



Responses to Predictions of Jakarta Sinking in Online Media: Framing Analysis on Tirto.id and Kumparan.com

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Abstract. This study aims to determine the framing of news responses to the prediction of Jakarta sinking in the online media Tirto.id and Kumparan.com. Qualitative approach was employed with the media text analysis method employing the framing analysis of the Zhongdang Pan and Gerald M. Kosicki models. The study found similar framing in both online media Tirto.id and Kumparan.com. The two contained framing denying the prediction of Jakarta sinking. Both, however, constructed the refutation differently. Tirto.id denied by constructing geological reasons such as land subsidence in Jakarta, whereas Kumparan.com denied by constructing reason that the local government's program and performance can address water-related problems in Jakarta. This is also demonstrated by the fact that the Tirto.id journalist is a Megapolitan desk journalist that covers the Jakarta issue. With such a background, journalists' critical power towards environmental issues is still more focused on the responses of figures and government regarding the prediction of Jakarta sinking.

Keywords: Framing · Jakarta sinking · Online Media · Tirto.id · Kumparan.com

1 Introduction

Environmental issues in Indonesia are still a problem. Flooding, forest and land fires crisis are one of them. The global climate disaster has aggravated the situation around the world, including Indonesia [1]. This is in keeping with The National Aeronautics and Space Administration's (NASA) which American President, Joe Biden also exposed in his speech, that Jakarta and coastal cities in Central Java predicted would collapse [2]. Confirming Jakarta's prediction, environmental specialists had stated that Jakarta's land surface lowers by 8 cm per year, and 24 cm per year in the North Jakarta area. In fact, flooding is indeed a major problem in Jakarta, Indonesia's capital.

Jakarta always hits with flooding in numerous regions almost every year. Especially in the North Jakarta area, coastal flood and tidal flood or Rob flood were common in 2021 [3]. Antara news also emphasized that the tidal flood that hit Jakarta in December was inextricably linked to the climate crisis and prediction made by Joe Biden. The tidal flood is not to be taken lightly, as it is an example of how the Jakarta sinking prediction is

extremely likely to happen. In addition, the possibilities due to groundwater exploitation, massive development in the capital city, and climate change.

The prediction of Jakarta sinking is not a new problem. This prediction has been around since the Dutch era [4]. In 2021, this prediction began to be discussed again along with the issue of the Climate crisis which was raised at the COP26 climate summit in Glasgow, Scotland. Especially after Joe Biden delivered NASA's prediction in his speech, namely about the state of Jakarta and other coastal areas which are predicted to sink in the next 10 years.

Many mass media, including online media, had also brought up the news about the prediction that Jakarta will sink in 2030. News headlines about this prediction were also published in Indonesian online media. The online media, not to mention the two news portals that are specifically engaged in the cyber world today, namely Tirto.id and Kumparan.com. Both are Indonesian mass media that operate as internet news platforms rather than print media. These two media proclaim themselves as digital news platforms that are more independent and enlightening. Tirto.id was founded in 2016 while Kumparan.com in 2017. In Indonesia, both are relatively new forms of media. According to Muayad et al., Tirto.id, and Kumparan.com are fresher, in terms of how to write news. As a result, the aim of this study is to expand on prior study by examining how Tirto.id and Kumparan can be used to uncover environmental issues [5].

The majority of the media do not find environmental issues to be particularly exciting. In contrast to problems such as politics and economics, which are thought to be more marketable and have a direct impact on the community. Environmental issues are different. The impact can be felt directly, but it can also be indirect. Environmental issues that are commonly discussed in the media might take the shape of forecasts regarding the future state of the natural world, the level of environmental harm, and how human life will be in the future. Certainly, this role can only be done by the mass media. The media plays a critical role in educating the public. An excellent environmental news is a news that may provide the community with useful information [6]. This knowledge certainly includes how the community reacts and acts on the information they receive in relation to the environmental news they read.

The Indonesian mass media, including newspapers, do not yet have a dedicated environment desk; instead, environmental topics are covered in special and national news columns[7]. In fact, few news organizations have a dedicated environment desk. The Antara news agency, specifically Antaranews.com under the name Warta Bumi, is the only online medium in Indonesia that has a dedicated environment desk. The remainder of the time, news about environmental issues is only broadcast on other popular desks. This issue is also attempted to be seen in this study. How the two new media, Tirto.id and Kumparan.com, deal with environmental issues, particularly in response to the prediction of Jakarta's sinking. The extent to which Tirto.id and Kumparan.com frame the function of the two media in informing about environmental issues and how reporting on the topic of Jakarta's sinking is presented.

2 Research Method

This research was a constructionist study with a qualitative research. The study examined news texts made by Tirto.id and Kumparan.com regarding the prediction of the sinking of Jakarta. Thus, comparing the news written by of these two media was carried out by framing analysis of Zhongdang Pan and Gerald M. Kosicki. Framming analysis is the study of how a news text is produced, as well as how journalists who write about it view, code, and construct a news narrative **7 Pan**. Then, this study seeks to figure out the cognitive components of the news that comes from journalists in the first place. As a result, interviews with journalists who work in the news industry were undertaken. The syntactic, script, thematic, and rhetorical characteristics are considered as the unit of analysis in Pan and Kosicki’s framing [8]. The unit of analysis is elaborated as follows (Table 1).

Table 1. Pan and Kosicki Framing Unit Analysis

Structure	Framing device
Syntax (compiling facts)	1. News Scheme
Script (telling facts)	2. Newsletter
Thematic (Writing facts)	3. Details 4. Coherence 5. Sentence form 6. Pronouns
Rhetorical (emphasize facts)	7. Lexicon 8. Graphics 9. Metaphor

Source: Sobur [9]

Table 2. News of the Jakarta Sinking Prediction

Tirto.id	Kumparan.com
Responded to Joe Biden’s, Deputy Governor: That Doesn’t Mean Jakarta Will Sink in the next 10 Years (Tirto.id, 31/07/21)	According to Joe Biden, Jakarta is threatened to sink in 10 years, Deputy Governor of DKI Denies (Kumparan, 31/07/21)
Jakarta Threatened to Sink, PSI: Due to Groundwater Exploitation (Tirto.id, 16/09/21)	NASA Says DKI Will Sink, Provincial Government Has Experts to Make Jakarta Better (Kumparan 20/07/21)
	With All Programs, Hopefully Jakarta Will Not Sink (Kumparan, 3/08/21)
	Anies on Joe Biden’s Jakarta Sinking Speech: Climate Change Is Real (Kumparan, 10/08/21)

In this study, the researchers analyzed several news related to the prediction of Jakarta's sinking on Tirto.id and Kumparan.com during period of July-September 2021. Not all news about the prediction of Jakarta's sinking was taken, because the researchers limited the time period above. During that time, Tirto only published two articles about Jakarta sinking prediction. However, Kumparan published four articles. As a result, the researchers analyzed six news items about the Jakarta sinking. The following are the headline of the news (Table 2).

3 Result and Discussion

3.1 Framing Analysis Predicts Jakarta Sinking Tirto.id

The first article on Tirto.id was titled 'Reply to Joe Biden, Deputy Governor: It Doesn't Mean Jakarta Will Sink in the next 10 Years.' In general, this news covered the answer of DKI Jakarta's Deputy Governor to American President Joe Biden's prediction that Jakarta will sink in the next 10 years. The lead story in this news was about Riza Patria's reaction to a prediction that Jakarta would sink in ten years, but this prediction was refuted by the Deputy Governor on geological grounds found in the text: "Indeed, Jakarta's land is low, there is a land subsidence every year in Jakarta." But that doesn't mean Jakarta will sink in 10 years. Furthermore, the geological reasoning was found in a similar answer by Governor Anies himself, who responded to this matter related to climate change. Tirto.id used a complete 5W1H structure to write the contents of the news. The news writing, on the other hand, that indicates that the Jakarta Sinking prediction will not occur was presented in a rhetorically different way. Tirto.id instead displayed an image showing that the sea water in the north of Jakarta has entered the mainland. The image was diametrically opposed to the news's content. That is as follows (Fig. 1).



Fig. 1. Image on the first news Tirto.id

It can be seen in the image above, how contrast between the content of the news, namely the thematic aspect and its rhetorical structure. The news primarily focused on the Deputy Governor of DKI’s response, in which he denied that Jakarta would sink in the next 10 years, as well as the Deputy Governor’s statement that he would continue to work on optimizing the work of the DKI Regional Government so that Jakarta would not sink, despite the fact that the portion of this statement was not as large as for geological reasons. Tirto.id journalists used an image as illustrations of events to indicate that there are various locations in Jakarta that have begun to sink, as shown in the image above. Although the sinking of the Jakarta was denied, information from NASA and Joe Biden’s reviews was not ignored, but rather provided as input and a warning, given the fact that sea water conditions had indeed risen to the surface, as indicated in the picture.

The second news, titled ‘Jakarta Threatened by Sinking, PSI: Due to Ground-water Exploitation,’ was published by Tirto.id. In general, this article also discussed NASA’s and Joe Biden’s warnings that Jakarta will collapse, as well as one member of the Regional People’s Representative Council (DPRD) of DKI Jakarta, PSI faction’s response. The author no longer used a title that contradicts the prediction that Jakarta will sink, as of the publishing of this news headline. The response from members of the DKI Jakarta DPRD was clearly depicted in this report, who stated that the prediction of Jakarta sinking was possible due to the ongoing exploitation of ground water. This problem arose due to the lack of clean water pipes that can be accessed by Jakarta residents. In addition, the thematic structure related to thematic aspects is clearly seen in the following text snippet (Fig. 2).

Looking closely at the image above, it can be seen that the author appears to have shown thematic in such a way that it has a relationship with comprehensive supporting data from the title that matches. The second news was delivered in greater detail than the first. Tirto.id used a rhetorical structure to present photos that are relevant to the news’ title and content. The image is as follows (Fig. 3).

Generally, the news that predicted Jakarta sinking in Tirto.id was presented in the Socio-Cultural News column not in special column for environmental news. According to Tirto.id journalist, Riyan Setiawan:

Pemasangan pipa-pipa dan mengalirkan air PDAM ke seluruh warga Jakarta dibutuhkan anggaran yang sangat besar, berkisar Rp23 – 30 triliun sampai tahun 2030, kata Anthony. Namun masalahnya, anggaran untuk PDAM dari tahun ke tahun hanya ratusan miliar saja, sehingga tidak realistis terhadap program tersebut.

"Selama kami di DPRD, nggak pernah anggaran air bersih ini mencapai Rp1 triliun, paling Rp200 miliar per tahun.

Fig. 2. Snippets of second news content on Tirto.id

Jakarta Terancam Tenggelam, PSI: Akibat Eksploitasi Air Tanah

Fig. 3. Image of second news content on Tirto.id

Menurut laporan NASA, Jakarta akan tenggelam dikarenakan meningkatnya permukaan air laut dampak pemanasan global dan pencairan lapisan es merupakan salah satu faktor tersebut. NASA mengkritik pemompaan air tanah secara luas akan menyebabkan wilayah kota cepat tenggelam.

Fig. 4. Image of content piece in news 2 on Kumparan.com

“This issue is indeed an environmental issue, only because the issue is in Jakarta, the inclusion of the topic of megapolitan, in the use of news photos also only uses existing stock photos and attached by the editor” (Riyan Setiawan, interview, 14 February 2022).

According to the results of the interview, the usage of photographs that serve as a point of focus on news material solely uses stock photos. Looking at the first news, it can be seen how the photo selection actually contradicts the content of the news that the author intended.

3.2 Framing Analysis of Jakarta Sinking Prediction Kumparan.com

NASA and Joe Biden’s statements on the sinking of Jakarta on Kumparan.com were similarly debunked, as was the framing at Tirto.id, by highlighting the reasons for strengthening the Regional Government’s program and performance in order to avoid the sinking of Jakarta in the next 10 years. The first news on Kumparan.com was titled “Joe Biden Called Jakarta Threatened to Sinking in 10 Years, Deputy Governor of DKI Denies.” The headline and lead of this news were based on news sources, but they were still related to NASA predictions about Jakarta sinking. Overall, this report demonstrated DKI’s Deputy Governor’s reaction to Joe Biden’s warning that Jakarta would collapse. Generally, the content explains how the government has refuted the prediction by taking preventative measures.

The second news analyzed entitled: NASA Says DKI Will Sink, Provincial Government Has Experts to Make Jakarta Better (Kumparan 20/07/21). In general, this news includes NASA’s predictions as well as how the DKI Provincial Government is attempting to prevent the sinking of Jakarta through programs, performance, and the deployment of experts. Certainly, this news story’s title is more explicit than Tirto.id’s previous news story’s title. However, in this first news, the writer of Kumparan presented news that supported NASA’s predictions compared to the response of the DKI Provincial Government. This was shown by the news narrative in the closing paragraph, which explained that there were several causes that allow Jakarta to sink. The closing paragraph on the first news was shown in Fig. 4.

In addition, a lead on news 3 with the title ‘With All Programs, Hopefully Jakarta Will not Sink’ was presented regarding Joe Biden’s warning of Jakarta’s sinking, which was compounded by the climate crisis and Jakarta’s lowland situation. As a result of this lead, the news was generally written according to thematic elements with 9 paragraphs. Although not totally coherent, the line was repeated as written in the news lead in the last two paragraphs. The rhetorical element, essentially how journalists stress facts, distinguishes this news writing. In this regard, the journalist Kumparan.com provided graphic



Fig. 5. Graphic information on news 3 kumparan.com

data to demonstrate how the state of Jakarta’s land surface has begun to deteriorate in 2015. The image is as follows (Fig. 5).

From the image above, it can be indicated that the author conveyed that the prediction of the Jakarta sinking is quite likely to happen. This was different from what the news headlines. In the title, the writer gave a hope to the readers about the efforts of the DKI Provincial Government, but in the content of the news, the writings related to the Provincial Government’s efforts were covered by the facts from the graphic info. As a result, if examined on the thematic structure, this news article 3 was not coherent and concentrated on the image of the Jakarta area progressively sinking.

News 4 entitled ‘Anies Comments on Joe Biden’s Speech about the Jakarta Sinking: Climate Change is Real’. This news, on the whole, contains quotes from sources. Specifically, Anies Baswedan, Governor of DKI Jakarta, responded for Joe Biden’s prediction that Jakarta would sink. In accordance with the title, the syntactic aspects of composing this news were highly cohesive. The news story focused on Anies’ reaction to the prediction. The author has also brought up the script aspect or the completeness of the news. On the thematic element, it was described in depth how the content of Joe Biden’s address connected to climate crisis that will have an impact on sea level rise. Another statement described how Anies Baswedan’s attitude and response influenced the prediction to adopt policies that are environmentally sustainable. As a result, journalists only include images of the primary news sources, especially Anies Baswedan and Joe Biden, in the rhetorical component of this story. What differs from Tirto’s perspective was the Governor’s message, which urges him to analyze and respond cautiously to the statement about the Jakarta sinking. As manifested in the following text:

Anies: “We need to communicate this because it is hoped that it would assist to establish the proper paradigm in seeing the prediction of Jakarta’s sinking and the solutions we must take, don’t make us misconceive the message and instead give respond that are opposed to the message,”

Anies: “therefore, for example, by using these predictions to encourage policies and economic models that only look at the long term on the environment, instead we have to look at the message carefully as a collective message that climate change is real and our policies must put ecological sustainability as a one major consideration.”

Tirto.id in the similar way, the news contained the findings of interviews with DKI Jakarta's Deputy Governor and Governor. On the whole, the news about the Jakarta sinking prediction, as packaged on Kumparan.com, took up in Kumparan News column. On both Kumparan.com and Tirto.id, there are no separate columns for environmental news. The news included the findings of interviews with DKI Jakarta's Deputy Governor and Governor.

On the syntactic aspect: both are presented titles that both denied that Jakarta would sink in 10 years. From the analysis carried out, Tirto presented news leads that point to a tendency towards the truth of prediction even though he has denied it. In Kumparan, the title and lead were made according to the sources related to the news, but are still relevant to the predictions from NASA about Jakarta sinking. In this aspect, the two media appear to be compiling facts by including statements from sources that contain statements, hopes, attitudes and work commitments of the DKI Regional Government to prevent the sinking of Jakarta.

Script: Tirto.id and Kumparan.com presented the news of the prediction of the sinking of Jakarta in full 5w + 1h characteristic. However, Kumparan.com was more capable to narrate comprehensively in narrating this fact by containing many statements from sources confirming that Jakarta will not sink.

Aspect of the Theme: The facts written by the two media were very different. Tirto.id recorded the facts and backs up the frame with a geological explanation. Meanwhile, Kumparan presented an explanation of the facts surrounding Jakarta's geological condition, and also focused more on the facts in the form of explanations about the DKI Regional Government's efforts to save Jakarta from sinking.

Kumparan's rhetorical structure was more diverse; Kumparan did not just offer statistics. It did, however, provide visuals. Kumparan offers in detail with more images, graphics, and an interactive map of climate central to see which places are anticipated to sink in practically every news item. Unlike Tirto.id, it just showed one image with no details, and this feature was not used to emphasize how the prediction was likely to happen.

It is demanding to present environmental issues. These two online media, on the other hand, were able to make environmental issues entertaining by highlighting particular facts to read. Kumparan.com, in particular, was able to display entire data by highlighting images, graphic information, and interactive maps, making it stand out from other news sources. When a news item includes information on future environmental damage, rather than just what has already occurred, it is considered perfect environmental news [10].

Prediction of Jakarta sinking becomes important news that contains environmental problems that occur behind it. The way these two online media reported environmental issues was indeed different, although the framing was the same which refutes the prediction, but each media has a unique style in presenting facts. At Tirto.id the news tended to be brief and not accompanied by detailed graphic info, even though the way journalists compiled and told the facts was complete. Then, on Kumparan.com the news was written comprehensively, the way journalists conveyed in a storytelling style complete with graphic info and photos that present the possibility of areas that would sink will be more impressed by the reader. This is as written by Abrar in his research on storytelling in environmental news as a way to convince audiences [11].

4 Conclusion

From the results of this study, responses related to predictions about Jakarta sinking in the frame of *Tirto.id* and *Kumparan.com* look similar. However, they differed in highlighting the reasons for the denial of Nasa and Biden's statements about the prediction of Jakarta sinking. *Tirto.id* wrote information about the prediction of Jakarta sinking and how the government responded to the prediction, while *Kumparan.com* wrote with a broader and informative perspective. In practice, these two media have different prominence. *Tirto.id* contains more about the geological reasons for the prediction of Jakarta sinking, while *Kumparan.com* writes how the prediction will not happen because the DKI Regional Government will work hard with various programs and high commitment.

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