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Resolving Lexical and Structural Ambiguity by Jordanian Learners of English

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ABSTRACT: The present study aims chiefly at gaining a deep insight into the process of resolving lexical and structural ambiguity. As a secondary purpose, the study attempts to examine the impact of meaning-dominance and syntactic category of a word on resolving ambiguity. The research method of this study is descriptive qualitative in nature. For the purpose of collecting the deeded data, a translation test is utilized. The test is divided equally into two section, each of which is comprised of eight sentences. Section one is designed to examine lexical ambiguity, while section two to test structural ambiguity. The findings of the study depict that lexical and structural ambiguity pose a great challenge for the participants, in which the percentage of unresolved sentences surpassed by far that of resolved sentences. It is also found that the participants retrieve high-dominant meaning more readily than low-dominant meaning. In addition, the participants tend to activate nouns quicker than verbs when resolving ambiguous sentences. Those results can be ascribed to lack of proficiency at grammar and lexis. The results lend support to constraint-satisfaction model, which indicates that when processing a meaning, several candidates compete with each other and the winning candidate is the one satisfies all constraints. The results of this study raise the awareness of language learners as well as language teachers on the significance of building a good grammatical and lexical competence in order to well understand ambiguous sentences, which in turn helps have a good command of English. The study sheds extra light on the role of word syntactic class and dominance of meaning in disambiguating sentences, which is not deeply discussed by other studies.

Keywords: lexical ambiguity, structural ambiguity, translation test, syntactic category; meaning dominance

I. INTRODUCTION

Natural languages are created principally to serve the purpose of communication between individuals or larger groups of people. Long before the invention of language, people used to contact each other via different ways including gestures, signs and whistling. Over years, human acquired ample experience enabled him/her to replace the primitive methods of communication with more sophisticated ones, resulting in attempts of using speech sounds and later words and phrases. Creation of language is deemed as a turning point in the history of humanity, as language is a method for conveying people' ideas, thoughts and world knowledge efficiently and effortlessly. To establish a fruitful communication between persons, four maxims need to be fulfilled as proposed by Paul Grice (1975) who points out that the message of a speaker can be interpreted correctly if it has the following maxims.

1- Be true (the maxim of quality).

2- Be brief (the maxim of quantity).

3- Be relevant (the maxim of relevance).

4- Be clear (the maxim manner).

The conversation ends up opaque and incomprehensible in case one of those maxims is flouted. For the purpose of the current study, maxim four is the core point. The manner maxim or (be clear) ,mentioned above, can be breached when the language of a speaker is not understood by the listener as a result of using pun or when two people exclude the overhearer from the conversation e,g lawyer and judge speak by using specialized terms never understood by the prisoner. Flouting maxim four is best exhibited through using ambiguity utterances by the speaker. Several definitions of ambiguity are forwarded, amongst those is the one by (Yarob, 2009) who contends that an utterance can be treated as ambiguous when it has multiple interpretations. Another working

ISSN- 2394-5125 VOL 7, ISSUE 08, 2020

definition of ambiguity is advanced by (Parisi and castelfranchi,1988. P, 129) as " the existence of potential alternative choices at particular points in the processing of a sentence". Based on the above mentioned definitions, what makes a word or a sentence ambiguous is the presence of multiple meanings for each utterance in the language, making comprehension a highly complex process.

According to (Kılıçkaya, 2007) nearly all English words can express more than one meaning. This statement is in line with the figures of the American Heritage Dictionary, which provides forty different meanings conveyed by the word "take", some of those meanings are intimately associated, while others have irrelevant senses. One more example of polysemous words in English is "hold", where OXFORD dictionary lists up to thirty-seven senses of this word. Such wide range of meanings of a single word is a leading factor of creating ambiguity. Ambiguity resolution can be sometimes a challenging task, involving two main strategies, first activating all the meanings conveyed by the ambiguous word. Second, building contextual relationship. However, some linguists cast doubt on the usefulness of context in clearing off ambiguity, indicating that context help only activate senses associated with it while ruling out all other senses of the ambiguous word.

Two types of ambiguity are distinguished; first, Lexical and structural ambiguity (Khawalda andAl-Saidat, 2012). Lexical ambiguity is also termed as semantic ambiguity. It is further subdivided into three types as follows; 1- Homonomy: Defined as a semantic relationship occurs when two words share the same pronunciation or spelling but have two different meanings. Homonomy can appear in the form of two words spelled the same but pronounced differently, which called "homography". Homonomy is also exhibited in the form of two words articulated in the exact manner but with dissimilar spelling, which is termed as " homophony. The lexical relationship, e.g homography is illustrated in the examples below.

A- Yamin and Jawad are close friends.

B- Please, close the door after leaving the class.

The word "close" is used in sentences (A and B) above. In (A), "close" is articulated as "s " conveying the meaning of intimacy while, in (B) "close" is articulated as "z " communicating the sense of " shut". It could be said that " close" in A and B are homographs. The examples (C and D) below clarify homophony.

C- Tom prefers meat with rice on lunch.

D- Edward did not meet his old friends for ages.

The word " meat" is used in sentences (C and D) above and pronounced the same in both sentences but the spelling is varied. Thereby "meat" in (C and D) are homonphones. The second type of lexical ambiguity is *polysemy* which occurs when a word expresses multiple senses, varied from one context to another. A glaring example of polysemy is the word " run" which communicates plenty of meanings as appear in the two sentences below.

E- Liza runs three kilometers a day.

F- John runs his own business.

The verb "run" in E indicates the meaning of jogging or moving at a speed rate faster than walking, whereas in F "run" expresses the notion of managing a business. It is noticed that polyesmous words are open class, where current English words continue in acquiring new senses as in the case of the latest lexical advents to technology e.g. tweet, facebook, spam, tablet etc.

3- Categorical ambiguity: words bear slight difference in meaning due to having varied syntactic categories. This type is actually very common in English as a great deal of words can serve as a noun and a verb simultaneously. Some of those words can only be differentiated by stress placement; nouns assign stress on the first syllable, whereas verbs place stress on the second syllable as exhibited in the words (present, record, import, increase, perfect, permit etc….). Other words, change in meaning does not have to do with stress when a word used in two different syntactic classes e.g. *sink*. The meaning of *sink* can only be understood on contextual ground.

The second type of Ambiguity is structural or syntactic ambiguity. It is generally agreed that "An utterance is structurally ambiguous when it can yield more than one syntactic interpretation or when it implies more than one syntactic relationship between constituents within a structure" (Oaks 2010, p. 15). Strictly speaking, an utterance is regarded structurally ambiguous not because of expressing variety of meanings but due to rules of grammar or order of words in a sentence. Wang and Gou (2017) differentiate between three primary types of structural ambiguity.

1- Attachment ambiguity. This type of ambiguity appears in three forms, the first of which occurs when a prepositional phrase has more than one verb phrase that can be attached to it as revealed in example A below.

ISSN- 2394-5125 VOL 7, ISSUE 08, 2020

A- The teacher will discuss course syllabus to teach the course in the classroom.

Sentence A has more than one nod or verb phrase that the prepositional phrase " in the classroom" can be attached to. To be more specific, *in the classroom* can be attached to either the verb phrase *teach the course* or to the clause *will discuss course syllabus.* Attachment ambiguity also occurs in matrix sentences where there is an adverb that can be attached to both the main clause and subordinate clause as depicted in sentence B below.

B- Tala reported that she will go on a tour to Jordan highlands tomorrow.

The adverb of time " tomorrow" can be attached to both the subordinate clause, *she will go on a tour to Jordan highlands* or to the main clause *Tala reported*. In addition, attachment ambiguity appears when an adverb can be attached to both verb phrase or to the whole sentence as exhibited in sentence C below.

C- Sadly, Jim reported the news that Tom's father died.

It is unknown whether, the adverb sadly refers to the way Jim informed the event of death or to the event of death itself.

2- Gap-finding ambiguity: occurs when there is more than one probable gap that a move constituent can refer to. See example D below.

D- A car was reported stolen by the police last night.

This sentence can be understood in two different ways; the police informed that there is a car was stolen yesterday by a thief or the police itself stole the car.

3- Analytical ambiguity: results from that fact that a word has more than one syntactic category as exemplified below.

E- I saw a man-eating shark in the aquarium.

The constituent *eating* can serve as a verb denoting an innate characteristic of shark, which is feeding on people. Eating can also be used in English as an adjective describing a unique type of sharks, eating humans.

Based on the above mentioned discussion alongside the provided examples, it is obvious that both lexical ambiguity, which results from multiple meanings of a word, and structural ambiguity, which stems from the syntactic structure of words cause great difficulty for non-native speakers of English. It is believed that failure of resolving ambiguous sentences creates lots of learnability problems for second language learners, making them unable to understand the delivered message or the speech of the addresser, which justifies the impetus beyond implementing of this study. In addition, very scant previous studies were conducted on lexical and structural ambiguity within the context of learners whose mother tongue is Arabic. Thus, this study fills a gap in literature by examining lexical and structural ambiguity among Arab learners of English.

II. THEORETICAL FRAMEWORK

Various theories, approaches and models attempt to account for word processing and word comprehension. The process of comprehension is highly complicated, passing through multiple stages until the optimal meaning is activated. One of the most influential models in this respect is garden-path model. It is adopted by a jury of researchers (Frazier 1989; Frazier & Rayner 1982; Rayner et al. 1983). This model is mainly proposed with the aim of resolving syntactic ambiguity. According to this model, disambiguating the meaning of a sentence is composed of two phases. In the first phase, the comprehension of a sentence is heavily dependent on the simplest syntactic construction of a sentence, while any non-syntactic data such as semantic or pragmatic data are not activated. More precisely, language processer takes into account only the available syntactic data to produce one structural candidate. In the second phase, non-syntactic data are activated. If there is congruency between the initial candidate and syntactic data, then the intended meaning is understood right. However, if there is a lack of congruency between syntactic and non-syntactic data, ambiguity may appear (Chen and Tsai, 2015).

In a counter response to garden-path model, constraint-satisfaction model is proposed in 1990s of last century by (Macdonald 1993; Macdonald & Seidenberg 2006; Trueswell & Tanenhaus 1994). The forerunners of this model point out that sentence comprehension is characterized by invoking all types of data e.g. syntactic, semantic, pragmatic, etc. following that several candidates are utilized together and evaluated by probability constraints so that the optimal candidate is the one matches probability constraint, resulting in comprehension of meaning and processing becomes easy. However, mismatch between probability constraint and the available candidates leads to ambiguity and difficulty in processing (Chen and Tsai, 2015).

ISSN- 2394-5125 VOL 7, ISSUE 08, 2020

Some factors play a prominent role in word processing and resolving ambiguity e.g. word dominance and syntactic category. Word dominance is viewed as salience of the meaning of a word in the language. Researchers believe that dominance of meaning is a crucial requirement for activation of that meaning, in the sense that when a word expresses multiple meanings, the brain is designed to invoke the most frequent or recent meaning. When two words are equally dominant, they compete with each other until one meaning is selected based on context or world knowledge (Carpenter & Daneman 1981; Duffy et al. 1988; Rayner & Duffy 1986). In relation to dominance, meanings are divided into two types; balanced homographs and biased homographs. Balanced homographs are featured by having two meanings or more that are equally dominant. In contrast, biased homographs consist of multiple meanings with variant degrees of frequency. The second factor intrinsic to meaning comprehension and processing is syntactic category. Words in English are categorized into several classes namely; nouns, verbs, adjectives, adverbs, prepositions, pronouns, determiners and conjunctions. Some words in English can be grouped under two syntactic categories simultaneously with difference in meaning as depicted in the two examples below.

1- The registration system does not permit you to add courses after the deadline.

3- Prior to entering the museum, you have to get a permit.

In the first example, *permit* serves as a verb denoting the meaning of *allow*, while in the second example *permit* functions as a noun with the meaning consent. It has been demonstrated by some studies that word class exerts an immense influence on meaning processing in which comprehending verbs is more challenging than nouns (Rayner 1977; Sereno 1999; Vigliocco et al. 2004). In this piece of study, both meaning dominance and syntactic category are examined in order to gain insight into their role in disambiguation of meaning.

III. REVIEW OF RELATED LITERATURE

A considerable body of studies investigated lexical and structural ambiguity among second language speakers. Those studies aimed at providing a satisfactory account for ambiguous utterances in terms of processing and comprehension. This review of literature presents some previous studies conducted within the context of structural and lexical ambiguity so as to gain through insight into this issue.

In a bid to investigate syntactic ambiguity in Thi language, Chaicharoen, (2015) studies ambiguity in four registers namely, legal, political, media, and academic registers. The study aims chiefly at highlighting syntactic patterns that involve ambiguity and to figure out the most challenging pattern. For the purpose of collecting the needed data, the researcher gets back to eighty pages representing the aforementioned registers. The analysis of results indicates that four ambiguous syntactic patters are found, namely (1) modification construction, (2) coordination construction, (3) modification+coordination construction, and (4) anaphora. The results further reveal that modification construction is the most ambiguous syntactic pattern followed by modification+coordination construction. It is also found that media register bears the most instances of ambiguity.

In line with Chaicharoen's study, Kılıçkaya, (2010) examines the resolution of lexical ambiguity. The study places a special emphasis on factors intimately associated with lexical ambiguity, that is word processing, recognition and the effect of context. The study attempt to understand the basis on which the reader or listener determine the meaning of words. In addition, the study discusses the resolution of ambiguity in two respects; the context that includes the semantic items and invoking the multiple senses of a word. The study reaches the conclusion that conclusive answer with regard to clearing off lexical ambiguity and the influence of context on resolving ambiguity is questionable.

In an attempt to examine lexical and structural ambiguity, Rahman & Nurjannah, (2017) explore both types of ambiguity in texts containing local wisdom. The researchers aim mainly at identifying the role of syntactic category of a word in disambiguating meaning. The results pertaining ambiguous word class are as follows; 46.6 % Nouns; 33.33 % Adjectives; 6.66% Verb; 6.66% Adverb. In a similar vein, Charina, (2017) carries out a study to investigate lexical as well as structural ambiguity in creating humor. According to the author, humor may occur as a result of lexical ambiguity when a word bears multiple meanings. Humor can also stem from the structure of words in a sentence or from context, which plays a crucial role in this regard. The data are elicited from 25 sentences, 12 of which represent lexical ambiguity and 13 on structural ambiguity. The findings of the study display that both lexical and structural ambiguity are utilized to produce patterns of humor such as pun. It is also found that humor is an influential tool when a word or a sentence has various interpretations, in which one interpretation implies no pun intended and the other interpretation expresses exaggerated humorous sense.

To shed light on ambiguity, Khawalda and Al-Saidatm (2012) conduct a study on structural ambiguity among Arab learners of English. The study seeks to understand the way Arab speakers of English comprehends

ISSN- 2394-5125 VOL 7, ISSUE 08, 2020

ambiguous sentences. A total of sixty subjects, majored in English, participated in the study. The participants are presented with eighteen ambiguous sentences comprising prepositional phrases, adverbial phrases, ellipsis, coordinate clauses, non-finite clauses and relative clauses. The subjects are instructed to translate the sentences in order to provide the multiple interpretations of those sentences. The results of the study denote that Arab learners of English encounter difficulty resolving the ambiguous sentences. Strictly speaking, the participants only understand the superficial meaning of a sentence, while deep meaning is beyond their comprehension. Consistent with Khawalda and Al-Saidatm study, Ovu, (2011) looks at some possible sources of lexical ambiguity in English language. Precisely, the researcher examines lexico-semantic relationships that may create ambiguity, namely homographs, homonyms, homophones and polysemy. The study arrives at the conclusion that contextual information is of utmost importance in disambiguating words and sentences. Furthermore, simple English words and utterances used in everyday communication are considered as a great guide for removing ambiguity.

Other studies attempt to explore the most dominant type of ambiguity; structural or semantic. In other words, those studies aim at gaining more insight into the type of ambiguity that causes the most difficulty for learners. Those studies reach conflicting results in that some studies e.g. (Tambunan, 2009) comes to the conclusion that structural ambiguity is more dominant in the writing of the respondents, while other studies; e.g. (Kristianty, 2006) indicates that lexical ambiguity appears more frequently in the language of the respondents. In light of the previously mentioned studies, this study seeks to make one further step by examining the comprehension of ambiguous utterances by Arab speakers of English, placing special emphasis on two prominent factors, namely dominance of meaning and syntactic category.

IV. RESEARCH QUESTIONS

This article poses three main research questions.

Q 1- To what extent does lexical and structural ambiguity pose challenge for Jordanian English foreign language learners?

Q2- Does word-dominance affect the activation of meanings of homographs?

Q3- Does word- syntactic category affect resolving ambiguous sentences?

V. METHODOLOGY

5.1 Sample

The sample of the study is comprised of seventeen Jordanian learners of English. All the participants are majored in English as a foreign language at Amman Arab University and have a similar exposure to English. Strictly speaking, none of the participants have lived in an English speaking country for an extended period of time. They have studied English as a foreign language at school in Jordan for twelve years before joining the university. The participants are mostly third and fourth year students who are chosen purposefully for the study. The study needs advanced participants, which justifies selecting third and fourth year learners, so as to have relatively proficient respondents who can comprehend items of the test well and supply relevant answers.

5.2 Instruments

In a bid to answer the research questions of the study, a translation task is designed. The task is divided into two sections. Section one is employed to measure lexical ambiguity, where the respondents are presented with eight sentences each of which has at least one ambiguous word or a word with multiple senses. The respondents are instructed to translate the sentences into Arabic, which is their mother language. The respondents are informed that a sentence can have more than one translation. Section two is designed to examine structural ambiguity, in which eight sentences are provided and the respondents are needed to supply as many interpretations as they can for each sentence. The items of this section are ordered as follows;

1- Two sentences with prepositional phrases.

2- Two sentences with adverbial phrases.

3- Two sentences with non-finite clauses

4- Two sentences with ellipsis

ISSN- 2394-5125 VOL 7, ISSUE 08, 2020

VI. RESULTS

In analyzing the data obtained from the participants in the study, descriptive statistics is utilized. The analysis of results is based mainly on the percentage and frequency of responses. The results are revealed alongside pertinent research question as follows;

Q 1- To what extent does lexical and structural ambiguity pose challenge for Jordanian English foreign language learners*?*

The results related to this research question are depicted in Table 1 below,

Table 1. Percentage and frequency of responses relevant to structural ambiguity**.**

Percentage of accurate responses	Frequency of accurate responses	Percentage of inaccurate responses	Frequency of inaccurate responses
47.4%	129	52.6%	143

Based on the figures appear in Table 1 above, the percentage of correct responses related to structural ambiguity is 47.4%, while the frequency of correct responses is 129. In contrast, the table further shows that the percentage of incorrect answers pertinent to structural ambiguity is 52.6% with a frequency of 143. Those results indicate that the participants managed to resolve 47.4% of sentences with structural ambiguity, while the majority of ambiguous sentences remained unresolved. Having displayed the results of structural ambiguity, the percentage and frequency of responses relevant to lexical ambiguity are revealed in Table 2 below.

Table 2. Percentage and frequency of responses related to lexical ambiguity.

Percentage of accurate responses	Frequency of accurate responses	Percentage of inaccurate responses	Frequency of inaccurate responses
38.6%	105	61.4%	167

The analysis of results related to lexical ambiguity denotes that 38.6% of participants' responses are correct with a frequency of 105. While, 61.4% of responses to sentences with lexical ambiguity is incorrect, with a frequency of errors 167. Such results indicate that the respondents, to a great extent, are unsuccessful in resolving lexical ambiguity. The figures obtained from the Tables 1 and 2 reveal clearly that Jordanian EFL learners encounter a great difficulty resolving structural and lexical ambiguous sentences. However, lexical ambiguity is more challenging for the respondents. The results of research question two appear in Table 3 below.

Q2- Does word-dominance affect the activation of meanings of homographs*?*

Table 3: percentage and frequency of high and low dominant homographs

Percentage of high dominant homographs	80%
Frequency of high dominant homographs	44
Percentage of low dominant homographs	20%
Frequency of low dominant homographs	11

The purpose of the second research question is to examine the role of *salience* or *pervasiveness* of a meaning in using that meaning by learners of English as a foreign language. A close look at Table 3 above denote that high dominant homographs are invoked by the respondents 44 times with a percentage of 80%. On the other hand, low dominant homographs are invoked only 11 times with a percentage of 20%. As expected, when making a choice between several senses, respondents instantly recall, the sense they are mostly exposed to or the most pervasive sense. Having revealed the results related to question two, the findings of research question three are depicted in Table four below.

ISSN- 2394-5125 VOL 7, ISSUE 08, 2020

Q3- Does word- syntactic category affect resolving ambiguous sentences?

Table 4. Percentage and frequency of word syntactic category**.**

Parentage of nouns	66%
Frequency of nouns	35
Percentage of verbs	34%
Frequency of verbs	18

The purpose of research question three is uncover whether meaning activation is based on the syntactic class of that meaning. To answer this question, one needs to have a look at table four above. The table shows that the respondents invoke meanings function as nouns 35 times with a percentage of 66%. In contrast, meanings serve as verbs are recalled 18 times with a frequency of 34%. One could say, nouns are more readily to recall than verbs when resolving lexical ambiguity. To conclude, the results of this study lend support to constraint-satisfaction model. More precisely, when attempting to resolve an ambiguous sentence, several candidates compete with one another in the brain, the winning candidate (the most harmonic) is the one satisfies all constraints or causes the least violation. In contrast, the worst candidate is the one that incurs fatal violation of a high-ranked constraint. With reference to this study, it is observed that the respondents make a list of preferences or candidates to determine the dominant meaning or syntactic category of meaning and the optimal candidate is the one produced by them; satisfying all constraints from their perspective.

VII. DISCUSSION OF RESULTS

This section of the study seeks to gain further insight into the linguistic phenomenon under investigation by analyzing and discussing the results of the study with illustrative examples. The discussion of results is made with reference to the three research questions posed in this study and to related literature.

The results of research question one indicate clearly that both lexical and structural ambiguity pose challenge for Jordanian learners of English. To be more specific, the participants managed to resolve only 47.4% of sentences with structural ambiguity. In addition, lexical ambiguity is more challenging than structural ambiguity, where only 38.6% of sentences with lexical ambiguity are resolved. Such inefficiency in understanding tricky or ambiguous sentences can be ascribed to the lack of knowledge of the target language, which is best exhibited in failure to activate several senses of a word or comprehending variation in meaning caused by structure of a sentence. Such conclusion goes with the results' of Khawalda and Al-Saidatm (2012) study who argue that ambiguous English sentences are highly intricate and constitute a learnability problem for Arab learners of English. With the aim of understanding the nature of difficulties Jordanian EFL learners encounter, while clearing off ambiguous sentences, let us consider the following example from participants' responses.

1- The chicken is ready to eat

When explaining the meaning of sentence one, most students went to the superficial meaning and

elucidate the sentence as the chicken is hungry and wants to eat its food. However, they left out the other possible meaning, which is the chicken is cooked and somebody wants to eat it. Such misunderstanding stems from the structure of sentence itself, where the construction *to infinitive+ verb* bear more than one meaning. Example two illustrates the case of lexical ambiguity.

2- I saw a piece of wood.

The vast majority of students when explaining the meaning of this sentence activate solely the common meaning of the verb *sa*w which is the past of *se*e, and never invoke the other meaning conveyed by *sa*w, which is *cut* or *chop*. Invoking one meaning indicates that the respondents need to build a good stock of English vocabulary and realize the fact that most English words are polysemous in nature.

The results of research question two additionally indicate that dominance of meaning exerts immense influence on the activation of that meaning. More precisely, the percentage of invoking high dominant meanings is 80%, while low dominant meanings account for 20%. This result can be attributed to *salience principl*e. Salience is known as “the availability of input” (Gass and selinker 2008, p. 145) or as described in Almahameed's, (2015, p. 24) words "the quantity of input received by EFL speakers concerning specific L2 pattern". To conclude, second language learners normally activate and utilize lexical and grammatical patterns they are exposed to the most, while less exposed patterns are suppressed. This result is consistent with (Hogaboam & Perfetti 1975; Simpson

ISSN- 2394-5125 VOL 7, ISSUE 08, 2020

1981) who state that highly dominant meaning is retrieved prior to less dominant meaning. To get further insight into this issue, let us have a look at the examples below.

3- The attendants have enjoyed the ball too much.

The problematic word in this sentence is *ball*, which bear completely two different senses. The common meaning is an object used in some types of sports like football and basketball, while the other meaning is a dancing party. As a consequence of salience of the first meaning, the vast majority of students mistakenly explain the meaning of *ball* as sport object. In example 4 the case is more obvious.

4- Sara passed by the bank.

The word *bank* either means a financial institution or a land alongside a river or a lake. The respondents retrieve the first meaning " financial institution" and ignore the second meaning " the edge of river" due to the salience of the first meaning. Resolving lexical ambiguous sentences require respondents to adopt eclectic approach comprising the context, world knowledge and second language knowledge.

The results of research question three display that word-syntactic category has an impact on retrieval of meaning. Precisely speaking, the activation of words function as nouns is double of verbs. This conclusion is in line with (Rayner 1977; Sereno 1999; Vigliocco et al. 2004) who contend that the respondents invoke nouns in a rate faster than verbs. The fact that verbs are acquired after nouns is ascribed to psychological complexity of verbs (Gentner, 2006). This conclusion is clearly seen in the answers of respondents in this study as exemplified in sentences 5 and 6 below.

5- we have battled with authorities to change the system, but we lost the battle.

In this sentence, *battle* can function as both verb and noun. In most cases, the participants fail to get the meaning of battle as a verb and explain it wrongly.

6- small number of children are educated at home. They are numbered by ministry of education.

In a similar vein, *number* is only understood by the respondents as a noun but not a verb, making the meaning of this sentence ambiguous for them. Generally, this study supports constraint-satisfaction model, which indicates that when processing a meaning, several candidates compete with each other and the winning candidate is the one satisfies all constraints (Macdonald 1993; Macdonald & Seidenberg 2006; Trueswell & Tanenhaus 1994).

LIMITATION AND FORWARD STUDY

The results of this study are limited to Arab learners of English, whose mother tongue is Arabic due to first language interference. This study may be replicated in the future with taking into considerations different sample either less or more advanced language learners. In Addition, the study can be replicated using other external factors affecting lexical and structural ambiguity e.g. second language proficiency level and context.

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IX. REFERENCES

[1] Yarob . M. (2009). Some cases of Ambiguity in English. Diyala Jornal. Vol 38.

[2] Parisi and castelfranchi. (1988). Lexical Ambiguity Resolution. Morgan Kaufmann Publishers. USA. P, 129.

[3] Kılıçkaya, F. (2007) . Lexical Ambiguity Resolution: Word processing, Recognition

[4] and Context Effect. Unpublished. Cited by ERIC. (ED508769).

[5] Khawalda, M and Al-Saidatm, E. (2012). Structural Ambiguity Interpretation: A Case Study of Arab Learners of English. Global Journal of human social science. Volume 12 Issue 6.

[6] Oaks, D.(2010). Structural ambiguity in English: An applied grammatical inventory. London: Continuum.

[7] Wang, L and Gou, W. (2017). Analysis of Ambiguity. Advances in Social Science, Education and Humanities Research, volume 132.

[8] Frazier, L. (1989). Against lexical generation of syntax. Lexical Representation and Process, ed. by William Marslen-Wilson, 505–528. Cambridge: MIT Press.
[9] Frazier, L &, Rayner, K. (1982). Making and correcting errors during sentence comprehension: Eye movements in the analysis of structurally ambiguous sentences. Cognitive Psychology 14.2:178–210.
[10] Chen, P and Tsai, J. (2015). The influence of syntactic category and semantic constraints on lexical ambiguity resolution: An eye movement study of processing Chinese homographs. Language and linguistics. 16-4-555-586.
[11] Macdonald, Maryellen C. (1993). The interaction of lexical and syntactic ambiguity. Journal of Memory and Language 32.5:692–715.
[12] Macdonald, C., & Seidenberg, C. (2006). Constraint satisfaction accounts of lexical and sentence comprehension. Handbook of Psycholinguistics, ed. by Matthew J. Traxler & Morton Ann Gernsbacher, 581–611. Amsterdam: Elsevier.
[13] Trueswell, C & Tanenhaus.K (1994). Toward a lexicalist framework for constraintbased syntactic ambiguity resolution. Perspectives on Sentence Processing, ed. by Charles Clifton, Lyn Frazier & Keith Rayner, 155–179. Hillsdale: Lawrence Erlbaum Associates.
[14] Carpenter, A & Daneman, M. (1981). Lexical retrieval and error recovery in reading: a model based on eye fixations. Journal of Verbal Learning and Verbal Behavior 20.2:137–160.
[15] Duffy, A, Morris, & Rayner, K. (1988). Lexical ambiguity and fixation times in reading. Journal of Memory and Language 27.4:429–446.
[16] Rayner, K, &. Duffy, S. (1986). Lexical complexity and fixation times in reading: effects of word-frequency, verb complexity, and lexical ambiguity. Memory & Cognition 14.3:191–201. Rayner.
[17] Rayner, K. (1977). Visual-attention in reading: eye-movements reflect cognitive-processes. Memory & Cognition 5.4:443–448.
[18] Rayner, K, Carlson, M & Frazier, L. (1983). The interaction of syntax and semantics during sentence processing: eye movements in the analysis of semantically biased sentences. Journal of Verbal Learning and Verbal Behavior 22.3:358–374.
[19] Sereno, A. (1999). Hemispheric differences in grammatical class. Brain and Language 70.1: 13–28.
[20] Vigliocco, G. Vinson, P. Lewis, W &. Garrett, M (2004). Representing the meanings of object and action words: the featural and unitary semantic space hypothesis. Cognitive Psychology 48.4:422–488.
[21] Chaicharoen, N. (2015). Syntactic ambiguity in legal, political, media and academic registers of Thi: Patterns and avoidance. Journal of Humanities, Special Issue No.21.
[22] Rahman, S & Nurjannah, N, (2017). Ambiguity found in the text containing local wisdom. ELT Perspective. 5 (1).
[23] Charina, I. (2017). Lexical and syntactic ambiguity in humor. International Journal of Humanity Studies. Vol. 1, No. 1.
[24] Ovu, B. (2011). Lexical Sources of Ambiguity in English and Daily Communication. Oluoha Journal of Languages, Vol.1. No.1.
[25] Tambunan, H. (2009). The Analysis of Lexical and Structural Ambiguity in Your Letter of the Jakarta Post. Thesis. University of Sumatera Utara.
[26] Kristianty, Susan. (2006). "The Structural and Lexical Ambiguity Found in Cleo Magazine." Unpublished Thesis. Jakarta; Universitas Kristen
[27] Gass, S & Selinker, L. (2008). Second language acquisition; An introductory course (3rd ed.) USA: Taylor & Francis group. http://dx.doi.org/10.1111/j.1540-4781.2010.01032.x.
[28] Almahameed. Y. (2015). The acquisition of preposition stranding and pied piping in interrogatives by Arab Jordanian EFL learners. International journal of linguistics. Vol. 7, No. 4.
[29] Hogaboam, W & Perfetti.C. (1975). Lexical ambiguity and sentence comprehension. Journal of Verbal Learning and Verbal Behavior 14.3:265–274.
[30] Simpson, Greg B. 1981. Meaning dominance and semantic context in the processing of lexical ambiguity. Journal of Verbal Learning and Verbal Behavior 20.1:120–136.
[31] Gentner, Dedre. (2006). Why verbs are hard to learn. Action Meets Word: How Children Learn Verbs, ed. by Kathy Hirsh-Pasek & Roberta M. Golinkoff, 544–564. Oxford & New York: Oxford University Press.