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Artificial Intelligence in Art: Bridging the Gap Between Automation and Human Expression

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Abstract

The role of artificial intelligence (AI) in art is examined in this study, focusing on how AI can bridge the gap between automation and human creativity. Using a qualitative approach, the study gathers information through in-depth interviews with academics, artists, and professionals in the art field to understand their perspectives on integrating AI into the creative process. The study looks at how AI technologies affect artistic creation, from creating new works of art to enhancing conventional techniques. It investigates AI's practical, philosophical, and ethical ramifications in art. The interviews provide a thorough understanding of AI's potential to expand artistic boundaries while maintaining human emotional expression, which presents various viewpoints on the technology's capacity to complement rather than replace human creativity. The findings suggest that while AI offers new tools for creativity, it also calls for reexamining concepts such as authorship, originality, and the nature of creativity. This study contributes to the ongoing discussion about the relationship between art and technology by highlighting how artificial intelligence (AI) changes how art is created and interpreted in the modern era.

Keywords: art, artificial intelligence, automation, human expression

1. Introduction

The Industrial Revolution (IR) in the eighteenth century represented a major turning point in the world, changing previously accepted means of production (Mohajan, 2019). The machine replaced manual labor, leading to the mass layoff of craftsmen in favor of factory workers, thus replacing skilled labor with less skilled labor (Xu and Ye, 2021). “Digitization, artificial intelligence (AI), the Internet of Things (IoT), big data, and cloud computing have become the keywords of this round of industrial revolution” (Xu and Ye, 2021, p. 1). Pelz (2016) describes that before the advent of the IR, humans worked in the same way for thousands of years as producers of crafts and artistic works, with little help from domestic animals and by harnessing the forces of nature, such as using water and wind energy. However, Pelz says: “All of this has changed with the advent of the industrial machine. Machines will no longer serve humans. Humans will be the ones who will serve machines from now on” (p. 53).

According to Lewiston-Porter Central School District. (n.d.), the IR brought inequality between the machine and factory owners and the workers serving the machines. Quoting “Bentham’s Utilitarian theory, people should judge ideas, institutions, and actions based on their utility, or usefulness. He argued that the government should try to promote the greatest good for the greatest number of people, and thus the concept of utilitarian return has changed radically” (p. 735). Instead of linking the profession to the worker's skill level, the new measure has become related to the number of hours of job performance (Pelz, 2016, p. 54).

Maxine Berg (2014), a British historian, and researcher, points out that the transformation in the factory sector has put craftsmen in front of two options: Either move to a new type of work as a result of the rapid transformation or join the weakened value of craft and handmade works and their extinction over time, due to their inability to compete with cheaper and faster production. Globally, a new IR is sparked by a fresh wave of technological innovation. "The buzzwords of this industrial revolution are digitization, artificial intelligence, cloud computing, big data, and the Internet of Things -IoT” (Xu and Ye, 2021, p. 1; Dmitriev and Hejase, 2023, p. 47). Therefore, the aforementioned rapid progress made by the technological revolution in the new millennium is rapidly penetrating the fields of audio-visual arts, and examples of artistic works have emerged that were entirely produced by

artificial intelligence techniques. A new transformation has emerged that is very reminiscent of what happened in the wake of the previous industrial revolution (El Takach, Nassour, & Hejase, 2022; OnFinance AI, 2024). Present models of content design and creation platforms based on AI algorithms have become more available to the public than ever (Davenport and Mittal, 2022). Thus, the problem that craftsmen suffered from in the mid-nineteenth century has resurfaced. Still, in a new form, it threatens current artists' existence. Given that we are on the verge of this coming revolution, it is necessary to understand what such a transformation might entail (Anderson and Rainie, 2018).

This research aims to present the recent developments that have occurred in the art industry after the introduction of AI models by approaching post-industrial revolution events to link them to the current reality to answer the following questions:

(1) How does AI influence the Arts compared to machines during the coming industrial revolution?

(2) To what extent do these technologies affect the role of current artists?

(3) Do AI-generated designs and artworks evoke emotions and meaningful messages compared to human works?

(4) What ethical concerns are raised about using AI to create designs and artworks?

(5) How will professionals in the artistic fields adapt to the integration of AI technologies to remain competitive in the job market?

This research includes five parts. Part one provides a background introduction to the subject, and part two delves into the historical transformation of work, technology, and jobs. Part three illustrates the research methodology used, part four provides the selected interviewees' perspectives, and the conclusions and recommendations end with part five.

2. Review of Literature

2.1 The Historical Transformation

Throughout history, humanity has witnessed radical transformations in its outlook on production processes and craftsmanship. Since time immemorial, craftsmanship has been considered the main method of production and manufacturing, but with the emergence of modern machines and technologies, society's outlook has changed forever (Benjamin, 1969). The next paragraphs will address the effects of the Industrial Revolution on man's relationship with craftsmanship, and how this relationship developed to reach the present day.

2.2 The Gutenberg Revolution

More than three hundred years before the Industrial Revolution, the printing press came with Johannes Gutenberg and relieved man of the trouble of writing (Federer, 2000, p. 270). It speeded up the process and increased productivity but eliminated the unique spirit of the ancient writing mechanism. It equated all writers and unified their works. "After that, human feelings, which were represented by the unique handwriting of the writer and author, became automatic inputs similar in form and content, thus losing their human character" (McLuhan, 2012, p. 154). Every innovation was a direct cause of the demise of what preceded it. Benjamin (1969) posits that "Even the most perfect reproduction of a work of art is lacking in one element: Its presence in time and space, its unique existence at the place where it happens to be" (p. 3).

2.3 From Craftsman to Worker

The emergence of mechanical machines in the eighteenth century marked a turning point in the history of human productivity, which in turn led to the voluntary transition from an individualized work environment to a predominantly collective one. This transformation was welcomed by many because of the benefits it represents on the economic and social levels, as productivity steadily increased (Berg, 2014).

Machines have become able to carry out difficult and precise tasks faster and more efficiently compared to the traditional craftsman (Hejase, 1999). Thus, the manufacturing process began to take place without any actual impact of the fluctuating time and cost factor, which made the products more abundant and at lower prices than they were previously. On the other hand, due to the intensity of the supply that exceeded the proportion of demand, an excessive "consumerism tendency" prevailed, bringing things to the point of acquiring what is not needed. "The German philosopher Martin Heidegger believes that the human relationship with manufactured products in the context of this perception has lost its human essence" (Rabouh, 2020, p. 273). The need for material things, which no longer carry a real human value that is independent of the private knowledge and experiences of the creator of the work, has become aimed at meeting the needs of the consumer society and nothing more. Therefore,

authenticity is lost. Benjamin (1969) contends that “The presence of the original is the prerequisite to the concept of authenticity” (p. 3).

In this regard, the American researcher Douglas McGregor stated that this transformation was like a “machine revolution against man” (McGregor, 1960, p. 211; McGregor, 1980), as it contributed to changing the way people think about the concept of productivity and work. The large number of clones produced using industrial machines, which do not have any artistic vision of their own, have in turn led to a decline in the craftsmen's skill level and whose presence has disappeared over time. Benjamin (1969), in this respect, posits that "The technique of reproduction detaches the reproduced object from the domain of tradition and its authenticity" (p. 4).

2.4 From the Humanization of Machines to the Mechanization of Humans

After the first industrial revolution, man invented modern methods to automate production through the casting of ready-made molds and the manufacture of self-propelled machines (Desoutter Tools, 2024), which automatically performed much of the technical and artistic work in place of man, “whether the effort of his hands or the effort of his mind” (AlAqsari, 2018, p. 51). The purpose of this, in the beginning, was for man to seek help from industries to manage his life, but then, the matter turned into an obsession with the industry becoming a goal in itself, so man expanded into the manufacture of machines and products that were redundant to what was needed, and then he created propaganda methods to promote them, and social behaviors. To put it mildly, the culture of consumption has become corrupt (Miskin, 2012, p. 100).

Man was magnified by industrial products, as with every new stage, the ready-made production templates increased along with them, and then the mechanization of man began in secret, from which he was not aware (Lippold, 2022). Himyar (2017) contends that the Genevan philosopher, “Jean-Jacques Rousseau, adds that most of what the machine has done is merely copying and duplicating products intended for mass consumption only, while the individual's spiritual and creative development no longer has any actual existence" (p. 285). That is, everything that the Industrial Revolution has achieved is but the replacement of the machine as a substitute for the human being to rob him of his human identity. Then, contemporary capitalist systems have worked to paralyze the human spirit, or as Friedrich Nietzsche says: "Man has died in this civilization" (Nietzsche, 1961).

2.5 The Debate on the Relationship Between Man and Machine in Philosophical Thought

Contemporary philosophers have sought to discuss the problems related to man, especially his relationship with the world and his role in changing it! The machine age impacted the establishment of the philosophical point of view regarding the reciprocal relationship between humans and machines. The technological dilemma has revealed the cruelty and enormity of the problems that human civilization may face! Therefore, contemporary philosophical thought had its position on the machine, which ranged between supporter and opposition.

Okasha and Al-Hudayri (2019) contend that before the first industrial revolution, René Descartes, the founder of modern philosophy, paved the way for a rational thought in which he balanced the role of man and the mechanical machine in society by describing the machine as "a complement to human existence that does not deviate from being both a natural and artificial existence" (p. 486). The authors add, "Descartes considered that the craft is one of the obstacles facing progress and development, as it depends only on individual skills and personal experience rather than science and general knowledge” (ibid). Therefore, it is necessary to break free from the concept of traditional craft and move to using mechanical machines for the sake of human development and the public interest.

On the other hand, Heller (2011) supports that the nature of scientific socialism also forced Karl Marx to have a clear position in the Industrial Revolution that required "enhancing human production through reliance on machines" (pp. 181-182). Marx's vision also coincided with supporters of pragmatist philosophy, such as Jean Baudrillard, because it provides many opportunities in production, distribution, and communication. It helps improve social and economic life, and thus, it is an essential part of the urban and cultural environment. Nevertheless, it is important to stress that the Marxian theory’s views on the material means of production—tools, raw materials, labor power, technologies, and factories—continue to have an impact on Baudrillard whose primary focus on signs, sign systems, and the code, represents his innovative ideas on the *means of consumption*, a term that is derived from Marx's sense of the means of production (Baudrillard, 1998, p. 17).

However, that reality eventually reversed to threaten human destiny in light of the direct danger of the deadly war machine with the outbreak of World War I, which has become a source of concern in the life of modern man. The issue of controlling highly complex automated systems has become more difficult than it was in the past, and misusing them has become a greater danger than was the case with simpler tools. Is it possible to accept the superiority of the machine over its inventor after the Deep Blue computer defeated its competitor, Garry Kasparov,

in a game of chess? An answer to this question was manifested by Kasparov many years later and reported by Kinni (2017) saying, "He has discovered something that becomes more and more obvious with time. While the idea of machines taking the place of people receives much of the focus and anxiety, the idea of people collaborating with machines should be welcomed as a means of enhancing various outcomes" (para 5).

2.6 Between Human Action and Mechanistic Tendency

The Industrial Revolution (IR) is "one of those rare occasions in world history when mankind changed the framework of its existence" (Stearns, 1993, p. 5), as industrial products became as valuable as those who created them. With IR, Man began to respond in his taste to what was prevalent, widespread, and common. This new concept reproduced human beings with unified patterns of taste and personal preference. Hence, he must choose between mechanizing his actions and pursuing their spiritual and creative dimension. Benjamin (1969) asserts that "Uniqueness and permanence are as closely linked in the latter (reproduction) as are transitoriness and reproducibility in the former (original)" (p. 5). On the other hand, the contemporary French philosopher Henri Bergson believes that mechanical machines cannot learn, adapt, and interact with the environment, similar to humans. Mechanical action cannot fully explain reality and perception, as life includes non-mechanical aspects, such as awareness, feeling, and creativity, which are unexplainable. Mechanical machines and technology reduce the spirituality in life, as they turn a man into a mechanical being without a soul (Awaida, 1993, p. 106; Telivuo, 2024, pp. 2-3).

2.7 Art Powered by Artificial Intelligence

As technology has developed over the centuries, its dialectical relationship with art has also evolved. The former was often viewed as a threat to the latter, and the most prominent example of this is the invention of photography, which painters of the time viewed as an existential threat to them (Benjamin, 1969, p. 6). Likewise, Charles Baudelaire wrote, as quoted by Beasley (2015), that "if photography were allowed to supplement the function of art, it would replace or completely subvert it," (para 2), but this did not happen. As artificial intelligence evolves and invades artistic fields, many current artists are beginning to worry.

The next three sections will address Artificial Intelligence (AI) and its impact on the future careers of creative people.

2.7.1 Reproduced Digital Art

The progress witnessed in the first three decades of the twentieth century in the process of automated reproduction of works of art represents a serious challenge from science in undermining the work of art in terms of its structure and originality. This phenomenon of reproduction is double-edged, as the German researcher and critic Walter Benjamin points out in his famous article "The Work of Art in the Age of Mechanical Reproduction," as he saw that the concept of art before mechanical reproduction was unique and respected because of its aura derived from its originality and its material and cultural context, even if it is reproduced. The mechanical production of a work of art (reproduction) may make it lose its originality and uniqueness (Benjamin, 1969, p. 4)

On the other hand, Benjamin has another positive outlook on this matter, as he justifies sacrificing authenticity for what he calls the "culture industry" and spreading it on a large mass scale to serve "popular culture," as Marxists claim, will only be achieved through the dissemination of reproduced works of art among the working classes and the poor. This is justified by the fact that it may not be possible for them to view original works other than the elite class of intellectuals of the capitalist bourgeois elite. (Taylor and Harris, 2008, p. 23).

Although Benjamin's views seem convincing from the point of view of some to achieve "democracy of art," the mechanical reproduction of a work of art has faced widespread rejection, not only because it makes the work lose its aura and originality (Benjamin, 1969, p. 4), but also because it turns it into a consumer commodity by flooding the markets with fragile and trivial artistic production that distracts people's eyes from the aesthetics of the original and widening the communication gap with it. Benjamin (1969) posits that "To an ever greater degree the work of art reproduced becomes the work of art designed for reproducibility" (p. 6). Especially after the means of reproduction have evolved from their traditional mechanical stage to the digital electronic reproduction common in the current era, which has developed into what is currently called digital art. Causing radical transformations that contributed to the escalation of heated debate about the fate of art and pessimistic proposals about its death or end. The German philosopher Hegel had a futuristic view on this matter when he publicly stated that "Art, considered in its highest vocation, is and remains for us a thing of the past. Thereby, it has lost for us genuine truth and life and has been transferred into our ideas instead of maintaining its earlier necessity in reality and occupying its higher place" (Hegel, 1975, p. 11)

2.7.2 The Art of Algorithms and Human Creativity

Anyoha (2017) posits that Science fiction introduced the idea of artificially intelligent robots to the world in the first part of the 20th century. For example, the play R.U.R. (Rossum's Universal Robots) written by the Czech author Karel Capek in 1920 depicts robots (Hejase, 1999), then the female humanoid robot that played Maria in Metropolis (1927) and later followed by the "heartless" Tin Man from The Wizard of Oz (1939) (Anyoha, 2017). By the 1950s, a generation of scientists, mathematicians, and philosophers had grown up with the idea of artificial intelligence (AI) deeply ingrained in their culture; Alan Turing, a British mathematician, was among them. He was the first to work in the field of intelligent machines. His work was particularly inspired by nerve cells in the brain, which are distinguished by their ability to collect and compare information, and then make decisions based on it (Turing, 1950). Today, "deep learning" allows machines to train their "artificial neurons" and feed them huge amounts of data to learn independently, creating perfect patterns and artistic creations that are difficult to distinguish from human works (Taye, 2023).

Butrym (2023) posits that "Deep learning and artificial intelligence have propelled a technological revolution that has changed the world. Revolutionary shifts due to the nexus between deep learning and artistic expression have drawn the interest of both researchers and artists. There has been a profound impact on the creation and interpretation of visual art" (para 1-3).

Artists gained their artistic knowledge from the works of those who preceded them and were influenced by them. However, some argue that using AI is different from simply finding inspiration from the work of other artists because it "directly steals their human essence" (Vallance, 2022, para14). Despite the diversity of opinions on this matter (Ernst, 2023), a broad group of artists adheres to their rejection of the idea of artificial intelligence being able to take over their creative role, as they consider it merely a scientific means that can be used to develop art and explore new horizons (Vallance, 2022, para 6). Carré and Schmite (2020) authors of the book "Comments on Art and Artificial Intelligence," believe that generative intelligence is a technical tool and a source of inspiration at the same time. He likens its appearance to the invention of photography in the eighteenth century, which many creative people in that era revolted against. Still, it did not affect their role in the creative process at all (p. 34).

When an artist creates something, he/she shows the recipient how he/she feels with his/her unique style, enriching the artwork with his/her feelings and thoughts generated at that moment. AI models only learn and copy or recreate images from a random database; That is, AI does not realize what that image means or what the purpose of creating it is. Consequently, one may ask if AI's powerful algorithms and potentially generated artistic works can be considered an artist. Gros (2019), in his thesis, concludes that "The greatest degree of men input to art creation, which also holds for all other weaker forms of AI contributions. All of them, from collaborators to imitators, can be written off as non-artists since they cannot generate art, regardless of how intricate or opaque their creative process may be" (pp. 47-48). One simple fact is that even the most advanced AI application in fine arts does not have "Two central notions that revolve around intention: Forethought and will" (ibid, p. 48).

2.7.3 Artificial Intelligence and the Labor Market

Significant questions are raised: Will artificial intelligence compete with current artists and creators? Are the works generated by machine intelligence able to give us feelings and emotions as did the immortal works that marked the history of art?

The most common concern associated with art created by AI is that it could significantly reduce the number of jobs available to artists working today in fields such as communication arts, animation, and graphic design. dem Moore, Chandran, & Schubert (2018) report in a study by the McKinsey Group indicates that "The Middle East countries could witness increases and convergence in technical automation potential of current work activities up to around 80 percent until 2030 (p. 21), but actual adoption is likely to be much slower… about 5% of the Arts, Entertainment, and Recreation jobs will be impacted" (p. 23). Moreover, Oosthuizen (2022) contends that the Fourth Industrial Revolution adopted a purely scientific and mathematical approach, relying heavily on digital technology that works through industrial machines (autonomous production methods powered by robots) and large smart computers (artificial intelligence, internet of things, algorithms, etc.), and in turn, ignored the traditional artist craftsmanship.

Through artificial intelligence, it is now possible to generate dazzling artistic models that may take days to be produced by a professional artist. This is done by writing descriptive texts, in any language, for ideas proposed from the imagination by any person in the world, even if he has no limbs or suffers from a neurological disorder that affects his ability to draw, just because he has an Internet connection.

Nevertheless, the fear continues as it should be noted that if the emergence of this technology follows a similar path to post-industrial automation, it could significantly reduce the value of current artists and cause massive job losses in an industry that was previously known for requiring a deeply human touch. However, in the most recent Cornell Tech @ Bloomberg Speaker Series event, Scott Belsky, Adobe's Chief Product Officer and Executive Vice President of Creative Cloud provides positive insights about the subject (Campitiello, 2023). He asserts that "Because there is less of a barrier to entry, this technology not only makes creativity generally accessible but also fosters the growth of individual artistic confidence; Integrating this technology into artists' tools has the potential to grant them an "edge to a breakthrough; and AI will not be replacing creatives in their spaces as it cannot emulate a human eye for aesthetics" (Campitiello, 2023, para 7-8, 13). Therefore, such insights, consider that everything from storyboards to collages to the creation of advertisements and graphic films will be dramatically different than before; which can cause a big problem for individual artists who have trained for many years to perfect their skills. However, on the other hand, it can also be said that it will undoubtedly open a level playing field for those who considered art out of reach.

2.8 Unfair Competition and the Future of Art

The "Portrait of Edmond de Belamy" is a notable example of an artificial intelligence artwork using a Generative Adversarial Network (GAN) that follows the 19th-century European portraiture. In October 2018, this work went up for sale. The painting is produced by the Obvious Art Collective, which operates under the motto "Creativity isn't just for humans." The artwork was printed on canvas and sold at auction for $432,000, 43 times its estimated value. Note that it is by an unknown artist who has not been heard of before. This painting was produced by a purely mathematical algorithm based on a series of data derived from 15,000 paintings, painted between the fourteenth and twentieth centuries (Artificial Paintings, 2021).

Consequently, artists became worried that a new type of AI image generator might one day take over their work and take advantage of all the hard work they've put in over the years to perfect their craft. Their worries increased when another piece of art created with Midjourney, an artificial intelligence program, took first place in the Colorado State Fair's annual art competition (Roose, 2022). To make things worse, one person on Reddit was banned from sharing his artwork because it looked too much like artificial intelligence art (Cole, 2023). In the end, the fury has sparked several legal actions against AI art generation software (Kelly, 2022; South China Morning Post, 2023).

So, the machine creates according to an organized mechanism, the main basis of which is learning by training. The process goes as follows: "(1) The neural network is fed a huge amount of painting examples, such as landscapes painted by different artists. (2) The AI algorithm is "taught" by machine learning with the help of the gathered database. (3) New artworks are produced by the algorithm based on the data analysis" (Artificial Paintings, 2021). When the algorithm succeeds, it is up to the user again to decide and evaluate its productivity, making other adjustments until the production is fit for display, which means that the human element is indispensable to direct and manage the process, as happened with the painting winner of the Colorado State Fair's annual art competition. Finally, allowing AI to help humanity process, analyze, and evaluate the massive amounts of data that create today's world, could encourage mankind to spend more time engaged in creative thinking, decision-making, and problem-solving (Stubbings, 2017, 2018).

3. Research Methodology

This research is qualitative, exploratory, and uses inductive reasoning. Such an approach will help acquire deeper knowledge "to convert an unstructured issue into a structured one" (Hejase & Hejase, 2013, p. 97). In addition, this research will rely on descriptive and content analysis approaches based on an in-depth interview survey with a selected convenient sample of undergraduate and graduate students, instructors, and expert artists directly involved in the field of arts and design. These individuals are affiliated with five Lebanese Universities, including private and a public Higher Education Institution (HEI).

3.1 Sampling and Sample Size

Thirty individuals responded to the set of open research questions. They are affiliated with five universities that offer undergraduate and graduate programs in the fine arts. The population of students, instructors, artists, and professionals is about one thousand persons.

An interview-structured questionnaire was administered via a targeted online survey monkey. Using reliability error estimates extracted from Hardwick's (2022), the authors herein used a similar approach implemented by Masoudi and Hejase (2023), Hejase, El Dirani, Haidar, et al. (2024), Rammal, Hejase, & Hazimeh (2024), Hejase et al. (2023a, b), Nasser et al. (2022), Younis et al. (2022), Chehimi and Hejase (2024), and Hejase et al.

(2024) with a total population of 1000 individuals. In a case where the population is about 1000, Table 1 indicates that the sample size would be 30 (at 95% confidence) and a target reliability error of about 17%. Therefore, at the 95% confidence level, the 30 sample size in this study provides an acceptable reliability error of about ± 17%, that is, in 83 out of 100 survey repetitions, the results will not differ by more than 17% if a maximum reliability error is assumed. However, it is worth noting that the above reliability error is used more for quantitative analysis while this work is qualitative. Then the sample of 30 interviewees, even via online approach, is adequate especially since responses did not change much by increasing the number of participants between 20 and 30 (reaching saturation) and therefore having an actual reliability error of much less than 17%. Such a reliability would be appropriate for this kind of exploratory study.

Table 1. Statistical reliability versus sample size at 95% confidence

[50/50% proportion characteristics]					
			Population		
Sample Size	**100**	**500**	**1000**	**5000**	**10000**
30	±14.7%	±17.1%	**±17.3%**	±17.6%	±17.7%
50	±9.7%	±13.1%	±13.5%	±13.8%	±13.9%
75	±5.6%	±10.4%	±10.9%	±11.3%	±11.4%
100		±8.8%	±9.3%	±9.7%	±9.8%

Source: Modified from Hardwick's (2022) Research.

3.2 Survey Design

The interview-structured questionnaire consists of five open-ended main questions. Four demographic questions were designed to analyze respondents' views, positions, and knowledge about the impact of generative AI on the artistic fields.

The respondents were to offer the most appropriate subjective answers to the set of open-ended type questions.

3.3 Data Analysis

Giving data a purpose generates insightful data (Hejase and Hejase, 2011). Also, descriptive statistics use simple, illustrative numbers or visuals to try and make sense of a set of data (Hejase & Hejase, 2013, p. 272). The demographic data evaluation used IBM's Statistical Product and Service Solutions (SPSS) version 26.0 package. Statistically, grouping responses allowed the calculation of frequencies and percentages to characterize the sample of respondents. In addition, qualitative content analysis was carried out by grouping similar or congruent responses and identifying differences that may add value to each question.

4. Results and Discussion

4.1 Demographics

Results show that 35% of the respondents were males, and 65% were females. The age factor has five (5) categories. 36.7% of the respondents were 22 to 26 years old, 26.7% were less than 21, 13.3% were 32 to 36, 10% were 37 to 41, 6.7% were 42 to 46, and 6.6% were older than 47. In addition, 46.6% earned their Bachelor's degree, 26.7% earned their Master's degree, 13.3% were artists, 6.7% were doctoral instructors, and 6.7% were professionals. Finally, 60% of the sample were affiliated with a private university, 30% with a public university, and 10% attended or affiliated with both.

4.2 Research Questions Analysis

The field, which until recently remained a bastion of the human mind's creativity alone, is nowadays facing a new challenge with the emergence of artistic works produced using artificial intelligence. Five research questions were addressed therefore responses are presented following the same sequence.

1). How does AI influence the Arts compared to that of machines during the coming industrial revolution, in your opinion

Respondents were divided in their answers based on their current knowledge, readings, schooling, and experience.

A. No response or no knowledge

Several persons preferred not to respond to this question including interviewees 2, 3, 6, and 12 (26.67% or 4 out of 15).

B. AI may replace the artwork workforce as did machines in the first industrial revolution.

Several respondents believed the new wave of artificial intelligence technologies would replace some artworks as the machines (fully automated machines and robotics) did in the earlier seventy years after the first industrial revolution.

Respondent 1: “AI may replace humans in some works as the machine did earlier.”

Respondent 7: “It will be a severe loss to human work.”

Respondent 16: “It cancels the work of humans.”

Respondent 24: “AI has an impact for sure. It will digitally transform all jobs and professions except for human creativity. However, with further development, robots will take over humans.”

Respondent 30: “AI will cancel certain jobs that do not need creativity and innovation.”

33.33% of the interviewees fear replacing or losing human jobs to advanced technology including AI. The above respondents compare to a great extent the loss of jobs due to automation, referring to the first industrial revolution, and artificial intelligence, referring to the new industrial revolution. Kinni (2017) posits that “the idea of machines taking the place of people receives much of the focus and anxiety.”

C. AI’s influence on the Arts.

Respondents provided many ideas about the influence of AI summarized as follows:

Deep impact:

**** Positive***

Respondent 5: "This is a broader technological revolution that is invading all sectors and fields, therefore its impact is much deeper."

Respondent 13: "Huge impact."

Respondent 17: "I believe AI's impact on the arts mirrors the influence of machines in the Industrial Revolution. As machines revolutionize industries, AI is transforming 'creativity' in art. AI enhances artistic capabilities, shifts the creative process, and challenges the boundaries between human and machine-generated art."

Respondent 18: "Positively with more creativity and innovation."

Respondent 19: "AI will help designers reduce the thinking process time of their designs by enabling them to ideas."

Respondent 22: "Providing new features and ideas making everything possible."

Respondent 23: "AI has a huge impact causing a major uproar due to the great development of techniques and methods in different ways, even unfamiliar to many people."

Respondent 25: "AI has made it easier to apply artwork with at least 20% to 30% improvement."

**** Negative***

Respondent 9: "AI has benefited the artwork field but as time passes it will lead to its destruction simply because art is a manifestation of human creativity, emotions, experiences, and senses, while AI is just empty of these!"

Respondent 14: "AI in art is a lazy practice that takes little to no effort compared to machines which would still need a lot more interference and human care.”

Respondent 20: "We will lose thoughtfulness, imagination, and creativity."

Respondent 27: "AI added a beautiful touch, as a matter of fact, but I think we will reach a moment where we shall miss the human touch even in expression and emotions. Isn’t this a terrifying thought? Art is life, and AI is taking that from us!”

40% (12 out of 30) of the respondents were anxious about the ways AI will impact Art and artworks. However, to add more focus on the issue in question, the analysis is divided into two principal outcomes, namely the first

assessing the deep impact, which is divided into positive and negative impacts. The second is considering the impact as a new revolution. Worth noting that there is a diversity of views and opinions as contended by Ernst (2023).

Positive impact

Eight persons (26.67%) felt the impact being deep and positive. They described such impact as significant by transforming creativity to be quicker, easier, and helpful for new techniques development to produce Art and artworks. Salient examples are

Respondent 22 asserts "AI provides new features and ideas making everything possible."

Respondent 23 posits that "AI caused a major uproar due to the great development of techniques and methods, even unfamiliar to many people."

Negative impact

13.33% (4 out of 30) of respondents described the impact as negative. These interviewees stressed the human-side loss due to AI on Art and artworks. Interviewees manifested their views using statements such as

"AI is empty of human creativity, experiences, and emotions" Respondent 9,

"AI needs a lot of human interference and human care" Respondent 14,

"With AI, we lose thoughtfulness, imagination, and creativity" Respondent 20.

Many researchers (Benjamin, 1969; Himyar, 2017; Gros, 2019) confirmed the above sentiments and concerns.

A new revolution indeed

Respondents provided positive as well as negative comments about the new AI revolution.

Respondent 4: "The fast development of Information and Communications Technology (ICT) is accompanied nowadays by social media, the internet, and a lot of ways to learn more about AI."

Respondent 8: "In both cases [the first and the second industrial revolution], we face a revolution."

Respondent 10: "AI has created a new revolution in the artwork field."

Respondent 11: "The new AI techniques and algorithms have helped in developing the Digital Arts methods. Those new techniques and algorithms have a broader reach and availability to larger numbers of users."

Respondent 15: "AI has facilitated and simplified many works, especially in the arts, and caused quicker results."

Respondent 21: "For me, we cannot even think about the coming industrial revolution".

Respondent 26: "In my opinion, there will be a major gap between the current generation and the coming one due to AI. It is natural and expected that our kids will use AI and will feel comfortable with it and will consider it their reality, exactly as we feel with our cell phones in terms of easiness, comfort, and best tool for communication as compared with our parents' and grandparents' old time gadgets."

Respondent 28: "We cannot negate that AI has changed the world of art and its thinking processes and has led to a revolution in this current time. However, AI would not have reached this point without the occurrence of the first industrial revolution because it was simply the door to evolution."

Respondent 29: "The two industrial revolutions can be compared somehow for sure, but one that uses physical labor, and the second using the human touch and creativity."

A new revolution

Nine (9 out of 30) or 30% of the respondents used the insight that AI is a new revolution. However, a few of those provided further views and insights presented herein,

Respondent 11: "AI helped create new techniques and algorithms which helped develop digital Art methods for a broader target of users."

Respondent 15: "AI facilitated and simplified many works."

Respondent 28: "AI led to a new changed world of Art and its thinking processes."

Respondent 29: "AI is using the human touch and creativity."

Various researchers (Carre and Schite, 2020; Butrym, 2023; Taye, 2023) support the positive impact of this new revolution.

2). To what extent do these technologies affect the role of current artists?

This question brought forward the understanding that human creativity, passion, and emotions cannot be replaced by artificial intelligence. However, new technologies may enable artists and art workers to produce faster outcomes and, products, and works. Such ideas were clearly stated and strongly emphasized by the respondents.

A. AI as a positive enabler of artists

Respondent 1: "It has a positive, easy, and quick effect."

Respondent 5: "It will enhance the artist's work."

Respondent 6: "AI is a more comprehensive technological revolution, as it will penetrate all sectors and fields, and therefore its effects will be much deeper on artwork and artists."

Respondent 11: "Of course, it has a huge positive future impact."

Respondent 12: "Artificial intelligence techniques and programs have helped develop digital art methods.

Respondent 13: "Artificial intelligence techniques and programs can spread and reach a large number of users."

Respondent 14: "AI helped develop art in some fields, especially industrial ones."

Respondent 16: "Artificial intelligence has facilitated many works in the field of arts and accelerated the artists' results."

Respondent 18: "I believe AI is transforming creativity in art. AI enhances artistic capabilities, shifts the creative process, and challenges the boundaries between human and machine-generated art".

Respondent 20: "It saves designers a lot of time thinking about designs, as it gives them ideas."

Respondent 24: "Providing new features and ideas making everything possible."

Respondent 30: "It may lead to the cancellation of some jobs that are devoid of character and creativity."

40% (12 out of 30) of respondents supported AI's influence on current artists. They provided positive arguments, including enhancing the artist's artwork with higher efficiency of Art production (Respondents 1, 5, 6, 20, and 24). Particular features were enumerated including the realization of enhanced digital art methods, boosting artistic capabilities shifting away from classical human creativity and enabling a stronger human-technology creativity, and bringing advanced AI applications to a broader user-base artists. Respondents 11 to 18 and 30 were specific in their insights. Researchers like Campitiello (2023) strongly supported the above views. Also, Artificial Painting (2021) described the enhancement process by linking advanced AI applications and tools to artistic painting. Moreover, Stubbings (2017) asserted that human technology enhancement can be achieved through data science analytics.

B. AI has a positive impact, BUT…

Respondent 9: "Artificial intelligence has benefited the field of arts, but with time, it will, of course, destroy it, because art depends on the creativity of individuals, their feelings, experiences, and sentiments, while artificial intelligence is devoid of all these qualities."

Respondent 15: "Now, what is most in demand is the work carried out through artificial intelligence, which is the future market. A designer who is not proficient in using AI in his/her work will not have a place in the labor market soon."

Respondent 19: "There is a noticeable shift that cannot be denied, but somewhere it turned the table on the true creators and gave value to some fools."

Respondent 27: "Of course it has an impact, and it will transform all professions using artificial intelligence except human creativity, but with development, robots will begin to replace humans."

Respondent 28: "ICT impact was strong according to their era. Artificial intelligence today has a great impact on the field of arts as it develops and advances more and more, but it will still require the human element."

Respondent 29: "AI added a beautiful touch, truth to be told, but I think we will reach a time when we will miss the human touch, even in expression and feelings. Isn't the idea terrifying? Art is life and now it is being taken from us."

Another 20% (6 out of 30) of respondents expressed positive assertiveness toward AI, however, they showed certain reservations and conditions for such positivity. Four respondents; 9, 27, 28, and 29, were still concerned about the human touch related to creativity, feelings, sentiments, and expressions. Himyar (2017) and Gros (2019) supported the abovementioned worries. Also, two respondents (15 and 19) accepted the notion that AI is the future but, were concerned about the job market loss of some types of Artists and worrying about a competition distortion where novice artists who are technology proficient may overperform artists practicing classical craftsmanship. Kelly (2022) and Cole (2023) addressed the concerns about AI's products and artworks and even related them to ethical issues.

C. AI as a negative factor

Respondent 2: "Artificial intelligence may replace humans in some places, as machines did."

Respondent 3: "He can take on the role of a human but in limited roles."

Respondent 4: "To some extent, artificial intelligence can take the place of artists."

Respondent 7: "It will cause a severe loss of artists' jobs."

Respondent 8: "It will take over certain human labor and replace artists in employment opportunities."

Respondent 10: "AI has a great influence, to the point that it began to compete with many artists and geniuses."

Respondent 17: "It annulates the work of artists."

Respondent 21: "We are now losing thought, imagination, and creative imagination."

Respondent 22: "It has a huge and very dangerous impact."

Respondent 23: "In my view, AI in the arts has restricted personal creativity and repetition of patterns, reproducing works without real innovation, similar to the effect of machines during the Industrial Revolution that diminished individual artistic character."

Respondent 25: "AI had a negative impact more than a positive one. It indeed made it a lot easier for Artwork workers, but the works of art became similar to each other, and art became something restricted and limited. It is very rare to find an artist who is innovating and inventing new ideas. The work that is mastered is performed with the help of AI means. Not all of them are man-made."

Respondent 26: "The advancement of art through artificial intelligence greatly affected what is done by humans (artists and professionals), resulting in the decline of art, creativity, and innovation among individuals."

3). Do you think AI-generated designs and artworks can evoke emotions and convey meaningful messages when compared to those created by humans?

Interviewees were varied in their responses and the way they expressed their agreement or disagreement about the possibility that AI-generated designs and artworks can evoke emotions and convey meaningful messages similar to those expressed towards human designs and artworks. The responses are classified into three categories the interviewees' positive stance, the indifferent conditional, and the negative stance.

A. Positive stance towards AI-generated designs and artworks

Respondent 3: "Yes, because artificial intelligence collects its ideas through people's ideas and experiences."

Respondent 6: "Yes, it is based primarily on the works of previous artists and is trained using deep learning to modify some of the works of current and former artists and designers and copy their styles."

Respondent 20: "This can happen. Yesterday I saw news about a famous photographer who won an award for the best picture, but he refused to receive it because he created it using artificial intelligence, so he considered that someone else had the right to win it. This leads us to conclude that the works of artificial intelligence are capable of stirring emotions and conveying messages."

Respondent 24: "Yes, of course, because when a human being draws or does an artistic project, he adds a sense of love to his project."

Respondent 26: "Yes, because artificial intelligence is developing itself, it will reach a stage that exceeds human ability."

16.67% (5 out of 30) of respondents agree that AI-generated designs and artworks can invoke emotions and convey meaningful messages. They base their position on the power of collecting diverse databases and the evolution of big data and data science. Respondents 3, 6, 24, and 26 assert that AI's capability to learn through deep

learning enables AI-generated designs and artworks that evoke emotions. For example, Respondent 24 contends that "AI artworks are based on a very rich accumulation of previous human artworks." Also, Respondent 26 posits "even exceeding human ability." Xu & Ye's (2021) and Dmitiriev & Hejase's (2023) research supports the above. Respondent 20 also agreed to the above, however, based on a personal stance, he respects the classical craftsmanship in Art.

B. Indifferent or conditional stance towards AI-generated designs and artworks

Respondent 2: "It can stir emotions, but it cannot completely replace a person."

Respondent 8: "Unable to answer... Waiting for the limits of artificial intelligence to become clearer."

Respondent 9 "Of course, it can convey feelings, but not to the same extent as what humans do, because humans express their feelings and experiences through art, and their works are full of feelings, unlike artificial intelligence, which is devoid of sensing and feelings."

Respondent 18: "If we compare the designs of artificial intelligence to the designs of humans in terms of visualization, then most likely artificial intelligence can stir emotions, but in terms of style, strokes, and free touches, human designs are the winner. The artistic touch of the human being is full of sensual energy and spirit and full of life."

Respondent 23: "A neutral answer because I have not witnessed such actions, but I believe that artificial intelligence can exaggerate this issue and it will be more effective than, for example, fantasy films of all kinds."

Respondent 29: "It is possible, but it certainly depends on imitation of works and not personal and mental creativity."

Respondent 31: "The human being is the one who created artificial intelligence and gave it the data and characteristics that the machine must work on. Therefore, it is possible to convey feelings through a specific image that carries a sad facial expression and others, but the human being is more accurate than the machine because he can convey it more clearly and deeply."

Respondent 33: "Certainly, it conveys messages and stirs feelings, but there is no doubt and certainty that the human touch remains the best, no matter how many different types of touches. How can a limited intelligence accurately describe and express what humans can describe?"

Eight respondents (26.67%) agreed with the statement but at the same time, six of them posit diverse conditions related to authentic human artworks, while two of them, Respondents 8 and 23, were not able to support due to limitations like not knowing enough about AI's capabilities. Next, important quotes for those who agreed are stressed herein.

Respondent 2: "Yes, but does not match human intelligence."

Respondent 9: "But not as humans express feelings and experiences."

Respondent 16: "Yes, but AI's artwork can't reach human expressions."

Respondent 17: "Yes, however, AI has limited intelligence and doesn't match human touch."

Respondent 18: "The artistic human touch is full of sensual energy, spirit, and full of life."

As can be observed, most respondents stressed the human effect strongly, even though accepting that AI artworks may evoke emotions. This dimension is asserted by Benjamin (1969), Awaida (1993), and Telivuo (2024).

C. Negative stance towards AI-generated designs and artworks

Respondent 1: "Not completely. Human beings always have a distinct human impact that overwhelms all types of creativity."

Respondent 4: "No, it cannot convey feelings, but it can convey messages."

Respondent 5: "AI can't be as specific as humans. Humans can enhance their way of expressing themselves and the details that AI won't pay attention to."

Respondent 7: "No, because artificial intelligence does not carry the same feelings as humans and cannot transmit the same feelings."

Respondent 19: "No, because we have seen many fabricated pictures published in many news stories. They detract from many details that touch hearts and feelings, and they are incomplete."

Respondent 21: "Emotions created by humans cannot be compared, but it is worth recognizing that what artificial intelligence offers can move emotions."

Respondent 22: "Mostly not, because human art is the product of the heart, work, and spirit of the artist. The artist expresses his experiences in life and his cultural background... This depth and complexity is difficult for artificial intelligence to generate because it depends on certain data and rules."

Respondent 25: "Not much... the source of it isn't human, which affects my perception when I look at AI-generated images. It's different when know an artist put their heart and soul into an artwork. Only then is it worth our emotions."

Respondent 27: "This depends on the way the AI is integrated into the piece of art or design, if the artwork is made by AI then it will look soulless and not interesting compared to other artwork that conveys a creative idea from an artist that puts an effort into it and used AI only in some parts of the artwork to enhance the idea or as a supportive solution."

Respondent 28: "I agree that designs and artistic works created by artificial intelligence can stir emotions and convey meaningful messages, but they are not equal to those created by humans. Artificial intelligence is superior to humans in the way of creating designs, not by imagining them."

Respondent 30: "The work of artificial intelligence cannot be compared to the work of humans. In my current opinion, artificial intelligence does not have feelings, but it is trying to become human-like, it is possible in the future that it will have feelings and influence humans."

Respondents didn't agree that AI artwork is capable of evoking emotions. 36.67% (11 out of 30) of respondents stressed distinct human qualities they perceive AI cannot have. Examples include

Respondents 1, 4, 7, 19, and 30 addressed "human feelings."

Respondents 5 and 25 addressed "human expression" and "human perceptions."

Respondent 21 mentioned "emotions."

Respondent 22 addressed "experiences."

Respondent 27 stressed the "human soul."

Respondent 28 mentioned "imagination"

The loss of human qualities is congruent with the works of Benjamin (1969) and Gros (2019).

4). Ethical Concerns Using AI in creating designs and artworks within your field.

The majority of the interviewees were concerned about copyright violations, theft, misrepresentation of 'creativity and innovation,' and unfair competition.

A. Copyrights violations

Respondent 3: "Taking responsibility, Copyright."

Respondent 6: "Lack of respect for property rights."

Respondent 13: "The fears are in the infringement of personal space and individual freedom, as there are no restrictions in the design. Any one image can be transformed into any other image that has no connection to the truth."

Three respondents (10%) expressed concern about privacy, copyright, and property rights. Respondent 13 fears 'identity theft' and 'deviant art.' Davenport & Mittal (2022) contend that AI will reach any person, while Anderson & Rainie (2018) stress that "users must understand the potential use of AI." In addition, Taye (2023) informs about the new AI capabilities, and Rammal et al. (2024) posit that "Metaverse technology enabled users however ethical concerns exist." The aforementioned technology-related aspects are linked to the ethical concerns about AI and digitalization, including diverse possible violations of copyright issues, personal property concerns, and even fake information. Several researchers addressed such topics, including Naik, Hameed, Shetty, et al. (2022), Hussein & Hejase (2023), Danach, Hejase, Farroukh, et al. (2024), Stewart (2024), and UNESCO (2024).

B. Misrepresentation of creativity and innovation

Respondent 1: "The inability to control and manage the content provided, in addition to the pain of imposing values on users."

Respondent 5: "What worries me most is the use of deepfakes and voice clones. Cloning faces and voices is a really serious issue and can lead to misuse."

Respondent 7: "It will be devoid of human creativity (intellectual and artistic)."

Respondent 8: "Creativity in artificial intelligence appears not to be the work of a human being, and this makes people use it more, which leads to reducing the creativity and innovation of the human mind, as it will automatically depend on artificial intelligence, in addition to the fact that when this human stops using artificial intelligence, it will lose deepfakes His confidence in his creativity, which leads to a decrease in the percentage of artists and creative people. It will also make people who rely on themselves lose to those who use artificial intelligence because of the intensity of the creativity of this intelligence."

Respondent 9: "It will kill creativity and excellence."

Respondent 10: "Wasting effort for innovative artistic works with a humane sense."

Respondent 12: "It can also be fraudulent."

Respondent 14: "Artificial intelligence fears that when human voices are imitated, this leads to human problems that lead to wars."

Respondent 15: "Staying away from creativity and stereotyping humans and human thought."

Respondent 19: "Here we fall into the problem that rich production does not become private and depends on thought and intellectual property, but rather becomes imitation."

Respondent 22: "It will lead a person to limit his imagination to artificial intelligence, meaning that a person has a broad imagination, but artificial intelligence is limited. Thus, a person is bound by the ideas of these means and no longer depends on his ideas or imagination, but rather depends on the means, which makes actions similar, and it is rare to find someone who adds his distinctive or special touch."

Respondent 25: "Artificial intelligence can change all facial and body shapes."

Respondent 27: "Dependence on others makes a person lose the sense of initiative and working hard and with effort. If we rely on artificial intelligence without training ourselves to present ideas and create creativity, we will end up erasing creativity and lowering the level of thinking outside the box. Art will become like plastic surgery (it has become all Like each other and similar to each other, but with different bodies)."

43.33% (13 out of 30) of respondents representing a majority were concerned about the Misrepresentation of creativity and innovation in Art and artworks. Several themes were identified and grouped concerning the interviewees' quotes.

Respondents 1, 5, 12, 14, and 25 (16.67%) manifested their concerns in AI applications related to deepfakes, voice cloning, and image cloning. In addition to concerns related to content control, and manipulations of face and body images. These deviant behavior acts called researchers' attention, among them Naik et al. (2022) and Stewart (2024).

Respondents 7, 8, 9, 10, 15, 19, 22, and 27 (26.67%) were mostly concerned about the loss of human creativity by referring to AI artwork creativity imitation, stereotyping human thoughts, and avoidance of intellectuality and human sense. In addition, the use of AI-advanced applications, according to some, leads to the loss of human imagination, confidence, and initiative sense. Gros (2019) summarizes the aforementioned by commenting "AL lacks forethought and will" (p. 48). Awaida (1993) and Telivuo (2024) advocate that "technology reduces spirituality and being without a soul."

C. Theft

Respondent 2: "Privacy and security, stealing ideas."

Respondent 20: "Anyone can come up with designs that took me a lot of time to create in a minute."

Respondent 21: "I feel scared that AI will impersonate my personality and profession in the artwork field."

Respondent 30: "Stealing others' work without their knowledge about it."

Four respondents (13.33%) tied their anxiety with AI's unethical consequences to theft. Respondents 2, 20, 21, and 30 expressed their views using expressions like 'stealing ideas, others using their original works with AI,

impersonating other's artwork, and stealing others' artwork without them knowing.' Researchers addressed the above in their works on ethical issues of AI including Naik et al. (2022) and Stewart (2024).

D. Unfair competition and loss of employment opportunities

Respondent 4: "It's unfair for people with zero or less knowledge to compete with professional users of AI."

Respondent 11: "It will lead to the creation of a non-creative and competitive group in the labor market."

Respondent 16: "Unfair competition because it is susceptible to theft and lack of transparency in business."

Respondent 17: "Loss of employment opportunities as sufficient."

Respondent 18: "Competition between abilities. For example, a person with artificial intelligence is more advanced than others, and it is possible that he cannot compete with a talented person with a normal program."

Respondent 23: "The inequality between designs made by humans and by artificial intelligence."

Respondent 24: "Transforming an ordinary person without artistic skills and taste into an innovative person using artificial intelligence."

Respondent 26: "I think that imitation is the most common problem we encounter as a result of its use. No one excels at anything now."

Respondent 28: "Fear of taking on the role of man entirely, without leaving room for man in various fields of business."

Respondent 29: "Percentage of the loss of human jobs, and issues of originality and lack the human experience."

Ten respondents (33.33%) addressed the issue of ethical concerns in the context of unfair competition and loss of employment opportunities. Four of those respondents 4, 11, 18, and 24 (13.33%) addressed the impact of creativity differences by comparing artists and users who are proficient in AI and those who are adept.

Respondent 4: addressed 'unfair comparison.'

Respondent 11 addressed 'users who apply AI but are not creative.'

Respondent 18 stressed the notion of 'competition between abilities.'

Respondent 24 is concerned with 'transforming an ordinary person without innate artistic skills.'

Vallance (2022), Cole (2023), and Campitiello (2023) have shed light on unfair competition and provided examples confirming such concerns.

Four respondents, namely 17, 23, 28, and 29 (13.33%), were more interested in AI's impact on employment opportunities claiming unethical concerns. Respondents' claims include a lack of jobs due to the threat generated by technical tools and the artists' artwork versus the AI's potential. Pelz (2016) and Xu & Ye (2021) addressed and supported the abovementioned facts.

Moreover, two respondents, 16 and 26 (6.67%), opined that unfair competition and the loss of employment opportunities are related to the theft of people's artworks and the lack of transparency, especially in identifying the sources of the training data for AI algorithms and software and the problem of imitation to original works. Various researchers like Benjamin (1969), McLuhan (2012), and Himyar (2017) addressed the above issues.

5). How do you think professionals within the Artistic Fields can adapt to the integration of AI techs to remain competitive in the job market?

Interviewees, in their grand majority, recommend training and development to upgrade knowledge and competency in AI. In addition, a few interviewees suggested self-education and relying on an individual's human values toward artwork.

A. Training and Development

Respondent 1: "Learn how to use AI correctly (prompt writing skills)."

Respondent 2: "Continuous learning and acquiring new skills. Also, artistic professionals can distinguish themselves by presenting unique and unusual works of art that demonstrate human creativity and personal expression, which distinguishes them from works that are created artificially or mechanically using modern technological means."

Respondent 3: "They will be forced to use the AI to help them stay engaged in the market."

Respondent 5: "Exercise, develop themselves, and learn everything new."

Respondent 6: "Keeping pace with development and benefiting from it to develop their methods and keep pace with their competitors."

Respondent 7: "Developing their creativity and feelings"

Respondent 8: "Undergo intensive and rapid courses to accumulate experience in the shortest possible time."

Respondent 9: "If it is an urgent necessity, he must work to seek help if failure to keep pace with development would be dangerous to his work."

Respondent 10: "He must learn how to work with artificial intelligence to have a job opportunity to keep pace with the times."

Respondent 19: "Professionals and workers in technical fields must learn the skills of artificial intelligence techniques and apply them creatively to compete in the evolving job market."

Respondent 21: "Register in training courses to adapt to artificial intelligence and practice modern applied programs."

Respondent 22: "Training to work with artificial intelligence in the field of art (to develop with the world), because it will inevitably be our new world."

Respondent 26: "Professionals in artistic fields can remain competitive by continuously learning AI tools, integrating them creatively, focusing on uniquely human skills like creativity and empathy, and offering personalized services while staying ethically aware and building strong networks for adaptability."

Respondent 27: "The necessity of learning artificial intelligence tools and knowing how to deal with them."

Respondent 30: "Work to develop skills and keep up with the latest developments in this field to keep pace with demand and the labor market. That is done with training, self-development, and multiple specializations."

50% (15 out of 30) of the interviewees opted for training and development (T&D), and the other 50% opted for self-development and relying on individual craftsmanship values in response to the question of how professionals in the artistic fields will adapt to the integration of AI technologies to remain competitive in the job market. The most salient quotes are as follows:

Respondents 1, 2, 5, 6, 7, 21, 22, 26, and 27: 30% stressed training, educating, and developing to keep updated to meet market demand, and be ready for the job's future requirements.'

Respondents 2, 8, 9, 10, and 19 recommended professionals and artists to 'continuously develop to learn AI potential applications and tools to keep being competitive, to keep being creative and innovate unique artworks.' Also, 'seek help when necessary, keep pace with time, and evolve with AI to seek better jobs and compete within the evolving markets.'

The aforementioned behavior towards training and development is considered a positive stance and accepting the reality and potential of AI and its tools and technologies as suggested by many researchers like Atubbings (2017; 2018), Xu & Ye (2021), Artificial Paintings (2021), Camitiello (2023), and Dmitriev & Hejase (2023).

B. Self-education and relying on individual's human values towards artwork

Respondent 4: "Always refer to a person's true feelings. What comes from the human heart always attracts the viewer more than works devoid of them."

Respondent 11: "First, discovering the advantages and disadvantages of artificial intelligence, and second, benefiting from what is appropriate for the artistic work."

Respondent 12: "They should use their creativity and touch to let their work be special."

Respondent 13: "Through their adaptability, open-mindedness, and willingness to explore AI technologies, professionals working in artistic fields can establish themselves as significant contributors within a quickly changing creative environment. Additionally, cultivating a culture of ongoing innovation and embracing technology as a supplement to their skills can support their success in a labor market that is progressively influenced by the integration of AI."

Respondent 14: "He must be fully familiar with the use of new and old software, along with mastery of technical study in the technical specialty, in addition to possessing a small part of artistic creativity."

Respondent 15: "To show their creativity by combining artificial intelligence with their touch."

Respondent 16: "Keeping up with every development and strive to gain experience and information about it."

Respondent 17: "The special touch in art must be combined with artificial intelligence so that it is a means of achievement and not innovation."

Respondent 18: "They should take the idea and make it more human and more Creative than AI."

Respondent 20: "Use the AI but still keep their identity and ideas."

Respondent 23: "To stay up to date with, contemporize, and use all new AI tools."

Respondent 24: "I also mentioned that artificial intelligence should be coordinated with us, not that we should be led by it. As for the labor market, it is natural for artificial intelligence users to be given priority over all other people, and this has been the case over time. Before this, someone who has a university degree, for example, became more fortunate in being employed than others. Who only has a school certificate, and this is the case with artificial intelligence."

Respondent 25: "Dealing with this intelligence with great intelligence and awareness, and maintaining the special touch that steals the viewer and tightens the vision."

Respondent 28: "They must use it innovatively and creatively."

Respondent 29: "Keeping pace with this development and using the most important means that make it easier for them to highlight their work in a way full of creativity."

50% (15 out of 30) of respondents opted for self-development and capitalizing on the human values towards artwork. As for self-development, 33.33% (10 out of the 30), namely respondents 11, 13, 14, 15, 16, 23, 24, 25, 28, and 29 addressed the item I question with quotes as follows:

'One starts with self-awareness and willingness to adapt and adopt AI, self-learning about AI potentials including advantages, disadvantages, and potential uses in artworks, building mastery in AI applications, striving to gain experience, considering human sense first, maintaining the creativity, and highlighting innovative artistic work.' Stubbings (2017; 2018) encouraged the aforementioned steps and recommended accepting AI applications as enablers to humanity. Carre and Schmite (2020) encourage "using AI as a source for inspiration besides its technical values.' In addition, Campitiello (2023) posits that "AI will not be replacing creatives in their spaces as it cannot emulate a human eye for aesthetics" (para 7-8).

Respondents 4, 12, 17, 18, and 20 (16.67%) commented more on capitalizing on the human values towards artwork. Quotes are summarized as follows:

Respondent 4: "True feelings and human-heart-based artworks attract the viewer."

Respondents 12, 17, and 20: "Use AI mixed with creativity and human touch."

Respondent 18: "One should delve more into transforming an idea based on human sense and creativity than AI."

The respondents above continue to manifest the human value of Art amid the contrasting opinions of researchers. For example, Benjamin (1969) contends that "The mechanical (nowadays automation) production of a work of art may make it lose its originality and uniqueness." Hegel (1975) posits that "Art has lost for us genuine truth and life." (p. 11). Also, Taylor and Harris (2008) assert that "Viewing original artworks is left to the capitalists bourgeois elite." (p. 23). In addition, as his colleagues above, Gros (2019) stresses that "Users of AI to create artwork and non-artists" (p. 48). Finally, Oosthuizen (2022) asserts, "The new 4th industrial revolution including the latest Metaverse technologies and AI, ignored the traditional artisan craftsmanship."

On the other hand, Taye (2023) informs that "Metaverse technology applications to Art have enabled learned artists to create artwork that cannot be differentiated from original art." Butrym (2023) contends that "The nexus between deep learning and AI have impacted the creations and interpretation of visual art" (para 1-3). Campitiello (2023) asserts that "Integrating AI technology into artists' tools has the potential to grant them an "edge to a breakthrough; and AI will not be replacing creatives in their spaces as it cannot emulate a human eye for aesthetics" (para 7-8, 13). In addition, Artificial Paintings (2021) states that "AI algorithms based on learning and following a well-organized process systematically depend on users to intervene to direct and manage the process, therefore producing artwork with human touch." Finally, Stubbings (2017; 2018) recognizes that "Today's AI tools and techniques could encourage humans to spend more time engaged in creative thinking, decision-making, and problem-solving."

5. Conclusion and Recommendations

This study is merited because it adds to the current theoretical and practical knowledge by exploring the impact of AI on Art based on a sample of students, instructors, artists, and professionals affiliated with a sample of five universities. The aim is to bridge the gap between automation and human expression by collecting primary data using a qualitative approach. The systemic path followed is to assess the different interviewees' views and stands between artificial intelligence and art while capitalizing on theoretical foundations. In this study, females (65%) in the age range of 26-46 (67.7%) are the majority of respondents. Although several pieces of research address one or more particular variables of artificial intelligence and art, the following discussion will focus on the significant relations of their variables. The findings are summarized as follows:

There exist mixed opinions, stands, and views characterizing the different impacts of AI on Art and artwork:

- AI, Art, and human expression.
- AI and artists' roles.
- AI applications and ethics.
- Professionals and artists adapt, in their artistic fields, to integrate AI technologies into their job market.

Based on the analysis of the interviewees' feedback, a summary of the results is as follows:

(1) How does AI influence the Arts compared to that of machines during the coming industrial revolution?

Overall findings reflecting on interviewees feedback are arranged into four categories: (1) No response with 13.33% (4/30); (2) AI may replace humans as happened in the case of the first industrial revolution with 16.67% (5/30); (3) AI influence on Art and Artworks showing interviewees' positive stance (agreeing on positive deep-impact) with 26.67% (8/30) and interviewees' negative stance (disagreeing on positive deep-impact) with 13.33%; and (4) AI is considered a new revolution 30% (9/30) agreeing to that. As for the general outcome of this question, interviewees showed fear and anxiety about the relationship between AI and Arts. Interviewees described the positive impact as significant by transforming creativity to being quicker, easier, and helpful.

(2) To what extent do these technologies affect the role of current artists?

This question's responses were categorized under three positions: AI being a positive enabler of Art and artworks with 40% (12/30); AI has a positive impact, but, human emotions may be missing for the resultant artworks with 20% (6/30); and AI is considered a negative factor representing the opposers with 40% (12/30) describing the impact as humans will lose employment and artwork will be without soul.

(3) Do AI-generated designs and artworks evoke emotions and meaningful messages compared to human works?

Overall findings reflecting on interviewees feedback are arranged into four categories: (1) No response with 20%% (6/30); (2) AI does show that the resultant art and artworks evoke human emotions with 26.67% (8/30); (2) interviewees showed indifference about the relationships; (3) interviewees agreed that AI-generated designs and artworks evoke emotions and meaningful messages compared to human works with 16.67% (5/30); and (4) interviewees do not agree about the stated relationship with 36.67% (11/30). Therefore, the majority of the interviewees continue to have a negative stance.

(4) What ethical concerns are identified about using AI to create designs and artworks?

Interviewees' concerns addressed four areas: Copyrights violations with 10% (3/30), misrepresentation of creativity and innovation with 43.33% (13/30), theft with 13.33% (4/30), and unfair competition with 33.33% (10/30).

(5) How will professionals in the artistic fields adapt to the integration of AI technologies to remain competitive in the job market?

Two areas that strongly affect the integration were identified. (1) Training and development with 50% (15/30) and (2) self-education with 50% (15/30).

Given the plethora of tools for converting text into images through AI models such as "DALLE 2" and "Midjourney," combined with their ease of use, concerns about people's preference for machine-generated art over traditional paintings appear to be far from the truth. While machine learning models can produce visually striking simulations, users still feel that the human artist is crucial, as they infuse images with artistic significance and context. According to this study's results, Today's artificial intelligence (the new revolution) will serve as a tool for

artists, similar to the camera (earlier revolutions), but it will not take their place. The categorization of contemporary art made by machines is entirely subjective, as beauty exists in the eye of the beholder.

Finally, one concludes that the applications of craft skills in art making will remain eternal because they will always carry actual human value. Humans will continue to explore unique visions of art and creativity. The Art created by humans every day will become more valuable as machine-generated versions become more abundant. The artistic value is the experience of learning and immersion in the craft.

We conclude the research with this statement by the philosopher Gilles Deleuze: "True art is the language of feelings, whether it affects us through words, sounds, colors, or even stones. Everything that does not start from a strong emotion is not worthy of being classified as a creative work" (Stamer, 2014, para 6).

5.1 Limitations

This study is qualitative and findings couldn't be generalized, but are qualitatively meaningful. Some challenges are found as follows:

1. Interviewees' Bias: Certain respondents might opt out of accurately evaluating research statements and refrain from being honest. This fact becomes evident when participants do not reply or adopt a neutral position.
2. The challenge in obtaining a larger sample of professionals: Attracting a higher number to this study proved to be hard. Researchers depended on the professionals' voluntary suggestions of others.
3. Labor-intensive task: Conducting interviews across various regions was challenging, restricting access to additional professionals and artists.
4. Insufficient understanding of the details regarding the topic studied: A few participants didn't provide input on specific research inquiries.

5.2 Recommendations and Future Research

After analyzing the findings and based on the conclusion, the following recommendations are suggested below:

1. Using a mixed method in carrying out similar research to achieve higher validity.
2. Using a quantitative approach in conducting similar research to achieve higher validity and reliability.
3. Expanding the data collection through interviews to a broader area of Lebanon.
4. Inviting Higher Education Institutions (HEIs) to revisit and develop their arts curricula using more critical thinking and persuasive writing. In addition, artists are encouraged to participate from the different sub-fields to dialogue with students.
5. Create a seminar course about the impact of Metaverse technology on Arts and artworks to address the different stances reported in this study's findings.
6. Create and establish a student club to raise more awareness about the relationship between Artificial Intelligence and Arts.
7. Invite researchers to delve into the research findings and expand further the theoretical foundations of Arts automation.

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