Assignment 2: APT Analysis of a Podcast

Science Rules! with Bill Nye Fires and Climate Change: A Vicious Cycle https://open.spotify.com/episode/06WMN4y2fiZvYafHLr4aK2?si=BFdyhc0jToubBSM1IQln9w

In the podcast, *Science Rules!*, Bill Nye and Cory S. Powell invite hydro-climatologist, Dr. Park Williams, to discuss the growing relationship between fires and climate change in their "Fires and Climate Change: A Vicious Cycle" episode. From the Australian bushfires to the California wildfires, the 50-minute podcast, published on March 18th, 2020, informs listeners about fire ecology, climate processes, and the warnings fires carry for the environment and human safety. Podcasts are convenient and engaging voice recordings of a certain topic. In this case, the science behind how fires start, persist, and are exacerbated by climate change are explained to people with a college level education through an alarming yet playful tone.

The podcast's audience includes people with a college level education and adults interested in climate. The first indication of this is the constant use of scientific and complex words, such as "correlation analysis", "aridity", or "atmospheric circulation". Most lay people do not understand these terms and processes; hence this podcast is geared towards a more professional and academic crowd. The speakers also refer to large, unimaginable numbers (i.e., 50 million acres) and past events, like the 2017 California fires or the 1930 Dust Bowl. These clues hint at the idea that the audience must be old and knowledgeable enough to be aware of past and current events. Furthermore, the people who call in to ask a question are associated with a university, hinting at how the podcast is for people in academia. The podcast's advertisements also target adults by using commercials for services, like insurance coverage, tax filing, and cyber protection. All of these factors, in addition to the complex nature of this topic, indicate that the audience is 18 years and older, in an academic and professional setting, and has at least a college level education.

Nye introduces listeners to the topic by exclaiming "the world is changing and … on fire". With an alarming and playful tone, Nye sparks curiosity by making people wonder what he means by "changing" and "on fire". What, exactly, is changing? And how is the world "on fire"? This metaphor grabs the listeners attention to both entertain and educate by connecting two large topics: climate change and fires. By describing how fires are more common in dry, windy, and hot climates and how climate change is expecting to intensify these conditions, Dr. Park Williams walks people through how this process works. Dr. Park Williams uses tree rings as a proxy and the fire in British Columbia as a case study to help the audience comprehend and digest how people evaluate fire impact and resilience. These tactics are employed to help the audience grasp the information and be able to inform their communities too.

Jumping from humorous to seriousness to empowering, the tone of the content encouraged curiosity and an urge to take action. The podcast first starts off with a theme song that is very intense, mystical, and thought-provoking. It had empowering quotes like "we can make the world better" and "we're all science people" to be inclusive and compelling. At the end of this theme song, a bell dings, acting as if the listener had developed an idea. This assists with engaging the audience and setting up the scene for discussing scientific topics. Continuously, the speakers are light-hearted when talking about climate processes but serious when discussing the longer-term effects of climate change. One moment when they got serious and then jumped to playful was when they discussed the point of no return. The point of no return is referring to when it is too late to return Earth back to our pre-industrial climate conditions. Nye lightened the mood by comparing CO2 residence times and climate conditions to cooking food in the oven and then taking it out to cool down. This is a silly comparison that lifts up the mood and after presenting the depressing outcome of climate change. I believe the speakers chose these tones for the podcast because science is supposed to be fun, meaningful, and hopeful. Nye is known for his wacky sound effects and these special effects make learning more engaging for the audience, especially over a 50-minute time span.

This podcast gives listeners the opportunity to learn about complex relationships of our climate system in an enthusiastic, accessible, and digestible manner. While podcasts do not have any visuals, the audio recordings allow for a feeling of personal conversation with the speakers. Nye, Powell, and Dr. Park Williams employ a serious and playful tone to teach about fires and climate change to those with a college level education or have an interest in climate. Through education and science, the podcast inspires people to learn more about these topics, inform their communities, and take climate action.

References

Nye, B., Powell, C.S. (2020, March 18). Fires and Climate Change: A Vicious Cycle. *In Science Rules! with Bill Nye*.

https://open.spotify.com/episode/06WMN4y2fiZvYafHLr4aK2?si=BFdyhc0jToubBSM1IQln9w