Developing an Idea about Semantics and Psycholinguistics

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Abstract

This overall report is revolving around developing an idea about semantics and psycholinguistics. Semantics and psycholinguistics are closely related that explain the way word can be interpreted by different individuals. Secondary data collection method has been chosen as the appropriate data collection method which will be sourced form already published articles and journals. Thematic analysis has been chosen for this study that has helped to duly meet the objectives and reach conclusion about particular topic.

Keywords

Language processing, Psycholinguistic, Semantics.

INTRODUCTION

Background and rationale

Psycholinguistics and semantics are very close topics which revolve around finding meaning of words and the way they are stored within the human brain. Semantics generally helps to understand the meaning of words and how they can be used in various contexts. Semantics can be broken down in different categories which are formal semantics and conceptual semantics. Formal semantics are logical aspects of meaning and in contrast, conceptual semantics are cognitive structures of meaning [1]. Psycholinguistics, on the other hand, is mainly concerned with neurobiological processes involved in language learning and use [2]. Since a few years, different research has been revolving around the way languages are stored within the human mind and how those are used in different contexts. This particular research will try to shed light on the way the brain processes different words and the way context can change the meaning of a particular word. Word meaning is a key concept of a research that is revolving around semantics and psycholinguistics.

Word meaning can be a straightforward thing but it can be influenced through different factors which are context, and the word that comes before and after it along with the person using those words. There are several ways through which these factors can influence the meaning of that particular sentence along with the way the brain can access and represent those meanings. Communication is considered as the way of interacting with each other and expressing feelings [3]. Language is also a key factor that influences the perception of individuals about the world and the structure of that particular language can also initiate different kinds of thoughts within someone. Overall, this research will try to develop an understanding about the way different languages work and the way the brain processes those. Several fields such as education, linguistics, and psychology can be benefited by this research revolving around semantics and psycholinguistics.

Literature review

There are various ways that elaborates the way word meanings are represented within the human brain such as a semantic network that suggests the word meaning is represented within the brain by different activity patterns in the brain's neural network. Semantic networks can be considered as the way of representing relationships between ideas and objects [4]. Another theory suggests that through specific brain region's activity, the meaning of words can be represented. Overall, it can be said that the meaning of words is represented in a distributed and complex manner in a brain that includes specific regions of brains and neuron networks.

Language and thoughts are also interrelated topics that are also related with a research that is revolving around semantics and psycholinguists. Language can help in problem solving along with influencing the perception of individuals about the world [5]. Language can play a huge role in problem solving as it can provide means of discussing and communicating problems with others. Language can also intrigue a collaborative nature in somebody and thus solutions can come quicker than in the time of working alone. It can also help to organise and represent obtained information which can eventually contribute to problem solving. Overall, it can be stated that language plays a huge role in problem solving.

Significance of the study

Current study is revolving around developing ideas about semantics and psycholinguistics which can be significant in different sectors. As it can help to understand different contexts in which words can be used along with its impact over perception of the world , thus, education, psychology, linguistics are some of the major fields in which this research can be used to obtain an in-depth knowledge about word meaning.

OBJECTIVES

The aim of this research is to get an idea about semantics and psycholinguistics and develop an in-depth understanding.

To find the role of semantics in language processing and the way brain can interpret meaning of those sentences and words

To analyse the cognitive and psychological factors that can impact interpretation of semantics

To evaluate the differences and similarities shared between other linguistic levels and semantics

To evaluate the contribution and factors of psycholinguistics in language learning process

METHOD

Research design

A general plan of the way research questions will be answered is considered as research design. Two major types of research designs are there which are exploratory research design and conclusive research design. Conclusive research design helps to generate those findings which can be helpful to reach decision making and conclusion about a particular topic. Exploratory research design, on the other hand, is used to study a problem which is not clearly defined [6]. It can help to understand the nature of a problem which can help to gain an in-depth understanding. This research is revolving around developing ideas about semantics and psycholinguists thus, exploratory research design has been chosen for this study. Exploratory research design can also help to generate new insights which will be particularly helpful for this current research [7]. Overall, it can be stated that exploratory research design is particularly suitable for this study which will help to generate new insights and eventually reach a decision making.

Research type

There are majorly two types of research that are selected for conducting research and reaching conclusions about a research phenomenon which are quantitative research and qualitative research. Quantitative research is where numerical numbers are included in a data set and in contrast, qualitative research deals with non-numeric materials. Quantitative analysis is done through using statistical tools and qualitative analysis has no need for any analysis tool which can help to easily derive a conclusion [8]. Quantitative analysis is useful for those topics which have the need of numerically analysing data. As this research is revolving around developing an idea about semantics and psycholinguists, thus numeric data will not be necessary for reaching a decision making. Thus, this research has been conducted through using articles and journals for developing ideas about semantics and psycholinguistics. Thus, a qualitative research type is fruitful for this study in order to reach a conclusion and decision making.

Research duration

Research duration elaborates the timeline of a research and how much time has been taken for reaching a conclusion and generating findings. This current research has taken 3 months that was started in September and ended in December.

Inclusion/exclusion criteria

Inclusion and Exclusion criteria are part of non-probability sampling that identify samples that should be included and samples that cannot be used. Inclusion deals with including samples according to the nature of samples and in contrast, exclusion deals with excluding those. Keeping in mind the relevancy, this research has included published journals in topics related to semantics and psycholinguistics since the year 2018 and excluded journals that were published before 2018.

Data collection

The process of collecting data from various sources is referred to as a data collection method which is used in a research for collecting data for analysing. Majorly two types of data collection procedure are there which are primary data collection and secondary data collection method. Primary data collection is collecting data from first hand sources by using methods such as interview, survey and others [9]. In contrast, secondary data collection refers to collecting data from sources that are already publicly available such as journals, articles and others. Secondary data collection comparatively takes less time than primary data collection. Through secondary data collection an in-depth analysis of a topic is possible as different journals and articles related to that particular topic are explored. This current research is revolving around developing ideas about psycholinguists and semantics; thus, interviews or surveys are not as helpful as using journals, articles. Secondary data collection method is therefore chosen for this study that will help to collect data and reach conclusions.

Data analysis

In the research methodology section, data analysis determines the method through which collected data will be analysed. Two types of data analysis methods are widely used in research which are quantitative and qualitative analysis. Qualitative research type has already been chosen in this study and there are different types of analysis methods that fall under qualitative analysis. Thematic analysis is also a type of qualitative analysis in which conclusions are reached through making different themes [10]. Several themes have been made in this current study by keeping in mind the objectives. Different themes will also help to elaborate variables related to this study and meet all objectives duly. Overall, it can be said that thematic analysis is justified for this qualitative type of research which will help to analyse secondary data which are collected from different articles and journals.

RESULTS

Contextual factors in structuring semantic meaning

Contextual factors play a big role in determining interpretation about meaning of the word which is also known as context-dependent meaning [11]. A word that comes before the target word can change the overall meaning and totally change the meaning of that other word too. There are different ways through which context can entirely change interpretation of words. A way that context can influence the word interpretation is through using antonyms. Antonyms are the words that have the exact opposite meaning which are hot-cold, happy-sad, and others. For instance the word "cold" can be interpreted in different ways such as it can be used to determine temperature as well as showing less-enthusiasm to a particular discussion. It can be understood that without previous words or contexts it is difficult to interpret the meaning of a particular sentence.

There is also another way through which interpretation of words can be changed is through using synonyms. Synonyms are those words which share similar meanings such as big-large, happy-joyful and others. The way synonyms can change interpretation of a particular sentence is in case someone says, "The elephant is big" it means the size of elephant. Similarly, "The elephant is very big" can have a whole other meaning as it represents that particular elephant is especially gigantic. Moreover, through using modifier words, verbs, adjectives about a particular noun can change the overall interpretation of that sentence. Tenses and verbs are also other factors that can impact the meaning of a sentence. Tenses usually indicate the time of occurred action which can impact the whole interpretation of other words in that particular sentence.

In the sentence, "I am eating an apple" indicates that the apple is getting eaten in present times and on the other hand in case any individual says "I will eat an apple" that indicates the apple will be eaten in future. It can be noticed that due to the verb will the overall meaning of "eat" is changed which changes the overall interpretation of meaning. Common phrases or idioms are also another factor which can change the meaning of an overall sentence. These particular idioms or phrases have different meanings from individual words which can change overall interpretation. In addition, the total context of the conversation can also change the interpretation of words. For instance, the same word can be used in a medical journal or a newspaper but that could interpret a whole different meaning. In conclusion it can be said that use of modifier words, verbs, and the overall context of conversations can influence interpretation.

Influence of individual differences over semantic processing

Semantic processing is the way individuals understand and interpret the meaning of language and words [12]. In context to semantic processing, individual differences are the ability to use and understand those languages. Age, cognitive abilities, culture, education can be some of the factors that influence individual differences. Individual differences can have influences over semantic processing by vocabulary size. People with knowledge of larger vocabulary sizes can gain easier understanding and interpreting languages as they have access to a bigger range of words. It can also help them to communicate with others through using those different levels of vocabulary. Vocabulary size can also be increased by education level and reading practices. Individuals with higher levels of education can have knowledge about different concepts and words than people with lower levels of education. Language processing speed is also another factor of individual differences which can impact semantic processing.

Some individuals are able to quickly understand and interpret languages, while others need more time to comprehend or understand words said to them. Ages, cognitive abilities along with prior knowledge are these factors which can influence the speed of language processing of individuals. Individual differences can also be brought by factors such as culture and linguistic background. For instance, individuals coming from bilingual households can easily understand different languages and its aspects as they deal with complex languages from an early age. Similarly, people that are experienced with different cultural practices can have greater understanding of languages and can adapt to interpreting languages within different contexts. Cognitive abilities such as attention, memory, problem-solving skills can also determine individual differences in semantic processing. A cognitive ability basically refers to mental processes involved with retaining, acquiring and using languages. It also includes a range of abilities and skills such as memory, decision making, and attention. This can influence individual differences which can affect interpretation of different languages.

Cognitive abilities can help someone to interpret and understand languages and also process and retain information through which semantic processing can be influenced. It also helps to retain and connect information about different pieces of information. It can be concluded that individual differences in semantic processing are influenced by different factors such as vocabulary size, cultural and linguistic background and cognitive abilities. These overall processes can influence interpretation of languages and different sentences along with speed of interpreting those. Understanding these differences can help individuals to communicate in a better way and convey thoughts and ideas to different individuals.

Relationship of Semantic with different linguistic levels

The process of understanding and interpreting different languages and meaning of words is referred to as semantic processing. It is related to different numbers of linguistic levels such as phonetics, phonology and syntaxes. In context to syntax, semantic processing involves understanding a sentence's grammatical structure and the relationship between those words to convey a meaning [13]. Syntax is highly related with rules, patterns which influence the

arrangement of words within a sentence which plays an important role in understanding the meaning of that particular sentence. For instance "Arthur is working" is a sentence in which "Arthur" is the subject and "Working" is the verb. This grammatical structure of this sentence helped to determine that Arthur is the one who is working. Overall, this governing helped to understand the overall interpretation and meaning of the word.

Phonetic is one of the branches within linguistics that mainly focuses on classification and production of world's speech sounds. In context to this, semantic processing understands the way those sounds are making up words and contributing to the meaning. Simply put, phonetics is the study of the language' sound and the way of their production along with understanding the way those words determine overall meaning. For instance, bat and cat are different from each other through the sound of their vowel which helps to convey those different meanings. At phonology level, semantic processing also involves understanding patterns of language sounds and the relation shared between them. It also contributes to different interpretations of meaning of the sentences. Overall, it can be understood that semantic processing is closely related to different levels of linguistics as it involves understanding and interpreting the meaning of a particular word. Different factors such as phonology, phonetic, syntax and others contribute to language and meaning of words. Therefore, it is an important consideration of semantic processing and understanding these different factors can contribute to understanding and interpreting different languages.

DISCUSSION

The contribution of semantics in processing of language is to evaluate the sentences or phrases used in language processing. In semantic analysis the conventional meaning of words is always focused instead of an individual's attempt to explore a particular meaning on any particular occasion. The technical approach is identified with general meanings or objectives and ignores trying to account for local meaning or subjective [14]. The linguistics semantics specifically deals with traditional meaning revealed through application of words, sentences and phrases of language. People are generally interested in characterising the conceptual meaning and the associative meaning is less focused. The conceptual meaning consists of essential and basic components of meaning that are revealed through the literary use of words. Several core components of any word such as needle in the English language may illustrate a sharp, thin or steel tool and these components are signified as conceptual meaning of the word. The semantics develops the knowledge about language depicting the subtle variations of meaning of words. The major tenets under the cognitive semantics consists that the grammar develops a conception about the world situated in a culture. It further indicates that knowledge about language is contextual. It signifies that capability to apply language is held upon the common cognitive resources and obviously not

the language module.

The psycholinguist has developed multiple theories that interpret the way a person learns language, perceives and produces both written language and spoken language including processing theories. Multiple theories have indicated the learning procedure of language referring to common procedures and difficulties. English learning for the foreign language speakers achieving oral fluency is a difficult task. A key construct is largely related to the particular mental state and the mental health of the language learners. In the language learning procedure the psycholinguistics is engaged into the processing of language, writing, reading, listening, speaking and memory. For instance, the way words on paper are transformed into meaning in the human mind. Retrieval and lexical storage refers to the way words can be stored in the minds and applied. Comprehension of language, production of language and language acquisition aspects are covered up under the psycholinguistics. Further, it has been seen that the neurological base causes the human being considered to speak language compared with the other species [15]. In general term, the psycholinguistic is the integration of two major disciplines that are linguistics and psychology. The connection of body and mind to the language learning process perception or acquisition is termed as the psycholinguistics. Language production means that important process that is involved in the creation and expression of meaning through language. Perception refers to the important procedure that consist interpretation and understanding of both the spoken and written language. Acquisition of language clearly means the process to acquire any other second language. Explaining the different way of language learning process the contribution of the psycholinguistics is immensely important.

CONCLUSION

The semantics deals with the subtle difference of meaning between words that technically mean similar meanings and the psycholinguistics refers to the study and analysis of mental aspects of speech and language. It is mainly concerned with important ways that language is processed and represented in the human brain. Mental mechanism to help people learn new language psycholinguistics helps to create scientific discipline in any study. From the above analysis it can be found that application of modifier words, overall context of any conversation and verbs are useful for creating interpretation. Depending on various tasks characterization within the human language procedure the architectural basis of semantics and psycholinguistics are important for suitable prediction. The psycholinguists importantly focus on major aspects that are language comprehension, production and acquisition of language. The procedures that are involved in the psycholinguistics are language processing, retrieval and lexical storage. The language acquisition or the way how language is learnt first or applied by the children are included in the psycholinguistics.

From the discussion it has become clarified that both the external and the internal factors may impact the development of language. Influence of vision impairment and hearing process is further important in order to learn new languages. Evolutionary interpretation about the way language is leant is important. Semantic perception helps to identify concise differences better than different words. The common purpose of psycholinguistics is to investigate the procedure and structure that underlies the abilities of humans to understand and speak languages. The second language acquisition and application is further involved in it. It signifies the way an individual may learn a new language and finds the ability to differentiate these angles in an important manner. In the language processing writing, reading, and memory and listening. The important way any word is kept in our mind is crucial in order to know the true characteristics of the language mapping.

The importance of psycholinguistics is important as the evolutionary explanation on the reason why humans have the capacity to apply language and parts of the human brain is concerned with different language areas. From the discussion it has also been known that even the non-human animals have the capacity to apply the capacity to learn language. Outlining and depicting the important process to produce and communicate the psycholinguistics provides information about the language learning process. The important fact that psycholinguistics is undoubtedly an interdisciplinary field, that defines relation between the language and mind is a matter of discussion. Description of comprehension procedure through psycholinguistic perspective in word-text area is another matter of discussion. There are different psycholinguistic related matters that influence comprehension and the factor is connected to each difference and for the mentioned reason in term it cannot be defined. The included methodology in this research is important to outline the basic characteristics of psycholinguistics. Having a disciplinary method in the study has become important to explore suitable knowledge on the topic in this sturdy. The representation of words and access of words, the use of verbs and grammar are important facts of psycholinguistics.

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