

Representations Of French Nuclear Tests In Algeria In Cinema

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Received: 13/05/2024; Accepted: 19/09/2024

ABSTRACT

The cinema has addressed the subject of French nuclear tests in Algeria, which took place between 1960 and 1966, as part of historical and political narratives. These events have been transformed into dramatic and artistic material, revealing their tragic aspects and their impact on the Algerian people and the environment. Through artistic visions that merge fiction with reality, filmmakers have created narratives that simulate the destructive effects of these tests, focusing on their environmental and human repercussions.

Global cinema has also represented the nuclear bomb in various films, tackling political and social concerns associated with nuclear wars. These films offer diverse perspectives on the widespread destruction caused by nuclear weapons from different angles.

This article begins by examining whether films addressing the topic of nuclear bombs constitute an independent genre or fall within existing cinematic categories, such as war films or science fiction. It then explores the representation of the effects of nuclear bombs in global cinema, as well as how French nuclear tests in Algeria have been depicted in both fictional and documentary films.

Keywords: Nuclear tests; film genre; film; fiction; documentary.

Introduction

FIRST: THE ISSUE OF GENRE AND CLASSIFICATION IN CINEMA

1- The Concept of Genre and Classification

Cinematic genres, such as action, comedy, drama, horror, and science fiction, have long served as shortcuts for both audiences

and filmmakers. They act as guiding markers, helping viewers understand what to expect and enabling filmmakers to meet or subvert these expectations. According to Tom Ryall's definition, adopted by Stephen Neale in his book *Genre* (1980) and later by Michael Rick Altman in his book *Film/Genre*, cinematic genres are "patterns/forms/styles/structures that go beyond individual films, governing both their construction by filmmakers and their interpretation by audiences" ¹.

The Oxford Dictionary of Film Studies similarly defines cinematic genres as classifications based on shared characteristics among a group of films, such as plot, narrative style, or even the themes they address. Genre serves as a mode of communication between filmmakers and audiences, shaping viewers' expectations about a film's nature before watching it ². For example, when an audience chooses to watch a horror film, they anticipate an atmosphere filled with fear and tension, while a comedy film is expected to provoke laughter and present lighthearted, fast-paced storylines. Films are typically classified using the following mechanisms ³:

- **Classification Based on Plot:** Films are categorized primarily by their storyline, such as:
 - **Adventure Films:** Revolve around journeys filled with risks and challenges.
 - **Mystery and Crime Films:** Focus on solving puzzles and crimes.
- **Classification Based on Themes:** Films are categorized based on their central theme, such as:
 - **War Films:** Center on military conflicts and their impacts.
 - **Romance Films:** Highlight emotional relationships and love stories.
- **Classification Based on Target Audience:** The intended audience plays a crucial role in classification, where films can be categorized by age group or gender, such as:
 - **Children's Films:** Suitable for younger audiences with simple content.
 - **Adult Films:** Contain complex themes or scenes requiring maturity to comprehend.
 - **Feminist Films:** Address women-centric topics or are produced and directed by women.

Cinematic genres provide a framework for deeper understanding of the messages a film aims to convey and the ways it interacts with its audience. They contribute to organizing the industry,

facilitating communication with viewers, and offering analytical tools for critics and researchers.

2- Cinematic Genres and the Issue of Classification

Genres serve as frameworks that help classify films based on their shared characteristics (such as drama, horror, and science fiction). Occasionally, what are known as "subgenres" emerge, characterized by unique traits stemming from specific historical or cultural contexts. A prominent example of this is "**Atomic Cinema**," which flourished in the 20th century, focusing on issues related to nuclear energy and the fears of its consequences.

1- Critics Supporting the Distinctiveness of Cinema Addressing the Nuclear Bomb

John Mathis is one of the most prominent advocates for the autonomy of "Atomic Cinema" as a unique genre. He emphasizes the need to recognize Atomic Cinema as a distinctive category, reflecting the spirit of the nuclear age during the Cold War. In his study *Atomic Cinema in America: A Historical and Cultural Analysis of a New Cinematic Genre Reflecting the Spirit of the Nuclear Age in the Cold War (1945–1989)*, he describes it as "a unique genre born from the nuclear age's zeitgeist during the Cold War, unified by its focus on themes of nuclear fear, governmental distrust, and the catastrophic consequences of human technological arrogance"⁴.

Mathis asserts that Atomic Cinema is characterized by thematic unity, deeply rooted in the cultural and psychological impacts of the Cold War. He argues that these films reflect the nuclear zeitgeist, exploring fears related to nuclear war, government control, and the ethical ramifications of scientific progress. Mathis points to recurring visual and narrative patterns, such as the harrowing imagery in *On the Beach* (1959), nuclear monsters in *Godzilla* (1954), and Cold War hysteria in *Dr. Strangelove* (1964), as evidence of the cohesive identity of this genre.

He compares Atomic Cinema to other historically specific genres, such as Film Noir and the Western, which emerged as responses to particular cultural and social pressures, strengthening his argument for recognizing Atomic Cinema as an independent genre.

On the other hand, Charles Maland, while not explicitly classifying "Atomic Cinema" as an independent genre, analyzes films like **Dr. Strangelove** to examine how cinema has been used to critique and reflect societal concerns about nuclear issues. His work suggests that films addressing nuclear themes serve as important cultural artifacts, challenging dominant ideologies and prompting critical reflection on technological advancements and strategies. Maland

describes these films as a distinctive cultural genre narrating the nuclear age, offering audiences a narrative framework to process existential terror and societal shifts brought about by atomic technology ⁵. He emphasizes their historical specificity and considers Atomic Cinema a cultural archive that provides unique insights into nuclear anxieties during the mid-20th century.

Jack Shaheen shares a similar stance, categorizing Atomic Cinema as an independent genre. He defines it as a type of film that integrates the fears and realities of the atomic age into its narratives, featuring recurring motifs such as nuclear disaster, post-apocalyptic survival, and ethical dilemmas surrounding scientific progress. He views it as a unique art form due to its continuous engagement with nuclear war and its repercussions. Shaheen highlights recurring narrative structures, such as the lone scientist warning humanity in *The Atomic City* (1952) and communities rebuilding themselves after nuclear destruction, as in *The Last Man on Earth* (1964) ⁶. His main argument is that Atomic Cinema combines entertainment with political commentary, making it a distinctive cinematic genre.

Tony Shaw indirectly supports the classification of Atomic Cinema as an independent genre through his analysis of its distinctive role in propaganda and culture during the Cold War. He argues that it forms a cohesive subcategory within Cold War Cinema, defined by its thematic preoccupation with nuclear fear and its visual language of destruction and survival.

Although Tony Shaw's primary focus was on Cold War Cinema in general, he considers Atomic Cinema a unique subgenre that addresses concerns related to nuclear weapons. Shaw asserts that Atomic Cinema developed its own set of conventions and visual language to express the existential horror of nuclear annihilation ⁷. Examples include the use of symbolic monsters in *Them!* (1954) and post-apocalyptic landscapes in *The World, the Flesh, and the Devil* (1959).

Mathis, Shaheen, and Maland classify Atomic Cinema as an independent genre or a category unified by a central theme and contextual characteristics, sharing the following features:

- **Thematic Focus**

Central elements of Atomic Cinema include nuclear fear, ethical dilemmas, and catastrophic consequences.

- **Cultural and Historical Context**

Definitions consistently highlight the Cold War and the atomic age as the historical forces driving this genre.

- **Narrative and Visual Coherence**

Recurrent motifs such as mushroom clouds, post-apocalyptic landscapes, and distrust in government are integral to these films.

2- Critics Rejecting the Distinctiveness of Cinema Addressing the Nuclear Bomb

On the opposing side, Rick Altman rejects the idea of Atomic Cinema as an independent genre, arguing that it operates as a thematic subcategory within science fiction or other established genres. In his critique, Altman emphasizes the fluid and structural nature of cinematic genres, noting that Atomic Cinema lacks the structural and industrial coherence required for recognition as a distinct genre. In his book *Film/Genre*, he states: "Genres are audience-driven structures shaped by cultural needs and expectations. Atomic Cinema heavily borrows from existing genres like science fiction and horror, preventing it from forming an independent identity"⁸. Altman contends that films with an atomic theme merely adapt the conventions of existing genres to reflect Cold War anxieties rather than creating a new and distinct genre.

Steve Neale similarly denies Atomic Cinema recognition as an independent literary genre, viewing it as a temporary historical phenomenon rather than a cohesive and enduring category. Neale argues that for genres to gain official recognition, they must demonstrate adaptability and relevance over time. In his book *Genre and Hollywood*, Neale describes Atomic Cinema as closely tied to the Cold War era, lacking the longevity and industrial framework necessary for recognition as an independent genre. He highlights the significant overlap between Atomic Cinema and science fiction, political thrillers, and horror films, stressing that thematic elements like nuclear fear and apocalypse are not distinct enough to warrant separate classification⁹. Neale also criticizes the decline of this genre after the Cold War, asserting that its reliance on historical context undermines its standing as an independent genre.

Peter Hutchings also rejects the classification of films about the nuclear bomb as a distinct cinematic genre, considering them a thematic branch within the framework of science fiction. In his critique, Hutchings argues that the defining features of Atomic Cinema, such as nuclear fear, scientific hubris, and post-apocalyptic scenarios, are fundamental components of the broader science fiction genre. In his book *Science Fiction Film: A Critical Introduction*, he notes: "The thematic concerns of Atomic Cinema integrate seamlessly into the broader fabric of science fiction, rendering the idea of a separate genre redundant"¹⁰. Hutchings considers films with an atomic theme as part of science fiction's response to the prevailing anxieties of their time, rather

than a standalone category with its own industrial or narrative structures.

Vivian Sobchack shares this perspective, asserting that Atomic Cinema is not an independent genre but rather a part of American science fiction. In her critique, Sobchack points out that the boundaries of Atomic Cinema are too broad and overlap significantly with the themes of other genres. In her book *Screening Space*, she argues: "The imagery of nuclear destruction and the apocalyptic narrative framework are integral to the broader project of science fiction, making Atomic Cinema more of a thematic variation than a distinct genre" ¹¹. Sobchack also critiques the temporal limitations of Atomic Cinema, noting that its cultural significance waned with the end of the Cold War, further weakening the argument for its classification as an independent genre.

Arguments Against the Independent Genre Status of Atomic Cinema

- **Overlap with Other Genres**

Critics consistently argue that Atomic Cinema borrows heavily from science fiction, horror, and political thrillers, preventing it from achieving the status of an independent genre.

- **Historical Context**

The reliance on the cultural and historical context of the Cold War is seen as a limiting factor. Once the Cold War ended, the thematic relevance of Atomic Cinema diminished.

- **Ambiguity of Genre Characteristics**

Scholars like Altman and Sobchack emphasize that genres are constructed categories that frequently overlap. The thematic focus of Atomic Cinema on nuclear fears does not provide sufficient distinction from other genres.

- **Lack of Industrial and Narrative Framework**

Atomic Cinema is perceived as lacking the industrial infrastructure and distinctive narrative conventions necessary to form a cohesive genre.

In the contemporary era, the boundaries between genres have increasingly blurred, giving rise to hybrid narratives that challenge traditional classifications and offer audiences richer experiences ¹². For instance, a film like *Get Out* combines horror, thriller, and social commentary, resisting categorization within a single genre.

The result has been a blend of narrative styles, where comedy can coexist with romance, and drama with science fiction. Filmmakers now have an appetite for this unconventional mixing, shaped by audiences exposed to diverse cinematic styles ¹³. For example, Bong Joon-ho's *Parasite* blends dark comedy, thriller, and social critique, blurring genre boundaries to create a unique story that received global acclaim. Similarly, Marvel's superhero films, typically classified as adventure or action, include elements of humor, drama, and even heist films, catering to a broad audience.

The collapse of genre boundaries also stems from technological advancements that allow directors to experiment with visual storytelling. Animation, once limited to family-friendly films, now intersects with other genres, such as crime and mystery (*Spider-Man: Into the Spider-Verse*) or science fiction (*Ghost in the Shell*). These innovations demonstrate that genres are not rigid frameworks but tools that can be combined to enhance narrative and artistic expression.

Despite its creative potential, this blending is not without challenges. Critics struggle to classify such films, leading to marketing difficulties and audience confusion. Award institutions also grapple with these complexities, as their strict genre-based categories cannot accommodate hybrid works. However, this trend of breaking genre boundaries reflects a profound shift in cinematic language ¹⁴, encouraging audiences to engage with stories on their own terms.

The blending of genres in cinema mirrors a broader cultural shift toward embracing complexity and rejecting binary distinctions. This approach highlights the multifaceted nature of human experiences, often transcending traditional storytelling boundaries. It is likely that the future will see this trend continue, with genres serving as threads woven into a richer tapestry of narrative art.

SECOND: REPRESENTATIONS OF THE NUCLEAR BOMB IN GLOBAL CINEMA

These films partially explored the theme of the nuclear bomb, with their production coinciding with the end of World War II. They shared several common points:

- **Key Themes:** Energy, environmental disasters, apocalypse, and total destructive war.
- **Social Issues:** Focus on various nuclear-related issues and conflicts among powerful, wealthy nations.
- **Visual Effects:** Reliance on visual effects to depict nuclear explosions or post-apocalyptic conditions ¹⁵.

Since its emergence during World War II, the nuclear bomb has become a symbol of absolute destruction, a warning against the dangers of advanced technology, and a tool to address complex political and ethical issues. This subject has been tackled from various perspectives in cinema, portraying the bomb's devastating effects, the political tensions arising from the arms race, and even fictional reflections on its future impact.

Films began by documenting the nuclear bomb from historical and ethical viewpoints, providing audiences with an opportunity to understand its origins and consequences. For instance, *The Beginning or the End* (1947) by director Norman Taurog was among the first attempts to present the story behind the Manhattan Project. The film depicted the development of the idea into a weapon that changed the course of World War II. It raised ethical questions about the decision to use nuclear weapons, making it an important work addressing a sensitive issue.

In 1959, *Hiroshima Mon Amour*, directed by Alain Resnais, added a deeply human dimension. Through a tragic love story between a Japanese man and a French woman, the film explored the memories of Hiroshima survivors, making it a cinematic masterpiece that delved into pain and healing.

Similarly, *Fat Man and Little Boy* (1989) by Roland Joffé addressed the details of the Manhattan Project¹⁶. It focused on the ethical dilemmas faced by the scientists, including Robert Oppenheimer, who grappled with the weight of responsibility.

1- Depiction of Destruction and Its Human Impact

During the 1960s and 1970s, cinema began to reflect the human aspect of nuclear disasters by portraying their effects on individuals and communities. *Black Rain* (1989) by Ridley Scott told the stories of Hiroshima survivors, depicting the daily suffering caused by nuclear radiation. This tragic human story highlighted the physical and psychological pain associated with nuclear catastrophes.

Through anime, *Barefoot Gen* (1983), directed by Mori Masaki, drew from the director's personal experiences as a Hiroshima bombing survivor. It presented a poignant portrayal of a Japanese child who survived the nuclear devastation but endured its harrowing aftermath. Based on a popular manga, the film used simple yet profound illustrations to spotlight the suffering of children and their families.

In 2007, *White Light/Black Rain* by Steven Okazaki emerged as a powerful cinematic documentary, presenting firsthand accounts from Hiroshima and Nagasaki survivors. This honest work

documented the unforgettable human pain, making it a significant historical testament.

The Cold War and Nuclear Fear

As tensions escalated during the Cold War, the nuclear bomb became a central theme in films addressing fears of nuclear armament and crisis management. *Dr. Strangelove* (1964), directed by Stanley Kubrick, used dark comedy to satirize the madness of the nuclear arms race. The film revolves around a general named Jack D. Ripper, who launches a nuclear attack on the Soviet Union without authorization. The U.S. president and his team try to prevent the disaster, emphasizing the human errors that could lead to catastrophe¹⁷.

In the 1980s, films such as *Threads* (1984) by Mick Jackson offered a grim and realistic depiction of the catastrophic effects of nuclear war on the city of Sheffield, England, and its inhabitants. This British television production employed a powerful documentary style, immersing viewers in the horrors of nuclear destruction and its resulting social and economic collapse. It remains one of the most impactful films in illustrating the human consequences of nuclear war and is often cited as a stark cinematic warning against the dangers of nuclear weapons.

Similarly, *The Day After* (1983), directed by Nicholas Meyer, was an American television drama produced by ABC. It depicted the aftermath of a nuclear strike on a small town in Kansas and its residents. The film focused on the human and environmental consequences of the disaster and became one of the most influential films of the Cold War era. Upon its release, it sparked widespread debate and heightened awareness about the risks of nuclear war.

2- The Nuclear Bomb in Science Fiction

Science fiction has served as a tool for expressing fears about nuclear power in innovative ways. *Godzilla* (1954), directed by Eiji Tsuburaya, symbolized the environmental anxiety stemming from nuclear testing, with the monster embodying uncontrollable destruction.

In *Planet of the Apes* (1968), the story follows astronauts on a space mission who end up on a strange planet in the distant future. They discover a world ruled by intelligent, talking apes who dominate humans, now living as wild, rightless creatures. As the story progresses, it is revealed that the planet is actually Earth, devastated by nuclear wars. The iconic ending features the partially buried Statue of Liberty as evidence of humanity's collapse¹⁸.

In modern times, John Hillcoat's *The Road* (2009) depicted a devastated world following an unspecified catastrophe. The film follows the journey of a father and son struggling to survive under harsh conditions, making it a powerful expression of the human tragedy that nuclear disasters could leave behind.

More recently, films have sought to spotlight the ethical responsibilities and ongoing risks associated with nuclear weapons. Christopher Nolan's *Oppenheimer* (2023) offers a dramatic portrayal of physicist Robert Oppenheimer's life, focusing on his role in the Manhattan Project and the profound impact of his decisions on history.

3- Documentaries and Historical Recordings

On the documentary front, British filmmaker Lucy Walker's *Countdown to Zero* (2010) tackled the issue of nuclear weapons and the risk of their proliferation, emphasizing the potential for nuclear catastrophe through accidents, terrorism, or flawed political decisions. The film delves into the history of nuclear weapons and the contemporary challenges of arms reduction, featuring interviews with prominent figures such as Mikhail Gorbachev and Tony Blair.

The Bomb (2016), directed by Kevin Ford, Smriti Keshari, and Eric Schlosser, presented an innovative visual experience exploring nuclear weapons and their enduring impact on humanity. Combining archival footage with artistic visual performances, supported by a powerful score from the band The Acid, the film highlights the risks and challenges associated with nuclear weapons, from their historical development to their persistent modern-day threats. Its artistic approach aims to provoke thought and awareness about nuclear issues without relying on traditional narration.

Documentaries have also chronicled the early stages of nuclear bomb testing and their long-term effects. *Trinity and Beyond* (1995), directed by Peter Kuran, examines the history of nuclear weapons, starting with the first-ever nuclear test, the "Trinity Test," conducted in July 1945, and extending to the subsequent development of hydrogen bombs and nuclear tests by the United States and other nations. Utilizing rare archival footage, some of which was previously classified, the film showcases the development and testing phases of nuclear weapons. Narrated by actor William Shatner and accompanied by an epic score by William T. Stromberg, the film offers a comprehensive view of the history of nuclear weapons, focusing on their scientific aspects and devastating effects. It serves as a powerful warning about the ongoing dangers of these weapons.

THIRD - REPRESENTATIONS OF FRENCH NUCLEAR TESTS IN ALGERIA

1- Historical Context of French Nuclear Tests in Algeria

The French nuclear tests conducted in Algeria between 1960 and 1966 represent a chapter of colonial crimes committed by France. During this period, France carried out approximately 57 nuclear tests in the vast Sahara Desert ¹⁹, leaving behind significant environmental damage, health consequences, and political tensions. This section examines the historical context, details of the tests, and their enduring impact.

Following World War II, France initiated its nuclear weapons program to assert its independence and solidify its status as a global power. In the late 1950s, France chose the vast Algerian desert as the site for its nuclear experiments while Algeria was engaged in a bloody war for independence. As Algeria was a French colony at the time, France exploited this status to militarize the region. The remoteness of the Sahara was believed to minimize international scrutiny and local resistance.

Nuclear Tests:

The French nuclear testing program was divided into two phases ²⁰.

1. Atmospheric Tests (1960-1961):

These included four tests conducted at the Reggane site, known as the "Gerboise" series. The series began with the detonation of "Gerboise Bleue" on February 13, 1960, a 70-kiloton bomb, making France the fourth country to join the nuclear club.

2. Underground Tests (1961-1966):

Following global condemnation of atmospheric tests, France initiated underground testing at the In Ekker site. More than 13 underground tests were conducted to reduce radioactive fallout, though some caused radiation leaks and contamination ²¹.

Type of Test	Location	Number of Tests
Atmospheric Tests	Reggane	04
Underground Explosions	Tan Afella (In Ekker)	13
Complementary Tests	Reggane	35

Secret Tests	Tam Atram (In Ekker)	05
Total	3 Locations	57

A table representing the number, type, and locations of nuclear tests in Algeria.

These tests remain a reminder of the human and environmental costs of developing nuclear weapons, and their consequences continue to affect Algerians.

2- Nuclear Tests in Fictional Films

The French nuclear tests were vividly portrayed in fictional films. One notable example is *Desert Flower* by director Osama Ben Hussein. This 26-minute short film depicts the life of an Algerian family temporarily residing in the Reggane area in southern Algeria²². The director intertwines personal tragedy with historical events during the French nuclear tests in Reggane, offering a deeply human perspective. The film also highlights the harm suffered by French soldiers, delivering a scathing critique of the colonial mindset, which displayed blatant disregard for the lives and suffering of Algerians.

French nuclear tests in southern Algeria are portrayed as a symbol of exploitation and neglect, characteristic of colonial rule. The film blends the personal tragedy of Abbas with the broader historical context, emphasizing the far-reaching impacts of such events. The land becomes a silent witness to the tragedy, with the once-beautiful and resilient landscapes of Reggane scarred by the destructive power of nuclear technology. Environmental degradation becomes a reflection of human suffering, with both the land and its inhabitants bearing the burden of exploitation.

The film is distinguished by its poetic visual storytelling, presenting the desert as a living environment and a character in its own right. The vastness and isolation of the landscapes underscore human fragility in the face of greater forces, contrasting the natural beauty with the intrusion of military equipment and radiation warnings. Through the eyes of Abbas and his small family, the narrative becomes intimate and emotional, evoking deep empathy for the victims. The symbolism of the desert flower, after which the film is named, adds another dimension, representing the fragility and beauty of life.

The film relies heavily on visuals and ambient sounds rather than extensive dialogue, creating a contemplative atmosphere that allows the events to resonate deeply with viewers. Silence here is not emptiness but an expressive tool reflecting the pain and neglect endured by the victims²³.

"Desert Flower" received wide acclaim for its ability to convey a complex historical tragedy through a brief yet impactful narrative. Critics praised its cinematography and humane approach to the tragedy, describing it as an artistic work that encourages reflection and remembrance. While the film's short duration limits its exploration of deeper historical aspects, its focus on Abbas's personal experience adds extraordinary power, making it an inspiring window for audiences to learn about the tragedy of nuclear tests in Algeria.

In contrast, the 2006 drama *Vive la Bombe!* by Jean-Pierre Sinapi tackles the Beryll test, a French nuclear experiment conducted in Algeria in 1962. The film blends historical fact with human narratives to offer a sharp critique of the consequences of nuclear tests on military personnel and the environment. It reflects the political and military decisions that exposed soldiers to harmful radiation²⁴, painting a grim picture of the events and highlighting the human and environmental costs of prioritizing military experiments over safety protocols.

However, the film presents a somewhat biased perspective, as its primary focus is on the harm suffered by French soldiers who participated in the tests without being aware of their long-term health consequences. Sinapi emphasizes the personal stories of survivors, underscoring their courage.

The film raises ethical questions about the responsibilities inherent in scientific and military endeavors, criticizing the arrogance of governments that gamble with human lives for geopolitical power. It highlights the lack of adequate safety measures and the blatant disregard for victims.

Additionally, the film addresses the environmental devastation caused by the nuclear test, pointing to the radioactive contamination in the Sahara Desert and its far-reaching consequences, serving as a cautionary tale about irreversible damage.

Cinematically, Sinapi weaves together historical events and emotional drama, making the film both informative and impactful. Archival footage intertwines with fictional storytelling to vividly depict the incident and its aftermath. The narrative focuses on the soldiers' experiences and struggles, humanizing the nuclear disaster and making its effects more relatable and comprehensible.

3- Nuclear Tests in Documentary Films

A. Gerboise Bleue (2009):

Gerboise Bleue is a documentary directed by Djamel Wahab, exploring the history of French nuclear tests in the Algerian desert between 1960 and 1966. The 90-minute film relies on testimonies from victims in both France and Algeria, combining interviews and archival footage ²⁵.

The film highlights the accounts of two former soldiers who served at the nuclear test sites in the desert:

- **Lucien Perfect:** A soldier affected by the "Beryl" test, now suffering from severe physical disabilities and undergoing frequent surgeries.
- **Gaston Morizot:** Living with a radioactive lung and premature spinal aging, he relies on morphine and antidepressants.

In addition, the film presents the testimony of the Tuareg people of the Algerian desert, who were exposed to radiation without any protection.

❖ Focus and Main Themes of the Film:

The documentary examines the French nuclear tests in Algeria and their devastating effects on humans and the environment. The film is divided into three main themes:

1. **French Soldiers:** Exposed to radiation during their service, with the film portraying their ongoing physical and psychological suffering.
2. **Algerian Desert Residents (Tuareg):** Who were not evacuated from test areas despite French authorities being aware of the radiation risks.
3. **Political Collusion and Neglect:** Highlighting official French negligence in addressing the aftermath of these tests, along with a refusal to acknowledge mistakes or compensate victims.

❖ Visual Narration and Artistic Approach:

The film employs a cohesive cinematic structure, blending survivor and expert interviews with rare archival material. This balance between personal suffering and objective analysis enriches the narrative.

- **Cinematography:** The desert is depicted as an isolated and tragically beautiful environment, transformed into a site of destruction. Wide-angle shots emphasize its vastness and desolation.

- **Music:** A mix of somber melodies and dramatic compositions enhances the emotional impact and general rhythm of the film.
- **Archival Footage:** Used to illustrate the harsh conditions under which the tests were conducted, including footage of the nuclear detonations. These visuals highlight the contrast between official propaganda, claiming the tests were safe in uninhabited areas, and the grim reality.
- **Visit to "Ground Zero":** In a pivotal scene, the director takes viewers to the "Gerboise Bleue" site for the first time in 47 years. This moment underscores the erasure of history and the lingering effects of radiation.

The documentary focuses on the human aspect, highlighting individual suffering rather than relying solely on numbers and statistics. This approach fosters empathy for the victims and conveys the magnitude of the tragedy.

While the film acknowledges the soldiers' suffering as victims, it critiques the marginalization of the Algerian desert residents, who were treated as "invisible" by the colonial forces and even in the narrative of the tragedy.

❖ **Political and Historical Dimensions:**

The film delves into the political context in which the French nuclear tests were conducted, emphasizing France's ambition to establish itself as a nuclear power. In this pursuit, the authorities ignored the human and environmental consequences of the tests.

The documentary shows how France refused to acknowledge its responsibility for the disaster, whether toward Algerian residents or French soldiers. It highlights the authorities' complete disregard for the victims, as they rejected calls for investigations or compensation.

At the same time, the film does not absolve the Algerian government of responsibility, noting the lack of serious efforts to clean up affected areas or monitor the health of victims since independence.

❖ **Messages and Impact of the Film:**

Gerboise Bleue delivers a powerful message to its audience, asserting that the radioactive injustice endured by victims persists to this day.

- **Acknowledgment and Compensation:** Calls for official French acknowledgment of responsibility and victim compensation.

- **Historical Documentation:** Emphasizes the importance of this tragedy, preserving this dark chapter in collective memory.
- **Reconciliation:** Suggests that acknowledgment of injustice and efforts to address it could pave the way for reconciliation between nations.

The documentary raises pressing questions about justice and reparations, advocating for corrective actions to ensure that such tragedies are not repeated in the future.

B. At(h)ome (2013):

With a duration of 54 minutes, *At(h)ome*, directed by Elisabeth Leuvrey, explores the consequences of French nuclear tests in Algeria. The documentary follows the journey of Algerian photographer Bruno Hadji as he investigates radioactive zones in the Algerian desert, particularly in the Hoggar region ²⁶. The film highlights the devastating effects of the nuclear explosion at In Ekker on May 1, 1962, which is considered the most dangerous nuclear accident in the Algerian Sahara. Nearby villagers recount an increase in unexplained illnesses and deaths following the explosions, revealing a long-hidden reality.

❖ Focus and Themes of the Film:

1. Memory and Forgetting:

The persistent ignorance about the consequences of nuclear tests in Algeria, both among local populations and within the collective French consciousness. The director describes this as a collective amnesia, raising questions about France's responsibility and the need to acknowledge the harm caused by these tests.

2. Environmental Impact:

The radioactive desert areas are portrayed as polluted spaces that have been contaminated for decades, affecting the land, water, and the health of the population. The film illustrates how these once-inhabited lands have turned into desolate spaces embodying suffering and death.

3. Human Consequences:

Testimonies from the Algerian Tuareg reveal unexplained diseases, premature deaths, birth defects, and disabilities, emphasizing the devastating effects of radiation on local populations. The film gives voice to these often-forgotten victims, seeking recognition of their suffering.

❖ **Visual Narrative and Artistic Approach:**

Leuvrey employs a poetic visual style, combining Bruno Hadji's photography with filmed sequences to create a contemplative atmosphere. The haunting desert landscapes serve as a backdrop for reflecting on the invisible consequences of nuclear testing.

The sober and evocative storytelling immerses viewers in this largely unknown reality. The film's presentation at numerous international festivals sparked discussions about historical responsibilities and the lasting impact of nuclear tests. It has also been used as an educational tool to raise awareness about environmental issues and the rights of affected communities.

Elisabeth Leuvrey delivers a profound reflection on memory, responsibility, and resilience in the face of human-made catastrophes. The film calls for collective awareness and acknowledgment of past injustices.

C. Algeria: De Gaulle and the Bomb (2010):

Directed by Larbi Benchiha, this 52-minute film explores the human, environmental, and political repercussions of French nuclear tests ²⁷, focusing on three main themes:

1. Political and Strategic Motives:

The director delves into Charles de Gaulle's strategy, which viewed nuclear weapons as a means to restore France's dominance and ensure its independence during the Cold War between the U.S. and Soviet Union. The film examines the ambiguous areas in the Evian Agreements, particularly the concessions made to France to continue its military and nuclear operations within Algeria.

2. Human and Environmental Consequences:

The documentary highlights the devastating impacts on populated areas and local residents, many of whom were unaware of the dangers. It includes testimonies from desert inhabitants and survivors from nearby villages, showcasing severe health problems such as cancer and birth defects linked to radiation exposure.

3. Forgotten Memory:

The film condemns the complete disregard by French authorities for the extent of the damage caused by nuclear tests and the maps of nuclear waste sites in Algeria. The director questions why these events have been neglected compared to other aspects of Algeria's struggle for independence. He also addresses the other side in France,

focusing on compensation and acknowledgment of victims.

The documentary demonstrates how these operations reflected a form of neo-colonialism, as issues related to compensating Algerian victims and cleaning up contaminated sites continue to strain relations between the two nations. Despite this, France only recognized the effects of these tests decades later through the Moran Law of 2010, which has been criticized for its limited scope and ineffectiveness, having compensated only one individual to date.

Beyond Compensation:

The film expands the discussion beyond financial reparations to question France's moral and historical responsibility toward Algeria. It serves as a critical tool for understanding the profound impacts of France's colonial and nuclear history.

D. The Sandstorm (2010):

This is Larbi Benchiha's second documentary, subtitled The Desert of Nuclear Tests. Spanning 56 minutes, the film focuses particularly on the aftermath of nuclear tests and the consequences of this political and military decision ²⁸.

❖ Focus and Themes of the Film:

The documentary begins by contextualizing the nuclear arms race of the 1950s and 1960s. It focuses on the consequences of nuclear tests, emphasizing that these are not merely historical events but have ongoing impacts, including the spread of diseases, disabilities, and radioactive contamination of land and groundwater.

The director gives a voice to the victims and witnesses, shedding light on the suffering of Algerian desert inhabitants and French soldiers conscripted for these operations. The narrative presents the story from both French and Algerian perspectives, highlighting the following key aspects:

- **Ongoing Impact on Algerian Desert Inhabitants:**

Residents near test sites were often unknowingly exposed to significant radiation doses, leading to chronic illnesses, birth defects, and radiation-related cancers.

- **Consequences for French Soldiers:**

French soldiers involved in the tests testify to long-term health effects, ranging from respiratory problems to cancer.

- **Radioactive Contamination in the Algerian Desert:**

The film portrays the enduring effects, showcasing vast areas rendered uninhabitable for centuries due to radiation, along with groundwater and agricultural land contamination, disrupting the ecosystem.

By exploring perspectives from both sides of the Mediterranean, the film contrasts:

- In France, families of soldiers and scientists express a sense of national pride tainted by suffering and radiation exposure.
- In Algeria, residents denounce the French authorities' complete disregard and refusal to acknowledge their crimes or compensate victims.

The documentary also focuses on the colonial legacy of this complex issue, illustrating how the strategic decisions made at the time continue to strain relations between the two nations.

Larbi Benchih, in his second documentary, focuses on the inequality in treatment and the absence of compensation for Algerian victims, in contrast to the ongoing debates in France regarding reparations. The film not only condemns the facts but also aims to raise awareness about collective responsibility.

E. Algeria : Ground Zero (2022) :

Algerian director Karim Moussaoui presented a short documentary titled *Algeria: Ground Zero - The Hidden Gerboise*. The seven-minute film delves into the consequences of French nuclear tests²⁹, showcasing Moussaoui's cinematic ability to convey messages with depth and transparency through a mix of real-life footage, firsthand testimonies, and archival material.

❖ Focus and Themes of the Film:

The film features a humanistic and emotional approach, highlighting the testimonies of Algerian Tuareg residents who experienced the tests and their consequences. Moussaoui narrates stories of those affected by nuclear radiation, including health impacts such as cancer and skin diseases, as well as the loss of arable land and access to clean water due to contamination.

It also examines the environmental aspects of the catastrophe. The nuclear explosions in the Algerian desert caused widespread pollution, with radioactive remnants persisting to this day. Despite the decades that have passed, these effects underscore how nuclear actions were not momentary events but devastating

turning points in the environmental and social history of the region.

According to reports featured in the documentary, the residents of Reggane suffer from long-term consequences. Nuclear pollution continues to affect future generations, with elevated rates of chronic illnesses and congenital deformities.

On the environmental side, the Reggane area has experienced severe biodiversity loss and ecosystem degradation due to radioactive contamination. Areas once inhabited and vegetated have become abandoned, reflecting a nuclear disaster that remains inadequately addressed.

The film reignites discussions about France's responsibility for the nuclear tests conducted during the colonial era. It serves as a clear reminder of the need to address the aftermath of these tests, compensate victims, and clean up the affected areas.

In a broader context, the film highlights the importance of shedding light on similar issues in other parts of the world affected by nuclear testing or environmental disasters.

CONCLUSION

It can be said that cinematic representations of nuclear tests in Algeria uncover the colonial era, particularly concerning the nuclear explosions in the Algerian Sahara and their profound impact on humanity and the environment. Through our exploration of fictional and documentary films addressing these tests, it becomes evident that cinema engaging with the subject of nuclear explosions aligns with broader transformations in how the world perceives the notion of total destruction and colonial power. While this classification remains a topic of academic debate, films focusing on French nuclear tests in Algeria underscore the need for a deeper understanding of colonial legacies and their enduring effects.

Documentary films have provided factual narratives aimed at exposing the horrific truths of human suffering, whereas fictional films have focused on artistic and political expressions of those experiences, relying on evoking powerful emotions and presenting personal testimonies.

While these cinematic works contribute to preserving the collective memory of the Algerian people and survivors, they also call for a reexamination of historical and political responsibilities.

Cinema remains a powerful medium for expressing the experiences of nuclear tests in Algeria, serving to document the events, recall them repeatedly, and retell stories that official records may have suppressed.

ENDNOTES

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 - ² Kuhn, Annette, and Guy Westwell, eds. *Oxford Dictionary of Film Studies*. 2nd ed. Oxford: Oxford University Press, 2020, p. 560.
 - ³ *Ibid*, pp. 561–563.
 - ⁴ John R. Mathis, *Atomic Cinema in America: Historical and Cultural Analysis of a New Film Genre That Reflected the Nuclear Zeitgeist of the Cold War (1945–1989)* (PhD diss., Salve Regina University, 2013), p. 45.
 - ⁵ Charles Maland, "Dr. Strangelove (1964): Nightmare Comedy and the Ideology of Liberal Consensus," *American Quarterly* 31, no. 5 (Winter 1979): pp. 698–704.
 - ⁶ Shaheen, Jack G., ed. *Nuclear War Films*. Carbondale: Southern Illinois University Press, 1978, p. 24.
 - ⁷ Shaw, Tony. *Cinematic Cold War: The American and Soviet Struggle for Hearts and Minds*. University Press of Kansas, 2007, pp. 45–48.
 - ⁸ Altman, Rick. *Film/Genre*. BFI Publishing, 1999, pp. 32–36.
 - ⁹ Neale, Steve. *Genre and Hollywood*. Routledge, 2000, pp. 94–97.
 - ¹⁰ Hutchings, Peter. *Science Fiction Film: A Critical Introduction*. Berg, 1999, p. 67.
 - ¹¹ Sobchack, Vivian. *Screening Space: The American Science Fiction Film*. Rutgers University Press, 1997, p. 91.
 - ¹² Hantke, Steffen. "Boundary Crossing and the Construction of Cinematic Genre: Film Noir as 'Deferred Action'." *Kinema*, Fall 2004, pp. 12–14.
 - ¹³ *Ibid*, pp. 12–14.
 - ¹⁴ Altman, R. (1999). *Film/Genre*, pp. 14–27.
 - ¹⁵ Toni A. Perrine, *Film and the Nuclear Age: Representing Cultural Anxiety*, ed. Jerome Nadelhaft, *American Popular History and Culture* (Orono: University of Maine Press, 1998), pp. 7, 10.
 - ¹⁶ *Ibid*, p. 17.
 - ¹⁷ Charles Maland, "Dr. Strangelove (1964)," pp. 703–709.
 - ¹⁸ William Tsutsui, *Godzilla On My Mind: Fifty Years of the King of Monsters* (New York, NY: Palgrave Macmillan, 2004), p. 33.
 - ¹⁹ Samira Taqadi, *French Nuclear Tests in the Algerian Sahara: A Social and Historical Approach*. *Journal of Historical Studies*, Issue 17, December 2016, p. 329.
 - ²⁰ *Ibid*, pp. 329–330.
 - ²¹ *Ibid*, p. 230.

- ²² Osama Ben Hussein, *Desert Flower*, 2013.
- ²³ Osama Ben Hussein, *Desert Flower*, 2013.
- ²⁴ *Vive la Bombe!* Jean-Pierre Sinapi, 2006.
- ²⁵ Djamel Wahab: *Gerboise Bleue*, 2009.
- ²⁶ Elisabeth Leuvray: *At(h)ome*, 2013.
- ²⁷ Larbi Benchiha: *Algeria: De Gaulle and the Bomb*, 2010.
- ²⁸ Larbi Benchiha: *The Sandstorm: The Desert of Nuclear Tests*, 2010.
- ²⁹ Karim Moussaoui: *Algeria: Ground Zero – The Hidden Gerboise*, 2022.