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PEDAGOGICAL GRAMMAR AS THE FRAMEWORK OF TEFL RESEARCH. PART 11. THE IMPACT OF THE MONITOR ON THE QUALITY OF THE FOREIGN LANGUAGE ACQUISITION

The relevance of the paper is explained by the need of establishing a common framework to integrate the research in teaching foreign languages, specifically in the development of grammar competence, into a single area with uniform approaches, terminology and criteria. Its aim is to analyse the notion of the 'monitor' with the purpose of its further accounting for in the development of academic programs and actual teaching. Basing on the analysis of experimental data in the half-a-century retrospective, the author attempts to generalize the data concerning the effect of the monitor on the quality of the foreign-language acquisition. It was found that in some cases, the experimental results were strongly affected by the mainstream ideas predominant at the particular periods in the specific area, such as the concept the overwhelming advantage of conscious approach in the Soviet theories of the 1960-1970s. The paper shows the methodological shortcomings of the experimental design, which affected the results in those enquiries, like the principal use of discrete tests, non-critical confusion of declarative and procedural knowledge, short-term experiments, inadequate ways of the subjects' speech samples elicitation etc. Though the later research demonstrated a greater variety of results, the monitor hypothesis' validity is open to debate because of the impossibility to establish not only the degree of the monitor's participation in an individual's speech production, but even the very fact of this participation. The most common proofs of the monitor use are the subjects' own evidence, when they try describing the way they use their knowledge of the specific rule in the speech production process. However, in many cases, it is difficult, even for the speakers themselves, to explain the way of editing their own utterances. The criticism also concerns the fuzzy definition of the monitor itself, resulting in its occasional coincidence with the meaning of 'learning' (in Krashen's terminology), inability of the theory to explain the receptive types of speech activity, its limitedness to syntax and its problematic ability to establish the use of monitor in specific cases. Thus, though the probability of the speakers' monitor use

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is beyond any doubt, the degree of its application depends on a variety of factors, probably extends far beyond the way a language is acquired, and needs additional research.

Keywords: experimental data, foreign language, grammar competence, language acquisition quality, monitor.

Леонід Черноватий. Педагогічна граматика як фреймове поняття для досліджень у галузі методики навчання іноземних мов. Частина 11. Вплив монітора на якість засвоєння іноземної мови. Актуальність статті пояснюється необхідністю встановлення спільної основи для інтеграції досліджень з навчання іноземних мов (ІМ), зокрема, розвитку граматичної компетентності, у цілісну галузь з єдиними підходами, термінологією та критеріями. Мета дослідження – проаналізувати поняття «монітор» для його подальшого врахування при розробці програм та в навчанні. Ґрунтуючись на аналізі експериментів, автор узагальнює дані про вплив монітора на якість засвоєння ІМ. Виявлено, що в деяких випадках на результати суттєво впливали панівні (в певні періоди) ідеї, такі як концепція переваги свідомого підходу в СРСР у 1960-1970-х роках. У статті показано методологічні недоліки експериментів, що вплинули на їхні результати, зокрема такі як переважне використання дискретних тестів, змішування декларативних та процедурних знань, коротка тривалість експериментів та неадекватні способи отримання зразків мовлення випробуваних. Хоча пізніші дослідження принесли більше розмаїття результатів, чинність гіпотези монітора ϵ дискусійною через неможливість встановити не тільки ступінь його участі у мовленні індивіда, але й сам факт такої участі. Найпоширенішими доказами монітора є свідчення випробуваних, що використання ними знання правила у мовленні. Однак часто навіть самим мовцям важко пояснити спосіб редагування власних висловлювань. Критика також стосується нечіткого визначення самого монітора, зміст якого інколи збігається зі змістом поняття «навчання» (в теорії Крашена), нездатності цієї теорії пояснити рецептивні види мовленнєвої діяльності, її обмеженості синтаксисом та проблематичності встановлення використання монітора в конкретних випадках. Таким чином, хоча вживання монітора мовцями не підлягає сумнівам, ступінь його застосування залежить від різноманітних чинників, ймовірно, виходить далеко за межі способу засвоєння мови та потребує додаткових досліджень.

Ключові слова: експериментальні дані, граматична компетентність, іноземна мова, монітор, якість засвоєння мови.

Леонид Черноватый. Педагогическая грамматика как фреймовое понятие для исследований в области методики обучения иностранным 11. Влияние монитора на качество иностранного языка. Актуальность статьи объясняется необходимостью создания общей основы для интеграции исследований по обучению иностранным языкам (ИЯ), в частности, развития грамматической компетентности, в целостную отрасль с едиными подходами, терминологией и критериям. Цель исследования – проанализировать понятие «монитор» для его дальнейшего учета при разработке программ и в обучении. Основываясь на анализе экспериментов, автор обобщает данные о влиянии монитора на качество усвоения ИЯ. Установлено, что в некоторых случаях на результаты господствующие идеи, такие как концепция сознательного подхода в СССР в 1960-1970-е годы. В статье показаны методологические недостатки экспериментов, повлиявшие на их результаты, в частности такие как преимущественное использование дискретных тестов, знаний, декларативных и процедурных незначительная длительность экспериментов и неадекватные способы получения образцов речи испытуемых. Хотя более поздние исследования принесли большее разнообразие результатов, валидность гипотезы монитора остается дискуссионной из-за невозможности установить не только степень его участия в речи, но и сам факт такого участия. Наиболее распространенными его доказательствами являются свидетельства испытуемых, описывающих использование ими знания правила в речи. Однако зачастую говорящим трудно объяснить способ редактирования собственных высказываний. Критика также касается нечеткого определения монитора, содержание иногда совпадает содержанием понятия «обучение», объяснить рецептивные неспособности теории вилы деятельности, ee ограниченности синтаксисом И проблематичности установления использования монитора в конкретных случаях. Таким образом, хотя употребление монитора говорящими не подлежит сомнению, степень его применения зависит от различных факторов, вероятно, выходит за рамки способа усвоения языка и требует дополнительных исследований.

Ключевые слова: грамматическая компетентность, иностранный язык, качество усвоения языка, монитор, экспериментальные данные.

Problem statement. *Introduction to the series.* 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 aim. The *object* of this part of the series is the comparative aspect of the various approaches to the foreign languages acquisition (FLA), with the *subject* being the characteristics of the FLA, specifically the impact of the monitor on this process. Its *aim* is to analyse the latter with the purpose of its further accounting for in the development of academic programs and actual teaching. This is the eleventh (see the previous issues of this journal starting with N 29) in a series of articles focusing on the Pedagogical Grammar (PG) issue [8], where the author, basing on the research data, is planning to discuss the various aspects of the problem.

Analysis of current research. There seems to be a certain contradiction (or, at least, ambiguity) regarding the use of the term 'monitor' even in the works by S. Krashen, the author of this theory. In one of his first publications related to this issue, Krashen defines the monitor as the 'conscious language learning' [18: 1]. In this sense, the meaning of the 'monitor' coincides with that of 'learning' within the 'acquisition – learning' opposition suggested by the same author. S. Krashen regards monitor as an 'editor' used to control the foreign language output [18: 12]. Simultaneously, the author assumes that in editing one's own performance, the speaker may (in addition to the conscious knowledge of the foreign language structure) also rely on the 'feel for grammaticality' [18: 2]. In a later book [18: 58], the monitor is defined as part of an individual's speech mechanisms responsible for the foreign language learning, i.e. the one based on consciousness raising [14: 58]. N. Chomsky [11] believes that the cognitive organizer (language acquisition device or LAD, in his terminology) purpose is limited to language acquisition only, while other authors [14: 60] presume that the monitor may have a broader function of providing for any learning in general. The cognitive organizer and the monitor are supposed to operate independently, which gave grounds to Krashen to make an assumption concerning the independence of the monitor-based 'learning', on the one hand, from the LAD-based 'acquisition', on the other [18]. However, there is quite a lot of data (though allowing variable interpretation) that might question this assumption. This data is analysed further.

Generalizing the meanings attributed to the term 'monitor' within the publications where it is used, the latter may be defined as a tracking

conscious control of the speech recognition and generation process. It is in this meaning that the term 'monitor' is used in this paper.

The ability to monitor one's own speech is available even in childhood but it is enhanced after the onset of puberty accompanied by the completion of the abstract thinking capacity development process. The latter capacity and the related monitoring expansion might manifest the general tendency of a dependence between the monitor use and the analytical mind prevalence (see the review of the research into this issue in [18: 33–34]). In general, analytical skills are seen as one of the reasons that might explain why analytically minded individuals typically perform better in language courses based on 'learning' [18: 23]). However, it is true only for the optimal monitor use cases. In Krashen's view, such individuals might overuse the monitor trying to control the speech generating process from the very beginning to the very end. It might considerably aggravate the speech quality. According to Krashen, the reason for the said overuse might be the excessive concern over one's speech accuracy or the insufficient foreign-language base accumulated through 'acquisition' that does not allow generating speech on its basis alone.

The monitor use degree is believed to depend on a number of other factors, both personal and related to the language environment characteristics. The former are related to psychological variables. Specifically, S. Krashen mentions the experiments with immigrants, many of whom do not seem to use any monitoring at all. They do not react to the correction of their errors and the correction itself does not seem to affect the quality of their speech [18]. Other person-related characteristics probably include the knowledge of the appropriate grammar rules, as the conscious editing is impossible without it. The environmental factors affecting the monitor use intensity usually include the way in which the foreign language was acquired, i.e. the proportion of 'learning' in this process. Here, the 'formal classroom learning' is opposed to 'acquisition' in natural language environment without any purposeful impact on the part of the teacher [18]. Other potential sources of influence include the types of tests used in the experiments [14], especially achievement tests. The tests, which allow the individuals' form-awareness and give them enough time to apply monitoring, encourage the latter. Those include the traditional standardized tests (e.g. discrete or multiple-choice ones), while tests focusing on the content and reducing the performance time hamper the monitor use. That is why it is believed that the latter tests measure the results of 'acquisition' while the former – show the combined effect of 'acquisition' and 'learning'.

In our previous publication [10], we analyzed the impact of the monitor upon the sequence of the FL grammar structures acquisition, as well as on the rate of the FLA in general. In this paper, we focus on some other aspects of the environmental factors impact. Specifically, we are going to analyze the impact of the monitor upon the quality of the FLA.

Presentation of the main material. The monitor-oriented instruction may have various forms, ranging from the deductive (with explicit application of grammar – linguistic or pedagogical – rules from the initial stages), to the inductive ones (when the rule is formulated by the students themselves after the specific grammar structure has been acquired following a proper amount of exercising). It is logical to assume that that the intensity of the monitor use in these various types is different. Thus, a natural question arises whether this intensity has any impact on the quality of acquisition. Looking for the answer to this question, let us resort to some experimental data on the issue in the half-a-century retrospective.

In the 1960-1970s, the discussions concerning the correlation between the 'language rule' and the 'speech action' (or *learning* and *acquisition*, in Krashen's terminology) used to be quite popular, at least in the framework of the-then Soviet psychology. A lot of research conducted within that period aimed to prove the advantage of the conscious-control approach (or the monitor, in Krashen's theory) in FLA. This overall trend was bases on the general provision concerning the leading role of consciousness prevailing in the Soviet mainstream Psychology, Pedagogy and Philosophy. Many experiments dealt with teaching foreign languages to younger and adult learners.

Concerning the younger learners, in the early stages of the research, the studies usually proved the deductive approach advantage over the inductive one, for example, in teaching the use of plural morphemes in English [2]. The subjects in this three-hour long experiment learned English in the formal class and had no opportunity to contact with the natural English-language environment. They included two groups: 8-9 and 12-13 year-olds (60 subjects in each group). The elicitation method included written and oral translation from Russian into English. The said advantage was true only in relation to 'average' and 'low-level'

subjects, while the 'high-level' ones were found to be able of achieving good results even without any rule. This phenomenon was explained by the relative simplicity of the corresponding grammar operations for this particular category of subjects.

Comparable findings were reported in three experiments on teaching the English sentence structure: the 16-hour long experiment with 60 12-year-olds whose speech samples were elicited through answering questions in writing [4], as well as short-term experiments with 36 12-year-olds who talked on a specified topic and constructed various types of English sentences [1] and with 13-year-olds who passed a written and oral tests at the end of their study [8].

Similar elicitation method (composing dialogues in writing) was used in a 20-hour long experiment with 45 12-13-year olds on teaching several German structures of the word and sentence levels [3]. In addition, the subjects were asked to describe (in writing) a rule (e.g., of the use of *Perfekt*) and to participate in a dialogue. The results showed an overwhelming advantage of the deductive approach.

In the period under consideration, the advantage of the deductive approach used to be overwhelmingly reported in the experiments with adult learners as well. In one study [6], the author postulates its priority in teaching German grammar (the subject and the extended modifier). In the 10-hour long experiment with 40 adult (university students) subjects whose speech samples were elicited through answering theoretical questions and translation, the efficiency of the deductive approach was found to be close to 100%.

In another 16-hour experiment with university students [7], it was found that the efficiency of acquisition of non-finite forms of the verb in deductive instruction is close to 100%. The subjects' answers were elicited through written tests where they identified the said forms and their functions. It means that, in fact, those tests checked the knowledge of linguistic rules and not their use in speech.

Still other 17-hour experiment with 20 university students [5], found the deductive method to be more effective in teaching German passive constructions. The subjects' fluency got closer to the native speakers' in the tasks where they transformed passive phrases and sentences.

Closer to the end of the century, the conclusions got more flexible. Concerning the younger learners (12-14-year-olds), it was experimentally proved [9] that the efficiency of the monitor use is not a permanent feature but depends on the effect of unfavourable factors in

each particular case. The said factors list includes inter- and intralanguage interference, the level of the students' language command, their general intellectual level, the degree of the particular students' anxiety in the classroom, operational and conceptual complexity of the grammar actions to be acquired, the students' individual psychological characteristics, their prevailing type of orientation, the learning conditions and some others. The monitor helps to neutralize their negative effect; otherwise, the inductive approach may be effective as well.

In the last decades, the research of the issue under consideration got more complicated. According to the available analysis [23], the exploration domain has grown. It concerns the number of studies, previously unexamined L1 groups, instruction studies, measures of learning, pretesting and delayed posttesting. Nevertheless, the results remain contradictory. One group of studies proved the efficiency of the monitor use with both younger learners and adults.

The research of 11- and 12-year-olds [13] showed the advantage of the monitor (error correction) over implicit approach (model texts). Learners in the error correction condition reported more noticing of grammar at the comparison stage, which was later corroborated in their revisions.

The study of English passive constructions enhancement (preliminary work with texts saturated with enhanced passive forms) [24] showed that enhancement did not significantly increase form correction gain scores or weaken comprehension. Enhancement promoted noticing passive constructions, but without further explicit instruction, it appeared to have done little else.

The monitor-oriented approach remains deeply rooted in the teachers' minds. The survey of 74 Dutch university teachers of English as a foreign language [17] showed that they considered explicit, systematic, and isolated grammar instruction a necessary condition not only for linguistic correctness but also for advanced communicative competence.

However, the second group of studies questions the advantage of the monitor-oriented approaches. The experiment [12] with 43 Latin older (age 60+) learners using a computer program with or without explicit instruction (EI) showed no overall effects of EI. Older adults' overall success at learning language contradicts negative stereotypes of aging and demonstrates that bilingual linguistic advantages are lifelong. This

assumption is supported by another research [22] where it was found that temporal and lexico-grammatical domains of language might be enhanced with increased L2 experience, regardless of age.

In the experiment with 13- to 14-year-olds learning French verb inflections in two secondary schools in England [19], the comparison of Processing Instruction (PI – activities that systematically force learners to interpret the meaning of formal features in the input) and Enriched Input (EI – brief awareness-raising strategies followed by a flood of the target features) showed that PI might be a viable and effective option for grammar teaching.

Some investigations question the very practicability of explicit (monitor) vs implicit instruction. The neuroimaging study [20] showed that in implicit contexts, some learners are able to quickly rely on neural circuits associated with L1 grammar and procedural memory, while others use extralinguistic neural circuits related to control mechanisms to process syntax. The authors assume that there may be multiple ways in which L2 is represented neurally, and thus, different ways to acquire grammar.

It encouraged efforts to look for some integral approach combining the monitor-oriented and implicit techniques. For example, in the so-called drama grammar [16], the author suggests the synthesis of grammar instruction and drama pedagogy, which integrates the structural and communicative approaches through a dialectic combination of acting and linguistic analysis. The author regards it as a possible track towards a postmethod grammar pedagogy

Conclusions. In spite of the practically unanimous admission of the monitor-oriented teaching and learning advantage in the first series of experiments (1960-1970s), they do not allow making categorical conclusions due to a number of reasons.

Practically in all those studies, the elicitation methods included discrete tests, which are believed [18] to measure knowledge acquired through 'learning'. Such tests create favourable conditions for the monitor use and may substantially improve the learners' formal results. Some experiments [3; 6; 7] additionally (or exclusively) used the tasks intended to check the subjects' knowledge of the respective grammar rules (instead of their command of the appropriate grammar structures in communication). At present, it is admitted that knowledge and command may not be related and, thus, it is impossible to assess the

level of the language command basing on the knowledge of its structure.

In addition, almost all of the said studies are short-term experiments where the monitor application effect is believed to be the strongest. The use of 'learning' in shorter courses, as a rule, is more effective as compared with 'acquisition'. In general, the said group of experiments provide little information about the monitor efficiency in teaching foreign languages. The only conclusion that follows from them is that the extensive monitor use results in acceptable results with respect to 'learning' provided the elicitation is carried out by means of discrete tests. The impact of this type of teaching upon 'acquisition' is not clear because when integrative tests were used (in addition to the discrete ones), their results were represented as a single data array. To differentiate the impact of the monitor on 'learning', on the one hand, and 'acquisition', on the other, the experiments have to ba designed in an appropriate way. Neither of the said experiments met this requirement. However, the problems of the monitor hypothesis interpretation are not limited to that.

This hypothesis' validity is open to debate because of the impossibility to establish not only the degree of the monitor's participation in an individual's speech production, but also the very fact of the said participation. The most common proofs of the monitor use are the subjects' own evidence, when they try describing the way they use their knowledge of the specific rule in the speech production process. However, some authors [21] are skeptical about that, stating that in many cases, it is difficult, even for the speakers themselves, to explain the way of editing their own utterances ('intuition' or 'conscious rule application') [15]. The lack of explanation concerning the monitor mechanisms operation in the hypothesis made some authors [15] compare it to the well-known 'black box' theory. The criticism also concerns the fuzzy definition of the monitor itself resulting in its coincidence with the meaning of 'learning' in some cases. Other limitations of the monitor theory include its inability to explain the receptive types of speech activity (it deals with the productive types only), the fact that it is limited to syntax and some others (see [15: 262–265]).

The main drawback of this theory seems to be in its problematic ability to establish the use of monitor in specific cases. It questions the very possibility of the adequate verification of this theory, even if the

experimental design met the appropriate requirements. The probability of the speakers' monitor use in the production of their own speech is beyond any doubt, but the degree of its application in each specific case depends on many factors and probably extends far beyond the way a language is acquired. The investigation of this problem constitutes the problem of our further research

REFERENCES

- 1. Бабкина В.С. Методика обучения структурному оформлению предложения в V классе: автореф. дис. ...канд. пед. наук: 13.00.02 / Моск. гос. пед. ин-т. Москва, 1971. 21 с.
- 2. Воскресенский Ю.Е. Эффективность применения различных типов учебных алгоритмов при введении нового языкового (грамматического) материала. Уч. зап. І МГПИИЯ им. М. Тореза, 1968. Т. 44. С. 237–255.
- 3. Гохлернер М.М. Поэтапное формирование грамматических механизмов речи на иностранном (немецком) языке. *Психологические механизмы усвоения грамматики русского и иностранных языков*. Москва: МГУ, 1972. С. 111–225.
- 4. Есипович К.Б. Методика составления программированного пособия по обучению структурному оформлению речи на немецком языке в V классе средней школы: автореф. дис. ... канд. пед. наук: 13.00.02 / Моск. гос. пед. ин-т. Москва, 1968. 22 с.
- 5. Кабанова О.Я., Гальперин П.Я. Языковое сознание как основа формирования речи на иностранном языке. *Управление познавательной деятельностью учащихся*. Москва: МГУ, 1972. С. 109–133.
- 6. Крылова В.А. Использование обучающих алгоритмов как средства повышения эффективности обучения (на материале преп. ин. яз. в неяз. вузе): автореф. дис. ... канд. пед. наук: 13.00.02 / Ленинград. гос. пед. ин-т. Ленинград, 1967. 23 с.
- 7. Маруга Э.В. Психологическое исследование формирования речи на иностранном языке (на материале значений неличных форм англ. глагола): автореф. дис. ...канд. психол. наук: 19.00.07 /МГУ, Москва, 1971. 22 с.
- 8. Черноватый Л.Н. Основы теории педагогической грамматики иностранного языка: дис. ... д-ра. пед. наук: 13.00.02 / Харьковский нац. ун-т им. В.Н. Каразина. Харьков, 1999. 453 с.
- 9. Chernovaty L. Grammar Teaching: Inductive vs Deductive Approach Issue Revisited. *Studia Anglica Poznaniensie*, 1990. Vol. 23. N 10. P. 111–119.
- 10. Chernovaty L. Pedagogical grammar as the framework of research in teaching foreign languages. Part 10. The impact of formal teaching on the

- foreign language acquisition. *Викладання мов у вищих навчальних закладах освіти на сучасному етапі. Міжпредметні зв'язки*. X: XHУ ім. В.Н. Каразіна, 2021. Вип. 38. С. 251–265. DOI: https://doi.org/https://doi.org/10.26565/2073-4379-2021-38-16.
- 11. Chomsky N. Syntactic Structures. Hague: Mouton, 1957. 272 p.
- 12. Cox, J. Explicit instruction, bilingualism, and the older adult learner. *Studies in Second Language Acquisition*. 2017. Vol. 39. N 1. P. 29–58. DOI: https://doi.org/10.1017/S0272263115000364.
- 13. Coyle Y., Roca de Larios J. Exploring the role played by error correction and models on children's reported noticing and output production in a L2 writing task. *Studies in Second Language Acquisition*. 2014. Vol. 36. N 3. P. 451–485. DOI: https://doi.org/10.1017/S0272263113000612.
- 14. Dulay H., Burt M., Krashen S. Language Two. New York: Oxford Univ. Press, 1982. 315 p.
- 15. Ellis R. Understanding Second Language Acquisition. London: Oxford Univ. Press, 1989. 327 p.
- 16. Even S. Drama grammar: towards a performative postmethod pedagogy. *The Language Learning Journal*. 2011. Vol. 39. N 3. P. 299–312. DOI: https://doi.org/10.1080/09571736.2010.543287.
- 17. Graus J., Coppen P.-A. The interface between student-teacher grammar cognitions and learner-oriented cognitions. *The Modern Language Journal*. 2017. Vol. 101. N 4. P. 643–668. DOI: https://doi.org/10.1111/Modl.12427.
- 18. Krashen S. Second Language Acquisition and Second Language Learning. Cambridge: Prentice Hall, 1981. 212 p.
- 19. Marsden E. Input-based grammar pedagogy: a comparison of two possibilities. *The Language Learning Journal*. 2005. Vol. 31. N 1. P. 9–20. DOI: https://doi.org/10.1080/09571730585200041.
- 20. Morgan-Short K., Deng Z., Brill-Schuetz K., Faretta-Stutenberg M., Wong P., Wong, F. A view of the neural representation of second language syntax through artificial language learning under implicit contexts of exposure. *Studies in Second Language Acquisition*. 2015. Vol. 37. N 2. P. 383–419. DOI: https://doi.org/10.1017/S0272263115000030.
- 21. Rivers W. Foreign language acquisition: where the real problems lie? *Applied Linguistics*. 1980. Vol.1. N 1. P.48–59.
- 22. Saito, K. The role of age of acquisition in late second language oral proficiency attainment. *Studies in Second Language Acquisition*. 2015. Vol. 37. N 4. P. 713–743. DOI: https://doi.org/10.1017/S0272263115000248.
- 23. Sok S., Kang B.Y., Han Z.H. Thirty-five years of ISLA on form-focused instruction: A methodological synthesis. *Language Teaching Research*. 2018. Vol. 23. N 4. P. 403–427. DOI: https://doi.org//10.1177/1362168818776673.
- 24. Winke, P. The effects of input enhancement on grammar learning and comprehension: A Modified Replication of Lee (2007) with Eye-

Movement Data. *Studies in Second Language Acquisition*. 2013. Vol. 35. N 2. P. 323–352. DOI: https://doi.org/10.1017/S0272263112000903.

REFERENCES

- 1. Babkina, V.S. (1971). Metodika obuchenija strukturnomu oformleniju predlozhenija v V klasse [Methodology of teaching the sentence structure in the fifth form]. *Extended abstract of candidate's thesis*. Moskva: Moscow State Pedagogical Institute [in Russian].
- 2. Voskresenskij, Ju. E. (1968). Effektivnost' primenenija razlichnyh tipov uchebnyh algoritmov pri vvedenii novogo jazykovogo (grammaticheskogo) materiala [Efficiency of application of various types of training algorithms for the introduction of new language (grammar) material]. Uch. zap. I MGPIIJa im. M. Toreza [Scholarly Notes of Maurice Thorez Moscow State Pedagogical Institute of Foreign Languages], 44, pp. 237–255 [in Russian].
- 3. Gohlerner, M.M. (1972). Pojetapnoe formirovanie grammaticheskih mehanizmov rechi na inostrannom (nemeckom) jazyke [Stage formation of grammar speech mechanisms in a foreign (German) language]. *Psihologicheskie mehanizmy usvoenija grammatiki russkogo i inostrannyh jazykov* [Psychological mechanisms of the Russian and foreign languages grammar acquisition]. Moskva: Moscow State University, pp. 111–225 [in Russian].
- 4. Esipovich, K.B. (1968). Metodika sostavlenija programmirovannogo posobija po obucheniju strukturnomu oformleniju rechi na nemeckom jazyke v V klasse srednej shkoly [Methodology of compiling programmed materials for teaching the German sentence structure in the fifth form of the secondary school]. *Extended abstract of candidate's thesis*. Moskva: Moscow State Pedagogical Institute [in Russian].
- 5. Kabanova, O.Ja., Gal'perin, P.Ja. (1972). Jazykovoe soznanie kak osnova formirovanija rechi na inostrannom jazyke [Language consciousness as the basis of speech development in a foreign language]. *Upravlenie poznavatel'noj dejatel'nost'ju uchashhihsja* [Management of the learners' cognitive activity]. Moskva: Moscow State University, pp. 109–133 [in Russian].
- 6. Krylova, V.A. (1967). Ispol'zovanie obuchajushhih algoritmov kak sredstva povyshenija jeffektivnosti obuchenija (na materiale prep. in. jaz. v nejaz. vuze) [Application of training algorithms as a means of raising instruction efficiency (on the material of teaching a foreign language in a non-specialized higher educational establishment)]. Extended abstract of candidate's thesis. Leningrad: Leningrad State Pedagogical Institute [in Russian].

- 7. Maruga, E.V. (1971). Psihologicheskoe issledovanie formirovanija rechi na inostrannom jazyke (na materiale znachenij nelichnyh form angl. glagola) [Psychological research into the development of speech in a foreign language (on the material of non-finite forms of the English verb)]. *Extended abstract of candidate's thesis*. Moskva: Moscow State University [in Russian].
- 8. 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].
- 9. Chernovaty, L. (1990). Grammar Teaching: Inductive vs Deductive Approach Issue Revisited. *Studia Anglica Poznaniensie*, 23 (10), pp. 111–119 [in English].
- 10. Chernovaty, L. (2021). Pedagogical grammar as the framework of research in teaching foreign languages. Part 10. The impact of formal teaching on the foreign language acquisition. *Teaching languages at higher educational establishments at the present stage. Intersubject relations.* Kharkiv: V.N. Karazin Kharkiv National University, *38*, pp. 251–265 [in English]. DOI: https://doi.org/https://doi.org/10.26565/ 2073-4379-2021-38-16.
- 11. Chomsky, N. (1957). Syntactic Structures. Hague: Mouton [in English].
- 12. Cox, J. (2017). Explicit instruction, bilingualism, and the older adult learner. *Studies in Second Language Acquisition*, *39*(1), pp. 29–58 [in English]. DOI: https://doi.org/10.1017/S0272263115000364.
- 13. Coyle, Y., Roca de Larios, J. (2014). Exploring the role played by error correction and models on children's reported noticing and output production in a L2 writing task. *Studies in Second Language Acquisition*, *36*(3), pp. 451–485 [in English]. DOI: https://doi.org/10.1017/S0272263113000612.
- 14. Dulay, H., Burt, M., Krashen, S. (1982). *Language Two*. New York: Oxford Univ. Press [in English].
- 15. Ellis, R. (1989). *Understanding Second Language Acquisition*. London: Oxford Univ. Press [in English].
- 16. Even, S. (2011). Drama grammar: towards a performative postmethod pedagogy. *The Language Learning Journal*, *39*(3), pp. 299–312 [in English]. DOI: https://doi.org/10.1080/09571736.2010.543287.
- 17. Graus, J., Coppen, P.-A. (2017). The Interface Between Student Teacher Grammar Cognitions and Learner-Oriented Cognitions. *The Modern Language Journal*, 101 (4), pp. 643–668 [in English]. DOI: https://doi.org/10.1111/Modl.12427.
- 18. Krashen, S. (1981). Second Language Acquisition and Second Language Learning. Cambridge: Prentice Hall [in English].

19. Marsden, E. (2005). Input-based grammar pedagogy: a comparison of two possibilities. *The Language Learning Journal*, *31*(1), pp. 9[in English] [in English]. DOI: https://doi.org/10.1080/09571730585200041.

- 20. Morgan-Short, K., Deng, Z., Brill-Schuetz, K., Faretta-Stutenberg, M., Wong, P., Wong, F. (2015). A view of the neural representation of second language syntax through artificial language learning under implicit contexts of exposure. *Studies in Second Language Acquisition*, *37*(2), pp. 383–419 [in English]. DOI: https://doi.org/10.1017/S0272263115000030.
- 21. Rivers, W. (1980). Foreign language acquisition: where the real problems lie? *Applied Linguistics*, *I* (*I*), pp. 48–59 [in English].
- 22. Saito, K. (2015). The role of age of acquisition in late second language oral proficiency attainment. *Studies in Second Language Acquisition*, *37* (4), pp. 713–743 [in English]. DOI: https://doi.org/10.1017/S0272263115000248.
- 23. Sok, S., Kang, B.Y., Han, Z.H. (2018). Thirty-five years of ISLA on form-focused instruction: A methodological synthesis. *Language Teaching Research*, 23 (4), pp. 403-427 [in English]. DOI: https://doi.org/10.1177/1362168818776673.
- 24. Winke, P. (2013). The effects of input enhancement on grammar learning and comprehension: A Modified Replication of Lee (2007) with Eye-Movement Data. *Studies in Second Language Acquisition*, *35*(2), pp. 323–352 [in English]. DOI: https://doi.org/10.1017/S0272263112000903.

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