

Entailment Analysis in Fourstatements

¹Gempito Darmonegoro, ²Asep Supriadi, ³Juanda

¹UniversitasKomputer Indonesia,Bandung,Indonesia, e-mail: pitodn00@gmail.com

²Badan Riset Inovasi Nasional (BRIN), e-mail:asepsupriadi67@yahoo.co.id

³Universitas Komputer Indonesia, Bandung,Indonesia, e-mail: juanda@email.unikom.ac.id

Abstract

This paper presents research in the field of semantics, especially in the discussion of entailment in three types, namely two-way entailment, metaphorical entailment and one-way entailment. In this research, the data used are compulsive gambler comics written by Homura Kawamoto and Toru Naomura which have been published and translated into English by English Yen Press which are also psychological comics. Therefore, the main objective of this study is to find out how the phenomena of two-way entailment, metaphorical entailment and one-way entailment occur in the four statements that have been expressed by several characters in the comic. The method used in this study uses a qualitative method, which means taking direct data sources and analyzing them descriptively based on the suitability of existing one-way entailment, two-way entailment and metaphorical entailment theories. The results of the research have proven that in the phenomenon of metaphorical entailment that occurs, the speaker tends to associate or characterize his first statement with other experiences or situations and conditions that are similar to what he is currently experiencing in his second statement, then in two-way entailment the uniqueness of this type of entailment can be proven or in terms of the logical formula built by Saaed's theory which requires that the two statements are true or correlated with each other, also from the phenomenon of two-way entailment in this data, the second statement acts as an affirmation for the first statement with the presence of lexical synonyms in each statement, and for one-way entailment the opposite of two-way entailment because in this phenomenon there is a one-way conversation so that one of the two statements can still be stated to be true or not to correlate the other statement.

Keywords: *Compulsive Gambler Comic, one-way entailment, two-ways entailment, metaphorical entailment*

Date of Submission: 01-12-2022

Date of Acceptance: 12-12-2022

I. INTRODUCTION

Language is a tool of communication. Even so, language cannot entirely able to convey the message of speaker. According to Palmer (1979: 4)if word have meaning, how can we fail to convey what we wanted to convey, more specific how can we fail to say what we mean. Obviously, the answer is not all that we said carrying literal meaning. Therefore semantic play a major role concern to meaning itself. Among what we said in conversation people do not realize they often carried Entailment.

Entailment is fundamental of basic semantic Griffith(2006: 25). Most people do not recognize the existence of entailment due not aware of its importance. To comprehend the phenomenon of entailment, people need to give more attention to every statement. This can be started by knowing every statement which are closely related. When they are related, there is a chance of the statement to entail each other. Afterward, the meaning what we wanted to convey becomes stronger more than one Proposition or utterance. Speaking of entailment, actually cannot be separated from concept Proposition since proposition is the basic sentence of semantic (Sa'adah, 2014).

According to Rambaud (2012: 25) Proposition is state of affairs which several writer sees as the basic element of sentence meaning, then according to Saeed (2003: 13) figuring out certain types of grammatical information can be obtained by the proposition. Learning proposition can be led to a logical concept of structure sentences. To put it simply the point is as long as contain states of affairs it can be said as a Proposition, note that proposition itself is basically lack of tense, aspect, modality, and agreement marking, nevertheless as to reach logical sentence Proposition later play a major role in determining types of Entailment. As it stated by Griffith (2006: 25) the truth of one proposition depends with another proposition, thus the two propositions related each other in every conversation.

The phenomenon of entailment can be found in movie, comic, and novel since they contain conversation in it.Brinton (2010:147) gives an example *Alan lives in Toronto* entails *Alan lives inCanada*. This relationship of entailment in two statement unlike that of paraphrase, is one-way: it is not the case that *Alan lives*

in Canada entails *Alan lives in Toronto*. This statement shown type of one way entailment as stated by Griffith before. Another type of entailment is two-way entailment, and metaphorical entailment. One-way entailment as an example above is most common people used in conversation on other hands metaphorical entailment is rare types uttered.

Looking at the description of entailment above, this paper is aim for research the phenomenon of entailment beside in movie. The comic compulsive gambler is the subject of this research for enrich language knowledge in the field of semantic, and to explore how the phenomenon of entailment is generated in the comics. Therefore several theory have been used to research this entailment.

In order to identify one-way Entailments is used theory of Brinton(2010): according to Brinton one-way Entailments occur when the second proposition is the consequence of the first propositions. The two-way entailment used theory of Griffiths (2006: 27): sees two - way Entailments as two proposition that have two same meaning or similar to paraphrase. Later Rambaud (2012: 70) call this equivalent entailments. Another theory is Fromkin, Rodman and Hyams (2003: 197) stated two-way entailments occur by active-passive pairs in a syntactic way. Crouch (2003: 11) has his own type of entailment called metaphorical entailment that said by giving a characteristic in a sentence to get the meaning of another sentence which has the relation of entailment.(Kovesces, 2006: 368): much further stated that the metaphorical entailment happens when the source domain is brought to the target domain.

II. RESEARCH METHOD

In order to do the research, this paper used descriptive analytic method to explain the data. Sugiyono stated:

"Descriptive Analysis Method is a research method by collecting data according to the actual data then compiled, processed and analyzed to be able to provide an overview of the existing problems" (2008: 105

Based on the quotation above, the writer uses descriptive qualitative to describe the data found in this research. Descriptive qualitative is also explains that the data can be collected based on descriptive analysis. The steps used are:

1) Observation Technique: The data was observed in every conversation or utterance containing the statement in the comic, then systematically examined carefully.

2) Classification Technique: The data then clarified which one was categorized of type the one-way (one-way) entailment, Two-way (two-way), and metaphorical (metaphor) based on the analysis and compatibility of existing theories in the declarative utterance in the data, later after classification was made, the data was marked with bold for the data that contain entailment, however take note that if all declarative utterance was written bold, it means all declarative utterance in the data is contain entailment.

3) Technique Description: After the data was clarified, then described how the analysis of each type of entailment.

III. FINDING AND DISCUSSION

This chapter describes the results of the study which includes the amount of data analyzed and detailed explanations of these data. Four data of declarative sentence have been clarified and analyzed.

Datum 1 "*The debt continued to grow bigger even if I gambled to pay it off. It was a feeling like struggling in a swamps*" Chapter 1, page 77

The first proposition "The debt continues to grow even if I gambled to pay it off" become the source domain of the second proposition "*It was a feeling like struggling a swamps*". In this case the second proposition In fact has no connection with the actual facts, the actual fact that stated "*debt will continue to grow even if I pay it*" is clearly not related to "*struggling in a swamp*". However, in this case "*struggling in the swamp*" as the source domain was taken as an illustration or parable to target domain "*The debt continues to grow even if I gambled to pay it off*". Therefore, the first proposition "*The debt continues to grow even if I gambled to pay it off*" which actually does not have a relationship, now in fact has formed a metaphorical entailments, furthermore when we stated "*struggling in a swamps*" in second proposition, it's means has entailed the first proposition and we are doing the same thing or we are in the condition as in the first proposition is.

Overall of analysis data above, it can be concluded that metaphorical entailment is formed by two propositions, one of which is the parable of what is being experienced. We can say in the metaphorical entailment of the

analysis data above, it is the same as equating what we are experiencing now with the dimensions of events that have happened or experienced in the past as the source domain. This is also, as, in accordance with Kovecses's theory (2006: 138), metaphorical entailment occurs because the source domain or event and dimensions in the past had similarity with what is being experienced by speaker know.

Datum 2 *“People gathers in casinos because human feel pleasure in this madness of betting their own fate”*. *“To resume Gambling is fun because it’s insane”*Chapter 2, page 44

The utterances of statements above can be analyzed based on the theory of Griffith (2006: 27) which he stated two-ways entailment can occur when two propositions are mutually paraphrase, it can be proven or seen from the second proposition of the words *“To resume Gambling is fun Because It's insane”* Paraphrase the first proposition or statement *“People gather in casinos because human feel pleasure in this madness of their own fate”*, which means what is stated in the second proposition only emphasizes what is stated in the first proposition. Furthermore Griffith's theory also says in both propositions there are keywords in the form of phrases or lexical in the proposition which can be synonymous with phrases or lexical in other proposition, in this case to emphasize the first proposition, the second proposition used the word *“Insane”* which becomes synonymy with the word *“madness”*, furthermore, with the emphasis on the word *“To resume”* in the second proposition, clearly indicating that the second proposition or statement want to reaffirm the first statement. Therefore, the data is categorized as two-way entailment, which means the two statements have the same meaning and the same reciprocity. For further analysis two-ways entailment in the data above can be symbolized or proven in propositional logic based on theory of Saeed.

“People gathers in casinos because human feel pleasure in this madness of betting their own fate” Saeed crafted theory the first proposition or statement can be symbolized as P and the second proposition or statement *“To resume Gambling is fun because it’s insane”* as Q, and Saeed crafted formula logic for two-ways entailment must be in:
$$\frac{P \quad Q}{T \quad \rightarrow \quad T}$$

Saeed name the symbolization above as the composite table truth for two-ways entailment. T is symbolized as true, and as when. So the formula which Saeed crafted for two-way entailment is, P true when Q is true. In manner of speaking, we can say *“People gathers in casinos because human feel pleasure in this madness of betting their own fate”* true when *“To resume Gambling is fun because it’s insane”* is true. In logic as mentioned earlier, second statement emphasized what the first statement stated, if statement changed to people gathers in casinos because human not feel pleasure in this madness, Its means the statement gambling is fun would not be stated since the second statement act as emphasis for the first by rephrase in synonymy word. Therefore, this is called two-ways entailment which means the truth of two statement must correlate each other.

Datum 3 *“If I say no gambling with Yumeko Jabami, that’s all it take for everyone to shun you. They are scared of getting destroyed. And with the student council President’s word behind them, nobody will dare accept your invite, and that’ll be the end for you. Your unfulfilled urges will eat at your very soul. I’ll kill you in the end.”*Chapter 28, page 13-14

The phenomenon of metaphorical entailment can be seen in the statement that has been marked in black. In this case we can analyze this phenomenon using Kovecses theory (2002: 125), which describes the phenomenon of metaphorical entailment occurs when the speaker build metaphorical image. The metaphorical image becomes an abstract thing which means things that in fact never happened. In this case the statement *“Your unfulfilled urges will eat you at very soul”* is a metaphorical image of the statement *“it’ll kill you in the end”*. We are all aware that unfulfilled urges cannot possibly consume the soul in human body, but only as an abstract illustration for tell us that unfulfilled urges can kill us in the end. Therefore, *“your unfulfilled urges at your very soul”* entails *“it’ll kill you in the end”* in the form of metaphorical.

In regard how the speaker in the data above build metaphorical image, the explanation of this analysis *“Unfulfilled urges will eat at your very soul”*, we can contemplate it, we are aware somehow if someone desire or wished something, and if that desire is unfulfilled can lead them to desperate, and desperate can lead someone do something which lead them to a death. Thus, that is how speaker build metaphorical image in the statement from datum above.

Datum 4 *“Gambling only works if both sides agree to it. If there is no opponent, there is no game.”*Chapter 28, page 11

The datum above is one sample of the phenomenon of one-way entailments. This phenomenon can be seen in a sentence or second statement "**If there is no opponent, there is no game**". This analysis is based on the theory of Crystal (1998: 169-170) which states that the second statement does not always follow the first statement, in this case the second statement can be seen from the statement which has marked black "**There is no game**". This analysis is the opposite of the phenomenon of Two-way entailment both statement or proposition has reciprocity and the same correlation or follow each other, however in one-way entailment, one statement or proposition does not always correlation each other. Furthermore, this analysis can be proven by the logic formula made by Saeed. Saeed makes the One -way entailment formula in the following of certain composite table:



Simple analysis of its logic, when there is a statement“there is no enemy”, it means that there is no game. This logically true since the fact in a game it must involve at least 2 person, let say it would be ourselves and the other is being our opponents. However, if there is a statement that “there is no game”, it does not mean there are no enemies, because if there is no game, it does not mean we have no enemies, we do not know the situation outside the gambling context, this phenomenon is called one-way entailment or one way conversation. In logical symbol of A above P “**If there is no opponent**”is true (T) then (\longleftarrow) Q “**there is no game**”is true. In logical symbol of B above Q“**If there is no game**”is true (T) then(\longleftarrow) Q “**there is no opponent**” can be true or false.

IV. CONCLUSION

In regard of four data analyzes above, it can be concluded that several things are related to the entailment phenomenon as follows:

1. In the phenomenon of metaphorical entailment found in declarative sentences, the speaker tends to associate an event or experience that is known to the person in commonly in the proposition or second statement with the first proposition or statement of the fact that is being experienced by speaker now, or by giving special characteristics to a objects that make the object to do the impossible things in logically, this can be seen from the first statement "*your unfulfilled urges at your very soul*" which refers to statement "*it'll kill you in the end*".
2. In the phenomenon Two-way entailment, to detect this phenomenon can be proven by the truth table of propositional logic theory crafted by Saeed as mentioned in the analysis above, this is to see whether both statements are true or false, and if they are true, both statement must be true and if they are false both statement must be false. Analysis of this phenomenon can also be detected by looking at from the second statement, whether it acts as an affirmation of the first statement by notice the synonymy in lexical of each statement.
3. The phenomenaone-way entailment is contrast to Two-way entailment, we can see it from its logic formula in one-way entailment when the second statement does not always follow the first statement, in other words when we said as in the datum 4 stated first there is no opponent, then we stated there is no game, logically this will be true, however if the stated first there is no game, then we cannot stated there would be no opponent, this is due the fact that the truth of there would be no opponent is questionable.

REFERENCE

- [1]. Brinton, Laurel J. Brinton, Donna M. 2010. *The Linguistic Structure of Modern English*. John Benjamins Publishing Company
- [2]. Crouch, Richard. 2003. *Scalability of Redundancy Detection in Focused Document Collections*. Berlin: Cascadilla Press.
- [3]. Crystal, David. 1998. *A Dictionary of Linguistics and Phonetics*. Oxford: Blackwell Publisher Ltd.
- [4]. Fromkin, Victoria, Robert Rodman, and Nina Hyams. 2003. *An Introduction to Language*. 7th Edition. Boston: Thomson Wadsworth.
- [5]. Griffiths, Patrick. 2006. *An Introduction to English Semantics and Pragmatics*. Edinburgh: Edinburgh University Press Ltd.
- [6]. Griffiths, Patrick. 2006. *An Introduction to English Semantics and Pragmatics*. Edinburgh: Edinburgh University Press Ltd
- [7]. Homura Kawamoto. Toru naomura. 2014. *Compulsive Gambler*. English Yen Press

- [8]. Kovecses, Zoltan. 2006. *Language, Mind, and Culture: A Practical Introduction*. New York: Oxford University Press.
- [9]. Murphy, Michael L. 2003. *Semantic Relations and the Lexicon*. Cambridge: Cambridge University Press.
- [10]. Palmer, F.R. 1976. *Semantics: A New Outline*. Cambridge University Press. London
- [11]. Rambaud, Margarita G. 2012. *Basic Semantics*. Madrid: Editorial UNED.
- [12]. Sa'adah, H. 2014. *A Semantic Analysis of Entailment Applied by the Main Character in the Movie Life of Pi*. A Thesis. Yogyakarta: English Language and Literature, FBS Universitas Negeri Yogyakarta.
- [13]. Saeed, John. I. 2003. *Semantics*. UK: Blackwell

Gempito Darmonegoro. "Entailment Analysis in Fourstatements." *IOSR Journal of Humanities and Social Science (IOSR-JHSS)*, 27(12), 2022, pp. 54-58.