Rhetorical analysis of john m barry's the great influenza

Science, Physics

In The Great Influenza Barry contrasts certainty and uncertainty so that there is an understanding that scientific research is in fact a pioneering effort through effective abstract language, romanticized syllogism, and strong metaphors. Firstly, the author points out the obvious knowledge of uncertainty and certainty where “ certainty creates strength" while “ uncertainty creates weakness by using antithesis. That’s general knowledge that most people - myself included- involved scientist as well. Then Barry suddenly turns upside down and says that it takes courage to “ embrace uncertainty". Uncertainty which was once weakness is now strength. It takes strength to move with a force of pure courage into the unknown, not knowing what will come of it. Scientists need uncertainty, like pioneers to be successful. Without that courage they will never learn to doubt themselves. Barry characterizes scientists but using abstract language. This is to emphasize that scientists rely on qualities than physical requirements. A scientist doesn’t have to be physically fit like a professional football player must be mentally fit to handle uncertain situations. The second paragraph in filled with abstract qualities like intelligence and curiosity, obviously, but passion, patience, and courage in order to embrace uncertainty. Uncertainty begins with the scientific process by making a hypothesis, a guess that shouldn’t be just thrown out in the open hoping that all goes well but a guess that you are unsure about whether that’s the answer or not. That takes courage to embrace the uncertainty if they are right or wrong. Pioneers generally exist on the frontier. “ All real scientists exist on the frontier. " Therefore all real scientists are pioneers. This implied syllogism shows, in a romantic way, that scientists are in fact just like pioneers. They both venture

into the unknown where the tools and techniques to tame it do not apply. Barry uses the allusion, “ there a single step can take them through the looking glass into a world that seems entirely different. " Scientists venture out into a world that may seem recognizable or familiar but turned sideways like when Alice fell through the rabbit hole into Wonderland. There were recognizable objects and things however everything was different. With just one step their whole world that they thought they knew so much about can shatter all around them “ with the sharp edge of a single laboratory finding. " Everything they thought to be real and what they believe might all be proven to be fraud by knife in a laboratory experiment which forces scientists to doubt their own beliefs. “ Scientists must create everything. " They always must question themselves, must always be uncertain so they have to create everything because they always have to question what right tool to use. Barry then mirrors the scientific process by asking questions, which takes up majority of the paragraph. These questions may be assumed rhetorical however, Barry tragically uses them to show how scientists analyze situations, jumping from one idea to the next. It emphasizes how uncertain their thoughts are. They are doubting their own knowledge even because the are unsure what would be the right chose or the wrong one. For the closing paragraph, Barry simply reasons why not all scientists can deal with uncertainty comfortably or may not “ know both where to look" at situations. Others may lask the confidence to keep pushing forward. Basically, not every scientist is meant to go out in the wilderness and persist not knowing what will come of it. He conveys that some scientists are made to deal with uncertainty with courage while others are not and are comfortable in a

laboratory. However, scientific research is not just going out in the wilderness though. There are experiments and lab work to be tested that those scientists are more comfortable with certainty deal with and is part of the pioneering effort. In the beginning of experiments, it is mainly “ intelligent guesswork" that rarely leads to desired result. Those scientists have to make them work. “ The less known, the more one has to manipulate and even force experiments to yield an answer. " Even with this type of research, Barry hints that there is somewhat of an uncertainty that they deal with because if less is known, then they can deal with experiments better to discover the truth like pioneers. He reasons that everything about the scientific research is a pioneering effort, not only with the scientists that go out into the dark abyss of the unknown and embrace that darkness but those who do all the laboratory findings. Both though have to deal with uncertainty. One more than the other but in science the only certainty in uncertainty. Throughout the passage uncertainty is repeated to emphasize what scientists deal with in the back of their head. It whispers to them whenever they go out to find an answer to a question. It is not a weakness but a strength far greater than anyone physically strong. Barry shows that everything they do, to the scientific process to the experiments, is a pioneering effort and that there is no certainty in science but a wilderness of uncertainty and discovery.