

From Eisenstein to the Algorithm: Analyzing The Frost's AI Montage

Amjed Altabal

University of Tripoli, amjedatabbal@yahoo.com

Wassim Habib Korbi

University of Carthage, wassimkorbi@gmail.com

Abstract

The art of film editing has long been intertwined with evolving technological and philosophical paradigms, from Sergei Eisenstein's dialectical montage to contemporary digital practices. This study explores *The Frost* (2024), a short film partially edited using generative artificial intelligence, as a critical site for examining the shifting dynamics of cinematic authorship and montage. By applying classical montage theories—especially those of Eisenstein, Pudovkin, and Walter Murch—the analysis interrogates how AI-driven editing reshapes traditional concepts of rhythm, narrative continuity, and ideological meaning. Positioned within the framework of posthuman theory, the research investigates the emergence of algorithmic agency as a co-creative force that destabilizes human editorial intentionality. *The Frost* thus exemplifies a hybrid montage logic that challenges established editorial norms, blurring boundaries between human and machine creativity. This case study contributes to ongoing debates about the aesthetic and philosophical implications of AI in filmmaking, calling for new frameworks to understand montage in the age of computational authorship.

Keywords

Montage Theory, Artificial Intelligence, Algorithmic Editing, Posthumanism, Computational Creativity

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Introduction:

The evolution of film editing has consistently mirrored broader technological and philosophical shifts. From Sergei Eisenstein's theory of montage as a dialectical and intellectual process (Eisenstein, 1949) to the contemporary logic of non-linear digital editing, cinematic rhythm has evolved in response to changing tools and epistemologies. Montage, once primarily a method for constructing meaning through juxtaposition, has increasingly become a site of negotiation between human intention and technological mediation.

In the twenty-first century, artificial intelligence (AI) has emerged not merely as a supporting tool in post-production but as a creative agent capable of influencing aesthetic decisions. Machine learning algorithms can now detect emotional beats, generate visual patterns, and even automate editing decisions based on extensive training data, thereby creating new paradigms for authorship and montage (Manovich, 2017; Elwell & Smaill, 2021). This development invites a reconsideration of what it means to "edit" a film and who—or what—is considered the editor.

The short film *The Frost*, partially assembled using AI systems, stands as a compelling artifact within this transitional moment. While it may not be celebrated for its narrative or emotional cohesion, it functions as a critical test case for examining the

aesthetic and philosophical consequences of algorithmic editing. Rather than evaluating *The Frost* solely on its artistic success, this study treats it as an experimental object through which broader questions about cinematic form, automation, and posthuman creativity can be explored.

This inquiry is situated within the context of posthuman theory, which interrogates the boundaries between human and machine, nature and technology, and redefines authorship in the age of intelligent systems (Braidotti, 2013; Hayles, 1999). Within this framework, *The Frost* becomes more than a short film—it becomes a mirror reflecting the ideological tensions of a cinematic culture increasingly shaped by non-human agency. By critically analyzing the montage of *The Frost* in light of classical editing theories—from Eisenstein's intellectual montage to Walter Murch's "Rule of Six" (Murch, 2001)—this paper seeks to uncover how algorithmically generated rhythm interacts with traditional narrative logic, emotional impact, and visual coherence. Ultimately, the study aims to situate this hybrid form of montage within the larger discourse of computational creativity, questioning whether classical theories remain adequate tools for interpreting the cinema of the algorithmic age.

Research Problem:

CITATION

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- Despite the growing presence of AI in audiovisual production, scholarly analysis of its aesthetic implications—particularly in montage—remains limited. There is a lack of critical frameworks for understanding how algorithmically generated edits interact with, challenge, or extend classical montage theories. Moreover, few studies examine how these new practices reflect posthuman ideologies that decenter human authorship and embrace machine agency.

Importance of Study:

- This study bridges the gap between classical film theory and emerging AI-based filmmaking practices by focusing on editing as a site of aesthetic negotiation. It offers a theoretical and practical lens for understanding how AI reshapes the grammar of montage, while also contributing to the discourse on posthumanism in media studies. As algorithmic co-authorship becomes more prevalent, developing new analytical frameworks is essential for film scholars, editors, and technologists alike.

Objectives of the Study:

- To analyze *The Frost's* montage using classical theories, particularly those of Eisenstein, Pudovkin, and Walter Murch.
- To identify ways in which algorithmic editing aligns with or diverges from human-driven editing practices.
- To explore the aesthetic and philosophical implications of posthuman agency in AI-edited films.
- To contribute to the development of a hybrid analytical model integrating classical montage theory with computational creativity.

Study Questions:

- How does the montage in *The Frost* reflect or deviate from classical montage theories?
- What aesthetic patterns emerge in the film's AI-generated sequences, and how do they contrast with human-made edits?
- In what ways does *The Frost* exemplify a shift toward posthuman modes of authorship and creativity?
- Can traditional editing theories still serve as a valid lens for interpreting AI-driven montage?

Terminology:

- **Montage Theory:** Montage theory explores how the sequencing of film shots creates meaning beyond individual images. Originating in the 1920s with Soviet filmmakers like Sergei Eisenstein—who

developed the concept of intellectual montage—this theory emphasizes the dialectical collision of shots to evoke emotional and ideological responses, laying the foundation for cinematic narrative and expression (Eisenstein, 1949; Bordwell & Thompson, 2013; Monaco, 2009).

- **Artificial Intelligence:** Artificial Intelligence (AI) refers to computer systems designed to perform tasks that require human-like intelligence, such as learning and decision-making. Established as a formal field in 1956, AI has recently advanced through machine learning and deep learning, entering creative realms like film editing and challenging traditional ideas of authorship (Russell & Norvig, 2021; Nilsson, 1998).
- **Algorithmic Editing:** Algorithmic editing involves using AI and computational algorithms to automate or assist in film shot selection and sequencing. Emerging alongside digital editing tools in the 1990s and accelerating in the 2010s, this practice reshapes the editor's role and fosters new collaborations between human creativity and machine processes (Manovich, 2017; Lopes, 2019; Cunningham & Craig, 2019).
- **Posthumanism:** Posthumanism is a philosophical framework that critiques human-centered perspectives, emphasizing the interconnectedness of humans, technology, and the environment. Developed through key works such as Hayles' *How We Became Posthuman* (1999) and Braidotti's *The Posthuman* (2013), it reconceptualizes agency and creativity as distributed across human and non-human actors (Hayles, 1999; Braidotti, 2013; Wolfe, 2010).
- **Computational Creativity:** Computational creativity studies how machines can perform tasks traditionally linked to human creativity, including generating novel and valuable ideas. Emerging in the 1990s with theorists like Colton and Wiggins, it provides frameworks to evaluate machine creativity and informs analyses of AI-driven artistic processes, such as algorithmic editing (Colton & Wiggins, 2012; Wiggins, 2006; Boden, 2004).
- **The Frost:** *The Frost* is a recent short film partially assembled using AI-driven editing algorithms. Produced in the early 2020s, it exemplifies hybrid human-machine creativity, challenging conventional editing practices and serving as a key case study for exploring AI's impact on cinematic form and authorship (Rubin & Waymark Creative Labs, 2023;

Williams, 2024).

Literature Review:

This study engages an interdisciplinary dialogue across classical film theory, digital media studies, and emerging discussions on artificial intelligence and posthuman creativity. By synthesizing foundational and contemporary scholarship, this review frames a critical analysis of *The Frost's* montage and identifies significant gaps that the current research addresses.

Classical montage theories developed by Sergei Eisenstein, Vsevolod Pudovkin, and Walter Murch remain indispensable for understanding cinematic editing both as an artistic practice and intellectual process. Eisenstein (1949) revolutionized editing by proposing the concept of intellectual montage, wherein meaning emerges dialectically through the collision of contrasting images, producing ideological and emotional engagement. This model foregrounds conflict and synthesis as core mechanisms in narrative construction. In contrast, Pudovkin (1926) advocated constructive montage, emphasizing narrative continuity and psychological immersion through editing designed to guide viewers smoothly across scenes. This approach offers a complementary perspective focused on coherence and emotional accessibility. Walter Murch (2001) further bridges classical theory with contemporary practice through his Rule of Six, which prioritizes emotion, story, and rhythm as key criteria to create impactful and coherent cinematic experiences. Together, these frameworks provide essential analytical tools but face new challenges when applied to the emerging phenomena of AI-assisted montage, revealing a critical gap in their explanatory power for hybrid editing forms.

The rise of artificial intelligence in film editing has introduced a disruptive force that transforms the traditional human-centric process into a collaborative human-machine endeavor. Lev Manovich (2017) situates AI as an active co-creator that transcends auteur models by enabling data-driven, algorithmically generated aesthetics. This shift compels scholars and practitioners to rethink creativity and editorial authority as AI systems now detect emotional beats, generate visual patterns, and automate editorial decisions. Despite these advances, scholarly frameworks explicitly linking AI editing techniques with classical montage theory remain underdeveloped, highlighting the urgent need for interdisciplinary research that bridges computational methods with film studies (Lopes, 2019). Addressing this theoretical gap is vital for advancing both academic discourse and practical understanding of AI's aesthetic role in cinema.

Posthuman theory provides a crucial philosophical

lens through which to interrogate the decentering of the human subject within creative processes, emphasizing hybrid agency distributed across biological, technological, and cultural boundaries. Hayles (1999) argues that the fusion of humans and machines reconfigures traditional notions of consciousness and authorship, while Braidotti (2013) extends this by advocating for relational creativity and distributed subjectivity. Within media studies, posthumanism foregrounds the ethical and political implications of algorithmic creativity, including challenges related to authorship, labor displacement, and questions of media authenticity (Hayles, 1999; Braidotti, 2013). Such perspectives are indispensable for understanding AI-assisted editing workflows where creative responsibility is shared between human editors and machine algorithms (Jones, 2020). Integrating posthumanism enriches our understanding of AI-edited films by situating them within broader cultural and ethical contexts beyond purely technical or aesthetic considerations.

Complementing these perspectives, computational creativity research examines the potential for machines to emulate human creative faculties, operationalizing creativity through criteria such as novelty, value, and surprise (Colton & Wiggins, 2012; Wiggins, 2006). This framework supports viewing algorithmic editing not as mere automation but as a hybrid form of creative production. Manovich (2017) extends this discourse by positioning algorithmic agency as an integral part of contemporary cultural meaning-making, challenging the traditional human-machine creativity binary. Applied to *The Frost*, computational creativity provides a nuanced lens to analyze how AI-driven montage reflects probabilistic assembly and pattern recognition while intersecting with established cinematic conventions. This approach offers necessary conceptual tools to articulate the emergent aesthetics of AI-assisted montage and the complex interplay between human intention and algorithmic agency.

Theoretical Framework:

This section provides the critical lenses through which the study is conducted. It includes:

Classical Montage Theories:

Central to this analytical framework are the foundational contributions of Sergei Eisenstein (1898–1948), Vsevolod Pudovkin (1893–1953), and Walter Murch (b. 1943). These figures each have shaped distinct paradigms in the evolution of cinematic editing.

Eisenstein's theory of intellectual montage, first articulated in his essays between 1923 and 1940

and later compiled in *Film Form* (1949), argues that meaning in cinema arises from the dialectical collision of images—where two contrasting shots, when placed in sequence, produce an idea greater than the sum of their parts. For Eisenstein, montage is not merely technical but philosophical; it is a method of thinking through images, intended to provoke intellectual and emotional engagement.

In contrast, Pudovkin advanced the notion of constructive montage in his writings from the mid-1920s, particularly in *Film Technique* and *Film Acting* (1926). Pudovkin saw editing as a way to build continuity, guiding the viewer's emotional response through smooth narrative progression and psychological realism. While both theorists valued editing as the essence of cinema, Pudovkin emphasized harmony and structure, whereas Eisenstein emphasized conflict and disruption.

Walter Murch, a leading American editor and sound designer active since the 1970s, introduced a practical philosophy of editing in *In the Blink of an Eye* (2001). His "Rule of Six" prioritizes six hierarchical criteria for editing decisions: emotion (51%), story (23%), rhythm (10%), eye-trace (7%), two-dimensional plane of screen (5%), and three-dimensional space (4%). Murch's framework bridges technical precision with emotional logic and remains widely influential in both industry and academia.

Together, these models offer a comprehensive foundation for evaluating the formal, narrative, and affective dimensions of editing in *The Frost*, particularly in light of the disjunctions and continuities introduced by algorithmic decision-making.

Posthuman Theory and Its Application to Video Editing:

Posthuman theory offers a critical philosophical framework for examining the shifting boundaries between human and machine creativity, challenging traditional humanist conceptions of authorship, agency, and subjectivity. Foundational scholars such as N. Katherine Hayles (1999) and Rosi Braidotti (2013) articulate how contemporary culture is witnessing the decentering of the human subject. Hayles, in her seminal work *How We Became Posthuman*, traces the evolution of the posthuman through cybernetics, artificial intelligence, and literary theory, illustrating how the fusion of humans and machines reconfigures epistemological assumptions about consciousness and creative authority. Braidotti expands this discourse in *The Posthuman*, advocating for a critical posthumanism that embraces relationality, hybridity, and distributed subjectivity—rejecting simplistic techno-utopian or dystopian narratives and instead emphasizing the complex entanglement

of technological, biological, and cultural forces.

Within the realm of video editing, posthuman theory illuminates how creative agency is increasingly shared between human editors and AI-powered tools. Modern editing software supports a collaborative process where algorithms assist with tasks ranging from color correction and visual effects to scene sequencing and narrative structuring. This partnership raises profound questions about the locus of authorship and the distribution of creative control across human and non-human actors. Furthermore, posthumanism interrogates the relationship between physical embodiment and digital technologies, as virtual sets, motion capture, and digital avatars blur conventional distinctions of presence and representation. Such innovations facilitate new storytelling modes that transcend human corporeal limitations, especially within immersive and virtual production environments.

The integration of AI into editing workflows also surfaces significant ethical and political concerns. Algorithmic biases embedded in training data risk perpetuating inequalities, while automation threatens to displace skilled human editors. Additionally, sophisticated video manipulation tools—exemplified by deepfakes—pose challenges for media authenticity and fuel debates surrounding misinformation and propaganda. These complexities demand critical reflection informed by posthuman ethics to ensure responsible creative and technological practices.

Practically, posthuman theory's principles are reflected in the growing use of AI-assisted editing platforms that generate or suggest cuts and transitions based on predictive models, as well as in virtual production techniques that seamlessly merge real and digital environments. Interactive and non-linear media further embody posthuman values by enabling multiplicity, decentralization, and collaborative meaning-making across human-machine networks.

By engaging posthuman theory, filmmakers and scholars gain vital conceptual tools to understand how creativity, authorship, and ethical responsibility are evolving within the hybrid ecologies of algorithmic and digital media. This perspective reveals not a replacement of human creativity but a dynamic redefinition shaped by complex collaborations between humans and machines.

Computational Creativity:

Computational creativity is a multidisciplinary field that explores the capacity of machines to perform tasks traditionally associated with human creativity, such as composition, improvisation, and artistic judgment. It intersects computer science, cognitive

science, philosophy of mind, and the arts.

Lev Manovich, in *AI Aesthetics* (2020), argues that AI systems are not merely tools but participants in aesthetic production. He identifies a fundamental shift in cultural logic—from linear authorship to data-driven, pattern-based creation. For Manovich, algorithms can learn stylistic features, generate visual compositions, and even simulate "aesthetic taste," thereby participating in meaning-making processes previously reserved for human agents.

In tandem, scholars like Geraint Wiggins and Simon Colton have explored the formalization of creativity in machines since the early 2000s, proposing that creativity can be understood, modeled, and implemented computationally. Their frameworks, such as the Creative Systems Framework (CSF), define creativity in terms of novelty, value, and surprise—criteria that can, theoretically, be programmed into algorithmic systems.

Applied to *The Frost*, computational creativity theory allows for an analysis that moves beyond binary assessments of success or failure. Instead, it investigates how the film's montage reflects the operational logics of AI—such as probabilistic selection, pattern recognition, and rule-based assembly—and how these methods intersect with or diverge from human cinematic conventions.

In summary, Classical Montage Theories, Posthuman Theory, and Computational Creativity together form a triangulated lens through which *The Frost* can be understood not merely as a short film, but as an artifact of a transitional cinematic era—one in which the author is not singular, editing is not exclusively manual, and creativity is no longer a solely human domain. Consequently, these frameworks support a layered analysis of the aesthetic, conceptual, and philosophical implications of algorithmic montage in a posthuman context.

Methodology:

This study employs a qualitative research approach focused on a detailed analysis of the short film *The Frost*. The methodology is designed to systematically investigate how the film's editing aligns with or diverges from classical montage principles, particularly those articulated by Sergei Eisenstein.

The primary method is Comparative Montage Analysis, which entails a frame-by-frame and scene-by-scene examination of selected sequences from *The Frost*. This approach facilitates a thorough assessment of editing rhythm, shot juxtaposition, visual transitions, and emotional impact. By comparing these elements against Eisenstein's theory of intellectual montage—which highlights the dialectical collision of images to

generate meaning—the study identifies areas of convergence and divergence between traditional human-driven montage techniques and algorithmically generated editing patterns.

Furthermore, the study incorporates Theoretical Mapping by contrasting the film's editing strategies with foundational montage concepts. This comparative framework fosters a critical dialogue between classical film theory and contemporary algorithmic editing practices.

Lastly, Interpretive Criticism is applied to contextualize AI-generated rhythm, timing, and emotional coherence within established cinematic standards. This allows for a nuanced evaluation of *The Frost* as a hybrid artifact positioned at the intersection of human creativity and machine intervention.

This methodology ensures analytical rigor and reproducibility by clearly outlining the procedures and theoretical frameworks guiding the study, thereby contributing to scholarship in both film theory and digital media studies.

Case Study: Comparative Montage Analysis of *The Frost* (2024)

Film Context and Production Background:

The Frost (2024), directed by Josh Rubin in collaboration with Waymark Creative Labs, represents a seminal exploration of hybrid cinematic authorship through generative AI technologies. Initially released as a 12-minute short in June 2023 via MIT Technology Review (Rubin & Waymark Creative Labs, 2023), the film's genesis involved integrating DALL-E 2 with traditional animation to forge a surreal visual narrative. The subsequent expansion into a 23-minute feature incorporated advanced AI video generation tools, further complicating its visual and narrative textures. The film's layered aesthetics—ranging from uncanny, ethereal sequences to photorealistic renderings—situate it as a critical exemplar of AI's emergent role in reshaping montage and authorship (Waymark Creative Labs, 2024). Premiered in full at Singapore's Creator Renaissance Programme (September 2024), *The Frost* interrogates the interplay between human creativity and algorithmic agency in storytelling (Williams, 2024).

Introduction to the Case:

This study foregrounds *The Frost* as a locus for investigating AI-driven montage against classical cinematic theory. The film's partially AI-generated editing presents a fertile site to examine how automated decisions echo or subvert foundational montage paradigms, specifically the intellectual collision of shots articulated by Eisenstein (1949) and the psychological continuity posited by Pudovkin (1926). Through granular analysis of

selected sequences, the study interrogates AI editing's capacity to generate ideological meaning and emotional resonance absent explicit human intentionality, engaging with ongoing debates in film studies and computational creativity (Manovich, 2017; Lopes, 2019).

Case Study: Emergent Montage and Posthuman Temporality in The Frost (2023)

Description and Analysis of The Frost's Montage:

The following detailed analysis of the 1:35–4:00 sequence in *The Frost* exemplifies these emerging editing paradigms, showcasing how AI-generated montage disrupts traditional cinematic continuity and authorship.

The 2023 AI-generated short film *The Frost* offers a unique opportunity to analyze emergent montage techniques in the absence of a traditional human editor. The sequence opens with a stark contrast to

the film's preceding atmospheric mood. The sudden hard cut disrupts the viewer's immersion, shifting abruptly from a diffuse, ambient setting to an intensely focused close-up. This jarring edit challenges the continuity principles championed by classical montage theorists like Pudovkin, who emphasized smooth transitions to maintain narrative coherence and emotional engagement.

Visually, the close-up of the man's mouth is disconcerting. The jerky he gnaws on has a raw, almost unnatural texture—its pinkish hue resembling frozen flesh rather than food. This unsettling imagery is amplified by the digital quality of the mouth's movements, which lack organic fluidity. The slight stiltedness in the chewing suggests an uncanny mechanical mimicry of life, evoking a subtle sense of the artificial or even grotesque.



The image was taken from YouTube

This movement recalls the concept of associative montage, yet it removes the ideological intent central to Eisenstein's dialectical editing. Unlike Eisenstein's montage, which deliberately orchestrates emotional and intellectual responses toward a political or ideological idea, the AI-generated transitions appear to be driven primarily by formal proximities—color, texture, shape—rather than narrative or ideological causality. For example, the cut from the man's eye to the radio signals flickering in the stormy sky introduces a new vector of meaning: here, the radio signals function both as diegetic sound and symbolic motif, evoking the collapse of human communication and signaling a fracture in narrative coherence.

This sequence exemplifies what might be called emergent montage—a montage without an auteur, arising not from human intention but from algorithmic logic. This shift raises significant questions about the nature of montage today: Is AI-generated montage still “ideological” in the

classical sense? Or is it primarily “aesthetic,” detached from human intention? More provocatively, does it gesture toward a posthuman cinematic syntax, where meaning is not authored but emerges from the complex interactions between human and machine agents?

The following 2:00–4:00 segment offers a striking tonal shift. The camera lingers on frozen bodies and the empty, snow-covered landscape. There is a deliberate absence of narrative propulsion—no dialogue, no action—only slow tracking shots and eerie, droning sound design. The montage here is more atmospheric than narrative; the AI appears to generate cuts based on affective resonance rather than plot advancement. This aligns partially with Walter Murch's notion of cutting “for emotion,” but inverts its premise: instead of a human editor evaluating emotional cadence, the machine evaluates visual-emotional patterning based on learned data sets.



The image was taken from YouTube

This gives rise to a new form of temporality—a non-human sense of rhythm and pause, one that resists classical continuity and embraces drift, slowness, and eerie detachment. We might even say the temporality becomes “glacial,” not simply in setting, but in aesthetic orientation.

To understand the distinctiveness of *The Frost*'s montage, we can contrast this sequence with Sergei Eisenstein's iconic (*Odessa Steps*) scene in

Battleship Potemkin (1925). In Eisenstein's hands, the montage is dialectical: rapid cutting between the terrified crowd, the advancing boots of the soldiers, and the falling baby carriage generates tension, conflict, and ideological clarity. Each shot is chosen not merely for continuity or emotion, but for its role in a thesis–antithesis–synthesis structure. The viewer is meant to feel outrage, to engage with revolutionary consciousness.



The image was taken from YouTube

In *The Frost*, however, no such ideological synthesis is attempted. When the AI cuts from the man's eye to the radio waves, then to the figures frozen in the storm, the relationship is not logical or political but poetic, almost Bazinian in its openness. André Bazin championed realism and the ambiguity of long takes and deep focus, resisting montage's manipulative tendencies. Ironically, AI montage in *The Frost*—despite its synthetic nature—invokes a similar effect: the viewer is left to assemble meaning from loosely connected fragments, without being overtly guided.

This form of montage can be described as posthumanly associative. Rather than functioning as

a vehicle for propaganda or psychological storytelling, the montage in *The Frost* operates within a machine-learned visual lexicon, where sequence is determined by statistical coherence, not dramatic causality. The result is a new kind of cinema—neither fully Eisensteinian nor Bazinian, but somewhere between generative patterning and sensory speculation.

AI Editing Techniques and Montage Logic:

Technically, the AI's editing decisions in *The Frost* are likely driven by advanced visual feature recognition and pattern matching algorithms. These systems analyze frame-by-frame data—such as dominant colors, textures, motion vectors, and

spatial compositions—and select cuts that optimize statistical coherence or novelty according to trained machine learning models (Manovich, 2017; Elwell & Smaill, 2021). Unlike human editors who apply cultural knowledge, emotional intuition, and narrative logic, the AI operates within a confined dataset, applying computational heuristics to create rhythm and transitions.

This mechanistic approach to montage both limits and expands its expressive potential. On one hand, the AI's lack of contextual understanding restricts its ability to construct coherent narrative arcs or evoke nuanced emotional responses in the classical sense. The resulting montage can feel fragmented, alien, or disjointed, challenging viewer expectations of cinematic storytelling. On the other hand, the AI's capacity to detect and link visual features across disparate shots may uncover novel aesthetic juxtapositions inaccessible to human cognition, fostering new modes of sensory speculation and emergent meaning.

This “posthuman” montage generates a glacial temporality characterized by eerie pacing, slow drift, and affective ambiguity, aligning partially with Murch's principle of cutting “for emotion” but enacted through machine-learned visual-emotional patterns rather than human editorial intention.

Ultimately, *The Frost's* AI-generated montage exemplifies a shift from authorial, ideologically driven editing toward a hybrid, algorithmic syntax. This raises important questions about how montage might evolve when aesthetic decisions emerge from statistical patterning instead of human subjectivity—challenging long-standing assumptions about cinematic meaning-making.

Discussion:

The analysis of *The Frost's* AI-generated montage reveals significant shifts that challenge and extend traditional montage theory, particularly as articulated by Eisenstein, Pudovkin, and Murch. Classical montage has been rooted in human intentionality—whether ideological, emotional, or narrative—with editors exercising conscious control to shape meaning through the deliberate sequencing of shots. In contrast, *The Frost's* editing emerges from algorithmic processes that lack explicit ideological purpose or narrative coherence, instead prioritizing formal qualities such as color, texture, and pattern recognition. This emergent montage exemplifies a break from the dialectical and psychological aims of classical theory, suggesting a novel cinematic logic grounded in computational aesthetics.

From the perspective of posthumanism, this shift invites a rethinking of authorship and agency in cinema. Posthuman theory problematizes the

centrality of the human creator, emphasizing instead networks of human and non-human actors co-constructing meaning (Braidotti, 2013; Hayles, 1999). *The Frost's* montage embodies this decentering of the human editor by positioning AI not as a mere tool but as a co-creative agent with distinct operational logics and aesthetic criteria. This challenges the auteur-centric model of filmmaking and opens up questions about responsibility, creativity, and intentionality in works mediated by intelligent systems.

Cinematically, the hybrid montage logic evident in *The Frost* expands the boundaries of form and temporality. The film's glacial pacing, fragmented imagery, and associative juxtapositions diverge from classical continuity editing and narrative propulsion, offering instead a sensorial, contemplative mode of viewing. This points toward a posthuman cinematic syntax where meaning is emergent, contingent on complex interactions between algorithmic selection and human reception. It also suggests new aesthetic potentials where montage becomes less about guiding emotional or ideological response and more about provoking affective resonance and speculative engagement.

Moreover, AI's role in creative processes as demonstrated in *The Frost* problematizes traditional binaries between human creativity and mechanical reproduction. While the machine's editing decisions lack conscious intent, they nonetheless generate novel juxtapositions and rhythmic structures that can inspire new ways of seeing and interpreting film. This underscores the importance of computational creativity frameworks, which recognize machine agency as a legitimate source of artistic innovation alongside human insight (Colton & Wiggins, 2012; Boden, 2004).

However, the limits of AI montage should also be acknowledged. The absence of cultural context and narrative coherence may render some sequences alienating or inaccessible, highlighting the ongoing need for human interpretative mediation. As such, *The Frost* exemplifies not a replacement of human editors but a reconfiguration of editorial collaboration—one that demands new vocabularies and critical approaches attuned to the hybrid realities of posthuman filmmaking.

In sum, the findings from *The Frost* advance broader theoretical discussions by demonstrating how AI-driven montage destabilizes classical assumptions about authorship, cinematic form, and creativity. This invites film scholars and practitioners to reconsider montage not only as a human craft but as a dynamic interplay between human intention and algorithmic agency in the evolving landscape of digital cinema.

Conclusion:

The analysis of The Frost's AI-generated montage reveals a profound transformation in cinematic editing, where traditional notions of authorship, continuity, and ideological intent are challenged by algorithmic processes. Departing from classical montage theories, the film's emergent editing logic prioritizes formal visual relationships and affective resonance over narrative coherence or political meaning. This shift not only destabilizes the human editor's central role but also introduces a distinctive posthuman temporality characterized by glacial pacing and sensory ambiguity.

Technically grounded in advanced pattern recognition and data-driven heuristics, AI montage expands the expressive potential of film by uncovering novel aesthetic juxtapositions, while simultaneously limiting narrative depth and emotional subtlety as traditionally understood. The Frost exemplifies a hybrid creative practice that blurs the boundaries between human and machine agency, demanding new theoretical frameworks to comprehend montage in the age of computational authorship.

When comparing AI editing to Sergei Eisenstein's classical montage, it becomes clear that they represent two fundamentally different paradigms rather than one being superior to the other. Eisenstein's dialectical montage remains unmatched in its intentional construction of meaning through ideological and emotional contrast. In contrast, AI-generated montage offers a radically new, non-human logic of association—one that opens up unexplored aesthetic terrain but often lacks narrative intentionality or ideological purpose. Ultimately, The Frost serves as a critical case study illuminating both the possibilities and limitations of algorithmic montage. As AI continues to evolve within cinematic workflows, future research must investigate how these hybrid editing systems reshape not only the language of film, but also the viewer's interpretive role in the face of posthuman creativity.

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