

Hocus Pocus

An Analysis of an Article on Quantum Consciousness

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Many people ask how can someone create an argument in physics, isn't physics just all math and facts? In the article, "Quantum and Consciousness Often Mean Nonsense" by Matthew Francis, Francis uses various rhetorical strategies in relation to the rhetorical situation to convey to his educated audience that cross-disciplinary research should be done with caution. This paper will examine how the author uses these strategies to convey his argument by deconstructing his strategies and in turn showing how to become more aware of how to construct an argument in the field of physics. Francis uses one main strategy, his character, and an auxiliary strategy, logic, to convey his message while attempting to disguise his character arguments as logical arguments.

Francis's use of logic to convey his message boils down to two main strategies. These two are the structure of the article and the use of hyperlinks in his article. These two are the strongest use of logic and are the ones that are most effective in conveying his message. The audience of Slate magazine, specifically the online portion tend to be well educated, which in turn means that the logical arguments for them are a lot stronger than any emotional or ethical appeals, although these two are considered. In addition to the audience being well educated, another attribute his audience shares is an interest in science and philosophy, specifically the subject of quantum mechanics and consciousness, due to the title of the article, "Quantum and Consciousness Often Mean Nonsense". With all these considered, the logical arguments should be the strongest argument made by Francis; however, he relies most heavily on ethical arguments in hopes of disguising them as logical arguments.

The first logical strategy used by Francis is the use of the structure of the article. In the article, Francis has two main blocks of writing divided by a cartoon. In this cartoon there is a physicist who goes on ranting about other fields of study and how they are wrong about everything. The cartoon finishes with a rather dark insinuation that the physicist needs to be put out of his misery because he has gotten to the point in his career where he rants about everything. This cartoon acts as a logical strategy because of the fact that it breaks the two bodies of text and acts as a transition between what he was talking about and what he was going to talk about. In doing Francis is effectively drawing the reader in while providing a logical structure and in turn giving the audience a logical progression of thoughts that can be followed. This cartoon also acts as a relevant piece of information for the reason that it shows that it is not just Francis who has this view about scientist and cross-disciplinary studies but that the concept is accepted enough that there is humor that is able to be associated with it and understood. While this is Francis's major use of logic, his other main strategy is using hyperlinks.

When Francis uses hyperlinks in his article he is effectively giving credible sources to back up his information. Even if the audience does not click on the links they are still acknowledging that he has done his research and is capable of backing up his claims if they need to be. This strategy is surprisingly effective for his audience due once again to the fact that they are more inclined to listen to logical arguments as opposed to the other two. It is not only the fact that this use of hyperlinks helps logically progress his argument, it also backs up his character appeals. As such nearly all of his character appeals are in fact backed up by hyperlinks as well as disguised as a logical argument.

First of all Francis tries to disguise his appeal to his sense of character by putting it in a more logical wording. One example of this is seen when Francis says, "I hold degrees in physics and have spent a lot of time learning and teaching quantum mechanics...[s]ure, there's some

weird stuff and it's fun to talk about, but quantum mechanics is aimed at being practical"[1]. In this paragraph Francis starts by talking about his professional expertise in the field of quantum mechanics and then concluding the paragraph by discussing what quantum mechanics actually is. What this does is effectively set up Francis's character by establishing him as an expert in the field of quantum mechanic. This in turn allows him to state things with relative accuracy and have them backed up by his character. This means that any statements that seem logically sound that are not backed up by hyperlinks are shown to not be based off of logic but rather his character.

While Francis's appeal to character is his strongest rhetorical strategy, it is not without merit. Francis was a professor and is an avid science blogger[1]. With these merits, it is safe to say that he does use have an expert opinion in the field and is not false. This means that Francis's use of character is possibly the only thing he would need to convey his message to his educated audience because once they know that he is an expert in the field, they are more likely to agree with his opinion on the subject he is an expert in.

In light of this it can be seen that Francis uses his character to drive the message of his article while drawing on logical arguments to show his well educated audience that cross-disciplinary research is to be taken on cautiously. From this rhetorical analysis the takeaways from this is that for an argument in physics, the best attack is either from the character or logical arguments due to the fact that the audience is typically well educated. In addition to this knowledge of understanding which rhetorical strategies to use, the other important takeaway from this analysis is to identify the difference between an appeal to character from an appeal to logic because the two often have similar qualities.

Works Cited

[1] Matthew R. Francis, "Quantum and Consciousness Often Means Nonsense", *Slate.com*, 29

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<http://www.slate.com/articles/health_and_science/science/2014/05/quantum_consciousness_physics_and_neuroscience_do_not_explain_one_another.html> (10 October

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