Magazine/Blog SODA Analysis

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The works I chose for this analysis are the article *Organic compounds found on Ceres*[1] from *Science News* and the blog post "Huge News: Organic Compounds Found On Ceres"[2] hosted on blogspot.com. Both (somewhat obviously) covered the story of a NASA probe named *Dawn* discovering signs of organic compounds present on the surface of a dwarf planet residing in the asteroid belt between Mars and Jupiter. Despite covering the same story the two pieces differ greatly in some regards. There was also a lot of shared material covered by both pieces, though the blog used a few more visual aids.

Both the blog post and the article covered what exactly was found: organic compounds (meaning hydrocarbons). However, the magazine went into greater detail about how exactly these compounds were detected, and the blog post explains (and speculates) more about specifically what kinds of compounds were found. Both pieces also stated the importance of this discovery in particular because of the presence of salts, clays, and water (in the form of ice), which apparently form an environment favorable to forming the early stages of life. However, the blog post neglected to mention hydrothermal activity, which is repeatedly stressed as essential in the article. The two works also both mentioned that density of the compounds rules out deposition on Ceres's surface by asteroid impart as a viable source of the compounds' formation, speculating that it is more likely that the compounds are native to the dwarf planet. The biggest difference between the material covered by each piece was that the article stated - in no uncertain terms - that this discovery marks "the first concrete proof of organics on an object in the asteroid belt"[1], while the blog claims that "[organics] have been seen previously on main-belt asteroids 24 Themis and 65 Cybele."[2] Naturally, neither provide citations for their respective claim, and so uncovering which

was accurate is left as an exercise for the reader.

The physical structure of the article and the blog post were fairly similar: a linear column of text illustrating points in roughly the same order. The main difference being that the blog post broke up its text with more images of Ceres and its location relative to the eight planets, whereas the article placed one image beneath the text body. The article also featured many quotations and some soft references, whereas the blog post featured exactly one quote.

I felt that both the article and the blog post did good jobs of imparting the information that some thing had been discovered, what that thing was, and the implication that this could tell us more about how life formed and/or where it came from. The blog expanded a bit more than the article on what exactly this thing is, but other than learning some vocabulary it was largely ineffective; it never explained why the distinction between these different kinds of thing is important or what it tells us. By contrast, the magazine's explanation of the detection method used helps form an understanding of why we know things are there, but can't tell what kind of things they are. As far as visual aids, the one used in the magazine (which was also featured in the blog post) went some way to showing the density of organic material and how confined it is to a single area - which is important as part of the argument for the compounds being native to Ceres. However, most of the images in the blog post felt distracting at worst or extraneous at best; only two out of four images were really helpful in any way, and one of them only if a reader somehow escaped primary school without a basic grasp of the solar system. Overall, I'd say the magazine was more effective, if only because it didn't bog itself down with needless explanation and provided more trustworthy sources for its information.

References

[1] Eaton, Elizabeth. "Organic compounds found on Ceres." *Science News*, 18 March 2017, p. 8

[2] Webb, Russel Adam. "Huge News: Organic Compounds Found On Ceres." *The Space Invader*, blogspot.com, https://spaceinvader.me/2017/02/16/huge-news-organic-compounds-found-on-ceres/. Accessed 29 August 2017