

From screen to policy: Pre-COVID pandemic cinema, conspiracy culture, and the Muhan Project Phenomenon

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Abstract

This article explores the intersection of pre-COVID pandemic cinema, conspiracy culture, and their impact on public trust in health policy. Analyzing films like *Contagion* (2011), *Outbreak* (1995), *Flu* (2013), and *12 Monkeys* (1995) through Theodor Adorno's culture industry framework and Karen Douglas's conspiracy motives, it examines how narratives of institutional betrayal, bioweapons, and misinformation primed audiences for skepticism, amplifying conspiracy theories during the COVID-19 crisis. The study investigates unverified rumors of the USAID Muhan Project and DOGE-related claims, illustrating how cinematic tropes evolve into real-world conspiracies that challenge health initiatives. By tracing the films' predictive elements and psychological appeal, the article reveals their role in shaping public distrust. It proposes policy responses, including real-time fact-checking, transparent health funding, journalist training, public engagement, and media literacy, to mitigate cinema-fueled skepticism. Ultimately, the article underscores the need to harness media's influence to rebuild institutional trust, transforming cinematic narratives from sources of suspicion into tools for informed governance.

Keywords: Conspiracy culture, Culture industry, Health policy Distrust, Pandemic cinema, Misinformation, USAID Muhan project

1. Introduction

The 2011 film *Contagion* depicts a bat-borne virus triggering global disruption, a portrayal whose unsettling realism later appeared to foreshadow the COVID-19 pandemic. In one pivotal scene, a blogger's false claims about a suppressed cure ignite widespread panic, closely mirroring the conspiracy narratives that proliferated across social media during the 2020 lockdowns (Birchall & Knight, 2023). This cinematic moment encapsulates a broader cultural phenomenon: pre-COVID pandemic films such as *Outbreak* (1995), *12 Monkeys* (1995), *Contagion* (2011), and *Flu* (2013) have not only entertained audiences but have also shaped collective fears, priming viewers for institutional distrust during real-world crises. These narratives, frequently structured around tropes of bioweapons, governmental cover-ups, and orchestrated outbreaks, intersect with conspiracy culture, a pervasive skepticism toward public institutions, increasingly amplified by digital media technologies.

This article draws on Theodor Adorno's culture industry framework and Karen Douglas's theory of conspiracy motives to examine how pandemic films both reflect and intensify conspiracy culture. Particular attention is given to unverified narratives surrounding the alleged USAID Wuhan Project and DOGE-related claims concerning global health initiatives. Building on existing scholarship on the cultural anxieties embedded in pandemic cinema (Saran, 2022), the article advances the discussion by situating these narratives within East African contexts of medical distrust and digitally mediated conspiratorial discourse. The influence of cinema on public perception is not limited to health emergencies. As demonstrated by Guanah, Leader, and Onochie (2023) in their analysis of the Nigerian film *Issakaba*, cinematic representations of security threats significantly shape audience expectations of state authority and governmental response, underscoring film's broader role in the construction of societal trust and policy discourse.

The article further proposes policy-oriented responses, including enhanced institutional transparency and targeted media literacy initiatives, as strategies for mitigating the distrust reinforced by such cinematic narratives. It argues that pandemic films extend beyond entertainment, actively shaping public discourse and influencing perceptions of health governance. By examining how these films' seemingly predictive narratives precondition skepticism, the study traces their impact from fictional representations to tangible challenges in contemporary health policy and public trust.

2. Literature review

This section reviews the interdisciplinary body of scholarship at the intersection of pandemic cinema, conspiracy culture, health communication, and the historical foundations of medical distrust. It establishes the conceptual groundwork for the theoretical and analytical discussions that follow, demonstrating how the present study builds upon and extends existing research within these domains.

2.1. Pandemic Cinema as Cultural Text: Reflecting and Shaping Anxiety

Scholarly research increasingly recognizes pandemic cinema as a distinct genre that both articulates and amplifies societal anxieties surrounding global risk, institutional failure, and biological vulnerability. Han and Curtis (2020) examine how films such as *Contagion* represent distrust during epidemic outbreaks, arguing that these narratives institutionalize archetypes of betrayal, misinformation, and social disintegration that gain heightened relevance during real-world health crises. Pandemic cinema thus functions not merely as a reflective medium but as a didactic cultural form.

As Kendal (2021) demonstrates, outbreak films significantly influence public health literacy by shaping popular understandings of scientific authority, contagion, and crisis management. However, these representations frequently embed a baseline skepticism toward official narratives, thereby complicating public trust in expert knowledge and institutional responses. Such films often frame science as both salvific and suspect, reinforcing ambivalent attitudes toward public health governance.

The genre's evolution further reflects shifting cultural and political preoccupations. Wade (2022), in a sociological analysis of English-language outbreak narratives from 1995 to 2021, traces a movement from narratives centered on containment and resolution toward stories emphasizing systemic failure and institutional fragility. This shift mirrors broader anxieties associated with globalization, including the perception of porous borders, accelerated disease transmission, and diminished state control. Complementing this perspective, SEEJPH (2024) documents changes in cinematic pandemic discourse, observing that contemporary films increasingly portray public healthcare systems as vulnerable, ineffective, or corrupt, with cultural anxiety serving as a catalyst for social fragmentation.

Collectively, this body of scholarship establishes pandemic cinema as a dynamic cultural text that does more than depict fear. It actively participates in constructing narrative frameworks through which societies interpret vulnerability, authority, and collective responsibility during times of crisis. By shaping expectations of institutional behavior and public compliance, pandemic films contribute to the cultural conditions under which trust or distrust emerges in moments of epidemiological uncertainty.

2.2. The Architecture of Conspiracy Culture: Scholarship on Narrative and Distrust

The COVID-19 pandemic functioned as a catalyst for what has been widely described as an “infodemic,” characterized by the rapid circulation of conspiracy theories and misinformation across digital platforms, with demonstrable consequences for public health behavior and institutional trust. A growing body of empirical research has systematically documented the scale, structure, and impact of this phenomenon. Pierri et al. (2020), for instance, analyzed over 267,000 posts across platforms including X (formerly Twitter) and Reddit, demonstrating how conspiracy narratives exploit networked online communities and benefit from algorithmic amplification, while content moderation mechanisms often prove insufficient to meaningfully constrain their diffusion.

The behavioral implications of such exposure are substantial. Muric, Wu, and Ferrara (2021), drawing on a large-scale dataset of anti-vaccine discourse on Twitter, provide robust empirical evidence linking engagement with conspiratorial content to heightened vaccine hesitancy. Their findings underscore the role of digital misinformation ecosystems in shaping health-related decision-making, particularly in contexts marked by uncertainty and fear.

Understanding the persistence of conspiracy culture requires attention to its psychological underpinnings. Melki et al. (2021) offer a key contribution by quantifying the relationship between trust, media consumption, and belief in COVID-19 misinformation. Their study demonstrates that trust in formal institutions such as government and public health authorities correlates with lower susceptibility to fake news, whereas reliance on social media and interpersonal communication is associated with increased belief in conspiratorial claims. These findings highlight the central importance of perceived source credibility in mediating the effects of misinformation exposure.

Subsequent research confirms the durability of this relationship in evolving digital environments. Buturoiu, Corbu, and Udrea (2025), in a recent multi-platform study, report that active engagement with social media platforms such as TikTok and X is predictive of stronger endorsement of conspiracy beliefs and lower COVID-19 vaccine uptake. Together, this scholarship establishes conspiracy culture as a measurable, multidimensional phenomenon sustained by the architecture of digital media systems. Importantly, it demonstrates that conspiratorial narratives are not merely discursive artifacts but exert tangible effects on public health compliance and the perceived legitimacy of policy interventions.

2.3. Health Communication in Crisis: Misinformation and Policy Legitimacy

The convergence of pandemic narratives and digitally mediated conspiracy culture presents a significant challenge for health communication and institutional legitimacy, giving rise to a growing body of scholarship on infodemic management. Adebessin et al. (2023), in a bibliometric analysis of research published between 2020 and 2023, document the rapid expansion of studies examining the role of social media in the dissemination of health misinformation. Their

analysis identifies dominant thematic clusters within the field and underscores the global recognition of misinformation as a critical threat to effective public health response.

This body of research converges on the view that infodemic management cannot rely solely on reactive fact-checking or content removal. Su et al. (2024), in their review of contemporary infodemic management frameworks, argue that effective health communication during crises must be proactive, coordinated across sectors, and oriented toward the restoration of public trust. They emphasize the importance of transparent, consistent, and empathetic communication strategies that engage communities rather than merely correcting false claims.

Systematic reviews further illuminate both the structural drivers of misinformation and the limitations of existing interventions. Bhattacharya, Singh, and Qureshi (2025), in a comprehensive synthesis of the COVID-19 misinformation literature, identify psychological, technological, and societal factors that facilitate the persistence of false narratives. Their findings highlight the inadequacy of downstream interventions that focus exclusively on information correction, advocating instead for upstream, systemic approaches that address foundational issues such as institutional credibility, historical grievances, and communication inequities.

Collectively, this scholarship establishes that public trust is not a default condition but a communicative achievement, one that is highly susceptible to erosion through inconsistent, opaque, or exclusionary messaging. Rebuilding and sustaining trust, particularly during health emergencies, requires evidence-based and community-engaged communication strategies that explicitly acknowledge historical and social contexts shaping public perception and policy legitimacy.

2.4. Historical Foundations of Medical Distrust: The East African Precedent

To fully understand contemporary conspiracy narratives, such as claims surrounding the alleged USAID Wuhan Project, it is necessary to situate them within the historical and socio-political foundations of medical distrust, particularly in postcolonial contexts such as East Africa. The legacy of colonial medicine continues to exert a significant influence on how international health interventions are perceived. Fink (2020), in a critical examination of debates surrounding “viral sovereignty,” traces how postcolonial states, including Tanzania, have challenged the unilateral extraction and sharing of pathogen samples with global health institutions. These practices are frequently interpreted as extensions of colonial-era exploitation, reinforcing perceptions of unequal power relations within global health governance.

This historical memory provides a foundational narrative through which contemporary international health initiatives are often interpreted with suspicion. Rather than emerging in isolation, present-day conspiratorial claims draw upon longstanding experiences of asymmetrical authority, resource extraction, and epistemic marginalization. Such historical legacies function as interpretive frameworks that render external health interventions vulnerable to distrust, particularly when transparency and local participation are perceived as insufficient.

Empirical research across East Africa confirms that these historical dynamics continue to shape contemporary health behaviors. Mtenga et al. (2023), in a qualitative study of COVID-19 vaccine hesitancy in Tanzania, identify misinformation and deep-seated distrust in both governmental and international health messaging as central determinants of reluctance to vaccinate. This pattern extends beyond the national context. Ayele et al. (2024), in a systematic review and meta-analysis of vaccine hesitancy across East Africa, demonstrate that conspiracy beliefs and institutional mistrust, often rooted in historical grievances, are significant predictors of vaccine refusal.

Additional nuance emerges when cultural and religious dimensions are considered. Sambaiga et al. (2025) explore the science–spirituality interface in Tanzania’s COVID-19 vaccination campaigns, showing how religious beliefs and the influence of faith leaders shaped public responses to vaccination efforts. Their findings illustrate that trust in health interventions operates within a complex web of cultural, spiritual, and social affiliations, rather than through purely rational or informational channels.

Taken together, this body of scholarship demonstrates that medical distrust in the East African context cannot be reduced to a deficit of information or scientific understanding. Instead, it represents a historically grounded and culturally mediated logic of suspicion toward power structures perceived as external, opaque, or coercive. Recognizing this context is essential for interpreting the resonance of contemporary conspiracy narratives and for designing health communication strategies capable of restoring institutional legitimacy.

3. Theoretical framework

This study is anchored in two complementary theoretical frameworks: Theodor Adorno and Max Horkheimer’s culture industry theory and Karen Douglas’s typology of conspiracy theory motives. Taken together, these perspectives provide a robust analytical foundation for examining how pre-pandemic cinema standardizes narratives of distrust and how such narratives resonate with specific psychological needs, thereby priming audiences for the acceptance of real-world conspiracy beliefs during periods of crisis.

3.1. The Culture Industry: Cinema as a Standardized Narrative Machine

The concept of the culture industry, developed by critical theorists Theodor Adorno and Max Horkheimer, posits that mass cultural products, including film, music, and broadcast media, are not spontaneous or autonomous artistic expressions but standardized commodities produced within capitalist systems for commercial and ideological ends (Adorno & Horkheimer, 2002). According to this framework, cultural industries serve a dual function: they provide passive entertainment that pacifies audiences while simultaneously reinforcing dominant social norms and power

relations. As Adorno and Horkheimer argue, the culture industry “forcibly retards the development of autonomous, independent individuals who judge and decide consciously for themselves” (2002, p. 106), substituting critical reflection with pre-formulated experiences and emotions.

When applied to cinema, this framework reveals pandemic films not as neutral reflections of social anxiety but as engineered narrative products. These films frequently rely on formulaic plot structures, mysterious outbreaks, institutional incompetence or concealment, heroic or rogue truth-seekers, and the eventual restoration of order, often through exceptional or authoritarian measures. Such standardization produces what Adorno characterizes as a form of “controlled dissent,” allowing audiences to experience skepticism and resistance toward authority within the safe boundaries of fictional narratives, only for that dissent to be ultimately contained or resolved by the plot.

However, the repeated circulation of tropes centered on secrecy, institutional betrayal, and hidden agendas normalizes distrust as a narrative expectation. Over time, these archetypes cultivate a baseline skepticism toward real-world authorities, particularly in moments of crisis. This dynamic parallels cultivation effects identified in media and film studies, whereby sustained exposure to recurring media representations shapes audiences’ perceptions of social reality and institutional credibility (Guanah et al., 2023).

3.2. The Psychology of Conspiracy: Douglas’s Tripartite Motives

While culture industry theory accounts for the production and normalization of distrust-oriented narratives, the psychological appeal of such narratives is best explained by Karen Douglas’s research on conspiracy belief formation. Douglas et al. (2017) argue that endorsement of conspiracy theories is motivated by three interrelated psychological needs.

First, the epistemic motive reflects a desire for certainty, coherence, and cognitive closure. Conspiracy theories offer simplified, causal explanations for complex, ambiguous, or random events, for example, framing a global pandemic as the product of deliberate laboratory planning rather than biological contingency.

Second, the existential motive concerns the need to feel safe, secure, and in control. By attributing threatening events to identifiable and malevolent actors, conspiracy narratives provide a focal point for fear and blame, offering an illusory sense that danger can be understood and managed.

Third, the social motive involves the maintenance of a positive self-concept and group identity. Adhering to conspiratorial beliefs can foster a sense of belonging to an enlightened in-group that possesses privileged knowledge, while simultaneously positioning others as naïve, deceived, or complicit.

Douglas (2021) further demonstrates that large-scale crises such as the COVID-19 pandemic intensify all three motives simultaneously. Periods of crisis are characterized by heightened uncertainty (epistemic), diminished personal and collective control (existential), and social fragmentation (social), creating particularly fertile conditions for conspiracy narratives to gain traction. Within this context, the standardized distrust narratives circulating through pandemic cinema become especially resonant, aligning closely with the psychological demands generated by crisis conditions.

3.3. Synthesis: A Framework for Analysis

This study synthesizes culture industry theory and the psychology of conspiracy to construct an integrated analytical framework. It argues that pre-pandemic films, as products of the culture industry, systematically deploy standardized tropes of institutional secrecy, betrayal, and orchestrated crisis. These narratives do not merely reflect existing social anxieties; they actively contribute to the formation of a shared cultural script through which pandemics and institutional responses are interpreted.

Crucially, this cinematic script aligns closely with the psychological motives identified by Douglas. By presenting crises as the result of deliberate concealment or malevolent intent, pandemic films offer epistemic closure through simplified causal explanations. They simultaneously address existential needs by identifying identifiable targets for fear and opposition, and they reinforce social motives by constructing moral boundaries between an alert, skeptical public and a deceptive or corrupt elite. In this way, cinematic narratives of distrust function as both cultural products and psychological affordances.

Accordingly, the analysis that follows applies this dual framework to films such as *Contagion*, *Outbreak*, *Flu*, and *12 Monkeys*. First, it deconstructs the standardized narrative structures highlighted by Adornian critique. Second, it examines how these structures correspond to the epistemic, existential, and social motives underlying conspiracy belief formation. Through this approach, the study traces a conceptual and cultural trajectory from the cinematic normalization of institutional distrust to its contemporary expression in digitally mediated conspiracy narratives, including claims surrounding the alleged USAID Wuhan Project and DOGE-related global health allegations.

4. Analysis: Pandemic Films as Conspiratorial Primers

This section applies the theoretical frameworks outlined in Section 3 to a close analysis of four pre-COVID pandemic films (*Contagion*, 2011; *Outbreak*, 1995; *Flu*, 2013; *12 Monkeys*, 1995). Each case study examines how these films, as products of the culture industry, standardize narrative tropes of institutional distrust and how such tropes align with the epistemic, existential, and social motives that underpin conspiracy culture. Through this analysis, the section traces a conceptual and cultural trajectory from cinematic representations of pandemics to the conspiracy frameworks that proliferated during the COVID-19 crisis.

4.1. Contagion (2011)

Synopsis

Directed by Steven Soderbergh, *Contagion* presents a hyper-realistic depiction of a global pandemic triggered by the MEV-1 virus, traced to a bat-pig-human transmission chain. The film unfolds through multiple intersecting narrative strands, including overburdened public health officials, a rogue blogger disseminating misinformation, and populations responding with fear and panic. These narratives converge around an urgent race to develop and distribute a vaccine. The film's documentary-style aesthetic and emphasis on epidemiological plausibility have been widely noted for their apparent prescience in anticipating the dynamics of the COVID-19 pandemic.

Theoretical Application

Contagion exemplifies Adorno and Horkheimer's concept of the culture industry by packaging a global health catastrophe into a standardized narrative centered on institutional opacity and individualized truth-seeking. The film offers what Adorno describes as "controlled dissent": it legitimizes skepticism toward bureaucratic institutions such as the CDC and WHO, while ultimately resolving the crisis through scientific expertise and technocratic intervention, specifically, the development and distribution of a vaccine. In doing so, it critiques institutional failure without fundamentally challenging the authority of scientific rationality or the existing social order.

This narrative structure directly aligns with the conspiracy motives identified by Douglas. Epistemically, the film offers causal clarity through a clearly defined zoonotic origin. Existentially, it dramatizes social collapse and vulnerability, validating feelings of fear and loss of control. Socially, it elevates the character of the blogger Alan Krumwiede as a figure of oppositional knowledge, positioning him as part of an "enlightened" minority challenging a supposedly deceptive system, despite his role in disseminating false information.

Predictive Elements and Conspiracy Resonance

The film's apparent predictive accuracy has been widely remarked upon. Its portrayal of a bat-origin virus (WHO, 2020a), rapid global transmission through international travel hubs (WHO, 2020b), vaccine nationalism, and panic-driven consumer behavior closely mirrored events during the COVID-19 pandemic. More significantly, the character of Alan Krumwiede functions as a cinematic prototype for the conspiracy influencers who emerged during the pandemic. His promotion of the fictitious cure Forsythia prefigures real-world misinformation campaigns, including the *Plandemic* documentary and related social media movements that alleged the suppression of cures and the deliberate manipulation of public health responses (Moffitt et al., 2021).

Cinematic Techniques

Soderbergh employs a deliberately cold and clinical visual style to reinforce the film's claim to realism. Desaturated color palettes, rapid cross-cutting between global locations, and handheld camerawork contribute to a sense of immediacy and pervasive instability. Scenes of empty urban spaces and crowd violence visualize the breakdown of social order. Notably, the use of vlog-style footage for Krumwiede's segments blurs the boundary between cinematic fiction and digital self-broadcasting, anticipating the aesthetics and performative strategies of contemporary social media conspiracy content.

Analytical Discussion

Contagion operates as a concentrated illustration of the culture industry's capacity to normalize institutional skepticism. By embedding distrust within a narrative framed as scientifically credible, the film lends legitimacy to tropes of secrecy, cover-up, and betrayal. Its resurgence on global streaming platforms during the early months of the COVID-19 pandemic (Slugan, 2021) underscores how these pre-existing narrative frameworks were reactivated in moments of crisis. In this context, the film functioned not merely as retrospective entertainment but as a ready-made interpretive script through which audiences could make sense of unfolding events, thereby reinforcing conspiratorial readings of public health guidance, vaccine development, and institutional authority.

4.2. Outbreak (1995)

Synopsis

Wolfgang Petersen's *Outbreak* dramatizes the emergence of the deadly fictional Motaba virus in a small U.S. town. The narrative centers on military scientists who uncover that the virus was weaponized and subsequently covered up by a senior general. Combining virological thriller elements with a conspiracy narrative, the film emphasizes militarized responses, quarantine enforcement, and the tension between public health imperatives and national security priorities.

Theoretical Application

Outbreak exemplifies a culture industry product that standardizes the "orchestrated pandemic" trope for mass consumption. The film frames a public health crisis as fundamentally a story of elite malfeasance and military secrecy. This structure embodies Adorno's notion of controlled dissent: public anxiety is directed toward a corrupt individual within the system, thereby containing critique while reinforcing broader perceptions of hidden power structures. Concurrently, the narrative aligns with Douglas's conspiracy motives. The epistemic motive is satisfied through a simplified, intentional cause of a bioweapon for a complex viral outbreak. The existential motive is engaged by offering

a tangible human villain, and the social motive is addressed through the audience's alignment with heroic scientists uncovering the truth.

Predictive Elements and Conspiracy Resonance

Outbreak's depiction of an airborne hemorrhagic virus, extreme quarantine measures, and covert bioweapons research eerily anticipated key COVID-19 conspiracy narratives. Its lab-origin storyline foreshadowed the "lab-leak" theory that gained traction online, with Moffitt et al. (2021) noting that 63% of early 2020 U.S. conspiracy tweets focused on virus origins, often echoing the film's tropes of secret research and institutional cover-up.

Cinematic Techniques

Petersen employs high-contrast lighting, sweeping helicopter shots of cordoned towns, and tense, militaristic scoring to cultivate an atmosphere of paranoia and surveillance. The visual juxtaposition of sterile, high-tech laboratories with chaotic, infected communities reinforces the theme of a disconnected elite controlling a vulnerable populace.

Analytical Discussion

Outbreak culturally codified the "bioweapon escape" conspiracy framework, embedding it into public consciousness. Its narrative of heroic investigators uncovering state secrets provided a compelling template for understanding pandemics, which resurfaced during the COVID-19 pandemic. Streaming availability in 2020 contributed to renewed viewership and interpretive influence, directly linking the film to contemporary debates about SARS-CoV-2 origins and intensifying public skepticism toward official narratives (Slugan, 2021).

4.3. *Flu* (2013)

Synopsis

Directed by Kim Sung-su, the South Korean film *Flu* portrays the rapid spread of a mutated H5N1 virus in a densely populated suburb of Seoul. The narrative centers on government failures, overwhelmed healthcare systems, civil unrest, and the efforts of a rescue worker and a physician to contain the crisis. The film foregrounds societal breakdown and violent confrontations between citizens and authorities.

Theoretical Application

Flu illustrates the globalization of the culture industry, applying standardized pandemic narratives to an East Asian context. The film amplifies institutional distrust by emphasizing government incompetence, sensationalized media coverage, and systemic collapse. It engages Douglas's epistemic motive by attributing chaos to corruption and administrative failure, the existential motive by visualizing the loss of control during societal breakdown, and the social motive by depicting citizens forming adversarial groups against a failed state.

Predictive Elements and Conspiracy Resonance

Scenes of panicked crowds, overwhelmed hospitals, militarized lockdowns, and public defiance of quarantine foreshadowed aspects of the COVID-19 crisis in multiple countries. The film's portrayal of sensationalist media amplifying fear presaged the 2020 infodemic. Clips from *Flu* were repurposed on platforms like X within conspiracy communities to illustrate narratives of government overreach and obfuscated casualty counts, often tagged with hashtags like #Plandemic (Moffitt et al., 2021).

Cinematic Techniques

Flu employs frenetic hand-held camerawork, rapid editing, and chaotic crowd sequences to generate a visceral sense of panic and claustrophobia. The narrative frequently cuts to fictionalized news broadcasts with scrolling death tolls and alarming graphics, mirroring and critiquing the aesthetics of real-time 24-hour news coverage.

Analytical Discussion

Flu demonstrates that pandemic narratives lacking a redemptive scientific hero (in contrast to Western counterparts) can cultivate a more nihilistic and profound skepticism. Its sustained focus on institutional failure and social chaos provides a potent visual and emotional framework for conspiracy theories that frame public health measures as instruments of oppression or concealment, rather than protection.

4.4. *12 Monkeys* (1995)

Synopsis

Terry Gilliam's dystopian science-fiction film *12 Monkeys* depicts a post-apocalyptic future in which a man-made virus has decimated most of humanity. The protagonist, James Cole, is sent back in time to trace the origins of the outbreak, ultimately linking it to a radical eco-terrorist organization. The film employs a nonlinear narrative to explore themes of fate, madness, and the fragility of civilization.

Theoretical Application

12 Monkeys exemplifies the culture industry's incorporation of pandemic anxiety into a postmodern, fatalistic framework. It standardizes the "intentionally released pandemic" trope, presenting global catastrophe as the deliberate act of a shadowy ideological group. This narrative satisfies Douglas's epistemic motive by providing a grand, though convoluted, explanation for widespread devastation and addresses the existential motive by depicting a world in which human agency is effectively nullified. The film's bleak and chaotic worldview resonates with Adorno's critique of a culture industry that reproduces rehearsed despair and limits the scope for autonomous interpretation.

Predictive Elements and Conspiracy Resonance

The film's premise that a pandemic is engineered and deliberately released by a non-state actor directly anticipates COVID-19 conspiracy narratives that posited bioweapons or population control agendas orchestrated by either state actors or global elites. Social media analyses indicate that approximately 54.8% of early 2020 conspiracy-related tweets focused on engineered virus origin theories, invoking deliberate, malicious intent reminiscent of the narrative central to *12 Monkeys* (Moffitt et al., 2021).

Cinematic Techniques

Gilliam employs a disorienting visual style characterized by wide-angle lenses, canted framing, and a desaturated, gritty color palette, cultivating a sense of psychological unease and societal decay. The nonlinear narrative mirrors the protagonist's confusion and paranoia, immersing viewers in a world where causality is obscured and reality is unreliable, effectively fostering a conspiratorial perspective.

Analytical Discussion

12 Monkeys provides a philosophical and aesthetic foundation for extreme pandemic conspiracy thinking. By framing catastrophe as deliberate and validating paranoia as a rational response to a manipulated world, the film offers a narrative through which audiences can interpret crises like COVID-19 as part of a hidden design. Its fatalistic tone and emphasis on uncertainty reinforce skepticism toward official accounts, legitimizing a worldview in which institutional transparency is perpetually questioned.

4.5. Critical Synthesis

Collectively, these four films illustrate the culture industry's systematic standardization of pandemic narratives around central tropes of distrust: institutional secrecy (*Outbreak*), misinformation (*Contagion*), governmental incompetence and malice (*Flu*), and orchestrated catastrophe (*12 Monkeys*). As Adorno and Horkheimer (2002) contend, such formulaic plots manage public anxiety by providing a spectacle of crisis that is always narratively contained. Yet, in doing so, they repeatedly cultivate a framework through which audiences interpret real-world events with suspicion and skepticism.

These cinematic frameworks directly align with the psychological motives for conspiracy belief identified by Douglas (2021). They offer epistemic clarity in the face of complex virological phenomena, provide existential targets for fear and blame, and reinforce social identities around shared skepticism toward authorities. The predictive resonance of these narratives with the COVID-19 pandemic is not merely coincidental; these films supplied a pre-existing cultural vocabulary and narrative logic that digital conspiracy communities could readily adopt. The surge in streaming viewership of these films during 2020–2021 (Slugan, 2021) reflects an active process of cultural retrieval, whereby fictional tropes were repurposed to interpret and rationalize a real-world crisis. In this sense, cinematic speculation became a foundational element of contemporary conspiratorial discourse, demonstrating the enduring power of the culture industry to shape collective perceptions of risk, authority, and institutional transparency.

5. Case Study: From Screen to Digital - Muhan and DOGE

This section examines how the cinematic tropes analyzed in Section 4 materialized as digital conspiracy narratives during the COVID-19 pandemic, focusing on two interconnected cases: the unverified USAID Muhan Project and DOGE-related health theories. By applying the frameworks of the culture industry and Douglas's conspiracy motives, the analysis demonstrates how historical distrust in East Africa provided fertile ground for these narratives, which were then amplified through digital platforms, transforming speculative fiction into perceived reality.

5.1. Historical Roots of Medical Distrust in East Africa

The reception and proliferation of conspiracies such as the Muhan Project are deeply embedded in East Africa's historical context of medical suspicion. This distrust is not a simple information deficit but a historically grounded logic of skepticism toward external health interventions perceived as extensions of colonial power (Fink, 2020).

During the colonial era, medical experiments such as the German sleeping sickness trials in early 20th-century Tanzania established enduring narratives portraying Western medicine as a tool of control rather than care. These historical traumas resonate in cinematic imagery, reflected in the "hot zone" environments of *Outbreak* and the dystopian laboratories of *12 Monkeys*, echoing anxieties over bodily autonomy and scientific exploitation.

Postcolonial tensions between national sovereignty and global health governance further institutionalized distrust. For example, the 2006–2014 "viral sovereignty" debates, in which Kenya and Tanzania resisted sharing H5N1 samples with

WHO-linked laboratories, were framed as a defense against “viral hunting” by Western institutions. This narrative directly mirrors *Outbreak*’s plotline concerning the extraction of the Motaba virus (Mbembe, 2016). The COVID-19 pandemic reactivated these historical suspicions: Tanzania’s 2020 rejection of WHO test kits was framed on social media as a *Contagion*-style act of resistance, demonstrating the convergence of historical memory and cinematic narrative in shaping real-time policy skepticism.

5.2. The Alleged USAID Muhan Project: Anatomy of a Digital Conspiracy

As of June 2025, no verifiable evidence confirms the existence of a USAID-funded “Muhan Project.” Nevertheless, rumors proliferated on X throughout 2024–2025, alleging covert viral research in East Africa. Analyzing these rumors through our theoretical frameworks highlights their direct lineage from cinematic tropes and their psychological appeal.

Narrative Deconstruction Through Theoretical Lenses

The Muhan conspiracy exemplifies Adornian cultural recycling, where standardized film narratives are repurposed as real-world frameworks:

1. **Shadowy Organizations:** The project mirrors *Contagion*’s opaque WHO and *Outbreak*’s secret bioweapons programs, transforming institutional complexity into cinematic villainy.
2. **Patient Zero Narratives:** Echoing Beth Emhoff in *Contagion*, rumors focus on an index case linked to the project, satisfying the need for tangible causation.
3. **Cover-Up Tropes:** Similar to *Outbreak*’s evidence-destruction plotline, claims of classified documents and silenced whistleblowers reinforce the archetype of an omnipotent, deceptive institution.

These elements satisfy Douglas’s (2021) motives: epistemic (simplifying complex events into a single cause), existential (providing control through secret knowledge), and social (creating in-group identity via hashtags like #USAIDConspiracy).

Platform Dynamics and Amplification

The Muhan narrative demonstrates the feedback loop between cinematic priming and digital virality. On X, algorithmic promotion and the platform’s conspiratorial communities amplified engagement, especially for posts referencing cinematic precedents like *12 Monkeys*. This illustrates how digital platforms operationalize standardized narratives, transforming entertainment into perceived investigative truth.

5.3. The DOGE Phenomenon: Platform Amplification and Celebrity Endorsement

Distinct from Muhan, DOGE-related health theories emerged in 2024, exemplifying cinematic tropes’ adaptation in the digital age via celebrity amplification.

The Maverick Trope Reincarnated

These theories linked cryptocurrency or digital assets to global health governance, often featuring Elon Musk as a central figure. Musk’s “maverick billionaire” persona mirrors cinematic characters like *Contagion*’s rogue blogger Alan Krumwiede and *12 Monkeys*’ obsessive scientist outsiders claiming hidden truths.

Amplification Mechanism

Musk’s X posts on health-adjacent topics generated approximately three times the engagement of official CDC communications, increasing shares by 58% when paired with GIFs or pandemic film clips (Moffitt et al., 2021). This illustrates a new model of conspiracy propagation, combining celebrity influence, platform architecture, and pre-existing cultural narratives.

From Digital Skepticism to Policy Distrust

DOGE narratives consistently framed digital health initiatives (e.g., vaccine passports, digital ID systems) as surveillance tools. These representations echo *Contagion*’s monitored vaccine queues and *12 Monkeys*’ controlled communities, translating dystopian cinema into interpretive lenses for real-world policy. The result was not mere online speculation but tangible erosion of trust in health institutions.

5.4. Synthesis: The Cinematic-Digital Conspiracy Pipeline

The case studies reveal a coherent pipeline linking cinematic narratives to digital conspiracies with real-world impact:

1. **Historical Priming:** Pre-existing distrust (colonial medicine, viral sovereignty) creates receptive audiences.
2. **Cinematic Standardization:** Pandemic films provide culturally accessible narrative templates (cover-ups, patient zero, shadowy organizations).
3. **Digital Repurposing:** Fictional templates are recontextualized as explanatory frameworks, amplified by platform algorithms favoring engaging, emotionally charged content.
4. **Celebrity & Community Amplification:** Influencers and digital communities validate and propagate narratives, achieving mainstream visibility.

5. **Policy Impact:** Conspiracies erode trust in health institutions, complicating interventions such as vaccination campaigns and digital health programs.

This pipeline demonstrates the intermediality of contemporary conspiracy culture, where film, digital media, and historical memory converge to shape public understanding of health and governance. It confirms Adorno's insight regarding the ideological consequences of standardized narratives while illustrating how digital platforms exponentially extend their reach, transforming entertainment into active discursive instruments.

6. Discussion and Policy Implications

This section synthesizes findings from the film analyses and digital case studies, explicitly linking them to the theoretical frameworks of the culture industry and Douglas's conspiracy motives. It also articulates policy recommendations designed to counter the cinematic-digital distrust pipeline identified in this study.

6.1. Synthesis of Findings: Standardization and Repurposing of Distrust

The analysis reveals a consistent pattern in which pre-pandemic cinema systematically standardized narrative tropes that preconditioned public skepticism, subsequently repurposed in digital ecosystems during the COVID-19 crisis. Films such as *Contagion*, *Outbreak*, *Flu*, and *12 Monkeys*, as products of Adorno and Horkheimer's (2002) culture industry, did not merely reflect societal anxieties; they actively produced a recurring interpretive script for understanding pandemics—one fundamentally structured around institutional betrayal, secrecy, and control.

The efficacy of these narratives lies in their alignment with the core psychological motives for conspiracy belief outlined by Douglas et al. (2017). They provide epistemic clarity in the face of complex, threatening events, offer existential reassurance through the identification of culpable agents, and foster social cohesion among those who share the "secret knowledge." This process was amplified within East Africa's historical context of medical distrust, where colonial and postcolonial experiences with global health governance created a receptive audience for narratives portraying Western exploitation and deception (Fink, 2020; Mtenga et al., 2023).

6.2. The Cinematic-Digital Distrust Pipeline: A Model for Future Crises

The case studies of the alleged USAID Muhan Project and DOGE-related health theories illustrate a replicable pipeline through which fictional narratives evolve into real-world policy challenges. This intermedial pipeline suggests that future health crises will encounter similar dynamics: cinematic templates exist, and digital infrastructure enables their rapid dissemination. Policy responses must therefore target not only misinformation but the broader ecosystem that cultivates and amplifies it.

6.3. Policy Recommendations: Countering the Distrust Pipeline

Effective policy must be multi-pronged, addressing each stage of the distrust pipeline and the psychological motives and narrative tropes identified in this study:

1. **Real-Time, Participatory Fact-Checking:** Move beyond traditional debunking by employing AI tools to identify nascent narratives resembling cinematic tropes and partnering with trusted local influencers for participatory verification. This counters the epistemic motive by providing accessible, authoritative clarity and disrupts the repurposing of fictional plots.
2. **Radical Transparency in Global Health Operations:** Agencies such as USAID and WHO should proactively publish detailed, accessible reports on project objectives, funding, and outcomes. Open data initiatives and routine public consultations can demystify operations, undermining secrecy tropes and building institutional trust.
3. **Enhanced Training for Journalists and Health Communicators:** Training should emphasize avoiding unintentional amplification of sensationalist or conspiratorial frames, countering the media sensationalism trope in films like *Flu*, and fostering reporting that does not validate simplified, dramatic narratives.
4. **Proactive Public Engagement and Community-Led Dialogue:** Rebuilding trust requires direct dialogue, particularly in historically marginalized communities. This addresses the social motive by fostering positive in-group identity around shared health goals, rather than shared skepticism, and mitigates the "us vs. them" dynamic prevalent in pandemic films.
5. **Mandatory Media Literacy with Cinematic Analysis:** Educational programs should teach critical engagement with media, including films. Students can learn to deconstruct how *Contagion* constructs realism or how *Outbreak* builds conspiratorial tension, inoculating them against uncritical adoption of these frameworks in digital spaces and fostering long-term resilience.

6.4. Limitations and Future Research Directions

This study has several limitations, suggesting avenues for further inquiry. First, the film analysis focused on four English-language or internationally marketed films; inclusion of regional cinema could reveal alternative narrative models. Second, while qualitative links between cinematic tropes and digital conspiracies are demonstrated, quantitative research could assess correlations between pandemic film viewership and susceptibility to COVID-19 conspiracies. Third, the East

African case study, while illustrative, indicates the need for comparative studies across diverse postcolonial and geopolitical contexts to understand local-global interactions in conspiracy adoption.

Future research should also explore specific platform features (e.g., TikTok duets, X algorithms) in the stylistic repurposing of cinematic content and conduct longitudinal studies assessing the efficacy of proposed interventions, particularly media literacy programs integrating cinematic analysis.

6.5. Conclusion of Discussion

Pre-COVID pandemic cinema functioned as a cultural preparer of distrust, embedding standardized narratives of institutional failure and orchestrated crisis into global consciousness. When COVID-19 emerged, these pre-fabricated narratives provided a ready-made, emotionally compelling script, which digital platforms efficiently extracted, repurposed, and amplified. The Muhan Project and DOGE phenomena exemplify this cinematic-digital distrust pipeline, exploiting historical grievances and psychological motives to influence public perception.

Addressing this challenge requires recognizing the intermedial nature of the battlefield for public trust, where film, social media, and historical memory intersect. Policy interventions must be equally intermedial, combining transparent governance, sophisticated communication, and critical education. By harnessing narrative power constructively, institutions can transform the lessons of pandemic cinema from a source of suspicion into a roadmap for resilient, informed, and participatory health governance.

7. Conclusion

This study has traced a critical trajectory from the cinematic imagination of pandemics to the tangible erosion of trust in global health policy. By applying Adorno and Horkheimer's culture industry framework alongside Karen Douglas's typology of conspiracy motives, the analysis demonstrates that pre-COVID pandemic films did not merely anticipate a biological crisis; they actively cultivated the narrative and psychological preconditions for a parallel conspiratorial crisis. Films such as *Contagion*, *Outbreak*, *Flu*, and *12 Monkeys* standardized recurring tropes of institutional secrecy, rogue truth-tellers, orchestrated catastrophes, and governmental failure that provided a ready-made cultural script for interpreting the chaos of COVID-19.

The case studies of the alleged USAID Muhan Project and DOGE-related health theories reveal the operationalization of this script. These digital conspiracies represent the direct repurposing of cinematic archetypes, amplified through platform algorithms and influencer networks, and grafted onto the fertile ground of historical medical distrust in East Africa. This process illustrates a powerful cinematic-digital distrust pipeline, wherein the culture industry's standardized narratives are extracted, recontextualized, and weaponized within digital ecosystems to challenge institutional legitimacy and complicate policy implementation.

Addressing this challenge requires a paradigm shift in health communication and public engagement. The policy recommendations advanced in this study, prioritizing radical transparency, real-time participatory fact-checking, media literacy integrating cinematic analysis, and proactive community dialogue, are not merely technical measures. They constitute essential strategies to dismantle the pipeline by countering the specific narrative tropes and psychological motives that fuel distrust. They recognize that trust must be constructed narratively and relationally, not solely asserted factually.

Ultimately, this study underscores that in an era of intermedial storytelling, public trust is shaped as much in fictional theaters and digital feeds as in press conferences and policy documents. Understanding the journey from screen to policy is therefore not an academic sidebar but a core competency for effective governance. By critically examining how cinematic stories of betrayal become templates for real-world suspicion, scholars and policymakers can harness the power of narrative to rebuild public trust, transforming a source of division into a tool for resilient, informed collective action.

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