PEDAGOGICAL GRAMMAR AS THE FRAMEWORK OF TEFL RESEARCH. PART 8. FOREIGN LANGUAGE SYNTAX ACQUISITION: WH-QUESTIONS

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The paper presents the results of the experimental data analysis concerning the said issue. Within a long observation period, the author researched three groups of subjects of various ages and backgrounds, using varied types of elicitation procedures (scrambled sentence technique, question reconstruction, oral interviews and translation). It was established that at the initial stage of foreign language acquisition (FLA), adults progress faster than children in the native language acquisition (NLA), which the author explains by their larger intellectual resources. In relation to wh-questions, the procedures common to both the NLA and FLA include the use of formulaic expressions, overgeneralization, archi-forms, and alternating forms (*be* instead of *do, do / does / did* instead of *be, does* instead of *did, did* instead of *do,* mixed use of several operators together), double auxiliary marking, double marking (mostly with irregular verbs in the *Past Simple* and considered a lexical retrieval error rather than reflecting any underlying grammar rule). Basing upon a high degree of the data resemblance in both the NLA and FLA, the author concludes that the *wh*-questions acquisition is a rule-governed procedure having a substantial degree of similarity in the said processes, irrespective of the fact, whether English is learned as a native or a foreign language. The difference between the NLA and FLA seems to be in the acquisition of *there is / are* structures. They have never been reported as a separate acquisition problem in the NLA. However, they seem to present a special difficulty in the FLA. It was found that such structures might be a problem even after the learners had mastered the *do*-inversion, which is considered the final stage in the NLA. In the FLA, however, the learners continued to use the first-stage structures even at the *do*-stage of *wh*-question acquisition. That might be explained by the learners' intuitive unwillingness to accept *there* as the subject of the sentence, which results in their frequent omission of it during the *wh*-movement.

Key words: alternating forms, archi-forms, double marking, foreign language acquisition, formulaic expressions, native language acquisition, overgeneralization, there is / are structures, wh-questions.

Черноватий Л.М. Педагогічна граматика як фреймове поняття для досліджень у галузі методики навчання іноземних мов. Частина 8. Засвоєння синтаксису іноземної мови: спеціальні запитання. Наводяться результати аналізу експериментальних даних досліджень у згаданій сфері. Протягом довгого періоду спостережень автор дослідив три групи випробуваних різних вікових груп із різними соціальними характеристиками, використовуючи різноманітні способи одержання матеріалу дослідження (складання речень із їх фрагментів, реконструкція питальних речень, усна співбесіда та письмовий переклад). Встановлено, що на початковому етапі засвоєння іноземної (англійської) мови

(ЗІМ) дорослі прогресують швидше, ніж діти в процесі засвоєння рідної (англійської) мови (ЗРМ), що автор пояснює більшими інтелектуальними ресурсами дорослих. Спільними рисами засвоєння спеціальних запитань є вживання мовленнєвих формул, надгенералізація, архіформи та альтернативні форми (вживання *be* замість *do, do / does / did* замість *be, does* замість *did, did* замість *do,* змішане вживання кількох операторів одночасно), подвійне маркування допоміжних дієслів, просте подвійне маркування (переважно стосується неправильних дієслів у *Past Simple*, що автор розглядає як збій у виклику слова із лексикона, а не як прояв дії будь-якого граматичного правила). Виходячи із високого ступеня подібності таких результатів у ЗІМ та ЗРМ, сформульовано висновок про те, що зміст засвоєння спеціальних запитань ґрунтується на певних правилах і є дуже схожим в рідній та іноземній мовах. Різниця між двома процесами полягає у засвоєнні структур *there is / are*, яке досі не розглядалося як окрема проблема у ЗРМ. Однак видається, що вони є такою в ЗІМ. Встановлено, що згадані структури можуть спричинювати труднощі навіть після оволодіння інверсією з допоміжним дієсловом *do*, що вважається заключним етапом засвоєння спеціальних запитань у ЗРМ. Однак у ЗІМ випробувані продовжували вживати структури першого етапу навіть на цій заключній стадії. Це може пояснюватись інтуїтивним небажанням випробуваних сприймати *there* як підмет речення.

Ключові слова: альтернативні форми, архіформи, засвоєння іноземної мови, засвоєння рідної мови, мовленнєві формули, надгенералізація, подвійне маркування, спеціальні запитання, структури *there is / are.*

Черноватый Л.Н. Педагогическая грамматика как фреймовое понятие для исследований в области методики обучения иностранным языкам. Часть 8. Усвоение синтаксиса иностранного языка: специальный вопрос. Приводятся результаты анализа экспериментов в упомянутой сфере. Описаны результаты длительных наблюдений трех групп испытуемых разного возраста и социальных характеристик с использованием разных методов (реконструкция предложений и составление их фрагментов, собеседование и письменный перевод). Установлено, что на начальном этапе усвоения иностранного (английского) языка (УИЯ) взрослые прогрессируют быстрее, чем дети при усвоении родного (английского) языка (УРЯ), что автор объясняет более обширными интеллектуальными ресурсами взрослых. Общими чертами усвоения специальных вопросов является применение речевых формул, сверхгенерализация, архиформы и альтернативные формы (употребление *be* вместо *do, do / does / did* вместо *be*, *does* вместо *did*, *did* вместо *do*, смешанное употребление нескольких операторов одновременно), двойное маркирование вспомогательных глаголов, простое двойное маркировки (в основном касается неправильных глаголов в *Past Simple*, что автор рассматривает как сбой в вызове слова из лексикона, а не как проявление действия какого-либо грамматического правила). Исходя из высокой степени сходства таких результатов в УИЯ и УРЯ, сформулирован вывод о том, что содержание усвоения специальных вопросов основывается на определенных правилах и очень похоже в родном и иностранном языках. Разница между двумя процессами заключается в усвоении структур *there is / are*, которое до сих пор не рассматривалось как отдельная проблема в УРЯ. Однако представляется, что в УИЯ они такой являются. Установлено, что

упомянутые структуры могут вызывать трудности даже после овладения инверсией со вспомогательным глаголом *do*, что считается заключительным этапом усвоения специальных вопросов в УРЯ. Однако в УИЯ испытуемые продолжали употреблять структуры первого этапа даже на этой заключительной стадии. Это может объясняться интуитивным нежеланием испытуемых воспринимать *there* как подлежащее предложения.

Ключевые слова: альтернативные формы, архиформы, двойное маркирование, речевые формулы, сверхгенерализация, специальные вопросы, структуры *there is / are*, усвоение иностранного языка, усвоение родного языка.

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 native (NLA) and foreign languages acquisition (FLA) with the *subject* being the characteristics of the FLA. It aims to analyse the latter with the purpose of its further comparison with the NLA. This is the eighth (see, the full list in [4]) in a series of articles focusing on the Pedagogical Grammar (PG) issue [1], where the author, basing on the research data, is planning to discuss the various aspects of the problem.

As it was mentioned in the previous papers of the series (see [4]), the development of an effective PG should be based on a sound psycholinguistic theory of the FLA. This kind of PG has to take into consideration the specifics of the speech grammar mechanisms development in general and the foreign language grammar mechanisms in particular, especially in the spheres where the NLA and FLA features are different. In our earlier articles (see the list in [4]), we started reviewing the strategies, procedures, and processes at the simple sentence stage in the NLA. Specifically, in one of our previous contributions [4], we analysed the syntax acquisition (*yes-no-* and *wh-*questions among other structures) in the NLA. In this paper, we are going to review the acquisition of *wh-*questions in the FLA and compare it with the same process in the NLA.

Analysis of current research. There have been some studies focused on the *wh-*questions acquisition [3; 5; 9; 10]. One of them concluded that rates of non-inversion error do not differ by *wh-*word, auxiliary or number, but by lexical auxiliary subtype and by

wh-word +lexical auxiliary combination [2]. Other authors [8] indicate that the native language is not a predictor of the foreign-language learners' production patterns, but the linguistic properties of the target language do predict learners' accuracy and inversion profiles.

Presentation of the main material. To verify those conclusions, we have conducted our own original research, which is described below.

Subjects. Three groups: Group – 11 adults, factory engineers – 7 males and 4 females, age ranging from 27 to 50, all started learning English mostly from the zero level. The period of observation – two years. The subjects had had regular classes (2 times by 2 hours a week) 10 months a year followed by a two-month break. Group 2 – 10 children, secondary school students, age – 10-12. Regular classes at school (4 hours a week). Started mostly from the zero level. The period of observation – 8 months. Group 3 – 5 adults, students of an evening English course, age: 14-41, 2 males and 3 females. Regular classes (2 times by 3 hours a week). Upper elementary / lower intermediate level. The period of observation − 7 months.

Elicitation procedure. Written translation from the native language into English, scrambled sentence technique, question reconstruction, oral interviews.

Hypothesis. Because of the Language Universals, the acquisition of *wh*- questions in English as a foreign language (FLA) would be generally similar to its acquisition as a native language (NLA).

Results. At the beginning of the FLA *adults seem to progress faster* than children in the NLA, which can be easily explained by their larger intellectual resources. At this beginning stage, adults acquire several types of questions, beginning with *What is*, *Where is*, and *What colour is*, which they use as formulas, without any transformations. This has been proven both by the quantitative and qualitative analyses. The test scores at the initial level are very high. The subjects of Group 1 showed 80 −100% accuracy with the exception of several of them, whose results were nevertheless higher than 50% in tests 2 and 3 (2 and 4 months after the beginning of study respectively). At the same time, the formulaic character of *wh*-questions at this stage is well proven by the use of archi-forms (the selection of one member of a class of form to represent others in the class) in some of the subjects' speech. For example, subject 5 (S5) attempted to use *wh*-questions instead of yes / no questions: *What is he a teacher*? (instead of *Is he a teacher?*), *What is Robert's wife student?* (*Is Robert's wife a student?*), *What is*

college teacher? (*Is she a college teacher?*), *What is he a teacher?* (*Is he a teacher?*). Generally, the *What is* archi-form was very popular with many subjects: S2 – *What is name daughter*? SI – *What are name children?* S3 – *What is going to?* S4 – *What is this?* (*Who is this?*). S6 – *What is kind of doctor?* S8, S9 – *What is can?* (*Who can?*). After the introduction of *there is / are* structures, the picture abruptly changed for the worse. In test 4 only one subject showed 100% accuracy (S7). The rest kept using correct structures only with *where* and *what*, while slipping to stage 1 structures with *there is / are* (e.g. *How many flowers in the vase?*). Subject 5 started using *What is this?* as an archi-form for all types of *wh*-questions, ranging from *Where is this?* and *What is there?* to *How many knobs are there?* and even *What colour is the sink?* She also used the formulaic *Where are room?* (*What kind of rooms are there in your flat*), while answering this same question as if it were formulated in the correct way, i.e. starting enumerating the rooms in the flat. Subject 4 adopted a surprising strategy of using *yes / no* questions instead of *wh*-questions: *Is there in the kitchen?* (instead of *What is there in the kitchen?* – twice), *Are there wall cupboards?* (*Where are the wall cupboards?*), *Is there over the cupboard?* (*What is there over the cupboard?*). This contradicts the once widely shared belief that the *wh*-movement operation is always performed first as compared to the subject-auxiliary inversion [6]. In all those examples, the subjects did perform the latter inversion, while failing to perform the *wh*-movement.

A. *Generalization* takes place exactly as it happens in the acquisition of English as a native language. First, the subjects used some formulaic expressions in the correct way (e.g. *Who works here?*). Until stage 4, when they started using the inversion with *do*, such expressions worked very well, but then the subject started using sentences of the *Who does work here?* type, which shows that the *do*-inversion rule had already been acquired. Other examples are: *Why we don't must ask the teacher?* (*Why mustn't we ask the teacher?*), *Who does write letters?* (Who *writes the letters?*), *Who did you tell?* (*Who told you?*), *Who did translated this book?* (*Who translated this book?*), *Who did you said this?* (*Who said this to you?*). Later on, the subjects differentiated the questions to the subject from the other *wh*-questions and stopped committing errors of that type.

B. *Archi-forms* are present at each stage. As soon as the operator *do* had been introduced, the subjects started mixing it up with the operators they had acquired before, and which they had been using quite well.

The period of archi-forms was characteristic virtually of all subjects. Sometimes their use was systematic (i.e. those were archi-forms proper), other times it was not (in which case those were alternating forms). There were several patterns in the use of archi-forms presented below.

(1) The use of *be* instead of *do*: S1 – *Where is you live? Are you want to talking? Are you like a party?* S3 – *Where are you usually relax? How often is she come here?* S4 – *What are do your friends? What is the director do now? Are you like she (= her) work?* S6 – *What are they usually have for lunch? What are now does your friend? When is you stand up* (*When do you get up*)? When are stand up your friend? *When are you breakfast* (*When do you have breakfast*)? *When are your friend's breakfast?* S8 – *How are the workers feel? What are they usually have for lunch?* S11 – *Are you wish tell with the director?* (*Do you want to talk to the director?*) *Where are you stay? Where she is read it does?* (*When does she read them?*).

(2) The use of *do / does / did* instead of *be:* S8 – *What does he doing?* (twice); S11 – *Do you tell going to today?* (*Who are you going to talk with today?*).

(3) The use of *does* instead of *did*: S1 – *When does she came? How long does she live in London? How often does she came? How many times does she telephone this week?* S3 – *How long does she lived...? How many times does she telephone? When does she came*? (twice).

(4) The use of *did* instead of *do:* S3 – *How many letters did you usually write a day?*

(5) The mixed use of several operators together: S3 – Why we are don't must ask? S4 – *Can do you talking with him?* S11 – *Where is they are having lunch?* S8 – *What for we must are going have bus?* (*What are we going to have the bus for?*) *Why must I am asking?* S6 – *When I am must get off? Why I must it is ask? When I must do telephone them?*

C. Like in the NLA, there were cases of *double auxiliary marking*. S2 – *Is there on the bookshelves is some the brushes?* (*Are there any brushes on the shelf?*) S10 – *Where is they having lunch*? Similar to NLA, the cases of double auxiliary marking did not happen often.

D. The cases of *double marking* were more numerous (the same picture is in the NLA). Like in the NLA, here we find that the majority of such cases occurred with irregular verbs in the Past Simple: S3 – *Where did you found this book? Who did you said this? Why didn't you went? How often did you saw TV? How many letters did you wrote a day?* S8 – *When did she came? Why didn't you came? How often did*

she came? It supports the hypothesis of some authors [7] who explain this phenomenon by performance factors rather than by the underlying rule structure. In their opinion, in choosing the wrong form of the verb, the acquirer retrieves it because it had been acquired as a separate word, and not as a part of the paradigm. Thus, it is considered to be a lexical retrieval error rather than reflecting any underlying grammar rule.

Subject 3 used *does* as an archi-form for *did*, i.e. she regularly applied it (alongside with *did*) as the Past Tense operator. She used it both with irregular and regular verbs: *When does she came? How long does she lived? How many times does she telephoned?* The last two examples are not typical of the NLA and might be explained by adults' attempts to find the correct rule resorting to logic. The same goes about the two sentences used by S7: *Where does she lives? Where does she works?*

The difference between the NLA and FLA seems to be in the acquisition of *there is / are* structures. They have never been reported as a separate acquisition problem in the NLA. However, they seem to present a special difficulty in the FLA. It turned out that such structures might be a problem even after the learners had mastered the *do*-inversion, which is considered the final stage in the NLA. In the FLA, however, the learners continued to use the first-stage structures (of the *how –many –books –on –the −table* type) even at the *do*-stage of *wh*-question acquisition. That might be explained by the fact that the learners, using their logic, cannot accept *there* as the subject of the sentence and very often omit it during the *wh*-movement. Because the operator (*is / are*) was acquired by them as an integral part of *there is / are* structure, it is lost in the process of *wh*-movement as well. The *wh*-question formation presumably involves several operations, among which are those of marking, copying, attachment, deletion, and movement. For example, to form the question (e.g. *How many people are there in the hall?*), one probably has to perform the following operations with the declarative sentence (*There are twenty people in the hall*): 1) mark the unknown element in the sentence (*twenty*); 2) attach the *wh*-element to it (*how many*); 3) mark all the elements related to the *wh*-element (people); 4) attach those elements to the wh-element (*how many people*); 5) move the *wh*-element with all attached elements to the front of the sentence (*how many people*): 6) copy the operator (*are*); 7) move the operator in front of the subject (*how many people are there*); 8) delete the operator after the subject (*how many people are*

therein the hall?). In the process of all these operations, there may happen all kinds of errors, registered in the subjects' speech: S5 – *Has got Andrew and Mary children?* (wrong attachment); S6 – *How many go stop can?* (*How many stops can I go?*) (wrong movements); S1 – *Why is looking he at as?* (wrong attachment); S8 – *How many will be days-off next month?* (no attachment, omission of *there*). Perhaps the most typical illustration of those operations malfunctioning was the translation of one sentence (*What are the engineers going to do?*) by most of the subjects: S1, 3, 7 – *What are going to work the engineers?* S6 – *What are going to work an engineers?* S8 – *What are going made engineers*; S9 –*What is going to do the engineers?* S10 – *What going to do engineers?* All those sentences are good examples of wrong attachment and the subsequent wrong movements, as a result of which the subject is moved to the end of the sentence. In the case of *there is / are* structures, we may assume that the action stops after the *wh-*movement, which (in combination with the loss of *there is / are* component) results in sentences like *How many people in the hall?*

To check the assumption that *there is / are* structures present a special difficulty in the FLA acquisition (at least for the learners with the Ukrainian or Russian native languages) we constructed a special translation test, which consisted of 5 parts: Part I – *be / can / may / must* inversion; Part 2 – the *Present Progressive* structures inversion; Part 3 – the *Present / Past / Future Simple* structures inversion; Part 4 – *there is / are* inversion: Part 5 – *there is / are* plus *modal* inversion. Below follow the results of the test (all subjects of all groups participated): Part 1 – 75% accuracy; Part 2 – 95%; Part 3 – 95%; Part 4 – 23%; Part 5 – 5%. The errors in Parts 4 and 5 are exclusively related to the omission of *there* (or *there is / are*), the wrong order of words (because of the wrong movements) or the combination of both.

Conclusions. Those results give us sufficient grounds to state that in the FLA, *there is / are* structures present a special difficulty for the learners and are acquired the latest of all. Otherwise, the acquisition of wh-questions in the acquisition of English as a native and a foreign language seems quite similar.

Prospects of further research. The conclusions on the similarity of the NLA and FLA are preliminary, as they have to be verified on a larger group of subjects, as well as on the material of other grammar structures, which is the prospect of further research.

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