УДК 81'367:001.8

APPLICATION OF GENERATIVE PROCEDURES FOR SYNTACTIC STRUCTURES INVESTIGATION (ON THE BASIS OF THE EXISTENTIAL *THERE*)

Polkhovska M.V.,
Zhytomyr Ivan Franko State University

The article highlights the advantages of generative methods in the investigation of syntactic structures and explains the emergence of expletive there in the sentence structure. The adverb there occurs in the sentence as an expletive topic [Spec, CP] preventing the verb from occupying this position especially in the V2 languages. Due to the development of SVO word order as well as the re-interpretation process it starts to function in the canonical [Spec, T] subject position.

Key words: *expletive, CP projection, TP projection, Probe — Goal agreement, interpreted / uninterpreted features.*

У статті висвітлюються переваги залучення генеративних методів під час дослідження синтаксичних утворень, пояснюється процес породження експлетивного there в структурі речення. Адвербіалія there з'являється у мові в позиції експлетивного топіка [Spec, C] для недопущення вживання в ній дієслова в мовах з V2-вимогою. З переходом мови від SOV- до SVO-моделі порядку слів в результаті реінтерпретації експлетивний топік починає вживатися в канонічній позиції підмета [Spec, T].

Ключові слова: *експлетив, CP-проекція, TP-проекція, узгодження «проба — ціль», інтерпретовані та неінтерпретовані ознаки.*

В статье освещаются преимущества использования генеративных методов во время исследования синтаксических образований, объясняется процесс порождения эксплетивного there в структуре предложения. Адвербиалия there появляется в языке в позиции эксплетивного топика [Spec, C] для недопущения употребления в нем глагола в языках с V2-требованием. С переходом языка от SOV- к SVO-модели порядка слов в результате реинтерпретации эксплетивный топик начинает употребляться в канонической позиции подлежащего [Spec, T].

Ключевые слова: *эксплетив, CP-проекция, TP-проекция, согласование «проба — цель», интерпретированные и неинтерпретированные признаки.*

For the last two decades of the 20th century the prime postulate of generative grammar was the hypothesis that every sentence has Deep structure which with the help of transformational rules is converted in speech into Surface structure. However, the publication of the Minimalist Program triggered a drastic reframing of the theoretic framework, namely the refusal from basic terms Deep and Surface structures. The latter was replaced by LF and PF respectively [4, 26].

The **object** of our research is the existential *there*.

The **subject** of our research is the structural peculiarities of the expletive and the processes that determine its generation and functioning.

The main **goal** of the article is to explain the process of expletive emergence in the structure of the sentence with the help of generative procedures.

The language is understood as a cognitive system that accumulates information about sound, meaning and structure. The language generates an expression Exp = <PF, LF> that consists of two levels: *PF* — where Phonentic component provides "instructions" for sensorimotor system about a sound (its categorical features F) and *LF* which gives "instructions" for system of thought [3, 90–91]. The interaction of language and these two external systems is determined by legibility conditions. The expression is legitimate if at the interface level *Exp* comprises solely the elements that give instructions to external systems (sensorimotor and conceptual). All unnecessary elements and derivational steps should be eliminated. The latter are justified only by significant reasons, namely the influence on the sentence interpretation [3, 95].

According to minimalist procedures the Language Faculty consists of two subsystems:

1) the computational system that generates expressions with the help of transformational rules and commands to the system of realization;

2) vocabulary that comprises all lexical information of a language.

There are two systems of linguistic expression realization: *articulatory-perceptual* (which corresponds to Phonetic Form) and *conceptual-intentional* (which corresponds to Logical Form). The language does not possess optional syntactic

processes. The difference between languages lies in the fact that in some languages they occur on the syntactic level (overtly) after Spell-out operation, in others on the interpretational level (covertly) before Spell-out operation. For instance, both English and Chinese allow the basic operation of *wh*-movement in questions. However, English allows this operation overtly and Chinese covertly. This constitutes the deep structure similarity of these languages.

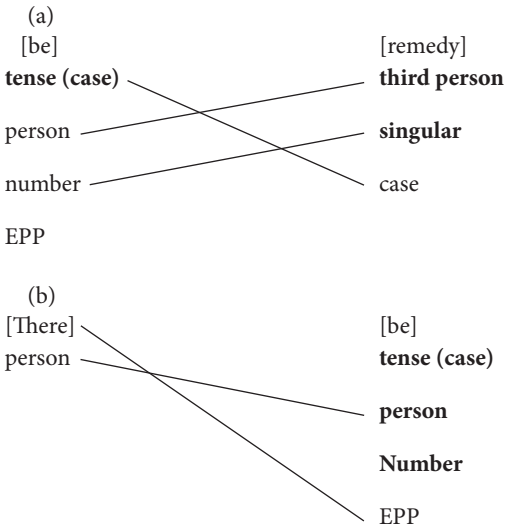
The structure of the English existential sentence, as of any other type of the sentence according to the Minimalist Program splits into functional and lexical projections, each of them having the head, specifier, and complement. The functional projection CP determines the communicative type of the sentence, its mood, and hosts complementizer. The functional projection TP contains a tense marker, and the feature of Extended Projection Principle (EPP) (the grammatical subject position, which is located in [Spec, T]). These features are uninterpreted (nonsemantic, structural), they constitute the core of agreement, case marking and movement operations, have an indirect impact on the interpretation of the expression, and must be checked (agreed and deleted). The verb is generated in the position of the lexical projection VP and moves to the functional projection *v*P to be verbalized.

The main operations, that constitute the transformational system are Merge, Agree and Move. Move is more complex than its subcomponents Merge and Agree, or even the combination of the two, it is a "last resort" operation chosen when nothing else is possible [3, 101; 6, 209]. Movement should be motivated and occurs only for feature-checking. For instance, in any predicative structure according to VP-internal subject hypothesis, NP moves to the position of [Spec, TP] to get case and this movement occurs before Spell-out operation. Agree sets up the conditions for case checking and agreement between a language unit and a categorical feature (F) in a limited domain. A new term of distant agreement has been introduced into linguistic science, namely *Probe-Goal* agreement. From a theoretical perspective, Minimalist considerations lead us to the conclusion that we should restrict the distant agreement to the relation of c-command [9, 281]. To say that constituent X c-commands another constituent Y is (informally) to say that X is no lower than Y in the structure (i.e. either X is higher up in the structure than Y, or the two are at the same height). More formally, a constituent X c-commands its sister constituent Y and any constituent Z that is contained within Y [9, 446].

While considering the structure of the English existential sentence the majority of linguists agree that existential *there* is an expletive, which merges into the structure of the sentence in the position of specifier *vP* of unaccusatives to satisfy the EPP feature, according to which this position must be obligatory filled in English [3; 8].

It is well-known that the derivation of a sentence is endocentric [9, 68]. Initially the NP is generated with interpreted (semantic, inherent) features of person and number and an uninterpreted feature of case (which should be checked before Spell-out operation) [1]. Then the verb *be* appears in the structure of the sentence, it has an interpreted feature of tense and uninterpreted features of person and number. Agreement (the deletion of uninterpreted features) occurs on this derivation level. Uninterpreted features of the verb are *the probe* that seeks *the goal* and finds it in interpreted features of NP, and vice versa, NP is *the probe* that seeks *the goal* to be marked with the case (a):

Agree operation in the existential sentence "There is no remedy".



After agreement with post verbal NP, verb EPP feature is left uninterpreted. The derivation process continues when at some point *there* appears and serves the *goal* to satisfy this *probe* (b). To be *the goal* a constituent must have an uninterpreted feature, in this case the expletive possesses the feature of person. It should be mentioned that the EPP feature can be satisfied with the help of NP movement to the position of [Spec, TP]. This movement is forbidden in the existential sentence because with the NP movement out of the VP scope the former loses the indefinite interpretation.

The ontology of the expletive has been much debated recently. [Spec, TP] position in early Germanic languages of SOV type was the position of *v*P complement movement. The movement is motivated by one of the constituents of this projection (specifier, when the features are checked in NP, or verb, when the features are checked in verb morphology). Feature checking occurs simultaneously with piedpiping operation (like in Modern German) or without it (like in Modern English).

In the development of English T (the probe) used to check its nominal features in the rich verb morphology (goal), the EPP feature was satisfied with the *head piedpiping operation.* As the result of the loss of verb inflections T seeks another goal for nominal features checking. The language is transformed from the language that uses *head piedpiping* operation, to the language which uses *spec piedpiping* operation because in this case the movement is triggered by NP in [Spec,*v*P]. The question arises: Why does the expletive emerge in the language despite the rich verb morphology? It must have appeared in the position of [Spec, CP] as an adverb to meet V2 requirement on condition of other topicalized element absence. With the time due to the reanalysis expletive *there* starts functioning in [Spec, TP] position [7, 68]. The plausibility of the hypothesis is also contributed to by the fact that *v*P that contains NP loses its ability to move to the [Spec, TP] because T-feature is not checked in the verb morphology. The expletive merge in the structure of the sentence is regarded as the last resort operation that occurs to check the EPP feature of T [10, 15].

The typological research of Germanic languages shows that the expletive functions in the position of specifier C in Scandinavian languages that have been transformed from the languages with rich inflection system and free word order to the languages with the obligatory usage of the grammatical subject [5, 61]. It was excluded from the structure of the sentence in case of indirect word order and in questions. In Middle High German there appeared the corresponder of English *there — es* which functions in the initial position of the sentence to fill [Spec, CP] position. Its emergence and grammaticalization is closely connected with syntactic development of the sentence, namely with V2-rule. The similar situation can be observed in Icelandic. Expletive *það* was used with nature phenomena verbs and in existential sentences (with transitive verbs included) only in the initial position and disappears when this position hosts another element, for example in general questions. In Modern Icelandic which is a symmetric V2 language, the expletive functions as topic in main and embedded clauses. In Danish in which V2-rule does not occur in embedded clauses, the emergence of expletive is explained by the necessity of subject position projection when the external argument of the verb is absent. In this case the expletive functions as the subject.

In the process of its development, due to the reanalysis *there* changes its position. Adverb *there* is duplicated by a locative, its usage becomes abundant, it loses its stress and locative meaning and functions as an expletive topic [Spec, C] to keep the verb out of the CP projection. With the change of the word order the expletive topic starts to function as the expletive subject. Expletive actualization is obligatory in SOV—SVO change, which leads to the strengthening of role of positional subjects.

REFERENCES

1. Adger, D. (2007). Three Domains of Finiteness: A Minimalist Perspective [Електронний ресурс] / D. Adger // Finiteness: Theoretical and Empirical Foundations. Oxford : Oxford University Press, 2007, P. 23–58.
www.ling.auf.net/lingBuzz/000296.
2. Biberauer, T. (2005). Changing EPP Parameters in the History of English: Accounting for Variation and Change / T. Biberauer, I. Roberts // *English Language and Linguistics. 2005. № 9,* P. 5–46.
3. Chomsky, N. (2000). Minimalist Inquiries: the Framework / N. Chomsky // *Step by Step.* — Cambridge, Mass. : MIT Press. 2000, P. 89–155.
4. Chomsky, N. (1995). The Minimalist Program / N. Chomsky. — Cambridge, London : The MIT Press, 1995, 420 p. 26
5. Faarlund, J. T. (1994). Old and Middle Scandinavian / J. T. Faarlund // The Germanic Languages. London, New York : Routledge, 1994, P. 38–71.
6. Haegemann, L. (1999). English Grammar. A Generative Perspective / L. Haegemann, J. Gueron. Oxford, Berlin : Balckwell Publishers, 1999, 672 p.
7. Hegarty, M. (2005). A Feature-based Syntax of Functional Categories. The Structure, Acquisition, and Specific Impairment of Functional Systems / M. Hegarty // *Studies in Generative Grammar № 79.* — Berlin, New York : Mouton de Gruyter, 2005, 348 p.
8. Lasnik, H. On Greed and Other Human Failings / H. Lasnik // *Linguistic Inquiry. — 1995. — Vol. 26. — № 4.* — P. 615–633.
9. Radford A. (2004). English Syntax. An Introduction / A. Radford. — Cambridge : Cambridge University Press, 2004, 384 p.
10. Richards, M. Explaining EXPL / M. Richards, T. Biberauer.
people.pwf.cam.ac.uk/mtb23/NSP/Explaining%20Expl.pdf.