

A Cognitive study of Nonlinguistic Factors Affecting the use of Prepositions by Vietnamese Native Speakers

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ABSTRACT

This article investigates factors that influence the use of English expressions made by Vietnamese native students at Ho Chi Minh City University of Food Industry (HUFU). The research is conducted to analyze the factors that validly affect the usage of prepositions by EFL learners based on a variety of personal data and background of the participants. It is hypothesized that the application of prepositions is affected by some of geographical and social factors rather than linguistics matters. With the help of the software SPSS, the research took a thorough exploration into certain hindered elements in Vietnamese that may affect the language acquisition through negative interference to EFL learners. The data came from the survey of 141 EFL students at HUFU. A number of factors that appear to influence the use of English prepositions made by EFL learners. The findings discovered that location, favourite colours and negative transfers influenced the use of prepositions rather than the other factors, e.g. gender, reading habits, leisure activities, outdoor activities. The result of the study contributes to the understanding of the hindering factors to the SLA in teaching English prepositions under the light of Cognitive Linguistics. Practical suggestions for EFL pedagogy and research are also included in this paper.

Key words: English Prepositions, Negative Transfer, Cognitive Linguistics, EFL

INTRODUCTION

Prepositions play a very important role in languages. Prepositions are crucial in forming utterances because most of language users rely on them to form sentence structures and meanings. In fact, prepositions connect various parts of a sentence. Some location (where something is in relation to something else, e.g. in, on, atop, under, next to, etc.) or space (how things are related in space, e.g. in, on, to, with, over, under, onto, into, besides, etc.). Others tell us physical connections or possession between nouns or pronouns and another word, such as of, with, by. Some refer to relationships in time: while, during, after, until (till), before, and since and many other aspects. That is why English is considered as the most often use in English.

Prepositions are extremely polysemous and complex in defining their variegated senses in contexts with a lot of difficulties in semantics and syntax fields. Even though English prepositions belong to the closed class, they have archaic words, dialectal forms and combing formulas that are very easy to form a new one like structure of the “preposition – adjective – preposition” to make a multiple word preposition like “as opposed to”. English prepositions do not have a fixed number since different sources report dif-

ferent figures. There are over 90 English single-word prepositions (Lindstromberg, 2010). Besides, there are also 40 two-word prepositions and 24 three-word prepositions, 37 archaic or dialect prepositions and 10 postpositions which bear the different form with the existing list. With a high frequency and richly polysemous usage, prepositions cause a lot of challenges for English as a Foreign Language (EFL) learners in Vietnam. These challenges are partly described and interpreted in recent linguistic researches for learners’ competence (Hoang & Boers, 2018) and self-efficiency (Thi, Phan, & Locke, 2015) but these researches papers do not state clearly the factors that may influence on their process of acquisition of the language, especially those for prepositions.

Besides, the number of English prepositions is much larger than that in Vietnamese. The Vietnamese prepositional system focuses on location and time (Tri C. Tran; Minh-Tam Tran, 2007). The Vietnamese locative prepositions are “borrowed” or “extracted” from the other kinds of Vietnamese parts of speech. Vietnamese locative prepositions are considered as the coherence device words, for example “trên” (on, above, over), “trong” (in, inside), “chung quanh” (around), “bên phải” (on/to the right of), “cạnh” (next to/beside) and so

on. They are the same as those of Vietnamese prepositions of time, for example ‘*vào*’ (in, on, at), ‘*trong*’/‘*suốt*’ (during/for), ‘*trước*’ (before), ‘*sau*’ (after), ‘*kể từ khi*’ (since) and ‘*cho tới khi*’ (until), etc. It is clear that Vietnamese language does not have an equivalent system like that of English prepositions, and Vietnamese grammarians try to explain the notion of prepositions as means of conveying the grammar meanings. It means that Vietnamese prepositions are ‘the words that create the relations and according to this, Vietnamese prepositions are named as linking words of place, time, reason, purpose, etc.’ (translated from Vietnamese grammar (Kim, Kỳ, & Khiêm, 1940, p. 132). That is the reason why Vietnamese EFL learners focus too much on nouns, verbs and adjectives because they generally assume that these kinds of words are crucial. They spend most of their time learning nouns, verbs and adjectives to actively master English vocabulary; consequently, they put the other parts of speech aside, especially prepositions. Moreover, they assume that prepositions and adverb particles are easy words, and they just tend to foster ‘the translation’ from the ‘equivalent words’ in their mother tongue into English. Based on those above reasons, this research is conducted to investigate which factors intervene the results of using English prepositions by EFL learners.

This research paper focuses on the extended use of prepositions as motivated polysemy networks of Vietnamese people based on the CL. The research tries to answer the question: “Which factors negatively intervene the way the EFL learners’ using English prepositions from the perspective of CL?”. Based on this research question, the study focuses on the factors affecting the use of English prepositions made by EFL learners based on the information collected from the survey. To achieve this purpose, we set up the three sub-theme questions (1) Is there any relationship between gender and the use English prepositions?; (2) Do Vietnamese negative transfers result in the choice of simple English prepositions uses by Vietnamese native speakers?; and (3) Which group of factors influences the use of English prepositions: social factor group or geographical one?

The research is not going to describe the linguistic signs that account for the results of the language used, but we pay our attention to the cognitive, experiential, and social contexts, which go far beyond the linguistic system itself. They are gender, age, location, leisure time, favourite colours, sports and many others. The research is setting a very new idea in defining which factors may influence language learning through the use of English prepositions by Vietnamese native speakers.

LITERATURE REVIEW

Cognitive Studies on English Prepositions Usages in Vietnamese Context

Studies on the prepositions in Vietnamese language are hardly found because the term of “Vietnamese preposition” does not exist in the Vietnamese language system. The studies of ‘Vietnamese prepositions’ only found in studies on space, time, manner, and movements under the term of “connecting words” or something similar. One of very early studies on

this matter is the article titled “Trong phòng khách và ngoài phòng khách: vài điều thảo luận từ quan điểm của ngôn ngữ học Tri nhận” (Translated into English, “Some notes from the views of cognitive linguistics on the use of the preposition when referring to the living room in Vietnamese”) (Thắng, 2007). The research explores a particular case of Vietnamese preposition from the view cognitive perspectives, i.e. Vietnamese linguistic expressions of “*trong*” (English word “*in*”) and “*outside*” the living-room. The research presents plausible findings that there are five Vietnamese expressions for the single sentence “Mom is in the living room” in English or “*Mama est dans le salon*” in French.

[1] Mẹ (đang) ở trong phòng khách.

[2] Mẹ (đang) ở dưới phòng khách.

[3] Mẹ (đang) ở trên phòng khách.

[4] Mẹ (đang) ở ngoài phòng khách.

[5] Mẹ (đang) ở phòng khách.

(Thắng, 2007)

Vietnamese language does not have prepositions as a type of speech, but it does have many ways of expressing the spatial relations due to ‘different perspectives on orientation, experience, physical or cultural directionality’ (Thắng, 2007). Although the research succeeds in interpreting the complex of ground “*phòng khách*” for stranding of native Vietnamese speakers, the lexical change of the guest (“*khách*”) is not fully involved in the category of ROOM under the view of CL. That lexical change leads to the different understanding propositional schemas. In the latter section of this research, major propositional schemas of aspect and tense will be analyzed to know the location, motion or actions.

Prepositions usually play a significant function in the sentence as markers to join the words, phrases together to make a sentence. One imperial study to apply Cognitive Perspective to teaching English prepositions for Vietnamese students is “Vietnamese Students Learning the Semantics of English Prepositions” (Hung, 2017). In this study, the author uses vivid pictures to teach English prepositions to examine how different senses of prepositions are analyzed. Thirty eight (38) selected students join the experiment and they are split into two groups: one with the new cognitive linguistic approach and the other with traditional instructions. The participants give their opinions of new pedagogical instructions and traditional one on ten prepositions, namely *above*, *among*, *at*, *behind*, *beside*, *between*, *in*, *in front of*, *on* and *under*. The findings illustrate that the group that is treated with CL-based instructions outperform the traditional group in the fastest, although they win a comparable mean score in the pretest. Most participants have positive reactions to the new treatment of CL. The findings suggest that cognitive treatment could be practiced to assist students in bettering their understanding and retaining the metaphorical meanings of the prepositions. The thought of using CL in teaching, especially for teaching a very specific type of language is becoming much of interested in Vietnam, although it is rather later than the other nations in the world. As a matter of fact, his research is done in the controlled groups and the students have a long time to work with the researcher, and the methods can strongly influence the results of teaching. Although

the research has pointed out the better performance of students when they learn with CL approach, it does not reveal the hinders of cross-linguistic influence or negative transfers that students may have during their studying.

The Cognitive Studies of Prepositional Senses

Recently, cognitive linguists have paid much attention to the semantic nature of English prepositions, because ‘they are notoriously hard to learn and frequently subject to negative transfer’ (Bratož, 2014, p. 325). The meanings of prepositions and adverb particles vary according to the ways they appear such as in time, space, manner, or even abstract and are often unpredictable and arbitrary. Cognitive studies on prepositional senses vary from English language learning and teaching to linguistic research. An experimental investigation into learning Semantics of English *to*, *from* and *at* has been conducted since 2003 which represent a promising target for the application of CL to instruct L2 learning (Mueller, 2011; Andrea Tyler, 2003; Andrea Tyler, Mueller, & Ho, 2011). Since then, CL has been applied to many meanings associated with English prepositions in a very systematic way. Their research is reported basing on a quasi-experimental study which examines the efficacy of applying a CL perspective to L2 learning such as the cognitive use of prepositions of English spatial preposition (Brenda, 2014), prepositional error detection (Akhtar & Rizwan, 2017). Researches on spatial preposition are the starting point of the CL framework for grammaticalization. Heine and Steele (1994) develop ‘prepositional schemas’ to represent processes and events and are divided into three basic schemas: location, motion, and action.

Lu (2013) adopts a cognitive pragmatic and a Conceptual Blending approach to examine the preposition “*in*”. The criterion for sense establishment for preposition “*in*” is based on Grice’s Modified Occam’s Razor (Bontly, 2005) and his work can be considered an inferential product of the proto-scene. The sense of preposition “*in*” is divided into two senses: physical containment and means, and the pragmatic model of the meanings can itself position as cognitive models. The study of prepositions also contributes how the context oriented model of polysemy senses integrates into Conceptual Blending Theory (Fauconnier, 1985, 2001; Fauconnier & Turner, 2003) by depicting the correspondences between its contextualization and elements of emergent structures. However, the research does not cover the other factors that may influence on the mastery of English prepositions of survey participants in the research such as gender, location, religion, cultures, etc. The other studies on prepositional polysemy are related to the preposition “*over*” which has been studied by many researchers (Bergen & Chang, 2000; Brenda, 2014; Nevalainen, 2000; Quirk, Greenbaum, Leech, & Svartvik, n.d.; A Tyler, 2003; Wright & Hope, 2005; Yoon, 2001). From their points of view, the meanings of “*over*” are derived by means of reconceptualization and given pragmatic contexts. The differences of senses are the results of conceptualizing the relationship between Trajector (TR) and Landmark (LM). Although at least seven distinct senses of the preposition “*over*” can be drawn from these

researches such as proto-scene, trajectory, examining, reflexive, covering, covering-multiplex, covering - multiplex and path, the finding is only examined the only one English preposition ‘*over*’. The group of the prepositional schemas of “*above/over/beyond/atop*” needs clarifying more deeply. In the next section of this study, all of the factors affecting to the mastery of English prepositions under the light of CL are taken into accounts for analyzing.

Negative Transfers on Prepositions

Zhu (2009) describes the prepositions’ frequencies and roles through his analysis of argument realization of preposition structures as follows:

Considering the total number of annotated sentences in Frame Net (62812/139 439), it means that in every two to three annotated sentences, there is one sentence with prepositional phrases marked as frame elements (2.21:1). It is interesting to note that argument realizations in the form of prepositional structures are so marked in Frame Net that in many sentences, the majority of the annotated semantic arguments are realized by prepositional phrases (p.383).

Chong (2007) investigates the prepositional errors of time, place and direction made by junior Chinese students. His experiment focuses on the difficulties in using English prepositions made by junior Chinese students and he points out that “many of the Chinese ESL learners have difficulty in employing English prepositions when they write in the target language. Consequently, they are not able to employ them in a correct manner or without ambiguity so as to satisfy the rules ascribed to their use” (Chong, 2007, p. 4). Chong succeeds in explaining the sources of errors mainly based on Contrastive Analysis Hypotheses, Error Analysis Hypotheses and Interlanguage Hypotheses. This research mainly bases on the ‘surface’ of the language through their work to interpret the sources of errors. That does not reveal to the readers why most of the Chinese students have certain ‘must-have’ types of errors of using English prepositions, but other students do not.

Zarei, Darakeh, & Daneshkhah (2016) also address the difficulties of EFL learners in using English prepositions through ‘nonlinear systematic and meaningful teaching/learning procedures’. Their findings support the use of image-schemas on learning English prepositions and enhancing learner autonomy, in which ‘the experimental group participants who received instruction through focusing on the networks of relations and their experience of the world outperformed the control group’ (Zarei et al., 2016, p. 130). This research presents a clear-cut of prepositional polysemy which is experimented based on the basic conceptual structures such as ‘image schemas, prototypes, and radical networks in a step-by-step dynamical approach’ (Evans & Tyler, 2005).

Cognitive studies of negative transfer are quite new to linguistics recently. Not many researchers have carried on that line of business because it is complicated and intense. Only some of studies focus on the major lexical categories, e.g. non-factive verbs (Thi Minh Tran & Luru, 2014), L2

Table 1. Descriptive statistics of the participants' scores

	N	Minimum	Maximum	Mean	Standard deviation
Total score	141	15	700	260.28	137.485
Valid N (listwise)	141				

word order processing (Erdocia & Laka, 2018), language skills (Akhtar & Rizwan, 2017; Li, 2014), teaching grammar (Sudhakaran, 2015), but not for minor lexical group of words such as prepositions and particles. One analysis of prepositions which is mainly on idiomatic phrases, prepositional phrases and zero prepositions for detecting errors in the writing of graduate ESL learners of Pakistan is found with a wellknown work. This work investigates the nature of errors in the writing skill problems of graduate learners. The research asks students from four colleges and one university to finish the writing project and then detect writing errors in the fields of prepositional phrases, idiomatic phrase and zero prepositional phrase from Pakistan learners. The outcomes indicate the incorrect usage of prepositions frequently 'with, in, by' and unnecessary insertion of prepositions because the learners tend to place a proposition as the same designs of Pakistan language.

METHODOLOGY

Population and Sample

With the focus on defining the factors influencing English prepositional usage at Ho Chi Minh City University of Food Industry (HUPI), we set up a survey of 141 students who are from the different areas in Vietnam. The survey was conducted to collect the personal background of the participants, such as age, gender, location, religion, color favourites, time management, time consumption, and qualifications. The survey involved 141 randomly selected students from different HUPI's 14 faculties and one institute. The data were collected through 70 multiple-choice item questionnaire and 5 writing tasks of describing pictures, in which students were asked to fill in the blanks with the most appropriate prepositions.

Research Design

To present the analysis of the input data from the undergraduates, descriptive methods were used. The results were expected to test the hypothesis of which factor had the most influence on the results of using English prepositions. The research based on descriptive methods, with the application of independent T-test, Anova test, and Linear Regression test to explain which factor had its own values in comparison with the participants' scores.

Research Instruments

There were two different tests in the questionnaire (See Appendix) which were used as instruments to collect data from the EFL undergraduates at HUPI. The first test included 70 multiple choice questions. The deletion of English prepositions was used to assess their overall semantic accuracy and capability

Table 2. Paired samples correlations Q.35 and Q.70

		N	Correlation	Sig.
Pair 1	Total score & Question 35	141	-0.275	0.001
Pair 2	Total score & Question 70	141	-0.105	0.216

to fill in the blanks appropriately in this test. In the first test, the correct answers were coded with digit '0' and incorrect answers with digit "1" in order to analyze the frequency of correct and incorrect of the reach of questions. We changed the coding signals with four different specific prepositions in each of the questions in the first test to analyze the source of difficulties when they used English prepositions. The coding was marked from 0 to 3, based on the proximity to the correct answer which was coded 0. The second test was designed to asked participants to describe the place or spatial relation of an item with the other things in the picture. There were five pictures in the total.

RESULTS AND DISCUSSIONS

The Relationship between Gender and the use of English Prepositions

The study set up a hypothesis that gender, age, location, favourites and leisure activities certainly affected the results of using prepositions. Based on the first multiple choice test in the questionnaire, the data were collected and analyzed statistically in comparison with the score they got through the test as shown in Table 1. The scores were in the rank from 15 to 700, according to their performance in the test.

Overall, the results presented above show that the scores of the participants were falling at the mean of 260.28. The Standard Deviation of 137.485 revealed that the difference among participants' results was extremely high. There was a perceived difficulty of the participants in the survey found in the large amount of the questions, but not for certain "difficult questions" only. Furthermore, it could seem appropriate to state that the correlation significant varied from .001 to .216 for the questions 35 and 70 in Table 2:

A high Standard Deviation around the mean identified from the analysis showed the 'negative results' of the survey. It meant that participants might have a wide spread-out in choosing the correct answers. Many of them have answers that were not expected to be close to the proximity with the correct answers.

Taking the survey, participants filled out the blanks with appropriate prepositions in 70 multiple choice questions and wrote sentence to describe an object in pictures. The analysis variables for investigating the relationship between gender and the use of prepositions were their total scores and respondent

Table 3. Group statistics with the gender factor

	Gender	N	Mean	Standard deviation	Standard error mean	Sig.
Total score	Female	109	265.05	139.999	13.409	0.887
	Male	32	244.06	129.343	22.865	

gender. The data were tested with Chi-Square test. The result from the survey testified the hypothesis that genders played no role in determining the nature sources of using English prepositions. Table 2 illustrated the performance of 109 female and 32 male undergraduates to prepositional uses in the survey.

Table 3 shows that *p* value is 0.887, which is greater than 0.005. This means that there is not any statistically significant difference between genders and total scores. It was concluded that no evidence was found to the relation between gender and the performance of using prepositions. Table 4 illustrates the tabulation between gender and scores in the Chi-square test.

However, one of the noticeable points that 5 questions numbered 8, 10, 12, 20, and 55 in the first test showed that there existed the differences between male and female performance in using prepositions. The results showed that it was statistically significant regarding the relationship between gender and the use of prepositions, with *p* < .0005 (see Table 5). This indicates that somehow there was a difference in between female and male performances, but not clear enough. These questions were closely related to phrasal verbs with the complex correlations with each other.

Geographical Factor Vs. Social Factors

To test which factor most affects the choices of using proper English prepositions, we used the Anova (See Table 7) and T-test (See Table 6) with an independent sample. The results revealed that location, where the students come from, had two significant factors influencing the answers of the participants: location and favourite colours with the same sig. at 0.011. That was a surprising result because we expected the reading time, habits, leisure activities could affect the results, but they did not have any strong correlations from our statistic data analysis.

The other factors like gender, age, religions, qualification (compared with the different group ratio), habits including reading times, playing games, sports, etc.) did not exceed the *p*-value in the correlation test: Age (0.397), Religion (0.59), Reading spending time (0.09), Leisure activities (0.388), Qualifications (0.181), and Starting time to learn English (0.88). Among them, only reading habit could have an influence on using English preposition of participants with the *p*-value at 0.88.

The geographical factors and favourite colours were shown as strong factors that might have such a significant number on the test. It showed that participants may have 'some capacity of using preposition' from the place they come and the colours their love might reveal their ability in using them.

From these statistical facts, it is high time that teaching English prepositions by rote learning and some of exceptions

Table 4. Total score *Gender crosstabulation

Total score	Gender		Total
	Female	Male	
15	1	1	2
25	5	3	8
35	2	1	3
55	2	0	2
65	0	1	1
130	2	0	2
140	2	0	2
170	3	0	3
180	4	0	4
190	4	1	5
200	4	2	6
210	4	1	5
220	5	1	6
230	8	2	10
240	8	3	11
260	8	3	11
270	5	1	6
280	6	0	6
290	5	2	7
300	5	1	6
310	6	1	7
320	3	0	3
330	2	1	3
340	1	2	3
360	2	1	3
370	1	0	1
390	0	1	1
420	0	1	1
430	1	0	1
470	0	1	1
520	1	0	1
530	1	1	2
540	1	0	1
560	1	0	1
570	1	0	1
660	1	0	1
680	1	0	1
690	2	0	2
700	1	0	1
Total	109	32	141

Table 5. Independent samples test for Questions numbered 8, 10, 12, 20 and 55

	Levene's test for equality of variances		T-test for equality of means						
	F	Sig.	t	df	Sig. (2-tailed)	Mean difference	Standard error difference	95% confidence interval of the difference	
								Lower	Upper
Q.8									
Equal variances assumed	9.268	0.003	1.444	139	0.151	0.1193	0.0826	-0.0440	0.2825
Equal variances not assumed			2.672	108.000	0.009	0.1193	0.0446	0.0308	0.2077
Q.10									
Equal variances assumed	10.496	0.001	1.165	139	0.246	0.2294	0.1969	-0.1599	0.6186
Equal variances not assumed			1.372	67.815	0.175	0.2294	0.1671	-0.1042	0.5629
Q.12									
Equal variances assumed	11.448	0.001	3.077	139	0.003	0.5499	0.1787	0.1966	0.9032
Equal variances not assumed			4.154	94.088	0.000	0.5499	0.1324	0.2871	0.8127
Q.20									
Equal variances assumed	5.656	0.019	-0.966	139	0.336	-0.2308	0.2390	-0.7034	0.2418
Equal variances not assumed			-1.038	56.859	0.304	-0.2308	0.2223	-0.6760	0.2144
Q.55									
Equal variances assumed	4.056	0.046	2.574	139	0.011	0.5020	0.1950	0.1164	0.8876
Equal variances not assumed			2.443	47.072	0.018	0.5020	0.2055	0.0886	0.9154

Table 6. The Correlations of the location and scores

	Total score	Location
Total score		
Pearson correlation	1	0.194*
Sig. (1-tailed)		0.011
N	141	141
Location		
Pearson correlation	0.194*	1
Sig. (1-tailed)	0.011	
N	141	141

*Correlation is significant at the 0.05 level (1-tailed).

should be considered because this kind of teaching leads to non-stable improvements for such factors like location and colours. For learners' locations and attitudes to colours, we use the domains, the notions of image schemas and the conceptual metaphor theory in the field of Cognitive Linguistics perspective to locate them and their 'outside world', forming their spatial, time and purpose relations. By that way, they can predict the use of prepositions in certain cases that are constrained by model of Trajectors and Landmarks for some common preposition such as *in, on at, over, above, under, etc.*

Simple English prepositions as the Results of Vietnamese Negative Transfers

When asked to describe the five pictures (See Section IV. Appendix), participants wrote the answers for the given ques-

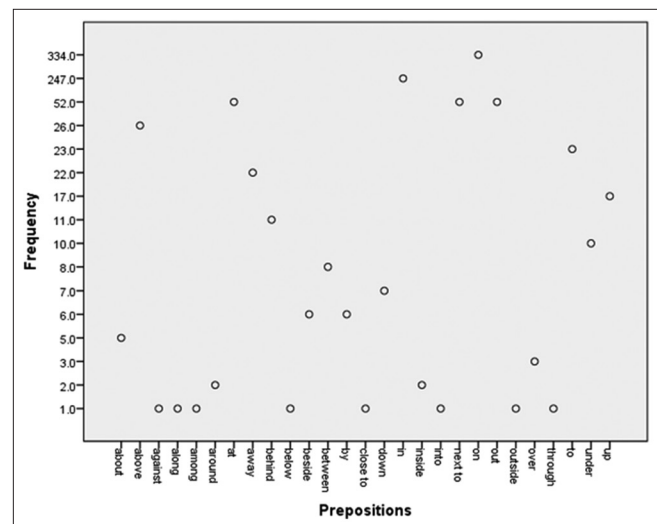


Figure 1. Frequencies of English prepositions in describing 5 pictures

tions below the picture. These pictures were focused to check the locative prepositions. Undergraduate participants could only use 26 locative prepositions (approximate to 57.7% of the total 45 English locative prepositions). The highest frequency was the preposition “on” with 334 times and appears only one a time is the following prepositions: *against, along, among, below, close to, into, outside, and through.*

That participants used the prepositions “on” up to 334 times and “in” with 247 times in their descriptions, nearly twice the number of participants itself. These Figures 1 illustrated the problems of defining their own embodiment out of the things

Table 7. ANOVA test for the correlation between total scores and other factors

	Sum of squares	df	Mean square	F	Sig.
Age					
Between groups	2.603	38	0.068	1.092	0.356
Within groups	6.333	101	0.063		
Total	8.936	139			
Gender					
Between groups	5.513	38	0.145	0.770	0.818
Within groups	19.224	102	0.188		
Total	24.738	140			
Location					
Between groups	42.951	38	1.130	0.814	0.761
Within groups	141.702	102	1.389		
Total	184.652	140			
Religion					
Between groups	111.685	38	2.939	1.217	0.218
Within groups	246.315	102	2.415		
Total	358.000	140			
Favorite color					
Between groups	148.215	38	3.900	1.427	0.082
Within groups	278.778	102	2.733		
Total	426.993	140			
Reading spending time					
Between groups	20.039	38	0.527	1.191	0.243
Within groups	45.166	102	0.443		
Total	65.206	140			
Leisure activities					
Between groups	106.512	38	2.803	1.227	0.209
Within groups	233.034	102	2.285		
Total	339.546	140			
Qualifications					
Between groups	6.424	38	0.169	0.914	0.614
Within groups	18.867	102	0.185		
Total	25.291	140			
Starting time to learn English					
Between groups	37.919	38	0.998	2.759	0.000
Within groups	36.889	102	0.362		
Total	74.809	140			

need describing. They focus too much on the ‘surface’ and the ‘containment’. They had no ideas with geometric factors that might require them to use *along*, *besides*, *next to*, *behind*, *beyond*, *etc.* That was a real debate issue in linguistics.

There is debate in the literature about whether prepositions like at, in and on, and over and under are defined entirely in terms of non-geometric factors, or whether their meaning involves a combination of geometric and functional elements.

(Zwarts & Gärdenfors, 2016, p.112).

The participants considered the thing needed describing was already “*on/in the picture*”. They did not concern about

the spaces in which it was related to the other items in the picture. Therefore, they described the position of the fan in the picture 5 like these:

[1a] The fan is **on** the **roof**.

[2a] It’s **under** the **ceiling** and on the **girl**.

[3a] [It’s] **in** the **ceiling**.

[4a] [The] fan [is] **below** [the] **roof**.

These four sentences were extracted from the Section IV of the Questionnaire with the errors in using English prepositions due to the negative transfers from their mother tongue as in [1-4b]:

[1b] Quạt **trên** **mái** **nhà**.

[2b] Cái quạt ở dưới trần nhà và trên [đầu] ô gái.

[3b] [Nó] trong trần nhà.

[4b] [Cái] quạt [ở] dưới [mái] nhà.

Sentences [1-4a] produced by students were negatively transferred from [1-4b] their Vietnamese semantics and structures when they were asked to write. The causes for these were different from two cultures in recognizing their embodiments. Vietnamese people normally define themselves as a reference point to examine the things in the world. They examined things without their proximity or geometrical positions. The prepositions “on” with the basic spatial meaning of “contacting” or “supporting” was lost during the process of transferring from the word “trên” in their mind to the words “in” the form of the questionnaire. The preposition “on the girl” in [2a] was referred to the notion of the preposition “above” in the participant’s mind because both of these prepositions were equivalent “trên” in Vietnamese language. Simply “trên” could not be clear for the two situations with spatial meanings of “contact” or “support”. If we said “on the girl” as in [2a], the fan would have ‘contacted’ or ‘touched’ on the girl’s head or any part of her body, and if we said “the fan is on the roof”, there would be no fan that was being up-side-down hung on the ceiling, but there was one standing on the roof. Langacker (2008: 235) mention that phenomenon after a long observation. Langacker interpret that prepositions implying visibility of positive meaning like *up, over, above, in front of* tend to be used more often than the prepositions *under, beneath, underneath, below, and behind* that lack of visibility. The evidence from the research survey also supported his conclusions.

The negative transfer also occurred on participants who were unable to recognize exactly about the geometrical spatial meaning of the preposition “in” and “below”. The word “trong” as in [3b] did not cause serious error in using “[The fan is] trong trần nhà” because Vietnamese people referred “trần nhà” (ceiling) as the whole space as a house. In this case, they considered “their trajectory” (the fan) as their position in their house, but not the fan. By the way, the landmark was not the ceiling, but a house itself in their mind. Once again, the notion of the basic spatial meaning of the “below” was lost in the [4a] because *BELOW is not used to refer to physical séances in which the Subject (Trajectory) and Landmark are touching* (Lindstromberg, 2010). With the lack of the Vietnamese equivalent terms in compared with English prepositions, Vietnamese learners tend to use very simple prepositions to express the complex dimensional LM as the results of Vietnamese negative transfers.

CONCLUSION

The main objective of this research paper was to investigate the nonlinguistic factors which may intervene the uses of English prepositions made by Vietnamese native speakers. The three sub-theme questions were also identified with the statistical data from the survey of 141 students at HUFU. The preliminary finding of the survey analysis was that gender did not affect the uses of English prepositions, while the geographical factor and their attitude to colours somewhat strongly influenced their choice by the extended use of poly-

semy networks of English prepositions. The results also provided the evidences of Vietnamese negative transfers in using English prepositions. Results from this research motivated us to give two remarkable conclusions for EFL teachers:

- (i) Prepositions that belong to the closed class of words in English are unchangeable in forms, pronounced softly, and unstressed, but they cause more problems for non-native speakers or learners of English than any other parts of speech. They appear to be not important in some ways; For example, they aren’t even given capital letters in book titles. Native speakers are likely to choose the correct ones intuitively since they are native born with the language and have been using them and familiar with them for their whole lives, so prepositions are the big challenges for foreign learners. The nonlinguistic factors must be involved in teaching or interpreting the use of prepositions because the use of prepositions is quite arbitrary. One may have many metaphor schema images based on the context they appear;
- (ii) Vietnamese culture is also quite different from the British culture. One experiences the language use of his/her own language system interacting with the cultures and social relations. That causes difficulties in searching one-to-one mappings between the prepositions in Vietnamese and English. Negative transfers come up as a very natural process of learning and teaching, especially prepositions and particles.

Although this research paper only explores factors affecting the usage of prepositions based on the Cognitive Linguistic, the authors hope to explore the effectiveness of language teaching by a CL-approach. In future studies, the authors will design and set up a pilot study for applying this perspective to real teaching to evaluate its effectiveness not only for prepositions but the other parts of speech as well.

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APPENDIX

Survey Question for investigating English prepositions uses

I. PERSONAL INFORMATION

1. Full name:.....
2. Your age:
 - a. 1-18 b. 18-23 c. 23-35
 - d. 35-50 e. >50
3. Your gender: a. female b. male c.-
4. Your hometown: Select from the list
5. Your religion:
6. Your favourite colours:
 - a. red b. yellow c. white d. green e. blue
 - f. orange g. black h. purple i. pink
 - j. brown k. grey
7. How long do you spend reading books?
 - a. hardly b. seldom c. 1-2 hours d. 3-4 hours
 - e. > 4 hours
8. How do you spend your free time?
 - a. playing games, surfing Facebook, Zalo, reading news, etc. on mobile
 - b. spending time reading books
 - c. spending time with family and local community
 - d. playing sports and outdoor activities
 - e. others
9. Your background education
 - a. Secondary School qualification
 - b. High school qualification
 - c. Vocational qualification
 - d. College qualification
 - e. High education qualification
10. When did you start to learn English?
 - a. Since primary school
 - b. Since secondary school
 - c. Since high school
 - d. Since college or university
 - e. others

II - PREPOSITIONS: PLACE, TIME AND MOVEMENT

Choose the correct answer for each of the questions.

1. We met a lot of people _____ our holiday?
 - A. on B. in C. during D. at
2. He went _____ sea alone.
 - A. in B. to C. into D. on
3. Speed is _____ essence in a project of this type.
 - A. on B. for C. about D. of
4. He is addicted _____ smoking.
 - A. to B. with C. on D. for

5. He sat _____ the shade of a tree.
 - A. under B. with C. in D. for
6. When will you hand _____ your assignment?
 - A. in B. back C. down D. into
7. There is a bridge _____ the river.
 - A. over B. on C. down D. up
8. Please make yourself _____ home.
 - A. at B. with C. in D. on
9. The brave youth immediately jumped _____ the river to save the drowning child.
 - A. in B. into C. inside D. to
10. Keep your dog _____ the flower beds. It may damage the flowers.
 - A. out B. from C. beside D. off
11. _____ the moment she felt disappointed for no stockings hung over from the fire place.
 - A. just B. for C. at D. since
12. King Shivaji fought _____ every kind of aggression.
 - A. against B. to C. with D. at
13. Don't depend _____ others; you must stand on your feet.
 - A. at B. on C. to D. for
14. Our life promises a lot _____ pleasure and we must learn to enjoy it.
 - A. with B. for C. of D. at
15. He travelled all _____ the world when was eighty years old.
 - A. in B. with C. of D. over
16. Amy did not disclose the fact _____ her husband.
 - A. to B. before C. from D. on
17. The child did not approve _____ the father's plan.
 - A. to B. by C. of D. with
18. The tribes live _____ customs different from the English had ever seen.
 - A. on B. by C. off D. with
19. The strike has been called _____.
 - A. of B. at C. off D. by
20. We warned her _____ the danger.
 - A. from B. about C. against D. of
21. We laughed _____ the affair.
 - A. over B. about C. for D. on
22. Put a blanket _____ the baby.
 - A. over B. about C. at D. on
23. Stay _____ your limits.
 - A. within B. in C. at D. on
24. She was happy to partake _____ the festivities.
 - A. in B. of C. at D. for

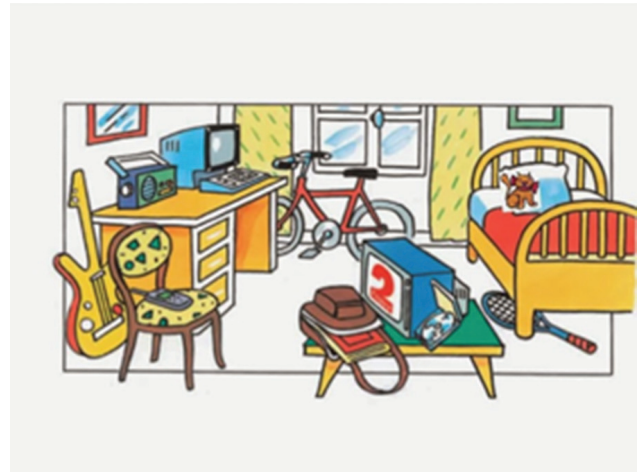
25. I can cope _____ any problems
A. up with B. with C. up D. from
26. Discrimination _____ any form should be avoided.
A. of B. by C. from D. in
27. She scoffed _____ the idea of revolution.
A. for B. at C. about D. on
28. It is our duty to get _____ the truth.
A. to B. over C. into D. at
29. This work of art is worthy _____ praise.
A. of B. for C. off D. to
30. For a child, a blow _____ self-esteem is a terrible thing.
A. of B. with C. to D. on
31. You must apologise _____ him for this.
A. with B. to C. of D. for
32. She seems cursed _____ bead luck.
A. by B. with C. for D. on
33. The criminal was totally taken _____ when the police recognised him.
A. aback B. up C. for D. away
34. As she became tired, errors began to creep _____ her work.
A. with B. into C. off D. up
35. Small pox has been eradicated _____ India.
A. in B. from C. within D. out of
36. Poets compared this world _____ a stage.
A. with B. to C. by D. on
37. My cousin will arrive _____ Sunday.
A. in B. at C. on D. the
38. The boys went inside _____ room
A. of the B. the C. to the D. of
39. He goes _____ disco techs every night.
A. to B. across C. down D. towards
40. You must walk _____ the bridge.
A. into B. across C. down D. along
41. That woman going _____ the supermarket is my mother.
A. onto B. across C. off D. into
42. Sally is talking _____ Michael.
A. to B. off C. through D. up
43. Anna has returned _____ her home town.
A. to B. into C. onto D. towards
44. The plane landed _____ the runway.
A. to B. into C. in D. on
45. There is something wonderful _____ him.
A. of B. about C. for D. in side

III - PREPOSITIONS: PHRASAL VERBS AND OTHERS

46. We were completely taken _____ by the estate agent who turned out to be a crook.
A. for B. on C. off D. in
47. Dr. Sheldon concluded his speech _____ explaining the importance of the charity.
A. by B. with C. at D. in
48. A large number of people have fallen victim _____ dengue fever.
A. to B. of C. from D. with
49. I smiled _____ him in all his virtues.
A. above B. below C. on D. at
50. A wise man profits _____ the mistakes of others.
A. through B. from C. with D. by
51. A minister has taken _____ after the election.
A. to B. over C. off D. down
52. Everyone in this world is accountable to God _____ his actions.
A. of B. for C. to D. over
53. That week the dollar dropped _____ its lowest levels.
A. to B. at C. into D. by
54. The students should be reconciled _____ the way things are changing.
A. with B. to C. for D. at
55. Walk _____ the street and turn left.
A. onto B. across C. around D. down
56. Don't put _____ until tomorrow what you can do today.
A. up B. of C. on D. off
57. He is known _____ others
A. by B. among C. for D. to
58. He was brought _____ by his aunt as his mother died when he was just a lad.
A. up B. of C. off D. with
59. I complimented him _____ his success.
A. about B. for C. on D. at
60. How did the things come _____ ?
A. at B. into C. about D. down
61. I prevailed _____ him to contest the election.
A. on B. off C. over D. of
62. The Principal called _____ an explanation from the clerks.
A. on B. out C. for D. in
63. Did the boys turn _____ for football practice?
A. in B. up C. on D. back

64. He shows great ability _____ Mathematics.
 A. at B. for C. in D. about
65. The headmaster congratulated him _____ getting the merit scholarship.
 A. for B. about C. with D. on
66. The aim of education is to bring _____ the best in students.
 A. on B. in C. about D. out
67. You should not confide _____ stranger.
 A. in B. to C. with D. by
68. The firm has been dealing _____ luxury goods for more than two decades.
 A. in B. with C. out D. on
69. Our teacher cleared _____ points before the exams.
 A. off B. away C. up D. out
70. After several minutes we located the key _____ the door.
 A. off B. away C. for D. out

73. Where is the bike?



74. Write a sentence to describe the picture.



75. Write a sentence to describe the picture.

IV - PICTURE DESCRIPTION

Look at the Picture and Answer the Questions:

71. Where is the small house?



72. Where is the fan?

