DELETION OPERATIONS IN ENGLISH

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Abstract

Deletion operations in English are a consequence of transformation in generative grammar. The paper is developed within the framework provided by generative grammar which presents us with a set of rules that will account for the well-formed expressions of a natural language. The aim is to explain the transformations that occur in deep structure that yield the surface structure sentences that we see, read and use in the functional context. It is hoped that a good knowledge of the underlying deep structure of sentences would result in a better and deeper understanding of language and improve a speaker's competence and performance in language use and study. The paper considers deletion operations in the areas of Wh-Deletion, Agent Deletion, Equi-NP Deletion and For Deletion, Deletion under Identity, Simple Element Deletion, Complex Element Deletion, and Multiple Element Deletion. It is further hoped that an understanding of the rules of grammar and indeed the rules of deletion operations examined in this paper will help the learner of English predict correctly which expressions are grammatical and acceptable and also help the learner explain why certain expressions are considered ill-formed and not acceptable in grammar.

Introduction

Language is rule-governed and that is the standpoint of generative grammar. It seeks to help a learner of a language have a good understanding of the language by exposing the learner to the rules of the language that will enhance competence and performance in language use and study. A generative grammar as understood by Chomsky (1965) must be explicit; that is, it must precisely specify the rules of the grammar and their operating conditions. In other words, generative grammar is a theory of competence which is purely psychological because it involves a system of a speaker's unconscious knowledge that underlies a speaker's ability to produce and interpret utterances in a language.

The study of English language does not merely entail having a good knowledge of generative grammar and nothing else – learning English language does not by any means begin and end with structure, but it is important for the learner of the language to have a good knowledge of generative grammar so as to enhance performance.

Wh-Deletion

Wh-deletion is here accounted for as a consequence of wh-relative pronoun being adjoined by WH-MOVEMENT, and thereafter deleted by rule of WH-DELETION when in comp.

Radford (1981) analyses an NP like *the man that I met* as derived thus:

1a   The man [$_s$[$_{comp}$ that][s I met who]] = D – Structure

          WH-MOVEMENT $\longrightarrow$

  b   The man [$_s$[$_{comp}$ *who* that][s I met ____]]= s- structure

          WH – DELETION $\longrightarrow$

  c   The man $_s$[$_{comp}$ that][s I met____]] = surface structure

What transpires here is that met has a wh-relative pronoun object that is adjoined to comp by WH – movement transformation, yielding the structure (1b); thereafter, the WH-DELETION applies to delete *who* in its comp position, giving rise to S- structure (1c). Structure (1b) is the output of the transformation whereas, (1c), is the output of the deletion rules.

Similarly, let us consider a relative clause like the (that) clause in

2.   A firm (that) I think [$_s$ *is* very entertaining]

          In this sentence the verb *is* is in the third person singular and it agrees with a third person singular subject of its clause. Thus, we can assume that the structure (2) is derived from the structure containing a wh-relative pronoun as subject of the embedded clause with *is* as its verb:

3.   A firm (that) I think [s comp[s which is very entertaining]]

The subject of the embedded clause, *which* is a third person singular that is adjoined to the left of the empty comp first and to the left of *that,* and thereafter deleted by WH-DELETION (Radford, 1981).

Agent Deletion

Null realization can also be a consequence of agent deletion in passive constructions in Carrie (2007):

4a.   John bit the apple.

 b. Susan forgave Louis.

 c. The jockey rides the horse

 d. Philip gave the medal to the soldiers

 e. Philip gave the soldier the metal

These pairs are active sentences that can take the suffix –*en* in English which can be attached to verbs to change the structures associated with them. This is called the *passive morpheme.* (5) (a-e) below are the passive equivalents of (4) (a-e) with the optional elements/agents in brackets which shows they can be left out(deleted).

5a.   The apple was bitten (by John)

 b. Louis was forgiven (by Susan)

 c. The horse was ridden (by the Jockey)

 d. The medal was given to the soldier (by Philip)

 e. The Soldier was given the medal (by Philip)

Further examples of null realization as a result of deletion in passive constructions are;

6a.   Innocent gave Sekyeen a present

 b. Sekyeen was given a present _____

7a.   The boss fired Max

 b. Max was fired_____

8a.   The bouncer is ejecting the intruder

 b. The intruder is being ejected _____

Note: The examples in (6-8) are active constructions with their corresponding passive equivalents in the (b) examples with '_____' as the points of null realization/agents deletion.

Akmajian and Heny (1975) examine agent deletion using these examples, with (9) (a-c) as derived from the corresponding sentences (10) (a-c).

9a.   Sam was fired yesterday.
   b. These files will be examined.
   c. The rock was moved.

10a.   Sam was fired *by someone* yesterday.
   b. These files will be examined by *someone*
   c. The rock was moved by *someone (or something)*

It may not be out of place, as Akmajian and Heny put it, that the sentences (9a-c) should be regarded as "reduced" passive sentences, and one might want to claim that such sentence as (9a) is derived from a structure such as following:
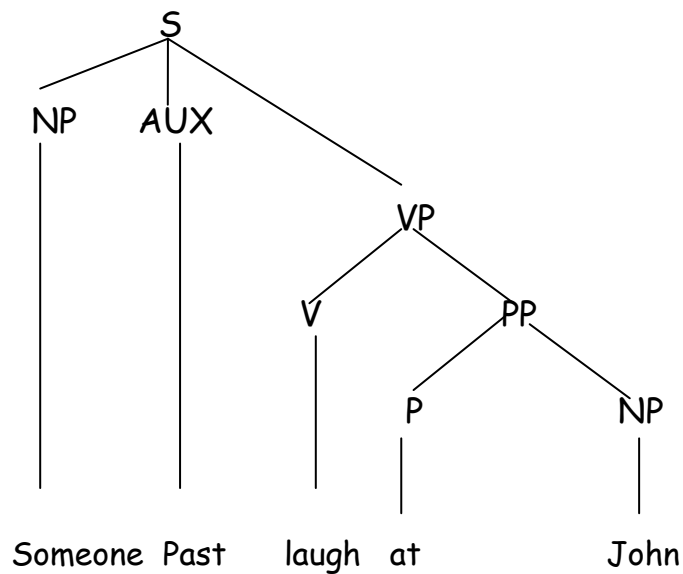
11.
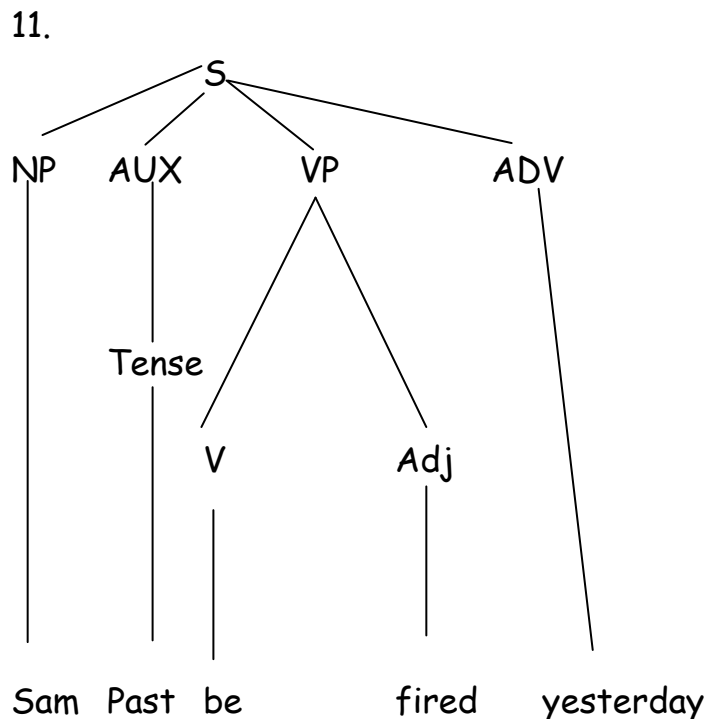
Thus, we could from this analysis, say that all sentences of (9a-c) generated directly by phrase structure (PS rules) which generated sentences so that passive sentences are further reduced.

Let us further consider the sentence:

12.   John was laughed at.

It is difficult to account for how these sentences can be generated directly from a PS-rule such as the one in structure (11). This is because the PS-rule or prepositional phrases, that is, PP⟶P⟶NP generated an NP following a preposition. But in (12) is derived from an underlying passive with structure:

13.


```
                    S
          ┌─────────┼──────────┐
         NP        AUX          VP
          │         │      ┌─────┴─────┐
          │         │      V          PP
          │         │      │      ┌────┴────┐
          │         │      │      P         NP
          │         │      │      │          │
       Someone    Past   laugh    at        John
```
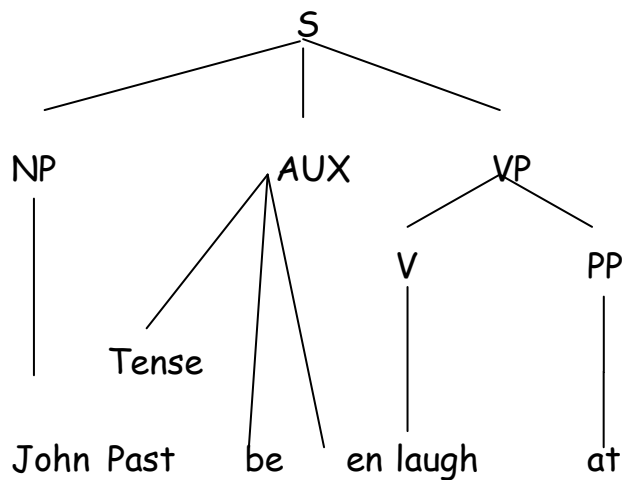
John in (12) derives from an underlying form in which it is the object of the preposition *at.* The passive rule as formulated requires an input structure of the form NP-AUX-V-NP; and so, it will not apply to the tree (13), since only the sentence NP-AUX-V-PP or NP-AUX-VP-NP are isolated. One would therefore have to relax the requirements of the passive, allowing an optional preposition to appear in its emotional description:
(SD): SD(NP-AUX-V-(P)-NP)

Such that it derives the output in the structure (14) as in Akmajian and Heny (1975):

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                        S
           ┌────────────┴──────────┐
                                   VP
    ┌──────┴──────┐        ┌───────┼────────┐
   NP           AUX                          
          ┌──────┴──┐                        
        Tense                V     PP        PP
                                   │        ╱ ╲
                                   P       ╱   ╲
                                          ╱     ╲
    John  Past  be   en   laugh   at   by someone
```

John was laughed at by someone

Applying the *Agent Deletion,* we might formulate one rule as follows:

SD: NP – X – be – en – V- Y $\left\{ \begin{array}{l} \text{by someone} \\ \\ \text{by somebody} \end{array} \right\}$

       1   2   3   4   5   6

SC: 1   2   3   4   5   ø

Structural description (SD) is a term used in transformational grammar to refer to an analysis of terminal string in terms of labeled bracketing. In transformational analysis, the SD identities the input to a transformational rule; that is, which will 'satisfy' or 'meet' the conditions of rule. The terms 'structural analysis' and 'structural index' are also used. Structural change (SC) on the other hand, is a term used in transformational grammar to refer to the operations involved in applying a transformational rule, the change between the input and output phrase-markers. In the transformation of active into passive sentences, for instance, the structural change is a complex one because it involves the reordering of the two noun phrases, and the insertion of new forms of the verb, and the agent marker *by.* This rule

has effect of deleting the agent phrase *by someone (or by something),* in passive construction and it would yield the output diagrammatically such as:

```
                            S
          ┌─────────────────┼─────────────────┐
         NP              AUX                 VP
          │             ╱ │               ╱    ╲
          │            ╱  │              V      PP
          │         Tense │              │       │
          │               │              │       │
        John Past        be         en laugh    at
```

Applying the Affix Hopping rule, the derived structure is, *john was labeled at* Akmaijan and Heny (1975) assert that; ….. If the transformation of Agent Deletion is to the condition that deleted elements must be recoverable and the condition that rules must not change meaning, then this seems to be the most natural way of stating the transformational source for a gentles passive and since the condition on recoverability requires that we do not delete any element unless it can be recovered from the derivation, we postulate that the deleted NP is one of a specific limited set of particular elements: <u>someone</u> or <u>something.</u>

Overall, I am the view that for cases such as (82) above, there must be a transformational source for agent less passives which conforms with recoverability that we do not delete any element unless such an element can be recovered from the derivation, but I still argue that not all deleted elements are recoverable especially when such elements are deleted for grammatical reasons.

Equi-NP Deletion and for Deletion
Deletion here is considered with sentences with Equi-NPs as subject of *for – to* clause (with subjects that are co-referential with the subject of matrix

clause). Let us consider the examples in Akmajian and Heny (300-303) where the rule deletes the subject of a *for to* clause, called *Equi NP Deletion.*

Note: Underlying, these sentences are "American " and as they undergo transformation, the derived sentences are "British".

83a. I would hate for <u>me</u> to find the house empty.

Equi –NP Deletion

b. I would hate for ___ to find the house empty.

84a. We would prefer for us to leave the room now.

Equi – NP deletion

b. We would prefer for ____ to leave the room now.

85a. *Sam* wants very much for *Sam* to college.

Equi- NP Deletion

b.   *Sam* wants very much for _____to go to college.

Applying Equip- NP Deletion (or Equi, for short) in the manner above, it will have the effect of leaving for adjacent to *to,* as in the (b) examples in (83-35). This then gives room for another transformation operation after the Equi, to delete *for* (obligatorily) when it is directly adjacent to <u>to.</u> This transformation, called, for deletion, would have the following effect in the (b) examples in (83-85), but only (83b) is considered here:

86a. I would hate for – to find the house empty.

For deletion

I would hate ____ ____ to find the house empty

I would hate to find the house empty.

Akmajian and Heny (1975) claim that:

> …… Sentences such as <u>I would hate to find the house</u>
> <u>empty</u> , must be interpreted in such a way that the missing
> subject of the complement sentence is co-referential with
> the subject of the matrix sentence.

Both facts are explained at once by a rule of Equi. If (a) Equi deletes the subject of a *For-to* clause when it I co-referential with the subject of the matrix sentence and (b), if it is an obligatory rule, then every sentence like, *I would hate for me to find the house empty,* would undergo the rule.

This is the simple reason why such sentences do not exist at the surface structure level in English. Second, Equi yields the sentence such as *I would hate to find the house empty* if and only if (IFF) the subject of the complement is co-referential with the subject of the matrix – and this explains the reason for the interpretation of the subject of the reduced clause *to find the house empty.* It is important to observe here that the Equi-NP deletes the subject of the lower clause that is co-referential with that of the matrix clause. This is similar to what is found in the deep structure of the 'PRO subject', but in the case of the Equi –NP deletion, a second deletion operation is required to delete the *for* that is adjacent to the preposition *to* in such sentences and as such, an obligatory for-deletion takes effect otherwise the output would be ungrammatical.

Deletion under Identity
This form of null realization involves the deletion of elements under identity. Akmajian and Heny (1975) consider this using elements/constructions in which deleted constituents are recoverable. For instance:
87a. Ellsberg was arrested by the *FBI and Fonda was too.*
　　b. I can't see you tomorrow, but *Sam may.*

What we have here, taken out of context, are meaningless and could not stand alone, but when conjoined with full constructions as used above, are quite common in ordinary speech. The meaning of each elliptical sentence in (87 a-b) is dependent on the meaning of the sentences that precedes it. And so, *Fonda was too and Sam may* are taken to mean that 'Fonda was arrested by the FBI 'and 'Sam may see you tomorrow' respectively. Given the transformation operation in these sentences, we can say that the transformational rules have the power to delete elements, and further

assume that the derivation for the sentences of (87) (a and b) are fully expanded pairs of sentences joined by *and;*

88a. Ellsberg was arrested by the FBI] and [Fonda was arrested by the FBI] too.

   b. Ellsberg was arrested by the FBI and Fonda was too.

89a. [I can't see you tomorrow] but [Sam may see you tomorrow].

   b. I can't see you tomorrow but Sam may.

It is important to note here that the (a) sentence that yields the source for the (b) sentence is itself fully grammatical. Let us propose a transformation of VP- deletion for the example (87) (a):

90.   VP Deletion (Optional)
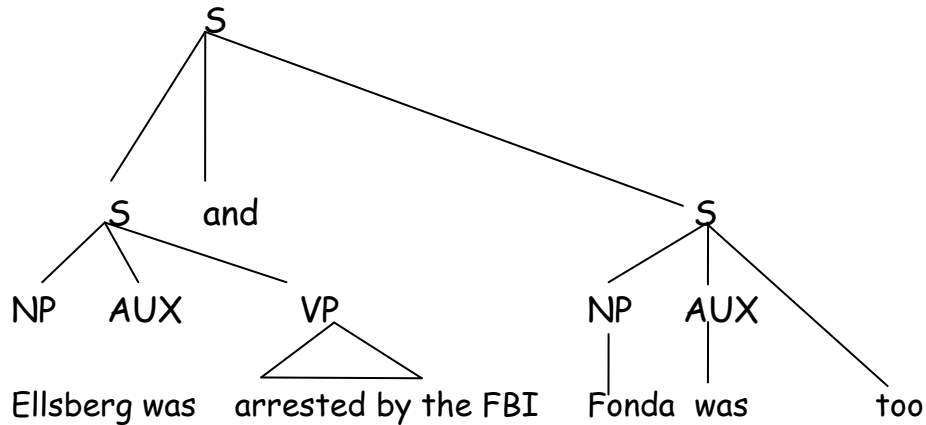   SD: VP-X-VP
             1 2 3
       SC: 1 2 ø
Condition: 1=3

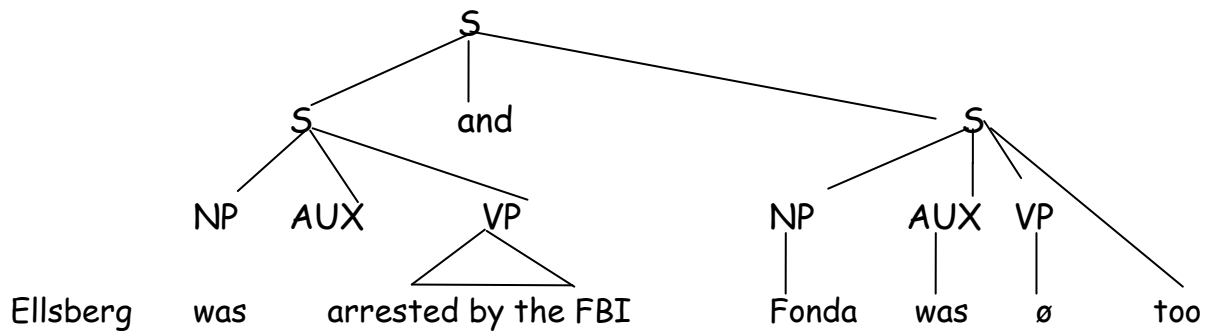This rule has effect of changing the structure in (91) to (92) below:

91.

S

S   and   S

NP   AUX   VP   NP   AUX   too

Ellsberg was   arrested by the FBI   Fonda was
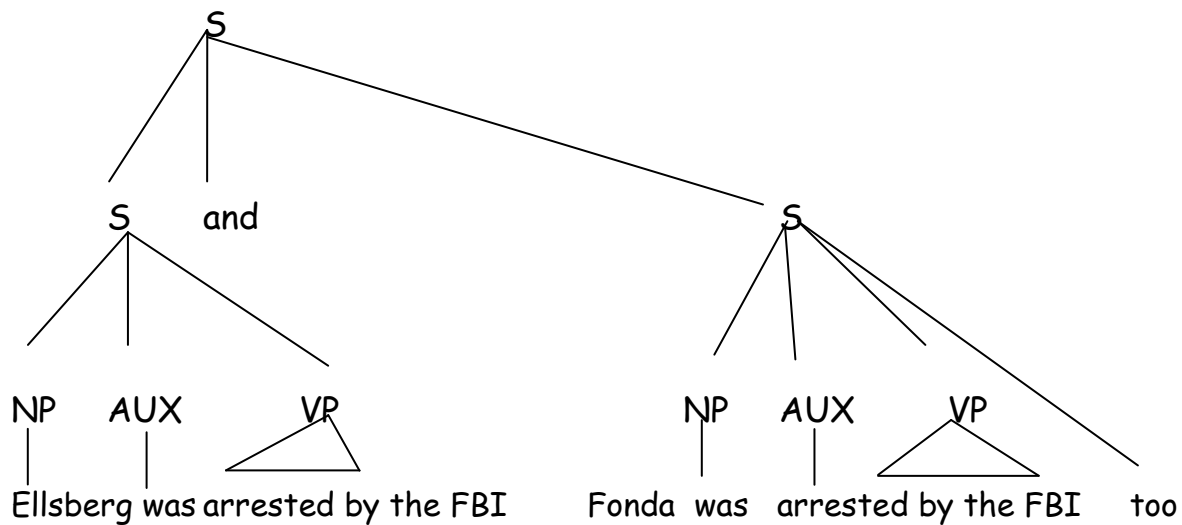
It can also be represented as I propose in (93) showing the deleted VP represented by null (ø)

93.

S

S   and   S

NP   AUX   VP   NP   AUX   VP

Ellsberg   was   arrested by the FBI   Fonda   was   ø   too

What this analysis here implies is that the rule of VP deletion is possible to allow deletion to remove elements form structure freely, prevailing these elements are identical to the preceding structure "left behind", that is, not deleted.

Similarly, Aarts (2001) examines deletion under using the sentences below, marking the points of deletion "_____"

94.   'Will you please leave the room?'
        'Ok I will _____'
95.   'Can you play the piano?
        'Yes I can _____'
96.   'You take chances, Marloure.'
        I get paid to _____'

Aarts accounts for this in (94) and (95), the strings *leave the room* and *play the piano* following the modal verbs *will* and *can* have deleted, while in (96), *take chance* following the infinitival has been left out. These could be said to be instances of special case of Substitution of deleted elements using the *null proform* (that is, nothing). Thus, (94-96) are also instances of VP deletion, deletion under identity.

Simple Element Deletion

This form of null realization is a consequence of the deletion of single component of major constituent such as the deletion of regular V, a copular V, a determiner or head of an NP, a modal, etc. for example;

97.   Bill *plays* drum, Peter [   ] guitar, and Mark [   ] piano.

98.   The boy *was* drunk and the girl [   ] sick with exhaustion.

99.   John *is* a greater hunter and his friend, Ben [   ] a good carpenter.

Complex Element Deletion

This occurs as a result of deletions involving combinatory configurations such as Auxiliaries/Adverbials + V, V + object, verb + preposition/particles + object, (see Tao and Meyer (141). For instance;

Jackendoff (Gapping) in Tao and Meyer (2006):

100.   Simon *quickly dropped* the gold, and jack [   ] diamonds.

101.   John *cleverly ate* the food in the flask, and Mary [   ] the diamonds.

102.   In Argentina the middle and upper classes make 38 percent of the population; in Uruguay [-] 35 percent, as against 14 percent for the EL Salvador of the "fourteen families", 12 percent of Guatemala under military occupation by its own armed forces.

Multiple Elements Deletion

Null realization as a result multiple elements deletion refers to the simultaneous occurrence more than one deletion pattern such as in Johnson (Gapping), in Tao and Meyer (2006):

103:   The faculty brought Scotch to the party and students [   ] beer [   ]

104:   Father St. John Groser, who started his ministry in poplar in 1922, described parents bravely struggling to survive in accommodation in which *a*

density of two persons per room *was* common and [   ] six per room [   ] not unknown.

Conclusion

This paper has examined the internal structure (deep structure) of sentences as deletion operation transformation is carried out. It explains what transpires at the deep structure level of sentences yielding the basic sentences that are used in the functional communicative context. It proves that sentences are generated based on rules as demonstrated in this paper using deletion of elements in sentences as examples to show how transformation in generative grammar operates. The analysis of deletion operations opens the heart of sentences to ensure that the sentences are laid bare before the language learner thereby helping the learner understand, use and make good and acceptable sentences in the functional context. This paper therefore submits that the knowledge of a language determines which groups of words are well-formed constructions and which are not. Thus, apart from knowing the available words in a language, it is important to know the rules for making sentences using the available rules so as to make right judgments in forming sentences.

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