

Cognitive Process of Comprehending Pragmatic Meaning by Senior High School Students

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Abstract. This research is done by using a descriptive qualitative design. The study's data source is the twelfth grade of SMA Swasta Methodist. The approach used in this research was based on Thomas's theory (1995). The data were collected by using retrospective introspection and in-depth interviews. The findings from problem 1 that the subjects of this study use five cognitive processes in comprehending the pragmatic meaning of the text. They are, Using a combination of explicit structure knowledge and semantic, semantic and tacit knowledge, semantic and knowledge of the world, Pragmatic meaning, and knowledge of literature meaning of sentence. The most dominant is using semantics with knowledge of the world. And the least used process is pragmatic meaning.

Keywords: Cognitive Process, Pragmatic meaning, Semantic.

1 Introduction

Language is a tool for understanding and interpreting the world around us, as well as the thoughts and perspectives of others. It allows individuals to convey thoughts, ideas, and emotions to others through spoken or written words. . Verderber (1999) stated language is the body of words and the system for their use in communicating that are common to the people of the same community or nation, the same geographical area, or the same cultural tradition. Through language, we can convey our thoughts and feelings, share our experiences, and connect with others on a deeper level. It allows us to communicate not just information, but also cultural values, beliefs, and norms. By learning and using language, people can build relationships, form social connections, and collaborate with others to achieve common goals. Levinson (1983:24) stated that pragmatics is the study of the ability of language users to pair sentences with the contexts in which they would be appropriate. The definition leads to the analysis that pragmatics cannot be separated from context and principles of language usage. Therefore, to understand pragmatics

meaning of the speaker, people should consider the principles of language used by the speaker. The speaker gives information to the listener. It has the function of connecting people both in spoken and written language. Language not only makes the listener do something but also does the activity as desired by the speaker. It means language has a function to persuade the hearer to do something by the speaker's utterance. Pragmatics studies the social-cognitive basis of communication, which is crucial for understanding the non-literal meaning of an expression. Pragmatic comprehension requires cognitive functions such as attention, the ability to use and store information (memory), comprehension of the structures of utterances (grammatical rules), integration of information from different sources (beliefs about the speaker and situation), empathy, and the understanding of the mental states of others (theory of mind), all guided by context. In order to understand the speaker's intention, the hearer has to utilize the information communicated directly and indirectly. When processing language, people utilize relevant contextual information when they are deriving the meaning of an utterance. People automatically pay attention to information that is relevant to them, and therefore they do not try to process all available information. Pragmatics allows understanding the intended meaning of another speaker, which has been measured in a variety of ways. The evaluation of pragmatic capacities is very broad, and it usually includes the assessment of underlying cognitive processes that are needed for understanding the intended meaning according to the context. Pragmatic comprehension is seen as an ability to utilize context in comprehension. (Sperber & Wilson 1995). Here is a simple context from the conversation, to comprehend pragmatic meaning. Two friends, Sarah and Alex, are hanging out in Sarah's living room. They are watching a movie, but Sarah keeps fanning herself with a magazine.

Sarah: it's hot in this room.

Alex: The AC is out of order. Will the fan do?

- What does the speaker A mean?
- Why the speaker B answer by saying, "The AC is out of order?"

Student's answer: Sarah & Alex feel hot at the time and Alex said this room is hot because the AC is out of order. In this data, the researcher gives a conversation that contains pragmatic meaning. There are speaker and listener in that conversation, the context Sarah hereby requests that to turn on the AC, Alex respond to the speaker's intention and do an action to turn on the fan. The data show that the student did not get the meaning from the conversation. The student's answer only rewrites the information about the situation from the conversation; it means that the answer shows an utterance meaning. She understands the literal meaning of the sentence. The learners' failure in communicating their messages can be traced back to their inadequacy in comprehending pragmatic meaning. The cognitive process of comprehending pragmatic meaning can play an important role in developing the pragmatic competence of

learners. This research is important to hone student's ability to comprehend implied messages and improve the quality of communication. If students do not understand this cognitive process, they might become confused and disconnect in communication. The researcher wants to know how the cognitive process is occurring in students of Senior High School because High school students have reached a higher stage of cognitive development compared to junior high students. This includes improved theory of mind, understanding of social cues, and ability to process multiple perspectives. These skills are crucial for interpreting the nuanced meanings behind language, which makes comprehending pragmatics more relevant. High school curriculum often places a greater emphasis on critical thinking and analysis, which are essential skills for interpreting pragmatic meaning. Students are expected to go beyond the literal meaning of words and consider the speaker's intentions, context, and social cues. Preparation for higher education and careers, the skills required for comprehending pragmatic meaning are crucial for success in higher education and many careers. High school can be a prime time to begin refining these skills in preparation for future challenges. The researcher is interested in doing the research about "The cognitive process of comprehension in pragmatic meaning in Senior High School Methodist 1 Medan that is located on Jl. Hang Tuah Medan.

2 Theoretical summary

2.1 Cognitive Process in Comprehending Pragmatic Meaning

Cognitive process is the ability of the mind to process information and to apply knowledge in an information processing setting (Hvelpund, 2011:38). Cognitive process is a mental process dealing with attention, perception, reasoning, emoting, learning, synthesizing, rearrangement and manipulation of stored information, memory storage, retrieval, and metacognition. This process is required to comprehend pragmatic meanings. Cognitive process comprehends pragmatic meaning in a mental process used to understand the meaning of pragmatic. Pragmatic comprehension refers to the comprehension of oral language in terms of pragmatic meaning. English language learners need to be able to comprehend meaning pragmatically in order to understand a speaker's intentions; interpret a speaker's feelings and attitudes, differentiate speech act meaning, such as the difference between a directive and a commissive, evaluate the intensity of a speaker's meaning, such as the difference between a suggestion and a warning. Cognitive process is a mental process taking place in one's mind while comprehending pragmatic meaning. This process involves the use of the background knowledge in processing the information in its setting; the pragmatic meaning deals with both layers of meaning, namely meaning of utterance and meaning of forces according to Thomas (1995), The first layers that is the meaning of utterance is realized in "sense, references, structure and occasion. The meaning of a word in an utterance , for example, can be its sense or its reference and in the structure by which the words are organized as well as in the occasion or context when the word is used. While the meaning of force refers to the speaker's intention. Speaker's intention is not the meaning of an utterance, it is the meaning that a speaker intends to say by making use of his experience, background knowledge, knowledge of social rules,etc. In addition, to convey this intention, a speaker also make use of his knowledge related to the context where a speaker also make an utterance. the same utterance uttered to a listener with certain background knowledge in the speaker's mind. The interpretation of the speaker's intention is possibly made by a listener if the listener has relevant background

knowledge with the utterance. Based on this explanation the cognitive process can be defined as the mental process taking place in a listener or speaker mind which activates the background knowledge resulting from experience of social rules, and of context, etc. Mental representation refers to how an event or an experience is represented in the mind. In language learning, mental representation may refer to how some students memorize what they have learned, or experiences in their life by remembering things in their native languages. It is clear that cognitive processes include all activities related to mental processing. In relation to language learning strategies, the cognitive category may include all activities that take place in the brain in order to acquire a foreign language. This category may include intelligent guessing, looking for patterns from sentences, inferencing, association, summarizing, grouping in the mind, deduction, imagery, and other mental processes.

3 Research methods

This study was conducted by using descriptive qualitative design. Bogdan and Biklen (1992) when using a descriptive qualitative design, data was expressed as words or images rather than as numbers. Descriptive qualitative is design, which not only describes how theory works in the different phenomena but also the way it does. The data will be collected by using retrospective introspection. Retrospective introspection refers to the process of looking back and reflecting on one's thoughts, feelings, and experiences. It involves a retrospective examination of one's own mental processes and inner experiences.

3.1 Data Source of the Research

The research data consisted of sentences reflecting the students' cognitive abilities to comprehend pragmatic meaning, which were obtained from their responses to conversations and open questionnaires. The data was collected from grade XII students at Methodist 1 Senior High School during the 2023/2024 academic year. At the school, there were four classes of grade XII students, each with 15 students, making 60 students. Due to the large number of students, the researcher requested the school principal to select the class best suited for the research. The data was obtained from one of the grade XII classes, chosen for their proficiency in English. Although there were 15 students in the class, only 10 were present on the day of the research.

4 Results

4.1 Cognitive Process of Comprehending Pragmatic Meaning

Cognitive process is a mental process-taking place in one's mind while comprehending pragmatic meaning. The subject consists of 10 students. Each student is given four conversations to comprehend pragmatic meaning. From these four conversations, there will be 40 variations data of the cognitive process of understanding pragmatic meaning. Based on the data analysis, it was found out that the subjects of the study uses five cognitive process in comprehending the pragmatic meaning of the text (conversation). The five processes are:

1. Using combination of explicit structure knowledge and semantic

2. Using semantic and tacit knowledge
3. Using semantic and knowledge of the world
4. Using Pragmatic meaning
5. Using knowledge of literature meaning of sentence

Each of this process is describe below:

4.1.1 Using Combination of Explicit Structure Knowledge and Semantic

In comprehending pragmatic meaning of a conversation, the subjects activate their knowledge of sentence structure that is by identifying that the sentence is in negative form, and activating semantic knowledge, that is by choosing a key word of the text or conversation and recall the meaning of the word. The subject's statement that the sentence is negative is the indicator that the subject activate explicit structure knowledge.

Table 1. Data 1

No	Conversation comprehending pragmatic meaning		
	During a casual conversation at a university campus, a woman and a man discuss their feelings about linguistics, which is a subject they both study.		
1.	Sarah: Hey, John! I noticed we are in the same linguistics class. Do you like linguistics? John: Oh! Let us say I do not jump for joy before the class. <i>What does the man mean by saying "I don't jump for joy before the class"</i> <i>Tuliskan apa yang terjadi di pikiran mu sehingga kau memberi jawaban seperti itu.</i> Key : Pragmatic Meaning		
	Subject	Students comprehension	Cognitive process
		1. means that John doesn't like the class	Because he answer the question with a negative sentence and there is not joy he has when he join the class. Semantic and Negative structure (Not Joy)
			Interpretation

In data 1, the subject identified that the sentence: "I don't jump for joy before the class" was formed in negative sentence, pick a word of the sentence, that is: joy, then related the negative form: not directly to the word joy and he interpret that not joy means does not like. This cognitive process was used by three subject.

4.1.2 Using Semantic and Tacit Knowledge

In comprehending the pragmatic meaning of a conversation, the subjects utilizes both semantic and tacit knowledge. This is achieved by selecting keywords from the text or conversation and recalling their meanings.

Table 2. Data 2

No	Conversation comprehending pragmatic meaning
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During a casual conversation at a university campus, a woman and a man discuss their feelings about linguistics, which is a subject they both study.

Sarah: Hey, John! I noticed we are in the same linguistics class. Do you like linguistics?

1. John: Oh! let's say I don't jump for joy before the class.

What does the man mean by saying "I don't jump for joy before the class"

Tuliskan apa yang terjadi di pikiran mu sehingga kau memberi jawaban seperti itu.

Key : Pragmatic Meaning

Subject	Students comprehension	Cognitive process	Interpretation
2	It means that he does not really care about the class, he does not hate it	Jump for joy usually show expression that you like something and love it	Semantic and tacit knowledge

I don't jump for joy before the class is understood by the subject as he doesn't care about the class, and added that "he does not hate it" is understood by activating tacit knowledge "Jump for joy" means that if the student like it jump for joy expression that you love. The subjects use jump for joy means moving from one place to another which shows an expression that you like it or love something. such as study programs which are often linguistic and students must take the subject even though he doesn't like the subject. From the subject's comprehension, the text or conversation jump for joy stated that tacit knowledge, which means, expression that you like. This process was used by four Subjects.

4.1.3 Using Semantic and Knowledge Of The World

In comprehending the pragmatic meaning of a conversation, the subjects activates their knowledge of the world that is by identifying the sentence and activating semantic knowledge. by choosing a keyword of the text or conversation and recalling the meaning of the word.

Table 3. Data 3

No	Conversation comprehending Pragmatic meaning
2	<p>A husband and his wife were cleaning up the garden and both did not bring any watch. However, they both had a shared knowledge that the train passes at a certain hour. (<i>Jurnal Bahasa, Sastra, dan Pengajarannya, Vol. 13</i>)</p> <p>Husband : "What time is it, honey?" Wife : "The train has not passed yet, darling".</p> <p>What does the woman mean by saying "The train has not passed yet, darling"</p> <p>Tuliskan apa yang terjadi di pikiran mu sehingga kau memberi jawaban seperti itu.</p> <p>Key : Pragmatic Meaning</p>
Students	<p>Students comprehension</p> <p>Cognitive process</p> <p>Interpretation</p>

1	They know at what time the train passes.	The husband and his wife know exactly all the schedules of the trains which pass by their garden.	Semantic knowledge of word
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In data 3, the sentence "The train has not passed yet, darling" is understood by the subject as a reference to the train schedule. The subject directly relates the word "schedules" to the word "time," indicating that the couple was using the train schedule as a time reference for their daily activities. This process was used twenty-three times. This process of activating knowledge of the word was used by twenty-three subjects.

4.1.4 Using Pragmatic Meaning

When trying to understand the real meaning of a conversation, the subject uses her knowledge of how to respond appropriately, by recognizing that the sentence is not direct and using their understanding of the context, such as picking out a keyword from the text or conversation, and remembering what that word means.

Table 4. Data 4

No	Conversation comprehending pragmatic meaning		
	The conversation between a father and his son above took place at home. His son is married. After spending weekdays working, he wants to borrow his father's car to take his wife and son for a ride to reduce stress and boredom.		
	Son : Are you going to use the Zass today, Dad? (Note: Zass refers to the car.)		
	Father : Where are you going?		
3.	Son : I'm thinking about taking Hany and Kemal for a ride. Father : Alright. The gas is running out.		
	<i>What does the man mean by saying "the gas is running out"</i>		
	<i>Tuliskan apa yang terjadi di pikiran mu sehingga kau memberi jawaban seperti itu.</i>		
	Key : Pragmatic Meaning		
Subject	Students comprehension	Cognitive process	Interpretation
1	He does not want to lend his son it.	father make excuse to not lend his son the Zass.	Pragmatic meaning : Illocution

In Data 4, the subject identified that the sentence "the gas is running out" was formed as an illocution. The subject was asked to pick a word from the sentence, in this case, "Excuse," and relate it indirectly to the phrase "not to lend the Zass." The subject interpreted the excuse as a way of indirectly saying "no" to lending the Zass, which means that the father does not want to lend the Zass. This process was used by one subject.

4.1.5 Using Knowledge of Literature Meaning of Sentence

To comprehend the practical meaning of a conversation, the subjects use their knowledge of literal meaning by recognizing that the sentence is a direct form, selecting a keyword from the text or conversation, and recalling the meaning of the word.

Table 5. Data 5

No	Conversation comprehending pragmatic meaning		
	<p>The conversation between a father and his son above took place at home. His son is married. After spending weekdays working, he wants to borrow his father's car to take his wife and son for a ride to reduce stress and boredom.</p> <p>Son : Are you going to use the Zass today, Dad? (Note: Zass refers to the car.) Father : Where are you going?</p> <p>3. Son : I'm thinking about taking Hany and Kemal for a ride. Father : Alright. The gas is running out.</p> <p><i>What does the man mean by saying "the gas is running out"</i></p> <p><i>Tuliskan apa yang terjadi di pikiran mu sehingga kau memberi jawaban seperti itu.</i></p> <p>Key : Pragmatic Meaning</p>		
Subject	Students comprehension	Cognitive process	Interpretation
2	His father asked him to refill the gas if he want to use the car.	Because his father said that, the gas was running means that he should refill the gas.	Direct: locutionary

In data 5, the subject identified that the sentence: the gas is running out was formed in the direct sentence, picked words of the sentence, that is: refill the gas, then related the locutionary form, and then he interpreted that the gas is running out means car's fuel level is low and needs to be refilled. From students' comprehension of the text or conversation refill the gas stated in the direct form. This process was used by nine subjects.

4.2 Discussion

The first research question of this study dealt with the cognitive process take place in comprehending pragmatic meaning. The students read the conversation and they have to answer after comprehending the text. Dealing with the theory proposed by Thomas (1995), there are two layers of meaning, they are meaning utterances refers to semantic and meaning force refers to pragmatic. Each process is crucial for students to interpret implied messages and grasp the intent behind spoken words. This research is significant as it helps students develop the ability to understand implied messages and enhance the quality of their communication.

Dealing with the theory, this study found some process of cognitive process that there are five cognitive processes involved in comprehending pragmatic meaning. They are as follows: Using combination of explicit structure knowledge and semantic, Using semantic with tacit

knowledge, Using semantic with knowledge of the world, Using pragmatic meaning, Using knowledge of literature meaning of sentence.

Based on the data, explicit structural knowledge and semantic knowledge, explicit structural knowledge refers to understanding formal grammatical rules and sentence structures in a language. Semantic knowledge involves comprehending the meanings of words and phrases. Second, Using Semantic Knowledge with Tacit Knowledge is the implicit understanding that individuals have about language use, often acquired through experience and not explicitly taught. Students use their tacit knowledge, which includes intuitive understanding and familiarity with language norms, alongside semantic knowledge. This allows them to grasp meanings that are not directly stated. Third, Using Semantic Knowledge with Knowledge of the World refers to general background knowledge about the world, including cultural norms, common practices, and typical behaviors. Students activate their general knowledge about the world and combine it with semantic cues to interpret pragmatic meanings. Fourth, Using Pragmatic Meaning, this involves understanding the context and the speaker's intent behind utterances. Students use their ability to infer pragmatic meanings directly, focusing on the context of the conversation, the relationship between speakers, and the situational cues. Fifth, using Knowledge of Literal Meaning of Sentence This is the direct, explicit meaning of words and sentences without additional contextual interpretation. When interpreting pragmatic meanings, students sometimes rely on the literal meanings as a foundation. They then build upon this literal understanding to infer additional, non-literal meanings. For example, a sentence like "It's cold in here" can be taken literally at first but might be interpreted as a request to close a window or turn up the heat when considering the context.

It can be concluded that Using semantic with knowledge of the world is dominant in the cognitive process of the subjects. They also often rely on understanding literature and sentence meaning. Less frequently, they use semantic and tacit knowledge and explicit structure with semantic knowledge. The least used process is pragmatic meaning.

The study presented here contributes that how variations in world knowledge between cultures affects semantic comprehension. But from feature linguistic, most of the students comprehend in semantic meaning. This is because Pragmatic comprehension refers to the comprehension of oral language in terms of pragmatic meaning. English language learners need to be able to comprehend meaning pragmatically in order to understand a speaker's intentions; interpret a speaker's feelings and attitudes. And for the reason of this Research could explore how this shared knowledge varies across cultural and social groups. For example, the study of how groups with different cultural backgrounds use the same or different idioms and references in everyday communication. how indirect communication is understood and processed in different cultural contexts. Research can focus on the ways in which individuals use and interpret indirect messages in various communication situations.

Another shortcoming of the study was This study may have used a limited sample in terms of size and demographic diversity, which may affect the generalizability of the findings. The methods used to measure cognitive processes may not be deep enough or accurate enough to capture the complexity of pragmatic understanding.

5 Conclusion

Based on the analysis, some conclusions were stated as the following explanation in order to conclude about the cognitive process take place in comprehending pragmatic meaning and the reason of cognitive processes were activated. There are five process in comprehending pragmatic meaning, they are : Using combination of explicit structure knowledge and semantic, Using semantic and tacit knowledge, Using semantic with knowledge of the world, Using pragmatic meaning, Using knowledge of literature meaning of sentence. The five processes of cognitive process .The most dominant is Using semantic with knowledge of the world and The least used process is pragmatic meaning.

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