

To: Prof. Kenzie

From:

Date: November 22, 2011

Subject: Analysis Reflection

When this essay idea was brought up, I thought it was going to be extremely difficult. To delve into the writing was going to be complicated, and to try and compare and contrast on levels outside of general observation was going to be a rough task to complete within the time we were given to complete the project. However, once I was able to get into the habit of comparing the meaning behind the articles, it was not as hard as I imagined it to be.

I compared my topics on three major ideas that I found as differences between the science and the media based articles: the lack of information about the tamarins in the media article as opposed to the science study, the way the media author wrote as opposed to how the scientists wrote their articles and their methods, and how the media article was set up while leaving the tamarin study ideas out. With those three major components as my focus, I was able to come across a lot of ideas that had to do with the comparison analysis. However, I did tend to focus mainly on the media article because of the fact that it was originally based around four studies and I was only focused on one.

I brought in, by briefly mentioning, the other studies present in the article as a description of my idea of how the article was structured for the general audiences' preference. I chose not to delve too deeply, however, for fear that my paper would have too much information to tackle and it would make the assignment a lot more complicated.

I found my article easily through the New York Times website, and I found it because it was interesting and appealing to my interests as well as how it read. I found it a good piece to work with because, as a general reader, I got a point of view in the beginning how anyone would read the article, and my opinions were able to change as I viewed the actual science study done by Culot and her colleagues. Overall, I think the assignment was a good learning experience and has taught me to think outside of just the general text and read between the lines.

## Media Misconstruing Science

The way media portrays stories is to, typically, grab the reader's attention and to hold it to further get their point across and into the mind of the reader. Once they have succeeded, their story will be remembered and possibly passed on to others. I came across an article while searching the internet for interesting, scientific topics pertaining to animals because I am interested most in those kinds of articles and stories. The first one to cross my gaze was in a bold headline, reading "A Toad-Eat-Toad World", and "Other Tales of Animal Cannibals." (Angier, 2011). Immediately, my attention was caught and I read the entire article within moments before discovering the internal links were connected to the various studies the scientists who were mentioned in the article had made. Clicking around, I soon discovered there was a major difference in the way the original studies were set-up in comparison to the way the media had displayed them for all to see across the world-wide web. Further delving helped me to understand the very reasons why the media may have portrayed the sections of the article the way they had, though I was disturbed by the lack of information given from the original science, the difference in writing when it pertained to the audience, and the subtle differences with the section of the article I was most interested in when compared to the entire article as a whole. The information had been misconstrued; the animals and scientists' true intentions became unclear just from reading the article and without reading the science-based text, no one would be able to truly understand the point the scientists were trying to make.

The article for the media was written as any might be; it held a hook, line and sinker to make any reader want to delve further into the topic and read about these animals most people have never even heard of, and to read about how they act so strange, but in similar fashions. The media article, written by Natalie Angier (2011), focuses around four studies done with four

different species of animals, all of which have displayed cannibalistic tendencies under certain situations, but have all committed it in different situations and manners. In the end of the piece, there is a mere three paragraphs about a certain species of tamarin, which proceeds to further describe a scene where the scientists present, at the time observed, a female tamarin and her baby, as well as another adult female foraging for fruit. When, seemingly, in the next moment “...the mother bit through the baby’s skull and ate out its brain. And once the mother had polished off the entire head, her adult daughter partook in some of the shoulder” (Angier, 2011). Horrified by the descriptions used, I clicked an internal link to the original scientific study and began to research some of what the scientists had studied and observed about these tamarins. From a background of animal knowledge-base, I understood infanticide was not a common act, especially when pertaining to certain species of primates. The study, performed by a Dr. Laurence Culot with various other scientists, proceeded to confirm my earlier theory that infanticide truly is not common. In fact, the beginning of the study states clearly in the abstract: “Maternal infanticide in wild non-human primates has only been reported twice.” (Culot, et al. 2011). Upon further investigation, I discovered the study to be describing, in great detail, the different aspects that surrounded their study of the specific type of tamarin present in Peru, *Saguinus mystax*. The scientists observed ‘possible’ cases of infanticide among four reproductive failures within the specific group of primates. The cases depended upon the number of females present in the group at the time, whether they were pregnant or not and whether there was a sufficient number of males present in the population of tamarins as well. Of the four cases, there was one investigated as being a possible case of infanticide, while the others were mere deaths before the infants were over three months of age (Culot, et al. 2011). In the news article written by Angier (2011), the only clue as to the reasoning behind the possible infanticide occurring was

given by simple statements revolving around the rearing of the tamarin babies being a group affair and therefore the pregnant, younger mother who had been present would never have a chance to rear her child because of the competition and how the attention would not be able to be split. Never once did the article mention the influence on the number of males in the group and how that affected the possibility of infanticide, nor did the article describe how it was a one-time occurrence which appears to need further investigation in order to conclude as a developing habit within the population of the tamarin species in Peru. With the lack of information of the original scientific study in the media article, whoever is reading the media article is unable to truly grasp the situation of the tamarins and only receives a rounded explanation of a similar situation to the other tales in the media article – all of which have more information and description to them than the story about the tamarins, which was merely tacked onto the end of the topic for relevance, it appears, as a way to round off the end of the article.

The news has to write topics in a certain fashion in order for a general audience to understand; however, I feel this does not mean possibly misconstruing the main idea of original, scientific works in order to gain a few more readers who have a general understanding of an important topic. When reading the media article written by Angier (2011), there is a transition period from the third topic story to the story of the tamarins where she makes the observation how not all mothers are ‘martyrs’ (in comparison of the tamarins infanticide to the previous story about a self-sacrificing caecilian) before she transitions into the tale of the tamarins. By using this sort of language, she personifies the caecilian mother as a ‘hero’ and already applies a negative appeal to the tamarins before the story is even told. This personification can cause readers to give the animals a human ideal; in turn, humans will then compare the tamarin nature to human relationships and further justify their opinion of the tamarin. She makes a general claim

of how the tamarins are typically known for their care of their young, and in the next paragraph she ‘fluffs up’ the story of the possible case of infanticide reported in the study done by Culot and her colleagues. She writes how the baby is “...clinging adorably to mother’s fur.” In the next moment, she is biting through the skull with no apparent second thought or decision, giving the idea of the possible infanticide a gruesome portrayal and almost a human recognition of the situation (Angier, 2011). The use of wording is easier to understand than the complicated language used for the more scientific-research based study by Culot and her colleagues, and therefore, by the way her statements are worded, the section about tamarins appears more gruesome than most. However, in the study done by Culot, the situation described in the news article is listed as a ‘possible case of infanticide’ during the study, and it is even observed while trailing the tamarins at the time of the infanticide: “We do not know for certain that the infant was alive when the mother started biting it” (Culot, et al. 2011). This piece of information was not even present in the description given by Angier in her article, making the situation appear as the mother killing her child in cold blood, despite her survival purpose. Going back to the wording used by Angier in her article, with the use of ‘martyr’ before the tamarin section and the lack of information from the scientific study, the idea of the tamarin infanticide is strongly misconstrued. Throughout the entire scientific article, Culot always proposes the incident as a ‘possible infanticide’, never once observing it as what actually happened in the situation; once again, the distinction of that possibility never being present in the news article, which only focuses on the one cannibalistic act which it claims happened.

Each article is obviously written for different audiences and a variety of readers: the news article more for a general, public audience who is only interested in the base facts of the common situation, while the scientific study done by Culot is written in the context of being a scientific

paper. Culot and her colleagues write with the skills of scientists, using certain lexes which are hard to understand to those not trained in how to comprehend them. Their study includes many statistical charts and analyses, along with terminology not commonly known (nor understood) to the common public when performing their observations about the tamarins in their current environment. As a reader of each article, the difference between their styles is dramatic. Angier writes her media article with a basis of having an interesting topic to those interested in science, using a genre more based around a source of entertainment with small puns in her words (for example, the end of the last paragraph reads: “Through a shared act of cannibalism, mother and daughter made their pact.” (Angier, 2011)), and descriptive language, while Culot writes in the genre for more professional and exact studies, where the observations are important as well as an exact description of events and studies performed surrounding the tamarins. Angier uses humor as a method to keep the article entertaining while also informing the general audience about the cannibalistic nature of these animals. For example, using a section of an interview with Culot, she has quoted Culot saying: “I couldn’t help thinking, ‘Oh, my God! I forgot my camera!’” (Angier, 2011). By selectively choosing this quote, it skews the viewers’ idea of the nature of Culot and their position in their studies. The news article is written closely following the CARS model introduced by John Swales, using the introduction as a main point to gain the readers attention and still distribute a sort of ‘authority’ of the writing based on using interviews from the scientists and their original works being linked into the text (1990). The scientific study by Culot is more focused on the facts and the raw information, what it could mean for the coming world of the tamarins and the future of the species present in Peru, and how this study could possibly be key use for further or future studies in animal behavior research.

Upon observation, Angier's article is a measly, two page informational about four different recordings of cannibalism in different species by different scientific studies. However, I believe they were placed in a certain order by Angier to keep readers interested. The first page holds the biggest stories: a study of cane-toads by a Dr. Shine, and a study of red-backed spiders by Dr. Andrade. In between the two sub-stories is a small transition of quirky puns made on the words describing the situations between the two cannibalistic acts; in a sense, it was almost like reading a comic-relief moment. The wording in the news article is the key to show how it is meant to be partially entertaining. For example, near the end of the first page of the article, she writes a description saying: "But woe to any suitor who lacks a daredevil stripe" (Angier, 2011). Such a statement is not necessary, unless a writer is attempting to appeal to the audience who is subject to reading their article. Further on, another story of a 'self-sacrificing' caecilian is told, based on a study done by Dr. Wilkinson, with a transition between the red-back spiders and the caecilian being a tale of another study done about a brown spider. Finally, the article ends with a small snippet about the tamarins, which turns out to be a much less-described section, but still contained a few main characteristics present in the article. Each story had at least one piece of an interview by each Doctor who performed the study, though often the words used seemed to be used only for a meshing with the entertainment purposes. Also, each story had a small purpose and humor-witted comment within them, along with puns on words to almost ease the tension of the topic of cannibalism (Angier, 2011). Despite the media article's purpose, the tamarin study held the least amount of information about the actual study, while still holding the main patterns of the entire article, which ultimately makes it seem like the tamarins got the 'short-end of the stick' when it comes to their actual information being displayed in terms of the news article. To find the real information, a reader would have to click the link and read the scientific article,

otherwise be left with the assumptions written by Angier. The structure in the media article is also planned out very keenly: those whose studies showed a bit more ‘lively’ results and possibly more prominent results towards actual cannibalism, made it out in the front of the article. I feel the tamarins took their place at the end of the article because of how the scientific information given by Culot stated it was a ‘possible’ case of infanticide; Angier brought the story in because of slight relevance, but she put it at the end because of the lack of actual evidence and the less dramatic or interesting results from the study, as opposed to those of the cane toads.

The scientists’ studies of tamarins may not have been very relevant to the media article in terms of dramatic entertainment, but the information left out of the media article misconstrued the idea of the scientific study all together. The media article by Angier was written simply to be as such: for the general media, those interested in science but not enough to delve deeply into the original research and who may want a bit of humor in their text to lighten the situation. The scientific study was written in a form that scholars would appreciate as well as other scientists interested in the study of tamarins and their cannibalistic habits. The media writes topics how they want to write them and how they believe general audiences would want to read them, while scientists write for facts and scientific evidence with conclusions. With this type of writing-style difference, I believe a lot of the true, factual information from scientific studies can be misconstrued and underwritten by the media and, sadly, the actual facts will probably remain hidden from those who are not curious enough to look for them.

## References

- Angier, Natalie. (2011). 'A Toad-Eat-Toad World,' and Other Tales of Animal Cannibals. *New York Times: Science*. Retrieved from <http://www.nytimes.com/2011/11/01/science/animal-cannibalism-may-make-good-evolutionary-sense.html?pagewanted=1&ref=science>
- Culot, Laurence, Et. Al. (2011). Reproductive failure, possible maternal infanticide, and cannibalism in wild moustached tamarins, *Saguinus mystax*. *Primates*, 2011 April; 52(2), 179-186. doi: 10.1007/s10329-011-0238-6
- Swales, J. (1990). "Create a Research Space" (CARS) Model of Research Introductions. In E. Wardle & D. Downs (Eds.), *Writing About Writing: A College Reader* (pp. 6-8). Boston, MA: Bedford/St. Martin's.