

Analyzing Human-Machine Relationships in the Post-Sora Era through Engels' Dialectical Perspective on Contradictions

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ABSTRACT

As the fundamental viewpoint of materialist dialectics, the dialectical perspective on contradictions maintains significant practical relevance and scientific value in analyzing and guiding contemporary affairs. In 2024, OpenAI unveiled Sora, a text-to-video model whose formidable capabilities in artistic creation have garnered extensive scholarly attention. The advent of Sora heralds a new epoch in artificial intelligence (AI), fostering an interactive human-machine relationship replete with contradictions and challenges. While recognizing the inherent contradictions within Sora's human-machine dynamics, we must simultaneously discern emerging developmental opportunities. Drawing upon Friedrich Engels' dialectical view of contradictions, this study employs multi-perspective analysis to examine the paradoxical nature of Sora-class AI systems and explore optimal coexistence patterns between artificial and human intelligence.

KEYWORDS

Friedrich Engels; Dialectical View of Contradictions; Sora; Human-Machine Relationships.

1. INTRODUCTION

The pervasive digital revolution has propelled artificial intelligence into diverse domains, with video creation being no exception. The advent of Sora in early 2024 marked a pivotal inflection point in AI-driven cinematic development. Since its launch, Sora-generated artworks have emerged as an avant-garde artistic form, rapidly evolving into a focal point of scholarly inquiry. Notably, each quantum leap in AI advancement invariably evokes a complex emotional resonance among cultural practitioners—an amalgamation of trepidation and exhilaration. This techno-anxiety, reminiscent of the "Frankensteinian" fear of creation, stems from existential apprehensions about human obsolescence. Conversely, the enthusiasm derives from acquiring novel hermeneutic lenses to re-examine intergenerational artistic and cultural legacies. "AI's impact on literary creation is neither a simplistic life-or-death struggle nor a mere replacement of the old by the new[1]." Engels' dialectical view of contradictions maintains trans-epochal guiding significance. By applying the laws of contradiction, we may identify optimal coexistence patterns between human and artificial intelligence.

2. IMMANENT CONTRADICTIONS IN SORA'S ONTOLOGY AND EVOLUTION

Admittedly, the creation of Sora opened up a whole new world of possibilities for video production. Firstly, Sora's introduction to the market has improved production efficiency while dramatically reducing production costs. Producers no longer need to spend a lot of money on building sets and hiring high-priced actors. With logical descriptions and multiple touch-ups and corrections, Sora is

able to produce satisfying videos at a fraction of the cost. Secondly, the emergence of Sora stimulates the creative vitality of the film and television creation industry. It lowers the barrier of entry to the film and television industry, so that people who are not familiar with filming equipment and editing software can also turn their wild imagination into a well-made video. It bridges the huge gap in manpower, technology, and capital between individual producers and large-scale film and television production companies, enabling video writers to devote more energy to their creation and provide diverse works for the film and television market. Thirdly, the emergence of Sora has blurred the boundaries between producers and viewers, which makes it possible to take viewers' feedback into account in the process of repeated corrections, thus enhancing the satisfaction and acceptance of the works. Roland Barthes' saying that "the author is dead", i.e. the right of interpretation is completely handed over to the readers after the completion of the work, has been changed with the birth of Sora. In the process of personalized creation using Sora, in order to present the most ideal results, creators need to provide timely feedback and corrections to the videos generated at each node. In this process, the creator himself plays the role of the audience of the work, taking into account the expected reactions of many viewers. Repeated switching of roles enables the final product to be accepted and loved by the audience to the greatest extent possible while better demonstrating the creator's aesthetic preferences.

However, just because Sora is useful, technologically advanced, and valuable to the film and television industry, it is important not to overlook the many contradictions that run through it and its development process. When refuting Dulin's view, Engels pointed out that contradictions are universal and objective. Practical experience has proved that we cannot deny the existence of contradictions, but we can make full use of contradictions to facilitate the new development of things. For the operation mechanism of Sora itself, contradictions exist in at least the following two aspects. First, the contradiction between the intellectual achievements of Sora's video works and the samples in its database, the video content generated by Sora will uncontrollably incorporate a large amount of unauthorized copyrighted materials, such as music, pictures, image clips, etc[2]. With the support of a powerful database, Sora will be able to recognize the unauthorized copyrighted video works and the samples in its database. Backed by a strong database, Sora does have the ability to produce excellent videos. But how much of the creators' labor has been "borrowed" from these "giant's shoulders"? It is difficult to estimate. From both a legal and emotional standpoint, this is unfair to the traditional creators who have worked diligently in the video business for years. In many jurisdictions, "machine-generated content is generally considered ineligible for copyright protection because it lacks independent thought and creativity[3]." It is clear that there is a real possibility of infringement of Sora-generated works, and that there is still a large gap in judicial regulation in this area. Engels believes that the unity of "temporary balance" and "constant struggle" between the two sides of the contradiction is an important driving force for the development of things in motion[4]. It is precisely because of the continuous occurrence of copyright disputes in the Vincennes video model that the conflict between the original creators of the material and the new authors who borrow Sora to generate videos has been made visible to the public. The "temporary balance" and "constant struggle" between the two makes the legislature see the lack of relevant laws, and has the opportunity to further improve the relevant laws and regulations. As for the tracking of video infringement, the technical department can also see its own lack of ability in copyright supervision and material tracking, so as to keep up with the times and improve its technical level to adapt to the advent of the artificial intelligence era. Secondly, the Sora Vincennes video model has placed virtual and reality at opposite ends of the spectrum since its inception. The two are opposites. So far, there is no AI model that can guarantee its ability to perfectly reproduce the real world in video, and errors and distortions are hard to avoid. For example, in Sora's first video release, there are a number of glaring holes: in a scene of a person running, the person in the frame is running in the opposite direction on a treadmill, and in a video with the cue "Archaeologists Find Plastic Chairs in the Desert," the chairs are suspended in air. Both are the same, and although there are still many illogicalities in Sora's presentation of the real world[2], there is no denying that its creative material comes from the real world and is a reflection of it.

To summarize, contradictions objectively exist within Sora and in its development process. Engels' concept of contradiction guides us not only to see the struggle and identity of contradiction, but also to see the positive role of contradiction in the development of things. By analyzing the multiple pairs of contradictions related to Sora, problems such as the lack of relevant laws and the immaturity of the technology have surfaced one by one. The judiciary and the technology research and development department have a greater incentive to make up for these deficiencies.

3. DIALECTICAL UNITY BETWEEN HUMAN AND ARTIFICIAL INTELLIGENCE

With the advent of Sora-class artificial intelligence, computers and humans have ushered in a revolution in their "coexistence" model. In the past, computers played merely an auxiliary role in the creative process, serving as tools for authors to transmit information - an interaction mode we might call "closed-loop interaction." In this model, "when users interact with a specific object, the program provides a set of options for selection." Although contradictions existed between computers as tools and humans as operators, they were not particularly pronounced[5].

Now, with the continuous iteration of AI systems like ChatGPT, Sora, and deepseek, human intelligence and artificial intelligence have entered an era of "open-loop interaction." Sora is no longer content with simply transmitting information; upon receiving user instructions, it can autonomously arrange and combine audio, video, and image resources from its massive database to deliver higher-quality and more diverse outputs to users. Compared to traditional computer programs limited to executing fixed commands, AI now possesses greater freedom and potential in creative work. Yet precisely because AI demonstrates increasingly "human-like" characteristics, the contradictions between artificial intelligence and human intelligence are becoming more apparent.

Sora-class AI models are now competing with traditional human creators for limited audience attention, significantly threatening humanity's dominant position in artistic creation. As Engels pointed out in *Dialectics of Nature*, the laws of dialectics can be summarized as three: "the law of the transformation of quantity into quality and vice versa; the law of the interpenetration of opposites; and the law of the negation of the negation." Among these[6], the law of the interpenetration of opposites holds particular significance for analyzing and resolving the contradictions between AI and human intelligence.

In the competition between human and artificial intelligence, their opposition is evident in several ways. First, AI represented by Sora far surpasses human intelligence in terms of creative speed. OpenAI, Sora's developer, continuously optimizes its algorithms and autonomy through its core Reinforcement Learning from Human Feedback (RLHF) technology and accumulated experimental parameters from user interactions. Currently, Sora employs Re-captioning technology alongside existing GPT models to rapidly and accurately understand textual inputs, making its video generation efficiency vastly superior to human capabilities. Second, the quantity and quality of video materials in Sora's database exceed the reserves of any human production team. This allows Sora to effortlessly produce visually rich and technically polished video content. In contrast, human-led video production—involving live shooting, editing, and post-production—remains time-consuming and labor-intensive. For example, during the filming of *Superman*, the production team had to minimize the use of on-set rigging because removing wirework in post-production was technically challenging. While this approach aimed to achieve natural-looking footage, the minimal rigging ultimately constrained actor Christopher Reeve's performance, preventing some action sequences from reaching their full potential. This demonstrates how human creators face issues like high costs, lengthy timelines, and complex workflows in film production—sometimes spending years completing a single outstanding work.

Of course, human intelligence still possesses advantages that current AI cannot match, particularly in creativity. AI, composed of fixed programming code, produces works with "formulaic" limitations that severely narrow audience aesthetic experiences. The primary reason for this "formulaic" nature in Sora-class AI outputs is its inability to possess genuine "emotion"—a challenge AI is unlikely to overcome anytime soon. When mimicking human emotional expression, AI's flaw lies in its tendency to avoid "transgressive" emotions, defaulting instead to positive emotional tones. For example, nearly all poems generated by ChatGPT (developed by Sora's parent company) exaggerate mainstream values in their emotional delivery: "Swimming Stones of Ten Thousand Souls" concludes with: "With steadfast faith, we pursue freedom and light, ultimately grasping life's meaning." "Uncontained by Ice" ends with: "Our footsteps mark the path ahead, our thoughts illuminate the way forward, we march ceaselessly toward distant horizons." "Courage in an Age of Uncertainty" closes with: "In adversity, perseverance; in challenge, resolve; in dreams, tenacity—let courage be our wings into tomorrow's skies[7]."

Another factor contributing to AI art's stereotypical nature is the current immaturity of AI technology. Videos generated by Sora often exhibit consistent flaws due to technical limitations. OpenAI has openly acknowledged Sora's common errors, such as temporal inconsistencies in longer sequences and the sudden appearance of objects without cause[8].

Although the opposition between AI and human intelligence is more readily apparent, we must not overlook their inherent unity through "interpenetration." Engels emphasized that contradictory sides possess an "interconnected nature" and that their "interaction" deserves attention. First, Sora's ability to generate videos swiftly relies on the vast amount of original material contributed by human creators[6]. Moreover, no matter how intense the competition becomes, both share the same practical goal: creating excellent artworks. In short, artificial intelligence and human intelligence exist in a relationship of "interpenetrating opposites." As Engels stated: "All polar opposites...their interconnection exists precisely in their separation, and their mutual dependence in their opposition." Only by dialectically examining their interconnectedness[9], interdependence, separation, and mutual exclusion can we fully understand the new human-AI relationship emerging in the post-Sora era.

4. THE DIALECTICAL TRANSFORMATION BETWEEN HUMAN AND ARTIFICIAL INTELLIGENCE

A thorough understanding of the contradictions between Sora-class AI and human intelligence creates the possibility of mitigating and transforming these tensions. Engels once provided a vivid analogy: "*Mechanical motion can be transformed into heat, electricity, and magnetism; heat and electricity can facilitate chemical decomposition; chemical combinations, in turn, generate heat and electricity, which through electrical mediation produce magnetism; finally, heat and electricity can again produce mechanical motion*[10]." This illustrates how contradictions, when pushed to their extremes, can undergo mutual transformation. By leveraging this dialectical principle, we can facilitate the reciprocal conversion of strengths between human and artificial intelligence-offering the optimal solution to their respective challenges. This approach not only promises higher-quality cultural products for the public but also stays true to the original vision of human-AI collaborative creation.

4.1. Pathways for Transformation

4.1.1. Neuromorphic AI Development

Future AI research must move beyond simplistic knowledge transfer and replication-based learning, focusing instead on emulating the neural networks of human intelligence. Aligning AI's knowledge-processing patterns with human cognitive models presents a viable solution to the current limitations of formulaic, template-dependent outputs lacking genuine innovation. By making AI "think" more like humans, we can mitigate the issues of rigid, uninspired AI-generated content.

4.1.2. Augmented Creative Workflows

When using AI for creative assistance, users should maximize the communication of personalized demands to enhance emotional resonance and originality in literary works. For instance, creators can:

- (1) Use Sora's efficiency to outline a video's structural framework
- (2) Develop narrative content independently
- (3) Employ Sora's variant-generation feature during creative blocks to explore multiple solutions

This hybrid approach significantly boosts productivity while reducing production costs.

4.1.3. The Labor Dilemma: A Rational Perspective

The existential threat AI poses to traditional creators reflects a broader occupational disruption. Studies show that ChatGPT-4.0 alone accelerated **15% of U.S. job tasks** at equivalent quality, and when incorporating derivative AI tools, this figure rises to **47-56%**[10]. These trends are irreversible. If we remain fixated on the antagonism between human and artificial intelligence, we risk missing opportunities for progress.

4.1.4. The Irreplaceable Human Edge: Creativity and Emotion

Artistic creation is, at its core, a chronicle of human consciousness. Each era's creators have left unique imprints-evidenced by movements like **Realism, Romanticism, and Modernism**. This capacity for **emotional depth** and **conceptual innovation** remains humanity's exclusive domain.

Thus, human creators must:

- (1) **Strengthen humanistic literacy** by deepening their understanding of:

- 1) Emotional intelligence
- 2) Sociocultural phenomena
- 3) Traditional heritage

- (2) **Strategically integrate AI** to:

- 1) Enhance workflow efficiency
- 2) Expand creative possibilities
- 3) Optimize resource allocation

By balancing **human insight** with **AI efficiency**, creators can produce enduring works that resonate with both depth and warmth-masterpieces that reflect the best of both intelligences.

In sum up, the dialectical relationship between human intelligence and artificial intelligence, as exemplified by Sora-class systems, presents both profound challenges and unprecedented opportunities for creative evolution. The path forward demands neither uncritical embrace of technological determinism nor reactionary resistance to innovation, but rather a nuanced synthesis that preserves the essential humanity of artistic creation while harnessing AI's transformative potential. As we navigate this complex terrain, Engels' dialectical framework reminds us that progress emerges precisely through the resolution of contradictions - in this case, by developing AI systems that augment rather than replicate human creativity, while cultivating human capacities that transcend algorithmic reproduction. The future of art in the AI age will be shaped by our ability to maintain this delicate equilibrium, ensuring that technological advancement serves to amplify rather than diminish the depth, diversity and authenticity of cultural expression. Ultimately, the measure of success will be whether our creative ecosystem can produce works that bear not just the mark of technical proficiency, but the indelible imprint of human experience, imagination and meaning-making - qualities that remain the enduring hallmark of truly great art across all media and technological epochs.

5. CONCLUSION: TOWARD A DIALECTICAL SYNTHESIS IN THE AI-ERA CULTURAL ECOSYSTEM

The rise of Sora seems to herald a new era for the cultural industry, and its emergence marks a new development in the relationship between artificial intelligence and human intelligence. This development inevitably raises concerns about the damage to the aesthetic value of artworks. The works generated by artificial intelligence are seriously homogenized and templated, and do not have real depth, resembling industrial products mass-produced by cultural factories on assembly lines. The contradiction between artificial intelligence and human intelligence is becoming increasingly acute, and Engels' view of contradiction guides us to actively seek a balance between technological progress and artistic creation. Not only should we fully utilize the new opportunities brought about by AI, but we should also be wary of its potential threat to the existence of art.

From a dialectical perspective, this tension between technological advancement and artistic authenticity constitutes a necessary phase in the evolution of cultural production. The homogenization of AI-generated content reflects what Theodor Adorno termed the "culture industry" phenomenon, where mechanical reproduction threatens artistic autonomy. However, this very contradiction also contains the seeds of its own resolution. By applying Engels' principle of the interpenetration of opposites, we recognize that AI's technical precision and human creative spontaneity are not mutually exclusive but can achieve higher synthesis through dialectical mediation. The standardized outputs of AI systems paradoxically highlight the irreplaceable value of human artistic expression - its capacity for ontological questioning, emotional authenticity, and cultural memory. This dialectical understanding prevents us from falling into either technological determinism or cultural conservatism.

Our ultimate goal is to create a more inclusive and dynamic art ecosystem, where AI and human intelligence can promote each other creatively and work together to enrich artistic expression and exploration. By maintaining a clear understanding of the contradictions between AI and human intelligence, we can ensure that art can still fulfill its unique cultural and social value in the digital age. This requires establishing new aesthetic paradigms that transcend the binary opposition between human and machine creation. Such paradigms should acknowledge hybrid forms of artistic production while preserving space for purely human creative acts. The measure of success in this endeavor will be whether the art ecosystem can simultaneously accommodate AI-assisted cultural production and safeguard those dimensions of artistic practice that require embodied human experience, historical consciousness, and critical reflection - qualities that remain beyond algorithmic simulation. Only through this balanced approach can we prevent the complete colonization of the cultural sphere by instrumental rationality while still benefiting from AI's transformative potential.

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