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# THE STUDY OF SUSPENSE IN SCIENCE AND EDUCATION DOCUMENTARY: AN INTERPRETATION BASED ON TEXT ANALYSIS

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#### Abstract

Science and education documentary primarily creates suspense through natural psychology, emotional transmission, and information gaps, which can be respectively referred to as natural suspense, transmitted suspense, and informational suspense. The construction of these three types of suspense relies on the subjective agency of humans. However, under the combined influence of factors such as source material, visual arrangement, and audience reception, their essence still distinctly points to real-life events in the objective world. The extensive use of suspense is influenced by external trends on the international scene, but more importantly, it is driven by the inherent characteristics of science, art, and entertainment within science and education documentaries themselves. These explorations are highly beneficial for the study of visual rhetoric in documentaries.

Keywords: Science and Education Documentary, Suspense, True Nature, Scientific Belief.

## **INTRODUCTION**

The science and education documentary primarily draws material from various fields of human scientific research, such as astronomy, geography, natural biology, scientific development, and societal changes, with the fundamental goal of disseminating knowledge about science and culture. It is an important means of science education, and its most fundamental characteristic is the emphasis on the scientific nature of audiovisual content. Faced with the dual impact of a market economy and popular culture, science and education documentary has begun to employ rhetorical techniques of suspense to arouse the audience's desire to watch, in order to avoid falling into the pitfalls of knowledge indoctrination and moral preaching. This has even led to a generalization phenomenon where suspense is excessively used. Science and education documentary is a type of documentary that exceptionally frequently employs suspense as a rhetorical device. Suspense has become a significant challenge for science and education documentary elitist characteristics.

Generally speaking, science and education documentaries need to adhere to objective and rational scientific principles, while suspense requires the full play of subjective agency. The apparent contradiction raises the central question of this article: Why do science and education documentaries often incorporate a significant amount of suspense? Whether in Europe, America, or China, science and education documentary emphasizes the integration of knowledge dissemination and entertainment aesthetics when creating suspense. This approach





helps documentaries use audiovisual language effectively to scientifically explain natural and societal phenomena. Therefore, it is possible to summarize the ways in which science and education documentaries create suspense through textual analysis. This analysis can help us understand the essence of suspense and ultimately deduce the internal and external factors contributing to the widespread presence of suspense in these documentaries. Therefore, it is possible to summarize the ways in which science and education documentaries create suspense through textual analysis. This analysis can help us understand the essence of suspense and ultimately deduce the internal and external factors contributing to the widespread presence of suspense in these documentaries create suspense and ultimately deduce the internal and external factors contributing to the widespread presence of suspense in these documentaries of suspense and ultimately deduce the internal and external factors contributing to the widespread presence of suspense in these documentaries.

#### 1. Specific Methods for Creating Suspense in Science and Education Documentaries

The rhetorical devices commonly found in narrative fiction films can also be effectively employed in documentaries. Suspense in science and education documentary arises when numerous unresolved and uncertain situation is triggered during the narration, visual presentation, and storytelling. It captivates the audience's curiosity and concerns about the fate of scientific figures or the progress of scientific events. Suspense, being a tension with an element of questioning, is an emotional response generated in situations where outcomes closely related to people are uncertain. It can engage the audience in following the development of science and education documentaries, making it a significant means of presenting scientific stories. Science and education documentaries borrow rhetorical techniques from narrative films to create suspense, while emphasizing the spirit of scientific exploration.

There are primarily three ways in which this is achieved:

**Firstly,** based on the natural psychological inclination of the audience, suspense is directly triggered. That is, certain aspects of scientific research/events that are liked by some members of the audience or have a direct bearing on their interests draw intense attention, leading the audience directly into a state of suspense.

This can be categorized into three specific types:

The first type involves anomalies related to the audience's interests, particularly when something with an interest connection appears to be irrational. For example, in the 2019 Netflix original documentary "The Great Hack" (114 minutes), Brittany Kaiser, a former director at Cambridge Analytica, played a crucial role as a key witness in the data manipulation events during the 2016 U.S. election. Her testimony is closely related to our data rights. However, during a congressional hearing where the CEO of Cambridge Analytica was questioned, a British journalist, Carol, reported that Kaiser had discussed the U.S. election. When Kaiser saw this report, she immediately denied it, expressed concerns for her personal safety, and prepared to leave the UK. Additionally, prior content indicated a harmonious relationship between the journalist and the person involved. This seemingly contradictory report creates implications that raise doubts and concerns about whether the person involved can safely leave the situation.



The second type involves challenging problems that can threaten the fate of individuals or entire organizations. For instance, in the 2019 documentary film "Hong Kong-Zhuhai-Macao Bridge" produced by China Central Television (directed by Yan Dong, 70 minutes), during the installation of the last section of the underwater tunnel, the film dedicates a significant portion to recalling the challenges faced in 2015 when the sinking process failed twice due to silt backflow in the foundation trench. The question of whether the installation of this final section will encounter the same silt backflow challenge directly engages the audience's curiosity and concerns. In the 2019 climate change-themed documentary "Ice on Fire" (97 minutes) produced by HBO Documentary Films, scientists raise questions such as "Will we really push the climate system to the point where all land ice melts?" This documentary illustrates global disasters resulting from massive carbon dioxide emissions, including rising sea levels, climate instability, and dwindling resources. These questions undeniably amplify the audience's doubts and profound concerns about how to reverse climate change.

The third type involves significant changes in everyday life caused by technology, which can also trigger suspense. For example, in the 2016 environmental-themed science and education documentary "A Plastic Ocean" (100 minutes), the first half of the film provides a detailed scientific explanation of plastic as a human invention and its widespread use, which has led to significant changes in the oceans and global ecosystems. In the second half of the film, images of massive plastic waste accumulation and the narration stating that "islands will ultimately be engulfed by the plastic waste they produce" engage the audience's attention and concerns about ways to rebalance the ecosystem. This method of creating suspense allows the audience to subconsciously skip the cognitive process when facing vital interests. Instead, it relies on specific stimuli provided to the audience, making it the most commonly used suspense technique in science and education documentaries.

The second method involves building suspense through the emotional transmission of characters. By conveying the emotions of characters through their expressions and actions in scientific experiments/events, the audience's suspense is stimulated. For example, in the documentary "Hong Kong-Zhuhai-Macao Bridge," during the deployment meeting for the installation of the final tunnel section, there are numerous close-ups of the participants' faces and hands. Their focused and attentive expressions remind the audience of the tense atmosphere at the meeting, foreshadowing the uncertain situations the installation process will face. In the 2018 science and education documentary "The Most Unknown" produced by Science Sandbox, researchers install electrodes on a person's head to test whether thoughts can control the movement of a robotic arm. The film includes close-ups of the researchers, test subjects, and the eyes and hands of the robotic arm, creating a sense of curiosity and tension about the unknown results. Especially in science and education documentaries, the visual representation of scientific research is an incomplete presentation of the scientific exploration process. As stated by Nie Xinru in "Aesthetics and Legitimacy of Historical and Science Education Documentaries," viewers see a symbolic representation of the process rather than the scientific research itself. Therefore, suspense doesn't require detailed and complex verification; it can be achieved by conveying the expressions and actions of key characters.





For example, in "A Plastic Ocean," to determine the cause of the increasing deaths of Mediterranean Sea turtles and dolphins, skin biopsies are needed to assess the accumulation of chemicals. Scientists use dart guns to obtain fat from dolphins, and in the footage, only three shots are shown to collect the fat. However, the turbulent sea, moving dolphins, and the concentration of the scientists create doubts and tension about the results. This method of creating suspense doesn't rely on the audience's prior psychological assumptions; it is an instinctive reaction when humans perceive the emotions of others.

Similarly, in the 2017 space-themed science and education documentary "The Mars Generation," homemade ablative shields crafted by teenagers are subjected to a burning test at a NASA space camp. The film doesn't show the entire burning process on-screen, but the anxious facial expressions and actions of the characters actually remind the audience of the uncertainty and concerns about the outcome.

The third method involves using information gaps to generate suspense. Specifically, in scientific events, the audience possesses more information than the characters in the documentary, creating a gap in the amount of information between the two. For example, in the first episode of the documentary series "Super Engineering" titled "Hong Kong-Zhuhai-Macao Bridge," during the installation of the circular steel tubes used to build the artificial island, a 5-meter-thick hard seabed layer was encountered, prolonging the originally planned 30-minute installation process to over two hours. The audience is provided with information about the formation and path of the typhoon, the evacuation of civilian vessels, and other details through narration and visuals. However, the documentary does not indicate that the on-site construction personnel, especially Mr. Chen in charge of lifting, are aware of these details. This creates doubts among the audience about whether the construction can be completed before the arrival of the typhoon and concerns about the safety of the site, maintaining a high level of suspense.

In the 2019 documentary "Apollo 11," which tells the legendary story of the moon landing, as the launch time of the rocket approaches, the audience is informed through narration and visuals about the busy and noisy control center, the anxious waiting of spectators on the beach, the solemnity of the media personnel, and even the unexpected situation of a valve leak in the Saturn V rocket. However, the astronauts are not aware of this information and proceed with their plans according to the original schedule. This creates doubts and concerns among the audience about whether the launch will be successful, generating a tremendous sense of tension and anxiety, and maintaining a high level of suspense.

This method of creating suspense is rooted in the audience's cognitive perception process and relies on narrative elements that provide a significant amount of information, such as interesting characters, compelling plots, and well-developed viewpoints. It requires a high level of skill in arranging information and is often used in narratives where scientific events are in progress. However, science and education documentaries tend to focus on the scientific interpretation of events and often depict events through retrospective analysis, which makes this method less common. For instance, in documentaries like "The Great Hack," "A Plastic Ocean," "Hong Kong-Zhuhai-Macao Bridge," "Ice on Fire," "The Most Unknown," and "The





Mars Generation," which portray scientific stories, the use of the present tense is relatively rare, making this particular method of suspense less prevalent.

The various ways of creating suspense in science and education documentaries, as described, can be categorized into natural suspense, transmitted suspense, and information-based suspense. Among these, natural suspense is the most common, followed by transmitted suspense, while information-based suspense is the least frequent. However, suspense, as a rhetorical device, inherently leans towards fiction. Additionally, each of these methods exhibits distinct tendencies, such as the selectivity of natural suspense, the simplification of scientific exploration in transmitted suspense, and the requirement for real-time information in information-based suspense. Does creating suspense in this way harm the true essence of science and education documentaries?

#### 2. The Fundamental Nature of Suspense in Science and Education Documentary

This question directly relates to the fundamental nature of suspense in science and education documentaries. Generally, the suspense techniques used in documentaries are less intense than those in fictional films, and this applies to science and education documentaries as well. Due to the reduced intensity of suspense, suspense in science and education documentaries tends to revolve around the audience's curiosity about the existence of certain individuals or events within the scientific story. This approach aligns with the fundamental goal of science and education documentaries, which is to enhance public scientific literacy by disseminating scientific knowledge.

Based on this premise, when creating suspense in science and education documentaries, filmmakers draw material from objectively existing scientific fields and follow the "hypothesis-deduction" model of scientific thinking to edit the content. The public's trust and admiration for science also make a significant amount of reenacted footage acceptable to the audience. Just as the determination of truthfulness no longer solely relies on the acquisition of material but must consider the selection of material and the audience's engagement, even though suspense has a fictional tendency, the specific content varies in style. However, the combined effect of material acquisition, editing methods, and reverence for science ensures that the fundamental reference of science and education documentaries remains rooted in real people and real events in the realm of scientific development. Therefore, the true essence of science and education documentaries remains intact and is not compromised by the use of suspense.

The materials used to create suspense can be entirely non-fictional and non-fabricated, and science and education documentaries ensure the authenticity of their materials from both the selection of subjects and the methods of acquisition.

On one hand, all three major suspense creation methods adhere to sourcing material from the development and dissemination of science, revolving around concrete scientific fields that are either in progress or have already occurred, such as marine and aerospace exploration, engineering construction, technological innovation, theoretical knowledge, and more. For instance, in "The Most Unknown," the suspense resulting from numerous uncertain scientific





experiments draws material from physics, astronomy, psychology, and other scientific fields, featuring physical space, evolving time, and tangible objective objects.

On the other hand, the three major suspense creation methods primarily use two techniques: live-action filming and computer-generated animation to obtain corresponding natural and artificial materials. Both of these techniques are derived from the genuine recording and reconstruction of scientific facts. For example, in "A Plastic Ocean," the suspense arising from the destruction of marine ecosystems by plastic waste is composed of scenes from real-life that explain the source, distribution, and harm of plastics, combined with animated scenes depicting changes in plastic particles, land-based plastic entering the ocean, and toxins circulating within marine organisms. These animated scenes enhance the suspense with a sense of technology, engaging the audience. Therefore, suspense in science and education documentaries exhibits a strong scientific attribute in terms of conveying ideas, content, and communication objectives.

As an objective existence that is not subject to human will, science reflects the objective world faithfully. The purpose of science is to discover true propositions about the objects of knowledge and arrange them systematically. It studies objects, reveals laws, and invents technologies that are real entities in real life. The visual materials that constitute suspense inherently possess the authenticity genes of their source material. They reflect the objective world, just as in "Super Engineering," where the series of suspenseful events related to massive offshore wind turbines, due to their huge size, complex manufacturing processes, and susceptibility to typhoon impacts, are all caused by real reasons and connected to the scientific story's characters or objects within actual times and settings.

Materials must be edited to create science and education documentaries, and how these materials are edited can also affect the true essence of suspense. This requires considering the creator's attitude towards the materials, which includes the choice of editing methods, as "reality is, in fact, a value judgment, a narration with a value position." In most cases, creators follow the "hypothesis-deduction" model of scientific thinking to edit materials and create a complete sense of suspense. This model involves presenting three types of suspense related to the problems in the scientific field and successfully resolving them. It can best reflect the real challenges of applying science and the intelligence of researchers.

For example, in "Ice on Fire," when faced with the question of how to use carbon to create something after reducing carbon dioxide levels using a direct air capture device (an unconventional question), scientists hypothesize that carbon dioxide can be transformed into essential products for life. This leads to scenes of using artificial leaves and bio-inspired leaves to carry out photosynthesis, converting sunlight, air, and water into fuel and food. Because science is based on laws, viewpoints, and methods that can be verified and practiced, it faces unpredictable and uncontrollable factors during verification and practice. Thus, bold hypotheses and careful verification are required to uncover the truth. The suspense created using this method reflects the creator's subjective judgment of the real world.

This editing method is also prominently featured in "The Great Hack." For instance, when faced with the question of how to make hidden data visible, the film hypothesizes that the data





is stored within Cambridge Analytica. It then proceeds to introduce Cambridge Analytica and show the process of making the data visible. While all three types of suspense generally follow the scientific deductive editing method, this method is not strictly unique or specialized. Suspense directly created through deduction, such as the significant changes brought about by certain technological advances or cleverly arranged narrative elements, may skip the hypothesis step but can still refer to real scientific events and characters.

This raises the question of audience acceptance. Since the Renaissance, science has been synonymous with terms like "correct, rational, should, advanced, truth," and has gained a sublime status in the minds of the general public, almost akin to religion. People unquestionably believe in it. After all, modern science is fundamentally a useful discipline that has had a significant impact on our lives. Therefore, when science and education documentaries use the three types of suspense to assist in presenting scientific stories, sudden events, the lack of strictness in the "hypothesis-deduction" method, the virtual nature of synthesized images, symbolic representations, and situational reenactments, among others, can all be forgiven by the audience to the greatest extent.

This is because the audience's reverence for science has already bestowed upon documentaries an overall "non-fictional designation." Audiences adopt a different attitude toward the portrayed events because they are believed to represent the real reality rather than a fictional one. The six documentaries mentioned in this article, when creating suspense, often exhibit traces of "reenactment" and symbolic representation in scenes narrating scientific stories, and the use of digitally synthesized animated scenes is also common. Even the "hypothesisdeduction" editing method is not always used. However, due to the firm position of science, the content presented through suspense can still allow people to make real and credible judgments, providing us with an index to the real world. Here, reality is not just a value judgment by the creators but also an acknowledgment by the audience of the truth of science.

Suspense using real source material represents the factual level of referring to real events and people; the editing methods rooted in scientific thinking represent the meaningful level, serving as the encoding practice of truthful narration by the creators; and the audience's reverence for science represents the imaginative level, projecting the audience's belief in science as a reality. These three elements, each from the perspective of imagery, production, and the audience, collectively point to the true nature of science and educational documentaries. All three are essential and indispensable in maintaining the authenticity of science and educational documentary.

# **3.** The internal and external factors that lead to the continuous emergence of suspense in educational documentaries

In science and education documentary, the creation of suspense and the reference to reality are dialectically united. The three major methods represent the concrete manifestations of suspense, while the essence of reality is the sum of the internal features of suspense. This relationship provides a framework for exploring the reasons for the existence of suspense from both external and internal factors.





Since the 1980s, under the dual influence of mass culture and market economy in Western societies, media competition has become increasingly fierce, challenging the elite nature of documentaries, and people's conception of reality has undergone changes. Influenced by postmodernism, which questions everything, the concept emerged in new documentary films that the process of exploring reality is more meaningful than reality itself. It was believed that all means used in fiction films could serve new documentary films, and even fictional methods could achieve authenticity. The trend of entertainment in the documentary field has been growing stronger.

Suspense is an important rhetorical device in the entertainment-oriented production of documentaries. It serves the narrative of documentaries and involves visual and auditory language knowledge, including camera movements, composition of frames, and plot design. Suspense can also enhance the expression of scientific themes in documentaries and improve the effectiveness of scientific communication, which has led to a significant focus on suspense in educational documentaries. With the continuous development of globalization and commercialization, the theoretical perspectives and production experiences of Western documentaries have also transcended national boundaries and had a significant impact on China since the 1990s. The widespread use of suspense in Chinese educational documentaries is deeply influenced by a large number of educational documentaries produced by the BBC in the UK and Discovery in the United States. However, the internal reasons, namely, the inherent characteristics of educational documentaries, are the more fundamental reasons for this trend.

The use of suspense in educational documentaries focuses on employing visual and auditory techniques to explain natural, societal, and cultural phenomena from a scientific perspective. It showcases a wide range of fascinating scientific knowledge and concepts. At the same time, suspense enriches the aesthetic expression of documentary images, enhances their appeal, sparks the audience's interest in science, and encourages them to become more invested in the fate of the researchers. Ultimately, it contributes to the improvement of public scientific literacy. The presence of suspense in educational documentaries is, in fact, significantly influenced by the three inherent characteristics of such documentaries: scientific, artistic, and entertaining aspects.

**Firstly,** this aligns with the scientific need to focus on the domain of uncertainty in scientific research. Heidegger believed that what we call science today is fundamentally a form of inquiry. Specific scientific research involves lengthy, complex processes and faces significant uncertainty. Karl Popper also argued that science is not about seeking certainty but about constantly questioning and experimenting. Science is not a rigid theoretical dogma; it is open to questioning. The cognitive function of science often thrives on uncertainty, inspiring scientists with a strong curiosity to explore the laws of nature and society by investigating various phenomena. Therefore, one of the core characteristics of scientific research is uncertainty. Science education documentaries, due to their emphasis on the field of science, often deal with scientific topics that are inherently uncertain. Examples include "Apollo 11" and the moon landing project, "Chasing Ice" and climate change, "Impossible Engineering" and bridge construction, "The Mars Generation" and interstellar exploration, "A Plastic Ocean"





and environmental protection, and "The Great Hack" and data analysis. This inherent uncertainty forms the fundamental psychological basis for the creation of suspense because uncertainty can stimulate human curiosity and innovation, as illustrated by the narration in "The Edge of All We Know" that states, "Science is a journey that takes you to places you've never set foot in before." The three major suspense techniques draw material from scientific fields that are filled with uncertainty. They use scientific thinking methods to create various hypotheses and experiments and then resolve questions related to scientific principles and the application of inventions through the presentation of confirmed scenarios. These elements not only enhance the scientific content and credibility of documentaries but also provide a broad and convenient stage for the extensive use of suspense rhetoric in science education documentaries' exploration of the world.

**Secondly,** there is an artistic need to enrich the aesthetic expression of science education documentaries. Science education documentaries do not simply replicate the entire scientific research process on screen but selectively curate their material. This creates a foundation for using artistic techniques to portray suspense, akin to how the development of science heavily relies on reevaluating and reconstructing our basic concepts. The use of suspense prompts science education documentaries to favor topics with dramatic elements, often centering around vivid stories of scientists engaged in the process of scientific application. This approach encourages the extensive use of various audiovisual techniques, overcoming the traditional methods of bluntly conveying values and the preachy expression often found in science education documentaries.

Simultaneously, it drives documentaries to strive for structured, fluent narratives with wellbalanced pacing and clear, natural plotlines. This aids science education documentaries in using audiovisual means to showcase scientific content more effectively and facilitate the dissemination of scientific and technological knowledge and cultural insights to the audience. It provides viewers with a dual sensory aesthetic experience and artistic enjoyment. After all, documentaries are an art form of expression rather than purely a scientific endeavor. All of these elements contribute to enriching the aesthetic expression of science education documentaries. In the creation of suspense, science education documentaries like "The Great Hack," "A Plastic Ocean," "Impossible Engineering," "Chasing Ice," "Apollo 11," and "The Mars Generation" employ various visual techniques such as aerial photography, underwater photography, time-lapse photography, as well as a combination of wide shots, close-ups, and extreme close-ups, coupled with the meticulous synchronization of music and visuals. For instance, in "Apollo 11," during the suspenseful moment of the rocket launch, different scenes are intercut, and various camera angles, including close-ups and wide shots, are employed. These visual techniques, combined with the soundtrack's dramatic music, create a clear and fluid aesthetic expression. Suspense is further enhanced by utilizing the scientific deductive editing method to present a series of interconnected, temporally and spatially intertwined scientific scenarios, narrating captivating scientific stories. The scientific thoughtfulness embedded in the visual content can also stimulate contemplation and reflection on one's values and life, imbuing the documentary with profound humanistic care.



In the end, this is the entertainment need that imparts a popular attribute to the content of the visuals. Traditional educational documentaries are filled with cold mechanical parts, complex abstract professional terminology, and profound and obscure theoretical knowledge. To capture the audience's attention with these dull visuals, the best way is to give the visuals a popular and easy-to-understand entertainment attribute. Suspense, as a narrative method designed to attract the audience's attention to scientific knowledge in educational documentaries, on the one hand, creates vivid and intuitive scientific images through popular means such as reducing specialization and authoritative guidance. For example, in "Hong Kong-Zhuhai-Macao Bridge," calculations and simulations are required for cable length, connection accuracy, and docking positions during the installation of immersed tube tunnels. Still, with the help of narration, sound effects, and animated scenes, a compact suspenseful atmosphere is created, reducing the professionalism of the installation process. Combined with the engineers' on-site coordination, the visuals become lively and interesting.

On the other hand, suspense conveys the creator's obvious emotional bias, making the scientific attributes tend toward non-purity in expression. For example, in "The Mars Generation," the transmission of suspense through the teenagers participating in the aviation summer camp testing their homemade model rockets, exploring robots, filtering water, and fireproof materials reveals the creator's interest in increasing teenagers' exploration of Mars and confidence in future Mars missions. Although the entertainment attribute reduces the professionalism and purity of science, suspense can build a bridge between the audience and the characters, allowing more viewers to feel the characters' emotions, thus projecting the audience's scientific beliefs into the science stories and guiding genuine judgments based on subjective emotions. Documentaries like "Plastic Ocean" and "Chasing Ice," due to the enhanced environmental awareness and the feasibility of solutions behind the suspense of the destruction of the ecosystem caused by human activities, actually overflow with the director's appreciation for human actions and efforts. The audience can also make a genuine judgment that the ecosystem is gradually changing in a positive direction as a result.

The above three points are the internal reasons for the existence of suspense, among which the uncertainty of scientific research is the foundation for the existence of suspense, as uncertainty leads to the infinite possibilities of change. The artistic need for aesthetic expression is the core, as it determines the specific content of suspense. The bestowal of entertainment attributes is crucial, as it can attract the audience's attention and achieve the important goal of disseminating scientific knowledge. Internal and external factors together contribute to the widespread presence of suspense in educational documentaries.

## CONCLUSION

The suspense in educational documentaries can be divided into three types: informational suspense, natural suspense, and narrative suspense. They integrate the true nature of the subject matter into the processes of material acquisition, editing methods, and the reverence for science. The presence of suspense is the result of the combined influence of external factors and the inherent characteristics of educational documentaries, with the inherent characteristics





holding a more significant position. However, the use of suspense is still in the process of exploration. If it is used solely to capture attention without satisfying the audience's expectations, it can lead to an imbalance between the setup and release of suspense, falling into the trap of mystification and overuse of suspense. This is another extreme compared to the mechanical imparting of values and rigid moral preaching. Suspense should seek the best balance between the content expressed in educational documentaries and the form in which it is presented. Through skillful use of audiovisual techniques and the complementary application of scientific thinking, logical reasoning, and scientific spirit, educational documentaries can combine clear storytelling, good pacing, and concise editing with scientific discoveries, interviews, and explorations. This approach can evoke inner anxiety in the audience while providing moments of enlightening revelation, creating a comfortable viewing experience.

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