

A Brief Account of the Base Component of Transformational Generative Grammar

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ABSTRACT

Purpose: To briefly introduce base component of transformational generative grammar (TGG). **Method:** The study is mainly descriptive where previous and related studies are reviewed and presented to reach a view about the base component of TGG. **Results:** Base component serves as input to two basic elements of language which are semantic rules and deep structure. Semantic rules give semantic representation. Deep structure leads to transformational rules or transformations which again lead to surface structure. **Conclusions:** Base component has been introduced and modified in different stages under standard theory (ST) and then it has been modified to extended standard theory (EST). Later on and as a recent modification of this theory, it has been introduced in terms of what is known in nowadays as revised extended standard theory (REST).

Keywords: *Base Component, Transformational Generative Grammar*

Theoretically speaking, anything in this world must have a base or in other words a foundation that enables it to stand on or depend on. In language study, however, namely a grammar of language, it is a truth that cannot be denied that any language, mainly its grammar, must have a base component.

Basically and mainly in transformational generative grammar TGG, a base is defined as “part of the STANDARD model of generative grammar”, (Crystal, 1997: p.40). He continues “this term is used in the phrase base component... which is one of the two main divisions of the grammar’s syntactic component”. Greinas (1979: p.22) adds “in generative grammar, the base (component), which generates deep structures, contains: (a) a categorial sub-component which includes both syntagmatic and morphological classes established by syntagmatic grammar... (b) the lexicon, in the generative sense, which supplies indications on the syntactic, semantic, and phonological traits of the morpheme signs”. Yet, component is introduced in terms of TGG as “a level of description of a grammatical model which consists of a syntactic, semantic, and phonological component”, (Bussmann, 1996: p.88). As a whole term, base component is referred to “the part

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dealing with syntax, is divided into two components: the base component and the transformational component”, (Richards, 1992: p.32). Richards goes on defining base component as “the base component generates the basic sentence patterns of a language; the transformational component transforms these into sentences”.

Having introduced some definitions of this term, now we look at the components of the base component and how it operates in language. It is important to notice that many changes and revisions have been made to what is known as base component of TGG and which has been introduced and presented by Chomsky. Put it differently, since the appearance of this theory in the 60s and 70s of the 20th century and onwards base component has passed through several adjustments by Chomsky. According to (Thakur, 2001: p.174) from the point of view of Chomsky, he declares, recently, “the base of the grammar of a language consists of two components: (i) the categorical component and (ii) the lexicon”. He goes on to present in detail what does each one of these components consists of “the categorical component of the base generates a set of abstract prelexical structures” which are then “lexicalized by inserting appropriate items from the lexicon of the concerned language”. Consequently, and according to Chomsky in Thakur’s (ibid) “the output structures... generated by the base known as D-structures” and these D-structures “serve as input to the transformational component of grammar” which basically consists of “a number of movement rules” which in turn “transform D-structures into S-structures”.

Nevertheless, it is worthy to note that Chomsky has modified his interpretation for the base component of language many times which make it to some extent difficult to present directly the base component of TGG. That is to say, in his early works he has introduced base component in his theory known as standard theory (ST) and then it has been modified to extended standard theory (EST). Later on and as a recent modification of this theory he introduced what is known in nowadays as (REST) revised extended standard theory, (International encyclopedia of Linguistics, 2003: pp.235-9).

Similar to the explanation brought by Thakur is Ambrose-Grillet’s one who states according to Chomsky that “the syntactic component consists of ‘two systems of the rules: the base and the transformational component of the syntax... the base component is further divided into two parts: the categorial system and the lexicon’”.

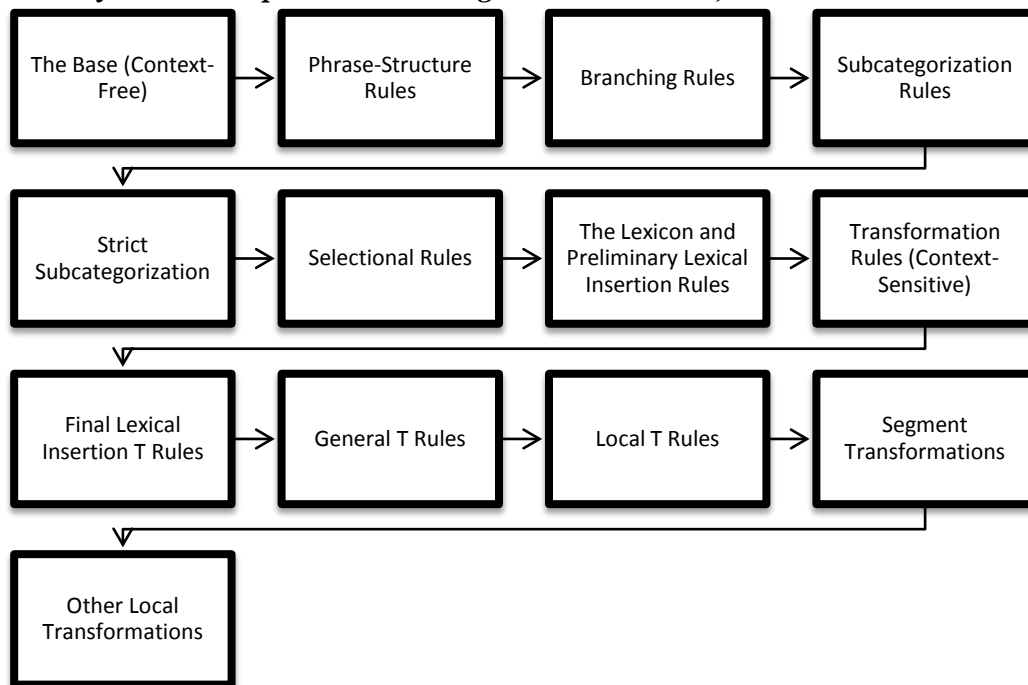
Analytically, Richards (ibid) points out that “the base component consists of a set of rules and a vocabulary list (lexicon) which contains morphemes and idioms”. He continues “the main rules are called phrase structure rules or rewrite rules”. He illustrates the last point by that a rule such as $S \rightarrow NP+VP$ can be analysed or rewritten as consisting of (NP) and (VP) and further the (VP) can be rewritten as a (V) and a (NP), (ibid).

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Other authors tend to present base component of TGG according to what they call as standard model or standard theory of TGG, (Crystal,ibid: p.395 &Busmann, ibid: p.491). According to them base component is presented as on component of the main components of TGG. They claim with reference to Chomsky that TGG consists of three components: syntactic, semantic and phonological. However, it is stated that “a syntactic component, comprising a basic set of phrase-structure rules (sometimes called the BASE component), which together with lexical information provides the deep structure information about sentences, and a set of transformational rules for generating surface structures’.

In a more detailed and comprehensive way, (LaPalombara, 1976: p.328) outlines the total grammar system in general as:

Figure 1: Syntactic component according to LaPalombara, 1976



Semantic component

It “operates on the base component and it influences Subcategorization rules and lexicon, and assigns a semantic interpretation to the deep structure generated by the PS rules”, (ibid, 1976).

Phonological component

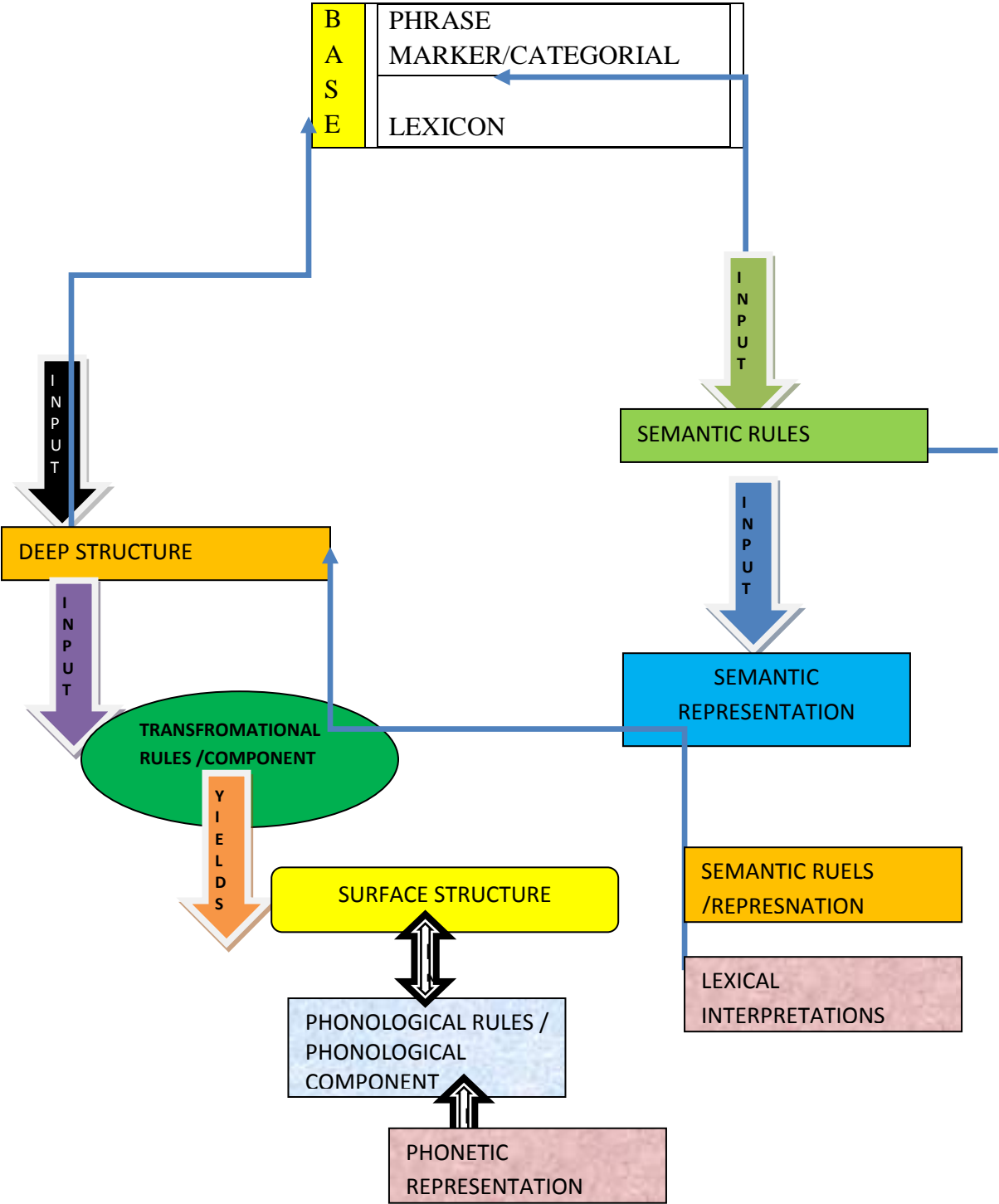
It “contributes phonological feature matrix information to the lexicon and after application of all T rules, it provides a phonological interpretation for the surface structure”, (ibid, 1976).

The following diagram is an attempt to illustrate what have been mentioned above in general. It is hopefully aimed that it illustrates clearly the components of the base component of language

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grammar. It is important to note that this diagram has been drawn with reference to some diagrams available in books such as (Helbig,2007 &LaPalombara, 1976).

Figure 2: Base component



CONCLUSION

To sum up, one can say that base component serves as input to two basic elements of language which are semantic rules and deep structure. Semantic rules give semantic representation. Deep structure leads to transformational rules or transformations which again lead to surface structure. Analytically, language operates at two levels: surface structure level which serves as input to phonological component which serves as input to phonetic component, and deep structure level which serves as input to semantic rules and semantic representation. Regarding lexicon, it has to provide us with various types of information, most importantly how the word is pronounced, how it operates on the phonological rules (permitted spelling or not), what does it mean and lastly but not the least how it is used in a sentence. Additionally, lexicon according to Chomsky's modifications will replace transformational rules of words, for example derived words like payment and marriage were earlier derived from pay and marry "respectively by applying the nominalization transformation", (Thakur, *ibid*: p.175). it is stated "in recent formulations of the theory such nouns are not transformational derived from corresponding verbs but taken from the lexicon which contains not only root words but also their derivational variants obtained by applying the morphological rules of affixation", (*ibid*).

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