Artifacts of the Plastic Pollution Problem on Marine Life

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Revision Page

Based on the feedback I received and the satisfactory state of the projects, I only decided to make local revisions. I am limited on global revisions based on the strength of my initial submissions. I only decided to edit what is stated below:

1. I added a missing word in my introduction (p.3).
2. I fixed the indentation of my Artifact #1 paragraph (p.3).
3. I changed a word in my Artifact #1 paragraph (p.3).
4. I added a paragraph break in (p.4).
5. I changed the integration of a quote (p.4).
6. I changed the way I introduce ethos (p.5).
7. I changed some words and cut out a part of a quote (p.5).
8. I fixed punctuation and changed a word (p.6).
9. I also added a paragraph break in (p.6).

Introduction

The presence of plastic pollution is a serious disruption within the ocean that has been increasing at an alarming rate. It is up to a specific group of biologists, known as stranding biologists, to research and rescue the marine life that have been a direct victim of this issue. Stranding biologists have been actively conducting studies, collecting data, and researching rescued marine animals, to move closer to preserving and saving our oceans marine life. Many perspectives on why marine life is becoming stranded and dying has resurfaced, ranging from big issues like climate change, to more specific issues like overfishing or pollutants. There are endless sources of disruptions causing the strandings, but one of the most prominent and worsening issues is plastic pollution. It is a very common pollutant to Earth, that affects many aspects of life. Therefore, in this essay, I will analyze two artifacts that show and explain the detrimental causes of plastics on marine life, that in turn lead to effects on humans as well. My goal is to shine light on the problems biologists are having to face when dealing with stranded animals, by showing real life scenarios and statistical numbers of the plastic pollution problem.

Artifact #1

An influential artifact has been articulated from the plastic pollution problem and composed into the genre of a YouTube video. The video is titled “Powerful Video: Why We Need to Stop Plastic Pollution in Our Oceans for Good” created by Oceana (2019), the largest international advocacy organization that focuses on ocean conservation (ethos). This video represents the exigence of an increase in marine life strandings because of the plastic pollution problem. The purpose of this video is then to highlight and document the affects plastic has on the marine life. This is done by showing real life footage of different animals being stranded on

the beach, or dead on the sea floor due to the high amounts of plastic in the ocean. The conventions used to present the purpose include a voice over, intense music, and graphic real-life video clips. All these elements can be seen in the video when a bird is washed up on shore with plastic wrapped around its neck. Also shown, is a stranded dolphin on the shore and a dead shark on the sea floor with a bag around its body. By being able to see the live action impact plastic holds followed by a melancholy voiceover and intense music, it creates a stronger message for the audience to feel a deeper way. This then allows pathos to be fully felt in the ways of anger, sadness, remorse, or guilt towards what you are watching. These situations shown in the video are occurring every second of every day, of every year, and is rapidly getting worse as time goes on. This consistent issue allows an appeal of Kairos to be present; this video came out roughly 3 years ago, a time in which pollution was at an all-time high and documenting its increasing effects that we still have to this day. The video mentions that, "17.6 billion pounds every year [of plastic ends up being dumped into the ocean]" (Oceana, 2019). The production of plastic is always increasing as it's a consumer demand, which means it will never stop entering the ocean.

Therefore, marine life will continue to encounter plastics, ultimately increasing strandings. As stated in the video, "scientists say that over 60% of whale and dolphin species are affected by it" (Oceana, 2019). This uses a logical appeal to continue the argument that a large portion of marine life is affected by the plastics, including many more species than just whales and dolphins. This can be seen in the video when a sea turtle is recorded swimming up to plastic and trying to eat it, which then leads to them choking. Likewise, not only is plastic affecting the lives of marine life, but it also affects humans as well. The video explains how "microplastics have been found in our salt, our honey, and our beer, and sometimes even in the

air we breathe" (Oceana, 2019). This statement introduces a new perspective that not only is plastic being consumed by animals, but by us as well. Oceana (2019) is including this piece of information in the video to hopefully warn the viewers even more of the issue by it now being applicable to them. Therefore, with this artifact being a video published publicly to YouTube, anyone in the world can view it. With the video already at 1.8 million views, it appeals to an audience that worries about themselves and/or the environment. This can include but not limit to, environmentalists or marine/stranding biologists that want to learn and see the problems presented to help control the plastic pollution issue.

Artifact #2

Another striking artifact has been created to discuss the plastic pollution problem in the genre of a peer-reviewed journal, which represents an ethos appeal. It is titled, "Marine Microplastics debris: a targeted plan for understanding and quantifying interactions with marine life" by Clark et al. (2016) and published in *Frontiers in Ecology and the Environment*. This journal reflects an exigence of an increase in microplastics entering the ocean, that then leads to an increase of consumption by marine life. The purpose of the article is to bring awareness to the increase of microplastics polluting the ocean, in hopes to alert the public and educate them on this disruption. This is done through the conventions of written descriptions, examples of data and research collected, diagrams or photos with captions. For example, Clark et al. (2016) mention "that ingestion by marine organisms not only allows plastics to be transported to sub-surface waters…but also provides a pathway through which plastics can enter the marine food web and be returned to humans through the consumption of seafood" (p. 320). This is a concerning factor that was found as not only do marine life ingest it, but it can reach us as well. This is the authors

attempt to warn and alert the public about the effects of plastic pollution. This introduces a pathos appeal as consumers may feel disgusted and worried about hearing this information, considering it may apply to them.

Furthermore, this article was released during a period of an active increase in plastic pollution, but also cited the past years of pollution problems as well, representing a Kairos appeal. They stated, “In 2010 alone between 4.8 and 12.7 million metric tons of plastic were believed to have entered the oceans from terrestrial sources” (Clark et al., 2016, p. 317). Plastic pollution has only gotten worse since 2010, so that number is estimated to be way higher as of today. This is represented in one of the diagrams provided from 2015 that encompasses, “a model-based estimate for the spatial distribution of small surface plastics in the North Atlantic and surrounding waters” (Clark et al., 2016, p. 319). The diagram shows a very high number of plastics distributed in the North Atlantic and surrounding waters, therefore proving that pollution is actively increasing with time. The readers knowing the statistical numbers and increasing percentages of plastic pulls in the audience of the public and manufactures, while presenting an appeal to logos. Now that the public is aware of the pollution issue, that puts pressure on the industries or manufactures of plastic to either cut down or create a plastic less workspace all together. However, with this article come some constraints as not everyone has access to it. Since the article is a peer-reviewed item, its placed behind a paywall, meaning access is only free through an educational institution. This limits how many people can view this journal, which isn’t ideal in the goal of spreading the message about the plastic pollution problem.

Compare/Contrast

These two artifacts work similarly with each other through their exigence, purpose, and audience. Both artifacts have an exigence of an increase in plastic pollution leading to the increase of marine life strandings. That goes with their purpose to highlight, warn, and document the effects of the increase of plastic in the ocean on marine life. Both artifacts even touch on how plastic in the ocean can affect humans, to make a stronger argument as it makes it more personable to the audience. They both use logos, ethos, Kairos, and pathos to appeal to an audience that can consist of manufacturers, environmentalists, marine/stranding biologists, etc. However, each artifact uses different conventions through different genres to deliver these elements. Artifact #1 uses a genre of a YouTube video that includes a voice over, intense music, and graphic real-life video clips to show the viewers their exigence. This creates more a pathos approach to appeal to the emotions of the viewers by using graphic footage. Whereas artifact #2, uses a genre of a journal that includes written descriptions, examples of data and research collected, diagrams or photos with captions. This creates a more statistical, logical approach to the present the purpose to their audience.

After completing the analysis of both artifacts, I can conclude that the YouTube video, that is artifact #1, seems to be more effective in delivering the message. The video is easy to access as it is public for anyone to view on a huge platform that mostly everyone uses or knows about, considering it has 1.8 million views. Unlike artifact #2 being a scholarly journal, its only free through an educational institution, leading to a constraint on the accessibility of it. Artifact #1 also seems to have more effective conventions as its easier to follow along and connect with

the real footage because of visually seeing what is happening versus just reading words and numbers like artifact #2. However, I do believe each communication satisfied the rhetors objective of informing whoever is reading or watching the effects of plastic pollution on marine life. It just happens that artifact #2 has more constraints, so it's not as effective.

Conclusion

The significance of conducting a rhetorical analysis on these artifacts allows a broad topic to be more targeted and explained, considering it's a serious problem that needs urgent assistance. Before the analyzing of the artifacts, it may just be assumed that climate change is the problem and there's not much you can do. But by further analyzing these artifacts, it allows the audience to read and see the specific issue, that is plastic pollution. I have learned that for people within my discourse community, of stranding biologists, it is easier to communicate through real examples, real footage, and diagrams showing the data collected. Since a main factor within the community of biologists is to research and rescue, meaning both physical and numerical aspects are involved, using these conventions present in the artifacts allows the community to make conclusions and solutions. I've never considered that a YouTube video would be the way people convey information in their discourse community to deliver a message, but after analyzing this artifact it turned out to be one of the most effective ways to reach the public. Overall, both artifacts succeeded at highlighting the problems biologists are having to face when dealing with stranded animals, by showing real life scenarios and statistical numbers of the plastic pollution problem.

References

Clark, J. R., Cole, M., Lindeque, P. K., Fileman, E., Blackford, J., Lewis, C., Lenton, T. M., & Galloway, T. S. (2016). Marine microplastic debris: A targeted plan for understanding and quantifying interactions with Marine Life. *Frontiers in Ecology and the Environment*, *14*(6), 317–324. https://doi.org/10.1002/fee.1297

Oceana, (2019). *POWERFUL VIDEO: Why We Need to Stop Plastic Pollution in Our Oceans FOR GOOD*. *YouTube*. Retrieved July 20, 2023, from https://youtu.be/Yomf5pBN8dY.