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**PEDAGOGICAL GRAMMAR
AS THE FRAMEWORK
OF TEFL RESEARCH.
PART 3. NATIVE LANGUAGE ACQUISITION: STRATEGIES,
PROCEDURES AND PROCESSES.
THE WORD-COMBINATION STAGE**

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The paper deals with the problems of the native language acquisition, focusing on the notions of ‘build-ups’, ‘breakdowns’, ‘completions’, ‘pivot grammar’ and ‘telegraphic speech’, as well as their role in language acquisition. The analysis allowed concluding that the purpose of the first three procedures seems to be the verification of the cognitive organizer’s hypotheses concerning the underlying grammar rules. Using the materials of three experiments (Braine, McNeill and Maratsos), the author analyses the pivot grammar, the child’s first systemic grammar, which is a characteristic feature of the language development at the word-combination stage. Arguments concerning the pivot grammar analysis on the case grammar platform are reviewed, including the three criteria, required to formulate the conclusion regarding the subjects’ rule-governed behaviour (the positional consistency of the element under observation; its productivity and semantic consistency). The paper also reviews the four possible patterns of children’s utterances suggested as the result of the said criteria application: positional productive patterns, positional associative patterns, ‘groping’ patterns and free order patterns. The author corroborates the assumption that the ‘telegraphic speech’ is a logical outcome of the child’s pivot grammar application,

taking into account the distinctive feature of the latter – skipping function words and grammar morphemes. The paper argues in favour of the further research directed at the establishment of the degree of similarity between the native language acquisition, on the one hand, and the foreign language acquisition – on the other. The data obtained in such research could be taken into account in the process of Pedagogical Grammar development.

Key words: breakdowns, build-ups, completions, grammar acquisition, native language acquisition, pivot grammar, telegraphic speech.

Черноватий Л.М. Педагогічна грамати́ка як фреймове поняття для досліджень у галузі методики навчання іноземних мов. Частина 3. Засвоєння рідної мови: стратегії, процедури і процеси на етапі словосполучень. Наведено результати аналізу досліджень у галузі засвоєння граматики англійської мови як рідної. Розглянуто зміст понять «нарощування», «розчленування», «доповнення», «ядерна грамати́ка» та «телеграфне мовлення». Визначено їхню роль у засвоєнні граматики рідної мови. Спрогнозовано зміст подальших досліджень, спрямованих на встановлення ступеня схожості між процесами засвоєння граматики рідної та іноземної мов з метою їх врахування при розробці педагогічної граматики іноземної мови.

Ключові слова: доповнення, засвоєння граматики, засвоєння рідної мови, нарощування, розчленування, телеграфне мовлення, ядерна грамати́ка.

Черноватый Л.Н. Педагогическая грамматика как фреймовое понятие для исследований в области методики обучения иностранным языкам. Часть 3. Усвоение родного языка: стратегии, процедуры и процессы на этапе словосочетаний. Приводятся результаты анализа исследований в области усвоения грамматики английского языка как родного. Рассмотрены понятия «наращивание», «расчленение», «дополнение», «ядерная грамматика» и «телеграфная речь». Определена их роль в усвоении грамматики родного языка. Намечено содержание дальнейших исследований, направленных на установления степени сходства между процессами усвоения грамматики родного и иностранного языков с целью их учета в процессе разработки педагогической грамматики иностранного языка.

Ключевые слова: дополнение, наращивание, расчленение, телеграфная речь, усвоение грамматики, усвоение родного языка, ядерная грамматика.

Introduction. Numerous research in teaching foreign languages, specifically in the development of grammar competence, often seem to lack a common framework to integrate them into a single area with uniform

approaches, terminology and criteria. It accounts for the **current importance** of the issue under consideration.

The **object** of this paper is the comparative aspect of the native (NLA) and foreign languages acquisition (FLA) with the **subject** being the characteristics of the NLA. The **aim** of this study is to analyse the latter with the purpose of accumulating the data for its further comparison with the FLA. This is the third (see [9; 10]) in a series of articles focusing on the Pedagogical Grammar (PG) issue, where the author, basing on the research data, is planning to discuss the various aspects of the problem.

As it was mentioned in the first article of the series [9], the development of an efficient PG should be based on an adequate FLA psycholinguistic model. Such PG has to take into account the regularities of the speech grammar mechanisms development in general and the foreign language grammar mechanisms in particular, specifically in the aspects where the NLA and FLA processes are different. In the previous paper we examined the NLA general background, while in this article we are going to review some aspects of the NLA, specifically the strategies, procedures and processes observed in the acquisition of English as the first language, which would be used for the comparison with the FLA in our further analysis (see also [1]).

In his/her acquisition of English as the first language, the child employs various strategies, procedures and processes, which reflect the mechanisms underlying the development of his/her intuitive grammar (see [9] for the definition). This paper attempts to present a synopsis of the said strategies, procedures and processes, resulting from a sophisticated interaction of the cognitive organizer (see [9] for the definition), language environment and the language universals (see [10] for the definition; see also [15; 19]). This description may allow comparing the NLA strategies, procedures and processes with the appropriate FLA features, as well as making the respective assumptions.

Within the relevant research (see the review in [6; 12; 18]), the NLA process is usually subdivided into several stages: a prelinguistic stage, single-word utterances, word combinations and simple sentences. For obvious reasons the prelinguistic development, as well as single-word utterances, are not analysed here. Instead, this paper is going to focus on those aspects of the word-combination stage that may be applicable for the later comparison with the FLA process.

Build-ups, breakdowns and completions. According to the available research [2; 8; 12; 17], in proceeding from the two-word utterances to the longer ones, the child often employs the build-up procedure, i.e. he/she adds one element at a time to the preceding word or word combination. After each operation, the child makes a pause followed by repeating from the very beginning the utterance fragment, which s/he has managed to stick together so far. It may be compared to solving a puzzle by an inexperienced person, who spends a lot of time looking for each of the next puzzle pieces. In the similar manner, the child spends a lot of efforts looking for the necessary word in his/her lexicon and filling the pauses with the repetition of the available fragments: *baby... eat ... baby eat ... cookie ... baby eat cookie; baby... doll ... baby doll ... ride... baby doll ride... truck... baby doll ride truck*. It is assumed [3; 12] that in this way the child may synthetically acquire the underlying rule by generating ever longer utterances basing upon the syntactic principles that have not been completely acquired.

The second procedure employed at the same stage is the so-called ‘breakdown’: *walking around... around, there baby ... there*. Here the child is probably experimenting with the inner rule but, unlike the ‘build-up’, s/he utilizes the analytical technique, splitting the word combination into its constituents.

The third procedure involves ‘completion’, where the child completes the grammatical subject to form a finished clause: *mommy ... comb hair; cow ... stand up* (all examples are from [12, p. 248]). The emergence of such clauses may signal that the process of the intuitive grammar rule development is ending, especially when the child also generates regular (without pauses) clauses of the same type.

Thus, all children employ (on the subconscious level) identical procedures at the initial stage of language acquisition, specifically the one related to English as their native language. The purpose of those procedures seems to be the verification of the cognitive organizer’s hypotheses concerning the underlying grammar rules. The presence of the same procedures in the FLA, provided it has been established, could be interpreted as the evidence of the cognitive organizer’s participation in this process.

Pivot grammar. Pivot grammar, the child’s first systemic grammar, is a specific feature of the language development at this stage. It includes two classes of words: ‘pivot class’ and ‘open class’. The pivot class is

divided into two subclasses – sentence-initial pivots (*P1*) and sentence-final pivots (*P2*) distinguished by their position in the clause (at this stage ‘clause’ is usually restricted to two elements). The pivot grammar rules, first formulated in the pioneering research on the subject [4], were as follows: (1) *P1+O*; (2) *O+P2*; (3) *O+O*; (4)**P+P*; (5)**P*, (where *P1* represents a sentence-initial pivot; *P2* – a sentence-final pivot; *O* – an open class word; asterisk (*) shows the non-permitted combinations). In the cited research [4] the subject had seven *P1* words (*all, I, no, see, more, hi, other*), five *P2* words (*off, there, by, come, fell*) and a relatively considerable amount of *O*-class words. The pivot grammar enabled the subject to generate many sentences of the following types: *no down* (*Don't put me down*) or *more car* (*Drive me around some more*) (*P1+O*); *bottle fell* or *airplane by* (*A plane is flying fast*) (*O+P2*); *shirt clean* (*O+O*) (all examples are from [12, p. 248]). The latter combination does not emerge before the former two have been acquired, that is why the generation of *O+O* structures may signal the onset of the child's transition from the pivot grammar to some more sophisticated means of expression.

In another research, the author [16], having applied the transformational analysis to pivot grammar, offered six types of grammatical relations presumably common to all languages. Three of the said six types are found in the pivot grammar. They include the grammatical subject (*The dog ate a red apple*), object (*The dog ate a red **apple***) and modifier (*The dog ate a **red** apple*) (all examples are from [16]). According to this approach, the pivot grammar development requires the child to possess a number of semantic categories enabling his/her identification of those relations in the language being acquired. In addition, the universal (genetically inherited) grammar provides him/her with the rules of their combination in speech.

In still other study, the researchers [14] suggested the idea of basic language universals, which in their view, were represented by the nominal components of the clause (*N*), on the one hand, and all other semantic classes, initially integrated into one common class of predicates (*V*), on the other. The pivot grammar, in this approach, is the first step in the child's syntactic system development. At later stages the *V* class starts breaking down into separate components enabling the child's more accurate expression of his/her thoughts, which reflects the changes in his/her grammar mechanisms.

The pivot grammar has been also analysed with the help of semantically oriented theories. Using the case grammar [11] approach, the authors [5] based their research on the three criteria, required to formulate the conclusion regarding the subjects' rule-governed behaviour. Those criteria included: (1) the positional consistency of the element under observation; (2) its productivity, i.e. the availability of the evidence concerning the production of sentences, which cannot be explained by adult modelling; (3) its semantic consistency, i.e. the fact that the element always renders the same meaning.

Having applied the said criteria to the subjects' utterances, the researchers [5] suggested the following possible options. Type A – positional productive patterns, which meet all the criteria above (e.g. *no wet, more hot*). Type B – positional associative patterns that meet criteria 1 and 3, but not 2 (e.g. *all wet, all broke*). Type C – 'groping' patterns, meet criteria 3, but not 1 and 2 (e.g. *all gone, all done*). Their generation is accompanied by certain hesitation, while the child is 'groping' for a way to express a new meaning. Type D – free order patterns, which meet criteria 2 and 3, but not 1. These patterns are different from patterns A-C and are probably the result of imitation or mechanical memorization of adults' chunks of speech. They are not based on any underlying rule.

While analysing the child's transition from the single-word utterances to pivot grammar, the authors [5] point out that at the initial stage the child has a very narrow set of meanings for expression. The meaning may be so narrow that it is restricted to a single word. Because it is hard to apply the term 'rule' to such patterns, the authors suggest the term *formulae of limited scope* in relation to them. Their generalization and the corresponding rule formation become possible only after a certain amount of patterns with similar meanings have been acquired.

Because the children acquire the language in different kinds of environment, the composition of each pivot grammar class varies to a substantial degree. In one research [2] the subjects used pronouns as pivot elements, each of which marked a specific meaning. For example, *I* indicated an 'agent', *my* – marked a 'possessor', *it* and *this one* – stood for 'affected objects', while *here* and *there* specified a 'location'. It was assumed that all those words were the prototypes of the future grammatical categories, which would be later developed on their basis. For example, words preceding *it*, would develop into verbs, *this* would

eventually develop into *the*, having provided the basis for the category of article development, and so on.

One of the pivot grammar's distinctive feature is skipping function words [13], as well as grammar morphemes, which results in the so-called *telegraphic speech* [7], e.g. *Get truck* (=Get a truck for me), *It drop* (*It has dropped*), *Me sit truck* (*I'm sitting on the truck*). Being bound by his/her memory span restrictions and the insufficient intuitive grammar development, the child limits himself/herself exclusively to content words [13], which are predominantly represented by verbs and nouns. There are several assumptions to account for it. First, the content words have a clear meaning, and second, they are always phonetically stressed, and thus are easier to be distinguished in speech. For virtually the same reasons the child ignores unstressed function words and grammar morphemes. A limited number of grammar morphemes that are used at this stage do not contradict the said assumption, as the closer analysis shows, most of them are used as the substitutes of nouns and verbs, e.g. *coat off*, *shoe on*.

Thus, following the application of the abovementioned procedures (build-ups, breakdowns and completions), the child develops a simplified (pivot) intuitive grammar, which facilitates his/her transition to the telegraphic speech stage. The presence of identical features (as well as any pivot grammar equivalent) in the FLA could be viewed as an argument in favour of the NLA and FLA processes similarity in this aspect. Like in the case of our previous papers, this assumption requires additional analysis and is the prospect of our further research.

LITERATURE

1. Черноватый Л.Н. Основы теории педагогической грамматики иностранного языка : дис. ... докт. пед. наук : 13.00.02 / Черноватый Леонид Николаевич. – Харьков : Харьк. нац. ун-т им. В.Н. Каразина, 1999. – 453 с.
2. Bloom L. Variation and reduction as aspects of competence in language development / L. Bloom, P. Miller, L. Hood // Minnesota Simposia on Child Psychology. – 1975. – N 9. – P. 3–55.
3. Bloom L. Why not pivot grammar? / L. Bloom // Journal of Speech and Hearing Disorders. – 1971. – N 36. – P. 40–50.
4. Braine M.D.S. The ontogeny of English phrase structure: the first phase / M.D.S. Braine // Language. – 1963. – N 39. – P. 1–13.

5. Braine M.D.S. Case-like categories in children: the Actor and more related categories / M.D.S. Braine, R. Wells // *Cognitive Psychology*. – 1978. – N 10. – P. 100–122.
6. Brown R. A First Language : The Early Stages / R. Brown. – Cambridge, Mass : Harvard Univ. Press, 1973. – 430 p.
7. Brown R. The acquisition of syntax / R. Brown, C. Fraser // *Verbal behavior and learning: problems and processes* [C. Coffey, B. Musgrave (eds.)]. – New York : McGraw Hill, 1963. – P. 158–201.
8. Campbell R.N. Categorization, Early Concepts and First Language Acquisition / R.N. Campbell // *Encyclopaedia of Language and Linguistics* [R. Asher, J.M.Y. Simpson, eds.]. – Aberdeen : Pergamon Press. – 1994. – Volume 4. – P. 1899–1904.
9. Chernovaty L.M. Pedagogical grammar as the framework of research in teaching foreign languages. Part 1. Levels and types of grammar / L.M. Chernovaty // *Викладання мов у вищих навчальних закладах освіти на сучасному етапі. Міжпредметні зв'язки*. – X. : ХНУ ім. В.Н. Каразіна, 2016. – Вип. 29. – С. 157–166.
10. Chernovaty L.M. Pedagogical grammar as the framework of research in teaching foreign languages. Part 2. Native language acquisition: General background / L.M. Chernovaty // *Викладання мов у вищих навчальних закладах освіти на сучасному етапі. Міжпредметні зв'язки*. – X. : ХНУ ім. В.Н. Каразіна, 2017. – Вип. 30. – С. 156–165.
11. Fillmore Ch. The case for case / Ch. Fillmore // *Universals in Linguistic Theory* [E. Bach, R. Harms (eds.)]. – New York : Holt, Reinhart and Winston, 1968. – P. 22–54.
12. Ingram D. First Language Acquisition / D. Ingram. – Cambridge : Cambridge Univ. Press, 1992. – 572 p.
13. Lipka L. An outline of English lexicology : lexical structure, word semantics, and word-formation / L. Lipka. – Tübingen : Niemeyer, 1992. – 212 p.
14. Maratsos M. Against the transformational account: a simpler analysis of auxiliary overmarkings / M. Maratsos, S.A. Kuczaj // *Journal of Child Language*. – 1978. – N 5. – P. 337–345.
15. Malmkjer K. Language Universals / K. Malmkjer // *The Linguistic Encyclopaedia*. – London and New York : Routledge, 1995. – P. 277–284.
16. McNeill D. The development of language / D. McNeill // *Carmichael's Manual of Child Psychology* [P. Mussen (ed.)]. – 1970. – Vol. 1. – P. 1061–1161.
17. Peters A. Language learning strategies / A. Peters // *Language*. – 1977. – N 53. – P. 56–73.
18. *The Routledge Handbook of Second Language Acquisition* : [Susan M. Gass, Alison Mackey (eds.)]. – London : Routledge, 2012. – 599 p.

19. White L. Second Language Acquisition and Universal Grammar / Lydia White. – Cambridge : Cambridge University Press, 2003. – 312 p.

REFERENCES

- Bloom, L., P. Miller and L. Hood (1975). Variation and reduction as aspects of competence in language development. *Minnesota Simposia on Child Psychology*, 9, pp. 3–55 [in English].
- Bloom, L. (1971). Why not pivot grammar? *Journal of Speech and Hearing Disorders*, 36, pp. 40–50 [in English].
- Braine, M.D.S. (1963). The ontogeny of English phrase structure: the first phase. *Language*, 39, pp. 1–13 [in English].
- Braine, M.D.S. and R. Wells (1978). Case-like categories in children: the Actor and more related categories. *Cognitive Psychology*, 10, pp. 100–122 [in English].
- Brown, R. (1973). *A First Language: The Early Stages*. Cambridge, Mass.: Harvard Univ. Press [in English].
- Brown, R. and C. Fraser (1963). The acquisition of syntax. In: *Verbal behavior and learning: problems and processes*. C. Coffey and B. Musgrave (eds.). New York: McGraw Hill, pp. 158–201 [in English].
- Campbell, R.N. (1994). Categorization, Early Concepts and First Language Acquisition. In: *Encyclopaedia of Language and Linguistics*. R. Asher and J.M.Y. Simpson, eds. Aberdeen: Pergamon Press, Vol. 4, pp. 1899–1904 [in English].
- Chernovaty, L. (1999). *Osnovy teorii pedagogicheskoi grammatiki inostrannogo yazyka* [The Basics of the Foreign Language Pedagogical Grammar Theory]. *Doctor's thesis*. Kharkiv: V.N. Karazin Kharkiv National University [in Russian].
- Chernovaty, L. (2016) Pedagogical grammar as the framework of research in teaching foreign languages. Part 1. Levels and types of grammar. *Vykladannia mov u vyshchyykh navchalnykh zakladakh osvity na suchasnomu etapi. Mizhpredmetni zviyazky* [Current teaching of languages at higher educational establishments. Interdisciplinary approach], 29, pp. 157–166 [in English].
- Chernovaty, L.M. (2017). Pedagogical grammar as the framework of research in teaching foreign languages. Part 2. Native language acquisition: General background. *Vykladannia mov u vyshchyykh navchalnykh zakladakh osvity na suchasnomu etapi. Mizhpredmetni zviyazky* [Current teaching of languages at higher educational establishments. Interdisciplinary approach], 30, pp. 156–165 [in English].

- Fillmore, Ch. (1968). The case for case. *Universals in Linguistic Theory*. E. Bach and R.Harms (eds.). New York: Holt, Reinhart and Winston, pp. 22–54 [in English].
- Ingram, D. (1992). *First Language Acquisition*. Cambridge: Cambridge Univ. Press [in English].
- Lipka, L. (1992). *An outline of English lexicology: lexical structure, word semantics, and word-formation*. Tübingen: Niemeyer [in English].
- Malmkjer, K. (1995). Language Universals. *The Linguistic Encyclopaedia*. London and New York: Routledge, pp. 277–284 [in English].
- Maratsos, M. and S.A. Kuczaj (1978). Against the transformational account: a simpler analysis of auxiliary overmarkings. *Journal of Child Language*, 5, pp. 337–345 [in English].
- McNeill, D. (1970). The development of language. *Carmichael's Manual of Child Psychology*. Vol. 1, pp. 1061–1161 [in English].
- Peters, A. (1977). Language learning strategies. *Language*, 53, pp. 56–73 [in English].
- Susan M. Gass and Alison Mackey (eds.). (2012). *The Routledge Handbook of Second Language Acquisition*. London: Routledge [in English].
- White, L. (2003). *Second Language Acquisition and Universal Grammar*. Cambridge: Cambridge University Press [in English].