example, is another language that is considered to be a non-NSL. An obvious research question that arises then is whether a language like French, which seems to have examples similar to the ones discussed here, can be analyzed with similar theoretical tools. Other possible extensions include areas of research that lie outside my own specialization. The fact that a large part of the data considered in this study belongs to colloquial English might have implications for the study of language variation and different registers from the point of view of sociolinguistics as well.

Finally, I also believe that researchers should try to make their research available to the general public and raise awareness of issues that are current in the academic world (the so-called popular science). As mentioned in the previous section, I am scheduled to give a brown bag lecture in my department to present the research reported here. These lectures are open to the general public and I definitely expect colleagues and students in the department to attend the talk. The results of this research will hopefully have an impact on those scholars interested in the topic and make people think about language and linguistic analysis in ways they had not thought before.

References

Bennis, Hans. 2006. Agreement, PRO and imperatives. In *Arguments and agreement*, ed. by Peter Ackema, Patrick Brandt, Maaike Schoorlemmer, and Fred Weerman, 101–123. New York: Oxford University Press.

Biberauer, Theresa, Anders Holmberg, Ian Roberts, and Michelle Sheehan. 2010. *Parametric Variation: Null subjects in minimalist theory*. Cambridge: Cambridge University Press.

Boeckx, Cedric. 2008. *Aspects of the Syntax of Agreement*. New York: Routledge.

Caponigro, Ivano, and Carson T. Schütze. 2003. Parameterizing Passive Participle Movement. *Linguistic Inquiry* 34:293–308.

Chomsky, Noam. 1986. *Knowledge of Language: Its Nature, Origins, and Use*. New York: Praeger.

Chomsky, Noam. 1995. *The Minimalist Program*. Cambridge, MA: MIT Press.

Chomsky, Noam. 2000. Minimalist inquiries: The framework. In *Step by step: Essays on minimalist syntax in honor of Howard Lasnik*, ed. by Roger Martin, David Michaels, and Juan Uriagereka, 83–155. Cambridge, MA: MIT Press.

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

Chomsky, Noam. 2008. On phases. In *Foundational issues in linguistic theory: Essays in honor of Jean-Roger Vergnaud*, ed. by Robert Freidin, Carlos Otero, and Maria Luisa Zubizarreta, 134–166. Cambridge, MA: MIT Press.

Chou, Chao-Ting Tim, and Gerardo Fernández-Salgueiro. 2020. A last resort approach to (number) feature inheritance. *Studia Linguistica* 74(3):694–716.

Cole, Melvyn. 2000. *The syntax, morphology, and semantics of null subjects*. Doctoral dissertation, University of Manchester.

D'Alessandro, Roberta 2015. Null Subjects. In *Contemporary Linguistic Parameters*, ed. by Antonio Fábregas, Jaume Mateu, and Michael T. Putnam, 201–226. London: Bloomsbury Press.

Epstein, Samuel David, Erich M. Groat, Ruriko Kawashima, and Hisatsugu Kitahara. 1998. *A derivational approach to syntactic relations*. Oxford: Oxford University Press.

Epstein, Samuel David, and T. Daniel Seely. 2006. *Derivations in Minimalism*. Cambridge: Cambridge University Press.

Epstein, Samuel David, Hisatsugu Kitahara, and T. Daniel Seely. 2015. *Explorations in Maximizing Syntactic Minimization*. London: Routledge.

Fernández-Salgueiro, Gerardo. 2011. Romance Null Subjects at the Sensory-Motor Interface. *Syntax* 14:1–28.

Fernández-Salgueiro, Gerardo. 2020. On EPP effects and the properties of Core Functional Categories. *Glossa: a journal of general linguistics* 5(1):36. 1–34.

Fernández-Salgueiro, Gerardo. 2021. On the properties of phase heads in raising and passive clauses: DP movement and Transfer options. ms., National Taiwan Normal University (manuscript submitted to *Canadian Journal of Linguistics*, second round of reviews).

Fortin, Catherine. 2007. Some (Not All) Nonsententials Are Only a Phase. *Lingua* 117:67–94.

Haegeman, Liliane. 2013. The syntax of registers: Diary subject omission and the privilege of the root. *Lingua* 130:88–110.

Holmberg, Anders. 2005. Is There a Little Pro? Evidence from Finnish. *Linguistic Inquiry* 36:533–564.

McFadden, Thomas, and Sandhya Sundaresan. 2018. Reducing *pro* and PRO to a single source. *The Linguistic Review* 35(3):463–518.

Merchant, Jason. 2004. Fragments and Ellipsis. *Linguistics and Philosophy* 27(6):661–738.

Nevins, Andrew. 2011. Multiple agree with clitics: Person complementarity vs. omnivorous number. *Natural Language and Linguistic Theory* 29(4):939–971.

Paul, Waltraud. 2017. Null subject, null topics and topic prominence in Mandarin Chinese and beyond. In *Studies on Syntactic Cartography, Volume 1*, ed. by Fuzhen Si, 134–162. Beijing: China Social Sciences Press.

Radford, Andrew. 2004. *Minimalist syntax. Exploring the structure of English*. Cambridge: Cambridge University Press.

Radford, Andrew. 2018. *Colloquial English: Structure and Variation*. Cambridge: Cambridge University Press.

Radford, Andrew. 2019. *Relative Clauses: Structure and Variation in Everyday English*. Cambridge: Cambridge University Press.

Radford, Andrew. 2020. *An Introduction to English Sentence Structure. Second edition*. Cambridge: Cambridge University Press.

Richards, Marc. 2007. On feature inheritance: An argument from the Phase Impenetrability Condition. *Linguistic Inquiry* 38:563–572.

Rizzi, Luigi. 1982. *Issues in Italian syntax*. Dordrecht: Foris.

Rizzi, Luigi. 1986. Null objects in Italian and the theory of *pro*. *Linguistic Inquiry* 17:501–557.

Rizzi, Luigi. 1994. Early null subjects and root null subjects. In *Language Acquisition Studies in Generative Grammar*, ed. by Teun Hoekstra and Bonnie D. Schwartz, 151–177. Amsterdam/Philadelphia: John Benjamins.

Simpson, Andrew. 2015. Verbal answers to yes/no questions, focus, and ellipsis. In *Chinese Syntax in a Cross-linguistic Perspective*, ed. by Audrey Li, Andrew Simpson, and Wei-Tien Dylan Tsai, 300–333. Oxford: Oxford University Press.

Stegovec, Adrian. 2019. Perspectival control and obviation in directive clauses. *Natural Language Semantics* 27(1):47–94.

Wagner, Susanne. 2018. Never saw one – first-person null subjects in spoken English. *English Language & Linguistics* 22:1–34.

Weir, Andrew. 2008. *Subject pronoun drop in informal English*. MA Thesis, University of Edinburgh.

Zanuttini, Raffaella, Miok Pak, and Paul Portner. 2012. A syntactic analysis of interpretive restrictions on imperative, promissive, and exhortative subjects. *Natural Language and Linguistic Theory* 30:1231–1274.

109年度專題研究計畫成果彙整表

計畫主持人：颯楊			計畫編號：109-2410-H-003-103-		
計畫名稱：口語英語中隱性主語的語法					

成果項目			量化	單位	質化 （說明：各成果項目請附佐證資料或細項說明，如期刊名稱、年份、卷期、起訖頁數、證號...等）
國內	學術性論文	期刊論文	0	篇	
		研討會論文	0		
		專書	0	本	
		專書論文	0	章	
		技術報告	0	篇	
		其他	0	篇	
國外	學術性論文	期刊論文	0	篇	
		研討會論文	0		
		專書	0	本	
		專書論文	0	章	
		技術報告	0	篇	
		其他	0	篇	
參與計畫人力	本國籍	大專生	1	人次	本計畫之兼任助理
		碩士生	0		
		博士生	0		
		博士級研究人員	0		
		專任人員	0		
	非本國籍	大專生	0		
		碩士生	0		
		博士生	0		
		博士級研究人員	0		
		專任人員	0		
其他成果 （無法以量化表達之成果如辦理學術活動、獲得獎項、重要國際合作、研究成果國際影響力及其他協助產業技術發展之具體效益事項等，請以文字敘述填列。）			將於110年12月受邀至國立臺灣師範大學英語學系演講發表。		