Subject ellipsis in spoken English

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Bae, Taek-Woo. 2016. Subject ellipsis in spoken English. *SNU Working Papers in English Linguistics and Language 14, 1-22.* In this paper, I have shown that subject ellipsis in spoken context (SESC) may not be a morpho-phonological phenomenon as former analyses claim to be. The possibility of subject omission in the second matrix clause of a conjoined sentence plays a significant role in defining it as a syntactic phenomenon. Also, it is found that deletion of the subject preceding the contracted 's is not SESC, for the contracted auxiliary is an affix, which makes it deletion of a morphological unit, not of a syntactic unit. However, the SBCG analysis of SESC is not as complete as it seems to be; it needs to be more refined as it cannot disallow precedence of certain adjuncts, which do not permit SESC, such as time expressions. Also, the fact the focus placed upon the subject inhibits SESC is not reflected in the SBCG construction description. **(Seoul National University)**

1. Introduction

Subject ellipsis in a quite universal phenomenon; according to Gilligan (1987), only seven out of 100 sample languages do not permit subject ellipsis in finite clauses. In pro-drop languages such as Italian, Spanish, and Modern Hebrew, where a pronominal argument can be dropped, subject ellipsis is observed quite frequently. Researchers have explained this tendency that this ellipsis occurs since the agreement inflection of a verb has adequate information for the hearer to recover the intended null subject, as exemplified in (1):

   (1)   Modern Hebrew (Melnik, 2007)
          (ata)   axalta/toxal   tapuax
          (you)   ate/will-eat.2SM   apple
          'You ate/will eat an apple.'

Subject ellipsis, however, is frequent even in pro-drop languages which do not have any verb inflection regarding to subject-verb agreement information such as Korean and Japanese, as presented in (2). This means that an informative verbal inflection is not related to the phenomenon of subject ellipsis.

(2)   Korean
       (ney-ka)   sakwa   mek-ess-e?
       (you-NOM)   apple   eat-PAST-Q
       'Did you eat the apple?'

Although English is not a pro-drop language, so any omission of an argument is not permissible, subject ellipsis occurs quite frequently in informal contexts. In English, in addition, -s¬ is only one inflectional affix that has subject-verb agreement information: third person singular. Thus, the assumption that an informative verbal inflection permits subject ellipsis is, again, not viable.

Subject ellipsis in English occurs in both written and spoken contexts. The written contexts include various forms of informal communication such as diaries, text messages, and e-mails, among which subject ellipsis in diaries as in (3) is the most studied, thus the subject ellipsis in written contexts is often called as 'diary drop'. Subject ellipsis in colloquial spoken contexts as in (4), on the contrary, has not been studied much by researchers even though it occurs quite frequently in everyday conversations.

(3)   Ø[1]   May drive to Paris with him.
       (from The Unabridged Journals of Sylvia Plath: 127)
(4)   A: Have you ever seen Tom lately?
       B: Ø Saw him in front of the library yesterday.

---

[1] Ø is used to mark the omitted subject.

Zwicky & Pullum (1983b) and Weir (2007) tried to account for this subject ellipsis in spoken contexts (SESC) within morphological and/or phonological perspectives, but this paper aims to analyze SESC within the Sign-Based Construction Grammar (SBCG) in order to describe more accurately the syntactic and pragmatic environment for the ellipsis.

2.   Subject ellipsis in English
2.1   Semantic and pragmatic aspects

The ellipsis of a subject is not a random phenomenon; only a subject recoverable from the context can be omitted. Rizzi's (1986, 1990) Empty Category Principle (ECP) in (5) (as cited in Haegeman, 2000:137) need to be satisfied by an empty category such as an omitted subject:

(5)   *ECP (i): formal licensing*
       An empty category must be governed by an appropriate head.
       ECP (ii): identification
       An empty category must be chain-connected to an antecedent.

Nariyama (2004) explains the recoverability of an omitted subject more clearly that "[s]ubject ellipsis occurs when the subject is recoverable by virtue of information contained elsewhere in the context" with Grice's (1975) Maxims of Conversation. Maxim of Relevance ensures that the omitted subject is related to the context and can be recovered within it. Also, after analyzing a spoken corpora of Australian English, Nariyama presents four triggers for subject ellipsis: anaphoric deletion relying on linguistic context, deixis relying on situational context, dummy subject, and/or conventional expressions. She adds that "ellipsis in general plays a major part in the organization of conversation and narrative for reasons of economy, cohesion, and style."

Kim & Jung (2006) assume two constraints on subject ellipsis: the ambiguity and contrast constraints. The ambiguity constraint ensures that only a recoverable subject can be deleted, and the contrast constraint prevents subject ellipsis when there is a contrastive focus on the subject. Contrast can be caused either by the discourse itself or by the intention of the speaker. When the contrast is aroused by the discourse, the subject cannot be omitted, as shown in (6). If the contrast relies upon the speaker's intention, however, subject omission is also dependent upon the speaker's intention, as presented in (7) (from Kim & Jung: 103).

(6)   A: My father likes hiking.
        B: My father likes fishing.
(7)   John: Good morning, Tom. How are you?
        Tom: Fine. And you?
        John: a. I'm a little busy.
              b. (?) Ø A little busy.

2.2   Structural aspects
2.2.1   Subject ellipsis in spoken contexts (SESC)

Subject ellipsis does not occur unconditionally even in spoken contexts, where varied ungrammatical sentences can be perceived as acceptable; rather, the environment which permits subject ellipsis is quite regulated. Nariyama (2004) accounts for the constraints on this environment after carefully analyzing sentences without a subject in Australian English. First, only the subject of a matrix clause can be omitted. Omission of subjects in the subordinate clauses lead to unacceptability even when the omitted subject is the same as the subject of the root clause, as shown in (8).

(8)   *I have never thought that Ø am older than him.

The second constraint is that auxiliary-subject inversion inhibits subject ellipsis as presented in (9a). Note that auxiliary verbs be, do, and have can be dropped freely as in (9b), and their omission permits subject ellipsis, as exemplified in (9c).

(9)   a. *Are Ø going home?
        b. You going home?
        c. Ø Going home?

Also, she claims that any subject to be omitted should be in the sentence-initial position, but this analysis turns out to be inaccurate, which will be accounted for further later in this section.

Along with the structural constraints presented by Nariyama, Weir (2008, 2012) presents more conditions on the subject ellipsis[2]. First, subjects preceding a verb with clitic form cannot be omitted as presented in (10a), but when the verb is cliticized, subject ellipsis is possible as in (10b). If an auxiliary verb is contracted with -n't, subject ellipsis is also possible as exemplified in (11).

(10)   a. *Ø Am thinking of watching a movie tonight.
         b. Ø 'M thinking of watching a movie tonight.
(11)   Ø Wouldn't go watch the movie tonight.

Second, focused subjects cannot be dropped as shown in (12):

(12)   A: Who's going first?
         B: *Ø 'M going first.

Finally, subject generally cannot be omitted when there is preposed material as in (13):

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[2] Many of his constraints are based on the works of Schmerling (1973), Napoli (1982), Zwicky & Pullum (1983b), and Akmajian *et el*. (1995).

(13)   *Today, Ø won't fail the test again.

All of the structural constraints provided here are considered valid except that subject ellipsis is limited to the sentence-initial position; Bailey's (2012: 26) analysis on Northeast England English and my research on Corpus of Contemporary American English (COCA) and British National Corpus (BNC) provide the counter-examples, as provided in (14)-(15):

(14)   a. hei can't bear to see his own blood but Øj only happened
          once (Bailey)
       b. I think someonei's got it and Øj probably be executive
          housing (Bailey)
(15)   a. … hei got a job at Berkeley, and Øj seemed he was
          launched on a- on a brilliant career in mathematics.
          (COCA: ABC Nightline)
       b. This onei's been patched. But Øj doesn't matter how
          high a fence is if you can cut holes in it. (COCA: Fox
          Hannity)
       c. … for men to care for women in relation to more intimate
          tasks is variable and Ø seems that gender taboos are less
          likely to apply… (BNC: CFEW)

Nariyama (2004: 259-262) also found subject ellipsis in non-sentence-initial positions in colloquial Australian English as in (16):

(16)   a. Maybe, (you) have really gone to Spain, which is sad.
       b. Obviously, (he) doesn't find me attractive.
       c. Probably (I) have to take your wisdoms out.

These data indicate that subject ellipsis is not restricted to the sentence-

initial subjects, and it can be assumed that this phenomenon is not dependent upon dialects as it is observed in all of British, American, and Australian dialects. SESC is possible when the subject follows a conjunction or a sentential adjunct, and even when it is in the subject of the second clause.

2.2.2   Diary drop

Unlike SESC, diary drop, subject ellipsis in written contexts, have been studied by various linguists and auxiliary verbs be, do, and have and other grammatical components such as the do not drop in written contexts, thus the structural conditions for diary drop are clearly analyzed. Although this paper focuses in SESC, the structural conditions for diary drop need to be accounted for since it is related to SESC.

According to Haegeman & Ihsane (1999) and Haegeman (2007), the conditions for diary drop are similar to those for SESC. First of all, only a subject of the matrix clause can be dropped. Auxiliary-verb inversion also prevents subject ellipsis in written contexts. It is interesting that just like SESC, topicalization, fronting of arguments, prohibits dairy drop while sentential adjuncts do not.

Different conditions for dairy drop are two-fold: subject ellipsis after certain preposed materials and possibility of subject ellipsis in subordinate clause. Certain preposed materials, especially time expressions such as today, tomorrow, and tonight, prohibits subject ellipsis in SESC, whereas the following subject can be omitted in diary drop, as presented in (17):

(17)   Tomorrow Ø won't at home.

Also, certain writers permit subject ellipsis in subordinate clauses, and this ellipsis in embedded clauses is quite frequent in British dialects while it is thought to be ungrammatical and unacceptable in other dialects,

which makes this phenomenon dialectal, or marginal. Example sentences in (18) are from a published diary, Journals 1954-1958 by Allen Ginsberg, and sentences in (19) are from a fictional diary, Bridget Jones's Dairy by Helen Fielding, from Haegeman & Ihsane (1999: 128):

(18)   a. Wonder if Ø ever make it so?
        b. also said Ø should make girls
        c. When Ø saw him at noon, he'd been in North Beach all
          last night
(19)   a. was worried that Ø might split
        b. Think Ø will cross that last bit out as Ø contains mild
          accusation
        c. cannot believe Ø have not realised this before

3.   Previous analyses

Although SESC is not a much studied area, plenty of researchers have tried to analyze diary drop in various accounts, which may be related to analysis on SESC. Therefore, two major syntactic analyses on diary drop are introduced here first in order to foster the understating of analyses for SESC.

3.1   Diary drop
3.1.1   Diary drop as topic drop

The topic of a sentence may be omitted in many languages such as German, Chinese, standard Dutch, and Korean, as exemplified in (20):

(20)   German (Haegeman, 2007:101)
        a. Ich habe das schon   gesehen.
          I   have that already seen.

'I have already seen that.'
b. Ø Habe das schon gesehen.
c. *Das habe Ø schon gesehen.

Many Generative Grammarians such as Raposo (1986; as cited in Haegeman, 2007:100) analyzed topic drop within a movement approach: "the null topic is merged in an argument position and is moved to Spec/Top(ic)P in the left periphery of the matrix clause." This topic drop is quite frequent in various languages; thus a lot of researchers have considered diary drop as a type of topic drop.

Moreover, topic drop approach can account why subjects in embedded clauses cannot be omitted: because the movement of the topic is restricted within the main clause. Also, it can explain why topicalization inhibits subject ellipsis as in (20c): since the topicalized element already filled the role of the topic. Haegeman (2007), however, claims that there are phenomena that topic drop cannot explain. First, dummy subjects such as it and there, which cannot be a topic of a sentence, also can be omitted in diary drop. Second, diary drop is limited to the omission of a subject while topic drop can be adapted to an object, also.

3.1.2 A phase-based approach to diary drop

Rizzi (2006) accounts for diary drop with a phase-based approach to spell-out, in which "as soon as a Phase category is formed, the complement of the Phase head is sent to spell-out (Haegeman, 2007)" and "the edge of the Root Phase is no sent to Spell-out at all (Rizzi, 2006)." Rizzi claims that the phase-based approach can explain why the C(omplementizer) is not spelled out in the matrix clauses, and also why a subject is not spelled out in diary drop: Since the C and the subject becomes the phase edges of CP and Subj(ect)P respectively, which are not spelled out. The concept of subject phrase (SubjP) is introduced as "a structural zone connecting the CP and the IP systems (Rizzi &

Shlonsky, 2007)" whose head is a functional head Subj, and its hierarchy can be described as in (21):

(21)   CP > SubjP > TP (Haegeman, 2007:111)

Rizzi assumes that the sentential subject, Subj of the matrix clause moves to the Spec position of SubjP because it is the highest phase head in diary drop, and thus only the complement of Subj is spelled out.
Within this approach, diary drop after an adjunct is explained as the adjunct is between SubjP and TP, not higher than SubjP, as presented in (22) and (23).

(22)   SubjP > Adjunct > TP (Haegeman, 2007:111)
(23)   [SubjP (I) [TP today [TP I met the guy who blackmailed
        me]]]

However, the concepts of movement of a sentential subject and subject phrase itself is abstract; their evidence on its existence is not as strong to hold the abstract category and movement. Also, In diary drops where subjects in the matrix clauses are omitted, CP still remains above the SubjP according to their perspective, which means that Subj is not the highest phase head of a sentence. Assuming that only in diary contexts Subj become the highest phase head is not consistent with their analysis.

3.2   SESC as left-edge deletion

Zwicky & Pullum (1983b) assume that SESC is a morpho-phonological phenomenon, and their critical evidence is the pronunciation of cliticized 's, as provided in (24) from Zwicky & Pullum (1983b:156).

(24)   a. (It)'s really cold here.
        b. (There)'s really no hope.

The pronunciation of 's in (24a) is [s] while 's in (24b) is pronounced as [z]. This difference in pronunciation is caused by progressive voice assimilation, which is a phonological phenomenon. These examples show that there is a strong possibility that the subjects are deleted after the voice assimilation. They assume that syntactic rules can feed or bleed morpho-phonological ones, not vice versa, thus if SESC is considered as a syntactic rule, it becomes the counter-example for their assumption about syntax-morphophonology interface.

Napoli (1982) and Weir (2008, 2012) follows Zwicky & Pullum's hypothesis, and assume SESC as a phonological phenomenon. Napoli asserts that there is a phonological rule that deletes the 'prehead', "the part preceding the first main accent". Weir develops this viewpoint with an Optimality Theory (OT) approach and suggest that SESC is a result of 'left-edge deletion'. Constraints motivating the left-edge deletion are presented in (25)-(27), as cited in Weir (2012: 111):

(25) *Prosodic hierarchy* (Selkirk, 1978 et seq.)
　　　Utterance
　　　Intonational Phrase (ι)
　　　Phonological Phrase (φ)
　　　Prosodic Word (ω)
　　　Foot (Ft)
　　　Syllable (σ)

(26) a. STRONGSTART (Selkirk 2011)
　　　　　A prosodic constituent optimally begins with a leftmost daughter constituent which is not lower in the prosodic hierarchy than the constituent that immediately follows. (Assign a violation for each prosodic constituent which does not satisfy this condition.)
　　　b. MATCH (ω, Lex) (after Elfner 2011, Selkirk 1995, 2011)
　　　　　Every phonological word must contain an instance of a

lexical word. (Assign a violation for each phonological word which does not satisfy this condition.)

(27)   The ALIGN(Foc, φ) constraint
The left and right edges of a syntactically Focus-marked constituent to be aligned with the left and right edges of a Phonological Phrase.

(28)   Align (Foc, φ) >> STRONGSTART, MATCH (ω, Lex)
>> MAX[3] >> MATCH (S[yntax], P[honology])[4]

These constraints compete with each other within the hierarchy given in (28), and the optimal candidate becomes the output, which is normally a sentence whose prehead is deleted. More detailed constraints, however, are required to explain the gradual nature of the left-edge deletion, thus Weir subdivides the STRONGSTART constraint into three as in (29) with the hierarchy of (30).

(29) a. STRONGSTART-ι
Assign a violation to any ι whose leftmost daughter is lower in the prosodic hierarchy than the constituent immediately following.

b. STRONGSTART-φ
Assign a violation to any φ whose leftmost daughter is lower in the prosodic hierarchy than the constituent immediately following.

c. STRONGSTART-ω
Assign a violation to any ω whose leftmost daughter is lower in the prosodic hierarchy than the constituent immediately following.

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[3] The constraint MAX is that every segment in the input must be in accordance with a segment in the output.
[4] The constraint MATCH(S, P) is Weir's (2012) constraint to match syntactic structure to phonological structure in which three constraints MATCH(Clause, ι), MATCH(Phrase, φ), and MATCH(Word, ω) are coalesced.

(30) STRONGSTART-ɩ >> STRONGSTART -φ >> STRONGSTART -ω

This left-edge deletion approach is viable in that it can explain SESC and other omissions of phonologically and semantically 'weak' components quite well that Weir even tries to analyze diary drop within this approach, which turns out to be insufficient. However, it bears several problems concerning SESC. First, it cannot account for why SESC is possible after conjuncts such as and and but or sentential adjuncts such as tomorrow and probably. Sentences like (14) to (16) cannot be produced as the optimal output within this approach. Also, left-edge deletion cannot restrict omission of unrecoverable subjects. Especially, third-person pronouns cannot be omitted if there is no antecedent preceding the subject to be omitted or at least within the sentence, or it is recoverable from the context. Left-edge deletion, however, can produce subjectless sentences even when the subject is not recoverable as in (31):

(31)   A: (At the beginning of conversation) *Ø isn't coming
                tonight.
          B: Who isn't coming tonight?

4.   A Sign-Based Construction Grammar (SBCG) Approach

Unlike deletion of other weak syllables such as auxiliary verbs be, do, and have and definite article the, SESC can occur in the latter clause of the conjoined clauses in a sentence as presented in (14) to (15). SESC is also possible after a sentential adjunct as demonstrated in (16). These facts indicate that the SESC is a distinct phenomenon from other weak syllable drops, and it occurs in more syntactically conditioned environments than other weak syllable drops. Rather, SESC is more similar to syntactic ellipsis in that it is syntactically regulated, and is possible when the element to be elided is mentioned or recoverable in the

context.

Also, syntactic analysis on SESC has more benefit, for it can be used to account for the similar phenomenon in other register, diary drop. SESC and diary drop have almost the same syntactic restraints, which indicates that they are actually related constructions. Moreover, there exists another quite similar syntactic construction that is regarded grammatical in any register: the imperatives. Subject ellipsis in imperative sentences is default, but the elided subject can be restored as in (32) just like SESC and diary drop:

(32) a. Be quiet, please.
      b. You be quiet, please.
      c. Everyone be quiet, please.

(32c) also shows that the imperatives can take other subjects than the second-person pronoun you, which is the default omitted subject for imperative sentences, but it is noteworthy that everyone in (32c) may regarded either as a vocative or a second-person noun. Furthermore, only the subject of a matrix clause can be omitted in the imperatives. Another construction that is related to SESC is subjectless tagged sentences like (33) from Kay (2002:453), which Kay proves to be unexplainable with movement and empty category approach:

(33) a. Fooled us, didn't they/she.
      b. Fooled them, didn't we/he?
      c. Fooled you! [Interpretation: 'Fooled you, didn't I!']
      d. Fooled me! [Interpretation: 'Fooled me, didn't you!']

Zwicky & Pullum's (1983b) example sentences in (24) still appear to be problematic if SESC is analyzed syntactically. We will come back to this matter later in section 4.2. First, this complex phenomenon of SESC will be explained with a Sign-Based Construction Grammar (SBCG)

approach (Boas & Sag, 2012) to analyze its syntactic environmental constraints more clearly.

4.1   Constructional analysis

Sign-Based Construction Grammar (SBCG) introduced by Boas & Sag (2012) is a blended framework where ideas from Head-Driven Phrase Structure Grammar (HPSG) (Pollard & Sag, 1994) and Berkeley Construction Grammar (BCG) are conjoined. Feature structures play a significant role in SBCG, and SBCG employs semantic, pragmatic, phonological, and morphological components altogether as well as syntactic ones, just as HPSG. Therefore, a construction with complex constraints like SESC can be analyzed far more clearly with SBCG, than any other approaches.

Basically, the construction for SESC can be described as in (34):

(34)   *SESC-cxt (preliminary version)*

$$
\begin{bmatrix}
\text{MTR} & [\text{SYN} & Y![\text{SUBJ} & <\,>]] \\
\text{DTRS} & \left\langle X: \begin{bmatrix} \text{SYN} & Y: \begin{bmatrix} \text{CAT} & \begin{bmatrix} \text{VF} & fin \\ \text{INV} & - \\ \text{AUX} & - \\ \text{IC} & + \end{bmatrix} \\ \text{VAL} & \begin{bmatrix} \text{SUBJ} & <Z_i> \\ \text{COMPS} & <> \end{bmatrix} \\ \text{SLASH} & <> \end{bmatrix} \\ \text{SEM} & [\text{CONTEXT} \,|\, \text{C-INDICES} \quad i\,] \end{bmatrix} \right\rangle
\end{bmatrix}
$$

The feature values [MTR | SYN $Y![$SUBJ $<\,>]]$ and [DTRS $< Y:[$SUBJ $< Z_i >]$ indicates that the sentence is constructed without a subject; the only daughter X requires a specifier, subject, but the mother is [SUBJ $<\,>$], which means a subject is no longer required in this construction. The daughter X must be a finite as restricted in [VF   *fin*], and [INV   −] shows

that there is no subject-verb inversion within the daughter. [AUX −] is used to specify that the daughter must not involve any auxiliary verbs while it must be a main clause as shown in [IC +]. The daughter requires a specifier Z_i as presented in [SUBJ $<Z_i>$], which is not satisfied as mentioned above; note that it shares the index i with [SEM | CONTEXT | C-INDICES i]. There exist three types of C-INDICES: *speaker* (1st person), *hearer* (2nd person), and *addressee* (3rd person), thus the unrealized subject Z_i must be in the context, which can restrict the pragmatic environment SESC can occur. Also, the feature SLASH is empty, which means there is no topicalized element in the daughter.

This construction seems to be idiosyncratic, but there are other constructions with similar constraints as mentioned above: dairy drop, imperatives, and subjectless tagged sentences. It is assumed that all of these similar constructions are subcategorized under *subject-ellipsis-cxt*, which falls under *nonheaed-phrase* as shown in (35):

(35) Phrase hierarchy
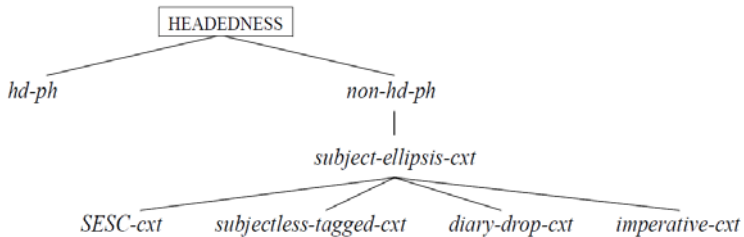
In SBCG, a construction type inherits its mother construction type in the hierarchy, so when constraints of subject-ellipsis-cxt which is shared among its sub-constructions is described, the constraints for SESC provided in (34) need to be reanalyzed.

(36) *subject-ellipsis-cxt* (↑ *non-hd-ph*)

$$
\begin{bmatrix}
\text{MTR} & [\text{SYN} \quad Y![\text{SUBJ} \quad <\,>]] \\
\text{DTRS} & \left\langle X: \begin{bmatrix} \text{SYN} \quad Y: \begin{bmatrix} \text{CAT} & \begin{bmatrix} verb \\ \text{INV} 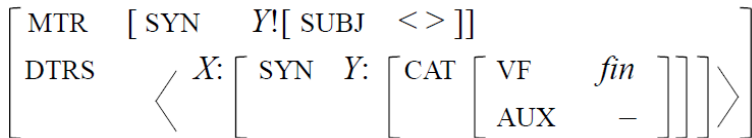\quad - \\ \text{IC} \quad + \end{bmatrix} \\ \text{VAL} & \begin{bmatrix} \text{SUBJ} \quad <Z_i> \\ \text{COMPS} <\,> \end{bmatrix} \\ \text{SLASH} \quad <\,> \end{bmatrix} \\ \text{SEM} \quad [\,\text{CONTEXT} \mid \text{C-INDICES} \quad i\,] \end{bmatrix} \right\rangle
\end{bmatrix}
$$
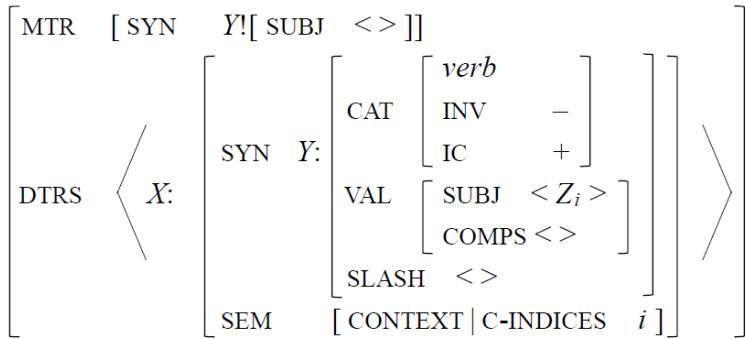
Subject ellipsis of all the sub-constructions in *subject-ellipsis-cxt* is restricted to a matrix clause without subject-auxiliary inversion, which is described as [INV −] and [IC +] in the daughter. Topicalization is prevented with [SLASH < >], and the unrealized subject must share the same index with someone in the context as shown as [SUBJ Z_i] and [CONTEXT | C-INDICES i]. Then, only the constraints that are not described in *subject-ellipsis-cxt* should be included in *SESC-cxt*, since it inherits the constraint of *subject-ellipsis-cxt* as default. The description for *SESC-cxt* becomes quite compact as in (37):

(37) *SESC-cxt* (↑ *subject-ellipsis-cxt*)

$$
\begin{bmatrix}
\text{MTR} & [\text{SYN} \quad Y![\text{SUBJ} \quad <\,>]] \\
\text{DTRS} & \left\langle X: \begin{bmatrix} \text{SYN} \quad Y: \begin{bmatrix} \text{CAT} \begin{bmatrix} \text{VF} & fin \\ \text{AUX} & - \end{bmatrix} \end{bmatrix} \end{bmatrix} \right\rangle
\end{bmatrix}
$$

4.2   Cliticization

Now let us turn back to the problem of syntactic analyzation on subject ellipsis in cliticized forms that Zwicky & Pullum (1983b) raised, as presented again in (38):

(38)   a. (It)'s really cold here.
        b. (There)'s really no hope.

These examples are problematic for syntactic analysis on SESC since the different pronunciations of 's in each sentence shows that the subjects are deleted after a phonological process, progressive voice assimilation occurs.
Deletion of these contracted forms, however, are not SESCs. It is not an omission of a syntactic element; rather, it is morphological or phonological deletion of a weak syllable. Spencer (1991) and Sadler (1998) argue that there exist two distinct forms of reduced auxiliaries. Let us look at Sadler's (1998:1-2) examples in (39) and (40):
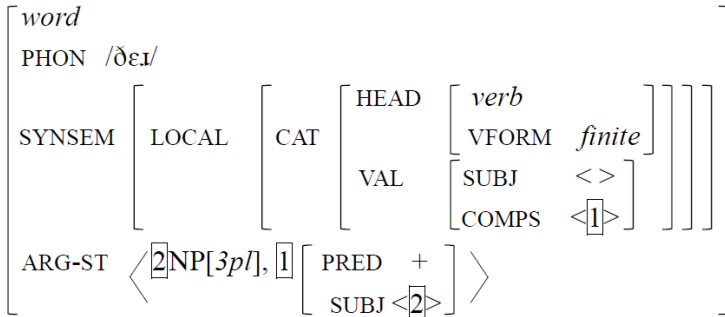
(39)   a. Sue'll */l/, /əl/ be playing with it all day long.
        b. John and you'll */l/, /əl/ go home.
        c. The tree'd */d/, /əd/ been burnt.
        d. John and he's */d/, /əd/ been sitting in the living room.
        e. The foci've */v/, /əv/ been changed.
        f. You and I've */v/, /əv/ tried to help her.
(40)   a. You'll /l/, */əl/ be able to go home at two o'clock.
        b. I've /v/, */əv/ taken several tablets.
        c. He'd /d/, */əd/ been waiting for you.

When an auxiliary is contracted after an NP or conjoined pronouns as in (39), it becomes syllabic, whereas it is reduced after a pronoun, it becomes a single consonant form as in (40). Spencer and Sadler treats the syllabic contracted auxiliaries as clitics, but treats the non-syllabic ones as affixes attached to the preceding pronouns. This differentiation indicates that the contracted forms in (38) are also affixes. Thus, the subject deletion in (38) is not actually a subject ellipsis; it is deletion of weak syllables just like the deletion of the and pro in pro'fessor. The fact that this phenomenon cannot be found in the second clause of a conjoined
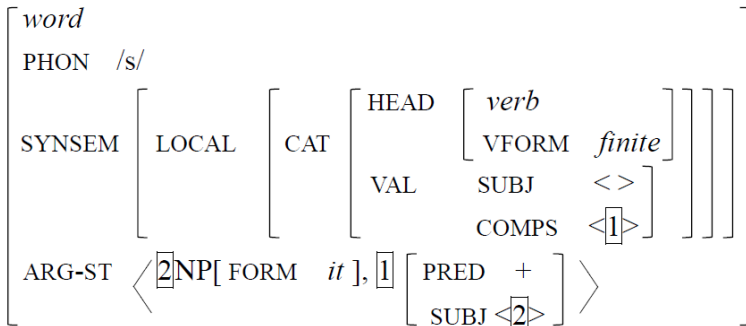
sentence unlike SESC supports this view.

Then, how can this phenomenon be dealt with SBCG? Bender & Sag (2001) follows Spencer and Sadler's assumption, and claim that the pronoun and the affix of contracted auxiliaries forms a new word in the lexicon. One example of they're is provided in (41):

(41)   Lexical description for *they're* (Bender & Sag, 2001: 22)

$$
\begin{bmatrix}
word \\
\text{PHON} \quad /\eth\varepsilon\textroundcap/ \\
\text{SYNSEM} \begin{bmatrix} \text{LOCAL} \begin{bmatrix} \text{CAT} \begin{bmatrix} \text{HEAD} \begin{bmatrix} verb \\ \text{VFORM} \quad finite \end{bmatrix} \\ \text{VAL} \begin{bmatrix} \text{SUBJ} \quad <\,> \\ \text{COMPS} \quad \langle\boxed{1}\rangle \end{bmatrix} \end{bmatrix} \end{bmatrix} \end{bmatrix} \\
\text{ARG-ST} \quad \left\langle \boxed{2}\text{NP}[3pl], \boxed{1}\begin{bmatrix} \text{PRED} \quad + \\ \text{SUBJ} <\boxed{2}> \end{bmatrix} \right\rangle
\end{bmatrix}
$$

It's and *there's* in (38) may be analyzed in almost the same way as (41). Also, assuming that the root morpheme of the subject is deleted, new words with contracted auxiliary affixes can be introduced; note that there need to be two different words for *(it)'s* [s] and *'s* [z] of other pronouns respectively. Here, a example lexical description for *(it)'s* is provided in (42):

(42) Lexical description for *(it)'s*

$$
\begin{bmatrix}
word \\
\text{PHON} \quad /s/ \\
\text{SYNSEM} \begin{bmatrix} \text{LOCAL} \begin{bmatrix} \text{CAT} \begin{bmatrix} \text{HEAD} \begin{bmatrix} verb \\ \text{VFORM} \quad finite \end{bmatrix} \\ \text{VAL} \begin{bmatrix} \text{SUBJ} \quad <\,> \\ \text{COMPS} \quad \langle\boxed{1}\rangle \end{bmatrix} \end{bmatrix} \end{bmatrix} \end{bmatrix} \\
\text{ARG-ST} \quad \left\langle \boxed{2}\text{NP}[\text{FORM} \quad it\,], \boxed{1}\begin{bmatrix} \text{PRED} \quad + \\ \text{SUBJ} <\boxed{2}> \end{bmatrix} \right\rangle
\end{bmatrix}
$$

It needs to be more refined, but the point here is clear: the deletion of the root morpheme in a word where a subject pronoun is attached with a reduced auxiliary also can be analyzed within the SBCG approach, although it is not a case of SESC and may be a morphological or phonological phenomenon.

5.   Conclusion and discussion

In this paper, I have shown that subject ellipsis in spoken context (SESC) may not be a morpho-phonological phenomenon as former analyses claim to be. The possibility of subject omission in the second matrix clause of a conjoined sentence plays a significant role in defining it as a syntactic phenomenon. Also, it is found that deletion of the subject preceding the contracted *'s* is not SESC, for the contracted auxiliary is an affix, which makes it deletion of a morphological unit, not of a syntactic unit. However, the SBCG analysis of SESC is not as complete as it seems to be; it needs to be more refined as it cannot disallow precedence of certain adjuncts, which do not permit SESC, such as time expressions. Also, the fact the focus placed upon the subject inhibits SESC is not reflected in the SBCG construction description. I hope that more improvement will be on the SBCG descriptions of SESC constructions in the next paper.

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