

RESEARCH ARTICLE

Hermeneutic Horizons of Authenticity in Science Fiction Cinema: Lens Language, Aesthetic Novelty, and the Sensorium of the Digital Age

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Abstract: Computationally generated imagery, virtual production, and generative artificial intelligence have made the question of authenticity newly urgent for contemporary moving-image culture, including cinema and related digital media. Rather than treating authenticity as a property that simply inheres in the recorded image, this article offers a philosophical-hermeneutic account grounded in Hans-Georg Gadamer's work. Through hermeneutic reasoning about effective history, the fusion of horizons, and the dialogical encounter between presentation and reception, the study reconceptualises cinematic authenticity as a relational achievement formed in interaction with spectator perception. Taking science fiction cinema as a principal case, the article advances three interrelated claims. First, what appears as "the real" in cinematic lens language is not secured by indexical reference alone; it becomes convincing through a contractual and historically effective process that depends on how the image is presented and how it is perceived. Second, science fiction cinema—by relying constitutively on simulation, spectacle, and computationally synthesised worlds—stages this dialogical encounter with unusual explicitness, producing what the article terms a "double fusion of horizons." Third, this framework discloses an aesthetic novelty relevant to the digital sensorium, showing how authenticity operates as an interpretive and perceptual accomplishment rather than a stable representational guarantee. Situated in current debates on deepfakes and virtual production, the study argues that hermeneutic analysis can provide productive theoretical resources for understanding contemporary authenticity and for extending this approach to interactive media in future research.

Keywords: Science Fiction Cinema; Authenticity; Philosophical Hermeneutics; Fusion of Horizons; Digital Sensorium

1. Introduction

Computational imagery, virtual production technologies, and generative artificial intelligence have fundamentally challenged the photographic foundations on which cinematic meaning was once grounded. This transformation raises an urgent question: what does authenticity mean when the image is no longer tethered to an external referent? Where the analogue celluloid frame inscribed a trace of light, and where even early digital cinema preserved a measure of indexical fidelity, today's moving image is increasingly the product of computational synthesis: a numerical artefact whose relation to any extra-filmic referent has become contingent rather than constitutive (Swords & Willment, 2024; Manovich & Arielli, 2024). The screen, in short, no longer points unambiguously beyond itself. While this study focuses on cinema, the underlying problematic is endemic to all calculative media that synthesise

worlds rather than simply record them—from interactive entertainment to virtual environments—and the conceptual resources developed here are intended to bear, in principle, on that broader class of cases.

Within this transformed media ecology, the science fiction film occupies a peculiar and theoretically generative position. As a genre, science fiction has always relied upon the construction of worlds that do not exist; its characteristic technical means—special effects, computer-generated imagery, virtual sets, and now AI-assisted post-production—have consistently positioned the genre at the leading edge of cinematic innovation. What was once an exceptional condition of one genre has, however, become the general condition of contemporary moving-image culture. Recent philosophical work on deepfakes and the epistemic robustness of the moving image has registered this transformation with growing urgency (Fallis, 2021; de Ruiter, 2021; Atencia-Linares & Artiga, 2022; Weikmann et al., 2025). Science fiction thus emerges as a privileged site for theoretical inquiry: the genre that most explicitly stages, dramatises, and renders visible the broader transformations in how images are produced and how they are seen (Bréan, 2021; Lim et al., 2025).

Yet the theoretical apparatuses most often mobilised to address these transformations have remained, on the whole, oriented toward cultural critique rather than ontological reconstruction. These traditions are, of course, neither uniform nor reducible to one another: Baudrillard's semiotics of simulation (Baudrillard, 1994), Debord's account of social relations mediated by images (Debord, 1995), and Jameson's periodisation of postmodern cultural logic (Jameson, 1991) each proceed from distinct premises and arrive at distinct conclusions. What the present argument isolates is a single shared tendency that cuts across their differences: each reads the loosening of the image from its referent primarily as a loss—a decline, an impoverishment, a disappearance—rather than as a positive constitutive condition. It is this specific construal, not the entirety of any of these frameworks, that the hermeneutic perspective seeks to displace, for such readings leave under-examined the constitutive role that technological mediation plays in the formation of contemporary perceptual experience (De Boer & Verbeek, 2022; Denson, 2023a).

The other established account of cinematic authenticity faces a complementary difficulty. The realist tradition descending from Bazin grounds the authenticity of the film image in its indexical bond to a profilmic reality—the photographic trace of something that was before the camera (Bazin, 2005). On that account, an image generated entirely by computation, with no profilmic referent whatsoever, cannot be authentic in the relevant sense at all; yet such images—the rendered black hole of *Interstellar* is the clearest case—are routinely experienced by audiences as authentic, indeed as more convincing than many recorded images, and the indexical account cannot explain why. A theory adequate to the contemporary cinematic image therefore cannot locate authenticity in the causal trace, as the realist tradition does, nor in its mere disappearance, as the critical tradition does; it must locate it in the encounter between the work and the spectator. This is what philosophical hermeneutics provides, and it is why a new framework is required.

This article takes a different theoretical approach. It draws on Hans-Georg Gadamer's philosophical hermeneutics, as presented in *Truth and Method* (Gadamer, 2004) and further developed in contemporary scholarship (Gillespie, 2022; Laverdure, 2022), to rethink authenticity in cinema. Rather than treating the “real” as a property that the digital image either preserves or betrays, the hermeneutic perspective approaches authenticity as a relational and effect-historical achievement: a horizon of understanding that emerges through the dialogical encounter between the work and its interpreter. On this view, the very instability of the contemporary cinematic image is not a symptom of crisis but the explicit appearance of a hermeneutic dynamic that has, in fact, always been operative in the cinematic experience.

Methodologically, this article is a work of philosophical film analysis rather than an empirical study. It employs a qualitative, interpretive method—close reading in the tradition of philosophical hermeneutics—in which selected film sequences serve as the primary evidence for a conceptual argument. Each sequence is examined for the way it stages the relation between the film's mode of presentation and the spectator's perceptual and interpretive horizon, and the individual readings are then drawn together to test the article's central claim. The aim is not statistical generalisation but conceptual adequacy: an account able to render intelligible the phenomenon it isolates.

A note on the use of these sources is in order, since the argument draws on a wide range of thinkers and the relations among them must be kept distinct. Gadamer's philosophical hermeneutics serves as the sole governing framework: the concepts of effective history, horizon, and the fusion of horizons supply the method by which the analysis proceeds. The other figures enter in clearly subordinate and differentiated roles. Husserl is invoked only at the threshold, for the limited purpose of the phenomenological suspension that loosens the natural attitude toward the “real”; the article does not adopt his transcendental programme, from which, as Section 2 makes explicit, Gadamer pointedly departs. Bazin, Manovich, and Heidegger furnish descriptions of the object-domain—the photographic image, new-media form, and the technological constitution of the visible—which the hermeneutic analysis then interprets. Baudrillard, Debord, and Jameson appear as the principal interlocutors against whom the argument defines itself. Hui, Verbeek, and Denson figure as contemporary partners in extending the framework toward interactive media. Holding these roles apart is what allows a broad engagement to remain argumentatively disciplined rather than eclectic.

Three interrelated claims structure the analysis that follows. First, the “real” in cinematic lens language must be understood as a contractual and effect-historical construct, irreducible to the indexical referent. The phenomenological suspension of the natural attitude reveals that authenticity is not a property of the recorded image but an achievement of the situated act of viewing. Second, science fiction cinema—by virtue of its heightened reliance on computationally produced spectacle—most explicitly stages what this article terms a double fusion of horizons: a dialogical encounter in which the cinematic mode of presentation meets, contests, and ultimately reshapes the spectator's mode of perception. Third, this hermeneutic dynamic discloses an aesthetic novelty that traditional aesthetics, with its representational presuppositions and its commitment to the stability of the canon, has been structurally ill-equipped to articulate. To grasp this novelty, this study argues, requires a theoretical vocabulary attuned to the dialogical, the effect-historical, and the perceptually formative.

The argument unfolds in three movements. The first clarifies the concept of authenticity by way of phenomenological suspension and contrasts the “real” of lens language with the realisms of other artistic media. The second develops the notion of a double fusion of horizons in the context of science fiction cinema, drawing on Gadamer's central hermeneutic concepts. The third examines the aesthetic novelty that emerges from this dialogical encounter and considers its implications for the sensorium of the digital age. A brief conclusion reflects on the broader theoretical resources that the hermeneutic perspective offers for an aesthetics adequate to contemporary moving-image culture.

2. Suspending the Real: Authenticity as Contractual Achievement

Any attempt to interrogate the authenticity of the cinematic image must first clarify what it is that the term “real” is taken to designate. The persistent ambiguity here is not merely terminological; it reflects a deeper philosophical question about whether authenticity inheres in the object, in the act of representation, or in the interpretive situation through which both are constituted. This section approaches that question through two complementary moves: a phenomenological suspension of the natural attitude toward the “real,” and a comparative analysis of the “real” of lens language alongside the realisms of other artistic media.

Four terms that are easily conflated must be distinguished at the outset, since the argument turns on holding them apart. Indexicality denotes the causal-physical bond between an image and its referent—the trace of light that the analogue photograph preserves. Realism denotes a stylistic achievement: the quality of appearing convincingly real, which a wholly synthetic image may possess in full and an indexical image may altogether lack. The hyperreal, in Baudrillard's sense, denotes the condition in which the simulation precedes and displaces any referent. Authenticity, as this article uses the term, denotes none of these: it is the dialogical and effect-historical accomplishment through which an image comes to be experienced as true within a situated act of viewing. The thesis developed below is that cinematic authenticity is independent of indexicality, is not reducible to realism as style, and is not identical with the hyperreal—even as it operates across all three registers.

2.1 The Bracketed Real: From Phenomenological Reduction to Effective History

Husserl's phenomenological reduction proposes that authentic philosophical inquiry begins with the suspension of the natural attitude—the habitual presupposition that there exists, behind appearances, a world-in-itself whose properties can be straightforwardly accessed (Husserl, 1970). When the phenomenologist brackets this assumption and attends instead to the intentional structure of experience, the “real” ceases to function as a fixed metaphysical posit and appears, rather, as something that takes on its sense within concrete situations of meaning-bestowal. The objective “real,” so approached, reveals itself to be neither given nor self-evident; it is a contractual and effect-historical achievement, constituted within shared horizons of understanding.

This phenomenological insight has, since the mid-twentieth century, been elaborated by hermeneutic, post-structuralist, and semiotic traditions in ways that bear directly on the analysis of the cinematic image. Heidegger's existential analytic situates being-in-the-world prior to any subject-object distinction, while later post-structuralist linguistics treats the apparently solid signifier as the effect of a structural play between presence and absence (Heidegger, 1977). Across these traditions, a common conviction emerges: the metaphysical conception of a “real” that precedes and determines knowledge gives way to an understanding in which the “real” is itself constituted by the act of cognition. What Western metaphysics had once taken as “being determining knowing” becomes, in this hermeneutic-phenomenological tradition, “knowing constituting being” (Mitchell, 1994). Lefebvre's diagnosis of the “decline of the referent” in the contemporary image-world captures this transformation in pointedly visual terms (Lefebvre, 1991): in a culture saturated by mediated images, what once stood as a stable ground of reference has become a relational and context-dependent effect. Gadamer's contribution to this tradition is to insist that the constitutive process of understanding is irreducibly historical. In *Truth and Method*, he argues that all understanding is shaped by what he terms *Wirkungsgeschichte*, or effective history—the cumulative sedimentation of tradition, convention, and prior interpretation that informs the interpreter's situation (Gadamer, 2004). Authenticity, on this view, is not the unmediated grasp of a thing-in-itself but the achievement of a situated act of understanding in which the interpreter's horizon meets and is transformed by that of the work. Recent reception of Gadamer's thought has emphasised the productive dimension of this encounter: interpretation is itself a form of translation, an act of bringing the work into dialogue with the interpreter's living concerns (Laverdure, 2022; Gillespie, 2022). The implication for the analysis of cinematic authenticity is significant. To ask whether a film is “authentic” is not to ask whether it preserves an indexical trace of a pre-filmic world, but to ask how it stages the dialogical encounter through which meaning emerges.

This appropriation of Husserl is, it must be acknowledged, a qualified one. Gadamer's hermeneutics is developed in explicit opposition to the central ambition of Husserlian phenomenology—the search for a presuppositionless, transcendental starting point in the constituting subject. Where Husserl seeks to ground meaning in the structures of transcendental subjectivity, Gadamer relocates the constitution of meaning in the historical, linguistic, and dialogical situation of understanding, denying that any horizon-free standpoint is available to the interpreter at all. The present argument does not elide this tension but turns upon it: Husserl's reduction is enlisted only negatively, to dislodge the natural-attitude assumption that the “real” is a self-evident given, while the positive account of how the “real” is thereafter constituted is drawn entirely from Gadamer's historical and dialogical model, not from transcendental subjectivity. The movement from the epoché to effective history is therefore not a seamless continuation of a single lineage but a deliberate substitution—the replacement of a transcendental ground with a historical one.

2.2 The Real of Lens Language and the Real of Other Artistic Media

With this clarification in place, it becomes possible to attend more carefully to the specific character of cinematic “realism.” Gadamer's treatment of language in *Truth and Method* offers an instructive starting point. Drawing on Heidegger's claim that

“language is the house of being” and on Humboldt’s thesis that “language is worldview,” Gadamer argues that language is not an instrument that the speaker uses to express a prior content, but the ontological medium within which the world articulates itself: “the world is articulated in language” (Gadamer, 2004, p. 447). Understanding, on this view, is inseparable from linguistic articulation. Transposed to the cinematic domain, this principle implies that the lens language of cinema is not a neutral conduit through which a pre-existing world is conveyed, but the ontological medium within which the cinematic world comes into being.

What distinguishes lens language from other artistic languages is its capacity to deploy realist means in the service of constructive ends. Bazin, in his canonical essays on the ontology of the photographic image, anchored cinematic authenticity in the mechanical capacity of the photographic apparatus to preserve a trace of pro-filmic reality. “The cinema,” he wrote, “is the equivalent of the integral re-creation of reality” (Bazin, 2005, p. 128). The recorded shot, in this account, carries an indexical authority that distinguishes it categorically from painting or literature. Yet Bazin’s argument, while compelling at the level of the single shot, encounters difficulty as soon as the analysis moves to the assembled film. Once shots are placed in sequence, edited, and articulated through montage, the cinematic image becomes, irreducibly, the result of a selective and constructive act. There is no omniscient point of view in lived perception, and there can be none in the film either; what the spectator sees is always the product of cinematic selection. Authenticity in cinema, accordingly, resides not in the indexical guarantee of the recorded shot but in the dialogue between the recorded element and the constructive operations that organise it (Hui, 2023).

This dynamic, although intensified in cinema, is not unique to it. The history of Western painting offers a structurally analogous case. In classical European religious painting, the depicted subjects—the Madonna, Christ, the saints—lie wholly beyond the empirical world; they are super-real in their referent. Yet the painters who rendered them did so by means of rigorously realist techniques, particularly the geometric science of linear perspective. Surrealism in the twentieth century pushed this logic further: Dalí and Magritte deployed the techniques of academic realism to render scenes that explicitly violated ordinary expectations of spatial and temporal continuity. Even contemporary art photography continues this dynamic, using the indexical authority of the camera to construct images whose referents are purely compositional or imaginary. Across these cases, a common pattern emerges: realist technique functions as the formal vehicle for the construction of the super-real. Cinema does not invent this dynamic; it makes it pervasive.

The three-layer model represented in Figure 1 schematises this analysis. At the most fundamental layer, the “real” is bracketed: authenticity is recognised as a contractual and effect-historical achievement rather than an objective property. At the intermediate layer, the recorded shot, understood as the basic grammatical unit of lens language, carries a delimited indexical authority. At the constructive layer, the assembled film mobilises that authority in the service of hyperreal worlds whose ontological status is irreducibly compositional. Crucially, the three layers are not sequential stages but mutually constitutive moments of a single hermeneutic situation.

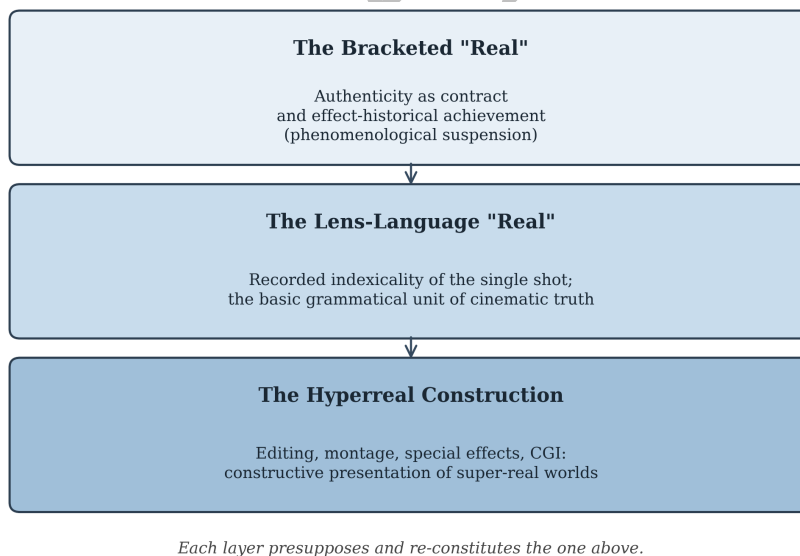


Figure 1: The Three-Layer Model of Cinematic Authenticity

source: author’s illustration based on Gadamer’s hermeneutics and the article’s argument

3. Science Fiction Cinema and the Double Fusion of Horizons

Having established that cinematic authenticity is a contractual achievement rather than an indexical property, the analysis now turns to the specific case of science fiction. The genre’s heightened reliance on spectacle, simulation, and computationally synthesised environments makes it the most explicit instance of the general dynamic articulated above. What is important, however, is not merely that science fiction relies more heavily on constructive techniques than other genres, but that it stages this reliance as part of its narrative and aesthetic substance. Science fiction cinema is, in this sense, a hermeneutic genre par excellence: it makes explicit the dialogical encounter between cinematic presentation and human perception that other genres treat as a tacit precondition.

The three films analysed in what follows were selected on principled rather than illustrative grounds. Each isolates a distinct condition within the phenomenon under study, and together they span its range. *Interstellar* (2014) furnishes the limiting case of a wholly computational image grounded in scientific calculation yet possessing no photographic referent: at the time of its release, no black hole had ever been photographed. *Blade Runner 2049* (2017) furnishes the composite case, in which synthetic and recorded elements are combined within a single image, so that the seam between the indexical and the generated itself becomes an object of perception. *The Wandering Earth II* (2023) extends the analysis beyond the Anglophone canon to a major non-Western production, testing whether the proposed model holds across a different cinematic and cultural horizon. Selected on these grounds—purely computational, composite, and cross-cultural—the three films provide analytic coverage of the argument rather than a convenient sample.

3.1 Spectacle, Simulation, and the Hyperreal in Science Fiction

In contemporary film criticism, science fiction is conventionally understood as a genre that depicts futures or alternate presents extrapolated from presently known scientific principles. This basic definition underscores the genre's constitutive reliance on world-building and speculative construction rather than documentary recording. It follows that the genre cannot rely solely on the indexical recording of the pro-filmic world; it must construct, extrapolate, and synthesise. Green-screen compositing, three-dimensional modelling, virtual cinematography, and post-production rendering combine to produce the sound-image environments through which the genre stages its speculative content. With the rise of LED-wall virtual production, this constructive dimension has become both more sophisticated and more integrated into the principal photography itself (Pires et al., 2022; Swords & Willment, 2024; Söğütülür, 2024). The cinematic image, in this configuration, is the result of a continuous loop between physical capture and computational modulation.

More radically still, recent advances in generative artificial intelligence have begun to erode even the residual indexicality of the recorded element. Where earlier digital effects supplemented or modified photographically captured footage, generative video models are capable of producing moving images for which no pro-filmic original exists in any meaningful sense (Manovich & Arielli, 2024). The science fiction genre, which has long imagined such conditions in its narrative content, now finds them operationalised in its production techniques. Žižek's observation that "technology no longer merely imitates nature; it lays bare the mechanism that manipulates nature behind the scenes" (Žižek, 1997, p. 163) anticipates this development with striking accuracy. The hyperreal, in this configuration, is no longer the symptom of cultural decline but the operational logic of the medium.

A single example brings this abstract claim into focus. The black hole Gargantua in Christopher Nolan's *Interstellar* (Nolan, 2014) was not photographed, nor was it imagined freely by visual-effects artists; it was rendered by the Double Negative team from the gravitational equations supplied by the theoretical physicist Kip Thorne, and the production's rendering work was sufficiently rigorous that it issued in peer-reviewed findings about the appearance of accretion disks under extreme gravitational lensing (James et al., 2015). At the moment of the film's release in 2014, no photograph of a black hole existed anywhere; the first such image was produced by the Event Horizon Telescope only in 2019. Gargantua is therefore a purely computational image with no pro-filmic referent whatsoever—and yet it carries an authenticity, at once scientific and aesthetic, that arguably exceeds anything a photograph could have offered at the time. This is the cleanest possible refutation of the equation of authenticity with indexicality: a zero-referent synthesised image is experienced as more authentically "real" than a recording, because its authenticity is not a function of any causal trace but an achievement of the dialogue between the film's mode of presentation—physically grounded computational rendering—and a spectatorial horizon trained to read such an image as a window onto cosmic reality. The same logic governs the film's planetary environments. Figure 2 shows one such world—a barren alien surface that exists nowhere, rendered with the textural realism of a location photograph and scaled by a single human figure, yet apprehended as physically present and real.



Figure 2: The Double Fusion of Horizons in Interstellar: Cosmic spectacle and human perception

Source: Screenshot retrieved from Film Grab, *Interstellar* (Nolan, 2014), <https://film-grab.com/?s=Interstellar>

Heidegger's analysis of the "age of the world picture" offers a complementary diagnosis (Heidegger, 1977). For Heidegger, the modern epoch is characterised by the transformation of the world into something that can be set before the human subject as an object of visualisation—a picture. The accelerating proliferation of audiovisual technologies, from photography and cinema through television and digital media to virtual and augmented reality, has continually intensified this transformation. Today, the dominant modes of signification operate through interfaces of augmented, virtual, and mixed reality; through generative video; and through real-time computational rendering. Within this transformed sensorium, science fiction cinema occupies a position of theoretical privilege precisely because it has always taken the dialectic of technological visualisation as its explicit thematic concern (Bréan, 2021; Denson, 2023b).

3.2 Horizon, Temporal Distance, and the Spectator's Fore-Understanding

Gadamer's concept of the horizon proves indispensable for grasping the specific hermeneutic structure of the science fiction film. The horizon, for Gadamer, designates the situated standpoint from which understanding takes place—the cumulative range of vision that a given interpreter brings to the encounter with a work. No interpreter possesses a horizon-free perspective; every act of understanding occurs within and from a horizon shaped by historical situation, language, prior experience, and interpretive tradition. The work itself, equally, comes embedded within its own horizon: the conditions of its production, the conventions to which it responds, the assumptions it presupposes.

The relation between these two horizons is not external. Gadamer's central claim is that understanding is itself the event of their fusion. The temporal distance that separates the interpreter from the work—and that earlier hermeneuticists had treated as an obstacle to objectivity—is, for Gadamer, the productive condition of interpretation. Effective history operates through this distance, allowing the work to disclose dimensions of significance that remained implicit at the moment of its production. To understand a work, then, is not to reconstruct what its author intended, but to allow the work to speak into the interpreter's present situation. Interpretation is, in this sense, always already a form of application (Laverdure, 2022).

Applied to the cinematic experience, this hermeneutic framework yields a specific analytic insight. The spectator who encounters a science fiction film does not approach it from a position of perceptual innocence. Her horizon is itself the product of a complex media history: of decades of exposure to photographic, television, and digital images; of conventions of genre, of narrative, and of visual rhetoric; of culturally specific expectations about what bodies, environments, and futures look like. The film's own horizon, in turn, encodes the technical, conventional, and ideological conditions of its own production. The hermeneutic event of viewing is, therefore, never simply the consumption of images; it is the fusion of two horizons in which both are reshaped (De Boer & Verbeek, 2022).

3.3 The Double Fusion: Presentation and Perception in Dialogue

The dialogical encounter between cinematic presentation and spectatorial perception is general to all cinema, but science fiction renders it structurally explicit. By constructing worlds that do not exist, the genre obliges the spectator to actively negotiate the gap between what is presented and what her perceptual training prepares her to recognise. Conversely, the genre's authors are themselves engaged in negotiating the spectator's perceptual capacities: each new innovation in special effects extends, and is in turn shaped by, the spectator's capacity to read constructed images as inhabitable worlds. This reciprocal dynamic—in which the cinematic mode of

presentation and the human mode of perception are continuously reconfigured in dialogue with one another—constitutes what this article terms the double fusion of horizons.

It is now possible to state precisely what the doubling in the “double fusion of horizons” consists in, and how it differs from Gadamer’s original concept. Gadamer’s fusion of horizons is single-axis: the interpreter’s horizon and the work’s horizon meet to produce understanding. The cinematic encounter, this article argues, operates along two distinct but interdependent axes. The first is the semantic-hermeneutic axis familiar from Gadamer: the spectator’s horizon of meaning meets the film’s narrative and thematic horizon, yielding interpretive understanding of the work. The second is a perceptual-technical axis: the spectator’s perceptual horizon—what her media-historical training has taught her to register as “real” or “convincing”—meets the film’s horizon of image-construction (lens, montage, special effects, computational synthesis), and the encounter renegotiates the criteria of perceptual authenticity themselves. In most cinema this second axis remains latent: the image presents itself as a transparent window, and the perceptual negotiation passes unnoticed. Science fiction, by presenting worlds that cannot be recorded, forces the second axis into explicitness. And because the spectator cannot complete the meaning of a science-fiction world without simultaneously negotiating how its images are to be perceived as real, the two axes become mutually dependent rather than merely co-present. It is this simultaneous operation of, and reciprocal entanglement between, the semantic and the perceptual registers—neither reducible to the other—that the term “double fusion of horizons” names, and that Gadamer’s single fusion does not capture. The doubling, in short, is not two interpreters or two works, but two registers of fusion folded into one event.

A scene from Denis Villeneuve’s *Blade Runner 2049* (Villeneuve, 2017) renders this doubling almost literal. In the sequence in which the holographic companion Joi synchronises herself over the body of the flesh-and-blood Mariette in order to be physically present for the protagonist K, two questions are posed in a single image. The semantic question is diegetic: is K’s love “real” when its object is a commercial artificial intelligence? The perceptual question is technical: which image is “real” when a projected hologram is digitally composited over a human body? The visual construction—synthesised image overlaid on indexical recording, with deliberate micro-misregistrations where Joi and Mariette fail to align perfectly—forces the spectator’s eye to negotiate the boundary between the synthetic and the recorded at the very moment the narrative asks her to negotiate the boundary between authentic and simulated feeling. The semantic axis and the perceptual-technical axis do not merely run in parallel; one cannot complete the thematic interpretation without enacting the perceptual one. The scene is the double fusion made visible. That the film’s posthuman imaginary repays sustained spatio-cognitive analysis has been demonstrated elsewhere (Elyamany, 2023); the present reading isolates the specifically hermeneutic structure of the encounter. The film makes the same point at the level of world-building. Figure 3 shows the irradiated ruins of Las Vegas—a wholly synthesised space whose saturated dust and dead light answer to no photographic referent—yet one the spectator inhabits as oppressively real.



Figure 3: Visual Authenticity in Cinematography in *Blade Runner 2049*: Authentic dystopian visual rendering

source: Screenshot retrieved from Film Grab, *Blade Runner 2049* (Villeneuve, 2017), <https://film-grab.com/?s=2049>

If *Blade Runner 2049* stages the double fusion within a single shared cultural horizon, *The Wandering Earth II* (Guo, 2023) discloses a further, cross-cultural dimension of the same structure. The contemporary Chinese spectator’s perceptual horizon has itself been formed, in large part, by decades of Hollywood science-fiction spectacle: the visual grammar of the genre—the scale, the rendering conventions, the choreography of catastrophe—is an imported and effect-historical sediment, not a native given. When the film mobilises precisely this globally trained grammar (space elevators, planetary thrusters, orbital catastrophe) to stage a conspicuously non-Hollywood narrative—collective rather than individual survival, the relocation of the Earth itself rather than the escape of a chosen few—the spectator’s horizon of perception, trained on Western science fiction, fuses with a horizon of presentation that both adopts that grammar and reorients it toward a different cosmotechnical imagination of humanity’s relation to its planet (on the industrial formation of this Chinese science-fiction idiom, see Huang, 2024). The authenticity at issue is not whether the planetary thrusters “look real”—they have no referent—but whether the dialogical encounter reconfigures the spectator’s sense of which futures, and whose futures, can be rendered as inhabitable. This becomes concrete in the film’s climactic lunar sequence: when the automated detonation of the nuclear devices needed to keep the Moon from striking Earth fails, the charges can be set only by hand,

as a one-way mission, and it is the older crew members of the international teams who are called to step forward—the aged offering themselves so the young may survive. The visual grammar is unmistakably that of the Hollywood disaster spectacle—the rendered lunar surface, the countdown, the catastrophic scale—yet the ethic it carries is conspicuously collectivist and intergenerational rather than the lone-hero resolution that grammar conventionally serves. Here the perceptual-technical axis carries an irreducibly cultural charge, and the double fusion becomes simultaneously a perceptual and a cross-cultural event—a point to which Hui’s account of cosmotechnics, examined below, lends further support (Hui, 2021).

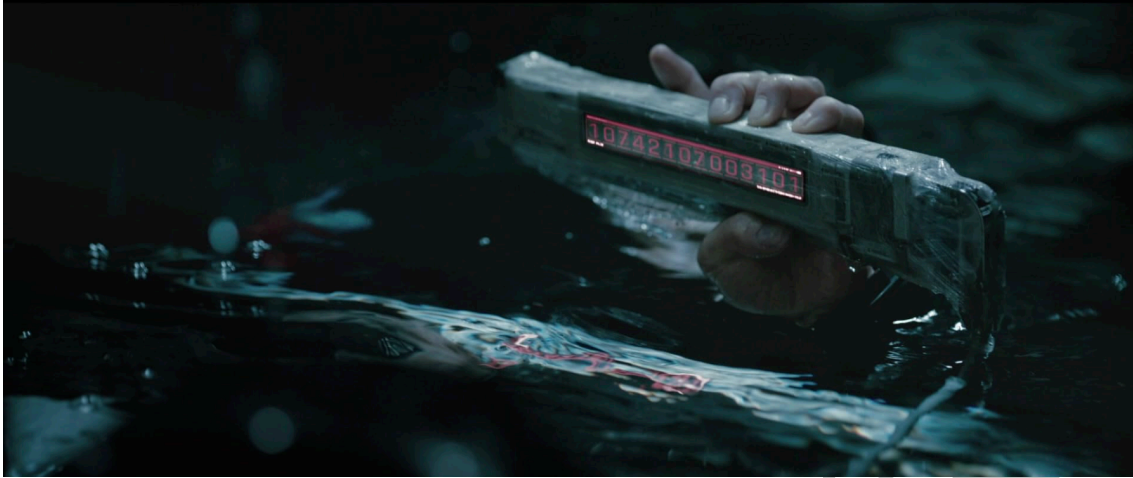
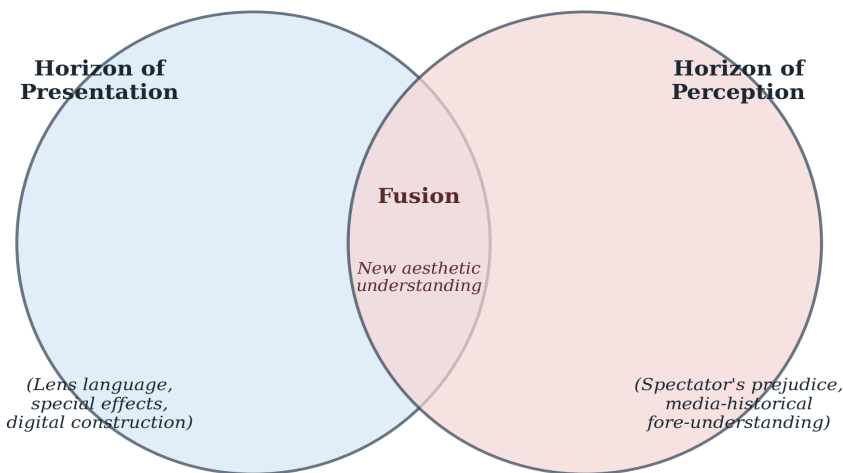


Figure 4: Cross-Cultural Double Fusion in The Wandering Earth II: The Lunar Detonation

source: Screenshot retrieved from IMDb, The Wandering Earth II (Guo, 2023), Media Viewer, https://www.imdb.com/title/tt13539646/mediaviewer/rm341618946/?ref_=ttmi_mi_15_2



The genre stages the dialogue between cinematic mode of presentation and human mode of perception.

article’s argument)

Figure 5: The Double Fusion of Horizons in Science Fiction Cinema
(source: author’s illustration based on Gadamer’s hermeneutics and the

Figure 5 schematises this dynamic. The horizon of presentation comprises the lens language, special effects, and digital construction through which the film offers its world to be seen. The horizon of perception comprises the spectator’s prejudices, conventional fore-understanding, and media-historical training. The overlap between them is not a static intersection but an event: the emergence of a new aesthetic understanding in which the spectator’s perceptual capacities are extended even as the film’s modes of presentation are interpretively activated. Crucially, this fusion is productive in Gadamer’s sense: it does not reduce the work to what the spectator already knows, nor does it reduce the spectator to what the work prescribes. It produces a horizon that exceeds both. It is also worth noting, in anticipation of broader theoretical applications, that the horizon of perception so understood is not exclusively optical: it already incorporates dispositions of expectation, recognition, and anticipatory orientation that, in interactive media, would be more explicitly classified as elements of a “horizon of agency.” The specific articulation of that broader claim, however, lies outside the scope of the present analysis.

Cinematic language, as Gadamer's analysis of artistic language anticipates, is constitutively ambiguous (Gadamer, 2004; Gillespie, 2022). Unlike everyday discourse, which operates within stable conventions of reference, artistic language remains open to a plurality of interpretations. This openness is not a defect but a productive condition: it is what makes a work capable of speaking into new historical situations. The richness of science fiction cinema, in this account, consists precisely in its capacity to keep the dialogical encounter perpetually open—to resist closure into a single, settled meaning. What the spectator gains from the film is not information about a fictional world but a transformation of her own perceptual and interpretive horizon (Lim et al., 2025).

4. Aesthetic Novelty and the Sensorium of the Digital Age

The hermeneutic analysis developed in the preceding sections discloses a dimension of aesthetic experience that traditional aesthetics has been structurally ill-equipped to articulate. To grasp the novelty of contemporary cinematic experience—and the broader perceptual transformation of which it is one symptomatic instance—requires a theoretical vocabulary attuned to dialogical encounter, effect-historical constitution, and the perceptual formation of subjects. This section examines the limits of traditional aesthetic categories, traces the emergence of a digital sensorium, and considers the implications for an aesthetics of the present moment.

4.1 The Aphasia of Traditional Aesthetics

The traditional aesthetic tradition, formed in the late eighteenth and nineteenth centuries, rested on a set of presuppositions that have become progressively unsustainable. Among these were: the autonomy of the work of art with respect to the surrounding culture; the stable distinction between art and non-art; the privileging of technical mastery as the ground of aesthetic value; and the contemplative gaze as the appropriate mode of aesthetic reception. Each of these presuppositions came under sustained pressure during the twentieth century, first from the modernist avant-garde and then, more radically, from the postmodern and digital developments that followed.

Modern art, by foregrounding the conditions of artistic practice itself, began the work of unsettling traditional aesthetic categories. The Cubist disruption of unified composition, the action painting of the New York school, the abstract gestural traditions of European painting, and much of contemporary musical composition deliberately resist the formation of a stable perceptual centre. Where traditional aesthetics presupposed a compositional unity that could be apprehended in a single contemplative act, these modern practices produced works whose internal differentiation and incompleteness resist such unification. Postmodern art subsequently extended this disruption to the boundary between art and non-art itself. Within the cinematic tradition specifically, recent scholarship has begun to trace how the long realist convention of the medium has been reshaped by digital production techniques—a transformation visible not only in Hollywood but, increasingly, in the world cinemas of East Asia (McGrath, 2022). The result is a condition in which the very framework within which traditional aesthetics had operated appears increasingly belated, and the analytic resources it offers correspondingly limited.

The reading of *The Wandering Earth II* above is one instance of this larger pattern: the digital reshaping of cinematic realism is not a uniform global process but one inflected, in each cultural setting, by the effective history of the perceptual horizon it meets. This matters for the present argument because it shows that the perceptual-technical axis of the double fusion is never culturally neutral—what counts as a convincingly “real” synthetic image is itself a historically and culturally sedimented achievement.

Within this transformed cultural field, the critical capacity of traditional aesthetics has been increasingly characterised by what some commentators have called its aphasia: an incapacity to give philosophically adequate articulation to the new aesthetic experiences that contemporary cultural practice generates (Rancière, 2011). The aesthetic categories inherited from the Kantian and Hegelian traditions are not so much wrong as belated; they were developed to address a cultural configuration that no longer obtains. The self-referential autonomy of the art object, the disinterested contemplation of the spectator, the cumulative authority of the canon: each of these structuring assumptions has been hollowed out by the transformations of the past century.

4.2 From Visual Mastery to Database Sensibility

If traditional aesthetics cannot adequately address contemporary visual experience, what conceptual resources might we turn to? Several theoretical resources, developed across the past three decades, point toward an answer. Manovich's analysis of new media in *The Language of New Media* (Manovich, 2001) identified the database as the dominant cultural form of the digital age. Where the cinematic narrative of the twentieth century proceeded through linear temporal sequence, the database mode proceeds through navigable arrangement. The user does not follow a single story; she traverses a structured space of items. This shift in cultural form, Manovich argued, has direct implications for the structure of aesthetic experience. More recently, the maturation of generative artificial intelligence has further transformed the database logic: rather than navigating a pre-existing arrangement, the user now prompts the synthesis of items on demand (Manovich & Arielli, 2024).

Debord's earlier analysis of the society of the spectacle (Debord, 1995) and Baudrillard's subsequent theorisation of simulacra (Baudrillard, 1994) anticipated, in their own theoretical idiom, the broader transformation that the digital age has rendered explicit. For Debord, the spectacle names the condition under which social relations are mediated through images; for Baudrillard, simulation names the condition under which signs no longer refer to a stable referent but circulate in their own economy. Whatever their differences, both diagnoses register the displacement of the indexical mode of cultural reproduction by an operational mode. Lefebvre's observation that the contemporary image-world is characterised by the “decline of the referent” (Lefebvre, 1991) sits squarely within this lineage. The French theorist Régis Debray's media-historical periodisation—writing, print, audiovisual—names the same transformation from another angle (Debray, 1996): each shift in the dominant medium reorganises the structure of human perceptual life.

Dimension	Traditional Aesthetics	Digital Sensorium
Technique	Mastery of medium; craftsmanship	Algorithmic mediation; computational synthesis
Object boundary	Art / non-art clearly distinguished	Art / commodity / interface mutually permeable
Mode of perception	Contemplative gaze; unified composition	Distributed scanning; database navigation
Aesthetic authority	Critical tradition; stable canon	Effective history of media; narrative-dependent value
Cinematic role	Window onto reality; representation	Operative interface; perceptual training ground

Figure 6: Traditional Aesthetics and the Aesthetic Novelty of the Digital Sensorium

source: author’s illustration based on Gadamer’s hermeneutics and the article’s argument

Figure 6 contrasts the principal structural features of traditional aesthetics with those of the emergent digital sensorium. Where traditional aesthetics privileges technical mastery, the digital sensorium foregrounds algorithmic mediation. Where traditional aesthetics maintains a stable boundary between art and non-art, the digital sensorium is characterised by the mutual permeability of art, commodity, and operational interface. Where traditional aesthetics presupposes a contemplative gaze upon a unified composition, the digital sensorium proceeds through distributed scanning and database navigation. Where traditional aesthetics derives its authority from a critical tradition and a stable canon, the digital sensorium operates through an effective history of media in which value is itself narrative-dependent. And where cinema, in the traditional account, served as a window onto reality, in the digital sensorium it functions as an operative interface that trains perception itself (Denson, 2023b).

4.3 The Sensorium of the Digital Age

Jameson’s diagnosis of the postmodern condition argued that contemporary culture had “entered an entirely new sphere beyond reading and writing”—a world beyond words (Jameson, 1991). What the present analysis adds to that diagnosis is a specific claim about the constitutive role of the cinematic experience in the formation of contemporary perceptual subjectivity. Cinema, and especially science fiction cinema, does not merely reflect the digital sensorium; it actively trains it. These three films enact precisely that training: *Interstellar* accustoms the eye to a computed world that outdoes any photograph; *Blade Runner 2049* makes the seam between the synthesised and the recorded its very subject; and *The Wandering Earth II* reorients a globally trained perceptual grammar toward a different civilisational imagination. Through the double fusion of horizons described above, the genre cultivates the perceptual capacities that contemporary technocultural life will increasingly demand.

This formative dimension is what Rancière names the distribution of the sensible: the partition that determines what is perceptible, sayable, and thinkable within a given order (Rancière, 2011). The connection to this article’s central claim is structural rather than ornamental. The perceptual-technical axis of the double fusion—the renegotiation of what counts as perceptually “real”—is itself an operation upon the distribution of the sensible. When science fiction cinema retrains the spectator’s capacity to read synthesised images as inhabitable worlds, it is not merely adding to a private stock of aesthetic experiences; it is redrawing the boundary of the perceptible for a whole perceptual community, and thereby participating in what Rancière understands as the properly political work of aesthetics. The double fusion of horizons, on this reading, is precisely a site at which the sensible is redistributed—which is why the question of cinematic authenticity cannot finally be separated from the question of who is trained to perceive what, and how. The aestheticisation of everyday life, which earlier cultural theorists registered as a symptom of consumer culture, appears in this light as a deeper transformation: the extension of the cinematic mode of perception into the texture of ordinary experience itself (Hui, 2023). Within this transformed sensorium, the question of authenticity is neither resolved nor dissolved; it is reposed. To ask whether a given image is authentic is no longer to ask whether it preserves a photographic trace, but to ask whether the dialogical encounter it stages is itself productive—whether it extends, complicates, and reconfigures the spectator’s horizon rather than confirming it. On this reformulated criterion, the proliferation of computational imagery does not threaten the possibility of authentic cinematic experience; it makes the conditions of that experience explicit and renders them available for philosophical reflection. The hermeneutic perspective, in other words, does not retreat before the digital transformation of the moving image; it offers the theoretical resources adequate to it (Hui, 2021; Denson, 2023a, 2023b).

5. Conclusion

This article has argued that the question of cinematic authenticity, newly urgent in an era of generative artificial intelligence and virtual production, can be productively reapproached through the resources of Gadamer's philosophical hermeneutics. The clarification of authenticity as a contractual and effect-historical achievement, the development of the concept of a double fusion of horizons in the case of science fiction cinema, and the elaboration of an aesthetic novelty that exceeds the categories of traditional aesthetics together constitute, this study has proposed, the principal contributions of a hermeneutic perspective on the contemporary moving image.

Three implications follow. First, the analysis suggests that the apparent crisis of cinematic authenticity in the digital age is, more accurately, the explicit appearance of a hermeneutic dynamic that has always been operative in the cinematic experience. The instability of the digital image renders visible what the apparent solidity of the photographic image had obscured: that authenticity is achieved, not given. Second, science fiction cinema occupies a position of theoretical privilege within this analysis precisely because its constitutive reliance on spectacle, simulation, and synthesised worlds makes the dialogical encounter between presentation and perception structurally explicit. Third, the aesthetic novelty disclosed by this hermeneutic analysis calls for a theoretical vocabulary attuned to the perceptually formative dimensions of cinematic experience—a vocabulary that traditional aesthetics, with its representational presuppositions, has not been able to provide.

A more pointed consequence is worth drawing out. If the productive argument of this study holds—namely, that technical intervention into the image is no longer a threat to authenticity but a condition of the hermeneutic encounter itself—then a question opens that this article has not attempted to settle. What are the implications of this logic for media forms in which intervention is not incidental but constitutive, and in which the user's action directly shapes the world being interpreted? The cinematic experience, however thoroughly mediated, retains a structural asymmetry between the film's mode of presentation and the spectator's mode of perception; interactive media collapse that asymmetry in characteristic ways (Nguyen, 2020; Egerton, 2022; Kalmanlehto, 2024). Whether the hermeneutic framework developed here—and particularly the concept of a fusion of horizons—extends to media in which the horizon of agency is constitutively engaged is, in the authors' view, the most pressing theoretical question that follows from the present argument. It is also the question that opens directly onto a research programme already under way (Hui, 2021, 2023).

Several further limitations and prospects for future research warrant brief acknowledgement. The analysis developed here is theoretical rather than exegetical; sustained engagement with specific films, including but not limited to recent Chinese-language science fiction productions, will be required to test, refine, and extend its principal claims. The implications of generative artificial intelligence for cinematic authorship, an increasingly pressing concern, have been addressed here only in their broad outlines and deserve dedicated treatment. The relationship between the hermeneutic perspective developed in this article and adjacent theoretical traditions—postphenomenology, cosmotechnics, the philosophy of interactive media—similarly invites more sustained comparative analysis (De Boer & Verbeek, 2022; Hui, 2021).

These limitations notwithstanding, the principal claim of this study remains, in the authors' view, defensible: that the hermeneutic perspective offers a productive theoretical resource for an aesthetics adequate to the digital sensorium. To navigate the transformed conditions of contemporary moving-image culture requires neither nostalgia for an indexical guarantee that was never as solid as it appeared, nor resignation before a digital flood that simply dissolves the question of authenticity. It requires, rather, a renewed attention to the dialogical, effect-historical, and perceptually formative conditions through which mediated worlds come to be inhabited. Whether and how that attention extends from the cinematic to the interactive—from the horizon of perception to the horizon of agency—is the question that follows.

Author Contribution Statement

Yan Wang: Conceptualisation, Writing-original draft preparation, and manuscript development. Yan Wang was primarily responsible for developing the theoretical framework and drafting the article.

Yilan Wang: Literature collection, data and material search, Writing-review and editing, and formatting support. Yilan Wang was responsible for collecting relevant literature, verifying sources and citations, and ensuring consistent formatting throughout the manuscript.

All authors have read and approved the published version of the manuscript.

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Conflict of Interest Statement

The authors declare no conflict of interest.

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