CHAPTER III

THE DESCRIPTION OF THE TOPIC

3.1 Propositions

Proposition can be understood as follow:

> "*A sentence contains certain information, but the same information can be presented in different sentences and in parts of sentences; the information presented, apart from the way it is presented, is called a proposition." (Kreidler, 2002:62)*

The quote above shows an understanding that proposition is the way to deliver information. Furthermore, proposition can show relation between one proposition and other propositions in a sentence.

As a way to deliver information, proposition has an important role to show relation between one proposition and other proposition in a sentence. Proposition can be an easy way to understand an information or a message in a sentence for readers. However, proposition is not only in a sentence, it can be in a phrase or argument, as Kreidler said (2002:66)

> *"Proposition contains one predicate and a varying number of referring expressions (noun phrase) called arguments, like a window, Albert. The predicate may be a verb, an adjective, a preposition, or a noun phrase."*

From the quote above, it can be understood that proposition is formed by one predicate. So the referring expression as it is said in the quote can have proposition by showing the predicate through paraphrasing the concepts existed in the referring expressions. In this case, I will focus on showing the proposition in the titles of the article in Journal of Engineering and Technological Sciences ITB.

3.2 Data Analysis

Here are the lists of the titles in the article that are found in Journal of Engineering and Technological Sciences of ITB:

1. Removal of Microorganisms in Drinking Water using a Pulsed High Voltage
2. A Scaling-up Synthesis from Laboratory Scale to Pilot Scale and to near Commercial Scale for Paste-Glue Production
3. Dissipative Controller Design for Networked Control System via the Markovian Jump System Approach
4. Unsteady Aerodynamics of Flapping Wing of a Bird
5. Experimental and Analytical Study Approach of Artificial Basilar Membrane Prototype (ABMP)
6. MIMO Frequency Sampling Filters for Modeling of MIMO System Applications
7. Development of Wet Noodles Based On Cassava Flour

The article titles above are analyzed based on proposition theory by Charles W. Kreidler.

Data 1: ***Removal of Microorganisms in Drinking Water using a Pulsed High Voltage***

According to the first data, there are two noun phrases; *removal of microorganisms,* and *a pulsed high voltage* and 1 prepositional phrase; *in drinking*

water. These referring expressions can be reexpressed into proposition through paraphrasing the concepts. They are:

a. Proposition of *removal of microorganism*

    1. There is a process of removing something
    2. Microorganism is removed

b. Proposition of *in drinking water*

    3. There is water
    4. The water can be drunk

c. Proposition of *using*

    5. Someone uses something or something is used

d. Proposition of *a pulsed high voltage*

    6. There is a voltage
    7. The voltage is high
    8. The high voltage is pulsed

The first data above has eight propositions and each proposition is related to other propositions. Proposition in *removal of microorganism* (1 and 2) shows that there is a removing of organism from proposition *in drinking water* (3 and 4) which is assumed that the organism is in the water that can be drunk. The removing process is showed by proposition *using.* Last, in *a pulsed high voltage* (6, 7 and 8) it is showed the method or instrument that is used to remove the microorganism.

Data 2: ***A Scaling-up Synthesis from Laboratory Scale to Pilot Scale and to near Commercial Scale for Paste-Glue Production***

From the second data above, there are one noun phrase; *a scaling-up synthesis*, and four prepositional phrase*; from laboratory scale, to pilot scale, to near commercial scale* and *for paste-glue production.* These referring expressions can be reexpressed into proposition through paraphrasing the concepts. As in the following:

a. Proposition of *a scaling-up synthesis*
    1. There is a synthesis
    2. The synthesis is scaled up
b. Proposition of *from laboratory scale*
    3. There is a scale
    4. The scale is laboratory
c. Proposition of *to pilot scale*
    5. There is a scale
    6. The scale is pilot
d. Proposition of *to near commercial scale*
    7. There is a scale
    8. The scale is commercial
e. Proposition of *for paste-glue production*
    9. There is a production
    10. The production is for a paste-glue

In the second data above, there are ten propositions and each proposition is related to other propositions. Proposition in *a scaling-up synthesis* (1 and 2) shows that there is a scaling up of a synthesis. The scaling up is showed by proposition *from laboratory* (3 and 4), *to pilot scale* (5 and 6) and *to near commercial scale* (7 and 8). Then, proposition in *for paste-glue production* (9 and 10) shows the purpose of the scaling up of the synthesis.

Data 3: ***Dissipative Controller Design for Networked Control Systems via the Markovian Jump System Approach***

The third data has two noun phrase; *dissipative controller design* and *the markovian jump system approach* and one prepositional phrase; *for networked control systems*. These referring expressions can be reexpressed into proposition through paraphrasing the concepts. Those are:

a. Proposition of *dissipative controller design*
    1. There is a design
    2. There is a controller
    3. The controller design is dissipative in nature
b. Proposition of *for networked control systems*
    4. There is a system
    5. There is a control
    6. The control system is networked
c. Proposition of *the markovian jump system approach*
    7. There is an approach

8. There is a system
9. The system approach is named the markovian jump

There are nine propositions in the data above. Proposition in *dissipative controller design* (1, 2 and 3) shows that there is a control design that is dissipative for proposition *for networked control system* (4, 5 and 6) which is assumed that the design is for networking a control system. Whereas in *the markovian jump system approach* (7, 8 and 9) it is showed the method that is used for networking a control system.

Data 4: ***Unsteady Aerodynamics of Flapping Wing of a Bird***

According to the data above, there are one noun phrase; *unsteady aerodynamics,* and two prepositional phrases; *of flapping wing* and *of a bird.* These referring expressions can be reexpressed into proposition through paraphrasing the concepts. They are:

a. Proposition of *unsteady aerodynamics*
    1. There is an aerodynamics
    2. The aerodynamics is unsteady
b. Proposition of *of flapping wing*
    3. The wing is flapping
c. Proposition of *of a bird*
    4. There is a bird

In the data above, there are four propositions. Proposition in *unsteady aerodynamics* (1 and 2) shows that there is an aerodynamics that is unsteady

from proposition *of flapping wing* (3) and proposition *of a bird* (4) showed that the unsteady aerodynamics is flapping wing of a bird.

Data 5: ***Experimental and Analytical Study Approach of Artificial Basilar Membrane Prototype (ABMP)***

Based on the data above, there are one noun phrase; *experimental and analytical study approach* and one prepositional phrase; of *artificial basilar membrane prototype (ABMP).* These referring expressions can be reexpressed into proposition through paraphrasing the concepts. As in the following:

a. Proposition of *experimental and analytical study approach*
    1. There is an approach
    2. There is a study
    3. The study approach is experimental in nature
    4. The study approach is analytical in nature
b. Proposition of *artificial basilar membrane prototype (ABMP)*
    5. The study approach is named ABMP

There are five propositions in the data above. Proposition *experimental and analytical study approach* (1, 2, 3 and 4) shows that there is a study approach that is experimental and analytical that is used in proposition *artificial basilar membrane prototype (ABMP)* (5) as the object of the study.

Data 6: ***MIMO Frequency Sampling Filters for Modeling of MIMO System Applications***

In the data above, there are one noun phrase; *mimo frequency sampling filters,* and one prepositional phrases; *for modeling of mimo system applications.* These referring expressions can be reexpressed into proposition through paraphrasing the concepts. Those are:

a. Proposition of *mimo frequency sampling filters*

    1. There is filters
    2. There filter name is MIMO
    3. The MIMO filters filter the sample
    4. The MIMO filters filter the frequency of sample

b. Proposition of *for modeling of mimo system applications*

    5. There is a model
    6. There is a system
    7. There is an application
    8. The system application is named MIMO

In the data above, there are eight propositions. Proposition in *mimo frequency sampling filters* (1, 2, 3 and 4) shows that there is a filter that filters sample and frequency of *mimo* that is used to make a model for a system application called mimo as it has mentioned in proposition *for modeling of mimo system applications.*

Data 7: ***Development of Wet Noodles Based on Cassava Flour***

In the last data, there are two noun phrases; *development of wet noodles* and *cassava flour,* one verb; *based on*. These referring expressions can be reexpressed into proposition through paraphrasing the concepts. As in the following:

a. Proposition of *development of wet noodles*

    1. There is something develop
    2. There is a noodle
    3. The noodles are wet
    4. The wet noodles are developed

b. Proposition of *cassava flour*

    5. There is a flour
    6. The flour is made from cassava

c. Proposition of *based on*

    7. Cassava flour is the basis

There are seven propositions in the data above. Proposition in *development of wet noodles* (1, 2, 3 and 4) shows that there is a developing of wet noodles and in proposition *cassava flour* (5 and 6) and *based on* (7) shows that the wet noodles are made from cassava flour.

3.3 The Discussion

Based on the analysis above, there are a lot of propositions that can be made from the titles and it can be seen that the information that exists in the titles are:

Data 1: Removal of Microorganisms in Drinking Water using a Pulsed High Voltage; "*Penghilangan Mikroorganisme dalam Air Minum dengan Pulsa Tegangan Tinggi"*

Data 2: A Scaling-up Synthesis from Laboratory Scale to Pilot Scale and to near Commercial Scale for Paste-Glue Production; *"Peningkatan Sintesis untuk Produksi Lem Pasta dari Skala Laboratorium ke Skala Pilot lalu ke Skala Semi Komersial"*

Data 3: Dissipative Controller Design for Networked Control Systems via the Markovian Jump System Approach; *"Desain Pengontrol Disipatif untuk Sistem Kontrol Jaringan melalui Pendekatan Sistem Lompat Markovian"*

Data 4: Unsteady Aerodynamics of Flapping Wing of a Bird; *"Aliran Udara yang Tidak Konstan pada Kepakan Sayap Burung"*

Data 5: Experimental and Analytical Study Approach of Artificial Basilar Membrane Prototype (ABMP); *"Pendekatan Eksperimental dan Analitik pada Prototipe Membran Basilar Buatan"*

Data 6: MIMO Frequency Sampling Filters for Modeling of MIMO System Applications; *"Pemodelan Sistem Aplikasi MIMO dengan Penyaring Frekuensi MIMO"*

Data 7: Development of Wet Noodles Based on Cassava Flour; *"Pengembangan Mie Basah berbahan dasar Tepung Singkong"*