

**THE IMPACT OF POLYSEMIOUS WORDS IN SECOND LANGUAGE ACQUISITION (POLYSEMIOUS WORDS IN MATHEMATICS REGISTER)**

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**Abstract:** This paper aims to explore the impact that polysemy can have on second language acquisition, as well as the methods and strategies that students use to acquire polysemous words. In addition, it recommends context, etymology, relatedness, zeugma, conjunction reduction and, collocations as some of the tests that students can use to distinguish polysemous words from homonyms. To conduct this study, a multi-faceted approach has been applied, combining both qualitative and quantitative research methods to offer a comprehensive understanding of the research problem. The participants in this study consist of fifty undergraduate students of the English Department at the University of Prishtina. Furthermore, 8 (eight) polysemous words in mathematics have been chosen for analysis. The present study has been successful in finding the effect that chosen items of polysemous words in mathematics, such as *angle*, *degree*, *expression*, *gross*, *operation*, *power*, *table*, and *volume*, can have on second language acquisition. It is important for students to understand the difference between polysemy and homonymy, as it improves their ability to comprehend and communicate effectively. Therefore, this study has proven highly beneficial in helping students become familiar with polysemous words, the methods for acquiring their meanings, and the tests used to differentiate them from homonyms.

**Keywords:** polysemy, impact, second language acquisition, polysemous words in mathematics

## 1. Introduction

The acquisition of vocabulary is one of the greatest challenges that students face when learning a foreign language. In fact, vocabulary acquisition is arguably one of the greatest stumbling blocks in second language acquisition (SLA). This is due to the fact that there are no strict rules when it comes to the acquisition of vocabulary in contrast to the acquisition of syntactic rules (Steves 2023). Additionally, Sun et al (2023) state that building vocabulary can be challenging due to factors such as difficulty in retaining words in long-term memory and the use of ineffective learning strategies.

The majority of words have more than one meaning. The most frequent words the speakers use are the words that have several meanings; therefore, learners encounter polysemous words very often. Lexically ambiguous words can be categorized into two types—homonyms and polysemes—based on how closely their different meanings are related (Li 265). Words with several meanings, including both polysemes and homonyms, may appear higher up on frequency lists compared to monosemous words (Bogaards 10).

The distinction between polysemy and homonymy is important for students, particularly in linguistics, as it helps clarify how words evolve and how context shapes meaning. Understanding these differences aids in comprehending language dynamics and the shift of meaning based on etymology and context. Polysemy involves words with related meanings, evolving through processes like extension for example, *paper* can mean *a newspaper*, a material made from wood pulp, or a blank sheet. Its meaning has also extended to include an electronic document, where wood pulp is not involved, while homonymy refers to words with unrelated meanings, such as *bank* (a financial institution) and *bank* (a river edge) (Crossley, 2000). Recognizing these distinctions is key for analyzing text, resolving ambiguities, and understanding word structures.

Both polysemy and homonymy can cause ambiguity, which students encounter in communication and academic texts. For example, *paper* has related meanings, whereas *bank* has unrelated ones. Context is essential for disambiguation, and understanding the difference between these word types helps students interpret meaning accurately (Lyons 43-47).

Distinguishing polysemy from homonymy can be difficult, as even words with the same etymology can have distinct meanings (e.g., pupil in a school vs. pupil as part of the eye) (Lyons 54-60). Understanding linguistic criteria (etymology, form, and relatedness) encourages deeper

analysis and helps students appreciate the complexities of word categorization (Lipka 136).

The present study focuses on the impact that polysemous words can have on SLA as well as the methods and strategies that students can use to acquire the meanings of polysemous words. A comparison between polysemous words and homonyms is also included. Additionally, the study investigates the reliability of dictionaries and whether students find them helpful in identifying the different senses of a polysemous word.

Polysemous words have multiple related meaning. However, while the various meanings of a word may be connected, they can also differ significantly, making polysemy a challenging phenomenon. Consequently, the study examines if the chosen polysemous words have the same core meaning and if they share etymological origins. The study also explores whether equivalent polysemous words exist in the Albanian language for the chosen words in English.

This study seeks to answer the following research questions:

1. How does first-language polysemy affect second-language meaning interpretation?
2. What tests can be used to distinguish polysemy from homonymy?
3. To what extent does knowledge of one meaning help in understanding another meaning of a polysemous word?

The hypotheses for this research are as follows:

1. First language polysemy affects second language meaning interpretation
2. Various strategies can be employed to assist students in decoding polysemous words.
3. Dictionaries are not very reliable when it comes to polysemous words.

## **2. Literature Review**

Polysemy is a very common feature of every language and plays a significant role in natural language study. Despite being widely used, polysemous words still display ambiguity, making them difficult to be processed. Consequently, polysemy is one of the challenges that students encounter when learning a foreign language as well as one of the obstacles they face when they have to translate texts in different fields. Addressing the issue of polysemy involves breaking down a challenging concept to make it easier for students to understand (Vardidze 114). In addition, Bogaards (10) highlights that polysemous words can be problematic because they occur both singly and within

larger lexical units. New meanings of words are never learned in isolation but through connections to previously acquired words. So, the connections between words allow newly acquired words to be easily incorporated within these networks.

Historically, people have preferred to take words and extend their meaning rather than create new words. Ozturk (133) found that 95% of the most commonly used 3,000 words in English have more than one meaning. The omnipresence of polysemous words can be seen as a result of this. Consequently, when words have several related senses, their meanings overlap and relate to the same abstract structure (Murphy 47).

Polysemous words have a primary meaning. Hatch & Brown (2001) define the primary meaning as the central meaning within a set of polysemous words. For example, the primary meaning of the word *break* means breaking an object like glass, and not the breaking of waves on the shore. In addition to this central meaning, polysemous words often have several related senses that extend from the core meaning. For instance, the word *juice* has one main meaning, which is the liquid extracted from plant or animal tissue but it also has multiple related senses. These include energetic vitality (e.g., creative juices), electric current (e.g., the batteries are out of juice), and bodily fluids (e.g., digestive juices). These related meanings share a connection to the primary sense, but are used in different contexts, illustrating the richness and flexibility of polysemous words (Skalicky 3).

It is argued that learners begin by acquiring the core sense of a given polysemous word and gradually learning its extended senses through broadening and narrowing processes. Learners must expand their knowledge to include all the senses of the L2 word that are shared and un-shared by the L1 equivalent but at the same time it has to also narrow down to include only the senses that the L2 words has and exclude any sense of the L1 equivalent that is not shared by the L2 word in order to have native-like competence (Ozturk 87-88).

Tashi (2010) affirms that there are three main sources of polysemy. The sources of polysemy are metaphor, metonymy and image-schema transformation.

The first source of polysemy is metaphor. Every time a word is used in a different domain from its original domain through mapping, the word acquires a new sense.

The second source of polysemy is metonymy. Metonymy is a cognitive process of using one unit to refer to another that is related to it. For example, in the sentence: *The ham sandwich is waiting for his*

*check*, the entity *ham sandwich* is used to refer to the person who ordered a ham sandwich (Lakoff and Johnson, 35).

The third source of polysemy is image-schema transformation. Image-schemas are cognitive structures that come directly from everyday bodily experience. For example, the usage of the preposition *in* in different situations such as *the present is in the box* and *my friend is in the classroom*. Here, we have a certain image of relationship of something and its container. By applying this image one can be aware of the meanings of expression such as be in school, be in love and be in trouble.

Nagy & Townsend (49) note that many words that students come across in school have at least two different but related meanings, and in most of the cases the academic sense of the same word is the extension of the everyday meaning. For example, the word *position* in the everyday meaning stands for the way a person sits or stands (she changed her position on the sofa), but the meaning of it in academia is connected to one's opinion and viewpoint (she changed her position in the debate) (Logan & Kieffer, 2017).

Senses are often borrowed from the everyday usage every time the intended meaning is not available for the student in the mathematics register. However, polysemy can take place even within the mathematics register itself and context is what helps here too. The example for this is the word *operation* which can have multiple meanings even within the mathematics register. For instance, in an elementary school classroom, it can mean addition, subtraction, multiplication or division whereas in a group theory course the meaning of the same word is the function of two variables (Zaskis 2).

However, even if these words are used in a special field, they still keep their common meanings. There are words which irradiate meanings so one form generates several senses and the new senses do not totally replace the previous one. Typically, when a noun has several senses, all these senses have something in common (Iglesias, 208).

### 3. Methodology

To achieve a comprehensive analysis, a multi-faceted approach was employed, combining both quantitative and qualitative research methods. The quantitative component involved the use of a structured questionnaire designed to assess the students' familiarity with polysemous words and their strategies for interpreting them. The questionnaire included multiple-choice questions, Likert scale items, and short-answer questions to gather data on the prevalence and recognition of polysemous words among the students. In addition to the

questionnaire, a qualitative component was incorporated through a translation test which was administered as an elicitation technique for evaluating second language acquisition. This test required students to translate sentences containing polysemous words from English to their native language. This method was used due to the fact that the topic required knowing and determining the difficulty that polysemy can cause in the acquisition of English as a foreign language, and what methods students use to understand the meaning of polysemous words. This study was conducted with fifty students from the Faculty of Philology, English Language and Literature Department, University of Prishtina, who willingly participated to fill in the questionnaire. Among this number of students seventeen were males and thirty-three were females, aged between 18 and 29 years old. The participants for this research were undergraduate students.

#### **4. Analysis of results and discussions**

The analysis section provides a detailed examination of the collected data, focusing on key findings and insights. The first part explores the impact of first-language polysemy on second-language acquisition and translation. The second part discusses the strategies and methods students use to acquire the meanings of polysemous words. Following this, a description of the analyzed polysemous words is provided, including their representation in monolingual dictionaries and their etymology. Furthermore, the section presents an analysis of the translations of the words included in the test.

##### **4.1. The impact of polysemy**

Polysemy is very challenging in semantic theory and semantic applications such as lexicography, computational models of natural language processing and translation (Falkum 13).

Moreover, many words used in math textbooks and teaching differ from their everyday life meanings. *Angle, degree, expression, gross, operation, power, table, and volume* are the chosen polysemous words for analysis in this study. They were chosen because one of their meanings is related to mathematics (See Table 1).

| WORD       | Meaning in Everyday Life    | Meaning in Mathematics   |
|------------|-----------------------------|--|
| Angle      | A viewpoint                 | In geometry the space between two lines or planes that intersect           |
| Degree     | Diploma                     | a measure for arcs and angles  |
| Expression | A look indicating a feeling | A symbol representing a value  |
| Gross      | Offensive, disgusting       | The total income from sales  |
| Operation  | Medical surgery             | A math process, addition, multiplication                                   |
| Power      | The ability to do something | the result of taking a quantity; the given number of times (x) as a factor |
| Table      | furniture                   | An arrangement of numbers, symbols   |
| Volume     | Loudness                    | Quantity or mass   |

Table 1. The senses of polysemous words in everyday life and mathematics

The above words were chosen in order to see whether students can make the distinction between the meanings of these words and how they differentiate among them when they have to translate these words in the ESP (English for Specific Purposes).

Young et al (2005) explain that the meanings of words in mathematics and science differ noticeably from the meanings of the same word in everyday usage. For instance, the meaning of the words: *power, force, revolution, pressure*, is different in mathematics and science compared to the meaning of the same words in everyday use.

Therefore, lexical ambiguity occurs between the meanings of these words in everyday life and that in the *mathematics register* of the language. Thus, context plays a major role in the meaning of the words. For example, words may denote different things in different contexts, their intended meanings are assumed in basic or everyday context and that of the mathematics register. This was also noted from the results of the respondents. When they had to translate a sentence which contained one of the words in mathematics, they translated the sentence correctly. So, when students were given the context, polysemy did not pose a great difficulty for students since all the senses of polysemous words have something in common. However, if they are only given the word without any context, the students will immediately write the common meaning of the word and not the one in mathematics or in another field.

The results supported some of the hypotheses proposed in this research paper. One such hypothesis was that polysemy in a first language influences how meaning is interpreted in a second language. Therefore, 80% of the respondents, the vast majority, affirmed that polysemy affects second language interpretation, as can be seen in the figure below.

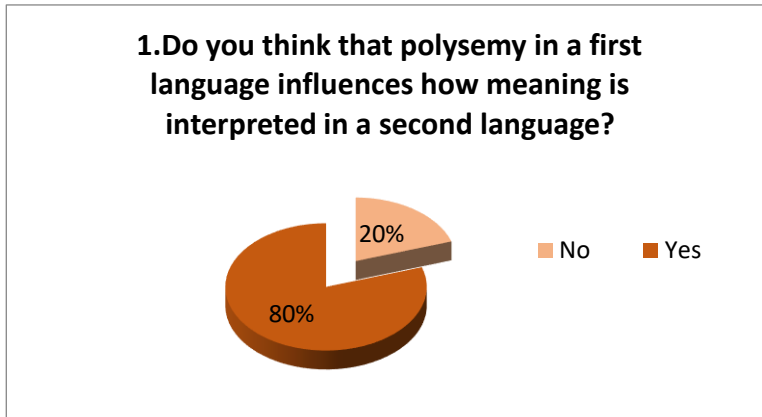


Figure 1. The second language interpretation

In addition, the participants had to choose an aspect that polysemy mostly affects. As seen in Figure 2, half of the respondents stated that polysemy affects translation production, thirty-seven percent declared that polysemy affects language acquisition and thirteen percent said that polysemy affects language representation.

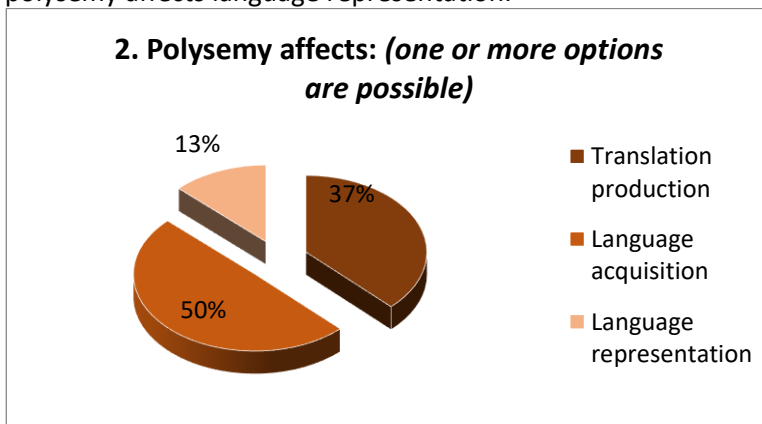


Figure 2. The impact of polysemy

The first language has an effect on second language acquisition. Learner's native language will have an impact on the acquisition of a polysemous word when the learner creates equivalence between the L2

word and L1 word. Cross-linguistic equivalences are formed through the core sense. The L1 equivalent of a polysemous word L2 is the word that has the same core meaning but not necessarily the same extended meanings. However, learning the extended senses of the L2 word depends on whether the equivalent L1 word has similar extensions (Ozturk 131).

One of the aims of this study was to find out how first language polysemy affects second language interpretation. Based on the findings, it can be stated that polysemy can affect translation production, language acquisition, and language representation.

Ambiguity can also affect translation production. According to Tokowicz (172) the effect that polysemy can have on translation production is predictable due to the fact that translator has to choose only one option for production. The translator may have several alternatives for conveying the same message in the target language, but he/she must choose only one option. This will result with the slowing of the production and making it less correct.

It is known that words can have different meanings in different contexts. Readers who are able to quickly grasp the different meanings of the same word in various contexts are more successful in reading comprehension, compared to those who only distinguish a few meanings of the same word (Perfetti & Hart, 188).

Being very complex, the concept of polysemy poses a challenge for lexical semanticists as well. As pointed out by Jackson and Amwela (69), the huge number of meanings, transference of meanings and difficulty in recognizing polysemy as opposed to homonymy are some of the problems caused by polysemy.

Different senses of a word may be related to each other but at the same time may not be alike each other and this is one of the risky aspects of polysemy.

Readers activate both meanings of a homonym when they come across homonyms with two frequent meanings. But, if one of the senses is more frequent than the other, readers tend to activate that meaning. However, when there was no limited context, readers did not show any preference for the main meaning over the secondary meaning when it came to polysemous words (Frazier and Rayner, 192).

Polysemy represents a challenge for EFL learners compared to homonymy for two reasons. First, polysemy is more common than homonymy and learners have to deal with related meanings more often than unrelated meanings. Second, the contextual clues will hint a different meaning from the one known to the learner more strongly

when dealing with homonyms, thus helping learners to know the correct meaning of the homonym from the context (Kang 37).

#### 4.2. The methods for acquiring polysemous words

One of the aims of this study was to also find out how students acquire the meanings of polysemous words. The researcher's hypothesis was that there can be strategies that help students decode the meaning of polysemous words. This study gives strategies and methods that can be used to distinguish polysemous words from homonyms. Haastrup & Henriksen (2000) stated that in order for second language learners to acquire a word, they do not need to recognize only the sound patterns and orthography but also the meaning of a word at the conceptual level. The respondents of the research have also chosen the context, dictionary, antonyms and synonyms of the words as some of the strategies that they use to understand the meaning of polysemous words when they encounter them.

So, when students were asked about the methods, they use in finding the meaning of polysemous words, context prevailed as the most preferred method selected by 55 percent of the participants, followed by dictionary chosen by 24 percent of the participants, and a small percentage of participants declared that they try to find the synonyms and antonyms as well as etymology of the polysemous word as presented in the figure below.

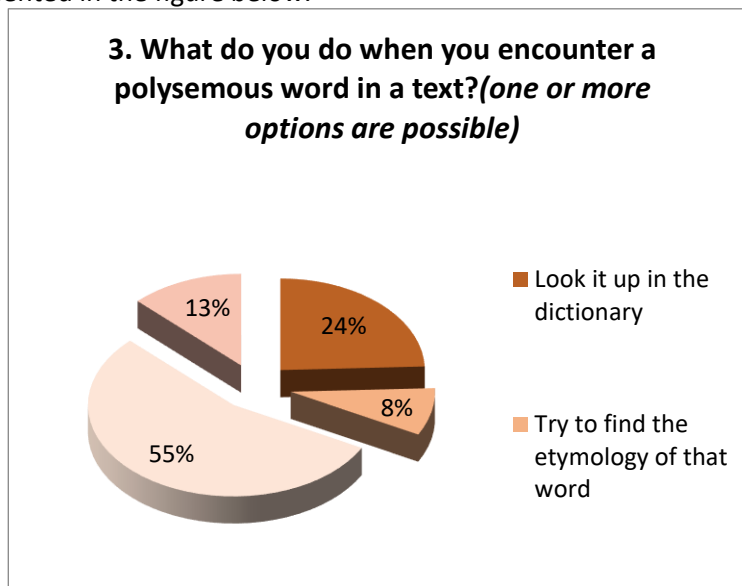


Figure 3. The methods used in understanding the meaning of polysemous words

Another aim of the research was to find out if the knowledge of one meaning helps with understanding an instance that uses another meaning. Thus, 68% of the respondents stated that the knowledge of one meaning helps with understanding an instance that uses another meaning, 24% declared that it does not whereas 8 % said that they do not know (Figure 3).

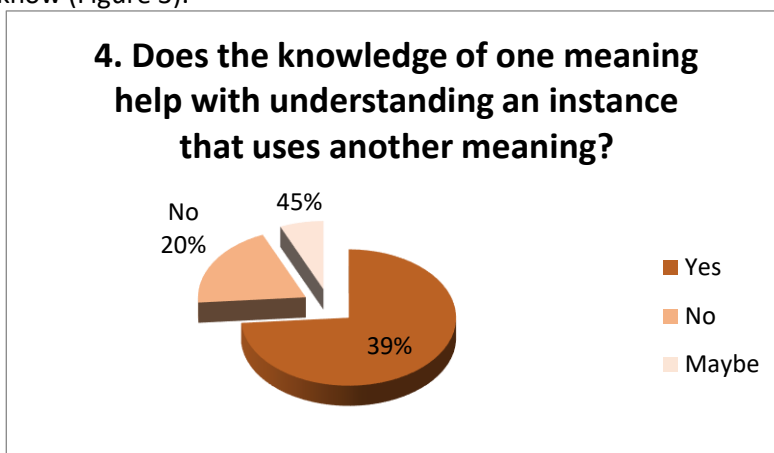


Figure 3. The relatedness between polysemous words

One of the tests in identifying polysemy is the notion of relatedness. Sometimes relatedness can be a vague concept and this makes the polysemous words very difficult to determine. Looking at word's etymology can also be used as a tool in helping solve polysemy. However, this is not the only solution since the meanings get lost in etymology and what was once used to help distinguish the meaning of a polysemous word may no longer be so. In addition, some unrelated words have the same historical origin. This is why etymology cannot be a perfect test for polysemy.

One of the tests for polysemy is zeugma; this is to see if one word displays different meanings if used in different contexts. Context usually brings different meanings of the same word. A word is polysemous if two of its senses do not match but they seem related to each other (Hong 9-21). This test again depends on learner's judgments about relatedness. Having this in mind, one could conclude that zeugma as a test for polysemy is not infallible but serves more as a helpful conceptual aid.

WordNet was also used to ensure the polysemy of words. In WordNet, there is the option to choose the domain of the chosen polysemous word. One example of this is the word *operation* (Figure 4).



Figure 4. Senses of the word operation in a specific field as defined in WordNET

From the figure it can be noticed that the word *operation* has multiple meanings especially in a specific field. What needs to be mentioned here is the fact that all the senses of the word operation share the same core meaning which is action, performance. So, even if students do not know all the senses of this word, if they know at least two of the senses of a word, they will still be able to guess it from the core meaning.

#### 4.3. The analysis of the polysemous words in the monolingual dictionary

This section will discuss the representation of the chosen polysemous words *angle*, *degree*, *expression*, *gross*, *operation*, *power*, *table*, and *volume* on the Shorter Oxford English dictionary on historical principles (SOEDHP), Oxford Advanced Learner's Dictionary of Current English (OALDCE).

This study tried to find if dictionaries are reliable when it comes to polysemous words. One of the hypotheses of this study was that dictionaries are not very reliable when it comes to polysemous words. Comparing dictionaries in different periods of time, it is visibly seen that the same words have different meaning quantity. There were cases when the OALDCE left out some of the senses of the words and focused only on the main meanings of the words.

Furthermore, homonyms in SOEDHP were given separate entries, whereas the related senses of polysemous words were all listed under a single entry. There were instances when the slightly different senses of a polysemous word were listed into different sub-entries. The SOEDHP used etymology and relatedness as two of its criteria in listing different meanings of words. The word belonging to different parts of speech was given different entries in the SOEDHP. According to Lipka (1992) polysemous words share the same etymology, belong to the same word class and have related senses. The SOEDHP is compiled according to this idea. However, bilingual and learners' dictionaries omit the etymological information since they consider that etymological information is not helpful to language learners. The OALDCE does not focus so much on polysemy.

One of the obstacles that people face while using a dictionary is trying to differentiate between the major and the minor senses of words because most of the dictionaries do not make such distinction and they treat all senses as equally significant (Kovács, 2011). The OALDCE only gives the main meanings of the words and gives only one entry for the word without taking into consideration the word class. Something that might be helpful for the students is giving the special and technical senses of the word just like in SOEDHP. On the other hand, the OALDCE gives examples for all meanings of words. This can help students in becoming more acquainted with polysemous words. While checking the etymology of words in the etymological dictionary, it was shown that polysemous words are words that share the same etymology.

A look at the entries for polysemous words shows that polysemous words represent a problem for lexicographers. The traditional practice is to put numerous senses for polysemous words and to collect the

related senses as sub-senses. However, lexicographers' opinions differ when it comes to the degree of polysemy and the organization of the polysemous words in the dictionary. As it was seen from the examples, dictionaries are not similar when it comes to the number of senses, the collection into sub-senses and the content of definitions they give for one word.

#### 4.4. The analysis of the polysemous words in the test

As part of the questionnaire, students had to translate some sentences which contained polysemous words. They had to translate sentences with the polysemous words: *degree*, *operation* and *area*. The participants of this study had to translate two sentences for each word. Moreover, 25 of the participants were given a test with three sentences containing the same polysemous word, and they had to guess the meaning of each sense whereas the other 25 participants had to give as many meanings as they knew about the given polysemous words. This was done in order to find out whether students have difficulties guessing the meaning of polysemous words in a specific field if they see the word in a sentence or context. This study also investigated whether L2 learners could guess the more minor meanings of a word if they were given only the word itself. The L2 learners were given two polysemous words: *power* and *table*.

When the L2 learners were given only the word without any context they showed preference to the primary meaning compared to the secondary meanings. So, if students are only given the word, they think of the most frequent meaning of that word. The majority of respondents gave the meaning for *table* a furniture in comparison to a small number who also knew the sense of this word as a set of arranged data. The same results were for the word *power*. 70% of respondents gave only two meanings for this word such as possession, person in authority, and attitude. However, when given the whole sentence, 90% of respondents knew the correct meaning of the polysemous words. They were able to tell the difference when the word *table* is used as a piece of furniture and as a set of data arrangement. However, most of the respondents had trouble with the sentence she sets a fine table. Most of them thought that the meaning of it is still a piece of furniture.

| Sentence                                     | Meaning  |
|--|--|
| TABLE  |  |
| I reserved a table at my favorite restaurant | <i>piece of furniture with tableware for a meal laid out on it</i> |

|                                 |  |
|---------------------------------|--|
| She sets a fine table           | <i>food or meals in general</i>  |
| See table 1                     | <i>a set of data arranged in rows and columns</i>  |
| POWER                           |  |
| During his first year in power  | <i>a government official of a government</i>   |
| the power of his love saved her | <i>powerfulness, possession of controlling influence</i>   |
| 8 to the power of 2 is 64       | <i>a mathematical notation indicating the number of times a quantity is multiplied by itself</i> |

Table 2. Senses of the polysemous words: *table* and *power*

What needs to be mentioned here is that even though they were asked to give the meanings for the chosen polysemous words, the respondents chose translation as their tool in distinguishing between the different senses of the given words. So, the study was able to find that the L2 learner would be able to guess the word's more minor meanings if the L2 learner was given the core meaning of that same polysemous word. The core meaning, though not necessarily the most frequent word is the most concrete sense that creates fewer concrete meanings. In addition, the core meanings helped in long-term maintenance of the word senses (Verspoor & Lowie 567).

As it was mentioned earlier, students had to translate some sentences which contained polysemous words: *degree*, *operation* and *area*.

They had to translate the sentences *a right angle is an angle of exactly 90 degrees* and *she has a master's degree in mathematics*.

All participants translated correctly these two sentences. They were able to make a distinction between the word *degree* used in mathematics as a measure for arcs and angles and as a position on a scale of intensity or amount or quality or as a moderate grade of intelligence.

The most frequent translations of the given sentences in the test are given in the table below.

| The translation of the polysemous words in the test                                |  |
|--|--|
| Degree   | Shkallë, diplomë   |
| A right angle is an angle of exactly 90 <i>degrees</i> .                           | Këndi i drejtë i ka saktësisht 90 <i>shkallë</i> .   |
| She has a master's <i>degree</i> in mathematics                                    | Ajo ka <i>diplomë</i> masteri në matematikë.   |
| Operation  | Operacion, veprim  |
| They will schedule the <i>operation</i> as soon as an operating room is available. | Ata do ta caktojnë një orar të mbajtjes së <i>operacionit</i> posa të lirohet një dhomë operimi. |
| They were learning the basic <i>operations</i> of <i>arithmetic</i> .              | Ata po mësonin <i>veprimet</i> themelore të <i>aritmetikës</i> .                                 |
| Area   | Fushë, sipërfaqe   |
| It was his <i>area</i> of specialization.  | Ishte <i>fusha</i> e tij e specializimit.  |
| Find the <i>area</i> of a rectangle  | Gjejeni <i>sipërfaqen</i> e drejtkëndëshit   |

Table 3. The translation of the words in the test

As it can be seen from the table above, the polysemous words in English are translated with different words in Albanian language. However, the respondents of test were able to distinguish between different senses of the same word.

## 5. Conclusion

Polysemous words present a significant challenge in second language learning. Learners frequently encounter polysemous words because many of the most commonly used words in any language have multiple meanings. This research focused on examining the impact of polysemy on second language acquisition, the methods students use to learn polysemous words, their representation in dictionaries, and some of the tests used to identify these words.

One of the main objectives of this study was to investigate how polysemy affects second language acquisition. The results demonstrate that polysemy can influence the interpretation of meaning in a second language. According to the findings, 80% of the participants indicated that a learner's first language affects how polysemous words are acquired in a second language. The research also revealed that there are equivalent polysemous words in Albanian for the English polysemous words studied. In some cases, one translation is used for all senses of the polysemous word. This supports the idea that polysemy in a first language significantly impacts the interpretation of polysemous words in a second language. Furthermore, the study found that polysemy affects various aspects of language learning, including translation

production, language acquisition, reading comprehension, and language representation.

Another key aim of the study was to explore how students handle translating polysemous words in specific fields, such as mathematics. The findings showed that, when provided with the full context of a sentence, the majority of participants correctly identified the intended meaning of the polysemous words.

Additionally, this research identified the most commonly used methods that help students understand the meaning of polysemous words. The data collected from the questionnaire indicated that context is the most frequently used strategy, followed by dictionary use, with a smaller percentage of students relying on synonyms, antonyms, and etymology.

In light of the findings from both the questionnaire and the translation tests, it is evident that there is a strong relationship between context and the ability to differentiate meanings of polysemous words. The results of the translation tasks demonstrated that when given full sentences, students were able to correctly interpret polysemous words. However, when asked to identify meanings without context, many students relied on the most common or primary meaning of the word.

Overall, the study underscores the importance of context in understanding polysemous words and highlights the role of first language knowledge in second language acquisition. It also provides valuable insights into the methods that can support students in learning to navigate the complexities of polysemy in a second language.

### **Recommendations**

The findings of this study confirmed that polysemous words remain a challenge for students learning a foreign language. Additionally, the relationship between polysemy and homonymy continues to be an issue in second language acquisition. However, the study demonstrated that context, notion of relatedness, zeugma, conjunction reduction, dictionaries and, etymology can help learners acquire polysemous words and distinguish them from homonyms. Therefore, it is recommended that professors discuss this phenomenon and the strategies used to address it to better familiarize their students with polysemy. As different meanings of polysemous words tend to avoid each other's collocations, it is recommended to use collocations as a tool to distinguish between different senses of a polysemous word.

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### **L'IMPACT DES TERMES POLYSÉMIQUES DANS L'ACQUISITION D'UNE SECONDE LANGUE (MOTS POLYSÉMIQUES DANS LE REGISTRE DES MATHÉMATIQUES)**

Ce document vise à explorer l'impact que la polysémie peut avoir sur l'acquisition d'une seconde langue ainsi que les méthodes et stratégies que les étudiants utilisent afin d'apprendre des mots polysémiques. De plus, il est conseillé aux étudiants d'utiliser le contexte, l'étymologie, la mise en relation, le zeugme, la réduction des conjonctions et la collocation comme tests pour distinguer entre mots polysémiques et homonymes. Pour mener à bien cette étude, une méthode mixte a été appliquée, combinant à la fois des méthodes

de recherche qualitative et quantitative afin de fournir une compréhension globale du problème de recherche. Les participants à cette étude consistent en 50 étudiants non diplômés du Département d'anglais de Prishtina. De plus, 8 termes polysémiques en mathématiques ont été choisis pour cette analyse. L'étude a réussi à trouver l'effet possible de certains éléments sélectionnés de termes mathématiques polysémiques (tel que l'angle, le degré, l'expression, le brut, l'opération, la puissance, la table et le volume) sur l'acquisition d'une deuxième langue. Il est important pour les étudiants de comprendre la différence entre polysémie et homonymie = cela augmente leur capacité de compréhension et de communication. C'est pour cette raison que cette étude s'est avérée extrêmement bénéfique pour aider les étudiants à se familiariser avec les mots polysémiques, avec les méthodes d'acquisition de leurs significations ainsi que les tests utilisés pour les différencier des homonymes.

**Mots clés:** Polysémie, impact, acquisition d'une seconde langue, mots polysémiques en mathématiques.