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A Comparative Study of Functional Approach and Structural Approach to Foreign Language Instruction in the Acquisition of Grammatical Accuracy

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Abstract

The present study was an attempt to explore the effectiveness of the functional approach to foreign language instruction in acquiring grammatical accuracy in comparison to structural approach which is based on rule- orientated techniques rather than meaning and interaction- oriented ones. To that end, 70 participants majoring in English language translation at the University of Islamic Azad University of Tonekabon in Iran were randomly selected. The research followed the qualitative and quantitative research methods to evoke the required data. The collected data was statistically analyzed through paired sample t-test. Overall, results showed that the functional approach to second language instruction is more effective in acquiring the grammatical accuracy than the structural approach. Pedagogical Implications of the study are further discussed.

Key Words: *Functional Approach, Structural Approach, Grammatical Accuracy*.

Introduction

Teaching grammar in the foreign language classroom has constituted an important and thought about carefully issue for more than the last fifty years. The way grammar has been considered has a direct and decisive influence on pedagogical grammars, learning processes and many other areas involved in foreign language teaching. According to Newby (2003), grammar is the subsystem in a network of other linguistic sub-systems and sub-skills which have been attached different roles in the language classroom. Lock (1997) mentions some of the dichotomies that arise whenever dealing with grammar teaching, which are form vs. function, form vs. meaning, fluency vs. accuracy, meaning-based instruction vs. form-based instruction, and the most emphasized one related to communication vs. grammar. Traditionally, grammar teaching was focused on a formal notion of competence.

According to Lee and VanPatten (2003), traditional approaches to teaching grammar are problematic, as they require students to produce output immediately while they do agree that production can help with fluency and accuracy, it is not the means by which the grammar develops in the internal system. Grammar teaching in foreign and SL situations focused on presenting learners to the forms without giving attention to the aspects of learning these forms. Such an approach was derived from the structuralism school of

grammar, which was led by De Saussure (1959), and was firstly criticized by Firth (1957): "Structuralism emphasizes segmentation and phonemics and excludes meaning" (p. 197).

The researchers were motivated to study on this topic for the fact that many instructors of English use the structural and traditional approaches in teaching grammar. The consequence of using such approaches is the decline of English language among university students. The focus of the study was on students progressing in learning English grammar as a foreign language through a comparison between structural and functional approaches.

To address the above mentioned problems, the present study was designed to investigate whether students' achievements of learning English grammar as a foreign language could be improved more through functional approach than structural approach, and to find if the functional approach to foreign instruction effectively facilitates the acquisition of grammatical accuracy.

Literature Review

Influenced by both Malinowski and Firth, Halliday (1975) refers to the relationship between meaning and context of situation. He emphasizes sociolinguistic and functional perspective and the development of functions in the communicative language and language functions in society are connected to his formal linguistic theory known as systemic functional grammar. This leads to the development of notional-functional syllabus as the base for the modern functional approach to language teaching. According to his idea, language acquisition is seen as the mastery of linguistic functions.

Brown (1987) as a functionalist believes that there are two levels of language development: the functional level, and formal level. On the functional level, the development is paced by the growth of conceptual and communicative capacities, operating in conjunction with innate schemas of cognition. On the formal level, development is paced by the growth of perceptual and information-processing capacities operating in conjunction with innate schemas of grammar.

Crystal (2003) defines functional grammar as a linguistic theory that was founded in the 1970s as an alternative to the abstract focused on the rules which govern verbal interaction which is seen as a form of cooperative activity, and focuses on the rules of syntax, semantics, and phonology which govern the linguistic expressions that are used as instruments of this activity while formalized view of language presented by transformational grammar. According to the studies done before, functional grammar helps in attaining the notion of grammatical accuracy among second/foreign language learners. It is termed systemic-functional grammar and lexical-functional grammar in accordance with those who see language as a system of systems and those who see it as a combination of lexical relations rather than transformations or operations on phrase structure trees as a means of capturing linguistic generations. Dalrymple (2001) defines lexical-functional grammar as a linguistic theory, which studies the various aspects of linguistic structure and the relations between them.

Bresnan (2001) include studies on rhetorical structure, semantic structure, and other linguistic structures. These investigations correlate with the view of Olga and Marianna (2012) that the functional approach to the teaching of grammar is a rich resource for making contextualized meaning in a culture- and language-specific way.

According to Fromkin and Rodman (1993), *"Grammar is comprehensively defined as a description of the speaker's competence and as unconscious linguistic system which underlies the native speaker's use of language in terms of comprehension and production" (p. 13).*

Research Questions and Hypotheses

1. Does the functional approach to foreign language instruction have a more positive effect on the acquisition of grammatical accuracy in comparison to structural approach?
2. What are the superiority and effectiveness of the more positive effect (if any) of the functional approach to foreign language instruction than structural approach on the acquisition of grammatical accuracy?

Based on the research questions the following null hypotheses are proposed:

1. The functional approach to foreign language instruction has a more positive effect on the acquisition of grammatical accuracy in comparison to structural approach.
2. There are some superior and effective factors of the more positive effect (if any) of the functional approach to foreign language instruction than structural approach on the acquisition of grammatical accuracy.

Theoretical Framework

The present study focused on functional theories of grammar which refer to those approaches to the study of language that see the functions of language and its elements to be the key to understanding linguistic processes and structures. Functional theories of language propose that since language is fundamentally a tool, it is reasonable to assume that its structures are best analyzed and understood with reference to the functions they carry out. Functional theories of grammar differ from formal theories of grammar, in that the latter seeks to define the different elements of language and describe the way they relate to each other as systems of formal rules or operations, whereas the former defines the functions performed by language and then relates these functions to the linguistic elements that carry them out. This means that functional theories of grammar tend to pay attention to the way language is actually used in communicative context, and not just to the formal relations between linguistic elements (Nichols, 1984).

Halliday's systemic functional grammar (1984) argues that the explanation of how language works "needed to be grounded in a functional analysis, since language had evolved in the process of carrying out certain critical functions as human beings interacted with their ... 'eco-social' environment."

Halliday (1985) states that all languages are organized around two main kinds of meaning, the 'ideational' or reflective, and the 'interpersonal' or active. These components, called 'meta-functions' in the terminology of the present theory, are the manifestations in the linguistic system of the two very general purposes which underlie all uses of language: (i) to understand the environment (ideational), and (ii) to act on the others in it (interpersonal).

However, in the area of second language acquisition, the works of Givon (1985) are considered the prominent attempts to develop a functional theory of second language acquisition. In his functional-typological theory, Givon claims that syntactic change is driven primarily by psycholinguistic and pragmatic principles relating to speech perception and production in face-to-face interaction. These principles are themselves derived from more basic ones underlying human perception and information processing. Givon's goal is to develop a unified theory of all kinds of language change, including language acquisition (Larsen-Freeman and Long, 1991).

According to the concept of grammar, which appeared in Halliday's writings in the 70s and which was consolidated in the 80s with his Introduction to Functional Grammar, the dichotomies previously mentioned would be irrelevant, since the concepts of function, meaning and communication would be included within the study of grammar and linguists should focus on the use of language rather than on its

form itself. Thus, grammatical knowledge was performance, rather than competence, and grammar was considered as a sub-skill to be learned as procedural knowledge.

Methods

Research Designs

Using a combination of qualitative and quantitative data can improve an evaluation by ensuring that the limitations of one type of data are balanced by the strengths of another. This will ensure that understanding is improved by integrating different ways of knowing. Carvalho, S. and H. White. (1997) introduce four kinds of purposes of combining data (1) Enriching: using qualitative work to identify issues or obtain information on variables not obtained by quantitative surveys, (2) Examining: generating hypotheses from qualitative work to be tested through the quantitative approach, (3) Explaining: using qualitative data to understand unanticipated results from quantitative data, and (4) Triangulation (Confirming/reinforcing Rejecting): verifying or rejecting results from quantitative data using qualitative data (or vice versa). This study attempted to provide the effectiveness of functional approach on improvement of university students' grammatical accuracy based on Paired *t*-test.

Participants of the Study

This study was conducted at Islamic Azad University, Tonekabon Branch, in Mazandaran province of Iran. A brief introduction to the study was provided to students enrolled in all sections of the focal course at the beginning of fall semester 2014. A sample of 70 male and female intermediate university students studying English language translation participated in this study with the age range of 20-24 was chosen randomly from among 150 ones by applying Krejcie and Morgan's (1970) table which is an effective method of determining sample size.

Instrumentation

The researchers collected quantitative data to assess the participants' grammar knowledge. To do this, English Language Skills Assessment Test (ELSAT) produced by London Chamber of Commerce and Industry Examination Board was used. The test consists of four language skills items but due to the objectives of this study, only the grammar items were applied. For English language grammar assessment, the English language Skills Assessment Test was taken. The test consists of four sessions – listening, speaking, reading, and writing, but because this study demanded to assess the students' grammatical knowledge, only the writing session of ELSA test was used which consists of 16 multiple choice items and one open ended question to write a paragraph about one of the given general topics. To collect qualitative data, a self-report in a five point Likert scale was used.

Results

Data Analysis

In the present study, the data was collected from 70 students who were majoring in English language translation at the University of Islamic Azad University, Tonekabon Branch, in Mazandaran province of Iran. They were divided into two equal groups, 35 students in control and 35 students in experimental group. Both groups were pre-tested. The control group was given a treatment, which was a structural approach to the teaching of the English grammar sentence patterns. The experimental group was given a treatment, which was a functional approach to the teaching of the English sentence patterns. After the treatment, both groups were post-tested.

The collected quantitative data and then qualitative data after being coded helped to find the answers of research questions, namely:

1. Does the functional approach to foreign language instruction have a more positive effect on the acquisition of grammatical accuracy in comparison to structural approach?
2. What are the superiority and effectiveness of the more positive effect (if any) of the functional approach to foreign language instruction than structural approach on the acquisition of grammatical accuracy?

At first, by entering the data into SPSS computer software programs version 22, descriptive statistics of the sample group by estimating mean and standard deviation was performed (table 1), and by the use of inferential statistics, Paired *t*-test for comparing the two groups' grammar accuracy was done (table 2).

Table 1- The descriptive statistics of the Participants' ELSAT scores

N	Valid	70
	Missing	0
Mean		44.96
Median		48.00
Mode		53.00
Standard Deviation		8.89
Variance		87.89
Minimum		24.00
Maximum		57.00
Sum		323.74

Table 2- Paired Samples Statistics for experimental group

		Mean	N	Std. Deviation	Std. Error Mean
Pair 1	Pre-test	23.72	35	2.177	0.858
	Post-test	26.18	35	1.442	0.636

Table 3- Paired Samples Test for experimental group

		Paired Differences							
		Mean	Std. Deviation	Std. Error Mean	95% Confidence Interval of the Difference		*t*	*df*	Sig (2-tailed)
					Lower	Upper			
Pair 1	Pre-test Post-test	-1.273	0.104	0.233	-2.014	-0.531	-5.829	34	0.000

As table 2 and 3 indicate, there is a significant difference between the means scores of the pre-test and post-test of the sample group which received the functional instruction (t =-5.829, $p < 0.05$). The mean score of the post-test (mean = 26.18, std. deviation = 1.442) is greater than the mean score of the pre-test (mean = 23.91, std. deviation = 2.177).

Table 4- Paired Samples Statistics for control group

		Mean	N	Std. Deviation	Std. Error Mean
Pair 1	Pre-test	16.667	35	5.7135	0.966
	Post-test	18.239	35	6.0747	1.071

Table 5- Paired Samples Test for control group

		Paired Differences					*t*	*df*	Sig (2-tailed)
		Mean	Std. Deviation	Std. Error Mean	95% Confidence Interval of the Difference				
					Lower	Upper			
Pair 1	Pre-test Post-test	-0.583	0.667	0.192	-1.007	-0.157	-7.210	34	0.000

Table 4 and 5 show that there is a significant difference between the means scores of the pre-test and post-test of the sample group which received the structural instruction (t = -7.210, $p < 0.05$). The mean score of the post-test (mean = 18.249, std. deviation = 6.0747) is greater than the mean score of the pre-test (mean = 16.667, std. deviation = 5.7135).

Table 6- Comparison of means obtained in pre-test and post-test by the two groups

Mean	Control Group	Experimental Group
Pre -test	16.667	23.72
Post-test	18.239	26.18

As table 6 shows, the mean difference on pre-test and post-test (experimental group) = 26.18-23.72= 2.46. The mean difference on pre-test and post-test (control group) = 18.239-16.667=1.572. Therefore, the experimental group had higher scores in post-test than the control group (2.46 > 1.572). Thus, the experimental group with functional instruction was more successful on developing learners' grammatical accuracy.

In order to achieve qualitative insight into the reaction of the participants to the program and also to gain comprehensive view to the findings of our statistical analysis a questionnaire containing three questions was distributed to the members of both groups. The first question in the questionnaire asked the participants:

1. Did the program have an effect on their grammar and writing ability? If so, how?

All participants answered this question positively by providing their reasons. Some of them considered the program effective and others for usefulness of the program in their other courses. They believed that in many cases they needed only a hint to correct their problems and if in these cases they were provided with the right assistance they would learn better. Still there were some participants who advocated the program for the sense of responsibility it offered to them in process of learning grammar.

2. Do they prefer learning grammar traditionally or through experiencing it fully functional and context specific?

Most of the participants preferred to learn grammar through interaction by considering the actual meaning and use of sentence structures.

3. Do they find the instruction (functional/structural) used to teach to them useful?

The participants of treatment group stated that they comprehended the English actual and real texts more deeply. They also mentioned that the strategies behind the instruction of English language sentence structures supported them with an opportunity to correct their problems by themselves. While the participants in control group answered that the instruction used to teach them sentence structures were boring and made them be dependent to their instructors, although they could improve their writing skills in the related plan well.

The results from the questionnaire indicate that there was a difference between the effects of the functional instruction and the structural instruction in grammatical accuracy.

Discussion

To understand and use English as a foreign language, a learner should know the appropriate grammatical structures and wording to convey and express meanings in a particular cultural situation, context or 'genre'. According to Halliday's Systemic Functional Linguistic (SFL) theory learning a language is actually '*learning how to mean in context'*. He also states that language can be used successfully only when the learner knows how to make choices from varying the forms of that language appropriate to different contextual situations or'genres'. Due to teaching and learning Methods, traditional grammar textbooks cannot be perfect to help learners in making these choices.

The results inferred from statistical measurements reveal that the functional treatment is more effective in acquiring grammatical accuracy than the structural treatment. In other words, these results support that the hypothesis of the study is factual, i.e. the functional approach to second language teaching which is semantically, internationally, and structurally based, provides more positive effect on the rate of acquiring grammatical accuracy than any other approach. These results support the research findings of several scholars who investigate the effectiveness of functional approach to second language instruction (e.g. Harley, 1989; Lund, 1997; Day and Shopson, 2001; Mohan and Beckett, 2003; O'Halloran, 2003; and North, 2005; Martin, 2011).

This study was limited in view of the participants' gender, as they were randomly selected among male students. Due to the constraints imposed by the research site on this study, we were unable to include more than the students of one university. Thus, the use of only one context of doing the research could have had a weakening effect on the outcomes and generalization of the results. In addition, the quantity and order of the participants, process and circumstance in real texts may of course vary considerably to that shown here.

The researchers wish the results of this study initiate a call for further research on functional approach in relation to English grammar learning, by setting learning environment addressing to all functional strategies of learning grammar, by reflecting them in evaluation methods, by including participants' genders, age, and educational level, as well as their creativities can make the results of future studies more generalized.

Conclusion

In sum, the researchers hope that this article will be able to initiate a call for action in the pedagogical settings where English is taught as a foreign language.

Due to the outcomes of the present study, it was indicated a highly significant difference between the mean scores of the pre-test and post-test of the sample group which received the functional instruction more than the mean scores of those who received the structural instruction. These findings of the study are important in helping Education authorities, teachers and curriculum designers adjust their educational programs and activities in meeting their students' educational needs to improve their English language skills.

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