Message in a Bottle

Abstract

This essay analyses the medium of message in a bottle for communication. After diving into the history and uses of message in a bottle, comparisons will be made against Crystal's seven features of speech and text (2006). The essay will then conclude by covering how message in a bottle has affected language and society at large.

History and Uses

Scientific Studies

A message in a bottle in a form of communication whereby a message is placed into a container, and placed into a water body in hopes that it will be found by someone. Message in a bottle was thought to date back to around 310 B.C, when Greek Philosopher wanted to prove his theory that the Mediterranean was formed by the inflowing Atlantic (Berlin, 2012). To do this, he placed a few bottles with sealed messages into the ocean, in hopes that he will receive a reply on where they ended up. Currently, the oldest known message in a bottle was found in 2018, 132 years after it was thrown into the sea, also in the name of science (Cheung, 2018). The bottle contained an authentic message from a German ship, as part of a German oceanographic experiment in 1886. The finder was requested to send the slip of message to the German Naval Observatory after filling in the information at the back of the paper (Figure 1).



FIG. 1 [Source: https://www.bbc.com/news/world-australia-43299283]

To date, drift bottles are still used by oceanographers studying global currents. A recent project example would be "The Drift Bottle Project", carried out by Fisheries and Oceans Canada in 2000 (Fisheries and Oceans Canada, 2018). The project did not discover new or unusual current flows, but it could be because only 1 out of 25 bottles were found and reported.

Personal Messages

Although message in a bottle has been utilised heavily for science, they also serve more a personal purpose. Before the wireless telegraph was introduced in the 20th century, the message in a bottle was a valuable method of communication for many seafarers. Hundreds of vessels were lost each year due to tumultuous sea conditions, and seafarers would often write a brief message that might include a desperate plea for help, or sometimes even a solemn goodbye. After such disasters, messages in a bottle were even looked upon as "the means of communication between the living and the dead" (Chambers, 1880s).

Besides messages concerning shipwrecks, there were also messages containing memorial tributes, confessions, suicide notes and kidnappings. An extraordinary example was a suicide note written by Charles Pilcher. His message read, "I, Charles Pilcher, murdered Margaret Hutchinson on November 23, 1870, afterwards putting the body in a well at Norwood, which, I believe, has never been found yet, and of late I can't sleep. I can always see her waiting for me at her pantry; that was our meeting place. To-night I have made up my mind to end my miserable existence by jumping overboard. My body will be good food for the fishes. I am not fit for anything else. So goodbye to everybody. I have no friends to weep for me. I am forsaken by all." (Brown, 2016). Just like Pilcher's example, many of the message in a bottle contained solemn messages with a desperation to be heard. Unfortunately, the recovery rates of bottles are extremely low. They are hence usually released in large numbers, sometimes even in the thousands when conducting scientific studies (Penny, Jerry, 2007). The reported rates for large-scale scientific studies vary from 3.4% to 11% (Scripps Institution, . Since seafarers only release one or a few bottles at a time, it is not surprising that their messages are usually left unheard.

Present day Perceptions

At present, message in a bottle is often associated with a romantic of poetic nature (Bort, 2016). The messages have been romanticised through literature, such as Nicholas Sparks' 1998 "Message in a Bottle" (Brogan, 2013). As such, stumbling across a bottled message has generally been viewed as a good sign, some even referring to their find as winning the lottery (BBC, 2012).

Effects on Communication

Due to the unmanned nature of message in a bottle, there is no privacy tied to the written message. It is impossible to direct the message to the intended receiver and the message can be accessed by anyone who comes across the bottle. As such, message in a bottle most commonly utilises formal language, with careful thought and deliberation on the message content, since it can be read by anyone. Even messages where the sender is aware that he is on the brink of death hardly reflect any erratic emotion.

Comparisons with Speech and Text

SPEECH		ТЕХТ	
Time-Bound	NO	Space-Bound	YES
Spontaneous	NO	Contrived	YES
Face-to-Face	NO	Visually Decontextualised	YES
Loosely Structured	VARIES	Elaborately Structured	VARIES
Socially Interactive	VERY SMALL DEGREE	Factually Communicative	YES
Immediately Revisable	NO	Repeatedly Revisable	YES
Prosodically Rich	NO	Graphically Rich	YES

When compared against Crystal's comparative chart between features of speech and text (2006), massage in a bottle has more text-like similarities since it pertains to communication via written messages. Similar to text characteristics, messages are permanent once the sender deploys it into the sea, unless it is never found, or the receiver decides to destroy it. The messages are definitely not time-bound, since the receiver can reply at any time after they find the message, even if it is several decades later. There is also no direct line of communication between a speaker

and a known addressee, which further sets it apart from the characteristics of speech (Bond, 2014) Further cementing their text-like characteristics, senders are usually indirect with no particular audience in mind, similar to traditional writing. There is no particular audience in mind, but the senders often simply wish to convey their plights to anyone that chances upon their message. This is similar to social media platforms such as Twitter and Instagram, where users can choose to update their status or share news for anyone to view.

In the aspect of spontaneity, message in a bottle definitely has text-like characteristics due to the extreme time lag between production and reception. Sentence boundaries are also typically distinct, and the content can be repeatedly reviewed. Message in a bottle is also fully visually decontextualised since it consists of text only.

Message in a bottle is mostly a one-way interaction, since the receiver is often unable to return a reply. The receiver will only be able to send back a reply if the sender has attached an address in his message, but this is often not possible for those who are out at sea and in need of immediate help and response. As such, its limited social interactivity as well as lack of non-verbal features for observation makes it tend toward text-like similarities.

However, some qualities of message in a bottle communication resembles speech characteristics as well. Despite written messages being less socially interactive than speech, it can be noted that attitudes can be conveyed through the informative content of the messages and the imitation of tone through the capitalisation of letters. Message in a bottle sent by those who faced disasters at sea demonstrates this well. For example, a message in a bottle found at Sea Isle City, New Jersey, read: "Off Jersey coast. Lost at sea June 21, 1883, bark Atlanta, bound from genoa to New-York. Have been without food for three days. Send us help or we are lost. Have buried Captain, mate, boatswain, and all but three sailors. Help us or we perish" (Brown, 2016). Although the phrase "send us help or we are lost" clearly conveys their need for help, the repetition of "help us or we will perish" expresses their desperation and helplessness behind their pleas.

Furthermore, this demonstrates a flouting of Grice's maxim of manner considering the urgency of their message that should avoid unnecessary wordiness. Maxim of relevance is also flouted since "have buried... all but three sailors" would be considered irrelevant information, considering the urgent nature of their message. Flouting is usually expected to be seen more commonly in speech rather than text, given that there is supposedly more room for better contemplation in the construction of texts.

Speech oriented structure is also sometimes reflected in such scenarios. For example, certain messages are observed to read, for example, "I don't know where I am - struck iceberg". The

looseness of structure can be observed from the contracted form "don't" and the incomplete sentence. Such loosely structured messages can also be observed through pigeon posts (Dash, 2012) and balloon mail (Maksel, 2010) during war-time communications, where messages were also restricted due to the nature of urgency and the physical constraints of parchment dimensions.

Finally, message in a bottle has the potential to be graphically rich since the sender will have the ability to enhance their message with tables and drawings. However, there seems to be no known recorded message in a bottle that has demonstrated this.

Effects on Language

Language Structure:

Message in a bottle could have compounded the need for succinct and concise language due to the somewhat limited parchment, amplified further by the often critical contexts in which information needed to be transmitted urgently. Thus, contractions and incomplete sentences could be observed often.

General Effects on Society:

Environmental effects

The message in a bottle communication system has helped early day oceanographers create pictures and patterns of water circulation without any technology. Furthermore, it has also highlighted and the movement of plastic waste, demonstrating the global issue of sea pollution (Duncan, 2020). However, message in a bottle contributes to significant environmental issues, since plastic bottles adds to plastic marine pollution and glass bottles can shatter into sharp pieces which may hurt marine life (Sinclair, 2018). Greater environmental awareness has led to scientists opting for biodegradable wood instead.

Providing Closure:

Message in a bottle provided closure for the families of those on the missing vessels. Although they brought heart-breaking news, message in a bottle helped ease the uncertainty after months and years of waiting. Often, the writer would convey a request for the finder to publish his message so that his friends and family can be informed of his predicament. One such example would be a note signed off by a Graham in 1856. The note read, "On board the pacific, from Liverpool to New York. Ship going down. Great confusion on board. Icebergs on every side. I know I cannot escape. I write the cause of our loss that friends may not live in suspense. The finder of this will please get it published." All 141 crew and 45 passengers were lost with the Collins Line

Streamer *Pacific* vessel. The note, found more than five years after the ship's disappearance, is the only record of its fate to inform the world of its passenger's plight (Brown, 2016).

However, not all messages were genuine. Newspaper publishers would often seek to verify the messages by having a family member identify the sender's handwriting or making enquiries at the vessel's home port. However, this is not always possible, and an unverified message would still be published to fulfil the last wishes of a lost soul. *London Standard* in 1897 reckoned that "hoax messages from the sea greatly outnumbered genuine ones". According to the paper, hoax messages "almost invariably give the name of a ship actually lost, in order to impart an air of verisimilitude to the story" and were calculated to "awaken sad memories, especially in the minds of widowed women" (London Standard, 1897).

Conclusion

Considering how the goal of mediums of communication is to facilitate successful communication, message in a bottle is undoubtedly a fairly ineffective medium of communication. There is no guarantee that the sender's messages will ever reach a receiver. Even if it ultimately does, the messages usually take at least months or even years to reach a receiver. That being said, they were still a key form of communication for seafarers to contact the rest of the world before the 20th century.

References:

Berlin, J. (2021, February 10). Oldest Message in Bottle: Behind History's Famous Floating Notes. Retrieved from https://www.nationalgeographic.com/news/2012/9/120918-oldest-message-in-a-bottle-science-history-messages/#:~:text=Of course, people have been,he ever received a response.)

Brogan, J. (2013, February 12). Messages in a bottle chart a lifelong romance with the sea The Boston Globe. Retrieved from

https://www.bostonglobe.com/lifestyle/2013/02/12/messages-bottle-still-carry-hint-romance/dduFlyJjc451G7gZZNU0xM/story.html

Brown, P. (2016). *Messages from the sea: Letters and notes from a lost era found in bottles and on beaches around the world*. UK: Superelastic.

Chambers's journal. (1880). Retrieved from

https://babel.hathitrust.org/cgi/pt?id=coo.31924069264012&view=1up&seq=19

Duncan, E. M., Davies, A., Brooks, A., Chowdhury, G. W., Godley, B. J., Jambeck, J., . . .

Koldewey, H. (2020). Message in a bottle: Open source technology to track the movement of plastic pollution. *Plos One*, *15*(12). doi:10.1371/journal.pone.0242459

Government of Canada, F. A. (2018, August 21). The Drift Bottle Project. Retrieved from https://www.dfo-mpo.gc.ca/science/data-donnees/driftbottles-bouteillesflottantes/indexeng.html

Government of Canada, F. A. (2021, February 11). Fisheries and Oceans Canada. Retrieved from https://www.dfo-mpo.gc.ca/index-eng.htm

London Standard Newspaper Archives, Feb 25, 1897, p. 1. (1897, February 25). Retrieved

from https://newspaperarchive.com/london-standard-feb-25-1897-p-1/

Maksel, R. (n.d.). You've Got (Balloon) Mail. Retrieved from

https://www.airspacemag.com/daily-planet/youve-got-balloon-mail-145532947/

Maksel, R. (2012, December 18). Spy Pigeons. Retrieved from

https://www.airspacemag.com/daily-planet/spy-pigeons-167097967/

Oldest message in a bottle found on Western Australia beach. (2018, March 06). Retrieved from https://www.bbc.com/news/world-australia-43299283#:~:text=A Perth family has found,remote beach in West Australia.

Penny, Jerry (March 2007) Message in a bottle. The American Surveyor. Retrieved from http://www.theamericansurveyor.com/PDF/TheAmericanSurveyor Penry-

MessageInABottle March2007.pdf

Ryan Bort On 3/7/16 at 11:37 AM EST, G. G., Chang, D. M., & Lampton, U. U. (2016, May 27).

A Brooklyn artist, the North Atlantic garbage patch and the magic of the message in a bottle.

Retrieved from http://www.newsweek.com/new-york-pelagic-message-bottle-george-

boorujy-433926

The Ocean in Motion: Studies in Physical Oceanography (2004). Retrieved from

https://publishing.cdlib.org/ucpressebooks/view?docId=kt109nc2cj&chunk.id=ch11&toc.de
pth=1&toc.id=0&brand=eschol&query=publish

World record as message in bottle found after 98 years near Shetland. (2012, August 30).

Retrieved from https://www.bbc.com/news/uk-scotland-north-east-orkney-shetland-

19422354