An Application of Compositional Metafunctions in Improving Children’s Ability to Learn English Through Images

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Abstract: An Application of Compositional Metafunctions in Improving Children’s Ability to Learn English Through Images. Objectives: The purpose of this study was to access the application of compositional metafunctions in improving children’s ability in learning English through images. Methods: The method used in this study is a qualitative approach with a literature review using sources from the internet, books, and related research outputs. Findings: The results of this study found that using images in the application of compositional metafunction in learning English to improve children’s abilities has a great influence, in terms of ease of learning and ease of observation. Conclusion: Based on the results presented, this study gives a new horizon that children can easily remember words in English through pictures and make motor comparisons in everyday life with the concept of cognitive development in improving memory for learning English.

Keywords: compositional, images, metafunctions, children.

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INTRODUCTION

Learning has various theories that can be used according to the needs of the teacher, in this case, there is a compositional theory of learning by increasing learning abilities using visual media, this theory is called the theory of cognitivism where learning is done by activating the students’ senses to gain understanding while the activation of the senses can be carried out using media or tools. Purba et. al. (2022) defined that the delivery of teaching with various variations means using many methods, therefore this theory is referred to as a perceptual model, namely the process of building or guiding students in training the ability to optimize the process of understanding an object. A person’s behavior is determined by his perception and understanding of situations related to himself.

A person’s cognitive development is related to genetics, the learning process is based on the biological mechanism of the development of the nervous system. With increasing age, the composition of nerve cells is also increasingly complex and increases abilities, especially in the field of intellectual quality. In this case, Piaget divides children’s cognitive development based on several stages, namely (1) sensorimotor stage (age 0–2 years), (2) pre-operational stage (age 2–7/8 years), 930 concrete operational stage (age 7 /8 – 11/12 years old, (4) formal operational stage (11/12 years old and above).

Metafunction is a function adopted from Halliday’s theory of systemic functional grammar which contains 3 metafunctions namely ideational, interpersonal and textual (Darong, 2021; Ngongo and Ngongo, 2022). To function as a full system of communication, the visual, like all semiotic modes, has to serve several representational and communicational requirements (Ngongo et. al., 2022). We have adopted the theoretical notion of metafunction from the work of Michael Halliday for this purpose. The three metafunctions which he posits are ideational, interpersonal, and textual (Herman et. al., 2019). In the form in which we gloss them where they apply to all semiotic modes and are not specific to speech or writing (Idrus and Hamid, 2014).

The more fluent a person speaks, the more fluent he thinks. In addition, we can also conclude that the more fluent a person’s language is, the more fluent he or she thinks, and the more successful he or she learns. Indeed, the relationship between language and thinking has been a very long debate, especially among cognitive psychologists. Since Benjamin Whorf and Edward Sapir put forward their hypothesis, the controversy over their relationship has not subsided. However, the argument of (Boroditsky, 2011) confirms this hypothesis “By the 1970s many scientists had become disenchanted with the Sapir-Whorf hypothesis, and it was all but abandoned as a new set of theories claiming that language and thought are universal muscled onto the scene. But now, decades later, a solid body of empirical evidence showing how languages shape thinking has finally emerged. The evidence overturns the long-standing dogma about universality and yields fascinating insights into the origins of knowledge and the construction of reality. The results have important implications for law, politics, and education.” Boroditsky very clearly provides evidence of the influence of language on thinking. He even stated that language is even involved in many aspects of human life more than what experts had previously suspected. He further emphasized that there are not many things from thinking activities that do not involve language (Suherdi, 2012).

(Widyastri, 2019) said that a Language is a communication tool in the form of sound symbols used by someone to communicate with other people (Allam, 2017). Language and humans are two things that cannot be separated, because it is with language that humans interact and
communicate with each other which then sparks brilliant ideas for civilization. Language is a system, which means that language is formed by a patterned component that is fixed and can be ruled out (Culache & Obadã, 2014). The function of language learning is to develop the ability to understand and create or compose texts (Yusnawarni, 2014). Language in education is used as a tool in teaching. Indonesian is taught at every school level starting from the elementary school level. Indonesian is taught at every school level starting from the elementary school level. medium. get to college. All schools in Indonesia use Indonesian as the language of communication in conveying and receiving student material. However, currently, not a few use English as an auxiliary language in their teaching.

The understanding of language is divided into two, firstly stating language as a means of communication between members of the community in the form of sound symbols produced by human speech tools. Second, language is a communication system that uses arbitrary vocal symbols (speech sounds). (Rondiyah, 2017) define language as an arbitrary symbol system that uses a community to work together. interact and identify. Two definitions of language are (1) language is a systematic system. perhaps also for the generative system, (2) language is a set of arbitrary symbols or arbitrary symbols (Saddhono, 2012).

Errors in the language in the process of acquisition and learning is a process that affects a person in learning that language. Language errors are something that cannot be avoided. However, the higher the quantity of language errors, the less the goal of language teaching is achieved (Saddhono, 2004). Information technology in this era of globalization is entering all countries very quickly without being blocked and prevented. Therefore, there is not a single language in this world that does not require another language. A language can’t express all concepts based on the vocabulary of the language itself. English itself, which is known as a world language, in its development, has absorbed a lot of vocabulary from Latin, Greek, and French. Therefore, Indonesian must also be open to absorbing vocabulary from other languages, such as English or regional languages. English is also needed in the dissemination of science and technology, Initially science used English in its.

Ausubel identified 4 possible types of learning that can affect the quality of students, namely: 1) learn by meaningful discovery, 2) learn with meaningful lectures, 3) learn by meaningless discoveries and 4) study with meaningless lectures. Therefore, the learning process with visualization by improving children’s ability to use English can be done through the use of images as media. This visual configuration has two related functions. In the first place, it creates a visual form of direct address. It acknowledges the viewer explicitly, addressing them with a visual “you”. In the second place, it constitutes an image act. The producer uses the images to do something to the viewer. It is for this reason that we have called this kind of image a demand. A direct gaze demands something from the viewer, demands that the viewer enters into some kind of imaginary relationship with him or her.

In this research, we know that perspective dan the subjective image are important. There is yet another way in which images bring about relations between represented participants and the viewer: perspective. Producing an image involves not only the choice between offer and demand and the selection of a certain size of the frame but also, at the same time the selection of an angle, a point of view and this implies the possibility of expressing subjective attitudes towards
represented participants. There are, then, since the renaissance, two kinds of images in western cultures: subjective and objective images, images with central perspective and hence with a built-in point of view, and images without central perspective and hence without a built-in point of view.

In subjective images, the viewer can see what there is to see only from a particular point of view. In objective images, the images reveal everything there is to know (or that the image produced has been judged to be so) about the represented participants even if, to do so, it is necessary to violate the law of naturalistic depiction or indeed the laws of nature

**METHODS**

**Participants**

This study used qualitative research methods with a literature study approach. According to (Sugiyono, 2015), a literature study of literature can be defined as a series of activities related to the methods of collecting library data, reading, taking notes, and processing research materials. Literature studies can also study various reference books and similar previous research results that are useful for obtaining a theoretical basis on the problem to be studied (Turnip et. al., 2021). Literature study also means data collection techniques by reviewing books, literature, notes, and various reports related to the problem to be solved. Meanwhile, according to (Raco, 2010) literature study is a theoretical study, references, and other scientific literature related to culture, values, and norms that develop in the social situation under study.

**Research Design and Procedures**

This library research method is used to develop concepts regarding productivity which can later be used as a basis for developing practical steps as an alternative management approach. The steps in Literature research according to Kuhlthau in (Dwiyan, 2020) are as follows: topic selection, information exploration, determine the research focus, collection of data sources, preparation of data presentation, and report preparation.

**Instrument**

Moleong (2007) in Silalahi et. al. (2022) states that, in qualitative research, humans or researchers are tools or instruments. Then, Purba et. al. (2022) explains, as an instrument, “researchers must have sufficient theoretical and insightful knowledge so that they are able to ask questions, analyze, take pictures, and construct the social situation being studied to be clearer and more meaningful”. In other words, the researcher becomes the main instrument of research. So in this study, the researcher acts as a planner, implementer of data collectors who then interprets the data that has been collected. In conducting research, researchers collect as much data as possible so that the research results are accurate.

**Data Analysis**

Data analysis is carried out when data from informants or other sources have been obtained. Hubberman and Miles (1992) in Herman et. al. (2022) propose a data analysis model which he calls an interactive model. This model consists of three main things, namely (1) data reduction; (2) data presentation; and (3) drawing conclusions or verification.

**RESULTS AND DISCUSSION**

(Puspitasari, Widodo, Widyaningrum, Allamnakhrah, & Lestariyana, 2021) defined social semiotics broaden Sausure’s knowledge of semiotics by exploring the implications of the fact that language and communication codes are shaped by social processes such as advertisements, pictures, photographs, or films. This social semiotics includes 3 functions, among
others, (1) Interpersonal Metafunction which includes all actions by all participants in the image including the image-maker, the main participant (model), and also the audience who sees it. This metafunction shows how images can attract the audience who see them, (2) Representational Metafunctions are related to people, places, and objects in an image consisting of 2 structures, namely narrative and conceptual (3) Compositional Metafunctions are a combination of the previous 2 metafunctions (interpersonal and interpersonal) and reading the two metafunctions are integrated into forming the overall meaning.

Humans are thinking creatures. Human dignity and welfare are determined by the ability to think and the fruit of his mind. The more orderly and sharp an individual thinks, the greater his chances of getting glory in his society. So is his welfare. The more orderly and sharp a person thinks, the greater his access to the welfare of his life. On a broader level, thinking also has the same role. People who think more orderly and sharp have greater access to glory and prosperity. In other words, thinking has a very important role in determining the glory and welfare of humans.

The novelty of this study is based on (Gabrielatos, 2005) that there are 7 things that affect second language learning, namely intelligence, aptitude, personality, motivation and attitudes, learners preferences, learner beliefs, and age of acquisition. All of the points describe that: 1) children can imitate some words in English and Children can imitate and say the meaning of some English vocabulary, 2) children can memorize some English vocabulary Children can name pictures in English, and Children can name pictures in English and their meanings, then Children can show pictures that are following the command using English, 3) children can take pictures according to the command using English, and 4) children can connect words in English and pictures

This takes into account the results of the study which found that using images in the application of compositional metafunction in learning English to improve children’s abilities had a big influence, in terms of ease of learning and ease of observation. So that children can easily remember words in English through pictures and make motor comparisons in everyday life with the concept of cognitive development in improving memory of learning English.

A person’s cognitive development is related to genetics, the learning process is based on the biological mechanism of the development of the nervous system. With increasing age, the composition of nerve cells is also increasingly complex and increases abilities, especially in the field of intellectual quality. In this case, Piaget in (Mu’min, 2013) divides the cognitive development of children based on several stages, namely (1) the sensorimotor stage (age 0-2 years), (2) the pre-operational stage (age 2-7/8 years), 930 concrete operational stages (ages 7/8 – 11/12 years, (4) formal operational stages (11/12 years and over).

The cognitive structure that a person has is caused by the process of assimilation and accommodation. This means that assimilation is the process of getting new information and experiences, which in this case there is intellectual development that plays an important role and is influenced by 3 factors, namely maturity, social transmission, and equilibration. Bruner in (Diva, S. A., & Purwaningrum, 2022) explains that this cognitive development will be passed by a person through three stages which are determined by the way he sees the environment, namely enactive (learning to use or manipulate objects directly), iconic (activities begin to involve mental which is a picture of the object), symbolic (manipulate
symbols directly and have nothing to do with objects.

In this case, learning is considered important because it is a process to build the ability to develop the cognitive potential that exists in students, learning is influenced by the dynamics of the development of reality around life so this assumption is known as free discovery learning because the learning process will be effective and efficient when providing learning using media that can improve students’ cognitive abilities in learning new languages.

Dienes in (Irpan, 2012) emphasizes how important it is to use media in manipulating objects in learning, there are 6 stages in learning, namely: 1) free play (free play), 2) games that use rules (games), 3) the game looks for similarities (searching for communalities), 4) games with representation, 5) games using symbols (symbolization) and 6) the game uses formalization.

The application of compositional metafunction in learning English to improve children’s ability is caused by the use of language which is so important to be optimized in the educational aspect (Zhang & Hu, 2022). In this case, language metafunction is a term that refers to the use of language by speakers of a language. The concept of metafunction is based on the interaction between users that greetings describe, exchange, assemble or organize experiences that connect the internal form of language and its use in semiotic social contexts in communication systems (Serafini, 2010). Based on Halliday and Eggins in (Knoll, & Fuzer, 2019) they divide three components of language metafunction analysis, namely ideational functions, interpersonal functions, and textual functions (Shanahan, 2013). Figuratively, Eggins places the metafunction at the semantic level. Levels that can be classified into three levels of clauses as the final part in the analysis of language metafunctions, on the other hand, language metafunctions are in the context of culture and the context of the situation behind the language (Herman et. al., 2022).

This language metafunction analysis is focused on four aspects. The first is the aspect of identification and analysis of processes, participants, and circumstances as transitivity in the experiential function and logical function which identifies and analyzes parataxis and hypotaxis as taxis in the logical function of the text (Hutabar et. al., 2020). The second is the aspect of subject identification and analysis, finite and adjunct predictors as modes in interpersonal functions, the third is the identification of themes as the classification of themes in textual functions (Shin, Cimasko, and Yi, 2020). The purpose of language learning as stated in the introduction to standard content for English subjects uses this belief as to the basis for its development Ministry of National Education in (Suherdi, 2012) English with this foundation is taught to assist intellectual, emotional, and social development and to help students master other subjects in addition to developing English communication skills. This statement implies that language learning should not be limited to developing language skills, but must be able to help children develop the thinking skills needed to master all subjects in the curriculum. Even more than that, language learning must be able to optimize the intellectual, emotional, and social development of the students who experience it.

The following are some studies that have discussed the same problem as a comparison for this research. Research by Ginting, Hassan, Lestari, Rahmadhani, & Marpaung (2020) entitled “English vocabulary training using picture media for children in Jarring Smooth Village, Secanggang District, Langkat District”. The results of the study explain if this training is one of the community services
that aims to improve the abilities and knowledge of the children of Jaring Halus Village through the introduction of English vocabulary using picture media. Based on the observations, it was found that the English language skills of the fine net village children were still low. This training was conducted in Jaring Halus Village, Secanggang District, Langkat Regency. This training consisted of eight instructors who were Lecturers of the English Education Study Program at STKIP Al Maksum Langkat and fifteen children from Jaring Halus Village. This training was held on March 9, 2020. The training material consists of several types of English vocabulary. The results of the training showed that ten children had low abilities after participating in English vocabulary training activities. Meanwhile, five children have intermediate abilities after participating in English activities. In other words, this training succeeded in increasing the ability of five children from low to medium. This training is expected to be carried out on an ongoing basis to improve the abilities of the children of Jaring Halus Village, Secanggang District, Langkat Regency.

Moreover, research by Maretsya, Kurnia, & Sholihah (2013) entitled “Introduction to English vocabulary through the use of animated media images of group B Rafflesia Kindergarten, Bengkulu City”. The results of the study explain if the use of image animation media can improve the ability to recognize English vocabulary in group B of Rafflesia Kindergarten, Bengkulu City. The data collection technique used a child’s observation sheet. The research data analysis technique used the percentage value achieved by the children. The results obtained in the first cycle reached 53.25% and in the first cycle increased to 81.6%. The results of this study indicate that the use of image animation media can improve the ability to recognize English vocabulary.

Research conducted by Lestari (2012) entitled “Efforts to increase children’s English vocabulary mastery through flash card media in group B at RA Barokah Klodran Karanganyar in the 2011/2012 school year”. The results of the study explain if the purpose of this study was to determine the improvement of children’s English vocabulary mastery by using flash card media. This research is a classroom action research consisting of a series of four activities carried out in an iterative cycle. There are four main activities in each cycle, namely planning, implementation, observation, and reflection. This research is collaborative between researchers and classroom teachers. The data taken in this study is data about the mastery of English vocabulary in children taken through the methods of observation, interviews, documentation, and tests. The subjects of this study were the children of group B and the teacher of RA Barokah Klodran Colomadu Karanganyar. This research was carried out in 3 cycles. The results showed an increase in children’s English vocabulary mastery through flash cards. Based on the results of action research, shows that there is an increase in children’s English vocabulary mastery through flash cards. This increase is in the cycle.
reaching an average rating of 61.94% for children with an increase from the pre-cycle of 12.50%. In the second cycle, the average score of children was 77.22% with an increase of 15.28%. And the cycle reached an average rating of 86.94% with an increase of 9.72%. This can be seen from the average percentage of learning outcomes for children’s English vocabulary mastery in one class before the action was 49.44%, the first cycle was 61.94%, the second cycle reached 77.22%, and the first cycle reached 86.94% this study concludes that the flash card media can increase the mastery of English vocabulary for the children of group B in RA Barokah klodran Colomadu Karanganyar.

Moreover, research by Hamid (2014) entitled “Improvement of English speaking skills through picture series media”. The results of the study explain if the purpose of this research is to improve students’ speaking ability in English through picture series media. This research is a mixed research method with action research at SMA Negeri 5 Kendari, Southeast Sulawesi. The data of this research were taken in the second semester of class XI IA 2 which consists of 42 students and analyzed qualitatively and quantitatively. Quantitatively, it was found that the students’ speaking ability increased significantly from the first cycle to the third cycle. Therefore, it can be concluded that students’ speaking ability can be improved by using serial image media. For teachers, it is highly recommended to use media serial images as one of the techniques in teaching the ability to speak English. In addition, it is also recommended to other researchers use this research for further research.

Research by Sari & Putrie (2022) entitled “the use of animated image media to improve the ability to recognize English vocabulary in early childhood memories”. The results of the study explain if This research is a classroom action research (CAR). This research was carried out systematically on various actions by the teacher, from planning to assessment in the classroom at introducing English vocabulary through the media of animated pictures in group B of Kenanga Kindergarten to be even better. The subjects of this study were 15 children of Kindergarten Group B PAUD Kenanga consisting of 9 boys and 6 girls. Based on the data above, it shows that with the action, there is an increase from cycle I to meeting 2, namely listening to English vocabulary with good scores reaching 53.3%, sufficient value 26.6%, less than 20%. In cycle II, meeting 2, listening to English vocabulary with good scores reached 86.6%, sufficient scores were 6.6%, and the scores were 6.6% less. Through the research that has been done, it can be concluded that the introduction of English vocabulary through animated images can improve the ability to recognize English vocabulary by listening to English vocabulary, pronouncing English vocabulary, mentioning English vocabulary, and writing vocabulary. English. If there is a problem with the child who has not been able to participate in the learning process, the teacher can guide the child slowly. re-explaining the subject matter studied so that the child understands the explanation from the teacher, motivates the child so that the child is enthusiastic about learning, and gives praise to the child who has understood the lesson.

Based on the research above research finding that English is one of the most widely studied foreign languages in Indonesia, even though this language has been included in the country’s education curriculum from early childhood education, and elementary education, to higher education. RI Law No. 20 of 2003 concerning the National Education System, it
was stated that early childhood education is a coaching effort for children from birth to the age of six. This education is through the provision of educational stimuli to assist physical and spiritual growth and development so that children have the readiness to enter further education. Various aspects are developed in early childhood education, which includes social, independent, emotional, religious, and moral values.

Besides that, basic abilities that include cognitive, physical motor, art, and language aspects are also developed. The world of children is a world of play, where from these activities many aspects of child development are grown. There are several benefits of playing games, namely a) practicing motor skills, b) training concentration, c) introducing the concept of cause and effect d) training language and insight and introduce colors and shapes. So, from this statement, it can be said that the ability of linguistic aspects, especially children’s English, can be developed through educational games. In this short article, the author will focus on a game tool in the form of a flashcard (Hidayati, 2017).

**CONCLUSIONS**

The results of this study found that using images in the application of compositional metafunction in learning English to improve children’s abilities has a great influence, in terms of ease of learning and ease of observation. So that children can easily remember words in English through pictures and make motor comparisons in everyday life with the concept of cognitive development in improving memory for learning English.

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