# Pragmatic Misunderstanding on Natural Disasters: A Discourse Analysis of Youtube Comments

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*Abstract*— **Indonesia has been the subject of natural disasters in recent times. The latest ones were earthquakes in Lombok and Palu. Those natural disasters are supposed to be understood accurately by the citizens. This kind of understanding is needed to improve the sense of disaster resilience. However, the samples taken from Youtube comments on disaster videos have shown that there are a number of inaccuracies of those natural phenomenon. These inaccuracies can be withdrawn from the pragmatic forces of the comments. Some comments containing inaccuracies have been categorized into the following types: (1) blaming the victims, (2) substantive misunderstanding, (3) discouraging victims and (4) hate speeches. Those types of comments have the potentials to lessen the citizens' disaster resilience. This paper displays the possibility of connecting the dots between discourse analysis and disaster resilience model.**

*Keywords*— *natural disaster, disaster resilience, pragmatics, social media Introduction*

## I. BACKGROUND

Natural disasters are events which occasionally take place in the real life of people. However, any events happening in human's life does not necessarily constitute singular understanding of the events. For some people, disasters may be translated into pure natural phenomenon but some others may feel that disasters are redemption of wrongdoings in the past. A single event (of reality) can be interpreted differently by different people with different point of views. This interpretation is affected by six areas of reality: (1) the meaning and value of aspects of the material worlds, (2) activities, (3) identities and relationships, (4) politics or the distribution of social goods, (5) connections and (6) semiotics or what and how symbols and forms correlate with meaning (Gee, 1999). Based on the different areas affecting reality, it is safe to state that reality is unstable, flexible and ambiguous. These characteristics lead us to the use of discourse analysis to break down the use of language to interpret events in human's life.

This paper focuses on natural disasters happening in Indonesia. By the time this paper is written, two big earthquakes have recently taken place in Lombok and Palu. Both disasters are relatively destructive and have left the Indonesian people heartbroken. Lives and wealth are lost into rubbles. They are devastating events and people are supposed to support each other to cope with disasters and recover from them. Supporting behaviour is an important part of disaster resilience. Committee on Increasing National Resilience to Hazards and Disasters states that disaster resilience is "the ability to prepare and plan for, absorb, recover from, and more successfully adapt to adverse events" (Cutter et al., 2013). It seems natural that resilience is an automatic response of the people of the community affected by disasters. This paper will provide evidence that people in the community may have different interpretations of the disasters and some interpretations are counterproductive to the concept of resilience. The analytical tool used in this paper is discourse analysis.

## II. THEORETICAL REVIEW

Disaster is "an unscheduled, overwhelming event that causes death, injury, and extensive property damage" (Rubin, 1985). When a disaster is not mitigated accordingly, it will create loss of trust to other members of community and loss of trust to the governing institutions (Mileti, 1999). In order to prevent chaos and collapse of the society, disaster resilience is needed. According to Gilbert (2016) there are six challenges of creating sustainable disaster resilient community.

(1) Provide hazard and disaster information where and when it is needed.
(2) Understand the natural processes that produce hazards.
(3) Develop hazard mitigation strategies and technologies.
(4) Recognize and reduce vulnerability of interdependent critical infrastructure.
(5) Assess disaster resilience using standard methods.
(6) Promote risk-wise behavior.

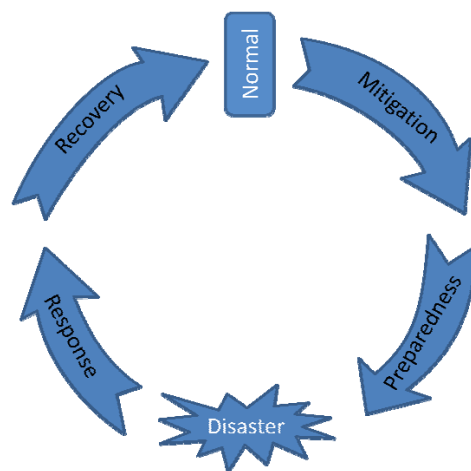A disaster resilient community should understand that a disaster has a six stages to cope with.
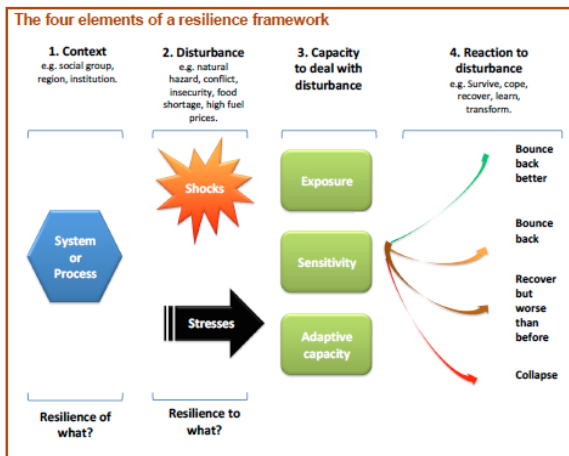


Figure 1. Six Stages of Disaster Cycle (MCEER, 2010)

MCEER (2010) explains that there are six stages in a disaster cycle: normal, recovery, mitigation, preparedness,

the disaster itself, response, recovery and then back to normal. On the other hand, DFID (2011) explains that overall disaster resilience can be explained via the following chart.



This paper focuses on the capacity of people to deal with disturbance. It has three facets to deal with: (1) exposure, (2) sensitivity and (3) adaptive capacity.

People perception and interpretation of disasters can be analyzed using discourse analysis. Discourse analysis covers the study of linguistic structure beyond sentences and the study of social practices and ideological assumptions associated with language (Biber et al., 2007). Trappes-Lomax (2004) implies the fact that discourse analysis is not a singular method but comprising of different methods. The variability of discourse analysis becomes its main strength as well is its main weakness. Researchers should decide what discourse razors to be used in order to achieve their investigation goals. In other words, discourse analysis cannot be standardized into a fixed method. Trappes-Lomax (2004) further elaborates the possible tools to accommodate the need of particular razor in discourse analysis.

**Table 1.** Ways and Means of Discourse Analysis (Trappes-Lomax, 2004)

| Rules and principles | • pragmatics (including speech act theory and politeness theory)<br>• conversation analysis |
| Contexts and cultures | • ethnography of communication<br>• interactional sociolinguistics |
| Functions and structures | • systemic-functional linguistics (SFL)<br>• Birmingham school discourse analysis<br>• text-linguistics |
| Power and politics | • pragmatic and sociolinguistic approaches to power in language<br>• critical discourse analysis |

One of the means of discourse analysis may include the model created by Gee (1999). Gee mentions that in order to conduct a discourse analysis, ones might use the *situated meanings* and *cultural models*. Situated meaning is a specific meaning given to general language features e.g. words, phrases or sentences triggered by the context related to in real life experience. Cultural model on the other hand is additional meaning created by social, cultural and collective believe of the people using the language. This paper mainly uses this model to analyze the data

## III. METHODOLOGY

In order to reveal whether Indonesian people have adhered the challenges and cycles mentioned in the previoussection, samples of language uses are taken from online evidence. One hundred comments containing non-supportive language of the disaster are taken from comments section of Youtube videos featuring earthquakes in Lombok and Palu in the year of 2018. The sources of the data are the comments of the following videos:

(1) https://www.youtube.com/watch?v=pxzYW-_HoSs
(2) https://www.youtube.com/watch?v=qGikUz7q6AU
(3) https://www.youtube.com/watch?v=gSqTKKl-Vn4

Data are recapped in a table and possible situated meaning and cultural model based in Gee (1999) affecting the comments are added to the table. The table looks like this one.

**Tabel 2**. Model Taxonomy on Data Analysis

| Data No. | Comments | Situated meaning | Cultural Model |
|---|---|---|---|
| 001 | .... | .... | .... |
| 002 | .... | .... | .... |
| 003 | .... | .... | .... |

Once the data are completed, full analysis is conducted and reports is written based on the results of the analysis.

## IV. RESULT AND DISCUSSION

After the data are recapped and analysis is completed, there are four types of non-supportive comments found in the dataset: (1) blaming the victims, (2) substantive misunderstanding, (3) discouraging victims and (4) hate speeches. Each type is explained in the following sections.

### a. Type 1: Blaming the Victims

Non-supportive comment in type 1 is very common in the dataset. The following data are some example of the phenomenon.

**Table 3**. Blaming the Victims

| Data No. | Comments | Situated meaning | Cultural Model |
|---|---|---|---|
| 041 | *Inilah gambaran seperti jaman nabi Luth dimana umat' nya sering melakukan perzinahan terutama LGBT.* This is the illustration of Lot era where his followers have committed adultery and LGBT. | Earthquake in Indonesia is compared with the narrative of Lot | Disaster is a result of accumulation of people sins. |
| 077 | *Karna disana tidak ada lgi kan* | People are no longer praying | Disaster can be prevented by |

| Data No. | Comments | Situated meaning | Cultural Model |
|---|---|---|---|
| | *yang menyebut kalam allah makanya allah turunkan azab.* Because there (in Palu), no one recites Allah's words anymore. That's why Allah sends a disaster to them | to God. | praying |
| 005 | *Karna di lombok banyak sekali cabe-cabean dan rakyat nya yg terlalu banyak maksiat itu aja :)* Because in Lombok there are a lot of sugar babies and people there commits sins constantly :) | People in Palu commit sins. | Disaster is a result of accumulation of people sins. |

The illocutionary force of those comments is that disaster is caused by the victims faults. Most of the time, the disasters are related with the cultural model saying that disaster is the result of accumulation of sins. Blaming the victim is not compatible with the disaster resilience model stated by DFID (2011). DFID has mentioned that sensitivity to the disaster victims is one of the key of resilience. Hence blaming the victim is counterproductive to resilience.

#### b. Type 2: Substantive Misunderstanding

It is important for the member of the community to understand the natural mechanism and the cause of disasters. In the case of earthquakes, the members of the community shall understand that it is caused by the movement of the earth plates and crust as part of natural occurrence. The following data show that it is not always the case.

**Table 4**. Substantive Misunderstanding

| Data No. | Comments | Situated meaning | Cultural Model |
|---|---|---|---|
| 034 | *Ini karena bulan bumi matahari sedang sejajar,akibatnya terjadi gerhana,utk bumi sndri memicu gempa,ombak besar,angin kencang waspada gerhana.* (The earthquake) | There is a connection between eclipse and earthquake. | Eclipse is the source of many disasters. |

| Data No. | Comments | Situated meaning | Cultural Model |
|---|---|---|---|
| | is caused by the earth and the sun are aligned. It causes eclipse. The eclipse triggers earthquake, big waves and tornado. Beware of eclipse. | | |
| 078 | *Efek dibor dari bawah laut oleh perusahaan asing.* (The earthquake) is caused by deep sea drilling by foreign companies. | There is a connection between deep sea drilling and earthquake. | Foreign parties are to blame of Indonesian bad luck. |

Some commenters still think that earthquake is caused by an eclipse. This is a cultural model because in Indonesia people still believe that eclipses are the cause of bad luck. Some commenters still cannot escape from this misunderstanding. Substantive misunderstanding of the earthquake is not compatible with challenges mentioned with Gilbert (2016). Gilbert says that people shall understand the natural process that produces hazard. From the data, we can conclude that some members of the society are still incapable of understanding the natural cause of the disaster.

#### c. Type 3: Discouraging the Victims

In order to recover from a disaster, people should support each other to rise from destruction. The following data show that some commenters discourage the victims instead of supporting them.

**Table 5**. Discouraging the Victims

| Data No. | Comments | Situated meaning | Cultural Model |
|---|---|---|---|
| 055 | *Yg lagi sholat koh pd bubar...harusnya lanjutkan...Allah pasti melindungi hambanya yg bertawaqal* Those who are praying are not supposed to run (because of the earthquake) ... they have to continue (their pray) ... Allah will protect his worshippers who submit themselves... | Praying (salat) is a must for Muslims. | Praying cannot be stopped by anything including earthquake. |

| Data No. | Comments | Situated meaning | Cultural Model |
|---|---|---|---|
| 041 | *Ngk seruu ah, ngk ada rumah yg terbang terbang.* It's not fun. No houses are flying. | Big disaster is related with houses flying (as a joke). | A joke is needed in a dire situation. |
| 098 | *Ya Alloh bu bu sudah dapet bencana seperti itu masih sajah tidak mau tutup aurat semoga Alloh memberikan hidayah ke pada mereka.* Oh God Ma'am. You have been experiencing such disaster. Why dont you cover your skin? May Allah give the light to them. | Women shall cover their skin. | Unable to cover one's skin will result in disaster. |

Some commenters use jokes in inappropriate manners like in data 041. A commenter also discouraging people who run from a mosque during prayer. These date are against the model from DFID (2011) focusing on sensitivity and adaptive capacity of the community.

#### d. Type 4: Hate Speech

The following data show that hate speeches can show up even in the context of disaster. Disasters are hard for the victims and hate speeches make it even harder.

**Table 6**. Hate Speech

| Data No. | Comments | Situated meaning | Cultural Model |
|---|---|---|---|
| 046 | Karena udah banyak PKI makanya Allah marah. A lot of members of Communist Party. That's why Allah is angry. | Communist party is banned in Indonesia. | Communist partisans are the cause of Allah's anger. |
| 082 | Peringatan bagi para gubernur yg mendukung rezim anti islam. This is a warning for those governors who support anti-Islam regimes. | Government in Indonesia shall support Islam | Failing to support Islam, Allah will be angry. |

The mention of communist party in the comment section is irrelevant to the disaster. It shows that some commenters love propaganda more than anything. Specific ideology also comes up in the comments section. For example, some commenters believe that the current government is against Islam. Thus, the commenters try to relate the disaster with the anti-Islam government. From the model of DFID (2011), the community should try to reduce stress and shock. However, the data show that some commenters tend to add the effect of stress and shock to the disaster.

### V. CONCLUSION

There are some conclusions can be drawn from the paper. A number of comments on youtube videos related with disaster have shown that language can reveal the clues on pragmatic misunderstanding of the disasters. there are at least four types of pragmatic misunderstandings of disasters namely: (1) blaming the victims, (2) substantive misunderstanding, (3) discouraging victims and (4) hate speeches. those misunderstandings are non-supportive to the victims of the disasters and to the communities as a whole. the non-supportive language behaviors are potential to reduce the ability of the members of community to achieve a state of disaster resilience. Through discourse analysis, it is possible to connect language usages and disaster resilience model. There is an important disclaimer to the results of the study. The data showing non-supportive attitude towards disaster is a small chucks of data showing supportive behaviors. Most commenters on disaster videos show supports and understanding to the struggle of the victims.

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