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Artificial Intelligence in the Creative Industry: The Role of AI in Revolutionizing Marketing Strategies

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INTRODUCTION

In the contemporary digital era, the fusion of creativity and technology has revolutionized various sectors, particularly Marketing. Artificial Intelligence has emerged as a transformative force reshaping the marketing landscape by enhancing efficiency, personalization, and strategic innovation. The integration of AI into marketing practices not only streamlines processes but also introduces unprecedented opportunities for creativity and engagement. This thesis delves deeper into the complicate relationship between AI and human creativity, focusing specifically on how AI-driven tools and techniques are transforming the creative industry and how brands are navigating these changes.

The historical evolution of AI illustrates a journey from basic automated systems to sophisticated, intelligent entities capable of complex tasks. By exploring different types of AI—Artificial Narrow Intelligence (ANI), Artificial General Intelligence (AGI), and the theoretical Artificial Superintelligence (ASI)—insights into the progressive capabilities of AI technologies are gained. As AI continues to advance, its applications in marketing have expanded exponentially, revolutionizing traditional practices and strategies. AI-driven marketing strategies are now essential for maximizing success, offering specific utilities across various segments and transforming sectors through enhanced data analysis, personalized customer experiences, and predictive analytics.

However, the integration of AI in marketing presents challenges and limitations. Ethical considerations, data privacy concerns, and potential reductions in human involvement raise significant issues. This thesis addresses these complexities while highlighting the crucial role of creativity in navigating this evolving landscape. Creativity, characterized by innovation and invention, finds new dimensions with AI. Modern advertising approaches, including personalized advertisements and emotional appeals, are increasingly shaped by AI, fostering a synergistic relationship between technology and human intelligence.

The Research Question I will be trying to answer in this thesis is: “How can Artificial Intelligence be utilized as a tool to empower human creativity in the generation and development of artistic and creative content?” This inquiry seeks to analyze the complex dynamics between AI and human creativity. Through the semiotic analysis of two case studies and the interviews, key themes and subcodes are identified, shedding light on AI's multifaceted impact on creative processes.

A significant focus of this study is on creative agencies such as Alkemy S.p.A., which are pioneering the use of AI for content creation and advertising. Case studies like the "Coca-Cola® Masterpiece" and "BeRebel - l'intelligenza reale - tonno all'opera" campaigns illustrate how brands are positioning themselves regarding AI, which can serve as both a tool for human empowerment and a primary creator. Through semiotic analysis and the Actantial model, these campaigns provide deeper insights into the narrative and functional roles AI plays in marketing.

Exploring the tension between artificial intelligence and human creativity is crucial to understanding how brands are responding to this period of change and the strategies they are implementing. Specifically, analyzing two semiotic perspectives on the case studies—one demonstrating AI as an enhancer of creativity and another critiquing its uses—providing valuable insights into evolving brand strategies.
In-depth interviews with key figures at Alkemy S.p.A. further illuminate these dynamics within the creative industries sector. These insights contribute to a nuanced understanding of the implications arising from the analysis of case studies and the evolving role of AI in creativity and contemporary marketing practices.

The concluding sections of this thesis offer managerial implications, acknowledging current research limitations and proposing directions for future studies. By presenting a holistic view of AI's evolving role in marketing, this research contributes to the ongoing discourse on the integration of technology and creativity, providing actionable insights for practitioners and scholars alike.

CHAPTER 1: ARTIFICIAL INTELLIGENCE IN MARKETING

Nowadays when somebody mentions or hears about “Artificial Intelligence” (or “AI”) many things come to mind starting from images of robot armies trying to take control of humanity, to less intimidating images of Alexa putting full volume your favorite song only with the use of your voice. Following this lead, it is easy to understand how much the word “Artificial Intelligence” has become omnipresent to describe countless forms of advanced technology.
But where does everything start? Which is the origin of this new and mysterious technology?
In this first chapter, I will dive deep into AI, uncovering its core principles, functionalities, and applications in the marketing landscape particularly. Starting by exploring the history and evolution

of AI, from its theoretical foundations to its practical uses, but firstly explaining what the definition of artificial intelligence really means.
After explaining all the possible applications of AI in marketing with its relative opportunities and benefits I will also focus on the several challenges and limitations of that comes from it in the marketing sector that is full of obstacles to overcome, including problems about data privacy, algorithmic biases, and ethical dilemmas.
Because of this, I will also investigate creative innovation for the future to get over the challenges listed above and clear the path for a day when ethical AI-driven marketing can thrive. Finally, the goal of this chapter is to provide a comprehensive understanding of how artificial intelligence has changed throughout time and how it is reshaping the marketing environment.

1.1 History and Evolution of Artificial Intelligence

The evolution of artificial intelligence starts from humanity's aspiration to replicate its own intelligence and, consequently, its cognitive faculties. Despite the difficulty in replicating the cognitive processes of human intelligence, numerous attempts have been made. For instance, the early efforts such as in 1943 when Warren McCulloch and Walter Pitts theorized a model of artificial neural network (ANN) inspired by the functioning of the human brain, not only they formally demonstrated that the rules of Boolean logic could be implemented in their model, but they also speculated that this system was able to "learn", (this was demonstrated by Donald Hebb in 1949 by making some changes to the previous model). Later in 1950, two Harvard students (M. Minsky and D. Edmonds) created a neural network known as SNARC (Stochastics Neural Analog Reinforcement Calculator), simulating a network of 40 neurons, able to perform a mechanism only when there was a successful previous task (Hebbian Learning) *(Crevier, Daniel, 1993*). This attempt was a very primitive approach to what had been done years after with the development of Machine Learning and Deep Learning.

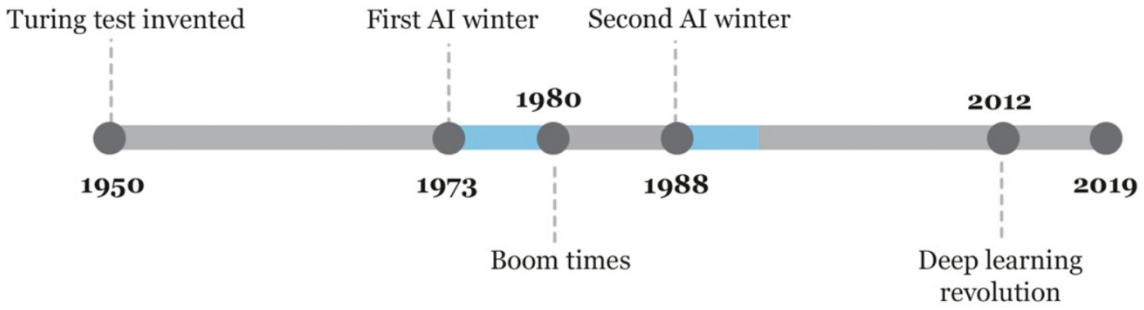
During the second half of 1950s, computer scientists began to develop programs that could solve problems previously thought to require intelligence (*Oliveira, 2017*). Artificial intelligence and its studies became a discipline in 1956, with the advent of the Dartmouth Conference, where researchers from various fields convened to explore the potential of machines to simulate human intelligence, this conference was held with all the major figures in computing of the time: John McCarthy, Marvin Minsky, Nathaniel Rochester, and Claude Shannon, they defined the project of creating AI in terms of “making a machine behave in ways that would be called intelligent if a human were so behaving” (*McCarthy et al. 1955*). The Dartmouth Conference was necessary to gather the main contributions on the topic of artificial intelligence, laying the groundwork for future developments. For the success

of this project, the contribution of Alan Turing was fundamental. Turing, considered one of the fathers and founders of modern computing, had already paved the way for the concepts of computability and calculability in 1936. He was the first to grasp the potential of automatic computation, arguing that computers would eventually be able to emulate the workings of the human mind. The logical consequence was to define what artificial intelligence means in the sense of "intelligent machine", concluding that a machine can be considered intelligent if it behaves similarly to a human, but the definition of Artificial Intelligence will be better explained in the next paragraph. In 1950, Turing himself tried to implement the first “artificial intelligence test” in an article titled *"Computing Machinery and Intelligence",* idealized what would become known as the *"Turing Test".* This "game" involves three people: a person (A), a person (B), and a third individual (C). C's task is to guess, by asking a series of questions, the gender of A and B. The logic is that person A must try to deceive C, while person B must try to help him solve the question. The answers to the questions must be typed to prevent handwriting and voice from aiding C in finding the solution. Turing hypothesized that a machine ("intelligent") could replace person A. If C does not realize the substitution, then A should be considered an intelligent machine, equivalent to a human being. Thanks to Turing's work, the topic of artificial intelligence received significant attention from the scientific community *(Bowen, 2016)*.
Indeed, Turing through this approach was able to define a criterion for which it is possible to determine if the machine displayed an intelligent behavior equal and/or indistinguishable from the human one.
This Turing’s idea was so futuristic that only twenty years after, the Turing test found a practical application to a famous computer program named ELIZA, a precursor of the actual chatterbots based on natural language processing structure *(Weizenbaum, Joseph, 1976).* The program was able to create a simulation of conversation between a psychotherapist (Eliza) and a patient using rules from a written script (simple pattern matching and substitution rules).

Unfortunately, after this first profitable period of developing in AI fields, the 70’s were characterized by a dramatic decrease in investments in matter of innovation due to some triggering reports about AI such as the “Automatic Language Processing Advisory Committee” (ALPAC) by US government *(National Academy of Sciences, National Research Council, 1966) and “Artificial intelligence: a general survey” (Sir Lighthill, 1973).*
In this sense, the ALPAC was made with the purpose of an economic investment instead of research motivations for the development of machine translation against the Russian government that led to disappointing results (*Hutchins, John, 1996*).

Meanwhile, overseas, the British professor James Lighthill at Cambridge University, with his survey (Lighthill Report) in 1973, discouraged the British government to continue to invest in AI fields stating a weak application of AI in real-life problems. This period was then called "AI Winter", because it was characterized by cuttings in investments and low optimism by researchers. Even though the decrease in investments lasted for a decade, the field of AI experienced a new peak in the 80's. Generally, the technological industry faced an increase in interest so that many innovative products were produced and commercialized. New technologies spread out in companies, opening the doors to a new prosperous period for AI. However, researchers feared an upcoming return of a second "winter period" for AI after this unexpected innovative boom. In fact, in the next years, AI suffered a financial slowdown around the world due to unreachable practical goals pre-fixed: The second AI winter. Even Japan government that massively invested for AI projects such as "Fifth Generation Computer System" *(McCorduck, 1979),* experienced disappointing results in the 90's from expectations made in the 80's, after investing 850$ million in the project *(The New York Times (1992), Fifth Generation' Became Japan's Lost Generation*).

Figure 1: MILESTONES OF ARTIFICIAL INTELLIGENCE



[Source: History of the first AI Winter, S. Schuchmann]

Throughout the course of the 90's and the new millennium, old challenges found the concreteness in real applications and new ones came out. Subsequent the period of break of the second winter of AI, a new round of exploration and investments begun in the first years of the 90's, a period characterized by successful applications in the technology industry by a burst in high technology investments and machine learning that promoted a potential economic effect that is lasting nowadays.

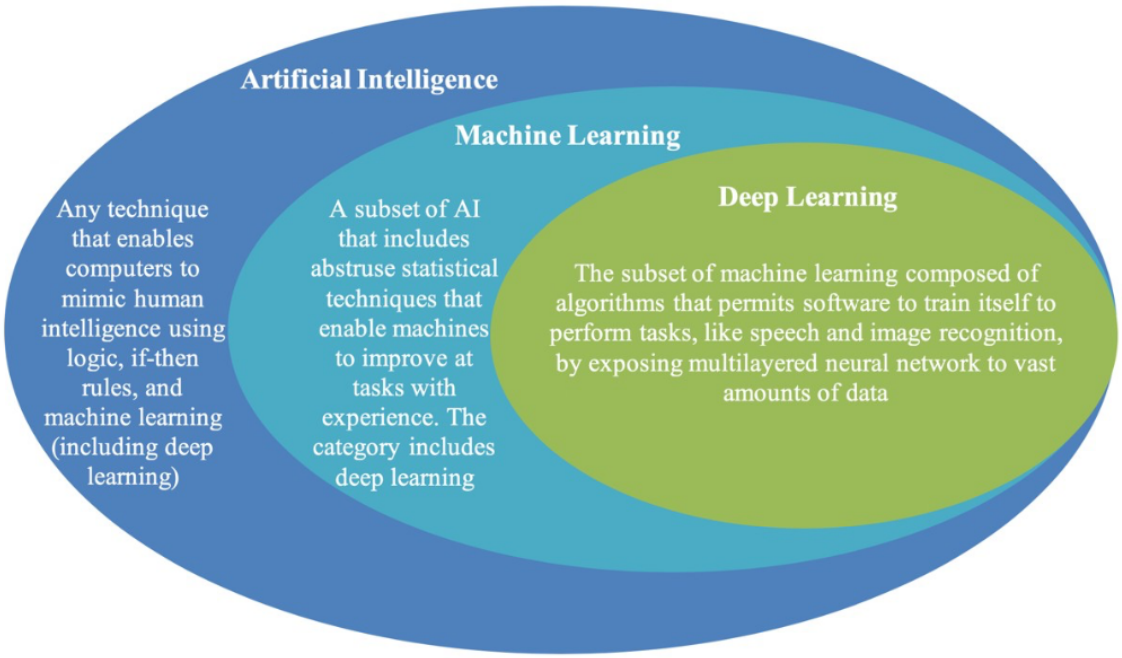
In 1995, Richard Wallace created ALICE (Artificial Linguistic Internet Computer Entity) strongly inspired by ELIZA but with improvements on a more natural sample data collection.

Two years later in 1997, IBM's chess-playing computer Deep Blue won against the world chess champion Garry Kasparov becoming the first elaborator system to beat a person with a very high skilled background. Moreover, this year were developed and improved neural networks with machine learning capability such as RNN and LSTM architectures (respectively Recurrent Neural Network and Long Short-Term Memory) responsible for speech and handwriting recognition algorithms, still largely used by large companies nowadays (Apple with quick-type feature and Siri, Amazon with voice recognition for Alexa, Google with Google Assistant, or speech-to-text technologies).

Virtual assistants are now able to replicate and mimic a human voice with tone of voice, interact with human and even schedule a hair salon appointment *(Google I/O (2018), Google Duplex: An AI System for Accomplishing Real-World Tasks Over the Phone).* And again, smart home devices (domotica) can create an automatic routine based on the previous and specific behavior with the service If This Then That (IFTTT technology) *(Xianghang & Qian, Feng & Zhang, Ying & Wang, Xiaofeng, 2017).* Or more, based on what it could be suitable for people since its taste or prevision.

In a few words, electronic devices started to have a certain self-machine learning with the human aid or not since the development of the sophisticated learning algorithms continuously powered by big and aggregate data retrieved from the usage of consumers. In this sense, the XXI century experienced a valid and concrete spreading of the so called "Deep Learning that is defined as "an approach to AI". Specifically, it is a type of machine learning, a technique that allows computer systems to improve with experience and data. […] is a particular kind of machine learning that achieves great power and flexibility by learning to represent the world as a nested hierarchy of concepts, with each concept defined in relation to simpler concepts, and more abstract representations computed in terms of less abstract ones." *(Ian Goodfellow, Yoshua Bengio, Aaron Courville, 2016).* In an increasingly digitalized and borderless world, the augmented amount of elaborated data (Big Data) allowed not only an easier development of machine learning but also a more precise and accurate execution of a task.
Next decades will be characterized by new challenges and opportunities, to better enhance and boost skills and applications of AI: internet of things (IoT), robotics, automation, big data analytics are the key words for our century.

Figure 2: VENN DIAGRAM OF SUBSETS OF AI, ML AND DL



[Source: Retrieved from IBM.com IT INFRASTRUCTURE (2019)]

1.2 The Definition of Artificial Intelligence

"What is Artificial Intelligence?" is not only a difficult question itself, but it is particularly difficult because it is not clear who can or should answer the question (*Matthew U. Scherer, 2016*).
In fact, it is very challenging to summarize artificial intelligence (AI) into a single standard definition, given its multiple scientific implications going from computer science to neuroscience, delving into studies on the functioning of the human brain.

For this reason, various groups, including philosophers, computer scientists, and cognitive scientists, have dedicated efforts to extract some sense out of this fundamental question (*Russell & Norvig, 2010.).* Each of these disciplines (philosophy, computer science, psychology, and mathematics) brings its own perspective and insights to the discussion, each of it gives a diverse range of points of view on the nature of AI. While experts may disagree on exactly what AI is, they all recognize the importance of this question. This shared interest shows how complex and varied the field is, putting emphasis on the importance of working together across different areas of expertise to fully understand AI.

The real root of complexity in defining AI largely comes from the complexity in the first place to explain the concept of "intelligence" or better “Human Intelligence”. Human intelligence in fact serves as benchmark because it helps to align the concept of intelligence with human-like characteristics (*McCarthy, 2007*). In fact, one common understanding of intelligence is related to the ability to perform intellectual tasks. However, as technology evolves, computers become more and more capable of performing highly complex tasks that previously were associated with human intelligence. Rather than recognizing these achievements as indicators of intelligence, experts keep raising the threshold of the meaning of intelligence. As a result, specific tasks become less significant in defining intelligence. One key consideration is the distinction between intelligence and agency, as highlighted by Luciano Floridi (2023). Traditionally, intelligence has been the benchmark for defining AI, often measured by a machine's ability to perform tasks typically associated with human cognition *(McCarthy, 2007)*. However, as Floridi argues, achieving these tasks doesn't necessarily signify intelligence.

Instead, Floridi proposes that AI should be understood through the lens of agency, referring to the ability to act independently and make choices within its environment *(Floridi, 2023)*. Chatbots, for example, exhibit agency by accessing information, processing inquiries, and formulating responses – all without direct human intervention. This ability to act purposefully within a specific domain highlights a crucial aspect of AI, regardless of whether it achieves human-level intelligence.
The focus on agency offers a broader perspective on AI's capabilities, moving beyond simply mimicking human behavior. As AI continues to evolve, this shift in understanding its core characteristics will be crucial for maximizing its potential and navigating its ethical implications.

This pattern is evident throughout the history of machine development, where each advancement in technology has thinned the line between what is considered human-like intelligence and what is perceived as simple computational capabilities. As machines evolve and do the same things humans used to do, experts keep changing the definition of intelligence. This leads to debates and changes in how AI is defined. In fact, what can be asserted today is that Artificial Intelligence is the discipline concerned with creating machines, ranging from software to actual robots, capable of thinking and acting like humans.

Russell and Norvig (2010) discuss different ways to define "artificial intelligence" into four categories: acting humanly, thinking humanly, thinking rationally, and acting rationally. These categorizations aim to show what makes a system intelligent. By encompassing systems that reason

and behave like humans, mimicking human behaviors, for example as I cited in the previous paragraph, the Turing Test says that if an AI acts like a human, it's intelligent. But thinking about it, just copying human behavior might not be enough to really be smart.

Another idea is that AI should think like humans do. This means AI needs to understand human thought patterns to be considered smart by possessing their own consciousness.
Finally, there is thinking rationally, which means AI follows logical rules like humans do, so the artificial intelligence processing must be indistinguishable from humans and engaging in rational problem-solving processes with available data, (*Russell & Norvig, 2010*).

These different ways of looking at AI aren't opposites. They all have their strengths and weaknesses, leading to debates about what truly makes an Artificial Intelligence. What is clear is that AI is conceived as a process, rather than a phenomenon in itself.
In conclusion, AI is mainly defined as the frontier of computational advancements that references human intelligence in addressing ever more complex decision-making problems. (*Berente et. al, 2021)*.

1.2.1 Types of Artificial Intelligence

Deeper examination reveals that Artificial Intelligence can be viewed from several angles that correspond to its core characteristics.
Different approaches explain Artificial Intelligence in different ways. The main categories of intelligence skills and the mechanism underlying AI (Artificial Intelligence) and ML (Machine Learning) can be better understood by first understanding the learning algorithm process, which is easily divided into three main approaches: Supervised Learning, Unsupervised Learning, and Reinforcement Learning.
Each has a different input, output, and task that it is designed to complete.
Supervised Learning involves the learner that "*makes predictions for all unseen points after receiving a set of labelled examples as training data*" (*Mohri,et al., 2012*). The most typical situation involves categorization, regression, and ranking problems. Also Spam detection on email is an instance of supervised learning *(Mohri,et al., 2012)*. This type of learning permits machines from large databases to label and categorize images distinguishing objects that are similar but different (e.g. an apple from a pear in the same picture).

Unsupervised Learning, conversely, is the condition when "*the learner exclusively receives unlabeled training data and makes predictions for all unseen points" (Mohri,et al., 2012).*
Since in general no labelled example is available in that setting, it can be difficult to quantitatively evaluate the performance of a learner. Clustering and dimensionality reduction are an example of unsupervised learning problems.

Finally, Reinforcement Learning is when "*the learner actively interacts with the environment and in some cases affects the environment and receives an immediate reward for each action" (Sutton & Barto, 2018).*
The object of the learner is to maximize his reward over a course of actions and iterations with the environment. However, no long-term reward feedback is provided by the environment, and the learner is faced with the exploration versus exploitation dilemma, since he must choose between exploring unknown actions to gain more information versus exploiting the information already collected." *(Mohri et. al 2012).*

According to Bass, B.M. (2002), with regards of the skills of the intelligence, there are three types of competence of the general intelligence: cognitive intelligence (linked to the structure of the way of thinking), emotional intelligence (self-awareness) and social intelligence (all the patterns related to the teamwork, social networks).
These types of human intelligence can be framed into types of AI systems that will be discussed in the following paragraphs. Mainly, coming back to the focus on the types of artificial intelligence, it could be possible to classify the Artificial Intelligence by certain criteria: (1) by stages considering the grade level of intelligence of a machine taking as point of reference the human intelligence or (2) by competencies considering the macro-area where the intelligence is successful.

In a general perspective, Kaplan & Haenlein (2019) described it as "A *system's ability to interpret external data correctly to learn from such data and to use these learnings to achieve specific goals and tasks through flexible adaptation*".
Another more specific definition was given by Nilsson, (2010), stating that "a*rtificial intelligence is that activity devoted to making machines intelligent, and intelligence is that quality that enables an entity to function appropriately and with foresight in its environment*."

1.2.2 Stages: ANI, AGI, ASI

Russell and Norvig (2010) makes a distinction of “Weak AI” and “Strong AI” stating that Strong Artificial Intelligence aspires to develop computers with conscious intelligence that is indistinguishable from human consciousness, whereas Weak AI attempts to construct robots that can solve problems that human intelligence can solve.

It is helpful to emphasize how Artificial Intelligence is separated into three categories based on these two methods, which correspond to the three stages of its evolution:

- Artificial Narrow Intelligence (ANI)
- Artificial General Intelligence (AGI)
- Artificial Super Intelligence (ASI)

ANI is also associated with the definition of ‘Weak AI’, which is compiled to perform a single task by extracting information from a dataset using a pre-fixed range of information. These "narrow" systems lack consciousness and therefore cannot be compared to human intelligence. Basically, as it was stated before, Weak AI simply aims to replicate or mimic the specific function that the program is designed for, and for most tasks, this is considered satisfactory.

Some examples include the task of checking the weather, playing chess, and analyzing raw data to write articles that are embedded in products like Siri, Alexa, and Google Assistant. They are classified as ANI as they are not conscious machines, so they lack the self-awareness, consciousness, and genuine intelligence to match human intelligence. The term ‘weak AI’ does not have the fluidity nor the flexibility to think like humans do. Another example that might not come to mind for this category are self-driving cars like Tesla that would be classified as weak AI, even though they consist of multiple ANI systems. Moreover, this kind of artificial intelligence is broadly used directly in marketing as leveraging sophisticated algorithms, augmenting human cognitive capacities, empowering marketers to engage in sophisticated actions. These include analyzing sentiment from social media data for targeted advertising, devising dynamic pricing strategies informed by real-time consumer behavior analysis, offering personalized product recommendations tailored to individual preferences, and crafting hyper-personalized content through natural language generation algorithms, or aiding in the successful generation of communication campaigns.

Next, we detect AGI – also associated with the definition of ‘Strong AI’ or sometimes “Deep AI” – referring to machines that exhibit and mimic human intelligence, i.e the machine’s intellectual capability and/or behavior is functionally equal to that of a human. An example is the Fujitsu K supercomputer that took 40 minutes to simulate a single second of neural activity *(Hornyak, 2013)*. In summary, Strong AI perceives machines not merely as tools but as systems endowed with their own cognitive faculties. While this perspective may seem too futuristic, it acknowledges that current

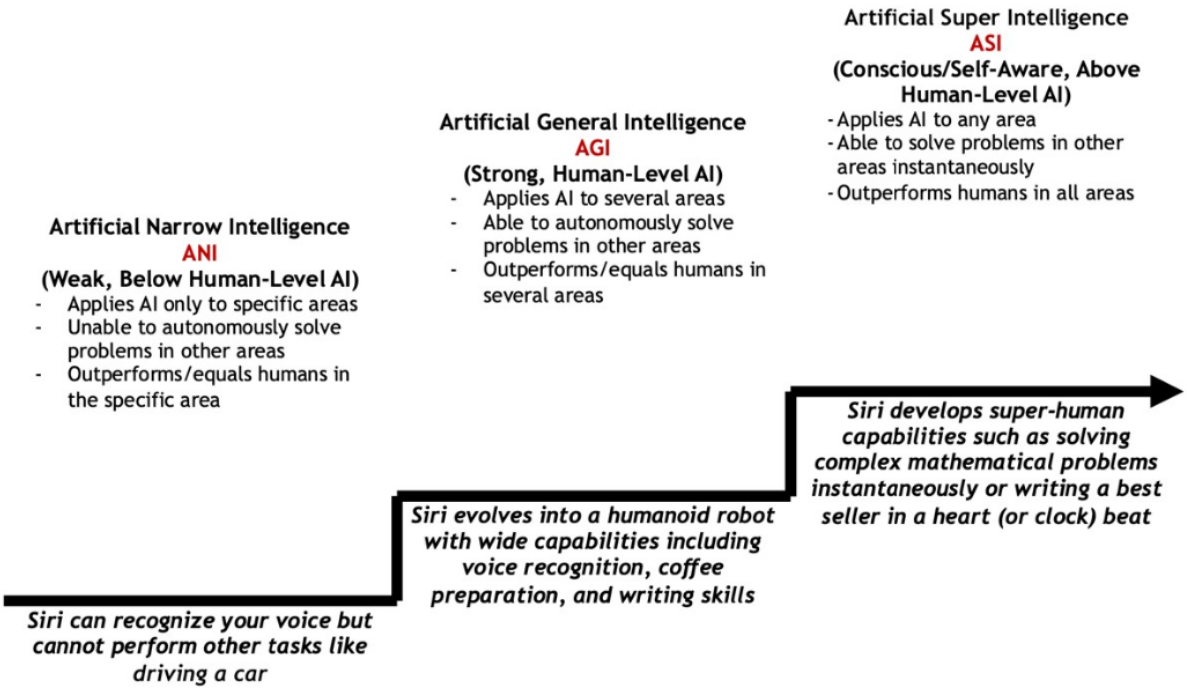
machines lack intrinsic human cognitive attributes such as consciousness and emotions. However, experts in favor of Strong AI remain optimistic about the future, envisioning a time when machines could potentially surpass humans in various aspects. John Searle, in his book *"Minds, Brains, and Programs" (1984)*, asserts: *"properly programmed computers really are minds, in the sense that computers with the right programs understand and have cognitive states."*

Finally, Artificial Super Intelligence (ASI) is the last step of the evolution of Artificial Intelligence as it reaches the point of when AI surpasses human intelligence and/or behavior.
It is defined by Nick Bostrom (2014), Oxford philosopher as "*any intellect that greatly exceeds the cognitive performance of humans in virtually all domains of interest"*.
Also, tech titans Elon Musk (Tesla) and Mark Zuckerberg (Facebook) agree on the fact that in the future, ASI could be dangerous for the entire humanity (*Smith, 2018*). Musk has claimed regarding the adoption of these technologies as autonomous weapons that "these can be weapons of terror, once this Pandora's box is opened, it will be hard to close" *(Revesz, 2017).*

Furthermore, the evolution of AI raises critical questions regarding its ethical implications and societal evolutions.
As AI systems become increasingly integrated into various facets of human life, concerns regarding algorithmic bias, data privacy, and the ethical use of AI algorithms come to the forefront *(Eriksson et al., 2020).* Additionally, the potential displacement of human labor by AI-powered automation necessitates careful consideration of socio-economic implications and the need for reskilling and upskilling initiatives to mitigate the impact on the workforce *(Winston, 1992).*

In conclusion, the types of Artificial Intelligence, ranging from Weak to Strong AI, offer interesting insights into the evolving relationship between humans and machines. While the journey towards achieving AGI and ASI holds immense promise for innovation and advancement.

Figure 3: AI STEPS BY STAGES



[Source: Kaplan, Haenlein (2019)]

1.3 Artificial Intelligence: Revolutionizing Marketing Practices and Strategies

Artificial intelligence (AI) has become a game-changer in contemporary life, reshaping how businesses connect with their audience and streamline their operations. In this paragraph, I intend to thoroughly explore artificial intelligence, discussing its fundamental concepts, functions, and broad implications in the world of marketing particularly.

As the world approaches the evolution of technological progress, AI emerges as a highly impactful innovation made to revolutionize marketing practices significantly. Much like the transformative impact of movable type printing and the advent of the internet in historical periods.

AI-based marketing results in a very important turning point, radically altering how marketing strategies are conceived, executed, and optimized in the digital age.
In AI-driven marketing, there's a significant move from old-fashioned techniques to ones powered by technology. From relying on intuition and demographic profiles to leveraging AI's capabilities in data collection, analysis, and automation, marketers are witnessing a profound transformation in their strategic endeavors.
This evolution underscores the transformative power of AI in reshaping marketing strategies, pushing businesses towards improved efficiency, effectiveness, and relevance in an increasingly competitive landscape.Throughout this analysis, I aim to delineate the important changes brought by AI in

marketing, tracing its evolution from inception to current applications. From the initial stages of AI adoption to its spread integration into marketing operations, the progress has been characterized by a constant search for innovation and adaptation to changing consumer trends. The transition from traditional marketing methodologies to AI-driven strategies reflects not only a shift in tools and techniques but also a fundamental reimagining of customer engagement and value creation.

Moreover, I will analyze the multiple applications of AI in marketing, spanning a spectrum of functions from data analysis and predictive modeling to personalized customer experiences and automated advertising campaigns. While the promise of AI holds big potential for innovation and efficiency enhancement in marketing practices, I will also address its limitations and challenges that come with its implementation. Challenges concerning data privacy, algorithmic bias, and ethical considerations highlight the importance of taking a careful approach to fully harnessing AI's potential in marketing efforts has previously been discussed in the paragraph above.

In addition to identifying challenges and limitations, I will explain also innovative strategies and ethical frameworks aimed at mitigating risks and fostering responsible AI utilization in marketing. By surpassing these obstacles, it is possible to pave the way for a future where AI-driven marketing approaches thrive while safely.

In conclusion, this comprehensive analysis aims to provide a holistic understanding of the role of artificial intelligence in shaping the future of marketing. By identifying opportunities for advancement and addressing challenges and limitations, it is possible to chart a course towards a future where AI empowers businesses to make deeper connections with their audience and navigate the continually evolving landscape of marketing with confidence.

1.3.1 Maximizing Marketing Success with AI-Driven Strategies

Artificial Intelligence is represented as a fascinating and dynamic technology that is essential to improving a business's content strategy. It contains a wide variety of domains, including natural language processing, machine learning (ML), Deep Learning, and computer vision, each contributing to its applications *(Goodfellow, Bengio, &Courville, 2016)*. ML, in particular, plays a central role in digital marketing, offering wide data analysis capabilities and sophisticated analytical tools *(Zhou et al., 2020).* This empowers marketing teams to gain deeper insights into consumer behavior, facilitating more informed decision-making and strategy formulation.

The significance of AI when it comes to digital marketing cannot be overstated. Because of its capacity for real-time analysis of large data sets, marketers can develop a deeper understanding of customer trends and preferences. *(Kumar et al., 2022).* Marketers can efficiently respond to specific client demands by using machine learning algorithms to discover patterns, anticipate outcomes, and

tailor content. This not only improves the customer experience but also drives engagement and nurtures brand loyalty *(Grewal et al., 2017).*

Moreover, the integration of AI allows for the automation of routine marketing tasks, freeing up time for marketers to focus on strategic planning and creative initiatives *(Chui, Manyika, & Miremadi, 2016).* AI can also assist in optimizing marketing campaigns by tracking performance metrics and making real-time adjustments for better results. By continuously analyzing data, AI helps marketers make data-driven decisions, improving overall efficiency and return on investment.

AI's impact on content creation and distribution is also very important. With AI-powered content generation tools, marketers can produce high-quality, tailored content at scale, catering to different audience segments and platforms *(Reddy & Knight, 2016)*. Natural language generation (NLG) technologies enable marketers to create engaging and personalized narratives, enhancing the relevance and appeal of marketing materials.

Additionally, AI-driven sentiment analysis allows marketers to gauge public perception and customer opinions about their brand, products, and services *(Liu, 2012).* This valuable feedback can be used to adjust marketing strategies and improve offerings in response to customer needs and preferences.

Furthermore, the continuous evolution of AI presents exciting opportunities for innovation and growth in digital marketing. As AI technologies become more advanced and accessible, marketers can explore new ways for customer engagement and brand promotion *(Kaplan and Haenlein, 2019)*. From chatbots and virtual assistants to predictive analytics and recommendation engines, AI offers a plethora of tools and techniques to enhance marketing efforts and drive business success.

A systematic strategy and an ability to adjust to emerging trends and technology are necessary when integrating AI into digital marketing *(Davenport and Ronanki, 2018)*. Marketers must keep up with the most recent advancements in artificial intelligence and investigate the best ways to incorporate new technologies into their current strategic approaches. This may involve investing in AI-powered tools and platforms, upskilling team members, and collaborating with technology partners to leverage AI possibilities fully.

AI's impact on digital marketing extends beyond the immediate benefits of data analysis and content creation. It also plays a role in enhancing customer engagement and satisfaction *(Russell, et al., 2016)*. For instance, AI-powered chatbots and virtual assistants can provide instant customer support, answering queries and resolving issues rapidly. This level of responsiveness can significantly improve the customer experience and strengthen brand loyalty *(Huang & Rust, 2018).*

In conclusion, AI has emerged as a transformative force in digital marketing, offering multiple opportunities for improving and bettering content strategy, personalizing customer interactions, and driving business success. As AI technologies continue to evolve, marketers must remain proactive in

embracing these advancements and leveraging them to stay competitive in the always changing digital landscape. By adopting a forward-thinking approach and prioritizing innovation, it is possible to harness the full potential of AI to elevate their marketing strategies and achieve lasting success *(Baker & Dellaert, 2017).*

1.4 Applications of Artificial Intelligence in Marketing

Nowadays, it is possible to say that artificial intelligence (AI) has become a crucial tool in marketing. Its main objective is to automate data collecting and analysis in order to enhance the consumer experience with goods and services. This signifies a substantial shift in marketing tactics, with the customer and data-driven decision-making now taking center stage. For instance, this implies that having a good product to sell is no longer good enough. Companies and brands need to predict what customers will want in the future to succeed, and this is where AI steps in to help to meet those needs.

So, what are the practical applications of Artificial intelligence in marketing?

Artificial Intelligence (AI) is transforming the marketing industry through its wide range of applications, which include interaction with customers and data analysis *(Verhoef et al., 2019).* Personalized marketing methods are one important area in which artificial intelligence is having a significant impact. By leveraging AI algorithms, marketers can analyze vast amounts of consumer data to understand individual preferences, behaviors, and purchase patterns *(Zhou et al., 2020).* This knowledge makes it possible to develop highly customized and targeted marketing efforts, which raises conversion rates and enhances consumer engagement *(Xiao et al., 2022)*. Furthermore, chatbots driven by AI are being used more frequently to offer prompt, customized customer care, improving the overall customer experience (examples are Alexa, Google Assistant and Siri) *(Kumar et al., 2022)*. Furthermore, marketers may predict future trends and spot business possibilities with the help of AI-driven predictive analytics *(Verhoef et al., 2019)*. Artificial intelligence is changing the marketing environment in several ways, enabling companies to reach their target audience and promote long-term growth more successfully. These changes include content production, consumer segmentation, and predictive modeling *(Verhoef et al., 2019)*.

1.4.1 Specific Utilities of Artificial Intelligence in various Marketing Segments

The main marketing categories included in AI projects are shown in Figure 4. In marketing contexts, pricing, strategy and planning, product, promotion, and place management become essential components for guiding AI-based systems. Furthermore, the relevance of other elements in shaping

product design and meeting end-user needs, such as situational analysis, cognitive models, and targeting and positioning, highlights their value in AI application marketing. *(et. al, 2021).*

Figure 4:

[Several Segments for AI applications in Marketing Domain[1].]

Marketing experts use AI to improve customer demand, updating user experience through integrated applications mixed with machine intelligence. These applications are very effective at monitoring purchasing behaviors and collecting information about the location and timing of the transactions. Following that, artificial intelligence algorithms examine the data collected, enabling the distribution of tailored promotional materials tailored to specific clients. For example, when a user visits a nearby retailer, these messages can include personalized recommendations and exclusive promotions designed to increase the customer's average order value (proximity marketing).

With an integrated system automation method, the marketing sector gives the business a competitive advantage. Benefits of using AI in marketing include more accurate customer management and better decision-making. Data is essential for improving the content patterns that machine learning algorithms suggest to users. Scaling display advertising campaigns, reducing human error, and

improving audience data efficiency are all made possible using AI algorithms and machine learning (ML) *(Thontirawong &Chinchanachokchai, 2021).*
Advertisements that speak to their needs or interests are more favored by consumers. Marketers can successfully interact with the most responsive consumer groups by developing focused advertising strategies that are suited to the right client segments. Leveraging the digital intelligence of AI models and algorithms empowers marketers to achieve this goal (*Yau Saad &Chong, 2021).*

AI is a great tool for marketers to use when implementing focused campaigns, especially when it comes to ad targeting. Furthermore, it is able to distinguish between different client behaviors, such making a purchase, making an actual conversion, and making exploratory actions, by utilizing machine learning (ML) skills.
Because of this, marketers may more successfully retarget prospects, concentrating on those who are more likely to convert. Furthermore, the amazing potential of AI technology to improve marketing strategies is demonstrated by AI-driven technologies like facial recognition software, which are essential in tracking customers' in-store visits and connecting them to their corresponding social media profiles. These innovative approaches send real-time discount offers and welcoming messages to individual visitors by integrating AI-powered smart notifications, raising the bar for personalized user experience to unprecedented heights *(Pavaloiu, 2016).*

When combined with high-quality market research data, AI emerges as a powerful tool, empowering companies to undertake a massive quantity of tasks. Segmentation of target groups stands out as the most important application within this largely adopted practice. In this regard, AI demonstrates remarkable speed and efficiency compared to humans *(Crunk & North, 2007).*

The rapid spread of new technologies has pushed many industry leaders to transition towards a more advanced and efficient landscape, with AI emerging as a predominant force. Companies equipped with AI capabilities stand poised to maintain a competitive advantage across multiple fronts *(Hildebrand, 2019).*

Brands have the opportunity to enhance customer experience by leveraging on AI to deliver personalized content, offers, and exceptional customer service to individual consumers. Predictive marketing analytics stands out as one approach employed by companies with AI *(Shovo, 2021).*
Through analyzing data from past occurrences, AI demonstrates the ability to accurately predict future performance based on a variety of parameters. This understanding of individuals' preferences

gives people more meaningful recommendations tailored to their needs. However, the majority of AI-driven customization solutions typically adopt a top-down approach, focusing on individual preferences rather than group dynamics. The ability to leverage AI for predicting the effectiveness of marketing strategies and refining user experiences represents a significant technological trend expected to persist for many years *(Pitt, et.al, 2018).*

As AI advances, conversational search requests and algorithms are evolving, leading search engine marketers and content developers to better their strategies. In terms of marketing automation, AI plays a crucial role in freeing up valuable time for human marketers, enabling them to create targeted marketing materials more efficiently, resulting in improved client conversion rates.

Prominent social networks have strongly encouraged marketing practices involving AI on their platforms. This allows consumers to interact with customer support bots for inquiries that don't necessitate a phone call or a human conversation. A practical example can be seen when people browse the Apple website and have a question about scheduling a repair appointment for a product like an iPhone. It is possible to use the built-in Apple Support app to chat with a virtual assistant. This AI chatbot can answer questions about repair options, availability at nearby stores, and even guide customers through the appointment booking process.

Another example is the Cooltra app, a popular scooter rental service in Europe. If an issue is encountered while using a Cooltra scooter, it is possible to utilize their in-app chatbot to troubleshoot the problem. The chatbot will guide you through basic troubleshooting steps, answer questions about billing or usage policies, and even connect the customer with a live customer service representative if needed.

These are just a few examples of how AI chatbots are being used by companies to provide convenient and efficient customer support on social media platforms and mobile apps. Vanishing messaging services are utilized by millions globally for personal communication with friends, as well as by marketers seeking more genuine and intimate interactions with consumers. Brands can leverage AI to engage with individuals in distinctive and intimate ways, particularly on social media platforms, where audiences frequently spend their time online *(André, et.al, 2018)*.

Moreover, the appeal of AI lies in its affordability and impressive efficiency, as it can mimic various tasks. However, implementing AI in marketing necessitates access to large datasets. Lack of experience with data science and artificial intelligence presents difficulties for many marketing teams, making it more difficult for them to handle massive amounts of data and derive insightful information *(Popkova, & Gulzat, 2019*).

Companies must collaborate with other groups who are skilled at gathering and analyzing data if they are to operationalize their initiatives. These partnerships support continuous maintenance and AI system training. As ML systems are fed more data, their capacity to make precise and useful judgments increases. Additionally, firms can successfully monitor and optimize processes thanks to process intelligence technology, which provides them with real-time, accurate, and comprehensive insights into their operations *(Zerfass, Hagelstein & Tench, 2020)*.

This allows marketing teams to focus on the right channels without overspending. Programmatic buying shows how ML can improve marketing adaptability to align with the evolving needs and interests of clients. From the moment in which different consumers respond to various messages across channels, some by emotion and some by logic, ML and AI can monitor customer reactions to messages and create more detailed user profiles accordingly *(Basri, 2020).*

Subsequently, marketing teams can tailor communications to users based on their preferences.
But, if the data lacks standardization and accuracy, the insights derived from it become ineffective, potentially leading AI algorithms to make decisions detrimental to marketing efforts. Before implementing AI marketing strategies, marketing teams should collaborate with data management teams and other departments to establish data cleaning and maintenance procedures (Ghimire et.al, 2020).

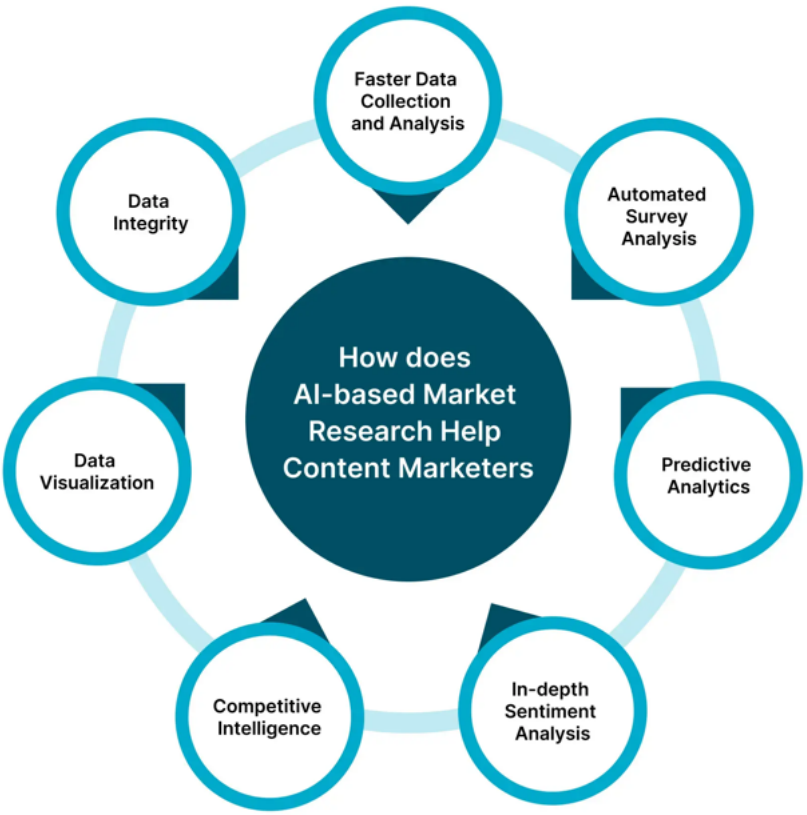
AI refers to computational technologies that can perform specific tasks typically requiring human intelligence. Databases are now a key part of the infrastructure that powers enterprise-level applications. Big data and AI have a specific link. Recent progress in AI development has largely been propelled by machine learning (ML). AI chatbots can be trained using datasets of text records from human conversations on messaging apps, allowing them to comprehend and respond appropriately to human speech.

In conclusion, AI can find patterns in massive data sets that human vision cannot detect. Computer models can identify an individual's personality traits more accurately than their friends can, solely based on which Facebook posts the individual liked.

1.4.2 AI-Based Transformations for Marketing Sectors

Different AI-based transformations have made the marketing domain more impactful and impressive. Fig.3 shows the various ways in which AI- based market research completes several intended functions for resolving the marketing issues faster in today's competitive and advanced level marketing publicizing. *(Luo, et.al,2019).*

Figure 5:



[How does AI-based Market Research Help Content Marketers[2].]

Marketers can leverage AI technology to identify trends and project them into the future. This information helps them make informed decisions about budget allocation and target audiences. Consequently, brands can reduce spending on digital advertising and focus more on high-value tasks *(Dumitriu & Popescu, 2020).* From the planning stage to the conversion and customer loyalty phases, AI plays a critical role in the success of any marketing campaign. As a result, companies that fully utilize AI will gain a competitive advantage. By examining user data and aiding marketers in interpreting user intent, AI is revolutionizing the dynamic landscape of content marketing.

AI systems are constantly working in the background of popular products and services like Netflix, Amazon, Google etc. However, in recent years, AI has made its way into marketing, assisting firms in improving every stage of the consumer experience. Furthermore, resources previously available to huge firms have become affordable and accessible to medium- and small-sized businesses. Additionally, marketers now have access to innovative tools thanks to neural networks that can improve consumer behavior analysis, create and comprehend complicated buyer categories, automate marketing campaigns, produce content, and predict sales. It is possible to handle big datasets thanks to these networks, which produce more insightful results. By seeing trends from previous initiatives, predictive analytics enables marketers to project campaign results. While neural networks are not new, more dynamic and intelligent systems are being developed as a result of the growing demand to manage Big Data *(Mgiba, 2020).*

The AI can also comprehend advertising needs and recommend a suitable target audience. The algorithms evaluate user data, including age, gender, demographics, interests, and other key information, to identify the ideal audience for a particular brand. The way people seek information online has evolved significantly, particularly with the growth of voice search devices. This additional input will help improve the precision of machine learning (ML) in the years ahead. Deep learning uses over a million data points to evaluate whether or not a prediction is valid, similar to ML models. Deep learning operates as a self-learning system, eliminating the need for human intervention and allowing immediate use of the results.

Marketing campaigns leverage various channels to promote products and services using specific themes and messages that position a brand in the market. This drives top-of-funnel activity and helps build a pipeline for the business *(Pelet, Lick & Taieb, 2019).*

Business concepts have developed from the assembly and promotion era to the connection and intelligence era. As computer science has advanced over the years, it has reshaped the concepts of ideas, innovation, and inventions. Consequently, business models continue to evolve.
The Internet of Things has revolutionized how data is managed. Besides offering broader access to consumer data, these devices also monitor and record user interactions, leading to smarter devices.

Businesses are employing IoT technology research to examine data collected from IoT devices for expansion and improvement as it advances constantly. Any firm may become more productive by

having a better understanding of its customers and market. IoT gadgets can also increase productivity in the product development process.

1.5 Challenges and Limitations of AI In Marketing

Marketing is being transformed by generative artificial intelligence (GAI), which offers hitherto unheard-of capacities for content creation, personalization, and intelligent decision-making. *(Dwivedi et al., 2023a; Dwivedi et al., 2023b; Kshetri, 2023a).* With the aid of this technology, marketers can create highly focused experiences, examine enormous volumes of data to comprehend consumer behavior, and generate content at scale automatically (*Susarla et al., 2023).* Research shows that marketing professionals are adopting GAI at a significantly higher rate, and ChatGPT and other similar products are becoming increasingly popular (The Conference Board, 2023; Bank of America, 2023). While cost can be a barrier, particularly for smaller businesses *(Warren, 2023),* the potential benefits of GAI are undeniable. This technology has the power to transform marketing efforts, enabling the creation of dynamic, data-driven campaigns that resonate deeply with target audiences.

Despite the benefits, there are challenges and limitations associated with AI in marketing. Because AI depends so heavily on data, privacy concerns are a major concern. Marketers must guarantee that client data is protected and adhere to data protection requirements such as GDPR. It's critical to be open about how data is used and to obtain the right authorizations before collecting any data (HubSpot blog on problems of AI in marketing). Furthermore, incorrect, or biased data may result in campaigns that have unsuccessful and misleading outcomes. Because AI systems can inherit preconceptions from their developers, some demographics may get excluded. (Marketing AI Institute on limitations of AI in marketing). GAI may also struggle with tasks requiring empathy, understanding emotions, or injecting creativity into marketing materials.

AI presents significant risks in the generation and editing of visual and verbal advertising content. And the impact it has on marketing outcomes and financial performance. 'Deepfakes' are a significant worry that underscores the ethical dilemmas surrounding artificial intelligence's application in marketing *(Kietzmann, Mills, & Plangger, 2021).* Additionally, AI's impact on the human touch in customer interactions is worth considering, as it may lower personalized engagement and emotional connections that humans often value.

These processes can be perceived as new opportunities for the production and editing of visual and verbal advertising content, but they also pose ethical concerns. Special attention is needed to study consumer attitudes toward AI use in marketing communications *(Esch, Cui, and Jain, 2021).*

According to empirical research, people's responses to AI-generated content differ from those to human-generated content; some respond more aloofly to AI-driven initiatives (Ahn, Kim, and Sung,

2021). These variations may vary depending on the particular marketing activity, such as creating content, using voice assistants, or looking for answers (Moriuchi, 2021). While some studies have found that AI-generated content can increase the effectiveness of communication campaigns and reduce advertising production and distribution costs, others highlight the potential for AI to introduce biases or lack creativity *(Spanos, 2021).*

The ethical considerations surrounding AI in marketing are crucial, as it can influence the development of advertising and marketing content. According to some researchers, the application of AI may bring about significant changes in the advertising industry, posing both opportunities and risks (Rodgers, 2021). Maintaining human-centric marketing methods while utilizing AI's capabilities is a fine line that needs to be carefully navigated.

It is obvious that AI will become more and more important in determining the direction of the marketing and creative industries as it develops. *(Somosi, 2022; Arango, Singaraju, and Niininen, 2023).* Further research is necessary to understand the nuances of AI's impact on marketing, including user reactions and ethical implications. This ongoing study will assist marketers in maximizing AI's potential while reducing its hazards, ultimately forming a more moral and successful marketing future.

CHAPTER 2: THE INTERACTION BETWEEN ARTIFICIAL INTELLIGENCE AND HUMAN CREATIVITY

In this chapter, I will delve into the interesting relationship between artificial intelligence and human creativity, a critical dynamic nowadays. AI is becoming more and more important in influencing creative processes in a variety of businesses as technology develops.

I begin by exploring fundamental concepts such as the nature of creativity, innovation, invention, and the distinctions between intelligence and creativity, which set the ground for looking at the relationship between AI and human creativity.

Subsequently, I discuss modern approaches to advertising, including personalized advertising, emotional appeals, and the growing use of artificial intelligence. This section explains how artificial intelligence (AI) improves advertising strategies and personalizes content to increase engagement and consumer connection.

The chapter then shifts focus to the transformative potential of creative AI for the creative industries, including content creation, information extraction, and enhancement. I investigate how AI tools can enhance human creativity in these areas, offering fresh perspectives and innovative solutions.

In addition, the chapter explores the concept of creative agencies, using Alkemy Spa as an example, and how AI is incorporated into their processes of strategy, creativity, and production, showing how this cooperation can produce creative results.

Finally, I will introduce the research question that drives this analysis, aiming to understand the full extent to which AI can serve as a catalyst for creative innovation. By examining the interplay between AI and human creativity, this chapter provides an overview of the opportunities and challenges that arise from their integration, offering valuable insights for the future of the creative industries.

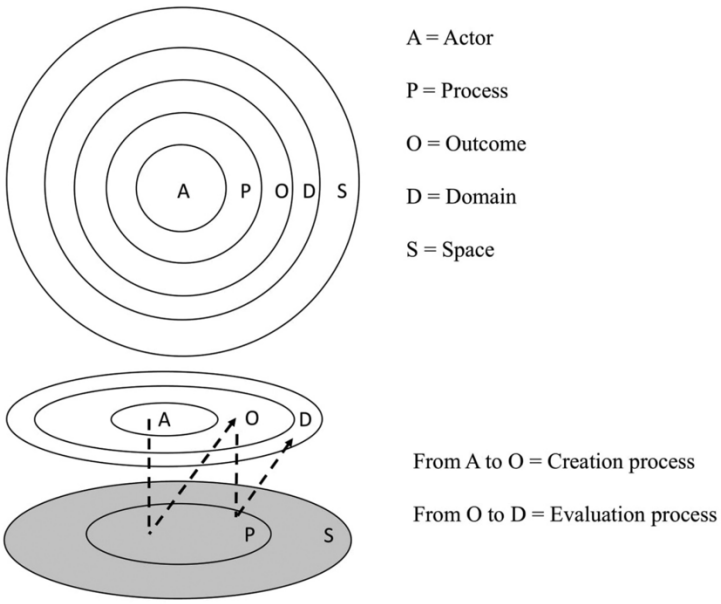
2.1 What is Creativity?

Five elements of creativity

Creativity has become a popular topic recently especially in the high-tech industries *(Proctor, 2014; Schilling, 2017).* Although there have been several definitions for the term, there still exists much confusion about what creativity means exactly *(Proctor, 2014)*.

But still in general, many definitions of creativity incorporate aspects of the following five elements: actor, process, outcome, domain, and space, particularly the first three *(Boden, 2004).* These elements are further analyzed in Figure 6, where they are represented as "beings" (i.e., actors and outcomes) or "doings" (i.e., processes) that exist in space and time.

Figure 6:



[Source: Redefining Creativity in the Era of AI Perspectives of Computer Scientists and New Media Artists, 2023]

The conventional definition of creativity includes the ideas of originality (or novelty) and effectiveness (or usefulness), according to Runco and Jaeger (2012). These terms have appeared in several definitions of creativity since 1950 (*Puryear & Lamb, 2020*). Table 1 lists a few of the commonly accepted definitions of creativity. In addition, research on artificial intelligence also frequently uses the same definitions (*Esling & Devis, 2020; Jordanous, 2016*).

Table 1: Definitions of human creativity commonly applied in AI-related research.

Definition of creativity	Reference
- Process or interaction(p) that consists of an individual's motivation, expertise, and creative thinking skills(a)	- (Amabile (1996), p. 84)
- Ability(a) to come up with(p) ideas or artifacts that are new, surprising, and valuable (o)	- (Boden (2004), p. 1)
- New combinations(p) of known ideas(o), [. . .] new ideas(o) are developed out of exploration(p) of the conceptual spaces(s), [. . .] transform[ing](p) a dimension of the conceptual space(s)	- (Boden (2004), pp. 3–6; 2009, pp. 24–25)
(a) = actor; (p) = process; (o) = outcome; (d) = domain; (s) = space	

The first element of creativity is the actor, traditionally a human being with the capacity to generate original ideas and novel behavior (*Glaveanu & Kaufman, 2019*). Creative actors have often been central in defining creativity, as seen in Guilford's (1950) description of creativity as "the abilities that are most characteristic of creative people". Research on creativity distinguishes between "big C" creativity, which focuses on exceptionally talented individuals, and "little c" creativity, which explores the everyday creativity exhibited by ordinary individuals (*Simonton, 2013; Stein, 1987*).

However, the traditional human-centric view of creativity has been challenged by theories of distributed and posthuman creativity. These perspectives highlight the interaction between humans and nonhuman agents, such as artifacts and technology, in the creative process. From this point of view, AI can be seen as an actor in creativity. The distributed perspective extends creativity beyond the human actor, distributing it among artifacts and the surrounding environment *(Glaveanu & Kaufman, 2019).*

Similarly, the posthuman perspective emphasizes the co-constitution of knowledge and creativity with artifacts and technologies (*Latour, 2013; Rose, 2017*). Ihde (1990) examines how technology mediates human experience, enabling certain actions and perspectives that would otherwise be unavailable. For instance, AI facilitates the analysis of large data sets by scientists. Additionally, Hayles's theory (2017) describes AI as a *cognizer*, an actor that autonomously pursues goals, distinguishing it from non-cognizers such as non-autonomous artifacts like pens.

Therefore, researching AI's role in creativity is crucial, as it represents a novel technology capable of making decisions and influencing the processes in which it participates (*Mazzone & Elgammal, 2019).* This shift towards considering AI as a creative actor expands the understanding of creativity and its sources in modern contexts.

The second element of creativity is the process of creation, where thoughts and actions are refined and developed to produce novel outcomes or ideas (*Lubart, 2001*). Researchers have identified key cognitive skills that are integral to the creative process. Among these, divergent thinking stands out as a critical ability, enabling individuals to imagine new ideas and explore a variety of solutions to a given problem (*Runco & Acar, 2012*). Divergent thinking is often followed by convergent thinking, a process where different ideas and solutions are evaluated and summarized into a coherent outcome.

Creativity is often framed in terms of problem-finding and problem-solving (*Runco, 1994*), with creative insight representing the moment a problem is recognized or a solution is uncovered (*Csikszentmihalyi & Sawyer, 2014*).
The integration of AI into the creative process enables tasks that require both divergent and convergent thinking, as well as problem finding and solving. This interaction can lead to a co-creative process where humans and AI complement each other by taking on distinct roles (*Kantosalo & Toivonen, 2016*). For instance, AI can assist in creative sketching tasks, providing interactive inspiration and feedback to enhance human creativity (*Lin et al., 2020*).

The third element of creativity is the creative outcome, which is the end product of the creation process. Creative outcomes can be intangible, such as theories and skills, or tangible, such as paintings, songs, and software. Margaret Boden's work (*Boden, 2004*) defines creative outcomes as being new, surprising, and valuable. Boden also categorizes creativity into psychological (P-creativity) and historical (H-creativity). P-creativity occurs when an actor produces an outcome that

is novel for themselves, while H-creativity is when the outcome is novel in the context of human history.

The evaluation of the originality and value of creative outcomes continues to be a complex and ongoing debate in creativity research. The emergence of creative AI has introduced new challenges, particularly around novelty, autonomy, and authorship. AI's creativity is often judged based on the outcomes it generates, further complicating discussions of what makes an outcome truly creative (*Browne, 2022*).

The fourth element of creativity is domain, which pertains to the specific area or cultural practice within which creative activity occurs. Csikszentmihalyi (2014) broadly defines a domain as a culture such as painting or logic, while Baer and Kaufman (2005) offer a more specific model, categorizing domains into a hierarchy: general thematic areas (e.g., arts), domains (e.g., visual arts), and microdomains (e.g., painting).

The concept of domain is a topic of ongoing debate among researchers. One point of contention is whether creativity is domain-general or domain-specific. In the domain-general perspective, creative individuals share similar abilities across various domains, suggesting that certain skills necessary for creativity, such as openness to new experiences or a willingness to take risks, can apply across different areas (*Baer, 2010; Kaufman, 2012*).

Conversely, the domain-specific approach sustains that creativity varies between different domains, and that distinct traits are more prominent in specific domains (*Baer, 2010; Sternberg, 2009*). This view implies that creative skills must be learned and cultivated within each specific domain for individuals to achieve excellence in that area (*Baer, 2013*). Additionally, some experts argue that creativity is inherent in all humans and can be nurtured through creative teaching across domains (*Lucas, 2001*).

Similarly, artificial intelligence (AI) is often developed and trained in a domain-specific manner, using data that aligns with the particular statistics and characteristics of the specific application domain under consideration (*Anantrasirichai & Bull, 2022*). This domain-specific training allows AI to excel in specialized tasks and contribute to creative processes in particular fields.

The last element of creativity is space, which refers to the physical and social environment that influences the creative process. Although space is less frequently mentioned in definitions of creativity compared to other elements, it is a fundamental aspect of how creative work is shaped and developed (*Jordanous, 2016*). Creativity is intrinsically a spatial process that involves the movement and interaction of humans and artifacts, as well as the distribution of the creative process across creators, society, and the environment (*Botella et al., 2013*).

Space is not just a passive container for creativity but a dynamic network where actors, artifacts, and environments interact during the creation process (*Hautala & Jauhiainen, 2019*). In the age of AI, space is no longer limited by physical limitations, as digital tools and virtual environments enable creative processes to transcend traditional boundaries. Moreover, research indicates that the potential for co-creativity between humans and AI technologies is greater in less controlled spaces such as robot laboratories (*Hautala & Jauhiainen, 2022*). This expanded view of space opens new possibilities for creative collaboration and innovation across diverse fields and disciplines.

2.1.1 Innovation and Invention

Schilling (2017) believes that innovation is the practical product of creativity that has been used in devices or processes. Proctor (2014) expands on this concept by suggesting that innovation should also involve a bigger shift in how technology is applied. He has further explained that there is a distinction between invention and innovation, where the former is *"the formulation of a new idea"* but the latter *"concerns the practical application of new inventions into marketable products or services" (Proctor, 2014)*. Proctor (2014) also suggests that businesses with a culture of creativity and ongoing innovation can better handle the unique and unprecedented challenges of today's business world, helping them sustain their competitive advantage. Therefore, creative thinking, innovation, and creative problem-solving abilities for all members of an organization, specifically for the management team, would be essential.

2.1.2 Creativity with Artificial Intelligence

Scientists have been interested in developing AI for decades, with the goal of making it capable of creative activities or enhancing human creativity *(Colton & Wiggins, 2012)*. With the development of neural networks and deep learning techniques, computational creativity—a branch of computer science focused on creating creative artificial intelligence—has gained popularity recently. In fact, it

is possible to distinguish between two main approaches on computational creativity: "independently creative AI" and "co-creative AI."

The first perspective on AI creativity is centered on developing systems that can emulate human-level creativity. This involves applying machine learning techniques to classify neural markers related to divergent thinking or problem-solving *(Stevens & Zabelina, 2020).* Novel neural networks are also being utilized in systems that generate various forms of art such as paintings, and sketches (Karimi et al., 2020).

The creativity of AI is typically evaluated based on the outcomes it produces, with tests like the Lovelace test being used for assessment *(Bringsjord, Bello, & Ferrucci, 2001)*. However, these tests often overlook the originality and effectiveness of AI-generated outcomes. Moreover, there is a tendency for human evaluators to be negatively biased towards AI-generated art, perhaps due to a lack of AI's understanding or the perception that creativity is exclusively a human trait *(Gioti, 2020; Ragot et al., 2020).*

The idea of independently creative AI raises concerns about a "competitive relationship" between humans and AI, as it introduces questions about whether AI could replace humans as creative actors *(Gioti, 2020)*. Although AI can simulate some of these skills, it cannot combine creative skills like humans can *(Hertzmann, 2018*) as it lacks identity, feelings, the ability to give meaning to the outcomes it creates or reflect *"the lived experience of the human" (Mazzone & Elgammal, 2019).* AI's limitations also extend to its lack of personal identity, emotional depth, and the ability to attribute meaning to its creations. These factors challenge the concept of a fully autonomous AI and the notion of an AI author, leading many to oppose the idea of AI replacing humans in creative roles *(Browne, 2022; Hertzmann, 2018).*

The second perspective of computational creativity focuses on the development of AI systems that work alongside humans in a collaborative, interactive process. Known as *"human in the loop"* co-creativity, these AI systems can learn from and adapt to real-time interactions with *humans (Karimi et al., 2020)*. This partnership allows AI to serve as either an equal creative partner or as a tool that enhances human creativity *(Chung, 2021).* Research has demonstrated that AI can provide new ideas, inspiration, and knowledge that boost human creative abilities, as well as help overcome creative obstacles such as fixated thinking and "blank canvas paralysis". *(Kantosalo & Toivonen, 2016; Karimi et al., 2020).*

Despite its potential, the field of human-AI co-creativity research remains relatively young, with most studies concentrated in art-related domains such as design, music, writing, and dance *(Lin et al., 2020)*. The definition of creativity in this area often revolves around Boden's criteria of novelty, surprise, and value, *(Canaan, et al., 2018; Gioti, 2020)* as well as Csikszentmihalyi's concept of flow, which is a state of complete concentration on the task at hand. AI can aid humans in achieving flow and finding open-ended, playful, and improvisational approaches to creative tasks *(Davis, 2013)*.

Furthermore, AI's role in co-creativity varies, including providing interactive sketches of varying similarity, presenting different perspectives on creative challenges, and supporting open-ended searching. Sometimes, all interactive processes where humans and AI influence each other during a creative task are considered as creative acts *(Fabiano et al., 2017)*.
This study brings the concept of human-AI co-creativity to the forefront of creativity research. Through the semiotic analysis of two case studies and interviews with strategy, creative and production professionals who work directly with AI technologies in the context of a creative agency *(Alkemy S.p.A.)*, it delves into the experts' perspectives on the integration of AI in their own creative processes, as well as the potential for expanding the scope and depth of human creativity with AI collaboration.

2.2 Modern Approaches to Advertising

In the modern advertising landscape, generating campaigns that resonate with people is an important goal. Nowadays, three key concepts are reshaping the advertising landscape: the use of artificial intelligence in advertising, emotional appeals in advertising, and personalized advertising.
By tailoring messaging and content to each individual's tastes, personalized advertising helps brands connect with their consumers more deeply and increase engagement. Emotional appeals use values and sentiments to connect with customers on a personal level, strengthening their associations with businesses and encouraging brand loyalty.
Simultaneously, artificial intelligence revolutionizes advertising by providing advertisers with advanced data analytics for precise targeting and real-time adjustments, ultimately transforming the way campaigns are developed, executed, and delivered.

This comprehensive examination of advertising techniques highlights the complex interaction between creativity, data-driven insights, and the human experience, shedding light on the future

course of the industry and how these methods can work together to shape impactful and innovative advertising strategies.

2.2.1 Personalized Advertisement

In the digital marketing landscape, the fight for consumer attention is relentless. Generic messages get lost in a sea of information, leading to banner blindness, and fading brand recall *(Etukudoh et al., 2024)*. By harnessing AI's analytical strength, brands can craft marketing that speaks directly to individual preferences, purchase histories, and online behavior. This shift empowers brands to create deeper connections with consumers, fostering engagement, loyalty, and a significant competitive edge *(Jiang & Wang, 2024).*

AI's ability to analyze vast amounts of customer data *(Hassan et al., 2024*) goes beyond traditional demographic segmentation, creating more specific customer segments based on purchase history, online behavior, and social media engagement. CRM data, purchase history, demographics, and past interactions provide valuable insights into customer preferences, while website behavior, browsing patterns, content viewed, and time spent on specific pages offer clues about customer interests. Social media interactions such as likes, shares, and comments reveal customer sentiment and brand affinity *(Matcov, 2024).*

By analyzing this data, AI algorithms discover hidden patterns and identify distinct customer segments. For instance, an AI system can pinpoint a group of customers who frequently buy running shoes and have recently downloaded a fitness app *(Hassija et al., 2024).* This insight allows brands to personalize marketing messages, offering targeted discounts on running apparel or showcasing training tips relevant to their fitness goals.

AI-powered personalization goes beyond static segmentation, enabling real-time personalization. Imagine a customer browsing a travel website, looking at various destinations *(Lai, 2024*). AI can analyze this real-time behavior and display personalized pop-up ads featuring special offers on hotels or flights for those specific locations. Similarly, AI chatbots on websites can personalize customer service interactions, providing tailored product recommendations or answering questions based on customers' browsing history. This real-time element significantly enhances the user experience, ensuring marketing messages are relevant and responsive to immediate needs and interests, fostering a deeper connection with the brand *(Mayo et al., 2024).*

Despite AI's potential in personalized marketing, there are concerns about OBA (Online Behavioral Advertising) methods. Boerman et al. (2017) noted that OBA uses covert methods to gather personal data, which can be unethical and detrimental as consumers may be unaware of the methods used by advertisers. Often, consumers find advertisements boring, intrusive, or irrelevant, resulting in the use of ad blockers, ad skipping, or outright ignoring them *(Mogaji & Danbury, 2017)*. This ad irritation increases skepticism, leading to greater avoidance of OBA.

However, there is evidence that advertisements targeting individuals based on their interests receive a higher level of engagement *(Mogaji, 2018)*. Brands that leverage AI's data analysis capabilities, segmentation, and real-time personalization tools can create targeted marketing campaigns that resonate with individual customers. This fosters deeper engagement, builds stronger brand loyalty, and ultimately drives business success. As AI technology continues to evolve, the possibilities for personalized marketing are limitless, and the future of marketing lies in creating genuine connections with consumers using AI's transformative potential *(Egieya et al., 2023; Okoli et al., 2024).*

However, as it was mentioned above, ethical considerations and responsible data practices will be paramount in ensuring this future is positive for both consumers and brands. Brands must prioritize transparency about how they use AI in personalization and avoid misleading customers *(McGurk & Reichenbach, 2024; Okafor et al., 2024)*. By doing so, brands can build trust and create a more positive, personalized marketing landscape for everyone involved.

2.2.2 Emotional Appeals in Advertisement

Emotionally appealing advertisements are meant to appeal to consumers' heart, making them feel special, and a part of the brand *(Mogaji et al. 2018).* Emotionally charged advertising can increase brand loyalty and make companies stand out *(Panda et al., 2020).* Advertisements incorporate emotional components such text, pictures, voice-overs, and background music to draw in viewers and spread company knowledge *(Mogaji, 2018).*

As visual clues for emotional appeals in advertising, images are essential. When it comes to conveying the message, emotionally resonant images frequently outperform words and headlines. Another crucial graphic component for generating feelings and bringing attention to advertisements in various media is color. They can take center stage in advertising and generate an emotional tone *(Mogaji, 2016).*

The text component of advertisements comprises headlines, taglines, and copy that effectively communicate the marketing message. Both positive emotions like joy or excitement as well as

negative ones like fear or guilt can be evoked by these literary elements. Similar to this, voice-overs, dialogue, and background music in commercials all support emotional appeals *(Rishi, 2018).* Advertisers frequently incorporate familiar and popular sounds to connect with customers, creating feelings of excitement, happiness, and love. Additionally, voice-overs can add complexity, ambiguity, and hybridity to audio elements, which can enhance emotional responses *(Li, 2017).*

Moreover, there is the very interesting concept of intertextual references. Intertextual references in advertising refer to the deliberate incorporation of elements from published works of art, literature, or culture into advertisements. These references serve various purposes, ranging from providing context to the ad's message to engaging and entertaining the audience by evoking familiarity or triggering recognition *(Fiske, 1989)*.

Explicit intertextual references involve direct allusions to specific works of art or cultural references, aiding the viewer in understanding the intended message of the advertisement. For example, a recent PopCorners commercial featured actor Bryan Cranston channeling his iconic Walter White character from Breaking Bad, but in a comedic situation where in the commercial, he and Jesse Pinkman are in their famous trailer, but instead of manufacturing crystal meth, they are making PopCorners snacks. This use of a well-known character explicitly references the show and its themes to create humor and promote the product.

Screenshot of the Breaking Bad: Super Bowl 2023 Commercial | PopCorners[1]

[1] Breaking Bad: Super Bowl 2023 Commercial | FULL (PopCorners) - https://www.youtube.com/watch?v=GPeezAty2u4

Implicit intertextual references, however, are more subtle and aim to stimulate the viewer's pleasure in identifying the references. These references may not be immediately obvious but enhance the viewer's experience by adding depth or layers of meaning to the advertisement. An example discussed is the Volkswagen's "The Force" commercial, aired during Super Bowl XLV in 2011, cleverly references the iconic "Star Wars" franchise, featuring a little boy dressed as Darth Vader using the Force to try and control various household objects, including a door and a dog and finally succeeds with the Volkswagen car thanks to his father who secretly “helps” him by opening the car with the car keys. The ad doesn't explicitly reference the film, but viewers familiar with the scene can make the connection, adding a layer of symbolism to the commercial's message.

Screenshot of the Volkswagen Darth Vader Commercial “The Force” (2011)[2]

Additionally, there are implicit intertexts where the reference doesn't require explicit identification by the viewer but contributes to the overall artistic intention of the advertisement. These references are used to create a contemporary advertising text with artistic intentions, enriching the ad's narrative or aesthetic appeal.

Analyzing advertisements that utilize intertextual references, particularly those drawing from canonical or lesser-known works of high art like painting or sculpture, helps to understand the motives behind such referencing processes. Advertisers often leverage these references to enhance brand perception, establish cultural relevance, and engage with the audience on a deeper level *(McQueen,*

[2] Volkswagen Darth Vader Commercial “The Force” (2011) - https://www.youtube.com/watch?v=qpL_DcT6ko8

2000). By weaving elements of art and culture into their advertisements, creatives aim to not only promote products but also to create memorable and meaningful experiences for the viewers.

2.2.3 Artificial Intelligence in Advertising

The skill to blend seemingly disparate elements of an advertisement into a cohesive whole is viewed as a form of creativity *(Chaudhuri & Singh, 2020).* As it was mentioned above in a crowded media landscape, advertisers face the challenge of creating campaigns that capture the attention of disinterested consumers. To stand out and overcome media saturation, advertisers often use personal data to precisely target customers and bypass the media cluster. The term 'media cluster' refers to the volume, competitiveness, and intrusiveness of advertisements. Creativity is key for an advertisement to stand out in this crowded environment, offering a strategic approach to creating engaging ads *(Wang, 2021).* Businesses can build and personalize advertising that emotionally connects with consumers and encourage to share them by using personal data and information gathered online.
In comparison, Aguirre et al. (2015) discovered that using more sensible and tailored data, like location, gender, and age, resulted in a decreased click-through rate. Individuals are more likely to find emotional cues appealing, such as background music, preferred colors, and well-chosen images.

Since the ability of artificial intelligence (AI) machines is to accomplish activities that they can perform better and better over time *(Williams 2018)*. AI can collect data from various sources, identify trends, and provide valuable insights. By combining big data and consumer analytics from different sources using AI, businesses can gain a deeper understanding of customers as unique individuals.

Information from social media, web and mobile analytics, media analytics, and customer journey analytics can all be gathered for data aggregation. This involves mining customer perceptions and opinions using the voice of the customer analytics and tracking individuals over time utilizing CRM and marketing system data *(Ukpabi et al., 2018).*
Consumers can provide emotional cues about themselves through a variety of means, including the music they listen to, their hobbies or interests, the celebrities they like, the places they like to vacation, and their fondness for particular pets or animals. These observations go beyond previous actions and commercials. Numerous further insights into consumer behavior are provided by big data analytics (*Mach-Król, 2021*).

AI may use this data to select a variety of creative aspects and arrange them according to the audience to produce personalized adverts that emotionally connect with consumers. The digital distribution of

these advertisements will influence programmatic advertising, which automates ad buying and sets prices using data-driven computer algorithms *(Kulbok, 2017*). Marketers can use their own data, media, and technology by utilizing programmatic advertising, which offers a single consumer perspective and a single point of media planning and buying across all digital media channels *(Jumaa, 2022).* According to Han et all. (2021), artificial intelligence (AI) can make programmatic advertising more effective, quicker, and simpler to deploy. This will guarantee that targeted ads are optimized and delivered as planned.

2.3 AI for the Creative Industries

The creative industry is undergoing a complete transformation thanks to artificial intelligence (AI), which offers fresh approaches and tools that can produce amazing outcomes. While data conformity and pattern recognition are frequently the keys to AI's success, their application in creative industries could produce innovative results. Human imagination is the source of creativity; it inspires unique concepts that occasionally deviate from commonly held beliefs. People in creative fields use their life experiences to think creatively and ask *"what if"* questions that are difficult for limited learning systems to answer.

For this reason, AI and human creativity working together could produce previously unheard-of breakthroughs and innovative works of design, art, and other creative outputs *(Anantrasirichai & Bull, 2022).*

Numerous research on the potential applications of AI in the creative industry has been conducted over the course of several decades. The technological capabilities of the time and the notion that AI could try to mimic human creative behavior were two of the limits.

AI is increasingly being linked to human creativity and artistic practices, though this association is sometimes misplaced. The technology's capabilities in areas such as seeing, hearing, speaking, moving, and writing have led to its application across a variety of fields, including audio, image, and video analysis, gaming, journalism, script writing, filmmaking, and even social media analysis and marketing *(Hildebrand 1999).*

Creativity is defined in the Cambridge Dictionary as *'the ability to produce original and unusual ideas, or to make something new or imaginative'*. As it was mentioned in the previous paragraphs, creative tasks typically demand a level of original thought, substantial experience, and a deep understanding of the target audience. In contrast, production tasks tend to be more repetitive and

predictable, making them better suited for automation by machines. For example, GumGum[3] creates a new piece of art following the input of a brief idea from the user. The model is trained by recording the preferred tools and processes that the artist uses to create a painting. The Turing test revealed that it is difficult to distinguish these AI generated products from those painted by humans.

In the next paragraphs, I will divide creative applications into two major categories: content creation and information extraction and enhancement.

2.3.1 Content Creation

Content creation is a fundamental activity of artists and designers. This paragraph discusses how AI technologies have been employed both to support the creative process and as a creator in their own right.

Image generation

AI can use specific training datasets to automatically create new digital artwork or photographs. It has been used, for example, to create fresh images of cartoon characters *(Jin et al., 2017)*, bedrooms *(Radford et al., 2016),* and celebrity headshots *(Karras et al., 2018),* another notable example is "*Théâtre D'opéra Spatial*"[4] by Jason M. Allen (Fig. 7) , which was created in 2022 using Midjourney an artificial intelligence program that turns lines of text into hyper-realistic graphics, marking a significant milestone as one of the first pieces generated by artificial intelligence to be recognized as a genuine work of art that took first place in the digital category at the Colorado State Fair.

Figure 7: Jason Allen's A.I.-generated work, *"Théâtre D'opéra Spatial"* took first place in the digital category at the Colorado State Fair.

[3] https://gumgum.com/artificial-creativity
https://insights.gumgum.com/hubfs/Art.ificial%20By%20GumGum.pdf

[4] https://www.nytimes.com/2022/09/02/technology/ai-artificial-intelligence-artists.html An A.I An A.I -Generated Picture Won an Art. Artists aren't happy.

[Source: The New York Times]

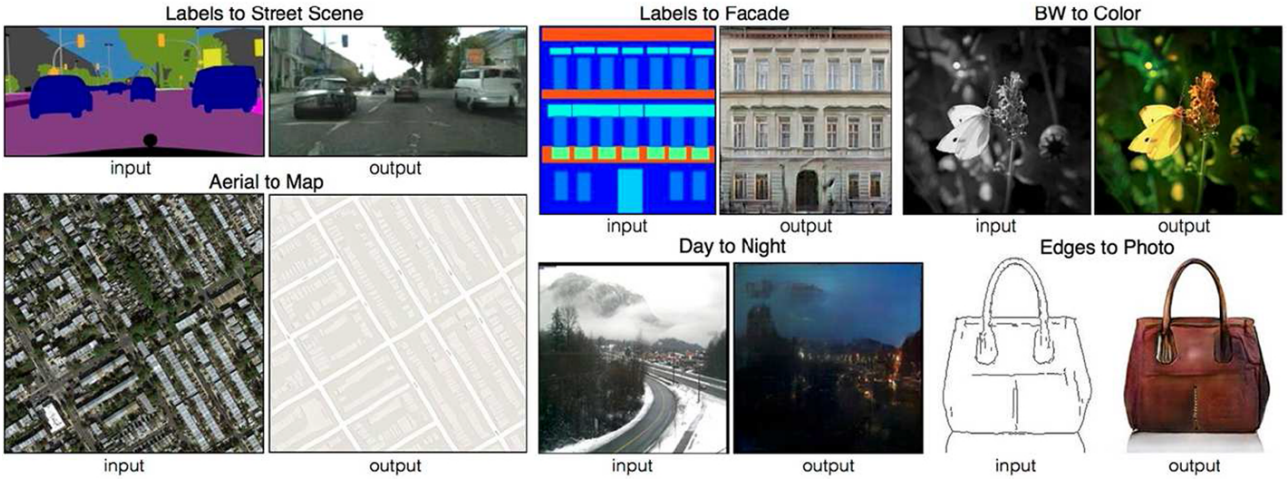
Some applications produce a new image conditioned to the input image, referred to as image-to-image translation, or *'style transfer'*. Even if the visual output looks different from the input, its semantic meaning is often the same. Stated differently, algorithms are trained to translate an input image into an output image. For example, it is possible to convert grayscale photos into naturally colored ones *(Zhang et al., 2016).*

Also, DeepArt *(Gatys et al., 2016)* combines feature maps from many convolutional layers to apply an input image with the style of a selected artist. Recurrent neural networks (RNNs) are used in a stroke-based sketching technique to train machines to draw and generalize abstract notions in a way that is similar to that of humans *(Ha and Eck, 2018).*

A Berkeley AI Research team has successfully used GANs to convert between two image types *(Isola et al. 2017)*, e.g., from a Google map to an aerial photo, a segmentation map to a real scene, or a sketch to a colored object (fig. 8). They have published their pix2pix codebase and invited the online community to experiment with it in different application domains, including depth map to street view, background removal and pose transfer. Following pix2pix, a large number of research works have improved the performance of style transfer.

Unsupervised learning techniques such as DualGAN (*Yi et al., 2017)* and Cycle-consistent adversarial networks (CycleGAN) *(Zhu et al., 2017)* have been introduced. Similar concepts explain both algorithms' operations: they translate images twice, from group A to group B and back again, and their loss function—known as cycle-consistency loss—evaluates the variation between the original image and its reconstructed counterpart.

Figure 8: Example applications of pix2pix framework *(Isola et al. 2017)*



[Source: Artificial intelligence in the creative industries: a review]

Samsung AI has shown how GANs may be used to turn portrait photos, such as the Mona Lisa, into films in which the subject seems to speak like a guide *(Zakharov et al. 2019)*. A human face can be altered using conditional GANs, which can be trained to change facial traits such beard presence, skin tone, haircut, and hair color *(He et al., 2019)* as well as age *(Song et al., 2018b)*.

Augmented, virtual and mixed reality (VR, AR, MR)

AR (Augmented Reality) and VR (Virtual Reality) use computer technologies to create a fully simulated environment or one that is real but augmented with virtual entities. By adding digital layers on top of the real environment through mobile devices, tablets, or head-mounted displays, augmented reality (AR) improves it. Conversely, virtual reality (VR) isolates the user from the real world, at least in terms of audio-visual perception, by immersing them in immersive experiences via a headset equipped with a 3D display *(Milgram et al., 1995)*.

Significant predictions have been made about the growth of AR and VR markets in recent years, but these have not realized yet[5]. This is impacted by several variables, including the price of the equipment, the accessibility of the information, and the physiological effects of "immersion," which are particularly felt over extended periods of time due to conflicting sensory interactions *(Ng et al., 2020)*. Virtual reality (VR) can simulate real workspaces to train workers on safety measures and avoid real-world consequences from potential failures *(Laver et al., 2017).*

Augmented reality (AR) may have more immediate potential for growth compared to virtual reality (VR). It has been applied in education and the creation of shared spaces for work and design, offering users enhanced 3D realism during interactions *(Palmarini et al., 2018)*. AR has also sparked interest in enriching experiences in movie and theater settings. For a comprehensive overview of current and future trends in AR and VR systems, refer to Bastug et al. (2017). Mixed reality (MR) blends the real world with digital elements, creating an overlap between the physical and virtual worlds *(Milgram and Kishino, 1994).* MR enables interaction with objects and environments from both worlds using touch technology and other sensory interfaces, merging reality with imagination for more immersive and engaging experiences.

Content and captions

There are many approaches that attempt to interpret an image or video and then automatically generate captions based on its content *(Pu et al. 2016; Xu et al. 2017b),* but AI, can also be used to produce images from text descriptions, however this is a trickier task.

GANs were utilized in early attempts to do this, like in the work of Mansimov et al. (2016), which produced indistinct foreground features but was able to generate background images with proper hues. In order to improve the diversity of generated samples and stabilize the training process of conditional GANs, Zhang et al. (2020) presented the conditioning augmentation technique. By learning to make images object-by-object, recent advances with increased complexity can produce images that look more natural *(Li et al., 2019*). However, problems still exist, like artifacts surrounding object borders and the possibility of producing improper backdrops if the text input is incorrectly formatted.

[5] https://www.marketresearchfuture.com/reports/augmented-reality-virtual-reality-market-6884

2.3.2 Information Extraction and Enhancement

AI methods based on deep learning have demonstrated significant success in recognizing and extracting information from data. Because they carry out effective statistical analysis, going from low to high levels and gradually extracting significant and representative features, successive convolutional layers are perfect for this purpose. It's often helpful to improve or modify a signal after information has been extracted from it. For instance, this might transform movements from a real animal to an animation or facilitate the interpretation of an image through modality fusion. This section looks into how AI techniques may create such information and repurpose it in different ways by using explicit information that has been collected from photos and videos.

Segmentation

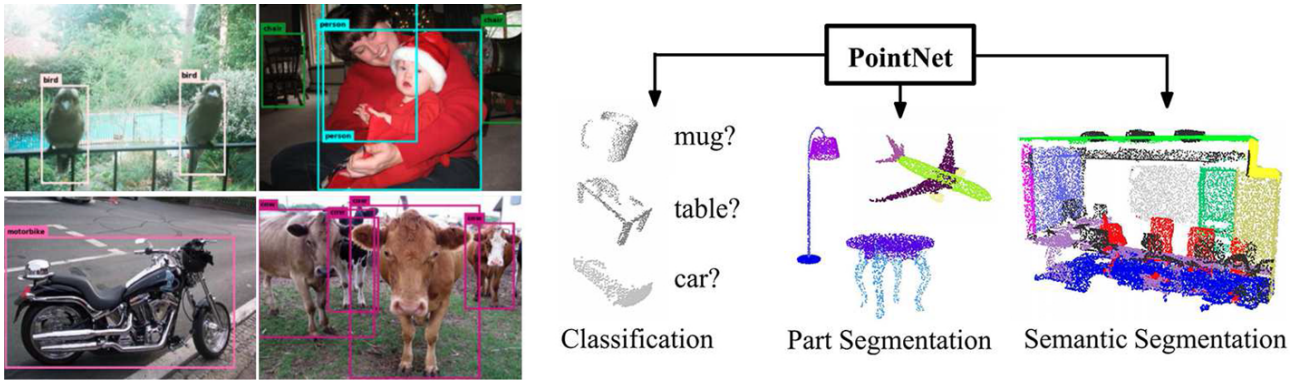
Segmentation methods are widely employed to partition a signal (typically an image or video) into a form that is semantically more meaningful and easier to analyze or track. The location and bounds of semantic objects or regions with parametric homogeneity in an image are shown by the segmentation map that is produced.

As a result, individual pixels within a region may depict recognizable objects or share traits like color, texture, and intensity. Along with other characteristics, segmentation boundaries can be used to determine an object's shape and identity. During the creative process, segmentation can be a useful technique for masking, cropping, and combining items from several sources to create a new image. In the case of video content, segmentation also allows the user to gradually alter the properties of the item or region, such as by replacing, color grading, or blurring.

Classification systems can be built on top of segmentation in order to detect or identify objects in a scene (Fig. 7). This can be compared with the way that humans view a photograph or video, to spot people or other objects, to interpret visual details or to interpret the scene. Since the criteria that define distinct objects or regions may vary to some extent, we can educate a computer to carry out a similar process, giving it knowledge about the contents and actions in the image or video. Consequently, this can facilitate data retrieval, cataloging, and classification. Semantic segmentation classifies all pixels in an image into predefined categories, implying that it processes segmentation and classification simultaneously. The first deep learning approach to semantic segmentation employed a fully convolutional network *(Long et al. 2015).* Both the U-Net design *(Ronneberger et al. 2015)* and the encoder-decoder model *(Noh et al. 2015)* were introduced in the same year. After this, Asgari Taghanaki et al. (2021) reported a variety of modified networks based on these architectures. In order to convert a natural image into a segmentation map, GANs have also been used for image translation

(Isola et al. 2017). Semantic segmentation has also been used to segment and categorize 3D scenes using point cloud data, as shown in Figure 9 (look on the right) *(Qi et al. 2017)*.

Figure 9



[Source: Artificial intelligence in the creative industries: a review]

Recognition

Due to its complexity and the abundance of annotated images accessible for deep network training, object identification has been one of the most popular AI targets in recent years. According to Redmon et al. (2016), YOLO and its variations represent state-of-the-art in real-time object tracking and detection. The frame-by-frame You Only Look Once (YOLO) system can handle video at standard rates (up to 55 frames per second at the moment). YOLO employs a multi-scale method to forecast bounding boxes, segmenting an image into several sections, and allocating probability to each one.

Speech and music recognition have benefited greatly from the application of deep learning techniques. Apps for mobile devices, such as Shazam, may recognize songs by recording a brief clip of music or sound. These applications use a spectrogram, or time-frequency graph, to build an audio fingerprint. They then look up a matching fingerprint in a database. Voice interaction is also made possible by this technology in in-car systems. Google unveiled a comprehensive visual-speech recognition system that uses long short-term memory networks (LSTMs) and spatiotemporal convolutional neural networks (CNNs) to translate lip movements in movies to word sequences *(Shillingford et al. 2019).*

For more than ten years, researchers have been studying how to recognize emotions. AI techniques have been applied to speech (e.g., tone, loudness, and tempo), facial recognition (e.g., eyebrows, nose tip, mouth corners) *(Ko 2018)*, and a combination of audio and video data *(Hossain & Muhammad, 2019)* in order to comprehend, interpret, and react to human emotions.

A further task, relevant to video content, is action recognition. This involves capturing spatio-temporal context across frames, for example: jumping into a pool, swimming, getting out of the pool. Yao et al. (2019) offer an excellent overview of the state of action recognition research at the moment. Temporal segment networks and temporal binding networks *(Kazakos et al. 2019)* are recent advancements in this subject that combine audio and visual information for better performance.

The study of body posture, hand gestures, and facial expressions in sign language recognition research involves tasks like segmentation, detection, classification, and 3D reconstruction *(Kratimenos et al. 2020; Adithya & Rajesh 2020).* These studies have implications for creative applications. Translation from spoken or written language to continuous sign language movies has also been made possible by the integration of visual and linguistic modeling *(Bragg et al. 2019)*.

2.3.3 Creative Agencies: Alkemy S.p.A.

What is a Creative Agency?

A creative agency is an organization that offers a range of marketing and advertising services to help clients achieve their goals. These agencies excel in crafting creative strategies, producing content, and executing promotional campaigns. Their services typically include advertising and brand strategy, content creation, design, web development, communications services, and more. Creative agencies also provide valuable insights and support for a brand's overall strategy.

In addition to offering diverse services, a creative agency is composed of a team of specialists, including art directors, writers, videographers, designers, and strategists, who work together to create impactful marketing campaigns. By combining the talents of these professionals, a creative agency can guide a brand's strategy and execute marketing efforts efficiently.

One of the key differences between a creative agency and other types of agencies lies in their broad approach to marketing and advertising. While other agencies may focus on a specific aspect of marketing, such as design, digital marketing, or social media, creative agencies typically encompass multiple areas, allowing them to offer comprehensive solutions to their clients.

Creative agencies play a fundamental role in helping brands succeed by providing fresh perspectives and innovative ideas. Since these agencies work with various clients across industries, they have a

deep understanding of market trends and best practices. This allows them to offer clients unique insights and recommendations that can drive successful campaigns.

By leveraging connections and creator networks, creative agencies can access expert partners for specialized services, such as video production or interactive website development. This broad network enables them to deliver high-quality content quickly and efficiently.

Another advantage of working with a creative agency is their ability to produce quality content consistently. Brands often struggle to maintain a steady cadence of content due to limited resources, but creative agencies have the infrastructure and expertise to manage high volumes of quality content.

In addition to producing exceptional work, creative agencies can also provide support during challenging times. For example, if a campaign faces unexpected difficulties, an agency can take responsibility, potentially saving the brand from negative repercussions.

Many full-service creative marketing agencies also specialize in specific industries or types of offerings, such as B2B tech or entertainment. This specialization allows them to provide tailored recommendations and strategies that cater to a client's unique needs.

In conclusion, a creative agency is a versatile and valuable partner for any brand or company seeking to enhance its marketing efforts. With their diverse skill sets and broad industry knowledge, creative agencies can help brands stand out in a crowded market and achieve their goals through strategic and creative campaigns.

Alkemy S.p.A.

Alkemy S.p.A.[6] is an Italian publicly traded company that serves as a leading example of a creative agency driving digital transformation.

Founded in 2012 by Duccio Vitali, Alessandro Mattiacci, Matteo de Brabant, and Riccardo Lorenzini, the agency has quickly become a pioneer in the industry by supporting the evolution of business models for large and medium-sized companies through digital transformation projects.

[6] https://it.wikipedia.org/wiki/Alkemy, https://www.alkemy.com/en.

Alkemy's core focus is on helping companies navigate the complexities of the digital landscape by providing expertise in consulting, data and analytics, digital marketing, brand experience, product and space design, and technology. This wide range of services allows Alkemy to deliver comprehensive solutions that drive growth and innovation for its clients.

The company's commitment to excellence has been recognized in the market. Alkemy became listed on Borsa Italiana's AIM Italia market in December 2017 and later moved to the main market, MTA, in December 2019. With its strong presence and achievements, Alkemy has become a category creator in Italy, particularly known for its "digital enabler" approach, which has set the standard in the industry.

Throughout its journey, Alkemy has expanded its capabilities through strategic acquisitions, such as Seolab Srl, TSC Consulting Srl, Biz-Up Srl, and Design Group Italia, allowing it to broaden its scope and deepen its expertise in areas such as system integration, e-commerce, and web marketing.

The company's international expansion began with the establishment of Alkemy SEE Doo in Serbia in 2016 and Alkemy Iberia in Spain in 2017. These ventures positioned Alkemy as a key player in the Balkans and Iberian markets, respectively. Alkemy further strengthened its international presence by acquiring Nunatac Srl and Ontwice Interactive Services SL.

In line with its mission to *"Enable Evolution",* Alkemy has continually evolved its services to offer omnichannel solutions and integrate cutting-edge technologies such as cloud computing. This approach has driven the company to achieve remarkable growth rates, with a CAGR of 47.8% from 2013 to 2018.

As of 2021, Alkemy had surpassed 95 million euros in revenue, demonstrating the agency's continued success. The company acquired a 51% stake in Experience Cloud Consulting S.r.l. and a majority share of Design Group Italia, solidifying its leadership in the industry.

Alkemy's commitment to sustainability is evident in its first sustainability plan, which aligns with the United Nations' Sustainable Development Goals. The plan outlines Alkemy's focus on four key areas of commitment, showcasing the agency's dedication to creating long-term value for its clients and stakeholders.

With headquarters in Milan and offices in Turin, Rome, Madrid, Belgrade, New York, and Mexico City, Alkemy's global presence continues to grow. The agency's blend of creativity, innovation, and strategic thinking positions it as a perfect example of a creative agency at the forefront of digital transformation.

2.4 Introduction of the Research Question

In recent years, the integration of artificial intelligence across various sectors has sparked widespread debate concerning its capabilities and constraints, particularly in the realms of creativity and content creation. Chapter 1 extensively examines AI's role in marketing, charting its historical journey from inception to contemporary applications. It explores AI's multifaceted nature, categorizing it into distinct types and tracing its evolution through different developmental stages. In the marketing landscape, AI has emerged as a transformative force, enabling innovative strategies and practices driven by data insights and personalized targeting. However, alongside its potential, Chapter 1 also acknowledges the challenges and limitations inherent in AI implementation, ranging from ethical considerations to technical obstacles.

Chapter 2 builds upon this groundwork by exploring the intricate relationship between AI and human creativity, especially within modern advertising and creative industries. At the heart of this exploration lies a fundamental question: What is creativity, and how does AI intersect with it? Through an analysis of contemporary approaches to advertising, including personalized advertisements and emotional appeals, Chapter 2 underscores the fundamental role that AI plays in empowering human creativity, offering new paths for innovation and experimentation. Within the creative industries, AI is increasingly being employed for tasks such as content creation, information extraction, and enhancement, blurring the lines between human and machine-generated content.

Amidst this landscape of evolving possibilities, the research question emerges as a focal point for deeper inquiry:

"How can Artificial Intelligence be utilized as a tool to empower human creativity in the generation and development of artistic and creative content?"

This question encapsulates the central premise of the study, which seeks to elucidate the nuanced relationship between AI and human creativity while acknowledging the inherent limitations of AI technology.

Then in chapter 3, by examining two commercials under a semiotic point of view, the former in which AI acts as an empowerment tool for human creativity, and the latter that represents AI as the main

creator of the campaign I aim to highlight the evident difference of quality in the output between the two campaigns, then I would like to confirm my assumptions through a series of interviews to the main strategy, creativity and production execute directors of Alkemy S.p.A. that work every day in close contact with artificial intelligence.
The research endeavors to uncover insights into the close partnership between AI and human creativity, offering a glimpse into the future trajectory of creative collaboration in the age of AI.

CHAPTER 3: ANALYSIS & METHODOLOGY

3.1 The semiotic analysis of the campaigns

In this section I would like to analyze under a semiotic approach two commercials: the "Coca-Cola® Masterpiece" campaign by Coca-Cola where AI has the role of human empowerment and the "BeRebel - l'intelligenza reale - tonno all'opera" by BeRebel a Pay-per-mile car insurance, where AI has the role of main creator of the commercial.

I have decided to analyze these advertising campaigns, because they offer valuable insights into the role of AI in storytelling. Additionally, by comparing them with in depth interviews from 3 key exponents of the Alkemy S.p.A creative sector reality, I can assess whether the perceived influence of AI in these campaigns aligns with the views and experiences of industry professionals.

I chose these specific commercials for their use and expression of Artificial Intelligence not only in their narrative but also for the message that they are trying to communicate and the overall comprehension they have of Artificial Intelligence. Starting with the Coca-Cola campaign titled "Coca-Cola® Masterpiece" I chose it as it is fundamental to my research because it demonstrates the perfect synergy between human work and Artificial Intelligence. This collaboration showcases how effectively using AI as a tool for human empowerment can create true masterpieces for iconic brands like Coca-Cola. This specific commercial helps me understand and delve deeper into how AI can become a true ally for humans.

Furthermore, Coca-Cola is considered an iconic brand, meaning that is able to intercept cultural tensions and offer symbolic solutions to its customers (Holt, 2004), which is crucial if we consider the controversies regarding AI reception. It is no coincidence that Coca-cola is taking a stand with respect to such a sensitive and controversial issue, as indeed the company has always been doing throughout history, gaining trust and respect from its consumers. Moreover, the fact that Coca-Cola is bridging the world of art and the world of magic through technological innovation, specifically through artificial intelligence, is significant especially if we consider its long-lasting relationship with

the art industry. In this case, AI does not have an explicit role in the advertising but a more implicit one, as its impact is evident in the visual quality of the advertisement therefore this campaign is important because it does not thematize the use of AI but employs it in the production process.

Regarding the choice of the BeRebel advertising campaign titled "BeRebel – l'ntelligenza reale – tonno all'opera" I decided to select it because of its use of artificial intelligence, which plays a crucial role as the actual creator of the campaign, from generating images and framing shots to writing texts. However, this campaign is not only relevant to my research due to its technical implementation of AI in campaign production but also because it addresses the broader tension about the theme of artificial intelligence. It raises problems and concerns about how AI is utilized by humans, mentioning both artificial and real intelligence. It highlights that while AI can achieve incredible goals like creating a singing tuna at the opera, real intelligence—human intelligence—is essential for solving practical problems and making important decisions in life, such as activating car insurance policies.

This advertising campaign is essential for illustrating perceptions of AI's capabilities and its role in people's daily lives, as it places satirically Artificial Intelligence characteristics in the spotlight for its ability to produce stunning images but also emphasizing its practical limitations.

Therefore, the choice of these two advertising campaigns was based on their pertinence to the RQ, and their relevance, given the significant numbers they were exposed to and the iconic status of Coca-Cola as an iconic brand. It is also grounded in how these campaigns construct a narrative about technology-mediated creativity, which is further explored though in-depth interviews, as I mentioned before. The semiotic analysis of the campaigns is crucial to understand how artificial intelligence is utilized and applied in the advertising world, helping us to identify the kinds of strategies employed by brands that are struggling to balance the time/cost savings provided by AI with more controversial issues such as the fear of replacement of humans' most creative sides. Moreover, it provides essential context to the environment in which creative industry experts operate and perceive this significant innovation.

The strategic selection of these two campaigns allows me to delve deeper into these tactics by conducting in-depth interviews to better analyze experts in the creative process within the brand experience area of the Alkemy creative agency. This approach will enable a comprehensive exploration of how AI influences and enhances creative practices in contemporary advertising.

For each campaign, I will follow the decomposition into sequences; in this way I will be able to break

down the campaign for a deep analysis. The technical breakdown sheet (*Peverini, 2012*)[7] for this exercise, it is easy to find the relevant textual units and elements. A grid facilitates comprehensive observation and documentation of all the components that strategically support the brand's operations. The commercial in question is divided into distinct sequences. A sequence is a unit of storytelling made up of several scenes joined together by a single event or piece of information. The duration and "visual column" of each scene are given, together with a detailed description of the scene's contents, the width of the frame defined, and the camera angle. It also discusses the most current tones and lighting. Since the editing, performers used, music selection, movement of the camera, dynamics regulating the many points of view, and other factors all play important roles in shaping the overall tone of ads, these factors are the subject of this study. Each segment's soundtrack must also be noted, along with any comments and an explanation of the type of sound heard. It is appropriate to take a more introspective position after analyzing the advertisement to understand how the components could both create meaning and assist to promote the product or idea.

In the next paragraphs I will do the Semiotic Analysis for each campaign.

3.2 "Coca-Cola® Masterpiece" campaign by Coca-Cola: AI as Human-Empowerment

3.2.1 The introduction of the commercial

"Coca-Cola® Masterpiece"[8] is a commercial that was created in early 2023 by the creative agency Blitzworks with creative direction by Ajab Samrai, from the OpenX unit of WPP, under the guidance of the agency David for Coca-Cola[9]. This high-profile ad that has a length of 1:52 min is part of Coca-Cola's ongoing marketing campaign that focuses on blending the brand's classic identity with modern artistic expression. The campaign aims to strengthen Coca-Cola's image as a timeless and universally recognized brand by associating it with iconic works of art and creativity. Since its release, the campaign has made a significant impact on viewers, reaching 2.7 million views, being streamed in over 50 countries, including the United States, United Kingdom, Brazil, India, and China. This

[7]Source: Peverini 2012. *I media. Strumenti di analisi semiotica*

[8] Coca-Cola® Masterpiece Youtube Adv: https://www.youtube.com/watch?v=VGa1imApfdg
[9] https://www.engage.it/campagne/coca-cola-presenta-masterpiece-lo-spot-capolavoro-per-la-nuova-campagna-globale.

widespread reach underscores the commercial's effectiveness in capturing the attention and imagination of audiences worldwide.

The commercial is visually stunning and innovative, presenting Coca-Cola as the centerpiece of various iconic works of art. Throughout the ad, a Coca-Cola bottle is integrated into paintings by renowned artists such as Edvard Munch and Vincent van Gogh. The bottle interacts with the works of art, blending seamlessly into the various artistic styles and settings, from still life paintings to portraits and landscapes. The visual transitions between scenes are smooth and captivating, emphasizing the versatility and adaptability of the Coca-Cola brand.

Screenshot of the "Coca-Cola® Masterpiece" Campaign

The ad uses a mix of animation, AI and visual effects to bring the artworks to life, creating a dynamic and engaging experience for the viewer. This approach aligns with Coca-Cola's goal of creating memorable and emotionally engaging content that resonates with a diverse audience.

The commercial "Coca-Cola® Masterpiece" showcases the innovative use of artificial intelligence in its production, enabling the creative team to achieve a seamless blend of iconic artworks and contemporary imagery.

Specifically, Coca-Cola's use of artificial intelligence in the creation and production of the "Coca-Cola® Masterpiece" campaign represents a strategic approach to enhancing creativity and efficiency

in advertising. The company's choice to leverage AI played a key role in achieving a visually stunning and engaging commercial that aligns with its brand identity and resonates with a global audience.

As it can be seen in the "Coca-Cola – Masterpiece – Making Of" [10] video explanation, first Coca-Cola utilized AI to adapt the distinct artistic styles of renowned artists such as Edvard Munch and Vincent van Gogh. AI algorithms analyzed and replicated the specific visual characteristics of each artist's work, seamlessly integrating the Coca-Cola bottle into iconic artworks. This approach paid homage to the original artists while emphasizing Coca-Cola's commitment to cultural relevance and artistic excellence.

In this case it is possible to see the adaptations of the main subject portrayed in the art piece of Stefania Tejada made in 2020 titled "Natural Encounters" into the face of the actress present in the Coca-Cola campaign.

[10] https://www.youtube.com/watch?v=-STp4lrf1WI - Coca Cola - Masterpiece - Making of

Screenshots of the "Coca-Cola – Masterpiece – Making of" video

AI also facilitated smooth transitions and visual effects, matching colors, lighting, and textures of the original artworks with the Coca-Cola bottle. This ensured a natural blend, creating an immersive viewing experience that captivated audiences.

The use of AI enabled a more efficient production process and creative collaboration. AI tools automated animation, motion graphics, and editing, streamlining the workflow and allowing the creative team to focus on artistic vision and innovation. This partnership between human creativity and AI technology resulted in a visually compelling and emotionally engaging commercial.

Coca-Cola's use of AI in the campaign highlights the company's commitment to pushing the boundaries of innovative storytelling. It is important to remember it is not a coincidence that the focal point of the campaign starts with the Coca-Cola bottle being extracted from one of the most famous Andy Warhol's painting "The Large Coca-Cola" from 1962, as there is a deep connection between Andy Warhol's art with Coca-Cola brand, in fact many of Andy Warhol's most iconic works portray the Coca-Cola bottle, encapsulating his fascination with consumer culture and mass production. In these paintings, Warhol depicted the Coca-Cola bottle, as symbol of American culture and consumerism, using his signature pop art style. By portraying the widely recognized Coke bottle, Warhol elevated an everyday object to the status of fine art, challenging traditional notions of what art could be. The repetition of the bottle in various works underscores the themes of uniformity and

mass production[11], central to Warhol's critique of modern society. These paintings and in particular "The Large Coca-Cola" that appears in the Masterpiece commercial not only reflects Warhol's artistic vision but also comments on the pervasive influence of advertising and branding in contemporary life, so by blending classic art with modern technology and given the deep relationship Coca-Cola has with art in general and in particular with Andy Warhol, the brand created a memorable narrative that showcases its product as a timeless and universal icon. This forward-thinking approach positions Coca-Cola as a leader in utilizing advanced technologies in advertising.

3.2.2 The Segmentation of Advertising

Below, it is possible to find the data sheet of the segmentation of the "Coca-Cola® Masterpiece" campaign, with all the different details on the various sections.

# Sequence	Duration	Visual Column	Soundtrack	Notes
1	**0.00 – 0.09**	- **Content description**: The commercial starts with an aerial view of an art museum rooftop. Gradually, the camera descends, taking viewers into the main area of an art gallery. Crowds of people are wondering around, admiring the artworks lining the walls and occupying the center of the room. The camera keeps going around until it finally settles on a close-up of a disinterested art student seated on a bench, eyes closed and hand sustaining his head in a gesture of profound boredom. - **Frame width**: It starts with a zoom-in on the art museum rooftop, filling the screen, then transitions in half-length shot to the main area of the art gallery. There, people are looking at the displayed artworks on the walls. The camera continues going around until it reaches a close-up shot of the student's face between seconds 0.06 and 0.09. - **Camera angle**: the sequence is shot horizontally and, a close up with a half-framed shot is preferred.	**Speech:** there is no speech. From second 0.00 to 0.01 of the commercial is possible to hear clacson horns of cars probably coming from a nearby street, that makes the viewer realize that the shot starts on the outside, then gradually as the camera immerses into the art gallery starts the background music that gives a sense of curiosity, and it is possible to perceive that the atmosphere has changed from outside to inside the gallery.	

[11] Su, D. American Consumer Culture as Reflected in Andy Warhol's "Marilyn Monroe" and "Green Coca-Cola Bottle". file:///Users/saracruciani/Downloads/American_Consumer_Culture_as_Reflected_in_Andy_War.pdf

		- **Lighting**: outside and inside the art gallery there is natural, soft light that comes from outside of the windows that gives to the art gallery a sens of quietness. The light of the sun coming from the windows is illuminating the left half of the student face; the light is slightly hot and bright. - **Color**: hot tones predominate, such as ocher and grayish that give the scene a halo of calmness as life keeps normally going. Another dominant color is the grey walls and white ceiling of the art museum, which may allude to a safe and normal place. - **Transition**: smooth as the background remains the same, it gives almost a seamless illusion.		
2	**0.09 – 0.14**	- **Content Description**: The student turns towards a group of three students sitting on a bench behind him, absorbed in drawing in their notebooks. They are visibly focused. Behind them, the teacher is busy observing their work. The camera returns to the student's face, which continues to appear bored and lacking inspiration to start his drawing. After the student sighs and rubs his eyes, on the other side of the room to his right, a painting begins to be glimpsed, taking center stage in the frame. - **Frame width**: close up on the student face while he looks back (0.09 - 0.10), followed by a full figure of the three students and the professor (0.10 - 0.11), and then we go back to the close up on the student face (0.12 - 0.13). Next, we see a background shot to anticipate the next shot of the first painting hanging on the opposite wall, the last frame is a close up on the painting (0.13-0.14). - **Camera angle**: the sequence is shot horizontally. The student is shot from a frontal angle and side angle (0.12-0.13). - **Lighting**: we are inside the gallery; therefore, there is natural, bright light illuminating the faces and the paintings; the light is slightly cool and opaque. - **Color**: hot tones predominate, such as red and orange de that give the scene a halo of relax and calmness. Another dominant color is the white and grayish background which may allude to a safe place. - **Transition**: the transitions happen from the boy turning back then directly to the students. Cut. The face of students from a side angle and from his side the camera transitions in the back starting to point at the first painting hanging on the opposite wall.	**Speech:** there is no speech. Background music plus the sound of the crowd of people in the gallery	
3	**0.14 – 0.24**	- **Content description**: The sequence begins with a frontal shot of a Divine Idyll artwork titled “Aket” made in 2022 that starts to come to life by blinking its eyes (0.14-0.15) and looking around after noticing the student's lack of inspiration. Shifting its gaze to the right, it notices that the teacher is carefully examining the progress of the three students the boy was looking at earlier (0.16-0.17). At that point, the camera returns to the painting, which leans out of its frame with the arm beginning to stretch towards another wall (0.19-0.21). The hand reaches Andy Warhol's artwork (1962) titled "Large Coca-Cola" and starts to grab it from its frame (0.22-0.24). - **Camera angle**: Across the entire sequence that is shot horizontally, there's an extreme close-up on the face of the painting (0.15-0.16), then it switches to an American plane depicting the two students from before with the teacher behind them, carefully inspecting their work and expressing a faintly approving expression. The camera returns to the painting, which begins to lean off its frame. As this happens, the camera angle shifts from a frontal view to a side view, then ends up behind the arm extending from the painting reaching towards the opposite wall (0.18-0.21). The camera follows the painting's arm from behind as if we're now viewing the scene through the painting's eyes. Once the arm reaches the opposite wall, it goes towards Andy Warhol's painting, and the angle returns to frontal to frame the hand of the first painting	**Speech:** there is no speech. Background music starts to be compelling.	

		attempting to enter Andy Warhol's frame to grab the Coca-Cola depicted at its center (0.22-0.23). - **Lighting**: Again, the light is natural and soft because everything is happening in the art gallery, where the light comes from the windows. - **Color and Light**: Again, soft and hot tones predominate, such as green and grayish, orange, red, violet and ocher. Given by the bright light gives the scene a slightly sparkling halo. Another dominant color is the white background and clear boundaries of the Coca- Cola bottle in the Andy Warhol masterpiece. - **Transitio**n: The camera closes up on the face of the painting(0.14-.016) and then transitions directly on the faces of the students and the professor (0.17- 0.18) then the transition goes back directly on the painting that starts to lean off the frame (0.18-0.20) at that point the camera follows the movement of the arm of the painting taking the point of view of the painting (0.20-0.22) as the arms goes toward Andy Warhol painting the camera follows its movement and that it transitions back with a clear cut on a frontal angle of the hand grabbing the Coca – Cola bottle (0.22-0.24).		
4	**0.24-0.30**	- **Content Description**: The painting's hand grabs the Coca-Cola bottle from Andy Warhol's painting, which as soon as it exits the frame, begins to change its texture into a multitude of styles, shapes, and colors characteristic of the painting that grabs it (0.25-0.26) and hurls it towards a third painting (0.29-0.30). This third painting is Joseph Mallord William Turner's 1805 artwork titled "The Shipwreck". All of this happens while the student blinks (0.27-0.28). - **Frame width**: The entire sequence is shot horizontally, beginning with a close-up on the hand of the first painting pulling out the Coca-Cola bottle from its frame. The close-up continues on the bottle, which starts to change its texture and colors, adapting to those of the painting that grabbed it. Meanwhile, a close-up appears on the student's face, hinting at a blink (0.27-0.28), and then it switches to a side shot from behind the bottle as it is thrown into the air towards a third painting (0.29-0.30). - **Camera angle**: Horizontal, alternating extreme close ups and side shots of the Coca- Cola bottle and the painting that throws it. - **Color and Lighting**: Again, soft, and hot tones predominate, such as green and grayish, orange, red, violet and ocher. Given by the bright light gives the scene a slightly sparkling halo. - **Transition**: There are no particular transitions.	**Speech:** there is no speech. Background music	
5	**0.30-0.38**	- **Content description**: The sequence begins with a shot of William Turner's painting titled "The Shipwreck," where the bottle thrown from the first painting arrives. The Coca- Cola bottle begins to change color and texture, adapting to the style of the painting itself when caught by the sailor's hand atop the sail (0.30-0.32). The sailor then drops it into the hands of one of his companions (0.32-0.33), who, while they are navigating through the storm (at this moment, the observer is immersed in the painting itself and sees the ship being tossed by a real storm), in turn throws the bottle out of the frame of the painting (0.35-0.37), passing behind the professors back projecting it into the art gallery. Meanwhile, there is a shot of the three students drawing while in the background, the painting in question behind them came to life (0.34-0.35). As the bottle starts flying again after being launched by the second sailor, it crosses from wall to wall throughout the art gallery until it is about to intercept a fourth painting (0.37-0.38). - **Frame width**: The sequence begins with a close-up on the painting "The Shipwreck," then it shows the bottle landing in the sailor's hand with a side shot of the bottle and the sailor's arm in the	**Speech:** there is no speech. We can hear the sailor's laugh when grabs the bottle of Coca – Cola. It is also possible to hear the Coca-cola while it's been thrown. Background music is mixed with the sound of the storm and the sea.	

		foreground (0.30-0.31). Then the shot moves into the painting like a full immersion, where the sailor with the bottle in hand is seen from top to bottom while passing the bottle to his companion (0.32-0.33). Cut. An American shot shows the students drawing, with the painting that has come to life in the background (0.33-0.34). Cut. The view is now behind the sailboat, and the second sailor is seen throwing the bottle out of the frame in front of him (0.35-0.37). The bottle exits the painting, and in a close-up on the teacher's face, it brushes past her shoulders, heading towards another painting hanging on the opposite wall (0.37-0.38). - **Camera angle**: Horizontal, alternating extreme close ups and side shots of the Coca- Cola bottle and the painting that throws it. - **Color and Lighting**: Cool, and cold tones predominate in this part of the commercial, such as dark blue, grey, and dark brown, violet and ocher. This color resembles the atmosphere of the storm during the night as the light is no bright but, on the opposite, there is no direct light in this part of sequence with on expectation in the moment when the sailor throws the bottle out of the frame of the painting. - **Transition**: There are many transitions the first one is when the Coca – Cola bottle touches the sailor's hand and take the texture and style of the whole painting, subsequently we fall in the painting and then it switches outside again		
6	**0.38-0.42**	- **Content description**: The Coca-Cola bottle flies into the hands of the woman depicted in Vikram Kushwah's painting (2012) titled "Falling in Library," and as soon as it touches her hands, it turns into glass. Subsequently, the woman drops the bottle down into the hand of another painting. - **Frame width**: horizontal, alternating extreme close ups and side shots of the Coca- Cola bottle in the hands of the woman in the frame before she let it fall into the hand of another artwork. - **Camera angle**: Frontal, shot horizontally. - **Color and lighting**: Neutral colors are prevalent, particularly black of the inside of the library and white of the papers and the pattern of the dress of the woman. - **Transition**: There is a transition from outside of the "Falling in the Library" artwork and being actually in the frame. And another one when the bottle touches the woman hands and becomes glassy.	**Speech:** there is no speech. We can hear the bottle of Coca – Cola when it turns into glass as soon as it touches the woman's hand. It is also possible to hear the Coca-Cola while it's been thrown. Background music	
7	**0.42-0.45**	- **Content description**: In this sequence, the Coca-Cola bottle lands in the hand of one of the protagonists in Fatma Ramadan's artwork from 2021 titled "The Blow Dryer," and changes once again its texture, resembling the one of the main characters of the artwork who then tosses it upward in the direction of "The Scream" by Edvard Munch. - **Frame width**: The sequence continues with a frontal shot of the Coca-Cola while falls and its grabbed. - **Camera angle**: Fully shot horizontally - **Color and lighting**: Hot soft colors are predominant. - **Transition**: There is no transition	**Speech: T**here is no speech. It is possible to hear the Coca-Cola while it's been thrown. Background music	
8	**0.45-0.52**	- **Content description**: After being thrown, the Coca-Cola bottle reaches the frame of Munch's (1895) artwork titled "Scream", within which the main character grabs it and examines it. Meanwhile, after each landing, the bottle takes on the stylistic characteristics of the painting where it lands. In the meantime, the scene is observed by the protagonist of the adjacent painting titled "You Can't Curse Me" by Wonder Buhle (2022), who calls out and attracts attention with a whistle to have the bottle thrown to him.	**Speech:** there is no speech. It is possible to hear the Coca-Cola while it's been thrown, the moment of exclamation of the "scream" and the whistle of the Buhle's painting protagonist. Background music blends with the other sounds.	

		Then the bottle is thrown from Munch's “Scream” into Buhle's painting, and as soon as it touches the hand of the protagonist boy in the painting, it takes on the style of the painting itself. - **Frame width**: The sequence begins with a close-up on the Coca-Cola bottle landing in the hand of the "Scream", followed by an American plane framing the " Scream" with the bottle in hand as it exclaims in astonishment. Cut. The next scene features an American plane of the protagonist of Buhle's artwork, next the frame widens to include both Munch's and Buhle's paintings in the picture, with the protagonist of Buhle’s painting leaning out of his frame while whistling to the "Scream" to toss him the Coca-Cola bottle. -**Camera angle**: The sequence is shot horizontally, and there are some close ups on the Coca-Cola bottle. - **Color and Lightning**: The colors are neat and tend to be red and dark blue resembling the ones of the “Scream”. - **Transition**: There is the Coca-Cola texture transition when it touches the “Scream” hand.		
9	**0.52-1.03**	- **Content description**: At this point, the protagonist of Buhle's painting grabs the Coca-Cola bottle and, leaning out of his frame, tries to find an optimal direction to throw it. However, realizing it's not comfortable enough, he turns back and launches himself into his painting, dematerializing into a thousand pieces and forms before landing inside Van Gogh's famous 1889 painting titled "The Bedroom (the bedroom in Arles)". As the protagonist lands on the bed, he stares at the Coca-Cola bottle in his hand, watching it slowly adapt to the style and characteristics of Van Gogh's painting. At this point, the boy rises from the bed with the Coca-Cola bottle in hand and heads towards the frame of Van Gogh's painting. Meanwhile, the teacher passes by Buhle's painting and notices the absence of the protagonist in the center of the frame. The shot then returns to the protagonist of Buhle's painting inside the frame of Van Gogh's painting, about to throw the Coca-Cola bottle. After being thrown, the Coca-Cola bottle is seen flying, and there is also a shot of the student still with his hand sustaining his face with his eyes closed, while in the distant background, the flying bottle is visible after being thrown. - **Frame width**: The sequence begins with a frontal close-up on the Coca-Cola bottle and the hand of the protagonist from Buhle's painting leaning out of the frame. Cut. The shot transitions from an American shot to a background where the protagonist is seen trying to throw the bottle but is uncomfortable. The framing changes, and the protagonist launches himself into the painting. The scene is depicted from an aerial point of view, showing the protagonist falling downwards, dematerializing until he lands on his back on the bed. At this point, the shot changes to a three-quarter profile shot, showing the protagonist looking at his hand with the Coca-Cola bottle, which begins to adapt to the style and characteristics of Van Gogh's painting. The shot changes again as the boy rises from the bed and is captured in full standing in the room as he advances towards the frame. There is a transition outside the frame to an American shot of the teacher seen from the side, observing Buhle's painting and noticing the absence of the protagonist in the center of the frame. The shot then returns frontally but frames the back of the protagonist from Buhle's painting as he throws the Coca-Cola bottle. Cut. An American shot shows the student supporting his face with his hand, with the Coca-Cola bottle flying in the background behind him. - **Camera angle:** The sequence is shot horizontally; it is also plenty of frontal and side shot and occasionally there are some areal views (0.54-0.56). - **Color and lightning**: There are several tonalities in this sequence, but in the first 2 seconds (0.53-0.55) the tones of dark blue, light blue, red, violet, black are prevalent as they represent the moment in which the boy from the Buhle’s painting dematerializes himself jumping from one painting to another. Then when he lands in the	**Speech:** there is no speech. It is possible to hear the Coca-Cola while it’s been thrown, the moment of exclamation of the Buhle’s painting protagonist when he lands in the Van Gogh bedroom. Background music blends with other sounds.	

		Bedroom of Arles the prevalent colors are orange, yellow, ocher deep red, brown, dark and light red. That marks the change of painting. The light is neutral. - **Transition:** The sequence is full of transitions starting with the boy that throws himself in the painting and starts to fall and lands in the Van Gogh's bedroom. And then he launches the Coca – Cola bottle out of the frame.		
10	**1.03-1.09**	- **Content description:** After the boy from Buhle's painting throws the Coca-Cola bottle out of Van Gogh's painting frame, the student is framed with his head resting on his hand, and in the background, the Coca-Cola bottle flying behind him is noticeable. Meanwhile, the bronze statue of Artemision, dating back to 460 BC and whose artist is unknown, comes to life and leans forward to grab the Coca-Cola bottle just before a museum guard turns around to check on it (1.04-10.05). As soon as the guard looks, he turns back to continue his patrol shift. The bronze statue then throws the Coca-Cola bottle again, which has now turned into bronze, and the bottle is seen flying through the art gallery. - **Frame width**: The sequence begins with a rear shot of the boy from Buhle's painting throwing the Coca-Cola bottle out of Van Gogh's frame, then it switches to a close-up shot of the student, captured from the waist up, with the Coca-Cola bottle flying behind him towards the Artemision bronze. After that, the Artemision bronze is framed grabbing the Coca-Cola bottle with a top-down shot of the statue in the foreground, immediately followed by a shot of it together with the police officer in a simple horizontal framing. Then, the close-up returns to the face of the statue as it throws the Coca-Cola bottle. The bottle is then captured in close-up as it flies in the air. - **Camera angle:** The sequence is mainly shot horizontally; close ups and side shots are preferred. - **Color and Lighting**: Colors are neutral, and the light comes right throw the windows illuminating the bronze. - **Transitions**: There are no important transitions	**Speech:** there is no speech. Background music blends with other sounds.	
11	**1.09-1.21**	- **Content description**: As the Coca-Cola bottle (made of bronze) flies and is about to hit the ground, the woman from Stefania Tejada's 2020 painting titled "Natural Encounters" notices it and jumps out of her frame to run and catch it before it touches the ground. She is seen propelling herself off the wall and leaping into the air just to hit the bottle with her hand, causing it to instantly stop being bronze and redirect its trajectory towards another frame. - Frame width: The sequence begins with a close-up on the bottle flying through the air about to hit the ground. Then there's a panoramic shot panning from left to right to frame the "Natural Encounters" painting, inside of which there is a super close-up on the woman's face, showing a surprised expression as she sees the bottle about to fall. Then, with a rear shot, she is seen jumping out of her frame and propelling herself into the air to catch the bottle. While in the air, the woman is captured rotating from bottom to top and then sideways as she grabs the bottle, with an extreme close-up on her hand with the bottle losing its bronze shell and turning into glass before being redirected. Immediately after, there is a shot of the woman from above dropping the bottle, captured from behind as it flies into another frame. - **Camera angle**: The sequence is shot horizontally; it is also plenty of frontal, side and rear shots and one main aerial view shot. - **Color and Lightning**: There is a natural light filtering from the windows that illuminates the bottle as it flies with the girl. The predominant colors are green, yellow, black and brown. - **Transitions:** It is possible to see a transition entering the frame of "Natural encounters" and another one when the woman jumps off	**Speech:** there is no speech. It is possible to hear the sound of the bottle that cracks while transitioning from bronze to glass. Background music blends with other sounds.	

		the frame. Also, there is a transition when the bottle shapes back into glass from being made of bronze as the woman touches it.		
12	**1.21-1.27**	- **Content description**: The Coca-Cola bottle ends up in Hiroshige's (1857) artwork titled "Drum Bridge and Setting Sun Hill" and starts rolling on the expanse of snow depicted in the painting until it falls into the frozen lake. At that point, as it sinks, a hand emerges from the water and grabs it. - **Frame width**: The sequence begins with an extreme close-up on the Coca-Cola bottle, which, in proportion to the painting, gives the impression of being huge compared to the people depicted in the artwork. After it finishes rolling, it is depicted again with an extreme close-up as it sinks into the lake. At that point, a frontal shot appears with the hand reaching for the Coca-Cola. - **Camera angle**: The sequence is shot horizontally; frontal shots and close ups are preferred. - **Colors and Lighting**: The prevalent colors are white, black, red and dark blue that give the idea of cold and snowy. - **Transitions**: There are no transitions	**Speech:** there is no speech. It is possible to hear the sound of the bottle that lands on the snow and starts rolling down. Background music blends with other sounds.	
13	**1.27-1.34**	- **Content description**: The hand of "Girl with a Pearl Earring," an artwork by Johannes Vermeer from 1665, takes the Coca-Cola from Hiroshige's painting and brings it into its frame. Then, it uncaps the Coca-Cola bottle and places it on the bench next to the student. - **Frame width**: The sequence begins with a close-up on the woman's hand as she takes the Coca-Cola bottle from Hiroshige's painting and brings it into her frame. Then, there's a frontal shot of the woman's frame with her in the center, opening the Coca-Cola bottle, depicted with an extreme close-up of the opening gesture. At that point, there's an extreme close-up side shot of the student's face as he hears the sound of the Coca-Cola being opened, and then the woman's hand placing the Coca-Cola on his bench is seen in a frontal shot with a moving background. - **Camera angle**: The sequence is shot horizontally; frontal shots and close ups are preferred. - **Coloring and lightning**: The prevalent colors are dark brown, blue, white and red. - **Transitions**: The only transition is when the coca cola bottle changes its texture into the one of the Woman with the pearl earring painting.	**Speech:** there is no speech. It is possible to hear the sound of the bottle that opens up. Background music start to fade out	
14	**1.34-1.44**	- **Content description**: The student turns and notices the opened Coca-Cola next to him, immediately grabbing it with an expression of happiness and joy. He then begins to drink it and shortly after starts drawing on his sheet, which until then had been empty. At that point, the teacher approaches him to examine his work, and after observing his sheet for a moment, she gives him a look of approval and satisfaction for the student's work. - **Frame width**: The sequence begins with a frontal shot of the opened Coca-Cola, and the student, noticing it, smiles and grabs it.	**Speech:** there is no speech. It is possible to hear the student drinking up the Coca-Cola and then drawing on the paper. Background music is very low.	

		Then, a side shot appears, depicting a close-up of the student while drinking the Coca-Cola, followed by an extreme close-up of his hand as he draws shapes on his sheet. Then, a frontal shot/American plane shows the student presenting his work to the teacher, who gives him an approving glance. - **Camera angle**: The sequence is shot horizontally; frontal and side shots and close ups are preferred. - **Colors and Lighting**: Light and colors are very natural, the predominant ones are brown, black and red, plus the white of the paper and the background. - **Transitions**: There are no transitions.		
15	**1.44-1.52**	- **Content description**: The sequence begins with the student turning his gaze towards the woman with the earring in a gesture of understanding and gratitude. The woman with the earring looks at him, winks, smiles, and then returns to her natural pose. The student smiles back at her, and then the Coca-Cola logo with the slogan "Real Magic" appears, closing the commercial. - **Frame width**: The sequence begins with a side shot of the boy turning his gaze towards the woman with the pearl earring. Immediately after, she is framed with a side shot as she looks at him, winks, and smiles before returning to her pose. At that point, a three-quarters shot of the student smiling in her direction is shown, and then he returns to look at his drawing. Finally, the Coca-Cola logo enters the center of the screen with the slogan "real magic" underneath. - **Camera angle**: The sequence is shot horizontally; frontal and side shots and close ups are preferred. - **Colors and lighting**: Light and colors are very natural, the predominant ones are brown, black and red, plus the white of the paper and the background. - **Transitions:** There are no transitions.	**Speech:** there is no speech. It is possible to hear the wink of the woman with a pearl earring. Background music stops.	

3.2.3 Commercial analysis

As anticipated, semiotic analysis involves the decomposition of the spot into sequences. The commercial is set in an art museum, where we see an art student sitting on a bench, seeking creative inspiration for one of his drawings. What makes this commercial really unique is that it brings paintings to life, it almost seems as if the Coca-Cola bottle, passing through various art-infused universes, becomes a bearer of inspiration.

They start passing around a Coca-Cola bottle extracted from an Andy Warhol painting until it reaches the student. As soon as the student finds the opened Coca-Cola bottle next to him, he drinks it and starts drawing. In this compelling and thought-provoking advertising campaign the goal of this commercial is to celebrate art itself while also demonstrating how Coca-Cola serves as an enabler of inspiration and a stimulant for creativity.

In *sequence 1 (0.00 – 0.09)* as the commercial kicks off by showing the viewers the roof top of the art gallery from above, then it zooms in, revealing the interior of the gallery. Inside, crowds of people are strolling around, checking out the artworks on display. The camera moves around until it focuses on a particular scene: a bored-looking art student seated on a bench. He's sitting with his eyes closed and his hand keeping his head up, clearly uninterested in what's around him. Meanwhile, the gallery is full of soft, natural light coming in through the windows, giving the whole place a serene vibe. The sunlight beams down, casting a warm glow on one side of the student's face, adding a touch of brightness to the scene, keeping the atmosphere very relaxed.

Figure 10: Frame from sequence 1

In *sequence 2 (0.09-0.14)* As the student looks around, he notices a group of classmates focused on their drawings on a nearby bench. Their intense focus is evident, with their eyes fixed on their notebooks while the teacher stands behind them, observing their progress. Despite the scene unfolding before him, the student's expression remains unchanged, still reflecting his boredom and lack of inspiration for his own drawing. With a sigh and a tired rub of his eyes, he shifts his gaze towards the opposite side of the room. There, a painting slowly becomes the focal point of the view. Inside the gallery, natural light fills the space, casting a bright and slightly cool glow on the faces of the students and the paintings alike. Warm tones of red and orange dominate the scene, transforming it in a sense of relax and tranquility. Against a backdrop of white and grayish tones, the gallery gives an aura of safety and comfort, inviting the student to find inspiration within its walls.

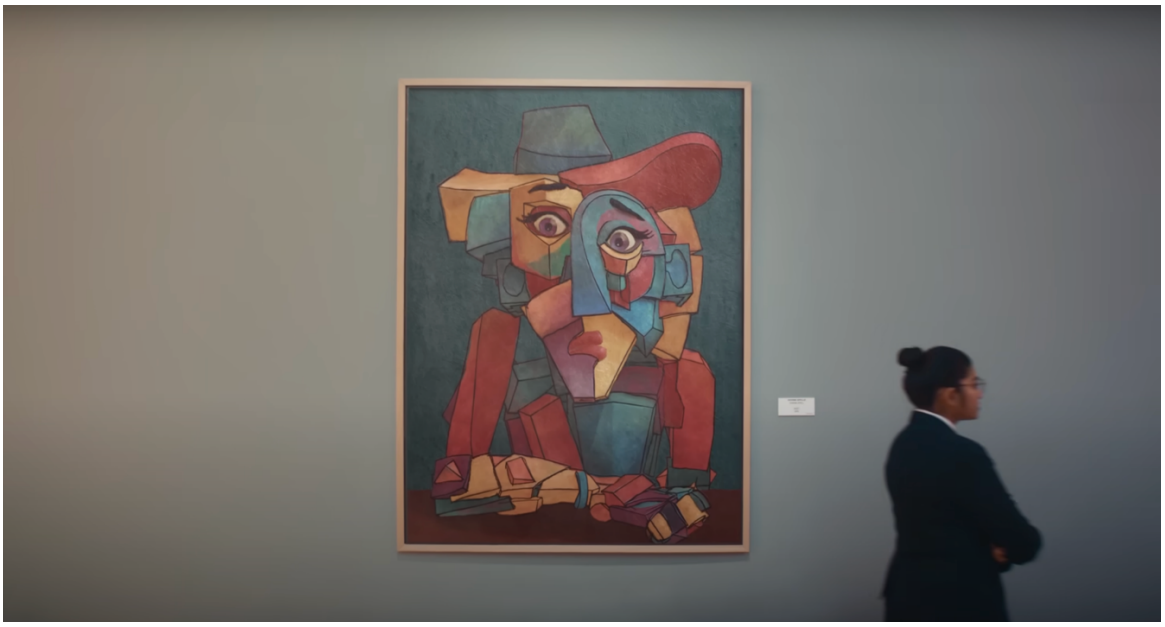


Figure 11: frame from section 2

S*equence 3 (0.14-0.24)* begins with a frontal shot of the Divine Idyll artwork titled “Aket”, created in 2022, seemingly coming to life. With a blink of its eyes and a curious glance around the room, it notices the student's evident lack of inspiration. Its gaze then shifts to the right, where the teacher attentively observes the progress of the three students that the student was looking at before, this scene catches the “Aket” attention. After a second the painting leans out of its frame, with its arm extending towards another wall. With high fluidity, the hand reaches for Andy Warhol's iconic artwork "Large Coca-Cola", created in 1962, and begins to pull it from its frame. In this sequence, a natural light filters through the windows, casting a soft and gentle glow over the unfolding actions. Soft and warm tones dominate the scene, from shades of green and grayish tones to vibrant orange, red, violet, and ocher shades, accompanied by the luminous quality of the light.

Figure 12: frame from section 3

In s*equence 4 (0.24-0.30)* as the Divine Idyll artwork's hand grabs the Coca-Cola bottle from Andy Warhol's iconic painting, a sudden transformation begins to happen. Exiting the frame, the bottle undergoes a multitude of changes, changing its texture, style, and color palette to mirror the characteristics of the painting that has taken hold of it. With a dynamic motion, the transformed bottle is launched by the Aket towards a third painting, Joseph Mallord William Turner's dramatic 1805 masterpiece, "The Shipwreck". Meanwhile, the student blinks, seemingly unaware of the things that are happening before him. The sequence is like a colorful dance where each painting's special style mixes together, making an interesting show of colors, shapes, and textures.

Figure 13: frame from section 4

Sequence 5 (0.30-0.38) begins with a shot of William Turner's painting, "The Shipwreck", as the Coca-Cola bottle thrown from the previous painting arrives within its frame. As it lands, the bottle undergoes the same transition of when the Aket touched it in the first place taking out of tis frame, it starts changing color and texture to blend seamlessly with the style of Turner's artwork. Captured by the hand of a sailor atop the boat, the bottle is then passed to another crew member while in background of the painting is depicted a strong storm. Meanwhile, the observer that is drawn into the painting, assist to the scene from the back of the characters looking at the ship being tossed by the storm. Every time that the bottle is launched, the scene shifts, crossing from wall to wall within the art gallery until it is intercepted by a fourth painting. Throughout this dynamic sequence, cool and cold tones dominate, also tones of dark blue, grey, and dark brown, along with hints of violet and ocher.

The colors used reflect the chaotic atmosphere of the stormy night in Turner's painting, with dim lighting adding to the feeling of tension and mystery.

Figure 14: frame from section 5

In *sequence 6 (0.38-0.42)* The Coca-Cola bottle continues its journey through the art gallery, after being launched from “The Shipwreck” now lands in the hands of the woman depicted in Vikram Kushwah's painting, "Falling in Library", created in 2012. As the bottle makes contact with her hands, the usual texture transformation starts happening, turning it into delicate glass. With a graceful gesture, the woman then releases the bottle, making it fall into the hands of another painting. In this sequence, neutral colors dominate the scene, evoking a sense of tranquility and introspection. Inside

the library, the colors are dark, with black contrasting against the bright white papers scattered around and the detailed pattern on the woman's dress. This subtle mix of colors creates a mood that draws you into the calm yet mysterious atmosphere of the art gallery.

Figure 15: frame from section 6

In *sequence 7 (0.42-0.45)*, the Coca-Cola bottle after falling from the hands of the woman of the “Falling In Library” frame is cached by the hand of one of the central figures depicted in Fatma Ramadan's evocative artwork, "The Blow Dryer", created in 2021. As the bottle touches his hand, once again it adapts its looks, mirroring the texture and characteristics of the “The Blow Dryer” painting. As the bottle is launched up, it sails through the air in the direction of "The Scream" by Edvard Munch. Throughout this dynamic exchange, hot and soft colors dominate the scene, infusing it with warmth and vibrancy. These tones, going from reds and oranges to pastels, create in the sequence a sense of energy and intensity, drawing viewers deeper into the narrative.

Figure 16: frame from section 7

As *Sequence 8 (0.45-0.52)* begins, the Coca-Cola bottle is launched towards the frame of Edvard Munch's iconic artwork, "Scream", dating back to 1895. As the bottle approaches the painting, the central figure reaches out and takes the bottle, examining it with a curious gaze, as the bottle starts transforming itself, adopting the stylistic characteristics of the painting in which it lands. Meanwhile, the adjacent painting, "You Can't Curse Me" by Wonder Buhle, made in 2022, offers a parallel perspective. The protagonist of this painting, a boy, observes the scene, and calls out attracting the attention of the “Scream” with a whistle, asking for the bottle to be thrown to him. As it happens in each sequence, the bottle is launched from Munch's "Scream" into Buhle's painting, where it is caught by the boy. Upon contact, the bottle seamlessly assimilates into the style of Buhle's artwork, it blends right in with its bright colors and design. The colors stay clean and vivid, with shades of red and dark blue that remind of the strong feelings in Munch's famous painting, "The Scream."

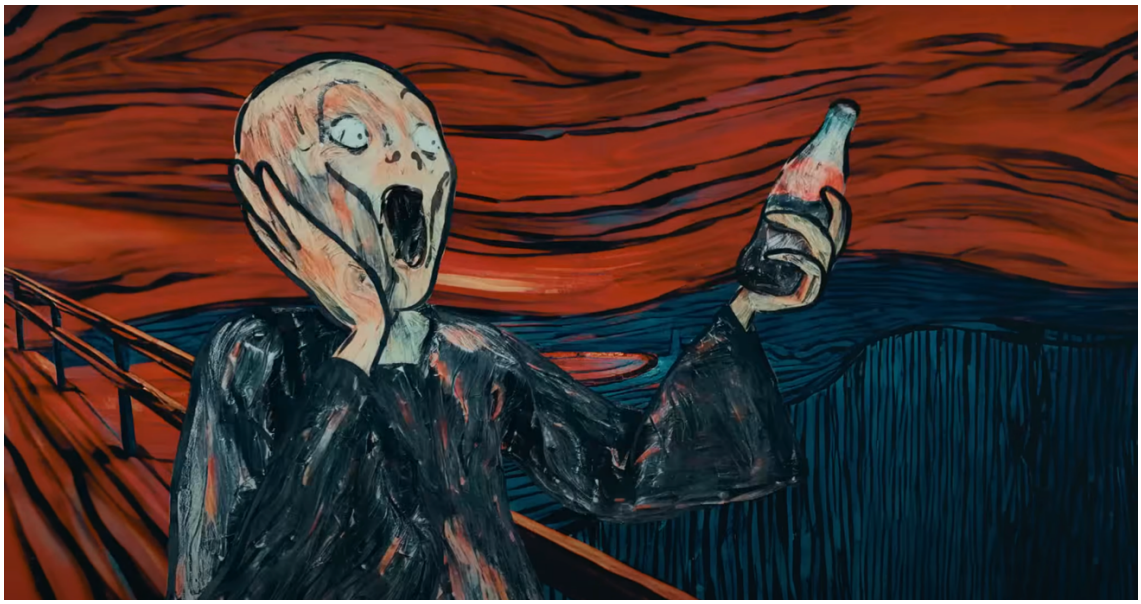


Figure 17: frame from section 8

Sequence 9 (0.52-1.03) As the sequence progresses, the boy of Buhle's painting grabs the Coca-Cola bottle and, with determination, leans out of his frame, seeking an optimal direction to throw it. However, finding the position uncomfortable, he turns back and launches himself into his own painting, dissolving into multiple pieces and forms before landing into Vincent Van Gogh's renowned 1889 masterpiece, "The Bedroom (the bedroom in Arles)". after landing on the bed portrayed in the painting, he stares intensely at the Coca-Cola bottle in his hand, witnessing its gradual transformation to match the style and characteristics of Van Gogh's iconic work. Determined, the boy gets up from the bed, holding the Coca-Cola bottle tightly, and walks confidently toward Van Gogh's painting frame. In the meantime, the viewers see the teacher passing by Buhle's painting, noticing the protagonist's absence from its frame. The scene then transitions to the protagonist of Buhle's painting within the frame of Van Gogh's artwork, ready to throw one more time the Coca-Cola bottle. As the boy falls from one painting to another, the colors change. At first, there are lots of dark blue, light blue, red, violet, and black shades, showing the boy's dreamlike journey between the artworks. When he arrives in Van Gogh's "Bedroom of Arles," the colors become vibrant with lots of orange, yellow, ocher, deep red, brown, and different shades of red, marking his entrance into a new artistic technique world. The light stays soft and neutral, gently illuminating the scenes.

Figure 18: frame from section 9

Sequence 10 (0.1.03-1.09) begins with the boy from Buhle's painting throwing the Coca-Cola bottle out of the frame of Van Gogh's masterpiece, setting it on a new trajectory through the art gallery. In the background, the student remains seated, his head cradled in his hand, unaware of the bottle's flight behind him. Meanwhile, the bronze statue of Artemision, a relic from 460 BC whose artist remains unknown, comes to life and with a graceful movement, reaches out to grab the Coca-Cola bottle just before a museum guard turns to inspect it. But since everything seems fine, the guard keeps walking around, letting the statue carry on with its actions. With a smooth move, the bronze statue throws again the Coca-Cola bottle now made of bronze, sending it flying through the gallery. During this sequence, the colors stay normal, and the natural light from the windows makes the bronze statue look even more surreal and captivating.

Figure 19: frame from section 10

As *sequence 11 (1.09-1.21)* progresses with a captivating close-up of the Coca-Cola bottle suspended in mid-air, ready to make contact with the ground. The scene transitions to a panoramic shot, sweeping from left to right to reveal the "Natural Encounters" painting. Within the frame, a super close-up focuses on the woman's surprised expression as she understands the bottle is going to fall on the ground. With a sudden burst of energy, she leaps from her frame, propelling herself into the air in an attempt to catch the falling bottle and redirect it towards another frame. Suspended in mid-air, the woman twists and turns, her movements captured in a series of dynamic angles. An extreme close-up highlights her hand as it reaches out to grab the Coca-Cola bottle, which sheds its bronze texture and transforms into glass after her touch. Bathed in the soft glow of natural light filtering through the windows, the bottle glimmers as it flies alongside the woman. The predominant colors of green, yellow, black, and brown lend a vibrant backdrop to the unfolding spectacle. In a moment of tension, the scene captures the woman from above as she releases the bottle, captured from behind as it arcs towards another frame, continuing its mesmerizing journey through the art gallery. In this sequence, the main colors are green, yellow, black, and brown. There's a tense moment when the scene shows the woman from above, letting go of the bottle, and from behind as it flies towards another painting.

Figure 20: frame from section 11

In *sequence 12 (1.21-1.27)* The Coca-Cola bottle finds its way into Hiroshige's artwork, titled "Drum Bridge and Setting Sun Hill," created in 1857. Within the winter landscape, the bottle irrupts in the quietness of the artwork as it starts rolling across the snow hills until it reaches the edge of a frozen lake. With a sudden movement, the bottle falls into the icy lake below. As it starts sinking under the surface, a hand pops out from the cold water, grabbing the. In this sequence, against the snowy backdrop, with black shadows and hints of red and dark blue, the scene feels cold, soft and quiet. Throughout this captivating sequence, the Coca-Cola bottle seems extremely big in proportion to the inhabitants of the painting looking very small.

Figure 21: frame from section 12

In *sequence 13 (1.27-1.34)*, the hand of Johannes Vermeer's renowned artwork, "Girl with a Pearl Earring", created in 1665, leans out its frame to retrieve the Coca-Cola bottle from Hiroshige's serene landscape. With grace and precision, the hand takes the bottle and brings it into her frame. Once she put the Coca-Cola bottle near her, with the hand she opens the bottle with a fluid movement, then she places it on the bench beside the uninspired student. In this sequence, set against a background of deep brown, blue, and white shades, with a bit of bright red, the scene gives an atmosphere of calmness and grace. In this captivating mix of art and reality, the lines between what's real and what's magical blur, inviting viewers into a place where everyday life and fantasy come together in perfect harmony.

Figure 22: frame from section 13

In *sequence 14 (1.34-1.44)* as the student turns, he sees the opened Coca-Cola bottle placed beside him, so he reaches for the bottle, then with a smile spreading across his face he takes a refreshing sip. After drinking Coca-Cola, he instantly sets to work, picking up his sheet of paper which had remained blank until that moment. As he starts drawing, the blank page comes alive with his imagination. The teacher, curious about his sudden burst of creativity, comes over to see. After looking at his work carefully, she smiles, impressed by his work. In the sequence, the room is filled with soft light, the colors of his drawing—brown, black, and red—stand out against the white paper and the background. It's a moment of artistic success, where light and color come together to reflect the joy, he finds in drawing.

Figure 23: frame from section 14

As *sequence 15 (1.44-1.52)* begins, the student looks at the woman depicted in "Girl with a Pearl Earring," a gesture of appreciation and understanding is evident in his gaze. In response, the woman winks at him and gently smiles at him before returning to her serene pose within the painting. Touched by her action, the student smiles back, feeling a deep connection and gratitude. The scene smoothly transitions to reveal the Coca-Cola logo and the slogan "Real Magic", wrapping up the commercial. In the sequence there is natural light and warm colors like browns, blacks, and reds, along with the clean white of the paper and background, the scene feels genuine and inviting. In this last moment, the mix of light and color perfectly captures the student smiling on the bench with his work on its legs representing a blend of art, inspiration, and the joy of connecting with others, creating a magical experience.

Figure 24: frame from section 15

3.3 The Semio-Narrative Level

3.3.1 The Actantial Model

After the careful analysis of the campaign segmentation, I can start to apply the intermediate layer of storytelling, as I explain the concept of actants, which represent the different roles within a narrative. Actants are abstract roles, like objects, individuals or animals, who engage in an action, showing that both tangible and intangible entities can drive the plot forward. They are found in the semio-narrative level of the generative path of meaning and, through their interactions, it's possible to understand and craft a cohesive narrative.

In Greimasian semiotics, there are six actants that work together to shape narratives and establish relationships that represented in table 3 below:

Table 3: Actants and their actions

Actants	***Description***
Subject	*The character who agrees to undertake a task.*
Object	*The desired outcome or goal of the subject.*
Opponent	*The obstacle that stands in the way of the subject achieving the object.*
Helper	*The character or the thing that helps the subject in overcoming obstacles.*
Sender	*The source that assigns the task to the subject.*
Receiver	*The individual who receives and carries out the task.*

These intermediate and abstract elements are essential for building narratives, as they involve assigning roles and constructing a coherent narrative. Without this layer, narratives would lack depth and coherence, appearing as a series of disconnected events.

Essentially, the Actantial model provides a framework for comprehending roles in narratives that go beyond those of characters. It draws attention to the relationships and interactions between six essential components, emphasizing the value of storytelling and the human connection with stories. Through an analysis of the sender, object, receiver, subject, helper, and opponent, it is possible to understand the complex dynamics that create engaging narratives in a variety of media.

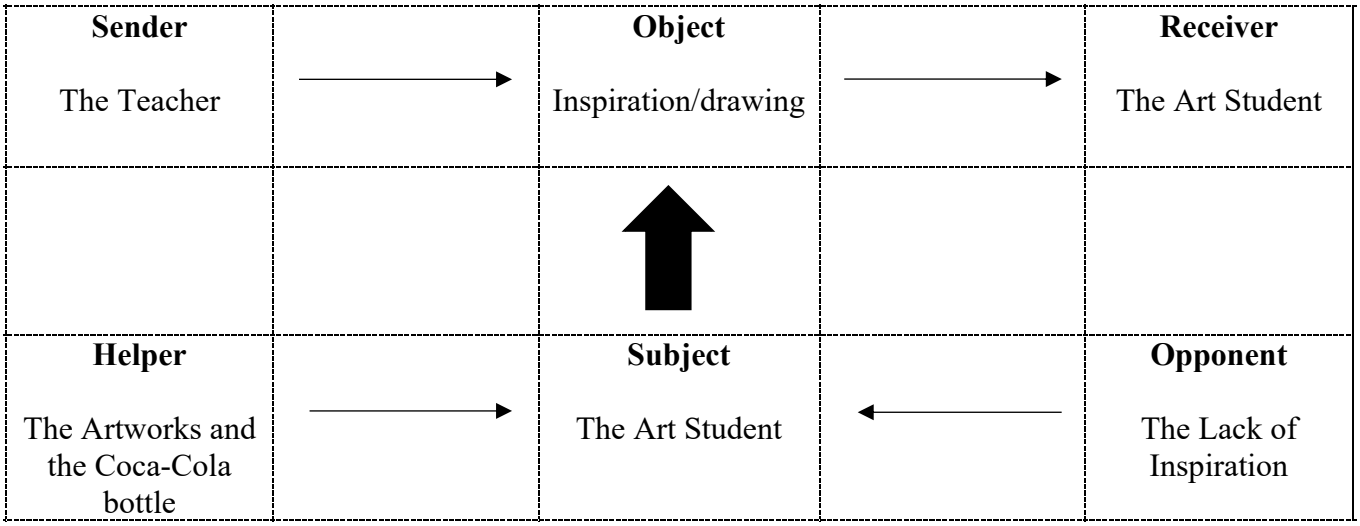


Figure 25: Greimas's Actantial Model customized to the Coca-Cola® Masterpiece case Source: Greimas (1973)[12]

1. Subject:

The subject of the campaign is the student. Indeed, he is the one who is facing the lack of inspiration and therefore he cannot start to draw on his paper.

2. Object:

The object of the campaign is the inspiration and creativity that the student is lacking. The narrative centers around the bottle's journey through various iconic artworks, that have the goal to bring inspiration to the disinterested art student. This aligns with Coca-Cola's broader branding message of bringing moments of happiness and positivity to people's lives.

[12] Source: Greimas, A. J. (1973). Les actants, les acteurs et les figures in sémiotique narrative et textuelle coll. *L. paris*.

3. Helper:

The helper in the campaign is the series of iconic artworks and their depicted characters. These artworks come to life and actively participate in guiding the Coca-Cola bottle on its journey through the gallery. Each painting's characters assist by passing the bottle along, transforming it according to their unique artistic styles, and ultimately ensuring that it reaches the disinterested student. Also the Coca- Cola bottle act as an helper in finding the inspiration as it is what brings materially inspiration to the student after he drinks it. The Coca- Cola bottle is a metonymic extension of the brand impersonating it, as Coca-Cola's symbolic universe is also encapsulated by its distinctive packaging.

4. Opponent:

The opponent in the campaign is the student's initial lack of inspiration and creativity. The lack of inspiration acts as a barrier preventing him from starting his drawing and finding creative fulfillment.

5. Sender:

The sender in the campaign is the teacher. The teacher is the one who wanders around in the gallery inspecting the art student's state of work giving glances of approval or disapproval and she is the one who assigned to the student the task of drawing something on his paper.

6. Receiver:

The receiver in the campaign is the student. As by the end of the commercial, the student's transformation from boredom to creative activity illustrates that he has successfully received the intended message of inspiration and creativity.

By analyzing the campaign through the Actantial model it is possible to demonstrate how the different parts and flow at play are clear.
The student is the subject of the commercial. Initially, he is seen as disinterested and bored, sitting on a bench with his head resting on his hand. His lack of inspiration, the opponent, is the central obstacle he must overcome. His struggle is shown through his bored and disinterested attitude and the empty sheet of paper in front of him. Overcoming this creative block is the main challenge of the narrative, while the student's journey from boredom to creativity is the focus of the story.

The teacher, acting as the sender, inspects the progress of all her students. By bringing the students to the gallery and asking them to draw, she sets the stage for the narrative and gives a reason to start looking for inspiration. The object of the campaign is the inspiration and creative spark he seeks. As

the student struggles with his lack of inspiration, the Coca-Cola bottle impersonating the brand becomes the helper that promises to transform his creative block into artistic productivity.

The various artworks within the gallery come to life, acting as helpers of the students to find inspiration. The sequence begins with the artwork titled "Aket" noticing the student's boredom and setting the bottle in motion. Each painting the Coca-Cola bottle encounters—from Andy Warhol's "Large Coca-Cola" to Turner's "The Shipwreck" and Vermeer's "Girl with a Pearl Earring"—contributes by passing the bottle along, making the bottle adapt its style and characteristics to match the painting's features. These animated artworks guide the bottle towards the student.

When the Coca-Cola bottle finally reaches the student with the help of the artworks, he becomes the receiver, as he finally benefits of the inspiration given by the Coca-Cola. Grabbing the bottle with a sense of joy, he begins to drink. This moment marks the turning point where he starts to draw, his previously blank sheet gets filled with artistic ideas and drawings. The teacher's look of approval further reinforces that the student has successfully received the inspiration he needed.

3.4 The Role of Artificial Intelligence in the Campaign

As I mentioned in the previous paragraphs, the role of Artificial Intelligence in shaping the narrative of this campaign is not explicit. However, taking in consideration the principle of enunciation—understanding who fundamentally emits the message—it becomes evident that AI played a fundamental role in constructing the entire narrative framework of the story. Collaborating with creative professionals, AI effectively "enunciated" the campaign's content, imbuing it with meaning and coherence that brought characters and scenarios to life. This collaborative effort highlights AI not merely as a passive tool but as an active co-creator, significantly contributing to the campaign's overall narrative impact.

Moreover, the fact that the advertising campaign is titled "Masterpiece" symbolizes how Coca-Cola is more than just a symbol of creativity and inspiration—it is an artwork itself that seamlessly moves in and out of paintings. This is evident from the campaign's inception, where the Coca-Cola bottle, which ultimately inspires the art student, is extracted from Andy Warhol's canvas. This illustrates that Coca-Cola is art itself, and as it being an artwork, its purpose is to inspire people.

Therefore, it can be affirmed that in this case, Artificial Intelligence's contribution went beyond the only creation of visually stunning images; it served as a genuine helper and empowerer for human creativity in creating the campaign. By leveraging AI's capabilities in content generation and narrative

structuring, the campaign achieved a level of sophistication and storytelling that might not have been achievable through traditional means alone. The relationship between AI and human creativity highlights the potential of technology to enhance and amplify creative endeavors, changing how stories are made and told in modern advertising.

This intersection of AI and creativity represents the basis of my decision to conduct a semiotic analysis. This approach allows for a deeper exploration of how AI's integration influences not only the aesthetic and thematic elements of advertising but also the broader implications for human empowerment. By analyzing the signs and meanings of this campaign, it was possible to discover detailed insights into how AI influences how people see things, what they value, and the overall story world in advertising. This shows how humans and technology working together can be powerful and empowering.

3.5 "BeRebel - l'intelligenza reale - tonno all'opera" campaign by BeRebel: AI as Main Creator

3.4.1 Introduction of the commercial

In the contemporary landscape of marketing innovation, BeRebel's campaign titled "BeRebel - l'intelligenza reale - tonno all'opera"[13] stands out as a notable example of leveraging artificial intelligence to redefine traditional approaches within the insurance sector. Produced by the marketing agency Caffeina in April 2024, for BeRebel, an insurance brand owned by the Unipol Group.

The campaign, lasting only 00:15 seconds, aimed to showcase the potential of artificial intelligence in marketing. As it begins featuring a bizarre scenario of a tuna singing at the Opera Theater, generated with AI. But as it goes on, the campaign cleverly emphasized the fact that with artificial intelligence, you can do beautiful things indeed, like generating a Tuna that sings opera. Yet, it juxtaposed this possibility with the concept of "real intelligence" by highlighting the practical and useful aspect of BeRebel's car insurance.

The main particularity of this campaign is that the Caffeina agency designed and created the campaign using many different AI-based tools: firstly ChatGPT was used to generate the surreal scenarios of the commercial, Midjourney instead served for the visual creation of the images shown and Runway

[13] BEREBEL - L'INTELLIGENZA REALE - TONNO ALL'OPERA - 15SEC YouTube Adv: https://www.youtube.com/watch?v=7blwM0kVklw

for the animation, also the narration of the commercial was developed thanks to ElevenLabs. Even the press release was created with the help of ChatGPT.

3.5.2 The segmentation of the advertising

Below, it is possible to find the data sheet of the segmentation of the “BeRebel - l'intelligenza reale - tonno all'opera” campaign, with all the different details on the various sections.

# Sequence	Duration	Visual Column	Soundtrack	Notes
1	**0.00-0.03**	**- Content Description:** The sequence begins in an Opera Theater where you can see a singer with ginger hair singing, and then immediately in front of him, a real tuna dressed in typical attire of an opera singer while singing a verse from the opera. **- Frame width:** The sequence starts with a full figure of the singer and the tuna with opera clothes standing in the center of the platea of the theater, then the shot focuses on the half plane of the singer in the act of singing and subsequently there is another half plane of the tuna wearing opera clothes singing the opera as well. **- Camera angle:** The whole sequence is shot horizontally. **- Color and Lightning:** The predominant colors in this sequence are tones of bronze, red, antique pink and ocher, mixed with a soft light on the audience and a dominant beam of light that illuminates the two singers. **- Transitions:** There are no transitions	**Speech**: It is possible to ear the narrator’s voice saying: “con l’intelligenza artificiale, puoi vedere un tonno all’opera!” **Background music:** There is a piece of opera singing in the background.	
2	**0.03-0.10**	**- Content Description:** The setting of the campaign changes now, and it's possible to observe the singer with ginger hair sitting in a car with a mobile phone in hand, open to the personal area screen of the BeRebel app. Then, a message appears next to his hand holding the phone on the screen of the active car insurance policy, displaying the price of the offer. **- Frame width**: The sequence starts with a close up on the side of the singer holding his phone in the hand while looking at the BeRebel personal area. Then it is showed another close up now frontal on the two hands before the wheel holding the phone. **- Camera angle:** The whole sequence is shot horizontally. **- Color and Lightning:** The predominant colors in this sequence are tones of blue, violet, yellow, white and black. There is a streetlight coming. Through the windows of the car but from the dark blue and red colors filtering from the light of the traffic lights you can understand that the scene is set in the evening. **- Transitions:** There is a small transition from being at the opera theater to looking at the insurance policy in the car.	**Speech**: It is possible to ear the narrator’s voice saying: “ma con l’intelligenza reale puoi fare BeRebel! La polizza auto a consumo a partire da 9,94 euro al mese” **Background music:** Now there is a more modern music playing in the background of the car.	
3	**0.10-0.13**	**- Content Description:** The sequence begins with a close-up of the red-haired singer's profile, and then as he starts to drive his car while on the screen appears “Comprala su BeRebel.it”	**Speech:** It is possible to ear the narrator’s voice saying: “meglio no? Comprala su BeRebel.it” **Background music:** There is a modern song playing in the background of the car.	

		- Frame width: The sequence begins with a close-up of the singer's profile, and then with a half-plane shot taken at three-quarters angle of the singer starting to drive his car. **- Camera angle:** The whole sequence is shot horizontally. **- Color and Lightning:** The predominant colors in this sequence are tones of blue, violet, yellow, white and black. There is a streetlight coming. Through the windows of the car but from the dark blue and red colors filtering from the light of the traffic lights you can understand that the scene is set in the evening. **- Transitions:** There are no transitions		
4	**0.013-0.15**	**- Content Description:** The final sequence consists of a purple background screen with the BeRebel logo and the slogan "Pay per you," with the Unipol Group logo at the bottom. **- Frame width:** The sequence is shot in full screen. **- Camera angle:** The whole sequence is shot horizontally **- Color and Lightning:** Violet, yellow and white. There is no light. **- Transitions:** There are no transitions	**Speech:** It is possible to ear the narrator's voice saying: "BeRebel pay per you" **Background music:** There is a modern song playing in the background of the car.	

3.5.3 Commercial Analysis

As I previously mentioned in the commercial analysis of the Coca-Cola campaign, semiotic analysis involves the decomposition of the spot into sequences.

The BeRebel commercial begins in an Opera theater, presenting an imaginary scenario crafted by Artificial Intelligence: an opera singer performing alongside a tuna that is wearing regent clothes. The scene then transitions, placing viewers inside the car of the opera singer, who is seen browsing the BeRebel car insurance on his phone's homepage with the intention to activate it.

What sets this advertisement apart is its exploration of the tension between artificial intelligence's creative potential and human "real intelligence". While AI allows for imaginative possibilities, such as a singing tuna in an opera setting, the campaign subtly critiques the limitations of artificial intelligence creativity and action potential. The narrator's juxtaposition of "with artificial intelligence, you can see a tuna at the Opera" and "But with Real intelligence you can have BeRebel" underscores this theme, suggesting that AI lacks the agency of human intelligence. The campaign aims to promote BeRebel insurance by challenging the efficacy of artificial intelligence, framing it as insufficient for decision-making.

Notably, the campaign's novelty lies in its creation entirely through artificial intelligence programs, resulting in low-quality images intentionally crafted to underscore AI's limitations in producing aesthetically pleasing content compared to human creativity.

In *sequence 1 (0.00-0.03)* the setting is an Opera Theater. The shot begins with a full figure of a singer with ginger hair positioned center stage. Standing directly in front of him there is a real tuna dressed in traditional opera attire, also occupying the center of the stage. The camera angle remains horizontal throughout the sequence. The predominant colors are bronze, red, antique pink, and ocher, with soft lighting illuminating the audience and a dominant beam of light highlighting the two singers. The narrator's voice can be heard saying, "Con l'intelligenza artificiale, puoi vedere un tonno all'opera!", accompanied by a piece of opera music.

Figure 26: frame from section 1

In *sequence 2 (0.03-0.10)*, the campaign's setting shifts to a car interior. The scene begins with a close-up of the singer with ginger hair seated in the driver's seat, holding a mobile phone displaying the BeRebel app's personal area screen. The sequence continues with a close-up shot of the singer's side, focusing on the hand holding the phone as he navigates the BeRebel app. The shot then transitions to a frontal close-up of both hands on the steering wheel, with the phone held between them. The ambiance suggests an evening setting, with hints of dark blue and red filtering through from traffic lights. The transition from the opera theater to the car setting is seamless. The narrator's voice can be heard saying, "ma con l'intelligenza reale puoi fare BeRebel! La polizza auto a consumo a partire da 9,94 euro al mese," as now modern music plays in the background of the car.

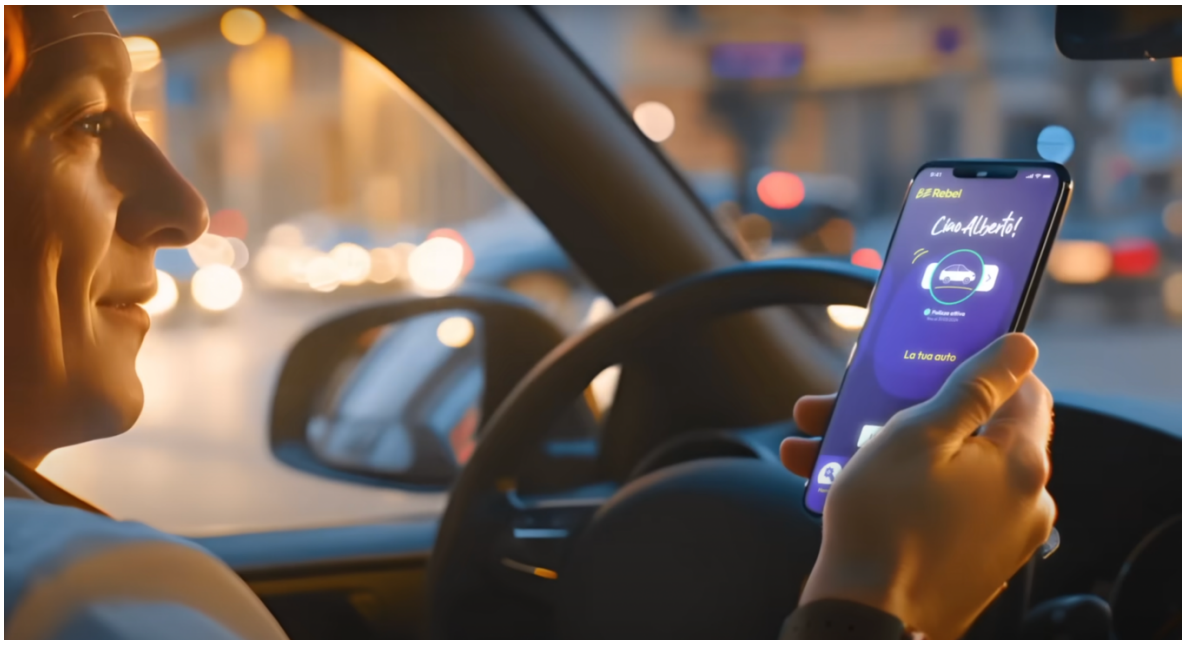


Figure 27: frame from section 2

In *sequence 3 (0.10-0.13)* the camera starts with a close-up of the red-haired singer's profile. As he begins to drive his car, a message appears on the screen saying "Comprala su BeRebel.it." The shot then transitions to a half-plane shot taken at a three-quarters angle, capturing the singer behind the wheel as he navigates the road. The camera angle remains horizontal throughout the sequence. Predominant colors include blue, violet, yellow, white, and black, with a streetlight casting a subtle glow through the car windows. The ambiance still suggests an evening setting, with dark blue and red tones filtering through the car window from traffic lights. The narrator's voice can be heard saying, "meglio no? Comprala su BeRebel.it," as modern music keeps playing in the background of the car.

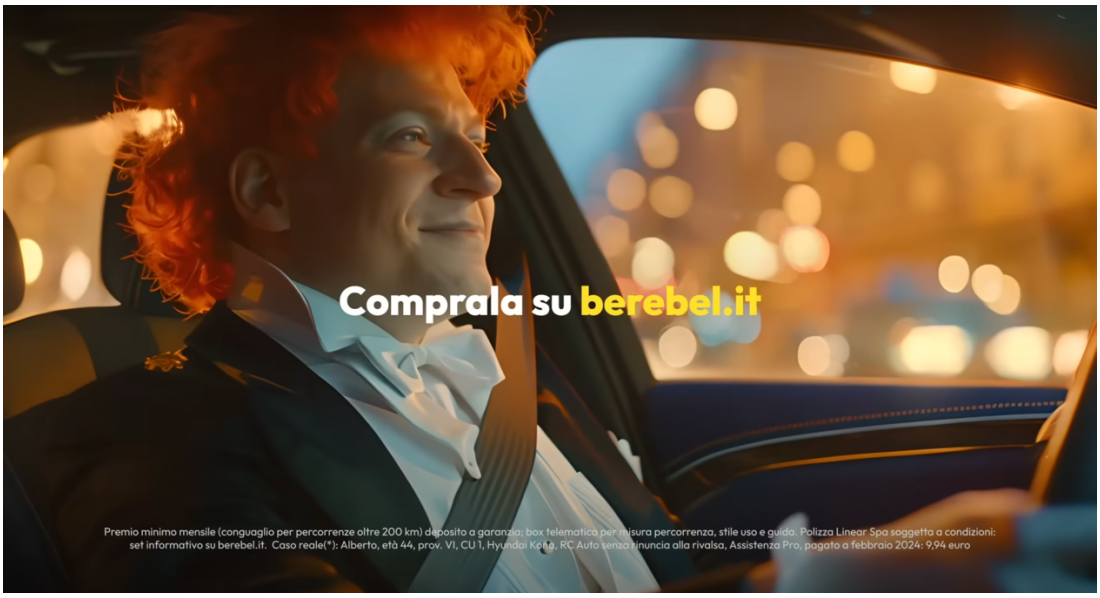


Figure 28: frame from section 3

Sequence 4 is the concluding sequence, the screen is filled with a purple background featuring the BeRebel logo and the slogan "Pay per you," accompanied by the Unipol Group logo at the bottom. The shot is captured in full screen, maintaining a horizontal camera angle throughout. The color scheme consists of violet, yellow, and white tones, with no additional lighting present. The narrator's voice can be heard saying, "BeRebel pay per you", in the background it is possible to hear modern music playing.

Figure 29: frame from section 4

3.6 The Semio-Narrative Level

3.6.1 The Actantial Model

Below it is possible to see the Actantial model adapted for the “BeRebel - l'intelligenza reale - tonno all'opera” campaign to analyze the sender, object, receiver, subject, helper, and opponent, to better comprehend the dynamics that shape compelling stories across various mediums.

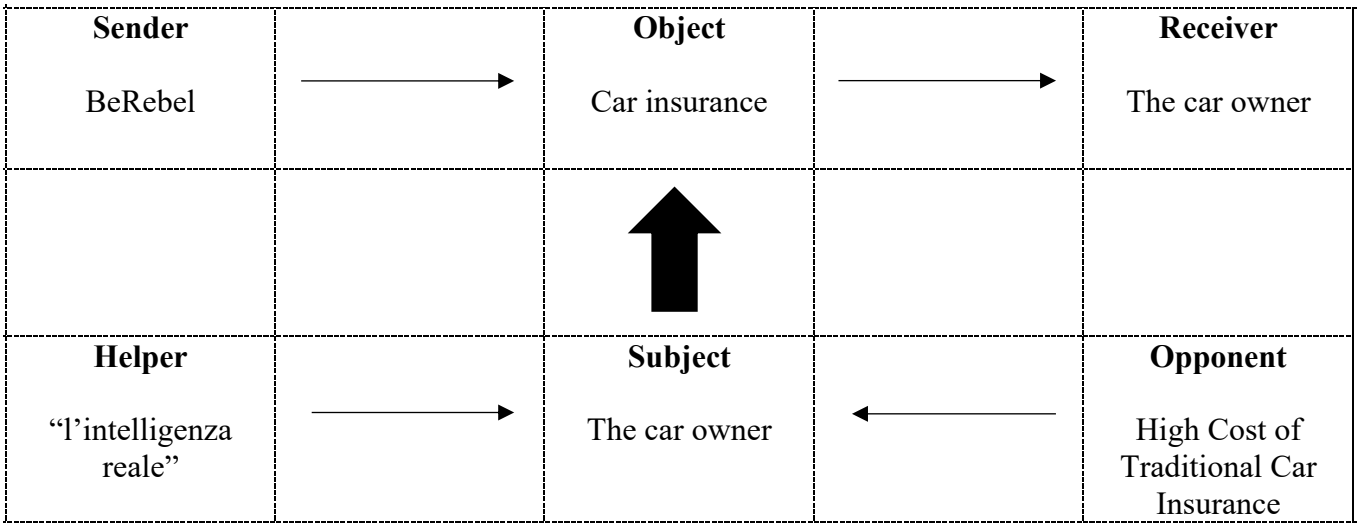


Figure 30: Greimas's Actantial Model customized to the "BeRebel - l'intelligenza reale - tonno all'opera" case, Source: Greimas (1973)[14].

1. Subject:

The subject of the campaign is the car owner. Indeed, he is the one who desires to save money and get car insurance.

2. Object:

The object of the campaign is the BeRebel car insurance, as it is the right choice made with real intelligence.

3. Helper:

The helper in the campaign is the "Intelligenza Reale" that is identified with the human intelligence that is capable of taking the right decision of getting the BeRebel car insurance to save money.

4. Opponent:

The traditional high cost of car insurance is the opponent that stands in the way of the car owner achieving its goal. But it is not the only opponent as in this commercial it is highlighted the contraposition between real intelligence and artificial intelligence. In this commercial AI is represented as a "false helper" since (depending on the use people make of it) it is not able to help the consumer in finding what he wants, like in this case the BeRebel car insurance.

[14] Source: Greimas, A. J. (1973). Les actants, les acteurs et les figures in sémiotique narrative et textuelle coll. *L. paris*.

5. Sender:

BeRebel acts as the sender, initiating the desire to save money by presenting their convenient car insurance as the solution.

6. Receiver:

The car owner is also the receiver, the one who is persuaded by BeRebel's message and takes action getting the car insurance.

7. The Role of the Tonno All'Opera

This element remains open to interpretation as it could potentially function as an intriguing element to capture the viewers' attention: This element could be a curiosity trigger, a hook that draws the car owner (the receiver) into the narrative and compels them to learn more about BeRebel's solution.

By analyzing the campaign through the Actantial Model it is possible to show the different parts and flow at play are clear.

The campaign starts with the scene of a Tuna and a professional singer both dressed in traditional opera attire performing at the Opera theater, while it is possible to hear the voice of the narrator saying: "Con l'intelligenza artificiale puoi vedere un tonno all'opera". Then the scene changes and projects the viewers in a car with the opera singer now represented as a car owner (the subject) trying to look at his phone with the BeRebel can insurance home page opened (the object of desire), while the voice of the narrator keeps saying: "ma con l'intelligenza reale puoi fare BeRebel! La polizza auto a consumo a partire da 9,94 euro al mese, meglio no?" in the voice of the narrator is possible to hear the helper (l'intelligenza reale) that is what helps the car owner to decide to get the car insurance.

3.7 The Role of Artificial Intelligence in the Campaign

In contrast to the Coca-Cola campaign, the role of AI in the BeRebel campaign is more explicit. The brand is not the only one enunciating it; Artificial Intelligence is directly mentioned in the first line of the commercial: "Con l'Intelligenza Artificiale puoi vedere un tonno all'opera," implying that at first glance, AI can do something amazing. However, the second line states, "Ma con *l'Intelligenza Reale* puoi fare BeRebel." With this statement, the brand takes a strong position on the perception of AI's role, leveraging the existing tension around AI and its place in society, as AI is often seen as a technological evolution that could revolutionize many aspects of people's lives.

In this sense, BeRebel is trying to send a specific message: while AI can achieve incredible things, it cannot assist you in making real-life decisions; only Real Intelligence—human intelligence—can help you make good decisions, especially when it comes to critical purchases such as insurance.

It seems that, given the contrast between Real and Artificial Intelligence, poorly used AI is unable to help the consumer find what they are looking for, making it a sort of "false helper". This highlights a specific use case, suggesting that while AI is a good tool for imagination, for real-life problems, human intelligence is necessary. The brand aims to set a boundary and take a clear stance on the AI issue. BeRebel uses AI but highlights clearly its limitations and proper role.

It's also interesting to see how the commercial communicates this message not only through words but also visually. The quality of the characters, the resolution, the colors, and even the length of the commercial are easily recognizable as AI-generated. The quality of the images is low, the movements of the characters are limited, and the facial features are not clearly defined. BeRebel is satirically making Artificial Intelligence admit that it is not as intelligent as humans are.

An interesting commonality between this BeRebel campaign and the Coca-Cola commercial is the representation of how the artificial world of fantasy is blended with the real one. In BeRebel, the opera singer who appears in the car merges the realms of fantasy and reality, showing their conjunction. Similarly, in the Coca-Cola commercial, the Coca-Cola bottle is extracted from Andy Warhol's canvas and passes through the various paintings in the gallery until it reaches the art student, inspiring him. This also serves as a clear example of the junction between the fantastical and the real worlds, emphasizing the incredible capabilities of AI.

It is evident that BeRebel takes a strong stance on the theme of Artificial Intelligence, emphasizing its limitations and potential drawbacks in practical applications within people's real lives. In contrast, Coca-Cola also takes a position but focuses on highlighting the positive uses of AI, portraying it as a genuine helper that enhances human creativity and effort. In conclusion, it is interesting to see how brands leverage and critic Artificial Intelligence taking strong positions regarding this theme.

3.8 Interviews

This thesis presents a One-on-One in-depth interviews part in which the goal is to understand and better explore the role of Artificial Intelligence as a tool for empowering human creativity.

In-depth interviews are a qualitative research method designed to collect detailed data, providing a comprehensive understanding of the subject being studied. For my research, I conducted three in-depth interviews using a blend of structured and semi-structured protocols. This hybrid approach allowed me to better analyze how experts in the brand experience area of the Alkemy creative agency perceive the relationship between artificial intelligence and human creativity.

To conduct these structured interviews, I crafted a specific set of predefined questions, which are available in the appendix. Each interviewee was asked the same questions in the same order, ensuring consistency in data collection. This consistency facilitated easier comparison of responses across different participants, helping to identify common themes and insights.

The questions were designed to obtain detailed and comprehensive answers, being open-ended to allow participants to provide in-depth insights into their thoughts, feelings, and experiences. This approach ensured that while the structure was maintained, there was still room for interviewees to express their views freely.

I structured my interview protocol into four main parts:

1. **Ice Breaker Questions**: These initial questions were designed to make the interviewees feel comfortable and open up about their experiences.
2. **General Questions about Artificial Intelligence**: This section aimed to understand their understanding and perspectives about AI, its current applications, and general sentiments towards it.
3. **Questions Focused on Potential Concerns**: Here, I delved into any concerns or risks the interviewees might perceive regarding the use of AI in their field and daily life.
4. **Questions Regarding the Future Framework of Artificial Intelligence**: This final part explored the interviewees' views on the future implications and potential developments of AI in the creative industry.

At the end of each interview, I summarized the key points discussed to ensure I had fully understood the interviewee's answers. This recap also was useful as a validation step, allowing the interviewee to confirm or clarify any information. Additionally, I asked each interviewee to present themselves to gather demographic data.

This kind of approach is particularly useful in exploring the complexities of participants experiences, especially in areas like working dynamics, tools used, and environmental factors within the creative

industry. Another significant advantage of this approach is the opportunity to build a relationship with the interviewees, making them feel comfortable and more likely to share valuable insights.

By combining structured and semi-structured elements, these interviews provided a balanced approach that ensured consistency and depth, allowing for a thorough exploration of how AI is perceived and utilized in enhancing human creativity within the brand experience sector at Alkemy.

The goal was to investigate and address the Research Question: *"How can Artificial Intelligence be utilized as a tool to empower human creativity in the generation and development of artistic and creative content?"* in order to make sense also of the observations extracted previously from the semiotic analysis.
In fact, the semiotic analysis of advertising campaigns aims to understand if a strategic line proposed by the brands emerges from the narratives, while the in-depth interviews serve to determine whether this empowering role of artificial intelligence is indeed made explicit by experts in the creative industries who, in the empirical world, are involved in content creation.

In the following section, I proceed to explain the whole process of gathering data, the research process and the tools used. Since I am currently working as a Strategy intern at the advertising agency Alkemy S.p.A in Milan, I found the opportunity to have the pleasure of interviewing the experts that work every day in this sector actively. Consequently, in order to give even more credibility to my research process, I have decided to use Nvivo 14 to elaborate the data gathered from the interviews.
The interviews were conducted with three key individuals from Alkemy S.p.A creative agency, these people are the main exponent of the Alkemy's Brand Experience (BX) creative process, that is composed of three teams which work together: strategy team, creativity team and production team.
In fact, each subject I had the pleasure to interview represent one of the three teams of the agency's brand experience creative process: Fabio Rodighiero, Strategy Director representing the strategy team; Jan Mattassi, Executive Art Director representing the creativity team; and Simone Di Mezza Cutillo, Executive Producer Director representing the production team. By engaging with these experts, the interviews seek to gain insights into their perspectives on AI's impact on human creativity and its potential to enhance the creative process.

3.9 Data Analysis

The analysis of the interviews has been conducted with NVivo 14 a computer software produced by Lumivero, designed specifically to help to analyze qualitative data, like interview transcripts. It was a fundamental tool that helped me with the challenge of organizing and making sense of big amount

of information. in fact, NVivo 14 lets you import your interviews, code them with relevant themes, and then explore connections between those themes.

3.9.1 Main themes and Subcodes

The first step of the interview analysis has been to code the interviews, I started by selecting the main themes that were extracted by the Research Question and the main parts in which the interview protocol is divided. After selecting the main themes, I looked at all the interviews to identify common subcodes that could be grouped under each main theme. I gathered all this data into table 3 below.

Table 3: Interview's Main Themes and Subcodes

Main Themes and Subcodes	Description	Sources	References
AI frequency use	This main theme highlights the Artificial Intelligence frequency of usage that the interviewees have. It can be daily, weekly or monthly.	0	0
High		2	2
Low		0	0
AI Impact on creative and work process	This main theme analyses the size of the impact that Artificial Intelligence has on the creative and work processes of the interviewees.	0	0
Positive		3	6
Neutral		2	2
Negative		0	0
AI perception and understanding	This main theme represents how the interviewees see and process Artificial Intelligence in their life and work under a creative point of view.	0	0
Positive		3	4
Neutral		2	3
Negative		1	1
AI's role in the evolution of creative industries	This main theme wants to understand what the interviewees think will be the role of Artificial Intelligence in the future evolution of the creative industries sector, particularly in the creative agencies one.	0	0
Positive		2	2
Neutral		1	1
Negative		1	1
Concerns and risks perception about AI	This main theme highlights some of the common risks and concerns that have emerged from the analysis of the interviews.	0	0
Misinformation		2	2
No Law Regulation		1	1

Main Themes and Subcodes	Description	Sources	References
Nullification of Critical Thinking		2	2
Feelings towards AI's answers	This main theme aims at showing the general sentiment and emotions that are generated in the interviewee after asking questions to Artificial Intelligence.	0	0
Positive		3	3
Neutral		1	1
Negative		2	2
Impact of AI on creativity stimulation	This main theme aims at showing the size of the impact that Artificial intelligence has on the process of creation and inspiration stimulation for the interviewees.	0	0
High		2	3
Neutral		2	2
Low		2	2
Potential of AI to overcome creative blocks	This main theme is important to understand the extent of the potential of Artificial Intelligence in helping the interviewees to overcome creative blocks giving the spark for the initial inspiration.	0	0
High		3	7
Neutral		2	2
Low		2	4
Primary uses of AI	This code highlights some of the common primary uses that interviewees make of AI emerged from the interviews analysis.	0	0
Double Check Information		1	1
Gathering initial ideas about a general topic		1	2
Image Generation & Modification		1	1
Searching for Information		3	3
Translation of Text		1	1

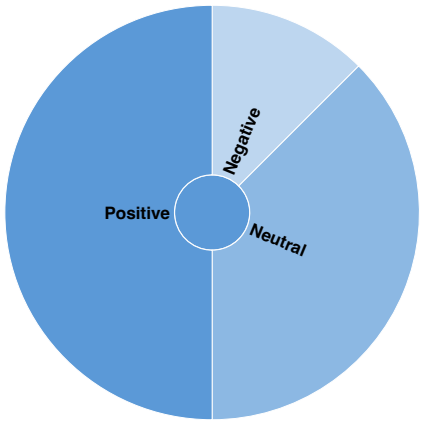
Source: NVivo 14

This analysis led to the discovery of how Artificial intelligence is influencing human creativity, the modalities and frequency of use of the AI tools and if they can be able to overcome blocks stimulating inspiration, leading to the understanding of the perception of AI' role in creativity. But also shed a light on the risks and concerns that are perceived about Artificial Intelligence and finally the perception of the future perspective of it in the creative industries sector.

AI perception and understanding

The NVivo 14 graph above likely illustrates the sentiments expressed by interview subjects regarding their perceptions of Artificial Intelligence and its understanding. From the pie chart, it's possible to understand that the prevailing sentiments regarding AI's perception and understanding are primarily positive and neutral, with a smaller portion reflecting negative sentiments.

The interviews centered around the question: *"Do you know artificial intelligence? If so, could you tell me what it represents for you?"* As I mentioned before, all interviewees demonstrated a clear understanding of artificial intelligence, with the majority expressing positive views.
For instance, one interviewee stated: “l'intelligenza artificiale oggi per me rappresenta… la nuova evoluzione, la nuova frontiera tecnologica dell'essere umano… è ciò che cambierà il modo in cui noi ci rapportiamo con la tecnologia da qua al futuro nemmeno troppo lontano” ("Artificial intelligence for me today represents... the new evolution, the new technological frontier of humanity... it is what will change the way we relate to technology from now into the not too distant future.") *(interviewee 1, interview conducted by the author, in the Appendix).*



AI perception and understanding pie chart

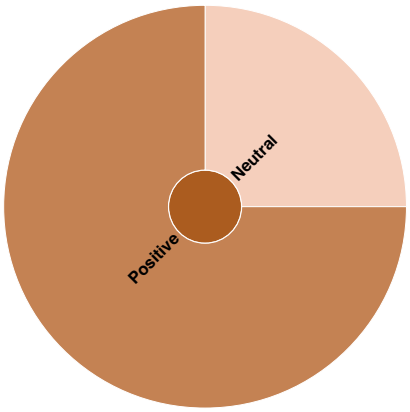
Source: NVivo 14

AI impact on creative and work processes

In this case the graph visualizes the responses of interview subjects regarding their personal experiences with integrating Artificial Intelligence into their creative or work processes. The

predominant sentiment identified in the graph appears to be positive, with a smaller portion indicating a neutral stance.

The question asked to the interviewees was: *"Have you ever personally experimented with using Artificial Intelligence in your creative/work process? If so, how has it influenced your approach?"* The majority of respondents provided positive answers, suggesting that AI has positively impacted their workflow. For example, one interviewee stated, "[L'intelligenza artificiale] non ha ancora cambiato i processi nel cuore, ma è diventato uno strumento che può essere un alleato, un facilitatore, uno sparring partner per determinate tipologie di compiti." ("[Artificial intelligence] has not yet changed the core processes, but it has become a tool that can be an ally, a facilitator, a sparring partner for certain types of tasks.") *(interviewee 1, interview conducted by the author, in the Appendix).*



AI impact on creative and work processes pie chart

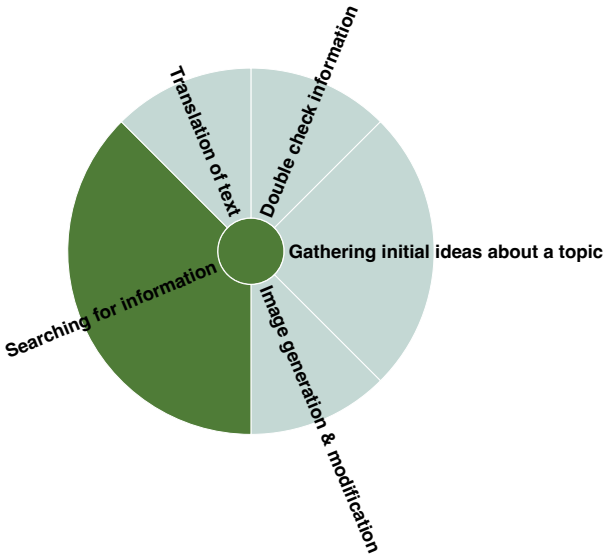
Source: NVivo 14

Primary uses of AI

The analysis of primary uses of AI was conducted by examining common themes across the interviews. Respondents were asked the question: *"What do you mainly use Artificial Intelligence for? Can you give me an example?".*

Among the various applications, two emerged as the most common:

The most prevalent use of Artificial Intelligence reported by interviewees was searching for information, indicating a significant reliance on AI for gathering data.
Following closely, the second most common use was gathering initial ideas about a certain topic, suggesting that AI serves as a valuable tool for brainstorming and conceptual exploration.
One of the interviewee stated: "Sì, allora traduzioni in inglese, ChatGPT lo uso per traduzioni, ricerca evoluta su internet, quindi “parlami di un determinato tema” soprattutto con Gemini questo, esplorazione semantica di parole e concetti o semplificazione di concetti... invece con Midjourney generazioni immagini, modifica di immagini generate e poi appunto esplorazione delle potenzialità del mezzo in generale anche per poter sapere di cosa si parla." ("Yes, so translations into English, I use ChatGPT for translations, advanced internet research, so “talk to me about a specific topic” especially with Gemini this, semantic exploration of words and concepts or simplification of concepts... instead with Midjourney, image generation, modification of generated images, and then precisely exploration of the potential of the medium in general also to understand what one is talking about.") *(interviewee 2, interview conducted by the author, in the Appendix).*



Primary uses of AI pie chart

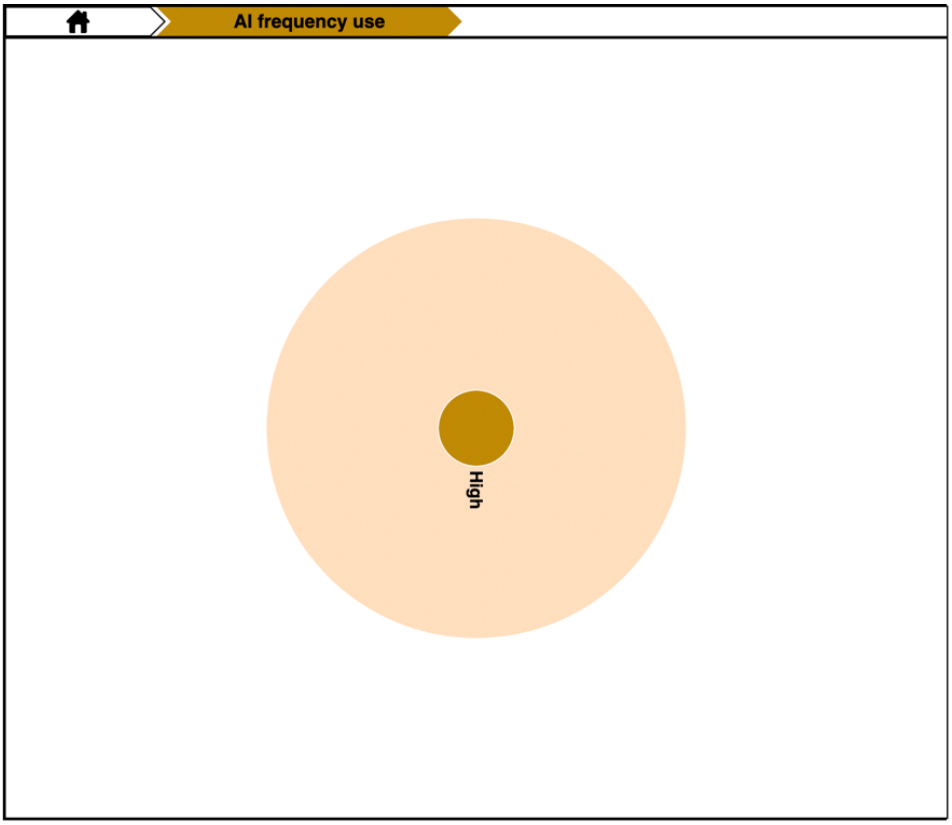
Source: NVivo 14

AI usage frequency

The analysis of AI usage frequency looking at the NVivo pie chart, is indicating a unanimous trend across the interviews. When asked, *"How often do you use artificial intelligence?"* all interviewees responded with high frequency. From the answers, it is evident that in all three interviews, participants

consistently reported utilizing artificial intelligence daily, whether for work-related tasks or in their personal lives.

One interviewee stated, "[Utilizzo l'Intelligenza Artificiale] Giornalieralmente, settimanalmente. E Copilot lo uso praticamente tutti i giorni." ("I use Artificial Intelligence daily, weekly. And Copilot, I use it practically every day.") *(interviewee 3, interview conducted by the author, in the Appendix).* Another intrviewee added, "Quotidianamente, non solo per lavoro ovviamente." ("Daily, not just for work obviously.") *(interviewee 2, interview conducted by the author, in the Appendix).*



AI frequency use pie chart

Source: NVivo 14

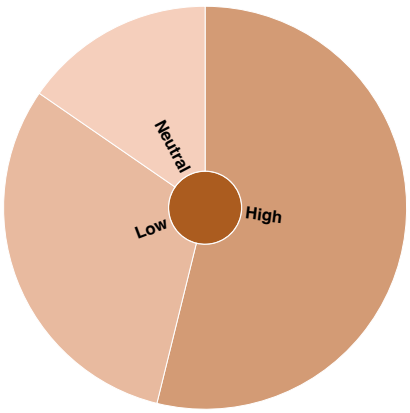
Potential of AI to overcome creative blocks

The NVivo pie chart illustrates the responses of interview subjects to the question: *"Do you think Artificial Intelligence could help overcome creative blocks or stimulate inspiration in the initial stages of the creative/work process?"*

The opinions expressed in the interviews are differentiated among high, neutral, and low sentiments. The majority of respondents agree that the possibilities of AI helping to overcome creative blocks and sparking inspiration in the initial stages of a project are high.

However, there are also some opinions that tend to be more neutral or low. For instance, it is common among the answers to hear interviewees express sentiments such as, "Non ha ancora raggiunto quel livello di perfezione che ti da la certezza di riuscire a farlo, come lo faresti 'manualmente' " (It has not yet reached that level of perfection that gives you certainty of being able to do it, as you would do 'manually') *(interviewee 1, interview conducted by the author, in the Appendix)*. Additionally, some respondents mentioned that AI "Può darti magari un'idea, uno stimolo, una piccola scintilla iniziale perché magari appunto sei alla ricerca di quel numero, di quel fatto, di quel dato, di quel che potrebbe aiutarti" (Might give you an idea, a stimulus, a small initial spark because maybe you are looking for that number, that fact, that data, that could help you) *(interviewee 2, interview conducted by the author, in the Appendix)*.

Overall, while there is a predominant agreement on AI's potential to help overcome creative blocks and stimulate inspiration, there are also reservations expressed regarding its effectiveness compared to manual processes.



Potential of AI to overcome creative blocks

Source: NVivo 14

Impact of AI on creativity stimulation

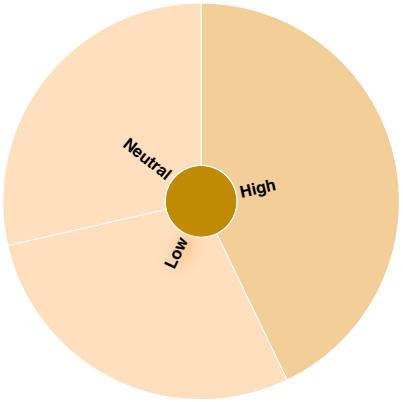
From the NVivo graph, it's clear that the results concerning the impact of AI on creativity stimulation are evenly distributed among high, neutral, and low values, with a slight preference for the high value.

Interviewees responded to the question: *"Could you tell me if Artificial Intelligence has influenced your personal approach to creativity in your work?"* Their answers varied, with some stating that AI served as a helpful assistant, while others indicated a more limited impact on their creativity.

For example, one interviewee mentioned, "Sono partito da un'idea e sono arrivato ad un'idea molto diversa, o un trattamento molto diverso; quindi, in quel senso della libertà artistica è una cosa, nel progetto di comunicazione non ha cambiato tanto, è stato più supporto, un'assistente, un buon assistente" (I started with one idea and ended up with a very different one, or a very different treatment; so in the sense of artistic freedom, it's one thing, in communication projects it hasn't changed much, it was more support, an assistant, a good assistant) *(interviewee 2, interview conducted by the author, in the Appendix)*.

Another interviewee noted, "Ha cambiato il modo in cui io accedo a determinate tipologie di informazioni senza dubbio. Ha cambiato il modo in cui io diciamo adotto un processo creativo, inizio un processo creativo, allora creativo professionale ti direi no, ma creativo personale sì" (It has changed the way I access certain types of information without a doubt. It has changed the way I, let's say, adopt a creative process, start a creative process or, well, a professionally creative process I would say no, but personally creative yes) *(interviewee 1, interview conducted by the author, in the Appendix)*.

Overall, while Artificial Intelligence highly impacted creativity stimulation under a personal approach to projects, it had a more neutral to low impact on work dynamics, serving more as a supportive assistant rather than significantly altering the creative process.



Impact of AI on creativity stimulation

Source: NVivo 14

Feelings towards AI's answers

Interviewees were asked to express their feelings towards Artificial Intelligence when it provided answers. Based on the NVivo pie chart the majority of responses indicated predominantly positive or negative sentiments, with variations depending on the nature of the question asked to the AI.

Respondents were asked: *"Are the feelings you experience towards Artificial Intelligence when it provides you with answers more positive or more negative? Could you give a concrete example connected to these feelings?"*

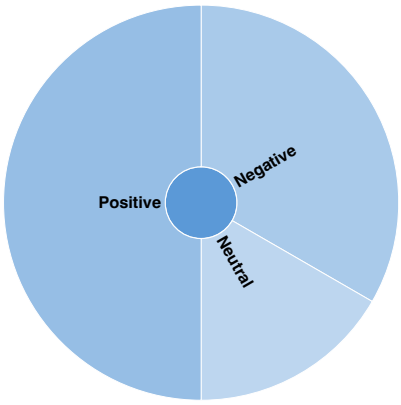
The analysis revealed that AI evoked positive feelings when asked to explain something easy or performing simple tasks, whereas negative feelings emerged when dealing with complex tasks or opinions.

For instance, one interviewee stated, "Direi che la mia sensazione è o neutra o positiva, cioè neutra nel senso che non sto ottenendo nulla di particolarmente diverso rispetto a quello che avrei potuto ottenere con un altro tipo di processo di ricerca in maniera più lunga, mentre positiva nel senso che mi accorgo che è in grado di andare oltre il tipo di prompt che ho inserito, quindi il tipo di output che arriva, effettivamente ha tirato fuori qualcosa che ho trovato molto utile" (I would say that my feeling

is either neutral or positive, meaning neutral in the sense that I'm not experiencing anything particularly different from what I could have obtained with another type of research process in a longer way, or positive in the sense that I notice it is able to respond to the type of prompt I have given, the type of output that arrives, and it actually pulled out something that I found very useful) *(interviewee 1, interview conducted by the author, in the Appendix)*.

While, another interviewee remarked, "Mi dà degli spunti interessanti, quindi su questo mi soddisfa, su teorie un po' più complesse mi soddisfa molto raramente" (It gives me interesting insights, so on that I'm satisfied, but on slightly more complex tasks I'm rarely satisfied) *(interviewee 2, interview conducted by the author, in the Appendix)*.

Overall, it is possible to understand that the feelings towards AI after providing answers varied depending on the complexity of the task or question, with positive emotions typically coming from simpler tasks and more negative emotions coming from more complex inquiries.



Feelings towards AI's answers

Source: NVivo 14

Concerns and risks about AI

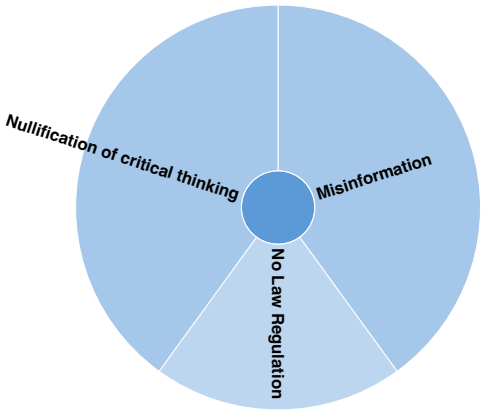
Based on the responses to the question, *"Is there anything that worries you when you use Artificial Intelligence? Do you perceive potential risks?"* the concerns and risks perceived about AI were analyzed. From this analysis, three common risks emerged: misinformation, nullification of critical thinking, and the lack of law regulations regarding the control of AI.

The NVivo pie chart illustrates that among the three risks emerged, the nullification of critical thinking and misinformation are perceived as the highest by the interviewees.

One interviewee in particular expressed concern about the nullification of critical thinking, stating, "Quello che mi preoccupa è che visto che dà delle belle risposte [the AI chatbot], la gente smetta di sapersi porre le domande... perché poi non il pensare porta anche a non saper prendere delle decisioni...il non sapersi porre domande vuol dire anche smettere di essere curiosi, di immaginare" (What worries me is that since it provides good answers [the AI chatbot], people may stop knowing how to ask questions... because then not thinking also leads to not being able to make decisions... not knowing how to ask questions also means stopping being curious, imaginative) *(interviewee 2, interview conducted by the author, in the Appendix)*.

Another interviewee highlighted concerns about the lack of regulation, stating, "Abbiamo dato in mano a delle aziende private che si occupano di tecnologia tutto quello che è, diciamo, lo sviluppo della società e abbiamo dato in mano a loro i nostri dati, le nostre informazioni, la possibilità di farlo praticamente senza regolamentazioni e tutte le regolamentazioni legali di ogni... di ogni paese... viviamo in un mondo in cui la regolamentazione di come devono essere fatte e gestite queste AI, quali sono i loro limiti, di quali informazioni si nutrono, e che tipo di punto di vista devono avere, non lo decidiamo noi, non lo decide uno stato, non lo decide un organismo regolatore, lo decidono delle persone che di lavoro, si occupano in tecnologia" (We have handed over to private companies that deal with technology everything that is, let's say, the development of society, and we have handed over to them our data, our information, the possibility of deciding what to do with it practically without regulations and all the legal regulations of every... of every country... we live in a world where the regulation of how these AIs should be made and regulated, what their limits are, what information they feed on, and what kind of point of view they should have, is not decided by us, not decided by a state, not decided by a regulatory organ, it is decided by people who work with technology) *(interviewee 1, interview conducted by the author, in the Appendix)*.

These insights highlight the concerns about AI, particularly regarding its potential to undermine critical thinking and the lack of regulation surrounding its development and use. Interviewees believe that Artificial Intelligence is a powerful tool that has the potential to wrongly shape and influence the human mind if used in the inappropriate way.



Concerns and risks about AI

Source: NVivo 14

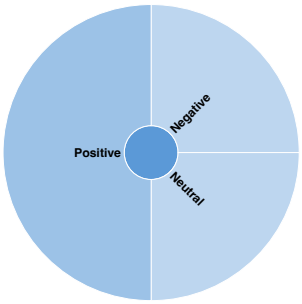
AI's role in the evolution of creative industries

The sentiment of interviewees regarding the role of AI in the future evolution of creative industries was analyzed in response to the question: *"How do you see the role of Artificial Intelligence in the future evolution of creative industries?"*

From the NVivo graph, it's evident that the analysis revealed that the sentiment about AI's role in the future evolution of creative industries is mainly positive. Interviewees expressed optimism about the potential of AI to enhance and potentially eliminate more time-consuming tasks that were previously performed by humans. They suggested that with AI's assistance, humans could focus on other (better) aspects of work. For example, one interviewee stated, "Macchine che possono ottimizzare e probabilmente anche eliminare alcuni lavori che facevano prima gli esseri umani. Gli esseri umani si potranno concentrare su fare un'altra parte (più importante) del lavoro" (Machines that can optimize

and probably even eliminate some of the jobs that humans used to do. Humans will be able to focus on doing another (more important) part of the work) *(interviewee 1, interview conducted by the author, in the Appendix)*.

This sentiment underscores the belief among interviewees that AI has the potential to positively shape the future of creative industries by enhancing efficiency and allowing humans to focus on more creative and higher-value tasks.



AI's role in the evolution of creative industries

Source: NVivo 14

CHAPTER 4: CONCLUSIONS

4.1 Conclusions

In this thesis, the aim was to address the Research Question:

"How can Artificial Intelligence be utilized as a tool to empower human creativity in the generation and development of artistic and creative content?"

As AI continues to gain prominence in people's lives, it is increasingly recognized as a transformative phenomenon that will significantly alter the way individuals interact with technology.

I started my research with the identification of the phenomenon of Artificial Intelligence delving deep into its origins, history, and definitions, followed by an analysis of its revolutionary impact on marketing strategies and practices. I delved into the diverse applications of AI in marketing, identifying specific utilities and transformative potentials across various marketing segments. I tried to understand how experts leverage AI to enhance their work and study the tension existing in the relationship it shares with human creativity. Does AI represent a threat to human creativity, potentially replacing it altogether? Or is it a powerful tool capable of augmenting human creative potential to unprecedented heights?

With these questions in mind, I approached the second chapter of this thesis in which I started to investigate the dynamic relationship between AI and human creativity. Through an exploration of the definition of creativity, the modern approaches to advertising and the role of AI in creative industries, I tried to understand how companies are responding to this phenomenon. Specifically, I aimed to examine the utilization of AI from the perspective of artistic individuals and experts working in the creative industry sector. This inquiry was particularly relevant as I currently work as a strategist intern at the creative agency Alkemy S.p.A in Milan.

In chapter 3 I explain the methodology I used to conduct the analysis. I conducted the Semiotic Analysis of two advertising campaigns, namely the "Coca-Cola® Masterpiece" campaign by Coca-Cola and “BeRebel – intelligenza reale – un tonno all’opera” campaign by BeRebel, to uncover the underlying meanings and narratives within each campaign. Then through the tools of semiotics, I explored the ways in which AI was utilized to enhance creativity and amplify human expression in advertising.

These two selected campaigns, exemplify the different roles of artificial intelligence in creative environments, with the former showcasing AI as a tool to enhance human creativity and work techniques, while the latter demonstrates AI as the main creator of the campaign's content. I decided to choose these campaigns to highlight the difference in the quality of the output and perception of the audience of a work created with the aid of Artificial Intelligence tools and a work created entirely by artificial intelligence.

To analyze each campaign, as I mentioned before I conducted the Semiotic Analysis, carefully examining the symbolism, colors, and textual elements to unveil their underlying messages. The results of the analysis revealed substantial differences in the quality of work between the two campaigns. While the Coca-Cola advertising campaign gained widespread acclaim thanks to its collaborative approach between humans and machines, the BeRebel campaign shared a message of satire, telling viewers to prioritize real intelligence over artificial intelligence in decision-making processes.

These advertisements reveal a significant insight: brands approach Artificial Intelligence in different ways. Some, like Coca-Cola, view it as a helper and thus "co-enunciate" creative content with it, delegating part of the manual work to Artificial Intelligence. Others leverage Artificial Intelligence by capitalizing on its popularity as a topic that is creating a great tension among people and brands, often adopting a more critical position. This strategic insight goes beyond the practical use of AI in agencies; it highlights how brands navigate a high-tension topic by either embracing Artificial Intelligence as a creative partner or critiquing its role.

This multifaceted approach underscores the importance of strategically integrating AI into advertising, as it inevitably positions brands within the broader conversation about AI’s impact on creativity and innovation.

Thanks to the commercial technical breakdown, the Semio-Narrative level of analysis and the in-depth interviews I could better highlight the various roles assumed by the Artificial Intelligence in both campaigns. This comprehensive analysis provided valuable insights into the relationship between AI and human creativity in the advertising industry, in this sense I understood more about the human-AI relationship and how it translates into strategic choices and the constructed narrative frameworks.

In the next phase of the analysis, I had the pleasure to conduct in-depth interviews with the three main exponents in the Alkemy Brand Experience (BX) creative process: the Strategy Director (Fabio

Rodighiero), the Executive Art Director (Jan Mattassi), and the Executive Producer Director (Simone Di Mezza Cutillo).

These structured interviews gave me the possibility to get a deeper understanding of the connection between artificial intelligence and creativity within the advertising agency sector. followed by data analysis using NVivo14 software which enabled me to identify main themes and subcodes within the interview transcriptions, provided valuable insights into the perceptions and experiences of industry experts regarding the interaction between AI and creativity.

After identifying 9 main codes and for each of them their subcodes (see Table 2) it was possible to extract the first results of the interviews that turned out to be very helpful to confirm what I already observed after the semiotic analysis and to address the Research Question. In the sense, I found out that the interviewees have a clear perception of Artificial Intelligence, further analysis illuminated the varying impacts of artificial intelligence on individuals' creative and work processes. While some viewed AI as a facilitator, enhancing efficiency and productivity, others expressed concerns about its potential disruption and displacement of human roles. This nuanced understanding highlighted the need for tailored approaches to harness AI's potential effectively. More importantly, this reflects perfectly the two cases I analyzed with semiotics, where the two advertising campaigns adopt different approaches towards AI in terms of its role, importance, interpretation, and practical application. It is interesting to see how the results cross well, demonstrating the strategic choices and narrative frameworks constructed around AI in both campaigns.

I also uncovered common primary uses of AI among individuals, including translation, information searching, and, image generation/modification. These insights underscored the versatility and utility of AI across diverse contexts, informing strategic decisions regarding its integration into workflows and processes.

Nvivo 14 visualization of hierarchy charts provided clarity on individuals' frequency of AI use, revealing a consensus among interviewees that they utilize AI frequently in their daily work or personal lives. This widespread adoption underscores AI's increasing prominence and relevance in contemporary society, shaping various aspects of human existence.

I also analyzed AI's potential to stimulate creativity and overcome creative blocks. While some individuals expressed optimism about AI's role as a source of inspiration and assistance, others remained skeptical, citing concerns about its ability to replicate human creativity authentically. This

result in particular matches perfectly the “Coca-Cola® Masterpiece” narrative exposed by the Coca-Cola brand.

Emotional responses towards AI's answers were also examined, with Nvivo 14 analysis revealing a predominance of positive feelings among individuals. However, the complexity of tasks influenced emotional responses, with some expressing neutral or negative emotions in response to more challenging questions.

Concerns and risks associated with AI use emerged as a significant theme in the analysis. NVivo 14 graph highlighted issues such as misinformation, nullification of critical thinking, and the lack of regulatory law, underscoring the importance of ethical and responsible AI use to mitigate potential risks.

Finally, my exploration of AI's role in shaping the future evolution of creative industries gave optimistic perspectives. The analysis presents an optimistic picture of AI's potential to optimize workflows, enhance creativity, and drive innovation in creative sectors. By leveraging AI as a tool, individuals and organizations can unlock new levels of creativity and productivity while navigating the ethical and practical considerations associated with its use. Ultimately, artificial intelligence stands as a powerful ally in the quest to empower and amplify human creativity in the digital age.

In conclusion, my thesis confirms that in the current historical moment, AI serves as a powerful tool that enhances human creative abilities and fosters inspiration.

Based on the comprehensive analysis conducted in this thesis, I can also conclude that Artificial Intelligence can indeed be utilized as a powerful tool to empower human creativity in the generation and development of artistic and creative content.

4.2 Managerial Implications

The insights derived from this thesis offer profound managerial implications for organizations operating within the creative industry sector.

Firstly, understanding the potential of artificial intelligence as a facilitator of human creativity can profoundly shape strategic decision-making processes. Companies can leverage AI technologies strategically to streamline workflows, enhance productivity, and unlock new dimensions of innovation in creative content generation. By recognizing AI as a powerful ally in the creative process

rather than a threat, brands and agencies can position themselves at the forefront of technological innovation while maintaining a human-centric approach to creativity.

Moreover, a nuanced comprehension of the complicated relationship between AI and human creativity enables organizations to develop tailored approaches to effectively integrate AI into their operations. This involves fostering a culture that embraces AI as a complement to human expertise, recognizing its capacity to enhance rather than replace human creativity. By cultivating an environment where AI and human creativity synergize, organizations can harness the full spectrum of creative potential and drive transformative outcomes. Additionally, when it comes to advertising, if brands choose to use AI, they must do so strategically. This is because they are inevitably taking a stance on a hot topic, and it is crucial that their use of AI is aligned with a coherent strategy that reflects their brand values and messaging. This strategic integration must be evident in the advertisements themselves, ensuring that the role of AI in empowering creativity is clear both in the narrative and to the experts involved in content creation within the creative industries.

Furthermore, the identification of common primary uses of AI among individuals offers valuable insights into specific areas where AI technologies can be deployed to drive efficiency and effectiveness. Agencies and brands can take advantage of these insights by prioritizing investment in AI applications that align with these primary uses, thereby optimizing resource allocation and maximizing returns on investment.

In addition to harnessing the opportunities presented by AI, brand and agencies must also address concerns and risks associated with its use. By implementing robust ethical guidelines, ensuring transparency in AI-driven processes, and prioritizing ad hoc law regulations, brands and agencies can mitigate potential risks and build trust among stakeholders. This entails fostering a culture of responsible AI use, where ethical considerations are integrated into every stage of AI utilization.

Overall, this thesis underscores the transformative potential of AI in the creative industry sector and highlights the importance of strategic integration and responsible use of AI technologies.

4.3 Limitations and Future Research

While this thesis offers valuable insights into the complicate relationship between artificial intelligence and human creativity, undoubtedly, this research alone is insufficient to provide a comprehensive understanding of the worldwide real dynamics between artificial intelligence and human creativity. For this reason, it's imperative to acknowledge its limitations.

Firstly, the chosen topic focusing only on two successful advertising campaigns leveraging AI may encounter limitations due to the availability of more suitable examples. The quantity of such campaigns might be limited, potentially constraining the depth of analysis and the lengths of insights derived from real-world cases.

Secondly, the analysis results are derived from the study of the real environment of just one creative agency, namely Alkemy S.p.A. While the results extracted from this specific context provide valuable perspectives, they may not comprehensively reflect the diverse landscape of creative industries globally. The uniqueness of Alkemy S.p.A.'s operations and the perspectives of its stakeholders may not fully capture the range of experiences and practices prevalent across the broader industry spectrum.

Moreover, the relatively low number of interviewees in the study could further restrict the generalizability of findings. The limited sample size may not accurately represent the multiple viewpoints and experiences within the creative industry sector, potentially resulting in incomplete insights.

Consequently, the findings derived from this study should be interpreted with caution and may not fully encapsulate the sentiments and practices prevalent among a more extensive and diverse population.

These identified limitations underscore the need for future research endeavors to address these constraints and broaden the scope of inquiry. By exploring a more extensive range of examples and perspectives and engaging with a more diverse array of creative agencies and brands, future studies can offer a more comprehensive understanding of the complex interplay between AI and human creativity in various contexts.

APPENDIX:

MIXED STRUCTURED/SEMI STRUCTURED INTERVIEW PROTOCOL

richiedere consenso alla registrazione dell'intervista

SEZIONE INTRODUTTIVA:
Ti ringrazio per il tuo tempo e per il tuo prezioso contributo al mio studio.
I tuoi dati personali saranno trattati in maniera confidenziale e per obiettivi di ricerca accademica.
Per favore, sentiti liber* di esprimere i tuoi punti di vista con franchezza, senza remore e come più ti è congeniale. Qualsiasi idea condividerai con me, anche quelle che dovessero sembrarti non pertinenti, sarà preziosa per il mio studio.

Lo scopo di questa intervista è quello di esplorare come l'Intelligenza Artificiale possa essere utilizzata come strumento per potenziare la creatività umana nella generazione e nello sviluppo di contenuti artistici e creativi

DOMANDE ICE BREAKER:

- Come stai?
- Come è andata/sta andando la tua giornata?
- È successo qualcosa di bello nella tua vita recentemente?
- Se dovessi descriverti con una parola sola quale sceglieresti? E perché?
- Qual è la tua fonte di ispirazione principale quando si tratta di stimolare la creatività?
- Potresti descrivermi in cosa consiste il tuo lavoro?

PARTE 1: DOMANDE GENERALI SULL' AI:

1. Conosci l'Intelligenza Artificiale? Se sì, potresti dirmi cosa rappresenta per te?
2. Hai mai sperimentato personalmente l'utilizzo dell'Intelligenza Artificiale nel tuo processo creativo/lavorativo? Se sì, in che modo ha influenzato il tuo approccio?
3. Per cosa utilizzi principalmente l'Intelligenza Artificiale? Potresti farmi un esempio? (esempio: generare immagini, generare testi, usarlo come fonte d'ispirazione prima di cominciare un lavoro, per informarti)?
4. Con che frequenza utilizzi l'Intelligenza Artificiale? (esempio: ogni giorno, nei weekend, etc.)
5. Pensi che l'IA potrebbe contribuire a superare i blocchi creativi o a stimolare l'ispirazione nelle fasi iniziali del processo creativo/lavorativo?
6. Secondo te in che modo l'IA potrebbe essere utilizzata per esplorare nuove forme di espressione artistica e narrativa?
7. Potresti dirmi se l'IA ha influenzato il tuo approccio personale alla creatività nel tuo lavoro? Se sì, in che modo? Potresti farmi un esempio?
8. Qual è la tua opinione sull'interazione tra creatività umana e Intelligenza Artificiale nel contesto della produzione di contenuti artistici e creativi?

PARTE 2. DOMANDE CENTRATE SULLE POSSIBILI PREOCCUPAZIONI SVILUPPATE

1. Le sensazioni che avverti nei confronti dell'intelligenza artificiale quando ti fornisce delle risposte sono più positive (esempio: soddisfazione, condivisione, etc.) o più negative (nervosismo, incomprensione, stress, noia, etc.)? Potresti fare un esempio concreto collegato a queste sensazioni?

2. C’è qualcosa che ti preoccupa quando utilizzi l’Intelligenza Artificiale? Avverti dei potenziali rischi?
3. Utilizzando l’Intelligenza Artificiale, ti sei mai posto problemi sulla privacy?
4. Solitamente ti fidi dei consigli e delle risposte che ti fornisce l’intelligenza artificiale?
5. Come pensi che l’intelligenza artificiale possa interferire sulla tua vita? Positivamente o negativamente, potresti descrivermelo con un esempio?

PARTE 3: DOMANDE INQUADRAMENTO FUTURO

1. Credi che in un futuro prossimo, l’Intelligenza Artificiale possa avere un ruolo più attivo e centrale nella tua vita? Se sì, in quale ambito?
2. Come vedi il ruolo dell'Intelligenza Artificiale nell'evoluzione futura delle industrie creative?

-Fine protocollo-

RECAP DELLE RISPOSTE
RACCOLTA DEMOGRAPHICS

INTERVIEW 1, FABIO RODIGHIERO, ALKEMY BX STRATEGY DIRECTOR

DOMANDE ICE BREAKER:

D: Se dovessi descriverti con una parola sola quale sceglieresti? E perché?

R: Pragmatico, sempre stata parte della mia indole ed è una cosa che trovo estremamente utile nel luogo di lavoro e nel lavoro che faccio oggi.
Pragmatismo inteso come cercare sempre di portare delle soluzioni che poi dopo siano effettivamente attuabili, portare soluzioni a problemi oltre che problemi, avere un mindset tendenzialmente legato al lavoro in un ambiente creativo estremamente dinamico che continua a cambiare, credo che parte del ruolo di chi la fa strategia sia quello di avere un punto di vista fattivo che trova un modo per realizzare cose che magari apparentemente sono un po' sognanti, molto lanciate in questo iperuranio, non molto ben definito.

D: Qual è la tua fonte d’ispirazione principale quando si tratta di stimolare la creatività?

R: Ottima domanda e ti direi che non ce ne è una sola, secondo me esistono forse una o due possibilità, due aree: una è quella che sono i progetti fatti da altri quindi intesa come creatività, campagne di comunicazione che vengono fatte da altri brand, altre agenzie di comunicazione, sono grande fonte di ispirazione per vedere come stanno agendo gli altri, soprattutto fatto al di fuori dei nostri confini nazionali, cioè vedere i grandi brand e le grandi aziende cosa fanno a livello internazionale e quella secondo me è una grandissima fonte di ispirazione. Dopo di che c'è una seconda fonte di ispirazione che in realtà è correlata, e riguarda le campagne advertising, non tanto cosa fanno dal punto di vista di quello che realizzano perchè credo che per il nostro lavoro in particolare, che sia creativo come mi chiedevi, ma legato poi dopo a tutti gli ambiti sia quello di lasciarsi ispirare da quello che ti succede attorno nella vita, nel mondo, cioè un lavoro, il nostro, che richiede il fatto di incuriosirsi di fenomeni che ti capitano mentre sei in viaggio per i fatti tuoi, mentre sei fuori un weekend, mentre fai una conversazione con persone che non hanno niente a che fare con il nostro mondo e il nostro lavoro, ma in realtà sono tutti stimoli per scoprire un nuovo insight un nuovo punto di vista, un qualcosa che magari è creativo ma non per forza nel nostro ambito e su questo cito sempre un mio vecchio direttore creativo esecutivo che lui diceva “uno dei contenuti che è più denso e ricco di insight utili per la

creatività e per la strategia sono le stand-up comedy" perché sono momenti in cui tendenzialmente ci sono persone che prendono in giro cosa? Comportamenti umani comuni a tutte le persone nel mondo e lì dentro trovi tonnellate, centinaia di piccoli insight quotidiani che ti possono poi generare delle idee, e io credo che questa cosa sia applichi a tutto: mostre, film, serie tv, documentari, libri, quindi secondo me proprio una questione di nutrire la di curiosità prendendola con enorme leggerezza.

PARTE 1: DOMANDE GENERALI SULL'AI

D 1: Conosci l'Intelligenza Artificiale? Se sì, potresti dirmi cosa rappresenta per te?

R: L'Intelligenza Artificiale oggi per me rappresenta, almeno per quello che è il mio percepito, la nuova evoluzione, la nuova frontiera tecnologica dell'essere umano, cioè, è quello che noi oggi vediamo in parte anche piccola, ed è probabilmente almeno dal mio punto di vista, ciò che cambierà il modo in cui noi ci rapportiamo con la tecnologia da qua al futuro nemmeno troppo lontano, quindi è qualcosa che potrebbe essere rivoluzionario tanto quanto lo è stato e forse anche di più rispetto a quanto lo sia stato l'avvento del personal computer nelle nostre vite, [più] dello smartphone, di internet, stiamo parlando di uno di quei salti tecnologici che fanno fare all'uomo un passo in avanti notevole.

D 2: Hai mai sperimentato personalmente l'utilizzo dell'Intelligenza Artificiale nel tuo processo creativo/lavorativo? Se sì, in che modo ha influenzato il tuo approccio?

R: Ad oggi io ti posso dire che il mio lavoro non è cambiato in maniera radicale, è entrata l'Intelligenza Artificiale ad oggi in maniera relativamente leggera nel senso che non ha ancora cambiato i processi nel cuore, ma è diventato uno strumento che può essere un alleato, un facilitatore, uno sparring partner per fare determinate tipologie di compiti, quindi ad oggi, soprattutto con quelli che sono [grazie a] l'Intelligenza Artificiale i software accessibili a tutti da ChatGPT a Gemini di Google, insomma sono tool accessibili che utilizzi per velocizzare una ricerca, per avere un punto di vista su dati informazioni, quindi cercare di avere anche una conversazione più intelligente in un momento in cui stai interrogando una macchina in relazione a un argomento che ti è utile al tuo processo, è interessante perché ci puoi fare anche un po' di "reverse engineering" cioè hai una situazione in cui sai qual è il risultato che devi ottenere e vuoi filtrarlo attraverso la macchina e capire quali sono tutti i possibili input che ti servono per arrivare a quell'output, quindi è più un tema di come dire dialogare non solo più con persone ma dialogare anche con una macchina. Però ti direi che non è stato trasformativo ad oggi però lo sarà molto a breve.

D: Quindi lo stai usando per il tuo lavoro ossia in che senso e in che modo? L'intervistato ha risposto direttamente anche a D4.

R: quotidianamente (R: della domanda 4) e per quanto mi riguarda la cosa più facile per fare un paragone: l'Interessenza Artificiale è una versione avanzata del modo in cui interroghi Google ma molto più intelligente, molto più user friendly è una versione cioè a tendere [in futuro] io spero di poter fare la stessa cosa che faccio con ChatGPT quotidianamente, di poterla fare come la faccio adesso in maniera molto diciamo basic con Alexa a casa quindi un dialogo un po' più botta/risposta in versione umana con una macchina.

D 3: Per cosa utilizzi principalmente l'Intelligenza Artificiale? Potresti farmi un esempio?

R: Sì, ci sono due esempi pratici che posso farti, o addirittura tre, il più basic di tutti: è tendenzialmente un double check quindi chiedo alla macchina se le informazioni che ho in possesso sono verificate,

se esistono delle fonti, se c'è una base dati, magari sono delle informazioni che la macchina ritrova in altre fonti in altri articoli o se sono per esempio verificabili che siano vere magari su un pubblico rispetto a un altro. Lo utilizzo soprattutto per quanto riguarda il nostro lavoro per raccogliere fatti chiusi e finiti rispetto a un argomento, nel senso, buona parte di quelle che sono raccolta di insight partono tendenzialmente da verità assolute sull'essere umano, tendenzialmente la macchina siccome prende dati informazioni già esistenti, se tu le chiedi quali sono i 10 stereotipi collegati a un argomento o le chiedi quelle 5 cose che sono riconosciute da tutti essere vere su un fatto, la macchina ti restituisce quello che è la "collective knowledge" non quello che ha visto da tutti, poi a partire da lì tu hai dei punti che puoi cercare di ribaltare, che puoi confutare, su cui puoi fare dei ragionamenti. Quindi tendenzialmente lo uso per "fact checking", raccolta informazioni, se ho delle richieste molto basilari sul come si fa una determinata cosa, posso chiedere alla macchina per iniziare ad avere una prima stesura. È tendenzialmente un primo momento di interrogazione su un'analisi, su una ricerca, su un processo di pensiero per avere un punto di vista. Uno standard di partenza, la macchina è in grado di darti uno standard di partenza in tempo molto veloce.

D 6: Pensi che l'Intelligenza Artificiale potrebbe contribuire a superare i blocchi creativi o a stimolare l'ispirazione nelle fasi iniziali del processo creativo/lavorativo?

R: Oggi secondo me, nelle fasi iniziali di un processo creativo lavorativo questo tipo di AI che utilizziamo a livello più strategico, secondo me non è ancora evoluta abbastanza. Può darti degli spunti, senza dubbio, però sono molto embrionali, nel senso, siamo molto lontani da avere quello che è uno spunto realmente creativo. Però può darti magari un'idea, uno stimolo, una piccola scintilla iniziale perché magari appunto sei alla ricerca di quel numero, di quel fatto, di quel dato, di quel che potrebbe aiutarti. Poi il dopo è in realtà ancora lontano. È vero che ci sono invece delle altre Intelligenze Artificiali che lavorano direttamente all'atto creativo, produttivo, eccetera, eccetera, che secondo me invece possono probabilmente sbloccare ancora di più il pensiero e il lavoro creativo. Diciamo che quello che abbiamo a disposizione oggi è un punto di partenza. Per quello che ho sperimentato io, siamo ancora distanti ad avere qualcosa che è in grado di darti grandi idee creative, quanto darti primi stimoli.

D 7: Potresti dirmi se l'Intelligenza Artificiale ha influenzato il tuo approccio personale alla creatività nel tuo lavoro?

R: Allora secondo me è una domanda molto interessante, poi forse va scorporata, nel senso che ha cambiato il modo in cui io accedo a determinati tipologie di informazioni senza dubbio. Ha cambiato il modo in cui inizio un processo creativo mentre se iniziassi un processo creativo professionale ti direi no, ma creativo personale sì. Cioè mi spiego, nel momento in cui tu per esempio devi ipotizzare, faccio un esempio, devo impostare una presentazione che ha anche a che fare con la creatività, ma è una presentazione e magari in questa presentazione devo presentare a un cliente un processo di lavoro per andare da un punto A, un punto B con loro, mentre originariamente creavo ex novo tutte le volte da un mio pensiero personale un processo e gli davo delle etichette mie personali con delle descrizioni personali, questo tipo di processo che avevo ideato, anche se non era una creazione, avevo ideato qualcosa. Poi magari mi serviva come base per fare i successivi documenti che assomigliavano a quello, oggi come oggi quel tipo di processo, la prima fase l'automatizzo, cioè chiedo alla macchina, quale sarebbe il processo ideale per fare con un cliente dal punto A al punto B. La macchina mi restituisce il risultato, io poi modifico in base ad alcune cose che ritengo più giuste, personalizzate, su quel cliente ma non ho più quella parte di ideazione iniziale, la sto demandando alla macchina. Quindi è creatività? No, è un processo creativo personale, secondo me a tendere su una fase iniziale ci saranno alcune cose su cui non avrò più bisogno di pensare a come crearle. E lo stesso secondo me vale a tendere in tempi rapidissimi, ne parlavo recentemente con altri colleghi di altre strutture, avverrà per tantissimi altri processi, per esempio il processo di creazione di un piano editoriale. Ci

sarà sempre un aspetto creativo, ma oggi come oggi io posso tranquillamente chiedere alla macchina di darmi un default di partenza data una serie di impostazioni che gli fornisco. Il default di partenza poi sarà al mio standard, ma la prima parte di quel processo creativo forse posso evitare di farla. Esattamente come potrei interrogare la macchina su darmi degli spunti, su come affrontare un processo di analisi e di ricerca, la macchina mi dà gli spunti, poi quelli li modifico. Però la prima parte generativa tra virgolette "dell'idea" la sto demandando alla macchina. Che non è niente di nuovo, faccio una deviazione. Cioè come questa cosa qua era identica, è sempre stata così, da quando esistono, che ne so, le guide di viaggio, i blog di viaggio, i travel blogger e tutta l'evoluzione fino agli influencer che ti parlano di dove sono andati in viaggio, il processo delle persone di creazione di quello che è il proprio percorso ex novo, versus partire da un percorso che esistente e personalizzarlo, è sempre stato un'evoluzione verso il creo sempre di meno, adatto sempre di più. Quindi è un processo cui andiamo incontro in generale come umanità. In questo caso è ulteriormente aumentato quindi ci sarà secondo me una partenza standardizzata maggiore, però in realtà poi dopo ci sarà tutto il processo di personalizzazione all'infuori dello standard.
Cioè la macchina sta semplicemente ricreando, emulando quello che già esiste e lo sta portando a un estremo di velocità, di diffusione che prima non era possibile.

PARTE 2: DOMANDE CENTRATE SULLE POSSIBILI PREOCCUPAZIONI SVILUPPATE

D 1: Le sensazioni che avverti nei confronti dell'Intelligenza Artificiale quando ti fornisce delle risposte sono più positive o più negative? Potresti fare un esempio concreto collegato a queste sensazioni?

R: Io non ho avuto mai ad oggi una sensazione realmente negativa, non mi è mai capitato, nonostante ne abbia letto e ho visto dei casi pratici di Intelligenze Artificiali che hanno risposto in maniera che potevano generare sensazioni negative per il tipo di risposte. Io personalmente questa esperienza non l'ho mai avuta ad oggi. Tendenzialmente ti direi che la mia sensazione è o neutra o positiva, cioè neutra nel fatto che non sto avendo nulla di particolarmente diverso rispetto a quello che avrei potuto ottenere con un altro tipo di processo di ricerca in maniera più lunga. Positiva nel senso che mi accorgo che è in grado di elaborare il tipo di prompt che ho messo, il tipo di output che arriva, effettivamente mi ha tirato fuori qualcosa che ho trovato molto utile o stimolante, eccetera, eccetera. Quindi in realtà oggi ho avuto un rapporto positivo con le risposte dell'IA, per quanto il rapporto sia stato ridotto, però d'altra parte sono certo che sia molto facile poter avere delle sensazioni negative, io non ho mai interrogato per esempio l'Intelligenza Artificiale su tematiche scottanti o scomode, sociali, politiche, secondo me da quel punto di vista è sempre un po' difficile... può generare dei mostri.

D 2: C'è qualcosa che ti preoccupa quando utilizzi l'Intelligenza Artificiale? Avverti dei potenziali rischi?

R: Sì sono sotto agli occhi di tutti, sono enormi rischi. Il rischio più grosso in assoluto è legato probabilmente al fatto che stiamo dando in mano collettivamente, e anche questo è un processo che è iniziato anni fa, abbiamo dato in mano a delle aziende private che si occupano di tecnologia tutto quello che è, diciamo, lo sviluppo della società e abbiamo dato in mano a loro i nostri dati, le nostre informazioni, la possibilità di farlo praticamente senza regolamentazioni e tutte le regolamentazioni legali di ogni... di ogni paese, di ogni area del mondo sono indietro anni luce rispetto a quello che è l'avanzamento tecnologico, quindi fondamentalmente viviamo in un mondo in cui la regolamentazione di come devono essere fatte queste AI, quali sono i loro limiti dove nutrono, di quali informazioni si nutrono, e che tipo di punto di vista devono avere, non lo decidiamo, non lo decide uno stato, non lo decide un organismo regolatore, lo decidono delle persone che di lavoro, si

occupano di tecnologia. È un enorme rischio, cioè gigantesco che la tecnologia ci ha mostrato quanto ci sono dei dark side devastanti, quindi la centralizzazione delle mani di pochi, del potere di queste AI è rischiosissimo. Il fatto che le AI oggi siano in grado, come lo era pochi anni fa i social, da soli della gestione delle informazioni non centralizzate, cioè centralizzate in poche mani è devastante. Il grado di disinformazione che è in grado di fornire, il grado di annullamento di un'opinione, il grado di automatizzazione di processi fino all'annullamento di determinate tipologie di pensiero critico singolo sono enormi. Rischi di privacy. Ti direi che rischi di privacy non so come dirti, è talmente già un problema di default oggi che non so se le AI è un problema in più, semplicemente stiamo continuando su un tema per cui già abbiamo abbondantemente superato il limite, non so come dirti, i rischi sono alla portata di tutti, sono davanti agli occhi di tutti secondo me, dal mio punto di vista il "tipping point" è stato abbondantemente superato, secondo me non viviamo in realtà in cui dobbiamo e ci sono tantissimi casi, ma senza andare in quelli politici famosi, quindi Cambridge Analitica e quello è uno dei tanti, ce ne sono migliaia, però tutto il mondo delle fake news e deepfake abbiamo avuto tutti, tutte le volte in cui ci sono state diciamo conversazioni che sono state, sono dimostrate completamente false pilotate, cioè tutto questo è già alla porta di tutti, ma se tu guardi anche nel mondo per esempio delle aziende che hanno a che fare col mondo di internet con la tecnologia degli ultimi 15-20 anni e vuoi vedere quanti sono i casi di aziende che sono nate, esplose e morte, nel giro di niente perché c'era, dietro alle spalle non c'era una regolamentazione, c'era un boost di diciamo di hype, al dietro di quale non c'era assolutamente nulla, c'era l'unica volontà da quella di cercare di innovare tutti i costi dimenticandosi di tutto quello che poteva essere il rispetto delle regole, rispetto delle persone, rispetto dell'ambiente, cioè è un costante, quindi c'è nel senso del mio punto di vista il tipping point è già superato, sul tema della privacy siamo indietro al punto tale che abbiamo due opzioni come essi come cittadini o decidi di andare a vivere su Neremo o se sei nella società di oggi ci partecipi e non esiste un modo per cui tu possa utilizzare uno smartphone, un telefono o qualunque cosa e pensare di non delegare a qualcun altro la tua privacy. Cioè quindi non so come dire che siamo arrivati al punto in cui le AI è ok, va bene, abbiamo un altro strumento ancora più potente che utilizzerà le informazioni che hai nel nostro possesso. Con questo tipo di infrastruttura, questo tipo di dati, oggi come oggi se già un'azienda prima aveva data base di intere informazioni che contenevano cosa fa, chi siamo, cosa facciamo, quali sono i nostri potenzialmente, i nostri spostamenti, le nostre transazioni economiche, tutto il resto oggi messe in mano a una macchina che è molto ancora più potente le possibilità di fare qualcosa di negativo sono infine, esattamente come quella di fare qualcosa di positivo, quali negativi sono per infinito.

D 4: Come pensi che l'Intelligenza Artificiale possa impattare sulla tua vita? Potresti descrivermelo con uno scenario?

R: Allora, credo che nella mia vita personale, credo che l'impatto più grosso, cioè quello che io temo di più in assoluto per me nel piccolo è che l'intelligenza artificiale farà quello che hanno fatto, quello che ha fatto la connessione veloce, lo smartphone per la generazione dei miei genitori, cioè mi renderà obsoleto in tempi molto rapidi. Cioè, nel senso, perché credo che questa cosa qua trasformerà talmente tanto, diciamo la tecnologia che sta attorno a noi, il mondo attorno a noi, facendo finta che...
dimenticandoci per un secondo gli aspetti negativi, facciamo finta che porti più cose positive che cose negative, in un mondo in cui porta più cose positive, pur portando cose positive mi rendo conto che mi renderà vecchio, dal punto di vista della capacità di interpretare il mondo e saper utilizzare questa tecnologia perché coloro che stanno lasciando adesso è che ci avranno in mano fino a quando sono ragazzini, saranno 30 volte, 50 volte, 100 volte più avanti in tempo rapidissimo esattamente come la generazione dei miei genitori è diventata...
mi ha detto di genitori, è diventata vecchia in un colpo solo dall'avvento dello smartphone in poi, cioè dal 2000... cioè era già internet prima però diciamo dall'avvento dello smartphone in poi in assoluto hanno fatto un salto e sono diventati dei... dei Neanderthal in un tempo rapidissimo, quando prima, i cambi tecnici che c'erano stati prima non avevano creato dei distacchi generazionali così ampi, adesso

sono molto più ampi e molto più rapidi, cioè sono letteralmente non hai nemmeno lo span 25 anni che non c'è la generazione, te le bastano 5-10 e hai già creato un divario importantissimo.

PARTE 3: DOMANDE INQUADRAMENTO FUTURO

D 1: Credi che in un futuro prossimo, l'intelligenza artificiale possa avere un ruolo più attivo e centrale nella tua vita? Se sì, in quale ambito?

R: Io non credo, cioè nel senso credo che per quanto riguarda la mia [teoria] personale, basata su nulla, credo che qualunque tipo di evoluzione tecnologica, evoluzione di innovazione, scusami nella storia dell'uomo abbia come dire virgolettato mietuto delle vittime inteso che comunque qualcuno nel mezzo che si passava da un paradigma un altro ci sono stati dei momenti di transizione in cui qualcuno tra virgolette rimaneva indietro al passami il termine e quindi credo che trascinerà la maggior parte delle persone, credo che la strada di maggioranza ne beneficerà negli aspetti positivi, credo che ci saranno una fetta di persone che non è che verranno esclusive però diciamo non potranno beneficiarne a pieno perché non saranno in grado di utilizzarla al massimo delle sue possibilità tutto qua cioè quindi è esattamente lo stesso modello di dare uno smartphone in mano una persona che oggi ha 60 anni o 70 anni non è che quella persona è totalmente incapace di utilizzarlo ma ne sta sfruttando forse il 5% 10% delle sue potenzialità credo che l'intelligenza artificiale e se domani ci fossero un'intelligenza artificiale con cui io o una persona che comunque può per esempio avere una conversazione elaborata e che abbia un comando effettivo magari tutto quello che succede all'interno della propria area domestica non solo ma ci fosse un domani l'intelligenza artificiale che è in grado di svolgere determinati compiti non è che una persona però è difficile e sarà difficile mano a mano che il tempo avanza per una generazione di persone che non l'hanno vista all'interno della loro quotidianità sarà semplicemente un po' più difficile tutto qua credo, poi magari sarà una quali evoluzioni che invece è facilita nella vita di tutti non difficile dirlo oggi.

D 2: Come vedi il ruolo dell'intelligenza artificiale nell'evoluzione futura delle industrie creative?

R: allora credo che sarà una bella battaglia cioè nel senso è un tipo di evoluzione, te la inserisco in questo contesto sì l'intera industria creativa da quando io ci sono dentro quindi sono gli ultimi 14 anni io sono entrato e già era un momento in cui si parlava in maniera preponderante dell'importanza dei dati, eravamo gli agli diciamo all'avvento vero dei social perché esistevano già ma relativamente poco, l'avvento dello smartphone mass, quindi c'è nel senso improvvisamente da un mondo che fino a pochissimi anni prima pur avendo internet però aveva un approccio diciamo al dato come secondario rispetto a quello diciamo dell'importanza dell'idea creativa dell'esecuzione si iniziava un ribaltamento e per anni la narrativa è stata: oggi non basta fare creatività oggi tu devi fare creatività che sia power by data che sia poi dopo delivered with data cioè deve essere tutto data centric quindi devo sapere nel dettaglio in che secondo parlo a chi su quale canale devo misurare tutto quello che faccio e avere poi un ritorno tale per cui modifico le informazioni modifico quello che ho fatto e quello è il modello diciamo che si è diffuso in maniera massiva perché ho fatto questa premessa perché questo modello ha diciamo mostrato le sue crepe dal punto di vista dell'industria creativa sempre di più perché più entro in una dinamica di performance più entro in una dinamica legata ai dati e le informazioni chiaramente più vado a privare del suo potere nativo la creatività che per definizione per struttura è fatta di umanità, è fatta di emozione, fatta sensazione è fatto di racconto, e che quindi inevitabilmente ha bisogno di spazi magari più lunghi ha bisogno di cose che sono più irrazionali non può essere sempre misurata il dettaglio, è difficile poter dire numericamente tutto ciò che funziona non funziona e alle volte la creatività va contro le regole, sono tantissimi casi di campagne di comunicazione ma non solo che le dati avrebbero detto che non avrebbe avuto successo ma poi invece avuto successo quindi fondamentalmente mio principio è se tu guardi oggi no il fatto che se io devo guardare i dati e adattarmi a quello che i dati mi dicono continuerai a ripetere costantemente quello che è già stato

fatto perché quello che funziona la creatività di default deve essere una disruption deve rompere il sistema a continuare a creare qualcosa che oggi non esiste e quindi evidentemente andare contro alle volte le numeriche i dati le informazioni e il suo compito senza questa cosa qua non stai facendo non stai completamente sfruttando il potere della creatività tutto questo per dire che in un momento in cui arrivo al mondo dell'intelligenza artificiale che è una macchina che prende informazioni che già esistono le rielabora in maniera super intelligente ma il suo database di partenza è quello per cui genera qualcosa qui genera da qualcosa che esiste inevitabilmente io spero che ci sia una attenzione sul fatto che non può essere sostitutiva della creatività ma deve essere un alleato può facilitare dei processi può rendere le produzioni più snelle può dare una mano a creare degli standard ma crea degli standard c'è in senso l'intelligenza artificiale dovrà essere spero interpretata come non sostitutiva non un creatore di creatività esattamente dovrà essere corretto dovrà essere qualcosa che dovrà essere utilizzato ma dovrà essere ricordato sia qua dentro gli ambienti creativi sia che nel mente dei clienti per cui è evidente che ci sono delle cose che potranno essere ottimizzate e standardizzate giusto che sia così ci mancherebbe ben venga però vuol dire che invece altre cose devono essere difese che lunghe con i denti perché il passare l'idea esattamente come nel 2007-2009 agli albori dei social era passata l'idea puoi fare comunicazione spendendo poco cioè quasi in quasi non costa nulla perché i canali sono gratis che erano a grande finzione puoi fare comunicazione senza spendere cioè senza fare grandi messaggi tanto ci sono appunto canali che ti permettono di fare micro comunicazioni tattiche che permettono di essere bene però allo stesso tempo stai deprivando la tua marca il tuo mondo di un tutto una serie di narrative era anche quella una mezza bugia tutte cose vere funzionano ma devono essere utilizzate diciamo l'una con l'altra sono sistemi che devono vivere in maniera diciamo combinata ecco la mia speranza mi la mia paura che contemporaneamente si traduce una speranza è che il messaggio delle ai in termini creativi non si traduca alla fuori in un post finalmente ci sono delle macchine che possono fare il lavoro che faceva prima degli esseri umani quanto ci sono delle macchine che possono ottimizzare e probabilmente anche eliminare alcuni lavori che facevano prima gli esseri umani gli esseri umani si potranno concentrare su fare un'altra parte del lavoro che però ad oggi ad oggi è quell'evoluzione tecnologica di oggi può essere sostituita se poi un domani esisterà una macchina che in grado realmente di generare creatività come un esser umano che potrebbe essere un tipo di frontiera non così fantascientifica allora lì sarà tutto un altro gioco.

PARTE 4: RECAP DELLE RISPOSTE DATE

R: siamo partiti da la tua fonte di ispirazione per la creatività, siamo passati attraverso al diciamo il rapporto e cosa rappresenta per te l'intelligenza artificiale e come ha sperimentato l'utilizzo quindi per te l'intelligenza artificiale sostanzialmente è uno strumento di supporto di aiuto che può diciamo dare la scintilla per far partire l'ispirazione in una persona ma che in sostanza non riuscirà a sostituire la creazione dell'ispirazione in sé, e andando avanti abbiamo guardato anche le preoccupazioni sviluppate riguardo le ai quindi sentimenti che tu provi nei confronti delle ai che sono parzialmente neutrali ma se si deve decidere fra negativo e positivo vanno prevalentemente in positivo nonostante tu tenga conto dei vari rischi che ne comportano che non sono solo rischi legati alle ai quanto rischi che ormai in generale vengono affrontati nel mondo della tecnologia e dell'evoluzione e per quanto riguarda invece come l'intelligenza artificiale ha impattato la tua vita è chiaro il fatto che la impattata in modo positivo ma che sostanzialmente ti sta dando delle sensazioni per le quali ok è arrivata una nuova ondata di evoluzione molto probabilmente potrei rimanere indietro potrei non riuscire a cavalcare l'onda come potrebbero fare generazioni più giovani della mia in quanto l'utilizzo che ne faranno verrà implementato fin da quando sono piccoli e in conclusione mi ha parlato anche del fatto che secondo te per quanto riguarda l'evoluzione futura nel mondo delle industrie creative le ai avrà degli sviluppi ampi ma che sostanzialmente dovrebbe essere vista da in primis le agenzie creative o le industrie creative ma anche dei clienti come non come uno strumento di sostituzione ma uno strumento che aiuta a ottimizzare il lavoro, eliminare il lavoro superfluo e aiutare le persone e i lavoratori a concentrarsi su un materie che sono più diciamo al nocciolo di quello che è il lavoro.

corretto ti direi che sono per aggiungere questo cioè immaginate oggi come oggi ho delle persone che sono degli art director che magari devono utilizzare dei software come in design o photoshop per creare delle immagini o ritoccarle se un domani io ho un software powered by ai che fa il lavoro di base del ritocco poi dopo io il tempo che prima pensi passavo a ritoccare lo posso utilizzare per fare invece generazioni delle idee e creare altre tipologie di contenuti che oggi usavo per fare quel lavoro lì esattamente come tu quando dovrai sbobinare questa intervista non c'è più un motivo un domani che tu lo faccia di persona perché ci sarà una macchina che già esiste che è in grado di trasformare questo in un testo e potenzialmente farti anche un recap e non c'è nessun motivo perché tu perda due ore un'ora tre ore a farlo quando lo può fare una macchina perché quel tipo di lavoro a te non ha un valore aggiunto di suo, è una tua scelta quello di doverlo fare ma se lo fa qualcun altro per te lo abbrevia ben venga, perché poi dopo tu di fronte a una sintesi ben fatta puoi fare cosa puoi iniziare a pensare a iniziare a strutturare il tuo pensiero su come vuoi utilizzare quegli argomenti e che tipo di filo logico vuoi dare quali informazioni ti servono per portare a casa quale tesi e quali antitesi e come concluderla quello il concetto è esattamente come sul tema dell'ispirazione dicevo prima per chiudere, per me c'è nel senso se io faccio un parallelo in proprio ti dico io utilizzo le ai per prendere l'ispirazione e penso che non possa essere sostitutiva della scintilla iniziale o solo in parte perché le ai oggi per come la utilizziamo noi per quanto guarda alcuni lavori è il corrispettivo, faccio un parallelo veramente brutale e improprio di prendere un catalogo di Ikea che c'è nel senso mi dà degli stimoli delle ispirazioni no c'è nel senso perché come se avessi digitato e mi fa vedere cosa potrebbe essere una stanza per un bambino oggi in stile scandinavo me la tira fuori però quella c'è nel senso è perché voglio partire da qualcosa che non sia il nulla ma è semplicemente un'immagine che prende cose che esistono sono messi assieme me le fa vedere mi ispira sì però poi la vera scintilla creativa nel fare qualcosa che non che non esiste che non c'è o combinare quegli elementi in un modo completamente nuovo tendenzialmente lo faccio io, posso pure stimolare la macchina continuare a farlo fino a quando non raggiungiamo il risultato che ho in testa però sto comandando io la macchina per raggiungere il risultato che ho in testa, non è lei che mi sta dando il risultato quindi è quello il concetto quindi per me ad oggi è ripeto con i sistemi che ho sperimentato io sono certo che ci saranno delle macchine che in questo momento non sviluppate con l'obiettivo di arrivare a livello di generazione altissima o comparabile a quello umano,
io: ti faccio un esempio solo perché l'ho inserito nella mia tesi non è inerente all'intervista, ho trovato delle fonti nelle quali un'artista ha partecipato a un concorso d'arte con Midjourney con la generazione di immagini e ha vinto il concorso nella parte digital, creazioni digital e ha tirato su un polverone di artisti in cui facevano discorsi riguardo l'etica del far vincere una macchina sostenendo che il lavoro non fosse dell'artista ma del generatore di immagini.

argomentabile esatto secondo me esattamente quello che stavi dicendo tu per quanto l'intelligenza artificiale ti può aiutare a tirare fuori l'output il prompt che ha scritto l'artista e suo personale quello che dico ce ne so per me ovviamente stiamo entrando su temi delicatissimi su cui tra l'altro conoscenze limitate però in per il puro fine della dialettica che c'è proprio ad avere un momento di dialettica non avrei problemi ad argomentare all'inizio poi dover difendere sentirmi smontare la tesi che è come se un'artista che suona uno strumento avesse accusato di un dj che utilizza un generatore di suoni che non è lo strumento stesso e li mette assieme allora non è che non sta creando quella musica perché non la sta suonando però so c'è nel senso ovviamente sono temi diversi ma di fondo tutte le volte che abbiamo delegato il fatto che sia una macchina che faccia determinate cose se noi siamo dietro generare l'output, è tuo, poi dopo che debba esistere una categoria ad hoc proprio bene c'erano esattamente come non vorrei che a una mostra di fotografia vincesse e andasse per provocazione un'artista che fa generare l'immagine non scattata da una foto allora li il problema però è la mala fede di chi si è scritto secondo me alla la competizione però se ci fosse una competizione di foto di sole immagini in generale non ho la competizione lui non lo dico non lo si si non di cosa ci fosse certo però se fosse una competizione di tutte immagini in generale o di qualunque tipo di cosa fatte tutte le

ai, ci sono degli artisti comunque che l'hanno fatto secondo me ci sono delle persone che hanno messo dentro un processo un pensiero che altrimenti la macchina da sola non l'avrebbe potuto fare può essere che ci sia appunto una domani delle macchine che sono in grado di farlo scopriremo.

INTERVIEW 2, JAN MATTASSI, ALKEMY BX EXECUTIVE CREATIVE DIRECTOR

DOMANDE ICE BREAKER:

D: Se dovessi descriverti con una parola sola quale sceglieresti? E perché?

R:
Una sola parola? Caspita. Anche di più se preferisci. Allora, sicuramente... è banale però curioso. Curioso è la parola che mi definisce forse meglio. Curioso, sì, curioso. Curioso. Questa è una cosa che mi è sempre definito. Ok. E poi mi, perché? Sognatore, anche. Perché? Perché allora prima, perché mi annoio abbastanza in fretta, delle cose che capisco e comincio a capire e quindi diciamo che non mi basta mai vedere le sfaccettature e le implicazioni delle cose nuove che ho scoperto. Poi, vabbè, sono un lettore, mi piace leggere di tutto, mi piace sapere, mi piace anche soprattutto lasciarmi trasportare delle cose che ho scoperto che ho imparato come un sognatore, no? Quando comincio a entrare in un tema mi perdo e comincio davvero a riflettere, a realizzare, ma proprio lasciami trasportare, quindi non so, credo che sia un po' anche il sogno che avevo da piccolo che era di fare l'inventore quando ero piccolo e secondo me, me la sono portata un po' dietro. Infatti, ho spesso tante idee, magari non tutte, anzi, la maggior parte non le concretizzo, però ne ho sempre tante, aldilà del lavoro che faccio, e ma proprio idee di piccola ottimizzazione o sai in casa, idee di attività anche imprenditoriali, ne ho diverse, alcune ho cercato di portarle a terra, poi mi scontro con la mia anima forse un po' troppo creativa rispetto a quella concreta numerica, però insomma non smetto mai di sperarci di usare la testa e il cuore per queste cose.

D: Qual è la tua fonte d'ispirazione principale quando si tratta di stimolare la creatività?

R: È una bellissima domanda anche questa, perché è tutto, nel senso, allora una frase importante di Raymond Carver, che è uno dei più grandi autori del 900, ha scritto anche un bellissimo libro di scrittura e lui dice, metti a frutto, metti a frutto tutto quello che ti succede, quello che hai vissuto, che ti ha fatto incazzare, che ti ha fatto sorridere, l'ispirazione secondo me si trova da, non da come sono le cose, ma dal modo in cui le vediamo e quindi anche davvero un cagnolino che ti attraversa la strada può portarti a immaginare chissà cosa c'è dietro l'angolo, allora da lì parte tutto. Secondo me il fatto di trovare ispirazione è proprio una ginnastica mentale ed è quel, non limitarsi a vedere le cose come sono, ma c'è per sempre di vedere come potrebbero essere o come potrebbero non essere e anche il focalizzarsi non tanto su quello che sappiamo, ma soprattutto su quello che non sappiamo, è come questa un bel gancio anche quando poi parliamo di intelligenza artificiale.

PARTE 1: DOMANDE GENERALI SULL'AI

D 1: Conosci l'Intelligenza Artificiale? Se sì, potresti dirmi cosa rappresenta per te?

R: Sì per me, rappresenta, allora intanto un interessante passo che unisce tecnologia e magia da un lato, soprattutto adesso sembra più magia che tecnologia, poi in realtà più la più la usi più scopri che effettivamente è un bello strumento, quindi mi accodo un po' quello che dicono un po' la maggior parte delle persone, che è uno strumento e in quanto lo strumento bisogna saperlo usare, perché se ti dò un cannone e sei un bambino fai più danni che trovare cose buone, quindi è uno strumento estremamente potente sia per migliorarci, ma anche per farci regredire, nel senso che non so se hai

una domanda sui rischi magari più avanti ne parliamo dopo, allora mi fermo qua. Quindi lo dico che l'ho reputo un potentissimo strumento.

D 2: Hai mai sperimentato personalmente l'utilizzo dell'intelligenza artificiale nel tuo processo creativo/lavorativo? Se sì, in che modo ha influenzato il tuo approccio?

R: Allora intanto sì, intanto per essere preciso di un'intelligenza artificiale generativa, quella che ho usato, sì, [l'ho usata] tanto nel senso che ho ricominciato a studiarla, a interessarmene nel 2018, più o meno, quindi un po' prima del covid ho cominciato a sfogliare qualche libro, a leggere un po' di letteratura, capire un po' di cosa si si è un po' prima rispetto all'hype che poi è esploso recentemente, quindi sono arrivato poi quando è scoppiato l'hype un po' preparato e il primo impatto è stato, oh dio cosa sta succedendo, il secondo è stato, va beh, la paura deve essere un po' un compasso che ci guida, quindi mi sono buttato di testa, nei primi strumenti quindi ho cominciato a smanettare un po' con ChatGpt, poi ho cominciato a farmi un account su Midjourney e poi su quello sono impazzito, nel senso che per me è diventato una specie di droga prima periodo, passavo tutte le serate fino a tardi a generare immagini, capire come funziona il prompt, poi studiavo tantissimo su Twitter, poi X diventato, poi su Medium, poi su Reddit, insomma ho guardato sui forum, mi sono molto interessato, mi sono creato anche qualche contatto con delle persone e quindi si ho smanettato tendenzialmente su chat Gpt e poi su Midjourney di base, adesso sono un po' più orientato su Gemini, sto capendo un po' come funziona, sto testando con un collega perché è un po' complicato stable diffusion, però non in prima persona, più tanto come un collega e anche lì è tutto molto interessante, adesso è un po' meno interessante rispetto a prima, nel senso che ho capito un po' come funziona e ho capito che magari non devo essere io per forza in prima persona a metterci le mani ma sapere un po' come guidarlo, quello mi interessa, sapere come governarlo più che per forza come usarlo in lo specifico.

D 3: Per cosa utilizzi principalmente l'intelligenza artificiale? Potresti farmi un esempio?

R: Sì, [oltre alla generazione di immagini] allora traduzioni in inglese, su chat Gpt lo uso per traduzioni, ricerca evoluta su internet, quindi "parlami di un determinato tema" soprattutto con Gemini questo, esplorazione semantica di parole e concetti o semplificazione di concetti, sì questa roba qua e mentre invece con Midjourney generazioni immagini, modifica di immagini generate e poi appunto esplorazione delle potenzialità del mezzo in generale anche per poter sapere di cosa si parla.

D 4: Con che frequenza utilizzi l'intelligenza artificiale?

R: quotidianamente, non solo per lavoro ovviamente, adesso molto Gemini sto usando... Funziona bene, poi ti fa le ricerche, interessante, però da quello che so è più potente chat Gpt4 o quella di versione quella poi voluta, ho visto un po' il test, è un po' più potente.

D 5: Secondo te in che modo l'intelligenza artificiale potrebbe essere utilizzata per esplorare nuove forme di espressione artistica e narrativa?

R: Nuove forme? Nuove forme. Anche nuovi modi di fare arte, per esempio. Sicuramente, sì sicuramente. Allora lo fa intanto perché ti dà intanto un primo riscontro, intanto la creatività è generativa. Le idee non è che ti viene il balzo, il colpo di fulmine, di solito parte da uno spunto, poi ci costruisci sopra e magari arrivi a un risultato totalmente inaspettato, poi la serendipità è quello che poi rende davvero creativo un lavoro, la fine di un processo. Avere una controparte con la quale puoi iniziare a testare, buttare i primi spunti e aiutarti nel processo creativo come strumento e non come guida sicuramente, a livello sia estetico, cioè quindi di immagine sia anche livello di testo. A livello di immagini credo che si stia già formando una nuova forma d'arte ed è da un lato nel video generativo,

ho visto degli esempi fatti con Sora in cui il prompt quello del video che entra uno nell'altro, è quello lì, ecco quella forma d'arte perché non è accuratissimo però capisci il concetto è abbastanza accurato, nel senso un insieme di elementi che lo rende un linguaggio a sé stante. Fino pochi mesi fa c'erano quei video che si impastavano nell'altro, anche qui era una forma d'arte e secondo me diventa una tecnica generativa. Ho visto anche delle esperienze museali in cui più che una generativa più l'elaborazione dei dati, o creare esperienze che siano di alta qualità, che siano immersive, che siano credibili perché poi la credibilità quello che rende un'espressione artistica, arte, che sia per forza vera o un fatto. Quindi secondo me siamo ancora all'inizio di un qualcosa che unisce tecnologia, generazione, analisi di dati, ricerche di nuovi dati, interazione umana, macchina uomo o macchina macchina, perché anche qui ci sono i primi esperimenti dei chat gpt che si parlano.
E lì cosa succede se metti altri ancora, butti dentro un elemento inaspettato, non sappiamo ancora cosa può succede, però ci sono dei primi spunti. E lì che anche metter due artisti generativi generati, quindi due robot generativi a confronto, cosa tireranno fuori non si è ancora fatto, però due artisti che generano immagini e sono dei bot, cosa succede? O due, dieci, venti, cinquanta di questi, cosa viene fuori? Una mega allucinazione, il grande caso, probabile, però anche li come lo interpreterà l'umano, la grande nuvola di caso che viene tirata fuori, ci pone davanti delle interessanti domande esistenziali, poi l'altro punto è ma l'umano sarà interessato a vedere qualcosa di non fatto da un umano? Questa è una domanda che mi pongo, ha la stessa magia, se sai che la cosa non ha fatto l'umano? Potrebbe, potrebbe, alla fine perché no, perché non cercare di apprendere da qualcosa di diverso, visto che il caso fino adesso ha appreso da noi. Questo è un buon punto, è vero, però ne faccio proprio una, sì, è una questione più esistenziale, cioè non so se un'opera d'arte fatta da un computer in cui non c'è nessun controllo umano, se era veramente in grado di darmi quell'aspetto empatico che può darmi invece la consapevolezza che l'ha fatto un umano.

D 6: Pensi che l'intelligenza artificiale potrebbe contribuire a superare i blocchi creativi o a stimolare l'ispirazione nelle fasi iniziali del processo creativo/lavorativo?

R: Sicuramente, è un'assistente molto potente, a volte per superare il blocco ti basta soltanto che arrivi un qualcosa di inaspettato, anche un'allucinazione ti aiuta a superare il blocco, poi parlare del blocco, secondo me è un tema un po' più ampio, non che credo tanto nel blocco, credo nel quanto siamo rilassati.
Però anche uno stimolo di partenza, magari quando hai un lavoro totalmente nuovo e dici ok devo cominciare da questa situazione, cosa faccio? E magari iniziamo. Iniziamo a buttarti già a un 50 formazioni, trovi la parola interessante che può aprire un ragionamento, sono d'accordo.

D 7: Potresti dirmi se l'intelligenza artificiale ha influenzato il tuo approccio personale alla creatività nel tuo lavoro?

R: Non l'ha influenzato, ha influenzato soltanto come avrei potuto influenzare in realtà il mio cervello, come quello che dicevamo mi ha influenzato, nel senso mi ha aiutato a volte a trovare un pezzettino di spunto in più.
Oppure mi ha dato un gancio, un'immagine poi mi ha dato un gancio estetico per generare un'altra immagine. Parliamo di un canale di Instagram che uso per giocare, in cui carico delle immagini che ho generato e lì è successo più volte io partissi da un concetto e generasse delle immagini. Poi la generazione dell'output mi dava il là per altre generazioni; quindi, magari sono partito da un'idea e sono arrivato ad un'idea molto diversa, o un trattamento molto diverso; quindi, in quel senso nella libertà artistica è una cosa, nel progetto di comunicazione non ha cambiato tanto, è stato più supporto, un'assistente, un buon assistente.

PARTE 2: DOMANDE CENTRATE SULLE POSSIBILI PREOCCUPAZIONI SVILUPPATE

D 1: Le sensazioni che avverti nei confronti dell'intelligenza artificiale quando ti fornisce delle risposte sono più positive o più negative? Potresti fare un esempio concreto collegato a queste sensazioni?

R: Allora piccola premessa, molto spesso le risposte che ti dà un bot sembrano costruite per sembrare delle risposte plausibili, cioè il bot ragiona di più nel senso di far funzionare la risposta che darti una risposta effettivamente accurata, quindi giocano un po' con questa nostra percezione, è un po' una mezza truffa in realtà, soprattutto su alcune domande magari un pochino più complicate o magari delle teorie che mi sono venute che io vorrei provare a verificare e lui mi risponde dicendo quasi la stessa cosa dicendo che ho ragione, magari non contraddistingue, e io dico no aspetta ma sei sicuro (al bot), e lui risponde [il bot] ah ho sbagliato, così non va bene, quindi allora di solito sì, mi soddisfa quando mi chiedo delle cose semplici tipo spiegami la relatività come se avessi 15 anni, va bene, che ridere divertente, ho capito un po' meglio bene, spiegami chi era questo personaggio o aiutami a capire meglio se collego questo concetto con questo concetto cosa viene fuori e mi dà degli spunti interessanti, va bene, quindi su questo mi soddisfa, su teorie un po' più complesse mi soddisfa molto raramente, se non nella misura in cui mi dà ragione, lui dice che sono bravo intelligente, è un modo per tenersi il cliente, è renderlo soddisfatto, quindi a questo livello quindi si mi soddisfa nelle cose semplici, nell'aiutarmi a spiegare qualcosa, non mi soddisfa quasi mai nel dare un valore aggiunto o fare quel passo in più, quindi su quello si smaschera il livello in cui è la Gen AI in questo momento.

D 2: C'è qualcosa che ti preoccupa quando utilizzi l'intelligenza artificiale? Avverti dei potenziali rischi?

R: Sì, al di là va be del copyright che va be chi se ne frega, di quello che non è che mi interessa, mi interesserebbe di più se fosse un artista ma non mi interessa tanto adesso, non lo starei affrontando [come argomento] però ho capito che ci sono dei temi dei diritti di mano? no quello che mi preoccupa che visto che da delle belle risposte [the AI chatbot], la gente smetta di saper porre le domande, cosa vuol dire? E già siamo, c'è un livello di ignoranza abbastanza allarmante nel mondo, questo strumento ha il potenziale di aumentarlo ancora di più, quindi di delegare completamente il pensare che quello che ci rende umani, a un computer che ha sotto una base dati prefissata, quindi che ti dice cose finite, questo mi preoccupa molto perché poi non pensare porta anche a non saper fare delle decisioni e poi a cascata porta anche a votare male e un attimo può entrare in un sistema autoritario, esatto l'apocalisse, sì perché poi arriva una generazione di stupidi che schiacciano il pulsante che non dovevano schiacciare.
Questo è un rischio che penso, il rischio appunto è non sapersi porre domande e non sapersi porre domande vuol dire anche smettere di essere curiosi, di immaginare, c'è un problema grande con la nostra società che è anche ben espresso nel saggio di Mark Fisher che forse ho citato alla luiss, non credo però lo cito ogni tanto che è un realismo capitalista e c'è una tesi molto bella dentro che dice che il nostro sistema è un affatto politico, però è una tesi che c'è dentro, che il nostro sistema, il capitalismo ci ha convinto che non c'è alternativa adesso, il fatto di non vedere alternative non ci spinge a immaginarle, facciamo fatica a immaginare dell'alternativa sistema in cui viviamo. Quando prima l'Europa era divisa, il mondo era diviso in due, per forza si immaginavano alternative alla realtà che vivevi, perché c'era un'altra, adesso non avendo contrapposizioni, anche se ancora adesso cominciamo a tornare in un modo di contrapposizioni, e non avere gli strumenti cognitivi e creativi e mentali e culturali per immaginare rischiamo che il nostro cervello si atrofizzi sempre di più, proprio perché è uno strumento che dà l'idea di poter sapere tutto, però non è importante quello che sappiamo, che è poi il data set sulla quale si basa l'intelligenza artificiale, ma quello che non sappiamo, è li che stanno tutte le analisi dei rischi, le opportunità di imprenditoria, di carriera, di invenzione, di innovazione, ma anche nella relazione fra l'altro in teso con l'altro, il misterio di quello che non so quando mi approccio una persona che non conosco, mi stimola tantissimo su come adattarmi, come

estrarre delle informazioni, come diventargli amico, come innamorarmi, è questa parte di mistero che ci rende umani, quello che non sappiamo che ci rende degli esploratori, gli avventurieri che ci hanno portato poi ad arrivare all'andare nello spazio.
Vero, è anche ciò che ci fa paura alla fine. Esatto, e la paura deve essere ciò che ci guida, non ciò che ci tiene indietro, invece avere già delle risposte, una app per risposte rimuove anche quell'imbarazzo nel buttarsi, quella spinta totalmente umana di scoprire, di buttarsi nell'ignoto, per il preoccupante, perdere l'ignoto.

D 3: Solitamente ti fidi dei consigli e delle risposte che ti fornisce l'intelligenza artificiale?

R: tendenzialmente no, nel senso, se sono cavolate mi fido.
Poi scopri che anche le cavolate magari non sono del tutto accurate, però le domande, allora diciamo che è uso per verificare una risposta che in parte ho già nella mia testa. Se no su cose più complicate, non mi fido. Ok. E anzi, spero che nessuno lo faccia di fidarsi, perché è proprio il problema. Siamo nella post verità.

D 4: Come pensi che l'intelligenza artificiale possa impattare sulla tua vita? Potresti descrivermelo con uno scenario?

R: Ah, bellissimo. Allora, uno, premere un pulsante di una macchina che carica i bambini e li porta a scuola. Non devi guidare, non devi portarli a scuola, vengono portati da soli. Il frigorifero, già c'è questo già, il frigorifero che ti fa la spesa, la domotica. Ah, vedere il film che voglia di vedere [l'intelligenza artificiale sa già il film che hai voglia di vedere], aumentare o diminuire lo stupore sulle cose, pianificarti i viaggi.
Tutti questi escamotage pratiche, ma anche secondo me, potrebbe essere utile, un supporto al buon governo. A un livello molto più alto avere l'intelligenza artificiale, non dico centrale per carità, però molto molto forte come supporto per prendere delle decisioni sane. Sto leggendo adesso un romanzo, non leggo romanzi di sci-fi [di solito], ma ne sto leggendo uno che è ambientato nel 2800. Si chiama Hyperion, Hyperion di Dan Simmons, e parla tanto di questo coro, di questo internet, non c'era ancora internet quando l'ha scritto, e di queste tre intelligenze artificiali di 3 nature diverse che un po' combattono per la supremazia, in maniera nascosta, dall'altro invece aiutano l'umanità a colonizzare l'universo.
è incredibile come sia è stato visionario, perché parla di tanti temi che sono attuali adesso, però la vedo un po' così il futuro, che sia un supporto che è ovunque, come internet.

Quindi l'impatto che ha sulla tua vita è un supporto costante che va a evolversi nel tempo? Sì, è una specie di esoscheletro, ecco. Non mi toglie la capacità di essere agente, però mi supporta nell'amplificare le mie capacità di scelta o il mio raggio d'azione anche.

PARTE 3: DOMANDE INQUADRAMENTO FUTURO

D 1: Credi che in un futuro prossimo, l'intelligenza artificiale possa avere un ruolo più attivo e centrale nella tua vita? Se sì, in quale ambito?

R: Sì, credo di sì, sicuramente. Come il cellulare, all'inizio sembrava uno strumento utile per telefonare, adesso ci fai bonifici, ci fai tutto, anche secondo me quello nel senso che sarà integrato nei vari devices, sarà vocale, ci parli, magari diventerà anche un psicologo, anzi sicuramente potrebbe diventarlo.

Sì sì, sicuramente aiuta anche molto la gente che soffre di solitudine, gli anziani, mi immagino. Certo, poi adesso noi pensiamo allo schermo, ma è un attimo, poi diventa una realtà virtuale, diventano

ologrammi o quant'altro. E ci sono tante implicazioni, anche dal criminale che può sfogarsi. No? adesso andando nel dark, però un serial killer, se non puoi rieducarlo, lo fai sfogarsi in un ambiente virtuale che sembra totalmente immersivo e reale.
Oppure per esempio una persona estremamente disabile può avere una vita, non dico normale magari quasi normale nel mondo virtuale, dove può esprimersi dove qualcuno lo capisce e gli vuole bene. Ci vedo cose anche positive, oltre al tanto rischio ovviamente, poi è sempre uno strumento e dipende da come verrà usato, sicuramente può creare anche grandi casini. Però speriamo di no, o nel minore. Ma comunque che ci sia anche chi poi sa gestirli questi casini. Certo, speriamo un uomo. Una donna. Un uomo, assolutamente un genere umano. Che non si sa mai.

D 2: Come vedi il ruolo dell'intelligenza artificiale nell'evoluzione futura delle industrie creative?

R: allora secondo me, renderà l'ambiente delle agenzie, renderà forse un po' più elitario questo mondo della creatività nel senso che la parte più bassa del lavoro creativo, verrà automatizzata in buona parte quindi ci saranno dei gruppi di supervisori dell'output che avranno si delle capacità creative però sarà molto guidato dalle menti creative quelli che hanno quella forma di impostazione proprio naturale per utilizzare gli strumenti per guidare poi la creatività quindi tutta questa parte poi sarà automatizzata, quindi tornerà la creatività, tornerà ad essere dimora di quelli che ce l'hanno un po' naturalmente mentre negli ultimi anni l'ambiente creativo come quello del design, si è massificato molto, poi finendo come? Con quelli che hanno la creatività e poi con quelli che stanno in batteria invece a fare le "cosette" tipo i designer che fanno il 3D, tipo che hanno studiato 5 anni di disegno industriale e poi devono fare il 3D di una lampada che ha disegnato uno su un pezzo di carta invece quella parte li di disegnare il 3D non lo fai più. L'ideatore lo realizza quasi subito, poi varianti di tecnici che lo portano in sviluppo. Però, secondo me sarà l'industria creativa, diventerà un po' più piccola, un po' più focalizzata sul generare idee, però serviranno sicuramente le figure tecniche che continueranno invece a supervisionare poi gli strumenti di intelligenza artificiale per farli funzionare. Quindi, io non so se è giusta la parola elitario, sicuramente sarà un po' più definito, anzi sarà sempre più importante il ruolo di chi ha una mente creativa, di problem solving, di pensiero critico. Comunque, una persona? Sicuramente una persona, sì, sì, sì.
Ci saranno lavori di molta creatività e molti più lavori, secondo me, c'è già una grande esplosione dei lavori di manuali. Il colletto blu, in questo momento, è in una fase di grande ritorno e anche di crescita salariale, non da poco, mentre i middle management stanno guadagnando meno, l'operaio, l'elettricista, l'idraulico, il muratore, e quelli invece cominciano a crescere, serviranno di più. È strano, interessante, è a buona versione.

PARTE 4: RECAP DELLE RISPOSTE

R: Allora, siamo partiti con la tua curiosità, siamo passati per la fonte d'ispirazione, che è il tutto, sostanzialmente non è tanto le cose che vediamo, ma come noi le vogliamo interpretare, sia quello che il significato che gli vogliamo dare. È l'ottimismo, scusami, aggiungo questo. L'apertura, l'ottimismo, è questo, perché il cinismo distrugge tutto. Bisogna saper avere rilassamento mentale e ottimismo. Se no non ce la fai, non ti vera mezza idea. No, anzi, molto prezioso per me, se aggiungi. Abbiamo parlato di intelligenza artificiale, ovviamente, sei un grande esperto da quello che si può dire. E per te rappresenta comunque un'assistente, un'aiutante, un esoscheletro che poi ti trasporterà nel futuro in quello che sarà la sua evoluzione. Ovviamente sperimenti intelligenza artificiale nel tuo processo creativo e lavorativo, come, diciamo, come aiuto, come abbiamo detto adesso, e che però sostanzialmente non ha influenzato di tanto il tuo approccio alla creatività, perché è comunque quello a cui saresti potuto arrivare.
L'utilizzo principalmente è per generazioni di immagini, ricerca dati, comprovare se un'informazione è quella che effettivamente avevi già in mente. Il tuo sentimento generale sull'intelligenza artificiale è prevalentemente positivo per le cose che gli chiedi che hanno una base semplice, alla quale

rispondere e più negativo per dei concetti che sono più ampi, più complessi. Riguardo ai rischi di cui abbiamo parlato, ovviamente vengono percepiti, sono molti rischi. Però il rischio maggiore di tutti è che le persone passano a smettere di pensare, di ragionare con la loro testa e affidarsi completamente all'intelligenza artificiale, a quel punto si potrebbe raggiungere una generazione di persone che non prende più scelte da sola. VLPC, di non playing i personaggi di... esatto.
Quindi di base non ti fidi di ciò che l'intelligenza artificiale ti dice, in linea di massimo se stiamo parlando di cose complesse o di domande fondamentali, non di concetti semplici, e come mi hai detto prima, impatterà sulla tua vita nel senso di aiutare te, ma anche come il resto delle persone, a vivere una vita in un certo senso migliore, nel senso di cercare di trovare anche il buono in chi magari ha caratteristiche che non rispecchiano gli standard delle persone.
Parlando di ottica futura, il ruolo dell' intelligenza artificiale, come abbiamo detto prima, è di supporto, di accompagnamento dell'uomo verso il futuro, e che sostanzialmente nell'industria creativa, il futuro evolutivo dell'intelligenza artificiale sarà di, diciamo, eliminare tutti quei lavori standard che prima facevano le persone, di lasciare solamente le menti creative reali sotto questo punto di vista, sia chi poi porterà veramente avanti l'industria e non le persone che alla fine svolgono compiti che in questo momento anche un'intelligenza artificiale potrebbe fare, ricollegandosi anche al discorso dei lavori manuali che, stanno tornando come cose che un computer ancora non si può permettere di risolvere.
Esatto, e posso aggiungere una cosa, forse allora appunto, eliminerà una parte un po' intermedia di quei lavori, quelli che venivano chiamati da David Greber, quello che è un economista, fa dottore di occupare i Wall Street, i bullshit jobs, molti di quelli spariranno. Però secondo me c'è anche un altro punto, che a un certo punto le AI bisognerà riflettere sul fatto di redistribuire il valore che genera, cioè sarà in grado di lavorare per noi in un futuro un po' più lontano e quindi molti di noi potranno anche permettersi, cioè di avere un, forse a un certo punto arriveremo a un income di base che viene generato dal lavoro di questi robot. È una riflessione molto avanti, però mi sembra che a un certo punto no, cosa fai? Elimini i lavori cosa fai per la gente? Forse se elimini i lavori gli dai gratis il prodotto del lavoro che ha fatto un robot per esempio. La riflessione un po' complessa.
Sì, io l'ho sempre pensata più di poter permettere alle persone di fare le cose che sono realmente importanti o le cose che alle quali pensi per prime, nel senso se vuoi andare da un ragionamento A, a un ragionamento B e in mezzo devi fare una moltitudine di cose che ti impiegano tempo, le AI ti potrebbe aiutare a eliminare tutto ciò che ti toglie il tempo e pensare direttamente alla soluzione di un problema.
Quello però per la fascia alta, o la fascia appunto molto manuale, però c'è una altra domanda, chi è che sa che cosa vuole fare nella vita? Cioè, molta gente finisce a fare dei bullshit jobs, perché va bene così, devo guadagnare dei soldi per pagare le bollette. Non tutti sono spinti da uno scopo, da un purpose, so qualcosa del genere. E io vi chiedo quella fascia di umanità, aggiungendo magari che smette pure di pensare e di essere curiosa, cioè diventa un layer di zombie, che cosa fanno? Sono totalmente controllabili, però entriamo già in una geopolitica del futuro. Però il rischio degli zombie c'è, non è così fantascienza ormai.

INTERVIEW 3, SIMONE DI MEZZA CUTILLO, ALKEMY BX EXECUTIVE PRODUCER DIRECTOR

DOMANDE ICE BREAKER:

D: Se dovessi descriverti con una parola sola quale sceglieresti? E perché?

R: Difficilissimo. Essere umano. Essere umano…Beh, debolezze e punti di forza di ciò che siamo, anche il bello, no?

D: Qual è la tua fonte d'ispirazione principale quando si tratta di stimolare la creatività?

R: Cinema direi, tendenzialmente. Mi piace molto andare al cinema, guardare film. Anche serie tv, ma Preferisco i film. Sono più alla vecchia maniera, mi piace andare al cinema, anche da solo, e guardare cose belle. Poi, in realtà, appunto... credo che guardare cose belle, inspiri cose belle, quindi... Può essere andare al cinema, può essere andare a vedere una mostra. Andare a teatro, qualcosa che faccio poco, ma che mi piace sempre molto. E ultimamente, da adulto, ho scoperto i concerti, cosa che invece prima non mi interessava, non sono un grande esperto di musica, però anche lì c'è dell'umanità che fa cose belle.

PARTE 1: DOMANDE GENERALI SULL'AI

D 1: Conosci l'intelligenza artificiale? Se sì, potresti dirmi cosa rappresenta per te?

R: Beh, intelligenza artificiale in generale, credo che abbia un impatto sul mondo già tangibile, e ne avrà sempre di più, sì. Per me, lavorativamente, è sicuramente uno strumento facilitatore e acceleratore di tante fasi, passaggi, sia di produzione che di postproduzione. Stiamo iniziando a testarli, stiamo iniziando ad usarli anche su dei lavori veri e propri. Diciamo che, nel mio ambito, ha creato un po' di panico, nel senso che, insomma, può sembrare che da un momento all'altro vada a sostituire in toto quello che, insomma, decine e decine di persone fanno ad oggi per poter produrre un video.
Sinceramente non sono così drastico, però, appunto, ieri ho fatto un'intervista con la Gazzetta del Pubblicitario e non posso andar contro quello che ho detto loro; quindi, credo fermamente che nessuno possa sapere che cosa accadrà nelle AI e quindi chi dice di saperlo o è un... un cantastorie, oppure, appunto, sarà un miliardario tra poco.

D 2: Hai mai sperimentato personalmente l'utilizzo dell'intelligenza artificiale nel tuo processo creativo/lavorativo? Se sì, in che modo ha influenzato il tuo approccio?

R: Sì, allora, considera che, appunto, è un qualcosa, è uno strumento che, al momento, si utilizza nella delivery vera e proprio, no? Quindi con la postproduzione, con determinate formule di Excel, eccetera. Quindi, diciamo, la utilizzano persone che coordino. Quindi, nel mio quotidiano stretto, cioè, proprio operativamente, ancora non ha... se non per scrivere, forse, qualche mail, ogni tanto, oppure nella ricerca.
Sono uno che si fa tante domande e immediatamente cerca una risposta su internet. Ultimamente ho iniziato a farlo su Copilot, invece, che su Google.

D 3: L'intervistato ha risposto alla domanda nella risposta alla d2
D4: Con che frequenza utilizzi l'intelligenza artificiale?

R: Giornalieralmente, settimanalmente. E Copilot lo usa praticamente tutti i giorni. Ok, quindi possiamo dire quotidianamente.

D 5: Secondo te in che modo li ha potrebbe essere utilizzata per esplorare nuove forme di espressione artistica e narrativa?
R: Beh, è un po' la wave di adesso, no? È nata questa figura del AI Artist, che è una figura molto nuova, che tendenzialmente sono persone che, grazie al prompting, vanno a generare immagini e farne dell'arte in quel che maniera. Quindi credo che già sia così.
Sinceramente, sulla scrittura, la vedo un po' meno probabile a livello qualitativo. Poi è ovvio che potrà scrivere dei libri molto... giusti, ma banalotti. E comunque sotto input di un essere umano.

D 6: Pensi che l'IA potrebbe contribuire a superare i blocchi creativi o a stimolare l'ispirazione nelle fasi iniziali del processo creativo/ lavorativo?

R: Allora, ad oggi... è... appunto la ricerca tramite intelligenza artificiale funziona alle volte, altre volte. Cioè, ho visto che lo utilizzano per fare dei mood board. Però insomma, non ha ancora raggiunto quel livello di perfezione che ti dava certezza di riuscire a farlo, come lo faresti "manualmente".
Quindi, appunto, parlando con diversi Art Director, mi hanno detto che spesse volte, non riuscivano a far capire che cosa volessero, andavano alla vecchia maniera a cercare le reference, etc.

D 7: Potresti dirmi se l'IA ha influenzato il tuo approccio personale alla creatività nel tuo lavoro? Se sì, in che modo? potresti raccontarmelo?

R: Al momento poco. Poco. Poco, devo dire. Non posso argomentare oltre.

PARTE 2: DOMANDE CENTRATE SULLE POSSIBILI PREOCCUPAZIONI SVILUPPATE

D 1: Le sensazioni che avverti nei confronti dell'intelligenza artificiale quando ti fornisce delle risposte sono più positive o più negative? Potresti fare un esempio concreto collegato a queste sensazioni?

R: No, di base devo dire che funziona ovviamente è sempre migliorativa, quindi funziona secondo me sempre meglio. Le volte... no, sicuramente... credo che ti dia quella soddisfazione, soprattutto per la generativa, in cui vedi crearsi qualcosa da zero su tua indicazione. Devo dire mi sono trovato in alcune situazioni in cui mi ha messo un po' a disagio nelle risposte. in ambito non lavorativo, però era quasi come se avessi una coscienza e di conseguenza fa paura. Quindi era quasi troppo umana per te? Sì, ma era un ambiente totalmente scherzoso in cui ero con una mia amica e chiedevamo appunto all'intelligenza artificiale di darle consigli d'amore e spiegando la situazione all'intelligenza artificiale, in su tutto punto, ha detto che non voleva più dar consigli perché non era giusto secondo l'intelligenza artificiale dare proprio il parere su una cosa così personale e anche insistendo nel chiedere era come si bloccasse e dicesse: no, non vado avanti. E questo fa un po' paura.

D 2: C'è qualcosa che ti preoccupa quando utilizzi l'intelligenza artificiale? Avverti dei potenziali rischi?

R: Eh, tutto il [mondo] delle fake news sono un grave problema in generale, diciamo che l'intelligenza artificiale generativa rischia di avvalorarne molte e la gente ci caschi.

D 3: Solitamente ti fidi dei consigli e delle risposte che ti fornisce l'intelligenza artificiale?
R: Sì, tendenzialmente si nel momento in cui è un po' come se facessi appunto una ricerca su Google, cioè è un velocizzatore di ricerca e mi dà più informazione. Ma ti fidi di quello che dice? Pure se tu non sapessi nulla riguarderei a quello che gli stai creando? Tendenzialmente per mia natura faccio sempre un doppio check su più fonti; quindi, sia qualcosa che assolutamente non mi sembra giusto, lo controllo anche da qualche altra parte.
Questo sì.

D 4: Come pensi che l'intelligenza artificiale possa impattare sulla tua vita? Potresti descriverlo con uno scenario?

R: Ma sulla mia vita lavorativa, bene be ne abbiamo già parlato sulla mia vita generale, credo che non sia una moda, non so come dire, non è come se il metaverso è caduto e si è anche andato a spegnere molto velocemente. L'intelligenza artificiale è un qualcosa di più potente che è applicabile a talmente tante cose, tanti fattori che sono abbastanza certo che entrerà nel quotidiano un po' di tutti, in quale modo non saprei dirtelo perché appunto non sono così esperto.

PARTE 3: DOMANDE INQUADRAMENTO FUTURO

D 2: Come vedi il ruolo dell'intelligenza artificiale nell'evoluzione futura delle industrie creative?

R: Ma appunto adesso stiamo lanciando questa campagna per Haier per farti un esempio concreto, una campagna OOH che uscirà su mega affissioni in UK a Manchester, Liverpool e Londra e sono 6 soggetti tutti generati in AI perché non avevamo il tempo tecnico di andare a scattare e quindi con gli art prendendo un AI artist e un foto ritoccatore siamo andati a creare 6 soggetti che verranno stampati giganti e appunto è un esempio di concretezza di applicazione delle AI in un agenzia [e di come le dinamiche del mondo della produzione si stanno andando ad evolvere con l'avanzare del tempo].

PARTE 4 RECAP DELLE RISPOSTE DATE

R: Allora siamo partiti con la descrizione in una parola ma tu hai usato due parole di te stesso essere umano nel senso di pregi difetti e la tua fonte di ispirazione, diciamo, per stimolare la creatività sono principalmente cinema, film, teatri, mostre quando capita e ovviamente conosci l'intelligenza artificiale e cos'è per te sostanzialmente uno strumento di supporto che ti aiuta nel tuo lavoro? Sì ma marginalmente perché non viene utilizzato in maniera diretta e poi siamo andati avanti sul fatto del per il cosa lo utilizzi principalmente, mi detto che principalmente utilizzi un programma che si chiama co-pilot che lo utilizzi quotidianamente e che secondo te sotto un certo punto di vista l'intelligenza artificiale può essere utilizzata per esplorare nuove forme di espressione artistica, sì ma nei suoi limiti comunque e pensi che possa contribuire a superare dei blocchi creativi sì sempre con le con le dovute e precauzioni perché non parte tutto da lì e si è influenzato il tuo approccio personale alla creatività nel tuo lavoro mi hai detto molto poco a prescindere se hai delle sensazioni che avverti nei confronti dell'intelligenza artificiale diciamo che sono principalmente positive nel senso è quella sensazione di soddisfazione quando gli chiedi una risposta in ambito lavorativo mentre in ambito non lavorativo possono mettere a disagio perché vai a toccare tematiche che sono un po' più delicate e riguardo ciò che ti preoccupa ovviamente lo spread delle fake news e tutta quella parte di influenzare le masse con informazioni non vere quindi e come ultima domanda ti ho fatto come puoi vedere il ruolo dell'intelligenza artificiale e l'evoluzione futura dell'industria creativa e mi hai giustamente fatto un esempio del lavoro che è stato fatto con Haier per gli OOH dove i soggetti sono stati creati interamente in AI.

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