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Original Research Article

Investigating the Aesthetic Concepts of Frank Sibley in Encrypted Art Using Fuzzy Screening Methods*

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Abstract

Problem statement: The rise of digital art using blockchain technology (Cryptoart) in recent years has ushered in a new era in the production, supply, and economic aspects of the art world. A new platform has changed the way art ownership works and has influenced how audiences view art aesthetically and artistically. Meanwhile, analyzing the components of aesthetics through the perspective of theorists like Frank Sibley can provide new insights into grasping this concept.

Research objective: The objective of this research is to pinpoint and evaluate key aesthetic indicators in the analysis of cryptoart works using Frank Sibley's viewpoint, to establish a theoretical framework for assessing these works within the digital realm.

Research method: The present study utilized a mixed approach, combining both qualitative and quantitative methods. The qualitative aspect involved identifying aesthetic components based on Frank Sibley's theory were extracted using content analysis of selected scientific articles and crypto artworks. The quantitative section of the study involved applying Ronald Yager's method and consulting with 18 experts in the digital art field to evaluate these elements.

Conclusion: The study's findings revealed that indicators like elegance, dynamism, and experience are considered more significant in the aesthetic evaluation of cryptoart works from the viewpoint of Frank Sibley, as indicated by experts. The findings of this research could prove to be useful in creating guidelines for assessing digital art, designing education programs in the realm of art critique, and examining artistic content in novel circumstances.

Keywords: *Cryptoart, aesthetic concepts, fuzzy screening, NFT.*

Introduction and Problem Statement

Traditional ideas of aesthetics in the digital era must be reevaluated. The integration of blockchain

technology and cryptography in the art world has given rise to a new form of art known as cryptoart. This type of art, characterized by its mix of disciplines, necessitates fresh analytical methods (Ahmadi & Rahbarnia, 2023, 54). Artworks have their own unique histories, and at the same time, they can also be seen as objects with distinct perceptual and auditory qualities (Attard, 2020, 1). Aesthetic characteristics play a crucial role in the overall

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aesthetic enjoyment, especially when analyzing art pieces. Frank Sibley has identified various aesthetic elements, such as balance, tranquility, unity, etc., that he believes are crucial in works of art (ibid., 4). The theory he proposed in (Sibley, 1965) focuses on factors such as elegance and dynamism, which can be a useful framework for evaluating digital art. Due to the rising popularity of cryptoart in the worldwide market and the absence of consistent analytical tools to assess the artistic value of these works, this research project seeks to bridge philosophical concepts of aesthetics with digital art. Research aims to identify Frank Sibley's aesthetic concepts in encrypted art through qualitative analysis. The study also aims to prioritize these indicators based on experts' opinions using the fuzzy screening method. The goal of this study is to identify the components through a thorough review and analysis of the article content, leading to a final integration. The fuzzy screening method is utilized to prioritize Sibley's aesthetic concepts in relation to digital cryptoart from their perspective.

As the NFT market expands, there is a demand for more precise criteria for the aesthetic evaluation of works. This study aims to address the existing theoretical deficiency. The research is essential due to the absence of a structured framework for cryptoart and the requirement to merge traditional theories with contemporary technologies. The main question of this research is: What are the components of Sibley's aesthetics in the analysis of cryptoart? Another question is: According to experts, what is the ranking of these components in terms of importance?

Theoretical Foundations

Frank Sibley, an English philosopher who was inspired by neo-idealism, developed a passion for the philosophy of aesthetics while at Oxford and dedicated himself more than any other to analytical aesthetics. The subject of the aesthetic qualities of AP has been primarily debated within the realm of analytical aesthetics, which is essentially a branch of philosophy focused on art criticism. This involves scrutinizing the terms and statements found in discussions

about aesthetics to assess the merits of an object, particularly a piece of art, and to investigate their assertions of being objective. Frank Sibley was the first author to thoroughly study the characteristics of AP, publishing several influential articles on the topic in the 1950s, 1960s, and 1970s. He describes aesthetic concepts as "taste concepts" because they pertain to a particular way of understanding, specifically aesthetic appreciation, distinct from individual preferences and capable of different degrees of sophistication possessed by everyone. He also presents a compilation of these ideas, such as "integral," "balanced," "calm," "elegant," "moving," "emotional," and more. Sibley points out that this compilation is not exhaustive, as several of them evolve into aesthetic descriptions through a form of "metaphorical shift" (Sibley, 2001, 46). He assesses the connections between aesthetic and non-aesthetic characteristics, emphasizing the intricate and subtle nature of aesthetic evaluations. He concludes that aesthetic characteristics rely on non-aesthetic attributes, suggesting that each aesthetic feature of an object originates from its non-aesthetic attributes. Alterations in non-aesthetic characteristics can result in changes in aesthetic characteristics, demonstrating that aesthetic qualities emerge from the fundamental non-aesthetic attributes. No non-aesthetic condition can logically necessitate the use of an aesthetic term (Sibley, 1965). Aesthetic characteristics can add to the value of a piece of art, but they do not solely determine it, as art can also possess cognitive and non-aesthetic values. It is important to emphasize the intricate relationship between aesthetic and artistic values and demonstrate that both are necessary for a thorough comprehension of art (Attard, 2020). Cryptoart is a recently developed type of art that involves the production and sharing of various forms of artistic expression, such as paintings, photographs, animated GIFs, music, and other audio and visual works. The introduction of blockchain technology has made tokenization an accessible and secure option for users interested in this art form. Cryptoart refers to an artistic creation that is generated and housed exclusively within the NFT framework. To us, it falls under the category

of cryptographic art and is a form of digital art. It pertains to creations made digitally and sold as non-fungible tokens (NFTs) using blockchain technology. Along with their artistic worth, these works also hold property and financial value (Kulakova, 2022, 39). The emergence of crypto art signifies a change in the art world where the worth of art is now more based on its potential for the future rather than its past significance. This change is defined by the democratization of the art market, giving artists the opportunity to achieve financial autonomy and have more authority over their creations (Habrel, 2022). In the current age of digital technology, societal changes and advancements in technology have led to a shift in people's perception of art. A new development in the world of art during this time is the emergence of cryptographic art and non-fungible tokens (NFTs). NFTs are essentially digital certificates that transform digital artworks and collectibles into assets that can be recorded and traded. It is thought that NFTs will have an impact on the future of art by being involved in the art world. Wealthy individuals invest in exclusive artworks for different purposes, in addition to investing in the stock market or precious metals. With this technology, the artist can sign their digital products, allowing them to have a digital version of the product (Kant, 1790/2000, 14).

Research Background

The current study focuses on identifying and ranking Frank Sibley's aesthetic principles within the realm of encrypted art, aiming to bridge the gap between philosophical ideas and digital artwork. Finding experts in Iran who have both a theory and a method for proposing a new question and developing a more efficient and coherent plan for this purpose is challenging. Over the past few decades, research in the country has been largely focused on a single topic, leading to a lack of diverse perspectives. This study frequently involved examining and organizing different theoretical bases established by scholars in the Western world. An examination of the development of research indicates that the artistic perspective on cryptoart is still in the early stages of development. This study

aims to bridge the gap by integrating Sibley's theory with blockchain technology. The focus of previous research has primarily been on the technical elements (Kulakova, 2022), the Economy (Balashova, 2023), or public perception (Ardianti & Widharta, 2022). The focus of the previous studies has been on other aspects, rather than conducting a thorough aesthetic analysis of cryptoart works using philosophical art theories. The purpose of this research is to address the lack of theoretical explanation by merging Sibley's theory with a mixed methodology of qualitative and quantitative methods

Attard (2020), in his article entitled "Aesthetic Features and Their (Non-)Contribution to Artistic Value," discusses the historical evolution of aesthetic concepts, including those by Frank Sibley and other modern thinkers, that highlight the significance of personal perception and sensitivity in the interpretation and assessment of art. Attard investigates the connection between aesthetic qualities and the value of art, pondering whether these qualities have a universal relevance and their impact on the appraisal of artwork. Nina Balashova's (2023) dissertation titled "Making money with NFT art: How do art experts and NFT artists think about monetary value of NFT explores the financial assessment of NFT pieces and highlights the influence of digitalization on the art industry. Huberl's (2022) article, "Crypto art: A new era in art vs adventure challenge," delves into the growing trend of cryptoart and discusses how it is impacting the art industry and posing challenges to traditional art markets. Ana Cristina Ribeiro's (2012) article "Aesthetic attributions: The case of poetry" delves into the connection between the structural aspects of poetry and their aesthetic outcomes in the ongoing aesthetic discussion. Ribeiro questions the assertion made by Frank Sibley that there is a rational link between non-aesthetic characteristics and aesthetic attributes. She argues that certain poetic forms, like the ballad stanza, display consistent aesthetic impacts due to their formal components. Ribeiro also shows a clear correlation where particular structural elements can

result in explicit aesthetic outcomes. He thought that this link facilitated a more accurate comprehension of how aesthetic characteristics are derived from the structural elements of poetry, and ultimately endorsed the concept that perceptual explanations can articulate aesthetic assessments in certain circumstances. In his essay “Aesthetic and nonaesthetic,” philosopher Frank Sibley (1965) discusses the differentiation between aesthetic and non-aesthetic judgments, highlighting the importance of aesthetic perception in the appreciation of aesthetics. In his article “Aesthetic Properties” in the “International Dictionary of Aesthetics,” Filippo Fucuzzi delves into the idea of aesthetic properties (AP), defining them as qualities of objects (whether natural or artificial) that are assessed through aesthetic judgments. He emphasizes the intricate relationship between aesthetic attributes in art and perception, along with augmenting the discussion about Appreciative Perception by incorporating insights from philosophers like Frank Sibley and Jerrold Levinson. Sibley differentiated between aesthetic and non-aesthetic qualities, while Levinson introduced the concept of superiority. The author argues that aesthetic distinctions are invariably linked to non-aesthetic distinctions (Focosi, 2018). To provide a thorough background and to explore related research, additional sources were reviewed. While these sources did not specifically discuss the application of Sibley’s theory to cryptoart, they were relevant to the research topic. One of the studies is called “Cryptographic Aesthetics: Towards a New Materialist Theory of NFT Art.” This study explores the aesthetics of cryptographic art and looks at the intricate connections, procedures, and outcomes present in the NFT and cryptoart markets from a materialist point of view. It also takes into account both human and non-human influences to grasp the concept of aesthetics (Poposki, 2024). An article called “Cryptoart: A Decentralized View” explores the different viewpoints on crypto art provided by experts such as artists, gallerists, collectors, art historians, and digital science scholars, and also delves into the emerging and challenging contexts of crypto art

(Franceschet et al., 2021). There are some sources, such as the article titled “The Transition of Aesthetics from the Beautiful to the Abyss of Aesthetic Concepts,” which discusses the topic of “Introduction and Analysis of Frank Sibley’s Aesthetic Concepts by Providing Examples and Samples and Its Application” (Kashefi, 2013). Another article titled “A study of aesthetic and agnostic concepts; based on the aesthetic thoughts of Frank Sibley” “is an attempt to emphasize the importance of examples, specimens, and evidence to support Sibley’s views and clarify his aesthetic concepts (Delavarian & Shayganfar, 2019). The article “Cryptoart: A Fusion of Art and Blockchain Technology” aims to gain insight into the emerging artistic movement by examining the role of technology in cryptoart and exploring its historical roots in the art world. Additionally, it discussed the market potential of cryptographic art (Ahmadi & Rahbarnia, 2023). Fundamental research in analytical aesthetics, especially on Frank Sibley’s (1965, 2001), shows a clear difference between aesthetic and non-aesthetic characteristics. Sibley identified terms like “elegance,” “dynamism,” and “unity” as essential elements of aesthetics. A review of the literature is provided in Table 1.

Methodology

This study aims to pinpoint Frank Sibley’s aesthetic ideas in the realm of encrypted art (qualitative aspect) and to rank these criteria based on experts’ opinions through the fuzzy screening technique (quantitative aspect). This study utilized a problem-oriented, mixed-method approach that incorporated both qualitative and quantitative methods, including qualitative content analysis and quantitative analysis utilizing fuzzy screening, in the qualitative portion. Scientific articles were reviewed, and key concepts were selected according to Frank Sibley’s theory. Expert opinions were analyzed and prioritized in the quantitative section using a paired comparison questionnaire and fuzzy screening technique. The statistical population consisted of experts in aesthetics and digital art. Data was collected using a card and a fuzzy questionnaire,

Table 1. Overview of the concepts and findings from the study’s context. Source: Authors.

Author and date	Method	Result	Relevance to the present study
Sibley (1965)	Philosophical analysis	Distinguishing between aesthetic/non-aesthetic features, introducing components such as elegance and dynamism	Theoretical basis of the present research
Attard (2020)	Theoretical study	The relationship between aesthetics and artistic value highlights individual perception	Confirming the importance of the mental approach
Kulakova (2022)	Legal-economic analysis	The challenges of owning NFTs, the role of blockchain in digital art	Technological research platform
Ardianti & Widharta (2022)	Qualitative content analysis	The relationship between aesthetic appeal and market value, a gap in public perception of NFTs	Qualitative methodology
Habrel (2022)	Case study	Cryptoart as a paradigm shift in art, democratizing the art market	Justification of research innovation
Balashova (2023)	Statistical analysis	The impact of social media on the valuation of NFTs, the role of the artist’s personal brand	The social dimension of digital art
Focosi (2020)	Systematic review	Classification of aesthetic characteristics, analysis of metaphorical transfer of concepts	Conceptual framework
Ribeiro (2012)	Poetry analysis	The relationship between structural features and aesthetic documents: a critique of Sibley’s view	Critical perspective

along with qualitative content analysis and Yager’s fuzzy analysis in Excel.

• **Research phases**

Phase 1: To pinpoint and rank the aesthetic ideas of Sibley, all concepts mentioned in the researchers’ texts were listed by referencing existing studies in the field. Phase 2: Afterwards, comparable instances were recognized, and headings that could be consolidated were merged, while cryptoart was specifically chosen from the cryptos and assessed by specialists. The pictures are included as demonstrations of cryptoart and were chosen from trustworthy sources to showcase a variety of styles and techniques in the field of cryptoart. Phase Three: In conclusion, a questionnaire was created to assess Sibley’s aesthetic concepts, with 8 indicators included. This questionnaire was then distributed to 18 experts, including professors from various universities and specialists in the visual arts. These experts were requested to provide their opinions on each indicator of aesthetic concepts for the presented works, using a scale of 8 options ranging from “very much” to “none.” They were requested to assess the elements in the typical NFT samples we chose. Phase 4 involved gathering the completed surveys and examining them through fuzzy screening to pinpoint the most impactful indicators and address the initial research

question. Subsequently, the information provided by the experts and the outcomes from scoring them were utilized to compile and assess the responses utilizing the fuzzy screening approach. The objective of the evaluation was to gauge the specialists’ understanding of the elements, rather than focusing solely on the images themselves.

Fuzzy screening: The assessment of multi-criteria decision-making problems using fuzzy screening involves evaluating the functional value of subjects and phenomena being studied and selecting key evaluation indicators through screening. The issue with screening begins with choosing a subset (X) of all available options. The act of selecting a subset A from X is known as the screening process. Every choice is outlined with the necessary details to showcase its effectiveness as the top choice, and it is later utilized to determine a specific subset A of X in further research. Additionally, when it comes to screening issues, there is usually a need for multiple individuals to be involved in the decision-making process, despite the limited amount of information available. The lack of sufficient information about the various options further complicates the situation, as it restricts the ability to integrate the opinions of numerous individuals. In 1993, Yager introduced the concept

of a fuzzy screening system as a solution to this challenge, aiming to reach consensus even with minimal and incomplete information regarding the criteria (Azar & Faraji, 2001). Fuzzy screening involves two steps. The process consists of three components:

The initial step involves considering various decision-making choices for the potential selection of specific criteria for further evaluation. These criteria are derived from qualitative content analysis and hand-picked by experts in the field.

The next component consists of a group of standards used to conduct evaluations. In this research, the chosen criteria for fuzzy screening include: C1 for balance, C² for unity, C3 for elegance, C4 for dynamism, C5 for objectivity, C6 for contradictions, C7 for competence, and C8 for experience.

The third component consists of a panel of experts whose viewpoints are important during the screening procedure. For this research, the views of 18 specialists and professionals in the

field of aesthetics and digital art were utilized. Professionals with expertise in the relevant field, such as university professors and experienced artists, were tasked with assessing the elements found in typical NFTs. Each expert was required to indicate how well each option meets the specified criteria. This assessment of how well the options meet the criteria is depicted through NFT cryptoart images in Fig. 1 for each criterion.

The research had defined objectives to address two specific questions. The fuzzy screening method was utilized to answer these questions. The various stages and components of the screening process were outlined. In accordance with the aforementioned criteria, each expert provided a series of n values for every option, representing the level of persuasion for that option in relation to the jth criterion. During the second phase of the fuzzy screening process, experts' assessments are consolidated to generate a comprehensive assessment of each option. Initially, a consensus

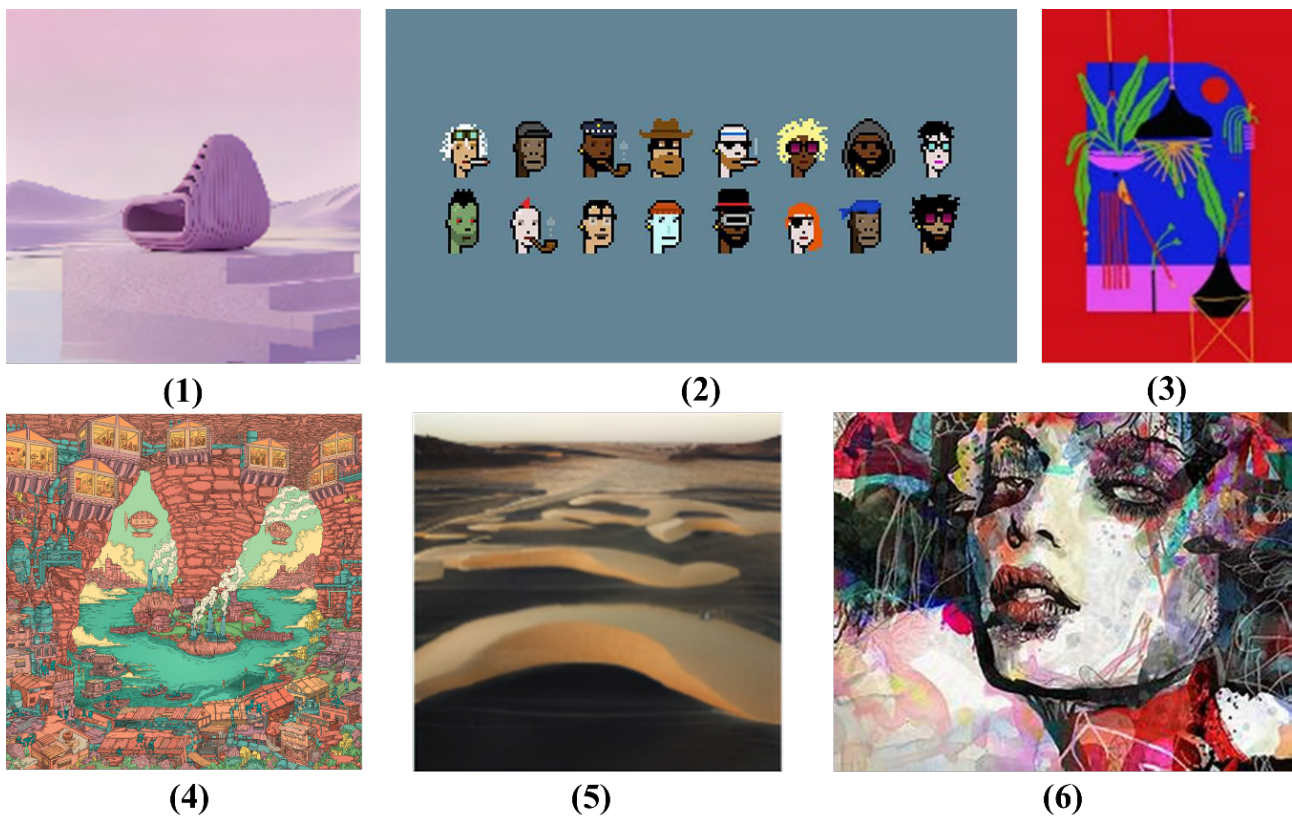


Fig. 1. CryptoArt NFT Images. (1): 3D NFT. Source: www.superrare.com, (2): 2D NFT. Source: www.nftplazas.com, (3): NFT Animation/GIF. Source: www.foundation.app, (4): Image NFT. Source: www.tayloradams.art, (5): Photo NFT. Source:www.nftculture.com, (6): Portrait NFT. Source: www.behance.net.

function (Q) needs to be established for the decision-making group. This function specifies the minimum number of experts required to agree for an option to progress in the screening process. The consensus function is defined as follows:

$$QA(k) = Sb(k)$$

$$B(k) = \text{Int}[1+(k \frac{q-1}{r})]$$

$k = 1, 2, \dots, r$

Since a scale with six points was utilized, the value 6 is used in place of q. Additionally, as 18 individuals responded to the survey, the value 18 is used in place of r. Therefore:

$$B(k) = \text{Int}[1+(\frac{5}{18} k)]$$

Once a consensus function is selected, the OWA operator can be employed for expert agreement. Each of the m choices is assigned a score by the kth expert (where k ranges from 1 to r) during this process. Now, the unit assessments by experts for each option need to be arranged in descending order. B_{ij} indicates the jth highest score for solution i, which is used to calculate the overall evaluation of solution i.

$$u_i = \max_j \{Q(j) \cap B_{ij}\}$$

$i = 1, 2, \dots, m$

The fuzzy technique is a recently developed methodology utilized in both local and international research for ranking and prioritizing criteria. When using this method, it is recommended to have a panel of experts consisting of a minimum of 7 to 8 individuals, as the results improve with a larger expert population (Foroozandeh Dehkordi & Kosari, 20).

Table 2 displays a six-section fuzzy spectrum for scoring. S5 represents a very high fuzzy number, S3 represents a medium one, and S0 represents none. In this study, the evaluation is conducted based on a specific set of criteria, with the selection criteria for fuzzy screening outlined in the second section. As per the data gathered from the survey, the significance of each element was identified. The ranking of the importance of each impact by the experts involved in the fuzzy screening is displayed in Table 3. Furthermore, Table 4 illustrates the hierarchy of

significance of Sibley’s aesthetic factors as perceived by both experts and participants involved in the fuzzy screening process.

Findings

Characteristics of the images: The images were used as a means to facilitate the professional’s aesthetic evaluation, rather than being directly analyzed. They were chosen from reliable sources based on their varied styles and technical aspects to encompass a broad spectrum of cryptoart. The current research employed a combination of methods to determine and rank aesthetic principles in encrypted art using fuzzy prioritization, as well as developed a theoretical model for analyzing NFT pieces. The main aim was to address specific research inquiries, and as a result, the steps of the study were delineated.

Also, a review of the aesthetic concepts that were expressed include: Frank Sibley describes aesthetic

Table 2. Six-segment fuzzy spectrum for scoring. Source: Yager, 1993.

Linguistic value	Defined symbol
Very high (VH)	S5
High (H)	S4
Medium (M)	S3
Low (L)	S2
Very Low (VL)	S1
None (N)	S0

Table 3. Ranking of NFT effects identified from fuzzy sieve based on their significance. Source: Authors.

Number	Effect
1	NFT image
2	NFT picture
3	NFT Portrait
4	NFT 3D
5	NFT GIF and Animation
6	NFT2D

Table 4. Hierarchy of Sibley’s aesthetic indicators in terms of their significance. Source: Authors.

Order of significance	Indicator
1	Elegance
2	Dynamic
3	Experience
4	Competence
5	Contrasts
6	Balance
7	Unity
8	Objectivity

concepts as “taste concepts” because they involve a unique epistemic access known as aesthetic acceptance, distinct from personal preference and inherent in everyone, allowing for varying levels of refinement. He also gives a roster of these ideas, such as “integral,” “balanced,” “integral,” “calm,” “elegant,” “moving,” “emotional,” and more. Sibley mentions that this list is not final, as some of them evolve into aesthetic terms through a form of “metaphorical transfer.”

Foucault discusses Sibley’s ideas about aesthetic concepts and taste concepts. According to Sibley, the list of these concepts includes integrated, balanced, calm, delicate, moving, and emotional, all of which involve metaphorical transfer. Sibley also classifies these concepts in terms of descriptive merit, such as balance and dynamism, as well as intrinsic evaluative terms that can have positive or negative connotations. Judgmental characteristics like beauty or ugliness are determined by how these descriptive merits are combined.

In Attard’s discussion on Sibley’s aesthetic concepts, he emphasizes the importance of perception, noting that individuals are affected by these characteristics and that perception is not something that can be easily shared or transferred. Aesthetic judgment cannot exist without direct perception. This perception involves both the epistemological aspect, which pertains to an individual’s experience with aesthetic properties, and the propositional aspect, which involves articulating and describing that experience. It also discusses key aesthetic concepts such as balance, unity, peace, aliveness, and so on. Kiyohiro also contends that Sibley recognizes the connection between basic properties and aesthetic properties when making aesthetic judgments about items like balance, gracefulness, dynamism, calmness, liveliness, and splendor in painting. A painting appears elegant due to its subtle curve. This demonstrates the elegance in the artwork; it is a verifiable observation that it indeed exudes gracefulness.

The researchers first identified all concepts presented in their writings by referencing past research in the field. Eight indicators were selected to evaluate the research

criteria, but their suitability varied. A fuzzy method was utilized to rank these indicators. The findings indicated that the criteria of “elegance”, “vitality”, and “experience” hold more significance in the assessment of cryptoart pieces, aligning with the theoretical framework established by Frank Sibley. According to [Table 3](#), the ranking of importance for each piece was determined by both experts and participants in the fuzzy screening process. Additionally, [Table 4](#) displays the ranking of importance for Sibley’s aesthetic principles as perceived by experts and participants in the fuzzy screening. Experts believe that the photo NFT is the most crucial crypto artwork, while the 2D NFT is considered the least important in the crypto art world. Among Sibley’s aesthetic indices, experts rank the elegance index as the most significant, while the objectivity index is deemed the least important.

Discussion

1. Compatibility of Sibley’s theory with digital art: The results of this research indicate that Frank Sibley’s aesthetic theory, which was originally developed for traditional art, can also be applied to digital art effectively. Specifically, there are three key elements: Elegance in cryptoart expands beyond the mere arrangement of visual components to encompass the precise algorithms and structured programming codes. Dynamics in NFTs have added a dynamic and interactive element that sets them apart from static art. Expertise: The primary innovation of this study involves examining the interactive and participatory aspects of digital art.
2. Challenges of adapting classical theory: The importance of the concept of “objectivity” in Sibley’s theory has been diminished within the realm of digital art. One possible reason for this is the complex and abstract nature of digital artworks, the significant influence of the viewer’s subjective interpretation, and the technological aspects of the works that allow for adaptation based on external data.
3. Comparison with previous studies: Confirming Attard’s (2020) research on the significance of individual perception, building upon

Kolakova's (2020) study by incorporating an aesthetic aspect into legal evaluations of NFTs, and diverging from Sibley's (1965) findings on the significance of the elements.

Conclusion

This study sought to bridge the gap between classical aesthetic theory and the emerging field of crypto art by employing Frank Sibley's framework. The findings demonstrate that traditional aesthetic components retain significant analytical value in the digital domain, though they require reinterpretation in light of technological and interactive contexts. Among the eight components identified, delicacy, dynamism, and experience emerged as the most critical for evaluating crypto art. While the first two reaffirm the applicability of Sibley's core concepts in digital environments, the prominence of experience highlights a novel dimension that reflects the participatory, multisensory, and decentralized nature of blockchain-based art.

The theoretical contributions of this research can be summarized in three key points:

- Establishing the first systematic analytical framework based on Sibley's aesthetics for the evaluation of crypto art.
- Enriching classical concepts by extending their meaning in digital contexts (e.g., delicacy expressed not only in visual composition but also in coding and algorithmic refinement).
- Identifying experience as a distinctive and essential aesthetic dimension unique to digital art.

From a practical perspective, this framework offers direct applications: digital artists can balance technical delicacy with visual aesthetics while designing richer interactive experiences; NFT platforms may adopt these criteria to develop more qualitative ranking systems and guide buyers beyond purely economic value; and educational institutions can revise curricula to emphasize the fundamental differences between digital and traditional aesthetics, thereby cultivating a new generation of critics and theorists of digital art.

Ultimately, this study shows that classical aesthetic theories, such as Sibley's, possess the flexibility and

richness to adapt to new artistic domains. Yet such adaptation requires redefinition and openness to emerging dimensions. The interactive, technological, and decentralized nature of crypto art not only revitalizes traditional components but also introduces entirely new ones, such as experience, that expand the geography of aesthetics and warrant further exploration in future research.

Research Limitations

Concentrating on a small number of NFTs, the necessity for additional exploration into various cultures, and the fast-paced technological advancements, which could alter the standards. The restricted number of images to just six examples lessens the chance for broad conclusions to be drawn. Due to the article's emphasis on theoretical rather than practical examination of Sibley components, the discussion of image analysis was omitted. This subject might be explored in future research endeavors.

Suggestions

A comparison of various genres of cryptoart, an investigation into how artificial intelligence affects digital aesthetics, and a study on how criteria for evaluating art have evolved with technological progress will be conducted.

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Interest of Conflict No of Declaration

The authors declare that they have no conflict of interest in conducting this research.

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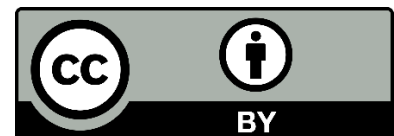
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