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Research on the Legal Nature and Protection Path of Portrait Interests of AI-Generated Original Virtual Actors

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Abstract. The portraits of AI-generated original virtual actors are generated by algorithms and data, representing a new type of legal interest in digital property with both commercial value and asset attributes. The images of AI-generated original virtual actors can hardly fully meet the recognition criteria for traditional intellectual property objects such as copyright and patent rights, and should be recognized as objects of data intellectual property rights. Under the current legal framework, a single legal department can hardly form a complete protection path for such interests, facing dilemmas such as difficulties in determining "originality", lack of subject qualification of personality rights, and the passivity and uncertainty of anti-unfair competition protection. While legislation is yet to be improved, optimizing the application of existing norms through methods of legal interpretation is a pragmatic approach. By extensively interpreting the originality rules of copyright law, applying the portrait property protection rules of the Civil Code by analogy, and activating the general clause of the Anti-Unfair Competition Law, a tiered and complementary stepwise protection system can be constructed to provide references for the judicial protection of digital image rights and interests and the compliant development of the industry.

Keywords: AI-generated original virtual actors, portrait interests, data intellectual property rights, theory of legal interpretation

1. Introduction

As an important product of the development of the digital economy, virtual digital humans are widely used in fields such as film and television performance, commercial endorsement, and cultural and entertainment communication. Compared with traditional digital humans reproduced from and driven by real humans, AI-generated original virtual actors, which are completely generated through algorithm training and data recombination, have become a new trend in the industry. The so-called AI-generated original virtual actors, also known as synthetic performers, refer to new type of virtual performing images that are independently generated by artificial intelligence with complete human appearance features, without relying on specific natural persons as the ontology [1]. Such virtual characters complete original generation through deep learning and reconstruction of massive data, have independent visual recognizability and commercial application value, and are not the digitization of a character in a certain work (such as "Hu Bayi", the protagonist of *Ghost Blows Out*

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the Light). Tilly Norwood, an AI actor from the United States, as well as Qin Lingyue and Lin Xiyan launched by China's Youhug Media, are typical practices of such digital images.

Nowadays, the commercial value of AI-generated original virtual actors is increasingly prominent, but the legal nature and protection path of their "portraits" are still controversial, which urgently needs theoretical responses. In terms of qualification, some scholars believe that the images of virtual digital humans should be protected by copyright through computer software [2]; some scholars hold that virtual digital humans have legal subject status [3], so the legal nature of their images will no longer be the object of traditional intellectual property; other scholars argue that the appearance interests of virtual digital humans can be attributed to the scope of patent protection [4]; the Hangzhou Internet Court ruled that the virtual digital human Ada belongs to fine art works under copyright law [5]. In terms of protection paths, some scholars believe that comprehensive protection of the appearance of virtual digital humans can be achieved through traditional copyright, patent rights and trademark rights [6]; some scholars propose a two-track scheme of "collaborative protection by copyright law and anti-unfair competition law" [7]; other scholars summarize two protection paths in the industry: one holds that the image of virtual digital humans should be classified as "fine art works", and the other holds that the creation process and existence state of virtual digital humans are similar to "filming movies" and can be protected as "audiovisual works" [8]. Generally speaking, in terms of nature, the academic circle has not reached a consensus on the nature of the images of AI-generated original actors; in terms of protection paths, the situation where the image of a synthetic performer fails to meet the "originality" standard and is illegally used by non-competitors is ignored.

This paper distinguishes and analyzes the legal attributes of the portrait interests of AI-generated original virtual actors, defines the applicable boundaries between this new type of legal interest and the traditional personality rights and intellectual property systems, and explains the legal basis for the application of data intellectual property rules to such digital images. By sorting out the application shortcomings of the *Copyright Law*, the *Civil Code* and the *Anti-Unfair Competition Law*, this paper adopts normative interpretation as the research method, builds a stepwise protection mechanism with clear levels and mutual complementarity under the current legal framework, provides normative application solutions for the judicial protection of new digital portrait interests, and promotes the refined development of digital intellectual property rules.

2. Analysis of the legal nature of portrait interests of AI-generated original virtual actors

The portraits of AI-generated original virtual actors are formed through algorithm training and data generation, shape independent visual images detached from the ontology of natural persons, have both market utilization value and digital asset attributes, and form special new civil legal interests. To accurately define the protection boundary and normative basis of such rights and interests, it is necessary to analyze layer by layer from three dimensions: the attribute of rights and interests, institutional adaptability and theoretical attribution, clarify its essential differences from personality rights and traditional intellectual property rights, and finally clarify its applicable attribute of data intellectual property rights.

2.1. Exclusion of personality rights objects: non-personality attribute and pure proprietary interests of AI virtual images

First of all, AI-generated original virtual actors do not have legal subject qualification. Although their appearance may be infinitely close to real humans, and even achieve highly anthropomorphic

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interaction through speech synthesis and natural language processing technology, their essence is a collection of codes, algorithms, data and human preset rules, a product of instrumental rationality. They do not have free will, ethical emotions or personal dignity, nor do they have limited entities, so they cannot be regarded as social organizations [9]. Therefore, they cannot serve as subjects of rights to enjoy specific personality rights such as the right to portrait, the right to reputation and the right to privacy established in Part Four of the *Civil Code*, which focus on safeguarding the personal freedom and personal dignity of "natural persons".

Secondly, the core of interests on the portraits of AI virtual actors is proprietary interests. The traditional right to portrait of natural persons is a composite of personality rights and property rights, with spiritual interests in the fundamental position. For AI virtual actors, the infringement of their "portraits" will not cause mental distress, and their interests are almost entirely reflected in the economic dimension: including but not limited to direct income obtained through authorization and licensing, improvement of commercial value brought by endorsements, ability to attract investment as core assets, and the transaction value of their images themselves as digital collections. Therefore, this interest is a kind of pure, evaluable and transferable proprietary interest in nature. Although some scholars discuss the possibility of virtual images as carriers of natural person's personality interests based on the extension of "digital personality", this usually presupposes a stable and identifiable one-to-one correspondence between virtual images and specific natural persons [10]. For "AI-generated original" virtual actors, their design and generation deliberately avoid association with any specific natural person, aiming to create an independent and fictional "personified" identifier. Therefore, the core demand for their interest protection focuses on the property level, thus realizing separation from the personality right system on the legal basis.

2.2. Disengagement from traditional intellectual property rights: the bundle of composite rights and interests surpasses the classical intellectual property system

Since this interest falls into the category of property rights and belongs to intangible property, can it be accommodated by the existing intellectual property system? In-depth analysis of traditional intellectual property types such as copyright, trademark right and patent right shows that the portraits of AI actors are not objects of these rights.

The object of copyright is intellectual expression with "originality". However, when the image of an AI-generated original actor fails to meet the requirement of originality but has certain commercial value, it is not an object of copyright. Therefore, the portraits of AI-generated original actors are not all objects of copyright. At the same time, the characteristics of the AI generation process make the determination of "originality" extremely complicated. When the final image is the "emergent" result of algorithms based on massive data and complex parameters, and human contribution may be reflected in early style setting, prompt writing or result screening, the evaluation of originality will face problems such as whether the evaluation object is the creation process or the creation result, and how to determine the identity of the author [11], which makes it difficult to determine the originality of AI actor images. A trademark is a sign that identifies the source of goods or services, and its function is to prevent market confusion [12]. Although the portraits of AI virtual actors can play a role in identifying the source, they not only have such identification function itself, but also include the intrinsic value as fine art works or cultural products, with a narrow scope of protection. The object of patent rights is technical solutions, which are far from visual images themselves.

It can be seen that the portrait interest of AI-generated original virtual actors is a bundle of composite rights and interests integrating the aesthetic value of fine art works, brand identification function and data asset attributes. It is like an object of copyright, but its originality is difficult to

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determine; it is like a trademark sign, but its value is more than source identification; it is also an important digital asset. This compositeness makes it difficult to fully fit the preset framework of any single traditional intellectual property right, thus in fact constituting a new type of right (or legal interest) that calls for independent evaluation and special attention.

2.3. Theoretical attribution of new legal interests: the object attribute of data intellectual property rights of AI-generated original portraits

Data intellectual property rights refer to "the general term of claims, privileges, powers and immunities enjoyed by right holders according to law for derivative data products with commercial value and intellectual achievement attributes formed by algorithmic processing of legally obtained data" [13]. The portraits of AI virtual actors are derivative data products creatively synthesized by generative artificial intelligence models based on in-depth processing of large-scale and legally obtained training data, learning patterns, and following specific instructions. This process is a qualitative change from raw data to value-added data products (or data derivatives). At the same time, the identity of "actor" inherently implies certain commercial value, because only when the image of an AI-generated original actor has certain aesthetic appeal, can meet the real needs of users, and make users willing to pay for it — that is, conforming to market demand and having monetization capability — can the AI-generated original actor have the opportunity to "star" in film and television works. This portrait not only has visual aesthetic feeling, but also has practical value such as reducing labor costs in film and television production, having high controllability, and completing performances according to the plot development. The intellectual achievement attribute required for objects of data intellectual property rights is much lower than that of traditional intellectual property objects, with more emphasis on practicality [14]. When the generation of an AI actor image conforms to the above process but fails to reach the originality standard and has certain commercial value, as long as the data intellectual property right registration is carried out, the image will be recognized as an object of data intellectual property right and protected. Therefore, compared with traditional intellectual property rights, data intellectual property rights can fully cover the image interests of AI actors in scope.

3. Deficiencies and reflections on current legal protection: tool failure and structural dilemma

After clarifying the legal nature of the portrait interests of AI-generated original virtual actors, it is not difficult to find when returning to the current legal system that the existing legal rules can hardly form complete protection for such rights and interests alone, and various systems have exposed obvious shortcomings in application.

3.1. Obstacles to object eligibility and right ownership in intellectual property law protection

In judicial practice, the most frequently resorted path for right holders is the *Copyright Law*. Claiming the static image of a virtual actor as a "fine art work" has become a paradigm. However, this path faces double obstacles.

The first is the obstacle of object eligibility, that is, the vagueness and shake of the judgment standard of "originality". For portraits completely generated by AI, courts need to judge whether they contain "original contribution" sufficient to constitute a work. If human participation is limited to inputting simple descriptions such as "an oriental beauty", the result is likely to be excluded from the category of works due to lack of "minimum creativity".

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The second is the chaos of right ownership. In traditional intellectual property theory, even if a portrait of an AI virtual actor is recognized as constituting a work, who is the "author"? Except for clear contractual agreements, the basic assumption of the current *Copyright Law* that natural persons or legal persons are the author encounters challenges here. Is it the human creator who designs the character setting and world view? Is it the team of engineers who write and train the underlying algorithms? Or is it the company that owns and operates the model? In complex industrial collaboration, various subjects contribute differently to the final results, but traditional intellectual property law fails to provide clear rules for ownership division. The ambiguity of right ownership directly leads to unclear rights protection subjects and surging transaction costs, which seriously restrains the standardized development of the industry and the enthusiasm for investment and financing.

3.2. Fundamental lack of subject qualification in personality right law protection

As mentioned above, the personality right path has fundamental obstacles due to the legal correlation between right subjects and objects. Article 1018 of the *Civil Code* clearly limits the subject of the right to portrait to "natural persons". As objects rather than subjects, AI virtual actors cannot enjoy the right to portrait.

In addition, when the image of a virtual actor is maliciously tampered with, used in vulgar or illegal scenarios, thus damaging its carefully built "public persona" and public evaluation, can it seek protection of the right to reputation? The answer is also no. The right to reputation protects the social evaluation of natural persons, legal persons or unincorporated organizations. AI virtual actors themselves have no social evaluation, and their public image is essentially the projection of the business reputation of their operators behind them. Therefore, a possible litigation strategy is to file a lawsuit on the grounds that the operator (such as a company) has suffered damage to its right to reputation. However, this path not only requires tortuous argumentation, which needs to prove that the infringement has actually and directly reduced the operator's own social evaluation, but also has an extremely limited scope of protection. It is only applicable to top virtual idols that are deeply bound to the operator's brand, and cannot provide universal and direct protection for most AI virtual actors.

3.3. Limitations of passivity and fragmentation in Anti-Unfair Competition Law protection

The *Anti-Unfair Competition Law* is often regarded as a "catch-all" protection tool for intellectual property law due to the openness of its principle clauses and its extensive concern for market order. Article 2 of the law stipulates the principle of good faith and business ethics.

However, the protection provided by this law has inherent defects. First, the protection is passive and post-event. The Anti-Unfair Competition Law usually does not grant positive and exclusive proprietary rights (such as the right of reproduction and distribution in copyright), and its initiation presupposes the existence of a competitive relationship and specific acts that have caused confusion or violated business ethics [15]. This means that right holders cannot prohibit others from unauthorized use in advance as they do with copyright, and can only provide relief after damage occurs, resulting in untimely and incomplete protection. Second, the application of law is fragmented and uncertain. Whether it constitutes "having certain influence", whether it is "sufficient to cause misunderstanding", and whether it violates "business ethics" — these elements are highly dependent on the judge's discretion and value judgment in individual cases, lacking relatively objective standards. Third, the restriction of the competitive relationship element. Acts of using the

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portraits of virtual actors without permission in non-directly competitive fields (such as for product promotion of completely different categories) may not be applicable to the *Anti-Unfair Competition Law* due to the difficulty in identifying competitive relationships, further increasing uncertainty.

4. Protection paths for portrait interests of AI-generated original virtual actors in China

As mentioned above, as a new type of legal interest in digital property, the portrait interest of original virtual actors cannot be fully accommodated by personality right rules and traditional intellectual property systems, and all current single legal norms have application shortcomings and regulatory blind areas. Facing the reality that technological iteration is faster than legislative update, it does not have institutional basis and practical conditions to create new types of rights through legislation. Therefore, interpreting and filling gaps in current norms through legal dogmatic methods, and constructing a tiered, adaptive and complementary stepwise protection system combined with the differences in institutional functions of copyright, personality rights and anti-unfair competition rules, is a feasible path to solve the dilemma of rights and interests protection at present.

4.1. Purpose-oriented extensive interpretation of Copyright Law

For portraits of AI virtual actors that reflect significant human intellectual input in the creation process, copyright law should be regarded as the core battlefield for protection. The key lies in carrying out creative interpretation of the two cornerstone concepts of "originality" and "author" in line with technological reality and legal purposes.

4.1.1. Reconstruction of the "originality" standard: from "result-centrism" to "process contributionism"

Traditional originality judgment mostly focuses on whether the final expression result itself has "minimum creativity". It is necessary to move the focus of review forward to examine the nature and degree of intellectual activities paid by humans in the whole process of creation [16]. This includes but is not limited to: (1) shaping the soul of the virtual actor character, such as systematic and detailed textual and visual settings of its world view, personality characteristics, background stories and core aesthetic style; (2) complex and delicate prompt engineering that reflects unique aesthetics and skills to generate specific images — this process itself is a kind of creative expression; (3) repeated screening, comparison, integration and iterative instructions with aesthetic judgment on massive initial results generated by the AI model. As long as this series of human-led activity chains can be proved to have a substantial and decisive impact on the "individuality" of the final visual expression, it should be recognized that the portrait of the AI virtual actor reflects "human originality", thus meeting the protection requirements of copyright. This interpretation, in essence, positions generative AI as an unprecedented and powerful advanced intellectual creation tool, thus firmly anchoring the focus of legal evaluation on human creative labor.

4.1.2. Determination of "author" identity

A natural person who carries out creative acts is the author of the work and the subject of copyright [17]. Specifically: (1) If a virtual actor is the result of systematic and organized creation by an institution organizing a professional team and investing a lot of resources, from concept design, model training to image generation and optimization, the institution meets the constituent elements

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of "legal person work" or "special work for hire", and shall be regarded as the author. (2) If an individual user dominates and shapes the unique personality of the final image through in-depth participation in prompt design, key parameter adjustment and creative post-processing, the user can be recognized as the author. Here, AI models and data providers are usually regarded as tools (like manufacturers providing paintbrushes and canvases), whose contribution lies in the technical level, and generally do not share copyright with users unless there is a clear agreement between the two parties.

4.2. Active application of the general clause of Anti-Unfair Competition Law

When copyright protection may not be accessible due to the originality threshold, or the infringement is mainly manifested as atypical copying acts such as "free-riding", appropriating goodwill, or causing market association confusion, the "principle of good faith" and "business ethics" clauses established in Article 2 of the *Anti-Unfair Competition Law* should exert their flexible and open protection function.

Interpretation can be made based on this general clause to find that the following acts constitute unfair competition: actors who have a competitive relationship with the right holder, without permission, use the portraits of AI-generated original virtual actors that others have cultivated with a lot of capital, technology and intellectual resources and have gained certain market popularity and remarkable recognizability in relevant fields, for their own product promotion, commercial publicity or other business activities. Such acts, subjectively with intent or negligence to exploit others' labor achievements and goodwill, objectively seize others' competitive advantages for free, undermine the market order of fair competition, and violate the basic business ethics of honest operation. Even if the portrait itself is not recognized as a work, such acts disrupting the market order should be stopped by law. Right holders may accordingly request the actor to bear civil liabilities such as ceasing the infringement and compensating for losses.

4.3. Analogous application of portrait rules in the Civil Code

Although AI virtual actors themselves do not enjoy personality rights, the identification function and commercial value carried by their portraits are highly similar in social function to the property interest component in the right to portrait of natural persons. When the law lacks direct provisions for a certain social relationship, applying the most similar legal provisions by analogy is a method to fill legal loopholes [18]. Therefore, when the portrait interests of AI virtual actors suffer from unauthorized commercial exploitation and there is no competitive relationship between the right holder and the user, the court may apply Article 1019 of the *Civil Code* by analogy.

In this analogy, the focus of legal protection is not the "personal dignity" of natural persons, but the legitimate proprietary expectant interest formed by the owner of portrait interests based on their creative labor, capital investment and commercial operation of the virtual image. The judgment of infringement composition can focus on whether the act is "without consent", whether it is "for profit-making purposes" and whether it leads to the depreciation of the market value of the portrait. In terms of calculating damages, the calculation method of property losses in portrait infringement can also be referred to, comprehensively considering factors such as the market popularity of the virtual actor, the market standard of licensing fees for similar images, the illegal gains of the infringer, and the reasonable expenses paid by the right holder to stop the infringement.

This kind of analogous application is not creating a new "personality right for virtual humans", but extending the protection scope of the interest types clearly protected by law (that is, the

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commercial interests of portraits) to another type of objects with the most similar functions and properties (that is, virtual images with commercial value) through the interpretation technique of "purpose-oriented expansion" within the existing normative system. It provides a supplementary path based on the *Civil Code* to remedy pure property damage for portraits of AI virtual actors that do not have enough "originality" to constitute works in the sense of copyright law, but have accumulated certain commercial value through operation.

5. Conclusion

The commercial application of AI-generated original virtual actors is a typical representation of the deep integration of artificial intelligence technology into the culture and entertainment industry, and also poses new challenges to the application boundaries of current civil legal norms. From the perspective of the essence of rights and interests, different from traditional reproduced digital images, the "portraits" of AI-generated original virtual actors conform to the core characteristics of data intellectual property rights and belong to independent new legal interests in digital property. Through legal qualification and normative review, this paper builds a stepwise protection path adapted to the portrait interests of AI-generated original virtual actors, which not only respects the stability of the current legal order, but also takes into account the realistic demand for the innovative development of the digital industry. With the continuous popularization of AI generation technology, in the future, we can rely on judicial precedents to accumulate trial experience, gradually refine the protection rules for digital image rights and interests, promote the refined development of the data intellectual property protection system, and realize a benign balance between technological innovation, industrial development and legal regulation.

References

[1] Chen, J., & Zhou, M. (2026). From digital replication to AI actors: The debate on performance subjectivity in the context of algorithms. *Film Literature*, (2), 46–50.
[2] Wu, L. (2024). A preliminary study on copyright protection of appearance images of virtual digital humans. *Journal of Ningxia University (Social Science Edition)*, (2), 118.
[3] Xiong, J., & Zhang, Z. (2025). Dilemmas and solutions of information protection of virtual digital humans in the metaverse. *Science Technology and Law (Bilingual)*, (1), 26–37.
[4] Lu, Q. (2023). Legal issues of IP-based virtual digital humans and responses to their intellectual property protection. *Science Technology and Law (Bilingual)*, (3), 57–67.
[5] Qian, Y. (2023, May 6). Hangzhou delivers first judgment on infringement case involving virtual digital human. *Zhejiang Daily*, p. 7.
[6] Hu, J., & Xu, J. (2026). Copyright infringement risks and regulatory paths of AI-driven virtual digital humans. *Publishing Research*, (1), 67–75.
[7] Wang, Q. (2021). *Intellectual property law tutorial (7th ed.)*. China Renmin University Press.
[8] Yan, H. (2024). Normative solutions to infringement disputes involving algorithm-driven virtual digital humans. *Journal of Chongqing University (Social Science Edition), 30*(2), 182–194.
[9] Zhi, Z. (2026). Legal analysis of the legal subject issue of artificial intelligence. *Science of Law (Journal of Northwest University of Political Science and Law), 44*(1), 31–44.
[10] Xu, W. (2025). On the right to digital image: Justification based on digital humans as objects of new personality rights. *Research on Rule of Law*(4), 31–45.
[11] Bao, L. (2026). Functional reflection and adjustment of core concepts of work identification in copyright law in the digital age. *Journal of Henan University of Economics and Law, 41*(3), 83–99.
[12] Gao, Y., & Feng, X. (2024). Evolution of trademark functions and institutional responses in the era of artificial intelligence. *Intellectual Property*(2), 21–43.
[13] Jia, L. (2024). Justification of rights and rule expansion of data intellectual property rights. *Law and Social Development, 30*(4), 205–224.

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[14] Deng, S., & Hao, M. (2026). Theoretical rationality vs. practical rationality: An empirical interpretation of the concept of data intellectual property rights. *Science and Technology Management Research, 46*(3), 118–131.
[15] Song, Y. (2023). On the general analytical framework of anti-unfair competition law. *Peking University Law Journal, 35*(4), 963–982.
[16] Li, H., & Xu, Y. (2025). Determination of civil rights involving "virtual digital humans" under the background of AI technology. *Research on Rule of Law*(4), 16–30.
[17] Zhang, X., & Bian, L. (2024). Research on copyright protection of artificial intelligence generated content. *Journal of Comparative Law*(2), 77–91.
[18] Chen, K. (2022). The idea of analogical interpretation and its application. *Law Science*(11), 3–16.