

Rhetorical analysis draft

Abdulrhman Almutawtah

Since the beginning of the United States, science is one of the fundamental aspects that contributed to analyzing issues and the nation's success. In the short film "Science in America – by Neil deGrasse Tyson" (2017), he addresses the American population and the political class on their stance on scientific outcomes and their policy decisions. The video is available on YouTube. The speech targets the American people who and more so the American government on the ignorance of science and its significance in the society. Tyson's speech's effectiveness attributes to the current government policies made by leaders who are in denial of scientific findings. Tyson uses his argument as a call to action to the American people in the hopes that they will become better informed and improve the world through their informed decisions. Science deserves the recognition of its space and role in the country, and the political class should let science play its integral part in shaping the nation. There is a need to have science back into American policy.

In the storyline of Tyson's narration, he argues that "Science in America" contains the most important words he has ever spoken. In the film, Tyson clarifies that the denial of science in the United States is on the rise, and it depicts a threat to the founding base of America's democracy. Science has proved to be a crucial tool for democratic governance. When the two work together, they have proven to support the democratic government and produce huge rewards in people's welfare and public health. Like Neil deGrasse Tyson's sentiments, America's founding fathers in the 18th century had a huge impact on enlightenment ideas. They utilized scientific principles in shaping the American system of government. It shows how the founding fathers recognized the role of science in governance and gave it a favorable space to contribute

towards governance. Democratic nations need to have persistence and robust engagements with both non-scientists and scientists. Neil deGrasse Tyson argues that science helps in finding what is true. 

Tyson uses the video to present his argument on how the United States has become less scientifically literate and that this trend is actively preventing the United States from dealing with problems we face. The US is faced with diseases, food shortages, environmental issues and other challenges that need scientific interventions but ignorance of scientific research as Tyson says makes the country lack solutions. Tyson relies on a variety of different strategies such as music, video, historical anecdotes, and stress on certain words to communicate his message. Using these devices makes the message concrete and persuasive to the listeners. He also appeals to the audience by suggesting that it is the responsibility of the viewer as a voter to become literate in the issues that face them, with his most prominent example being global warming. By passing this message Tyson enlightens voters on the importance of voting for people who are conscious with scientific findings and ignore those who neglect and undermine scientific studies.

In other cases, the video by Dr. - Neil deGrasse Tyson' (2017) appeals to the government to stop criticizing scientific findings given by researchers on public health and the environment. For example, the Trump administration opposed the health and environmental findings raised by researchers concerning the coal mining and oil drilling industries. Former US president Donald Trump recently dismissed an impeded study on human-led climate change despite its worldwide scientific consensus. These undermining science actions coincide with those raised by Neil deGrasse Tyson on the government's ignorance of the key roles played by science in governance where the government opposes research findings that could help make better federal decisions.

The funding of research in the United States has **reduced in recent days**. Dr. Neil deGrasse Tyson uses his video to highlight how the government has neglected scientific approaches, as opposed to how it used to be in the old days. The administrations, both at the state and federal levels, have failed to fund public health and environmental research. **Scientific research erosion** goes beyond environmental and public health studies, where different research projects have stalled due to the federal government's abrupt withdrawal of funding. For example, in San Francisco, **the government stopped funding a study on the effects of chemicals on pregnant women abruptly**. Like Neil deGrasse Tyson's complains about genetically modified foods, **political intimidations and agricultural policies on workers and research agencies by the administrations affect the role of science in the US**. A good example of what happened in Kansas City, Mo where two agencies that work on agricultural activities and crop science funding moved their employees. Also, the **administration** delayed the transfer of money to the ongoing studies making them to fail 

Science plays a key role in policymaking. Scientific evidence that gets its findings from facts explains why a certain step should be taken. Dr. Neil deGrasse Tyson recalls how the previous governments used to involve scientist in their policy making processes. Through reliable explanations of the scientific phenomenon, the government can choose the best policies using scientific facts. The goal of science is to help the administration create better policies. Secondly, politicians who associate with scientists end up making better service delivery decisions. It also provides facts that assist in forming good policies. Limiting government funding can make the government lose much in expertise. Reliable explanations are given by scientific studies on various phenomena assist the policymakers in making the best policies using scientific facts. A good example of how they can help is the present problem of globalization

which various scientists have conducted studies on to get facts on the effects and causes of such. They have shaped how governments make policies on the environment to counter globalization's environmental effects. The American challenges can be achieved through science and its involvement in governance.

Giving science its space in public policy and governance is essential in the United States. The ancient US and the forefathers knew how scientific findings could help find the best policies. However, other than just shutting down scientific projects and programs, the recent US administrations also questioned the scientific research findings and recommendations. They underpin the findings of studies and underpinning the regulations set using them.

According to Dr. Neil deGrasse Tyson the government should allow scientists to air their views to the people without restrictions. They should be given protection on their communication rights. They should be accorded speech rights, allowing them to speak directly to the public members and members of the press and corrections to communication agencies that reference their findings. The Covid-19 pandemic depicted how the CDC had a curtailed freedom of speech where the administration couldn't allow them to talk of the looming COVID-19 cases in February 2020. When these agencies are protected from speaking to the public directly, it muzzles the scientists and prevents the public members from making informed decisions related to their health and safety.

The glory is not yet lost, and the government can take various steps to restore the situation and have scientists gain their confidence in the country back. The concerns raised by Dr. Neil deGrasse Tyson” are solvable. First, the restoration of public confidence and the utilization of independent science roles in policymaking, the Center for Science and Democracy

needs to be empowered. Scientists require more empowerment to enable them to engage deeper within society. The established Center for Science and Democracy needs to increase its networks with other professionals from different fields to enlarge the research scope. The government needs to equip the scientists with the proper skills to communicate their expertise, decision-making, and public engagement through effective coordination of major scientific findings. The government should also promote their work by connecting them to help the national and local decision makers through their science and for more and efficient policy crafting. Instead of **rubbishing out scientific reports**, the government needs to give its citizens proper access to accurate and verified scientific information. To ensure journalists and citizens spread evidence-based information, the government needs to equip them with better tools for differentiating it from propaganda. They should devise ways to deliver accessible and reliable scientific information and techniques to those in need.

In conclusion, **for the United States to be on the right track of sound policymaking, the actions of undermining science as depicted by Neil deGrasse Tyson must come to an end.** The government cannot overlook the key roles played by science in governance. It should refrain from opposing research findings that could help make better federal decisions. Giving scientists a room to air their findings to the public and members of the press can help society make informed and sound decisions concerning their health and safety. The video urges the government to consider science before giving any verdict. Scientific evidence that gets its findings from facts explains why a certain step should be taken. Through reliable explanations of the scientific phenomenon, the government can choose the best policies using scientific facts. Globalization and industrialization rely on science, and these two must work hand in hand with scientific researches to make everything visible in terms of their effects and benefits to society. For

example, the video shows how America could take science seriously during his days. Any globalization step depended on science. The government needs to give its citizens proper access to accurate and verified scientific information rather than rubbishing it. As Tyson states this, he gives different examples to show efficacy of his points. The US administration can sue Tyson's video as an eye opener on how important it is to consult scientists and use evidence based scientific studies in policy making.