

## **PEDAGOGICAL GRAMMAR AS THE FRAMEWORK OF TEFL RESEARCH. PART 13. CHARACTERISTICS OF ENVIRONMENT IN NATIVE AND FOREIGN LANGUAGE ACQUISITION**

*Leonid Chernovaty*

Doctor of Pedagogics, Full Professor, The School of Foreign Languages,  
Mykola Lukash Translation Studies Department, V.N. Karazin Kharkiv  
National University (61022, Kharkiv, 4 Svoboda Square); e-mail:  
[leonid.chernovaty@karazin.ua](mailto:leonid.chernovaty@karazin.ua); orcid: <http://orcid.org/0000-0003-3411-9408>

The paper presents the comparative analysis of the characteristics of environment, or input, in the native and foreign language acquisition. The available research provides contradictive data on the role of input in the said acquisition ranging from regarding it as a secondary factor because of its assumed deficiency to underlining the importance of the linguistic experience as the key to the development of grammar mechanisms. The proponents of the latter approach stress the role of the linguistic input, indicate that variable input affects acquisition, focus on the probable relation between the patterns used in input and those used by the language learners. They assume that the input structural complexity can determine the overall timing of the onset of specific language mechanisms. Even those who allow for the dependence of acquisition on the corresponding maturation mechanisms, consider the active interaction of the learner's internal grammatical system with the surrounding linguistic environment to be the most important component of language acquisition. The analysis of interim grammars of learners of English in a formal setting showed that they used similar sets of interim grammar rules, which could be represented in the form of substitution tables (ST). The new students who joined the group later, initially had a different nomenclature of their interim rules but eventually tended to show signs of developing the patterns similar to the other learners in the group. This may be explained by the fact that the structure of interim grammar (ST patterns) depends upon the content and structure of the material processed by the students' cognitive organizers. Identically organized input may contribute to the formation of similar (though not fully identical) interim grammar rules in the students' minds. Consequently, the content and the structure of the input may have an impact on the configuration of intake, i.e. the part of the foreign language acquisition, which proceeds on the basis of the cognitive organizer's operation and the subconscious development of grammar mechanisms.

©Черноватий Л. 2022

**Keywords:** *acquisition of a foreign language, acquisition of a native language, acquisition environment, cognitive organizer, interim grammar, input, intake.*

**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, with the *subject* being the characteristics of the environment in the native and foreign language acquisition, specifically their impact of the said processes. Its *aim* is to analyse the input in the two types of the abovementioned acquisition with the purpose of its further accounting for in the development of academic programs and actual teaching. This is the thirteenth (see the previous issues of this journal [4]) in a series of articles focusing on the Pedagogical Grammar issue [1], where the author, basing on the research data, is planning to discuss the various aspects of the problem.

**Analysis of current research.** In some concepts [5], the language environment, or input, used to be considered a secondary factor in language acquisition, as it was viewed only as a means to trigger the innate acquisition mechanism. The environment itself was considered “deficient”, as it was full of linguistic norm violations and did not contain complete information necessary for the children to develop their grammatical systems.

In other theories [12; 13; 17; 19], the input characteristics were given much more attention, as they were assumed to have a significant impact on the nature and speed of learning. According to the available research [17], children’s intake is selective, as they view part of the input as uninformative and initially learn only from higher-frequent, more regularized input. Other researchers concluded that the input structural complexity can determine the overall timing of the onset of specific language mechanisms [18], and that linguistic experience is key to the development of such mechanisms [19]. They stress the role of the linguistic input [8], indicate that variable input affects acquisition [13], focussing on the probable relation between the patterns used in input and those used by the language learners [12].

One should note that the position of nativists [5] or, more precisely, neonativists, depends on the approach. Thus, naturalists minimize the influence of environment, assuming that if any principle of universal grammar at each specific moment were not mature, then no level of frequency of the corresponding phenomenon in the environment would be capable to provide for its acquisition. After the said maturation, however, even a minimal amount of material in the input leads to the acquisition of the related mechanism.

Proponents of the inclusion hypothesis [22] believe that the child is ready for language acquisition almost immediately after birth, and thus, the rate of acquisition is directly proportional to the amount of the related linguistic material in the input. An attempt to combine the two positions mentioned above has been made by constructivists [2], who allow for the dependence of acquisition on the child's corresponding maturation, but at the same time consider the active interaction of the child's internal grammatical system with the surrounding linguistic environment to be the most important component of language acquisition.

**Presentation of the main material.** Initial research in this area focused on the characteristics of input without analysing their impact on the rate of acquisition. The analysis of 26 works on the study of the environment in terms of its characteristics allowed to summarize the research data concerning this problem [6; 9]. The resulting list of contrastive characteristics of adult-child speech compared to adult-adult communication looks as follows.

In phonetics: 1) greater pitch and exaggerated intonation; 2) clear diction, slower speech rate, distinct pauses between utterances; 3) phonological simplification, distinct combinations of vowels and consonants, frequent doubling of syllables.

In syntax: 1) shorter and more simplified utterances, reduction of the sections of utterance preceding the verb; 2) almost all sentences are complete and distinct; 3) large number of partial or complete repetitions of the child's own statements or utterances, sometimes accompanied by expansion; 4) few instances of interruption of utterance; 5) many sentence members are pronounced in isolation; 6) simplification of syntactic relations; 7) fewer verbs per utterance, fewer complex sentences in indirect speech; 8) infrequent use of attributes, pronouns and function words, more frequent use of semantic words; 9) frequent omission of the subject and auxiliary verbs in yes-no questions;

10) greater frequency of imperatives and question structures; 11) higher percentage of affirmative sentences as the child matures.

In semantics: 1) the use of a limited number of words, each word denoting only one object, extensive use of diminutives; 2) the referential system corresponds to the time of the moment of speech, i.e., talking about concrete objects, usually perceived at the moment of speech; rare use of the past tense; 3) various degrees of generality in naming objects; 4) a more limited range of semantic relations.

In the area of pragmatics: 1) more frequent use of directives, imperatives and requests; 2) more frequent use of deictic statements.

This rather long list convincingly shows that, at all levels, adult-child speech significantly differs from the adult-adult speech. Initially, it was thought that one of the main factors in the acquisition of the native language was the frequency of the relevant phenomena in parental speech. However, this concept was criticized by some authors [16] who, combining maturationalist and constructivist approaches, concluded that in addition to frequency, two other factors influence acquisition. The first is the readiness (maturation) of the child to acquire a given item, and the second is the way parents present it. The most effective ways of the linguistic items presentation turned out to be (a) simple rearrangement (e.g. Child: *Broke*; Adult: *Yes, the truck broke*) and (b) continuation (e.g. Child: *Truck*; Adult: *Yes, the truck broke*).

The efficiency of those simple techniques has been convincingly confirmed in a number of other studies [14; 15]. Even in teaching 4-year-olds passive structures, which are believed to be learned only after the age of 9 (and some structures – beyond the age of 11), the efficiency of learning the two types of them (reversible and irreversible agentive structures) was 63% and 25% respectively (compare with similar results in another study – 47% and 0% respectively) [10]. The results of several other studies [3; 21] confirmed the effectiveness of extension and continuation as the catalysts in the native language acquisition.

The authors conclude that language acquisition is most effective when the input complexity is slightly higher than that of the child. If we denote the latter as  $L$ , then the ideal level of input can be represented as  $L+1$ . When extension is used, the adult actually takes the child's utterance (e.g. *Mommy eat*) from level ( $L$ ) to a higher level (e.g. *Yes, Mommy's eating her lunch*). The extension technique probably draws the child's attention to the contrast between his or her own sentence and

that of the adult. As with any other technique, extension should not be abused, because learning may become formal, and children stop paying attention to it. Parents are warned against turning the natural input into a formal one, seeking to help their children develop their speech [20]. While maintaining a certain element of novelty and a close connection with the child's speech production, the technique of balancing the input complexity level in relation to the child's actual level ( $L: L+I$ ) can be very effective in stimulating their grammatical (and general) development.

*Characteristics of the environment in foreign language acquisition.* As indicated above, in the native language acquisition, the parental speech that provides for the child's input is characterised by a number of important features. One of them is a high degree of redundancy [11]. Communication between parents and children occurs within the themes whose understanding is facilitated by extra-linguistic factors. In most cases, this is provided for by the child seeing the objects in question, or the perception is reinforced by the parents' gestures and facial expressions.

The primary function of parental speech, according to the authors who have studied the issue, is communication. The other functions (educational, cultural) are realized in the implementation of the communicative one [11]. The input is transformed into intake only if the child actively participates in communication, i.e. interacts with the interlocutor. This interaction provides a close link to the situation and the overall context of communication, specifically, to the situational components, such as the theme, tenor and modus, which are intertwined with the functional components of language (experiential, interpersonal, textual) and the situation itself. This integration of all those components in the act of communication accelerates the child's native language acquisition.

Studies of the speech characteristics of native speakers when communicating with non-native speakers (who do not speak a specific language well enough) have shown a great similarity between their speech and the speech of parents when communicating with their children in the native language acquisition. Practically, in this case, the techniques are similar to those used in communication with the children in the native language acquisition (slower pace of speech, more careful pronunciation, shorter sentences, etc. – see above). However, the extent these techniques are used is higher in adults-children communication than in adults-adults one. There are also differences between the

characteristics of input in the native language acquisition and the same characteristics in the communication with non-native speakers: certain violations of the grammatical structure, a higher percentage of affirmative structures, etc. (see the review in [7]). Despite these and other dissimilarities, the coincidence of numerous speech characteristics in the situations of the native language acquisition and the communication of native and non-native speakers may indicate that those features are determined by the internal regularities of communication development as a whole, and the structure of interlocutors' interaction in communication.

Thus, the characteristics of input in the native language acquisition, as well as those in the native speakers' natural communication with non-native ones, coincide in many respects. However, the analysis of input in the most typical conditions of formal language acquisition shows significant differences of its characteristics from the "natural" environment. First, and this is one of the main features, the nature of communication in the classroom is radically different from the "natural" one. Unlike the latter, the former is seldom motivated by any of the learner's real needs. The absence of such motivation greatly impairs the prospects of realising the main goal of communication. Whereas when communicating with parents or a foreigner, individuals primarily seek to convey or receive some information, to correct their own behaviour or to control someone else's actions, the purpose of "communication" in class is often quite "unnatural" (such as: replace the words in the bold type with synonyms, etc.). The frequent absence of a situational element hampers the functioning of both the situation components (theme, tenor and modus) and the functional components of language (experiential, interpersonal and textual). The lack of motivation and active participation (initiated by students) in communication, on the other hand, results in a significant reduction in the amount of intake and, consequently, in a delay of the speech mechanisms development.

Another potential reason for the intake reduction may be the input characteristics, in terms of its difficulty. As mentioned above, the native language acquisition is most effective when the level of the input ( $L+I$ ) is slightly higher than the child's speech level ( $L$ ). This remains valid for the teaching of foreign languages, but its implementation is fraught with difficulties. In natural conditions, the level of the interlocutors (children or adults) is determined by their counterparts intuitively,

basing on the information obtained through the feedback (their reactions). In the classroom, due to the reduction of both input and intake, as discussed above, the teachers do not get a full picture of the changing level of all their students through the feedback. This makes it difficult to adjust their own speech in terms of matching the *L+I* level. Of course, the mere input matching does not in itself mean that it is automatically incorporated into the learner's speech mechanisms. The latter is determined by many other factors, but here we shall focus only on the effect of the nature and structure of the input on the foreign language acquisition in a formal setting.

The issue will be discussed on the basis of the data collected in the teaching of English as a foreign language to a group of adult students (factory engineering staff), the period of observation – over 20 months.

In learning English, these students had gone through a number of interim grammars before they approached the level of the relatively self-contained grammar mechanism capable of supporting their communicative needs. Throughout this process, the students formed (on a subconscious level) ten quasi-rules that could be represented as substitution tables (ST), and which they used to construct their own utterances in oral and written speech. All students used more or less similar STs. However, they could hardly be regarded as universals in the sense that anyone learning English would inevitably pass through the stage of developing them in their minds. It would be more sensible to assume that their similarity within this particular group was due to the structure of the material processed by each student's cognitive organizer. All of the students worked with the same materials, whose structure affected the formation of the relatively similar STs in their minds. It could be illustrated by the analysis of one student's grammar development pattern. This student (S3) joined the group eight months after it had started their English classes. Before that he had tried to learn English on his own and in a different group, i.e. he had been working with teaching materials which were completely different from the ones used in his new group. In test 1 (nine months after the start of learning and one month after joining his new group), his speech did not contain any of the STs used by other students in the group. At the same time, the intensity of the STs commonly used by other students in this test amounted to 13.82 per examinee.

However, in his speech, one could find the beginnings of some STs used by other students in the group, which is probably the result of a

month's experience of contact with the corresponding materials and students. For example, combining ST 2 and ST 8 (used by the other students) resulted in generating the utterances like *Why is a flat? (Whose is this flat?)*.

In addition, his utterances contained STs that were absent in the other students' speech. Those STs probably resulted from the input processed by his cognitive organizer at the previous stages of learning. For example, ST3A was used to convey sentences like "We (me, you, etc.) have/no...".

## ST3A

at	you they myself	no have	any some	mineral water shampoo creams time	not
----	-----------------------	------------	-------------	--	-----

This ST generated sentences like: *At you no any mineral water (=You have no mineral water); At they have some shampoo and creams (=They have some shampoo and creams); At myself time not (=I have no time)*.

To convey the superlative degree in comparing adjectives, the student S3 used ST3B.

## ST3B

It is	more the	fairest coldest quietest noisiest	restaurant place shop
-------	----------	--	-----------------------------

This ST generated sentences like *It is more the noisiest restaurant (=It is the noisiest restaurant)*. Simultaneously, S3 used *-er* to form the comparative degree with all adjectives, regardless of their type, so it did not interfere with the use of *more* to form the superlative degree (see ST3B). In acquiring the *Simple Present* structures, S-3 for some time used ST3C, in which the operator *does* was placed in the final position, regardless of the type of the sentence and the subject.

ST3C (*these = it, it = them*)

She They	can is read feel	these it not well	does
-------------	------------------------	-------------------------	------

ST3C generated both affirmative and interrogative sentences: *When she can these does? (=When can she do it?); When she is read it does?*



(=When does she read them?); *They feel not well* (=They don't feel well). A similar ST (ST3G) has also been used in the construction of sentences in the Continuous tense.

## ST3G

They	are	feel work have eat	a better not lunch at lunch
------	-----	-----------------------------	--------------------------------------

The ST3G produced both affirmative and interrogative sentences: *They are work not* (=They are not working); *What they are eat at lunch?* (=What are they eating for lunch?).

After four months of training in the new group, the S3's grammatical features demonstrated obvious signs of switching over to the patterns common for the rest of the group. In test 3, he used ST6 five times, while its average usage frequency in the group amounted to 7.33 per subject. After 6 months (in test 5), S-3 used a wider range of STs common for the rest of the group (ST1, ST2, ST6, and ST6B) in his speech, and the total amount of ST application increased to 13,0 (the average frequency of ST use per subject in the group being 17,45). In test 7 (after 9 months), S3 index of ST use amounted to 12,0, while the total ST usage frequency by the other subjects had already dropped dramatically to only 2,15 per student.

**Conclusion.** Thus, we can assume that there might be a direct connection between the content and structure of input, on the one hand, and the structure of learners' intuitive grammar mechanisms. In our experiment, the student under consideration had generally gone through the same stages of ST use as the rest of the group. However, due to the fact that he joined the group later, for him, this process began later and, accordingly, when the majority of the students in the group had already given up using ST due to the transition to more rational ways of their intuitive grammar organization, he kept increasing the number of the STs he used. In doing so, he gradually started switching over to the STs used by the rest of the students in the group at earlier stages. This may be explained by the fact that the structure of interim grammar (ST patterns) depends upon the content and structure of the material processed by the students' cognitive organizers. Identically organized input may contribute to the formation of similar (though not fully identical) interim grammar

rules in the students' minds. Consequently, the content and the structure of the input may have an impact on the configuration of intake, i.e. the part of the foreign language acquisition, which proceeds on the basis of the cognitive organizer's operation and the subconscious development of the speech grammar mechanisms.

This assumption requires additional analysis which is the *prospect of further research*.

## REFERENCES

1. Chernovaty, L. (1999). *Osnovy teorii pedagogicheskoi grammatiki inostrannogo yazyka* [The Basics of the Foreign Language Pedagogical Grammar Theory]. *Doctor of Sciences thesis*. Kharkiv: V.N. Karazin Kharkiv National University [in Russian].
2. Beehrens, H. (2021). Constructivist Approaches to First Language Acquisition. *Journal of Child Language*, 48 (5), pp. 959–983 [in English]. DOI: <https://doi.org/10.1017/S0305000921000556>.
3. Bloom L., Hood L. and Lightbown P. (1974). Imitation in language acquisition: if, when and why. *Cognitive Psychology*, 6, pp. 380–420 [in English].
4. Chernovaty, L. (2016-2022). Pedagogical grammar as the framework of TEFL research. Parts 1–12. *Vykladannia mov u vyshchyykh navchalnykh zakladakh osvity na suchasnomu etapi. Mizhpredmetni zviazky* [Teaching languages at higher educational establishments at the present stage. *Intersubject relations*], 29–40 [in English]. DOI: <https://doi.org/10.26565/2073-4379-2021-39>.
5. Chomsky, N. (1982). *Some Concepts and Consequences of the Theory of Government and Binding*. Cambridge, Mass.: MIT Press. [in English].
6. de Villiers, J. and de Villiers, P. (1978). *Language Acquisition*. Cambridge, Mass.: Harvard Univ. Press. [in English].
7. Ellis, R. (1989). *Understanding Second Language Acquisition*. Oxford: Oxford Univ. Press. [in English].
8. Gerard, J. (2022). The extragrammaticality of the acquisition of adjunct control. *Language Acquisition*, 29 (2), pp. 107–134 [in English]. DOI: <https://doi.org/10.1080/10489223.2021.1971231>.
9. Gleitman, L., Newport, M. and Gleitman, H. (1984). The current status of the motherese hypothesis. *Journal of Child Language*, 11, pp. 43–79 [in English].
10. Horgan, D. (1978). The development of the full passive. *Journal of Child Language*, 5, pp. 56–80 [in English].
11. Ingram, D. (1992). *First Language Acquisition*. Cambridge: Cambridge Univ. Press. [in English].

12. Ingham, R. (1993). Input and Learnability: Direct-Object Omissibility in English. *Language Acquisition*, 3 (2), pp. 95–120 [in English]. DOI: [https://doi.org/10.1207/s15327817la0302\\_1](https://doi.org/10.1207/s15327817la0302_1).
13. Miller, K.L. and Schmitt, C. (2012). Variable Input and the Acquisition of Plural Morphology. *Language Acquisition*, 19 (3), pp. 223–261 [in English]. DOI: <https://doi.org/10.1080/10489223.2012.685026>.
14. Nelson, K.E. (1977). Facilitating children's syntax acquisition. *Developmental Psychology*, 13, pp. 101–107 [in English].
15. Nelson, K.E., Denninger, M., Bonvillian, J., Kaplan, B. and Baker, N. (1984). Maternal input adjustments and non-adjustments as related to children's linguistic advances and to language acquisition theories. *The Development of Oral and Written Languages: Readings in Developmental Applied Linguistics*. Eds. A.D. Pelligrini, T.D. Yawkey. New York: Albex, pp. 31–56 [in English].
16. Nelson, K.E. and Baker, N. Recasting. (1984). *First Language*, 5, pp. 3–21 [in English]
17. Nguyen, A.D. and Legendre, G. (2022). The acquisition of *wh*-questions: Beyond structural economy and input frequency. *Language Acquisition*, 29 (1), pp. 79–104 [in English]. DOI: <https://doi.org/10.1080/10489223.2021.1968867>.
18. Pérez-Leroux, A.T., Roberge, Y., Lowles, A. and Schulz, P. (2022). Structural diversity does not affect the acquisition of recursion: The case of possession in German. *Language Acquisition*, 29 (1), pp. 54–78 [in English] DOI: <https://doi.org/10.1080/10489223.2021.1965606>.
19. Reuter, T., Sullivan M. and Lew-Williams, C. (2022). Look at that: Spatial deixis reveals experience-related differences in prediction. *Language Acquisition*, 29 (1), pp. 1–26 [in English]. DOI: <https://doi.org/10.1080/10489223.2021.1932905>.
20. Schreider, F. (1973). *Your Child's Speech*. New York: Ballantine Books. 182 p. [in English]
21. Shipley, E., Smith, C. and Gleitman, L. (1969). A study in the acquisition of language: free responses to commands. *Language*, 45, pp. 322–342 [in English].
22. Tzakosta, M. and Revithiadou, A. (2006). A Grammar Inclusion Hypothesis of child language variation. *Journal of Greek Linguistics*, 7, pp. 49–70 [in English]. DOI: <https://doi.org/10.1075/jgl.7.04tza>.

The article was received by the editors 01.10.2022.

The article was recommended for printing 02.11.2022.

**In cites:** Chernovaty L. (2022). Pedagogical grammar as the framework of TEFL research. Part 13. Characteristics of environment in native and foreign language acquisition. *Teaching languages at higher educational establishments at the present stage. Intersubject relations*. Kharkiv: V.N. Karazin Kharkiv National University, 41, pp. 100–113. DOI: <https://doi.org/10.26565/2073-4379-2022-41-06> [in English].

## **ПЕДАГОГІЧНА ГРАМАТИКА ЯК ФРЕЙМОВЕ ПОНЯТТЯ ДЛЯ ДОСЛІДЖЕНЬ У ГАЛУЗІ МЕТОДИКИ НАВЧАННЯ ІНОЗЕМНИХ МОВ. ЧАСТИНА 13. ХАРАКТЕРИСТИКИ МОВЛЕННЄВОГО СЕРЕДОВИЩА У ЗАСВОЄННІ РІДНОЇ ТА ІНОЗЕМНОЇ МОВ**

*Леонід Черноватий*

докт. пед. наук, професор кафедри перекладознавства імені Миколи  
Лукаша факультету іноземних мов Харківського національного  
університету імені В.Н. Каразіна (61022, Харків, майдан Свободи, 4);  
e-mail: leonid.chernovaty@karazin.ua; orcid:<http://orcid.org/0000-0003-3411-9408>

У статті подано порівняльний аналіз характеристик мовленнєвого середовища в оволодінні рідною та іноземною мовами. Наявні дослідження містять суперечливі дані щодо ролі такого середовища у зазначеному засвоєнні – від його розгляду як другорядного чинника, через його начебто недостатність, до підкреслення важливості мовленнєвого досвіду як ключового для розвитку граматичних механізмів. Прихильники останнього підходу підкреслюють роль мовленнєвого середовища, вказують на те, що насичене середовище позитивно впливає на засвоєння, зосереджуються на ймовірному зв'язку між структурами, наявними у середовищі, і тими, що вживаються учнями. Припускається, що структурна складність вхідного матеріалу може визначати загальний час формування конкретних мовних механізмів. Навіть ті, хто допускає залежність засвоєння від відповідних механізмів дозрівання, вважають активну взаємодію внутрішньої граматичної системи учня з навколишнім мовленнєвим середовищем найважливішим компонентом засвоєння мови. Аналіз проміжних граматик учнів, що вивчають англійську мову в умовах формального навчання, показав, що вони використовують схожі набори проміжних граматичних правил, які можна репрезентувати у вигляді підстановчих таблиць (ПТ), Учні, які приєдналися до групи пізніше, спочатку мали іншу номенклатуру проміжних правил, але з часом виявляли ознаки вироблення шаблонів, подібних до тих, що були у інших студентів групи. Це можна пояснити тим, що структура проміжної граматики (патернів ПТ) залежить від змісту та структури матеріалу, який опрацьовується когнітивним організатором учня. Ідентично організована вхідна інформація може сприяти формуванню у свідомості студентів схожих (хоча і не повністю ідентичних) правил проміжної граматики. Отже, зміст і структура вхідної інформації може впливати на конфігурацію засвоєння, тобто на ту частину засвоєння іноземної мови, яка відбувається на основі роботи когнітивного організатора і підсвідомого розвитку граматичних механізмів.

**Ключові слова:** оволодіння іноземною мовою, оволодіння рідною мовою, середовище оволодіння мовою, когнітивний організатор, проміжна граматики, вхідна інформація, інформація оброблена когнітивним організатором.

## СПИСОК ВИКОРИСТАНИХ ДЖЕРЕЛ

1. 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.
2. Beehrens H. Constructivist Approaches to First Language Acquisition. *Journal of Child Language*. 2021. Vol. 48. Issue 5. P. 959–983. DOI: <https://doi.org/10.1017/S0305000921000556>.
3. Bloom L., Hood L., Lightbown P. Imitation in language acquisition: if, when and why. *Cognitive Psychology*. 1974. N. 6. P. 380–420.
4. Chernovaty L.M. Pedagogical grammar as the framework of research in teaching foreign languages. Parts 1–12. *Викладання мов у вищих навчальних закладах освіти на сучасному етапі. Міжпредметні зв'язки*. Харків: ХНУ ім. В.Н. Каразіна, 2016–2022. Вип. 29–40.
5. Chomsky N. Some Concepts and Consequences of the Theory of Government and Binding. Cambridge, Mass.: MIT Press, 1982. 567 p.
6. de Villiers J., de Villiers P. Language Acquisition. Cambridge, Mass.: Harvard Univ. Press, 1978. 312 p.
7. Ellis R. Understanding Second Language Acquisition. Oxford: Oxford Univ. Press, 1989. 327 p.
8. Gerard J. The extragrammaticality of the acquisition of adjunct control, *Language Acquisition*. 2022. Vol. 29. Issue 2. P. 107–134. DOI: <https://doi.org/10.1080/10489223.2021.1971231>.
9. Gleitman L., Newport M., Gleitman H. The current status of the motherese hypothesis. *Journal of Child Language*. 1984. N 11. P. 43–79.
10. Horgan D. The development of the full passive. *Journal of Child Language*. 1978. N 5. P. 56–80.
11. Ingram D. First Language Acquisition. Cambridge: Cambridge Univ. Press, 1992. 572 p.
12. Ingham R. Input and Learnability: Direct-Object Omissibility in English. *Language Acquisition*. 1993. Vol. 3. N 2. P. 95–120. DOI: [https://doi.org/10.1207/s15327817la0302\\_1](https://doi.org/10.1207/s15327817la0302_1).
13. Miller K.L., Schmitt C. Variable Input and the Acquisition of Plural Morphology. *Language Acquisition*. 2012. Vol. 19. N 3. P. 223–261. DOI: <https://doi.org/10.1080/10489223.2012.685026>.
14. Nelson K.E. Facilitating children's syntax acquisition. *Developmental Psychology*. 1977. N 13. P. 101–107.

15. Nelson K.E., Denninger M., Bonvillian J., Kaplan B., Baker N. Maternal input adjustments and non-adjustments as related to children's linguistic advances and to language acquisition theories / eds. A.D Pelligrini, T.D. Yawkey. *The Development of Oral and Written Languages: Readings in Developmental Applied Linguistics*. New York: Albex. 1984. P. 31–56.
16. Nelson K.E., Baker N. Recasting. *First Language*. 1984. N 5. P. 3–21.
17. Nguyen A.D., Geraldine Legendre. The acquisition of *wh*-questions: Beyond structural economy and input frequency. *Language Acquisition*. 2022. Vol. 29. N 1. P. 79–104. DOI: <https://doi.org/10.1080/10489223.2021.1968867>.
18. Pérez-Leroux A. T., Roberge Y., Lowles A., Schulz P. Structural diversity does not affect the acquisition of recursion: The case of possession in German. *Language Acquisition*. 2022. Vol. 29. N 1. P. 54–78. DOI: <https://doi.org/10.1080/10489223.2021.1965606>.
19. Reuter T., Sullivan M., Lew-Williams C. Look at that: Spatial deixis reveals experience-related differences in prediction. *Language Acquisition*. 2022. Vol. 29. N 1. P. 1–26. DOI: <https://doi.org/10.1080/10489223.2021.1932905>.
20. Schreider F. *Your Child's Speech*. New York: Ballantine Books, 1973. 182 p.
21. Shipley E., Smith C., Gleitman L. A study in the acquisition of language: free responses to commands. *Language*. 1969. N 45. P. 322–342.
22. Tzakosta M., Revithiadou A. A Grammar Inclusion Hypothesis of child language variation. *Journal of Greek Linguistics*. 2006. Vol. 7. P. 49–70. DOI: <https://doi.org/10.1075/jgl.7.04tza>.

Стаття надійшла до редакції 01.10.2022.

Статтю рекомендовано до друку 02.11.2022.

**Як цитувати:** Черноватий Л. Pedagogical grammar as the framework of TEFL research. Part 13. Characteristics of environment in native and foreign language acquisition. *Викладання мов у вищих навчальних закладах освіти на сучасному етапі. Міжпредметні зв'язки*. Харків: ХНУ ім. В.Н. Каразіна, 2022. Вип. 41. С. 100–113. DOI: <https://doi.org/10.26565/2073-4379-2022-41-06>.