

Article

Reconstruction of Actors' Performative Subjectivity and Aesthetic Boundaries Under the Influence of Artificial Intelligence

Heng Zhang^{1,*}

¹ Qingdao Film Academy, Qingdao, China

* Correspondence: Heng Zhang, Qingdao Film Academy, Qingdao, China

Abstract: Generative artificial intelligence, digital humans, motion capture, and virtual production are reorganizing the production chain of screen acting, in which the actor's body, performance data, algorithmic generation, and post-production increasingly participate together in character construction. The central issue is therefore not whether AI can reproduce a face, a voice, or a movement, but how actors can remain subjects of character meaning when visible performance no longer has to be executed frame by frame by a human body. Drawing on studies of AI-art subjectivity, digital cinematic bodies, and performance theory, this article defines actor subjectivity as the actor's capacity to organize character meaning through embodied experience, action decision, relational response, and aesthetic judgment while retaining identifiable creative agency and artistic responsibility within technologically mediated collaboration. It proposes a five-dimensional framework-embodied experience, action decision, relational response, aesthetic judgment, and technological collaboration-and argues that AI does not simply erase actor subjectivity; rather, it repositions the actor from a subject of visible presentation to a subject of meaning generation within distributed production. On this basis, the article identifies three analytical boundaries for acting aesthetics: visual generation versus character generation, motion simulation versus relational response, and technical verisimilitude versus performance truth. It concludes by discussing the implications of this reconstruction for acting education, screen production, and the ethics of digital bodies.

Keywords: artificial intelligence; screen acting; actor subjectivity; digital performance; acting aesthetics; human collaboration

1. The Shift in Performance from "Bodily Presentation" to "Algorithmic Generation"

Traditional film and television performance takes the actor's body as its primary medium. Facial expressions, voice, posture, breathing, rhythm, and the immediate relationships with co-actors jointly constitute the character image, while the camera transforms these bodily actions into screen performance through framing, shot scale, and editing [1]. The increasing integration of digital technology has altered this foundational structure: motion capture can encode bodily movements into data, digital doubles can substitute for actors in performing certain dangerous or surreal actions, and generative artificial intelligence has further enabled faces, voices, movements, and even continuous shots to be algorithmically produced, computed, transferred, and recombined. As a result, the relationship between the actor's body and the final screen image is no longer a stable one-to-one correspondence.

This transformation has drawn sustained attention in film and performance studies. Research on digital cinema emphasizes that although the cinematic body can be reshaped through technology, the performing body and its corporeal experience remain essential foundations of digital images [2]. Recent scholarship has further explored the structural evolution of performance—from experiential embodiment and motion capture toward

Received: 29 July 2026

Revised: 13 September 2026

Accepted: 24 September 2026

Published: 29 September 2026



Copyright: © 2026 by the authors. Submitted for possible open access publication under the terms and conditions of the Creative Commons Attribution (CC BY) license (<https://creativecommons.org/licenses/by/4.0/>).

computational generation—examining concepts such as bodily presence, virtual performers generated via AIGC, and the logic underlying AI-driven character reproduction. Compared with early digital doubles, the impact of generative artificial intelligence extends beyond enhanced realism; it enables the regeneration of performance materials, character images, and movement sequences without requiring real-time human execution frame by frame. Consequently, the actor's role in performance production is shifting from being the central locus of visual representation toward participating in a more complex network of meaning construction.

Therefore, the question of whether artificial intelligence will replace actors is insufficient to guide rigorous inquiry in performance studies [3]. Discussions centered on technological substitution often reduce actors to mere sources of facial features, vocal timbre, and physical motion, overlooking the fact that acting fundamentally involves organizing action within dramatic situations, responding dynamically to interpersonal relationships, modulating expressive rhythm, and sustaining continuous aesthetic judgment about character. This article addresses three interrelated questions: first, what conditions sustain actor subjectivity when external forms of performance can be algorithmically generated; second, which dimensions of bodily experience, action decision-making, relational responsiveness, and aesthetic judgment may be partially simulated by technology, and which continue to require sustained engagement by an embodied human agent; and third, under conditions of human-machine collaboration in character creation, what criteria should performance aesthetics employ to distinguish between technical plausibility—'being generated convincingly'—and artistic efficacy—'making the character convincing.'

Based on these questions, this article employs literature research, conceptual analysis, and comparative examination of performance mechanisms. It does not engage in philosophical ontological claims regarding whether artificial intelligence possesses full subjectivity, but instead focuses narrowly on the performance studies question of how actors contribute to the generation of character meaning. In contrast to broader studies of artificial intelligence and art, this article advances a methodological shift: it reframes subjectivity—not as an abstract question of authorship—but as a set of analyzable performance functions. Specifically, it decomposes actor subjectivity into five operational dimensions and investigates the conditions under which technological generation enters character meaning across three functional boundaries. This approach avoids framing AI solely as an external threat to actors, and equally avoids treating the physical presence of a human performer as the sole source of artistic value, thereby establishing an intermediate-level analytical framework capable of bridging traditional performance training, research on embodiment in digital cinema, and practices of generative image production.

2. Literature Review and Conceptual Definition

2.1. Subjectivity in Artificial Intelligence Art: From Instrumentalism to "Quasi-Subjectivity"

Research on subjectivity in artificial intelligence art has evolved from binary debates about whether machines function solely as tools to investigations of the intricate creative interplay among humans, algorithms, data, and platforms. Questions concerning authorship and the nature of subjecthood have prompted reconsideration of traditional criteria—such as consciousness, volition, emotion, and originality—as foundations for attributing subjectivity. Generative artificial intelligence challenges these criteria, prompting theoretical frameworks that emphasize collaborative generation processes. A related perspective introduces the notion of 'quasi-subjectivity', highlighting that subject effects in AI art emerge not from the machine as an autonomous agent, but from dynamic interactions among users, algorithms, and task-specific data [3]. From a humanistic standpoint, concerns have been raised that the computational logic underpinning AI art may attenuate human subjectivity and distort aesthetic experience; accordingly, human-

machine collaboration is advocated as a means to sustain meaningful human value judgments.

These perspectives collectively establish an important theoretical foundation: subjectivity in artificial intelligence art should be conceptualized not as a fixed, individual authorial authority, but as a distributed phenomenon across technological and human elements. However, existing scholarship on artistic subjectivity predominantly focuses on textual, visual, design-based, or multimodal creative outputs, and thus remains insufficient for capturing the distinctive features of acting performance. Unlike other artistic domains, acting entails continuous creative adaptation—not merely initial intention-setting or final output selection—but rather real-time responsiveness through bodily action. Bodily perception, interaction with scene partners, spatial parameters, and technical requirements such as camera framing continually shape and reshape performative choices [4]. Consequently, analyses of performance subjectivity must centrally integrate the concepts of embodiment and relationality.

2.2. Digital Bodies and Performance Studies: From Mediated Bodies to Embodied Action

Research on the body in digital cinema has established a relatively clear media foundation for this issue. The body in digital cinema is commonly distinguished into cinematic, performing, and viewing dimensions, which are deeply intertwined within digital contexts. Further analysis from perspectives including technological prostheses, cyborg theory, and embodied perception indicates that digital media do not eliminate the body but instead generate new aesthetic relationships through technological extension and bodily reconstruction [5]. These findings suggest that digital technology transforms how the body enters the image, rather than rendering the concept of the 'body' obsolete in performance.

Within performance studies, contemporary inquiry has broadened its scope beyond liveness to emphasize embodiment, generativity, and agency, while integrating digital and machine-based performance as emerging domains. An interdisciplinary framework underscores performance as a dynamic process rather than a fixed outcome, highlighting its continuous emergence through action and relational exchange. At the level of actor training, scholarship grounded in embodied cognition and somatic practice demonstrates that character development arises not from external imitation alone, but from the interplay of bodily perception, habitual movement, psychological disposition, and situational engagement.

Recent research has increasingly centered on AIGC-driven performance environments. A distinctive 'double presence' has been observed between the actor's physical body and generated virtual imagery in digital image spaces. Investigations into the ontological boundaries between virtual and human performers have examined functional capacity, expressive excess, and lived states. The evolving logic of performer reproduction in the AI era has been characterized by a progressive shift—from experiential grounding, to motion capture, to algorithmic computation. While such work begins to address the enduring relevance of real actors, deeper examination remains warranted—particularly through structural analysis of subjective agency as it manifests in the actor's specific creative processes [1].

2.3. An Operational Definition of Actor Performance Subjectivity

The term "actor performance subjectivity" used in this article does not denote the actor's general status as a natural person, nor is it equivalent to possession of final editing rights, copyright, or control over the work. Instead, it denotes the actor's capacity—during character creation—to perceive dramatic situations through embodied experience, formulate character objectives via intentional action, adapt responses dynamically to scene partners, physical space, camera framing, and directorial guidance, and continuously generate character meaning through deliberate choices concerning rhythm, intensity, pauses, gaze, vocal delivery, and related expressive elements. From a performance-mechanistic perspective, this subjectivity comprises three interrelated attributes: first, embodiment, wherein meaning-making arises from bodily perception and

action; second, relationality, wherein performance decisions are continually refined through reciprocal feedback from others and the environment; and third, aesthetic responsibility, whereby the actor's choices remain identifiable, analyzable, and yield traceable creative consequences for character realization [6].

This definition further implies that an actor's full visual presence in the final image is not the sole criterion for assessing their subjectivity. In motion capture, digital double generation, and virtual production contexts, the actor's external appearance may be substituted, yet their bodily experience, action-based judgments, and relational decision-making continue to substantively shape character formation—thereby preserving their status as a creative subject. Conversely, when an actor's face or voiceprint remains visible in the final output but the underlying logic of the character's behavior is entirely reconfigured by algorithmic processing or post-production adjustments, mere visibility does not guarantee the intact presence of performance subjectivity [7]. Hence, the conceptual focus must shift from “who is seen” to “who generates meaning.”

3. The Five-Dimensional Reconstruction of Actor Performance Subjectivity under AI Influence

To avoid treating actor subjectivity as an abstract and unanalyzable whole, this article decomposes it into five interrelated and nested dimensions: bodily experience, action decision-making, relational response, aesthetic judgment, and technological collaboration. These dimensions do not form a linear hierarchy from basic to advanced, nor do they represent five isolated competencies: bodily experience establishes the perceptual foundation; action decision-making integrates perception with character objectives; relational response sustains openness and adaptability in action; aesthetic judgment informs choices regarding the scale and form of expression; and technological collaboration enables these capacities to participate in performance capture, transformation, and regeneration within contemporary digital film and television production [8].

This conceptual structure rests on a coherent theoretical foundation rather than a mere aggregation of training terminology. Bodily experience reflects the embodied basis of performance; action decision-making and relational response respectively address the situational grounding of character action and the interactive emergence of performance; aesthetic judgment captures the actor's deliberate selection among multiple expressive possibilities; and technological collaboration accounts for how performance behavior is captured, encoded, and reproduced through digital media systems [9]. The first four dimensions constitute the core performance-theoretical framework of actor subjectivity, while the fifth functions as the operational interface through which that framework engages with media production practices in the AI era. This distinction prevents conflating technical proficiency with subjectivity itself, while also avoiding reduction of subjectivity solely to the unmediated physical presence of the performer.

3.1. Bodily Experience: From Visible Action to Embodied Knowledge

Artificial intelligence can generate 'actions that look like actions,' but the visual form of an action is not equivalent to the actor's bodily experience [1]. Through long-term training and life practice, the actor's body develops a sense of center of gravity, breath organization, muscle memory, spatial distance, and rhythmic habits. These experiences are not stored in isolation within a particular movement, but jointly inform judgment within specific situations. The perspective of embodied cognition emphasizes that the body is not a passive container for psychological content, but one of the essential conditions under which cognition and character development occur. Research on physical training also shows that sustained practice transforms actors' bodily awareness, plasticity, and approaches to internalizing character.

From the perspective of technological mechanisms, generative models can learn patterns of movement through motion samples and synthesize postures that conform to physical intuition at the visual level [6]. However, the 'bodily experience' discussed here

is not an accumulation of movement data, but rather the perceptual-judgment structure formed by a subject through a long-term bodily history. Generated results do not require first-person experiences of fatigue, pain, loss of balance, restricted breathing, or spatial pressure, whereas actors' creative judgments are often triggered precisely by these bodily conditions. Therefore, the irreplaceability of the actor's body should not be reduced to a comparison between 'real human body' and 'digital body,' but understood as the role of embodied experience in establishing an internal pathway from perception to choice in character action.

Therefore, physical training in the AI era should not be diminished on the grounds that 'actions can be generated.' Instead, it should deepen its focus beyond external physical form toward how the body generates judgment [5]. Training should explore how shifts in center of gravity influence psychological states, how breathing modulates vocal expression, how spatial distance shapes character relationships, and how the body exercises nuanced control under varying camera scales. What cannot be reduced to data in an actor is not a fixed set of movements, but the way bodily experience actively contributes to meaning-making.

3.2. Action Decision-Making: From Action Execution to Situational Judgment

Actions in performance are not isolated visual units. Turning around, crying, running, or remaining silent becomes character action because it is embedded within a situational framework defined by purpose, relational intent, and encountered constraints. The same action of 'handing over water' may vary significantly in speed, spatial distance, eye contact, and physical intensity depending on whether it serves to apologize, probe a relationship, mask inner tension, or signal parting. Actor subjectivity is therefore first expressed through the selection of action rather than the replication of action [7].

Generative artificial intelligence can produce diverse emotional and behavioral variants based on prompts, thereby broadening the repertoire of performative expressions [10]. However, quantitative expansion does not inherently yield character depth. A coherent character emerges from causal continuity across actions: performers must integrate the character's background, immediate objectives, impediments, interpersonal dynamics, and anticipated developments into each present choice, while preserving consistent behavioral logic across discontinuous production segments. AI may supply formal alternatives, but the core of subjective judgment remains the rationale for acting in this specific way at this precise moment.

Consequently, following integration of AI tools, the actor's value will shift decisively from executing actions toward structuring action systems. Future performance training should de-emphasize result-oriented emotional display and standardized facial configurations, instead prioritizing rigorous practice in mapping relationships among objectives, actions, obstacles, tactical responses, and pivotal narrative transitions—enabling performers to sustain authoritative control over the character's behavioral coherence despite the availability of multiple externalized options.

3.3. Relational Response: From Preset Behavior to Interactive Generation

Performance subjectivity also manifests in relational contexts. Whether on stage or during film and television production, actors do not execute isolated, pre-determined sequences of actions; instead, they continuously respond to stimuli from scene partners, directors, cameras, settings, props, and sound. A shift in a scene partner's delivery pace, an unplanned pause, or a gaze directed outside the anticipated axis may all influence the actor's subsequent action. The 'vitality' of performance arises precisely from this capacity for real-time responsiveness.

In examining the generative dynamics of performance, scholarly attention has emphasized the reciprocal interaction between performers and their interlocutors. Although film production differs from live theater, a comparable cycle of mutual influence—comprising perception, adaptation, and further response—operates among actors, scene partners, cameras, and on-set environmental elements. Actors do not first finalize an internalized character representation and then present it to the camera; rather,

character embodiment often emerges through sustained, dynamic engagement within relational frameworks [11]. Thus, relational response is not supplementary to action but constitutes a core mechanism through which performative subjectivity takes shape.

While AI systems can produce conversational outputs and adapt responses based on input, a technologically mediated 'response' must not be conflated with the embodied 'reaction' inherent in performance relationships. The latter entails not only output modulation in reaction to input but also the performer's interpretation of relational significance and the resulting implications for subsequent choices. For actors, a pause may convey concession, hesitation, or implicit challenge; an averted gaze may subtly reconfigure interpersonal dynamics within the scene [2]. The value of relational response resides in this context-sensitive, ongoing generation of meaning that actively informs and reshapes ensuing behavior.

3.4. Aesthetic Judgment: From "Generating More" to "Choosing More Precisely"

One of the important advantages of generative artificial intelligence is its ability to rapidly produce a large number of versions [12]. However, 'being generatable' and 'being worth adopting' are not the same issue in artistic production. The aesthetic quality of performance often emerges from subtle choices: whether a line should enter half a beat earlier, whether an emotional climax should be expressed outwardly or restrained, whether a gaze in a close-up should linger or quickly avert, and whether a character should leave an unfinished bodily tendency before completing an action. Such choices are difficult to evaluate using a single criterion such as 'more intense' or 'more realistic.'

In this sense, AI integration makes the value of actor subjectivity more clearly visible in 'aesthetic judgment' rather than simply in 'action execution.' Actors need to assess whether a particular technologically generated solution conforms to the overall character temperament, whether it affects the continuity of the character's actions across adjacent scenes, and whether it aligns with camera distance, narrative rhythm, and film style. Especially when post-production can modify facial expressions, lip movements, vocal qualities, and even bodily details, actors' aesthetic participation needs to extend from on-set work to stages such as virtual previsualization, motion capture, digital double calibration, and final character confirmation in post-production [13].

It can thus be seen that the greater the technological capacity for generation, the less human judgment can be understood as a passive process of 'choosing one version at the end.' Genuine aesthetic subjectivity requires actors to participate in setting the boundaries of a character before generation, identify deviations during generation, and determine after generation which results still belong to the character. The shift of actor subjectivity from performance skills toward aesthetic judgment is one of the most significant changes brought about by the integration of artificial intelligence [14].

3.5. Technological Collaboration: From a Central Subject to Distributed Creation

Digital film and television production is transforming performance from creation by a single individual into distributed collaboration. Motion-capture actors provide movement and rhythm, facial capture systems record subtle expressions, algorithmic models perform transfer or completion, directors organize the character's direction, and post-production teams complete visual integration. Within this mechanism, it is difficult to attribute the final character entirely to a single isolated subject. Concepts such as 'quasi-subjectivity' and 'collaborative generation' in artificial intelligence art illustrate that subject effects may emerge through the dynamic relationships among users, algorithms, and data. The 'shift from experience to computation' observed in AI performance research further indicates that performance materials are being divided, digitized, and recombined.

However, 'distributed subjectivity' does not imply 'the disappearance of subjectivity.' For actors, the capacity to collaborate effectively with technology is becoming integral to emerging forms of subjectivity. Actors must understand how motion capture interprets bodily movement, recognize spatial feedback differences between virtual and real cameras, grasp the movement amplitude and rhythmic requirements imposed by digital doubles, and sustain relational imagination despite the absence of physical sets or co-

performers [15]. Technological knowledge should not reduce actors to software operators, but rather empower them to comprehend how media transform their performances, which expressive information may be lost in translation, and how creative choices can compensate for such losses.

Accordingly, actor subjectivity in the AI era can be characterized as 'meaning subjectivity under distributed conditions': the final visual realization of a character results from joint contributions by directors, actors, technical teams, and algorithmic systems; yet actors retain continuous and identifiable structural influence on character meaning through embodied experience, action organization, relational responsiveness, and aesthetic judgment. Subjectivity thus shifts from 'I independently complete the entire performance result' to 'I maintain judgment, contribution, and responsibility within a collaborative system,' preserving its core while altering the mode through which it engages with the work [1].

4. The Threefold Boundaries of Performance Aesthetics in the AI Era

The five-dimensional structure of subjectivity addresses how performers retain their agency, yet it remains essential to define what constitutes a genuine performance outcome. Without clear aesthetic criteria, technical metrics—such as resolution, naturalness, continuity, or generation speed—may inadvertently supplant artistic evaluation. This section therefore introduces three analytical boundaries [9]. These are not intended to marginalize technology, but rather to serve as conceptual tools for distinguishing technologically produced outputs from embodied, character-driven performance (As shown in Figure 1).

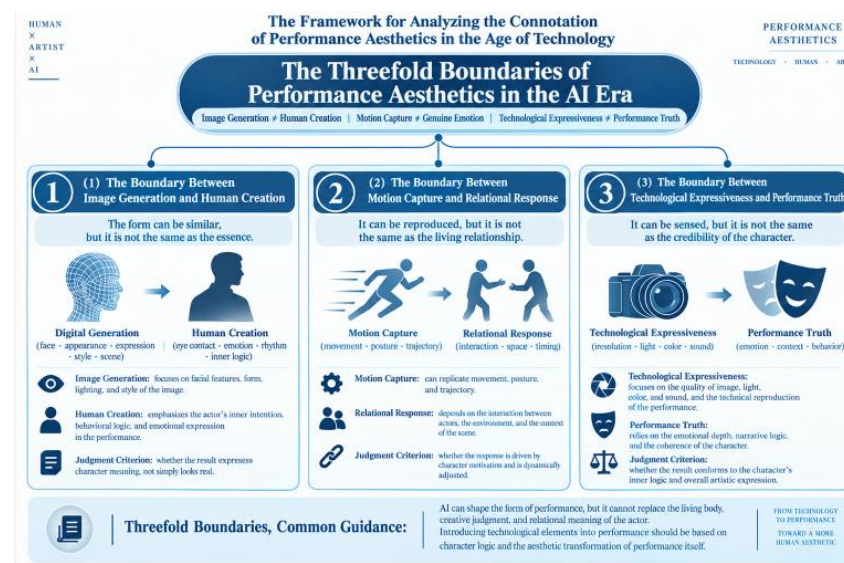


Figure 1. The Threefold Boundaries of Performance Aesthetics in the AI Era

4.1. Visual Generation and Character Generation: Complete Appearance Does Not Equal Character

The first boundary lies between “visual image” and “character.” Generative technology can produce complete faces, stable appearances, natural lip movements, and continuous actions, but a character is not merely a collection of visual features. It is an action structure that develops over time, with each reaction connected to the character’s goals, relational history, values, and situational context.

Research on AIGC virtual actors indicates that such agents can achieve considerable substitution at the functional and perceptual levels, while the presentation of a “state of life” raises deeper questions. From the perspective of performance mechanisms, character generation requires consistency and meaningful variation across shots and scenes [4, 13].

A realistic cry in a single shot becomes part of the character only when it connects causally with prior emotional restraint, current stimuli, and subsequent actions.

Therefore, visual generation can be evaluated through detail realism, movement continuity, and stylistic consistency, whereas character generation must also consider motivation, relational history, and the basis for behavioral change. This distinction prevents performance evaluation from being reduced to visual technology alone.

4.2. Action Simulation and Relational Response: Reproducible Actions Do Not Equal Relationships

The second boundary lies between action form and relationship generation. Actions can be captured, reproduced, and transferred, yet their meaning is fundamentally shaped by relational context. A smile directed at a lover, a superior, a stranger, or an adversary conveys distinct emotional and relational significance in each case.

Algorithms can produce contextually appropriate responses, but relational responsiveness in performance entails more than logical consistency. An actor's real-time adjustment to an unexpected shift in a scene partner's rhythm may reshape subsequent dialogue, physical expression, and the evolving power dynamics within the interaction. Consequently, relationship functions not as a static backdrop to action but as an active condition for meaning-making.

This distinction implies that AI performance research must move beyond evaluating movement naturalness or emotion-recognition accuracy alone, and instead assess whether generated characters sustain relational memory, allow prior interactions to inform subsequent behavior, and evolve dynamically through engagement.

4.3. Technological Realism and Performance Truth: Perceptual Credibility Does Not Equal Dramatic Credibility

The third boundary lies between technological realism and performance truth. Digital technology can enhance skin texture, lighting, lip synchronization, physical motion, and auditory fidelity, yet performance truth hinges on whether the audience perceives that "this person would act this way in this situation." Studies on bodily presence in digital cinema indicate that advanced technology does not supplant the emotional and narrative functions served by the actor's embodied performance [1, 7].

Performance truth does not presuppose that actors have personally undergone the character's experiences, nor does it mandate adherence to a specific realistic acting methodology [3]. Instead, it denotes situational credibility: actions must align with character objectives, emotional shifts must arise from discernible triggers, and bodily expression as well as interpersonal dynamics must cohere with the character's internal logic. While technology may achieve high perceptual fidelity, performance remains hollow without coherent internal progression of action and relational development.

These three boundaries collectively reflect a shared principle: AI can broaden the spectrum of performative forms it generates, but visual appearance, behavioral output, and technological verisimilitude acquire performative meaning only when integrated into the logic of character action and relational dynamics.

5. Practical Dimensions of Subjectivity Reconstruction

5.1. Performance Education: "Embodied Training–Camera Action–Digital Collaboration"

With AI increasingly integrated into film and television production, performance education must maintain rigorous foundational training rather than diminish it due to the availability of AI-generated external forms. Grounded in the five-dimensional structure, university performance curricula can adopt a composite pedagogical model comprising embodied training, camera-based performance practice, and digital collaboration.

The first layer emphasizes body awareness, breath control, vocal articulation, rhythmic sensitivity, center-of-gravity coordination, and spatial orientation—strengthening the integration of physical perception with character embodiment. The second layer develops proficiency in camera-oriented performance, including subtle facial

expressions, intentional gaze direction, strategic pauses, responsive interaction with scene partners, and maintaining continuity across discontinuous takes. The third layer incorporates motion capture, virtual production environments, digital avatars, AI-assisted previsualization, and generative character prototyping, enabling students to grasp how performance data are acquired, processed, and reconstituted.

AI tools can also support comparative analysis between performances delivered with live and virtual scene partners, or facilitate evaluation of multiple AI-generated action variants. Their pedagogical function is not to supplant performers, but to render performance choices more transparent, analyzable, and open to critical discussion.

5.2. Film and Television Production: From Performance Delivery to Full-Process Character Collaboration

In virtual production and generative imaging, characters undergo continuous reconstruction across previsualization, motion capture, and post-production stages. Consequently, actors must transition from delivering a single performance to actively co-creating the character throughout the entire production pipeline.

Creative contributions by actors—including movement, vocal expression, and digital representation—must be explicitly delineated; core performance data must be preserved; and substantial post-production alterations require formal creative approval. Unchecked technological 'optimization' risks undermining the character's intrinsic action logic.

Future production workflows demand a shared collaborative framework: actors engage with technological evolution, directors prioritize essential performance elements, and technical teams attend to expressive bodily nuances. Human-machine collaboration achieves value through alignment on character-driven logic as the central organizing principle.

5.3. Ethical and Professional Boundaries: From Digital Body Authorization to Creative Responsibility

AI enables the reproduction and regeneration of actors' likenesses, voices, movements, and performance data. Research indicates that virtual representations, model processing, and specific performance content should be differentiated based on originality, degree of control, and actual creative contribution.

At least four principles should therefore be observed: specific authorization—clearly defining permitted uses of likeness, voice, and movement data; traceable modification—documenting significant technological alterations; identifiable contribution—preserving the chain of character creation; and traceable responsibility—ensuring ethical accountability is assigned to human actors rather than abstracted as 'algorithmic behavior'.

These principles do not establish legal determinations, but underscore that performance subjectivity entails ethical responsibility. Safeguarding actor subjectivity in the AI era requires maintaining the visibility of human creative judgment across datafication and automation processes.

6. Conclusion

The deeper impact of AI on performance art lies not in machines producing 'human-like actions,' but in the separation of faces, voices, expressions, and movements from the actor's physical presence. Thus, judging the performer solely by 'who appears on screen' is no longer sufficient. Actor subjectivity should instead be understood as the capacity to organize character meaning: bodily experience provides the embodied foundation; action decisions and relational responses construct situational logic; aesthetic judgment governs formal articulation; and technological collaboration ensures identifiable creative contribution and responsibility.

The five-dimensional framework demonstrates that AI does not simply affirm or erase actor subjectivity, but transforms how it manifests within mediated images. Bodily experience furnishes the embodied basis; action decisions establish character causality; relational responses sustain generative interaction; aesthetic judgment regulates form and scale; and technological collaboration mediates performance across evolving media

infrastructures. The three conceptual boundaries—between visual and character generation, between action simulation and relational response, and between technological realism and performance truth—shift evaluation away from 'how human-like it looks' toward 'how character meaning is established.'

This study remains primarily exploratory and theoretical. It has not yet empirically tested the five-dimensional framework through actor interviews, motion-capture experiments, comparative analyses of human and AI-generated performances, or audience reception studies. Future research could compare human-performed, motion-captured, and fully AI-generated renditions of the same character, or investigate how performance information is preserved or altered across the 'capture–translation–generation–confirmation' pipeline in virtual production. Integrating technological mechanisms, actor-centered creation, and audience perception may further enable performance studies to address who performs, what constitutes performance, and how performance responsibility can be identified in the digital era.

References

1. E. Fischer-Lichte and S. Jain, *The Transformative Power of Performance: A New Aesthetics*. Routledge, 2008.
2. B. Kirshenblatt-Gimblett, "Performance studies," in *The Performance Studies Reader*, 2004, pp. 43–56.
3. J. Huang, G. Hitchen, and S. Dogan, "Generative AI in the screen and live performance industries: A conceptual framework and prospects for future research," *Convergence*, vol. 31, no. 6, pp. 1971–2005, 2025.
4. T. Allison, "The threat of the AI actor," *JCMS: Journal of Cinema and Media Studies*, vol. 64, no. 1, pp. 196–201, 2024.
5. A. S. Eşanu, "THE ARTIFICIALITY OF ACTING," *Jurnalul Artelor Spectacolului (JAS)*, Special No., pp. 182–193, 2025.
6. C. H. D. Surwati, E. N. S. Alkhajar, T. Hermawati, and L. L. Ramos, "Negotiating the screen: Indonesian audience reception of AI virtual characters and its implications for film marketing communication," *Dewa Ruci: Jurnal Pengkajian dan Penciptaan Seni*, vol. 21, no. 1, pp. 1–11, 2026.
7. M. D. Rahman and M. A. Ali, "AI in video production: From script to screen," *Media and AI: Navigating*, p. 49, 2024.
8. A. Pal, S. Mitra, and D. Lakshmi, "Illuminating the path from script to screen using lights, camera, and AI," in *Transforming Cinema with Artificial Intelligence*. Hershey, PA: IGI Global Scientific Publishing, 2025, pp. 97–142.
9. P. S. Chow, "Ghost in the (Hollywood) machine: Emergent applications of artificial intelligence in the film industry," *NECSUS_European Journal of Media Studies*, vol. 9, no. 1, pp. 193–214, 2020.
10. P. S. Song, "Innovation of Teaching Mode and Enhancement of Artistic Performance in Film and Television Acting Supported by Artificial Intelligence."
11. A. A. Joubin, "Screens as anthropomorphic interfaces: How AI changes shakespearean theatrical publics," *Shakespeare Bulletin*, vol. 41, no. 4, pp. 529–553, 2023.
12. K. Marshall, R. Jones, and S. Barley, "Neither artificial nor intelligent: Applications of artificial intelligence (AI) and creative machine learning in screenwriting and screen story development in the Charismatic Consortium," *Journal of Screenwriting*, vol. 16, no. 3, pp. 287–306, 2025.
13. S. Goswami, "Chapter-5 From Script to Screen: AI is Shaping the Future of Film Making," in *Virtual Reality and Artificial Intelligence Technologies*, 2024, p. 55.
14. M. Jie and Q. Zhang, "A Study on the Reconfiguration of Artistry in Screen Production Involving Generative Artificial Intelligence," *International Journal of Advanced Culture Technology*, vol. 14, no. 2, pp. 254–268, 2026.
15. M. Mateas, *Interactive Drama, Art and Artificial Intelligence*. Pittsburgh, PA: Carnegie Mellon University, 2002.

Disclaimer/Publisher's Note: The statements, opinions and data contained in all publications are solely those of the individual author(s) and contributor(s) and not of Publisher and/or the editor(s). Publisher and/or the editor(s) disclaim responsibility for any injury to people or property resulting from any ideas, methods, instructions or products referred to in the content.