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From descriptive storytelling to digital image generation with AI: A new *digital* ekphrasis?

Abstract

After briefly discussing ekphrasis's historical significance and function in the arts and its continued relevance as an effective artistic practice, this essay explores the concept of digital ekphrasis in the age of artificial intelligence and digital image generation. The discussion focuses on popular AI models readily available online, such as Midjourney, Dall-e, Stable Diffusion, and Firefly. By examining prominent examples of AI art or so-called popular "prompt art" – including Refik Anadol's award-winning and mesmerizing AI project "Unsupervised" (MoMA, New York, 2023) and the viral Midjourney prompt "The Pope wearing a Balenciaga puffer jacket" (Spring 2023) – the author questions whether we can also speak of a computational ekphrasis in the age of artificial intelligence and AI models as our new co-creative collaborators. Therefore, the essay considers a praxeology of digital ekphrasis, exploring how efficient text instructions for AI models are now used to create compelling images in a new digital aesthetic that affects their global audience.

Keywords

Digital ekphrasis, Computational ekphrasis, AI Art, Prompts

The Author of this article has been invited for his internationally relevant work on the topic of the issue.

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1. Functions of ekphrasis

In order to determine what “digital *ekphrasis*” (cf. Mitchell 1994; Bolter 1996; Webb 1999; Klarer 2005; Godhill 2007; Lindhé 2013; Heffernan 2015; Webb 2016) could mean, we should first recall that the ancient Greek term “ekphrasis” originally refers to the highly vivid and compelling description of objects, characters, places, and settings as well as times, but also actions and events, whose dramaturgy and composition correspond to an affecting narrative: *ekphrasis* – from ancient Greek: *ekphrásō*, “to tell exactly” or “to describe exactly”. This precise and detailed description takes place in a comprehensive and holistic modality. According to Theon, Hermogenes, and Aphthonius Sophistes in the textbooks of late antiquity known as the *Progymnasmata*, *ekphrasis* is understood as “a detailed speech that clearly shows what is to be shown” (Nikolaos of Myra) – in functional distinction to a pure report, which merely describes a sequence and summary of events and actions. Thus, what was initially meant with the term was not a particular genre of text but rather a performative act and generative process, in interaction with an audience, for example, in the form of a gripping oral speech, the aim of which is to convey a direct vividness (*enérgeia* or *evidentia*) to the audience. Moreover, the recipient should be stimulated and affected to be mentally transformed from listener to emotionalized spectator. In contrast, the spoken words and sentences are transformed into (imaginary) images and scenes, as coming present and alive, and to make the absent as-if-present.

Ekphrastic words/narrative performances thus ignite the fantasy and imagination of the audience; they generate virtual mental images which, however, are subjectively actualized through the sensory organs. The modality of language evokes a present scene and action, which the audience should experience as-if present. However, these remain factually absent, and their factuality (from true to invented) ultimately remains open. “In short, *ekphrasis* prompts visualization processes on the part of the reader” (Brosch 2018: 237).

Another characteristic feature of *ekphrasis* is that the given verbal or textual descriptions also contain scenic embellishments and stylistic modelling of what is depicted, which tend towards narrative independence (fictionalization) and a high degree of imagery due to rhetorical exaggeration. The artful narrative description of Achilles' shield in Homer's *Iliad* (18th canto: 478-608) is still a prominent example of literary *ekphrasis* today. It allows its listeners or readers to witness, as it were, the creation process of the symbolic shield – itself an ekphrastic object (Mitchell 1994)

– in Hephaestus’ forge. The recipients are successively guided towards a holistic imagination and mental visualization of the given narrative. The mythological narrative unfolds temporarily and scenically as if on a theater stage, i.e., on the one hand, it is composed in a particular media way. However, on the other hand, it is immaterial and fleeting in its referenced materiality.

The Latin synonym *descriptio* has primarily retained the narrative sense of “description”. At the same time, *ekphrasis* is used today almost exclusively in the narrow sense of characterizing images and art descriptions. However, the ancient theorists did not initially restrict the affective and vividly effective description to aesthetic artifacts alone. However, a description was always a form of (subjective) narration, of storytelling with partial fictionalization, not the objectified reproduction and representation of a reality that was truly experienced by the senses. It was only with the development of art theory in the early modern period that this form of recording art descriptions changed, which were no longer merely part of a literary work, as in the numerous artists’ vitae since Vasari, for example (Pfisterer 2019: 99). The immediate visualization of a specific image through a detailed description and interpretative translation now came to the fore, and, among other things, (see *Vite dei più illustri pittori, scultori ed architetti* (1550/1568) by Vasari and *Le vite de’ pittori, scultori et architetti moderni* (1672) by Bellori), systematically introduced “scientific” criteria – such as the consideration of composition, the stylistic idioms used, iconography, etc. – which in the pre-modern age were not only used to describe a specific painting, but also to interpret it. And which, in the pre-reproduction era, aimed to describe the recognizability of an individual work of art and the individual artist’s signature. Until the introduction of photographic illustrations in books, rhetorically guided descriptions of artworks remained a strongly argumentative moment in art criticism and art studies, which developed characteristic taxonomies for the convincing discussion and connoisseurial evaluation of aesthetic works from ancient rhetoric. These are, therefore, more part of a linguistic staging and the performance of a persuasive interpretation, which should give works a special outstanding significance. However, the mostly subjective act of viewing and interpreting a work is always expressed or described more than the aesthetic artifact itself. This way of interpretive analysis and narrative description always depends on what is already culturally and socially familiar to the author. Each time, their words and texts contextualize and model the presentation and interpretation of the artwork anew in each case.

Initially, the factual existence of what was described was not even constitutive for the *ekphrasis*, i.e., it could also originate from the realm of pure fantasy or come from a symbolic imaginary, i.e., in its status of fiction, it could have no relation to actual reality and be located in the rich realm of imaginary artworks in cultural history – such as perhaps the mythical shield of Achilles, to which no archaeological find has yet been attributed. At the same time, an effective and compelling description is a powerful form of representation, but not of reality as such, even if this can be simulated in the media.

“In the course of postmodern new uses, *ekphrasis* has re-established itself as a transmedializing visualization strategy of the media and then very generally means the visually narrative re-representation of a verbal representation of a non-verbal (visual-haptic) representation” (Pfisterer 2019: 99). According to Wolf-Dietrich Löhr, the new boom in *ekphrasis* is explained by its potential to gain an additional interpretative or allegorical and explanatory level without breaking the narrative mode. At the same time, the now doubly aesthetically mediated content gains a unique appeal and produces effects in the sense of Aristotle’s *Poetics*, 1448b. Here, the focus is always more on the operative act of illustration, visualization, and emotionalized contemplation than the described aesthetic work itself. This can instead be understood as an aesthetic component of a more comprehensive performance, which stimulates and generates effects such as affects.

2. Are “prompts” and “verbs” to be understood as new digital *ekphrasis* in the age of generative image processes?

The Greek word “*Ekphrasis* – ἑκ-φρασις – (*ek*: out of, from; *phrazéin*: to say, to pronounce)” thus refers, in its lowest historical denominator, to an artfully vivid and effective description or an illustrative and visual representation of an event of any kind (from real to imaginary) utilizing the spoken word or a written text. *Ekphrasis* thus ignites the processes of the imagination, the creative power of imagination, and the visual fantasy in the audiences. It generates virtual mental images and, in the digital age (with its technically networked ecosystem from AI models to social media), is comparable to the creative phenomenon of “prompting” and “verbing,” whereby a general modern definition, “*ekphrasis* is the verbal representation of visual representation” (Heffernan 1999: 21), is additionally problematized.

Anyone who wants to engage a global audience with digital images in today's social media age must first find efficient text instructions for the ubiquitous digital image generation tools (such as the new AI models from *Midjourney*, *Dalle-2*, *Firefly*, or *Staple Diffusion*): "The art of creating the most effective prompts to achieve your desired result", and advertising slogans such as "Become a GOD in Midjourney with Text Weights" promise, nowadays, that almost everyone can instantly generate and distribute digital work on the Internet, which goes enormously viral as a so-called "meme" like recently the "Pope with the Balenciaga jacket in rapper style" (Figures 1-2).

Figure 1





Figure 2

This prominent *generative image* fascinated the audience as a “deep-fake” and triggered global discussions (Hagler 2023). The iconic AI image of 2023 was inscribed with pointedly original narratives for the *Zeitgeist*: for example, the convergence of hip-hop and religious cult, the increasing

indistinguishability of staging and reality, or semantic confusions (“fashion pope”), “hallucinations” and other creative fabulations of current AI models. It also stirred a discourse around the post-artificial power of simulation and the illusionary potential of artificial intelligence, which is not only capable of generating all media and styles but is also able to synthesize them to significant effect.

The creator of the popular fashion-pope wearing a white puffer jacket, Pablo Xavier (his surname remains anonymous), a 31-year-old construction worker from Chicago, shared his *Midjourney* prompt on the Reddit platform in March 2023, from where it was immediately redistributed to other social media platforms and media outlets. Digital images of the AI age are all about communication and resonance. It exemplifies that their producer, the so-called “prompt engineer” or “AI whisperer”, not only has the perfect “magic spell”, i.e., an efficient text input as input for the AI model, but also still needs a particular technical know-how and new technical skills in order to generate an exciting or meaningful digital image of our time as an effectual output in creative collaboration and co-operation with a standard AI model such as *Midjourney*, which then might go online, be shared, liked, commented on or further modified at the very moment of its creation and publication in the web or in popular internet chats such as *Discord* and *Reddit*, i.e., in the best case, the generative images goes viral on social media as a popular meme. Thus, “while visual imagination and skills and possibly talents for image creation were previously considered essential in many visual art fields, today outstanding expertise in prompt design is required to interpret the oracle of the image generators’ algorithms, which are misunderstood or at least largely unknown to most users” (Schappert 2023).

Sometimes, the AI models even automatically suggest optimized and more original text input for subsequent image generation before the input is entered, as further intelligent algorithms for automated text corrections and improvements have already been programmed into the text-to-image generators as an additional service; however, most of which are based on industrial standardizations and static success criteria, but at the same time also have restrictions and censorship prescriptions into them (e.g., concerning the depiction of explicit nudity or morally offensive content and pornographic content).

Author Mario Herger has recently researched the following optimal narrative as a template for currently successful text instructions – hereby using the example of *Midjourney*: “Create an image of a [Subject] [Action] in a [Setting], with [Lighting] that emphasizes [Composition] and a [Style]

that is [Adjective]. The [Angle/Perspective] should be [Adjective], and the image should be set in the [Time Period] period. The image should be rendered in a [Medium] that evokes [Feeling], with an [Orientation] of [Aspect Ratio]. Exclude any [Nots]" (Herger 2023).

The new buzzwords for such effective image generation processes using AI are “to prompt” and “to verb” (in the case of computer games), which means the reversal of a classic image description and interpretation as practiced by art historians, for example. This could be understood as a new, AI-supported digital *ekphrasis* (Figures 3-7).

Figure 3

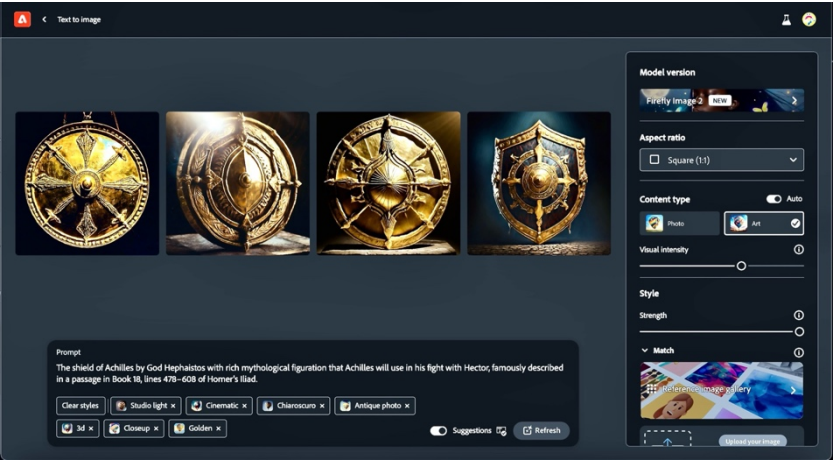


Figure 4; figure 5



Figure 5; figure 6

Intelligent algorithms, AI models, and AI image generators (such as OpenAI's *DALL-E*, *Midjourney*, *Stable Diffusion*, or, more recently, Adobe's *Firefly*) have already developed into creative aids and intelligent image-generation tools for everyone. They enable anyone to generate new synthetic digital productions in seconds using text and image input, which can simulate and synthesize any conceivable media and motifs. Liking, commenting on, and sharing code-based generative AI images, particularly the act of "prompt engineering" has become a favorite creative activity for many online users over the past year thanks to the wide range of AI models now available on the web. The modality, precision, and taxonomy of the text instructions with which the AI models are to be fed are intended to stimulate the artificial neural networks to generate and visualize effective digital images, which they synthesize beforehand from a collective memory of archives and databases with which they have been trained in a deep learning process (Goodfellow 2016).

Thus, it also requires not only the appropriate formulation of effective text input but also the art of writing effective program codes or intelligent algorithms, as the extremely popular and mesmerizing AI artworks by Refik Anadol have demonstrated in the past years.

3. AI Art as Digital Ekphrasis

AI artworks (cf. Scorzin 2021; Merzmensch 2023; IMAGE 37 2023) are always created in interaction between humans and intelligent machines or in cooperation and collaboration in an act of "co-creativity", even if science fiction films still like to pit natural and artificial intelligence against

each other. However, in recent years, we have witnessed the rapid development of artificial neural networks for image generation, from Google's *Deep Dream* and StyleTransfer algorithms to GANs (Generative Adversarial Networks) and CLIP (Contrastive Language-Image and Pre-Training) architectures for text-image generation. Today, various AI models such as *Midjourney*, *Dall-E2*, *Stable Diffusion*, or *Firefly* are now easily available to everyone on internet platforms or as apps. In their AI workings, contemporary artists reflect on the current influence of AI on contemporary digital image production and its effects on our global communication in various exemplary ways: on the one hand, critically analyzing and reflectively admonishing, but on the other hand also experimentally exploring and affirmatively explorative or just as "artistic twists and hacks" (as the artist Helena Nikonole puts it).

A historical precursor to current AI art is the computer art of the 20th century: the term "generative art" (GenAI) refers to works created using algorithmic codes or mathematical formulas since the 1960s. Hereby, the digital artist transfers either partial or complete aesthetic decision-making power to an autonomous system. In the following, however, the focus is on new types of synthetic images or digital meta-images created using recent complex AI models from stochastic computing processes in a latent space. Generative art is thus a generic term for code-based art, and AI falls under this generic term because it uses digital codes. While generative artists and computer art pioneers like Frieder Nake or Georg Nees use explicit programming instructions to produce a controlled set of results, AI artists train an algorithm on a specific data set to produce artworks with their artistic parameters. Stylistically, generative works usually have a geometric, pattern-oriented appearance, while recent AI works are far more diverse and unpredictable or are generated by a particular StyleGAN, for example.

A few years ago, for example, the first AI artworks appeared to the public like a new abstracting surrealism. Many AI artists still use algorithms known as Generative Adversarial Networks (GANs), which are trained on datasets of existing images to create genuine visual representations with realistic features. The recent release of machine learning models such as OpenAI's *DALL-E* or Adobe's *Firefly* has then quickly made AI-generated art accessible to the broad masses, allowing almost anyone to collaborate with artificial intelligence to produce unique and meaningful images that are essentially images about images and often generic rather than genuine in terms of art styles or genres.

In 2018, Christie's was the first auction house to offer a work of art created by an algorithm for auction. The AI-generated work entitled "Edmond de Belamy" from the series "La Famille de Belamy" by the Parisian artist group OBVIOUS was created using a freely available GAN and signed with the algorithm used in a pretty Duchampesque gesture. In Refik Anadol's spectacular and trendy AI art (Scorzin 2021), on the other hand, advanced AI technology has for some years now been emerging as a "superhumanly powerful" modeling and visualization medium itself as an apparently tangible co-producer and creative agent that performatively overwhelms the audience's senses by conjuring up luminous digital abstractions from data extraction. It turns extensive masses of data, images, and information into something aesthetically pleasing that previously remained hidden and invisible to the human senses. New hardware and software developments, as well as quantum computing, enable previously unseen algorithmized techno-aesthetics (beyond human imagination) and thus also novel representations of the (surrounding) world, which are based on its computational data and collected information (big data).

4. Digital ekphrasis as computational ekphrasis: Refik Anadol's "Unsupervised," MoMA, New York 2023

In summer 2023, "Unsupervised" (Figures 8-9) premiered at New York's MoMA building and enchanted crowds of museum visitors: an animated abstract meditation on technology, creativity, and modern art that is part of the "Machine Hallucinations" series, an ongoing AI project by Refik Anadol Studios in Los Angeles that explores, and tests digital data aesthetics based on collective visual memories and cultural heritage. Since the start of the data visualization project in 2016, Refik Anadol has been using machine intelligence as an efficient collaborator and co-creator, in particular DCGAN, PGAN, and StyleGAN algorithms, which are trained on massive data sets to visualize previously unrecognized layers and patterns of our external realities. The artist and his team collect vast amounts of information and data from existing archives, databases, and other publicly available resources. They process these large data sets using advanced machine-learning classification models. As a masterfully curated multi-channel experience, the Machine Hallucinations series offers the astonished audience a self-regenerating moment of surprise and a new form of sensory autonomy through cybernetic serendipity. The "Unsupervised NFT Collection" also stems from such an aesthetic-scientific vision

and processes 138,151 metadata from the Museum of Modern Art's extensive collection in the memory storage of an intelligent machine. Using the StyleGAN2 ADA, Refik Anadol trains a singular AI model with subsets of the MoMA art collection archives and creates embeddings in 1024 dimensions. The sorted image datasets are then clustered into thematic categories to understand the semantic context of the data better. This expanding universe of data not only represents the interpolation of data as synthesis but also becomes a latent universe in which a speculative imaginative and hallucinatory potential emerges from a novel form of artistic co-creativity of humans and machines that analyzes, interprets, and insightfully restages MoMA's historical collection of modern and contemporary art. The historical MoMA collection spans over 200 years of art, from paintings to photography, cars to video games, and thus represents an extraordinary data set for the AI artist and his studio. MoMA also houses historic works from prominent artistic movements such as Expressive Abstractionism and Surrealism, which are not dissimilar to "Unsupervised". Since Refik Anadol uses its data and information to explore the principles of automatism, chance, and complex systems and to create unprecedented new forms of art that surprise and engage the audience.

Figure 8



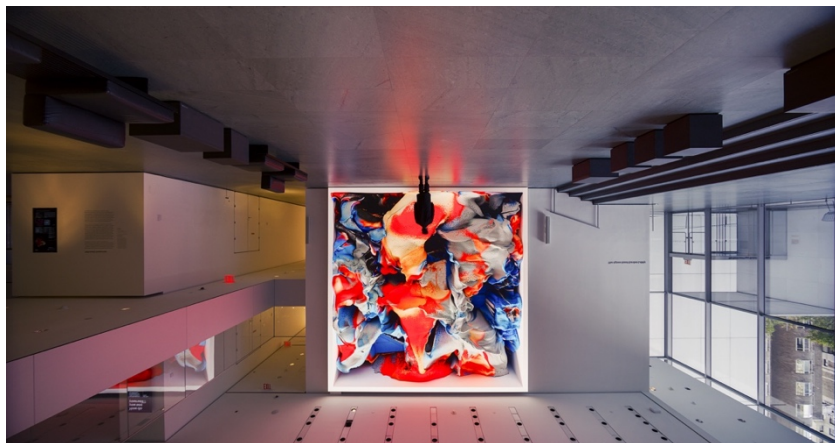


Figure 9

This award-winning abstract AI work, therefore, not only has an aesthetic resonance in the local audience and global media but also pushes research in the field of machine learning and AI into new realms. Artificial intelligence enables the artist to sensually comprehend their “unconscious decisions” in a technological network of complicated and poetic connections. As the AI model “wanders” through a vast selection of works available in the museum archives due to its conception, it re-imagines the history of modern art and “dreams” of what could have been and what could still (artistically) come. In addition, Refik Anadol incorporates site-specific influences from the surroundings of the museum’s Gund Lobby into the processual image generation – such as changes in light, movements in the room, acoustics, or the current weather – and thus influences the constantly changing images and sounds on the gigantic screen on display, which reacts live to this immediately incoming information and data. AI art appears here as virtual, variable, and viable.

Artificial intelligence is often used to classify, process, and generate realistic modeling and representations of the world. In contrast, however, “Unsupervised” is also speculative, visionary, original, and innovative, i.e., in general terms, it is also experienced as (co-)creative and self-reflective: since it simultaneously explores the imagination and imaginative capacity of neural networks, but also the phenomenon of hallucination and surrealist irrationality, thus creating an alternative understanding of creativity and art itself to awe new audiences: “I try to find ways to connect memories with the future”, says Refik Anadol in the interview, “and to make

the invisible visible” (Jacobs 2023) – with the help of what non-human, intelligent machines observe, recognize, see and visualize. Here, idle, or unattended, AI constantly regenerates and stages the MoMA archives, permanently constructing new aesthetic images and color combinations through unique lines drawn by algorithmic connections updated in a unique digital abstractionism of digital modernism. We, as audiences, are then the human observers of the machine observations, which affect us with their effective visualizations and aesthetic stagings to transport meaning and significance strategically.

However, language, information, or data as stimuli for the procedural visualization of AI models are also *beyond ekphrasis* because the input is constantly translated into a digital computer language of zeros and ones. AI models also produce immaterial, virtual digital images as visual output in response to prompt inputs, which are syntheses of the data and information available to them based on probability calculations. Nevertheless, the art for the users/operators of the AI models is first to find the efficient input text for the most effective image output, and the efficient rhetorics for effective aesthetics. In contrast to the recipient’s biological brain, however, we can observe on a screen/interface what an artificial neural network algorithmically recalculates from the input data it receives and the available information memory and visualizes virtually from the outside. Temporarily generated meta-images, data visualizations, and generative images about images thus emerge from a latent space of the AI model, a “black box” for humans. Generative images are made electronically visible to human eyes with computer pixels, thus quasi-present. Herewith, they bring forth new perspectives on reality. To some, they create the vision of being able to investigate the imaginary world of an intelligent machine, into the “mind” of an intelligent machine, as Refik Anadol puts it (Scorzin 2021).

Abstract and surrealist “prompt art” is shared and discussed more frequently today than (photo-)realistic prompts, which are often deliberately generated as deepfakes. What is sought is the spectacular and singular, the never-before-seen, the sensually appealing and emotionally stimulating – something that affects and mesmerizes the audiences and, in turn, activates them to take immediate (creative) action, for example, to “like, comment, recreate, and share” on popular social media platforms. In sum, AI images are perceived as highly creative, innovative, or artistic in the art and culture sector and on the art market precisely when considered surprising and novel, original, unique, and singular (e.g., in terms of motif and style).

In the case of “verbs” and “prompts”, and in the sense of computational ecphrasis, however, inner/mental ideas are ultimately transformed into outer/actual ones. The transformation and the change of modality are processual: input (words, texts, or images) is translated into digital codes in the AI model and afterward computationally processed by intelligent algorithms to transform the output back into digital files and pixels, turning them into a (text) image again that the physiology of the human eye can perceive. The effective and sometimes surprising, unexpected, or entirely unpredictable translation and transformation process is at the same time the aesthetic play that the audiences can admire on a meta-level. This computational ecphrasis leads to something never seen before and previously not present on digital screens, which is why AI images are particularly susceptible to fictionalization and so-called “hallucinations”. The technological updates of the respective text/image-to-image/text generators and their generative output are generally stochastic, statistic, or probabilistic. Generative images and texts are always based on the respective training data for machine learning, their respective cultural memory, and knowledge.

So-called “Prompt Art” conjured up with AI models, in turn, has an inspiring effect on its recipients: Inspiration (from Latin: *inspirare*), here in the sense of a new technology-induced inspiration, which still stands in the tradition of divine or natural inspirations, i.e. the subjectively surprising emergence (inspiration) of a sudden idea/fantasy or in the sense of a pictorial-mimetic recollection, but also by associating and combining pictorial memories into new, imaginary realities. All this is now solely due to the “magic spell” of a “prompt engineer” or “prompt whisperer”, who knows how to skillfully activate the AI model’s complex “black box” in interactions and iterations for co-creative processes as well as productions. The proportion of the AI model’s creative capacity is decisive for this intermedial act. This is because creativity leaps from humans to machines and vice versa in the cooperation and collaboration between biology and technology (Scorzin 2023). The process also prompts speculation about whether artificial intelligence could already be attributed consciousness or its own specific idea of the world.

With this aesthetic magic, the art of skillful “prompting” and “verbing”, in turn, resembles the historical phenomenon of the convincing visualization and presentation of textual sources in the history of art and culture: In addition to biblical models, ancient literary ekphrases in particular repeatedly became popular models for visual artistic creation

in the early modern period, such as Titian's "Venus' Feast" (1518-19, Madrid, Prado), which masterfully transposes passages from Philostratus' "Eikónes" into newest visual art. Today, the artistic "prompt engineers", in turn, like to refer to well-known artists from history (especially modernism) and the present or even popular culture (like fantasy art) and try to elicit new synthetic images "in the style of X" from the AI models.

Thus, "to prompt" and "to verb" refer to connect to an ever-present cosmos of images in which the statistical cultural unconscious is archived and can be understood as a meta-medium: Generative AI, "GenAI" for short, provides statistically or stochastically calculated meta-images. Given the current state of AI technology, AI-generated digital productions are less striking than surrealistic, and more generic than genuine. As a technical circumstance, it is the new text-image relationship through AI that is still based more on an approximation of a "natural", i.e., human, language rather than one based on digital machine code.

Today, in the context of Prompt Art as well as AI Art, we are also talking about AI-generated hallucinations, glitches, and "deepfakes", which have been feeding the Internet as new viral memes with a specific agenda for some time now and, like ChatGPT, are significantly shaping the current public discourse on AI-generated images. Instead of just mentally evoking images, they are now temporarily updated and circulated as generative images and digital data sets published on social media platforms now of their creation and publication. The iconic pope wearing the puffy white down jacket was its best example in spring 2023. Its photographic realism made it quasi-live for the Internet community, triggering a variety of reactions – including a heated debate about deepfakes on social media. The AI image also gave rise to numerous discussions about the current AI revolution, misinformation, and fake news and already belongs to the history of the new "Prompt Art" or so-called "Promptography" (Boris Eldagsen). Questions arose like: How could one still recognize in 2023 that we deal with a generative digital image? What reality does the generative represent as a deepfake? What about copyrights and author's rights, and why did Balenciaga creative director Demna Gvasalia distance himself from the jacket design? (The AI only created the impression of a design draft and instead synthesized the Roman Catholic pontiff's habit with the currently fashionable, winter white down jackets in expensive bling-bling rapper style). Moreover, suppose you re-enter the original prompt for the iconic "fashion pope" into an AI model. In that case, you will never regain the same generative digital image again, but at best, iterations and variations that would correspond to permanent restagings of classic materials

or texts. Nor do prompt digital images automatically come with a final title. Only in the media was the “Roman Pope with the white Balenciaga jacket” ennobled with several associative (image) titles by the Internet community or supplemented with an ALT on social media, whereby the annotation, in turn, corresponds to an act of “reductive ekphrasis,” because it narrows down any potential interpretations and symbolic meanings of the viral digital image.

5. Conclusion

Digital *ekphrasis* is still intended to achieve maximum attention and vividness (*enargeia/evidentia*) for the audiences – albeit now with the use of a new technological tool and powerful co-creative collaborator such as AI. In this sense, Refik Anadol’s recent award-winning AI project “Unsupervised” can also be understood as a digital respective computational *ekphrasis*: Refik Anadol’s signature, the fluid dynamics algorithm infinitely envisions and “dreams” about the MoMA archive – in staging, at the same moment, how the extraction of data transforms into digital abstraction that represents the mere beauty of data (pigments and pixels) as well as the “mind” and the “memory” of an intelligent machine. Moreover, Refik Anadol’s big data-based and AI-powered fluid digital abstractions in high resolution become highly sensual sensations and representations of knowledge created by the (meta)data of the selected artifacts that function as their original data sets.

Like their predecessors in Western art history, most notably the New York School of Abstract Expressionism, which gained prominence in the 1940s in Post-War America, these new digital abstract artworks challenge the logic of representation by boldly straying away from traditional materials and processes as well as by performing their own visual rhetorics. The deconstruction of the figurative and symbolic forms once gave way to the expression of subconscious landscapes characterized by expressive gestures, shape, form, color, and line. Today, Refik Anadol’s fluid digital abstractionism, with its animated 3D AI data pigmentations, is deeply rooted in the historic abstract tradition and its legacies on the one hand, but on the other hand, also boldly crosses the boundaries between computer art, communication design (data visualization and data modeling) and advanced technology. At the same time, it paves the way for impressive multi-sensory experiences that allow their poly-cultural audiences to see the unseen and make visible the invisible; even more, it visualizes a

machine learning and AI-based non-human understanding of our world within digital aesthetics and produces with computational *ekphrasis* new knowledge co-created by man and machine.

Bibliography

Bolter, J.D., *Ekphrasis, virtual reality, and the future of writing*, in G. Nunberg (ed.), *The future of the book*, Berkeley (CA), University of California Press, 1996.

Brosch, R., *Ekphrasis in the digital age: responses to image*, "Poetics today", 39/2 (2018), pp. 225-43.

Goldhill, S., *What is ekphrasis for?*, "Classical philology", 12 (2007), pp. 1-19.

Goodfellow, I., Bengio, Y., Courville, A., *Deep learning*, Cambridge (MA), MIT Press, 2016.

Hagler, C., *The ethics of creating A.I.-generated images of public figures*, "Smithsonian magazine", 30 (2023), <https://www.smithsonianmag.com/smart-news/is-it-unethical-to-create-ai-generated-images-of-public-figures-180981900/>.

Heffernan, J.A.W., *Ekphrasis: theory*, in G. Rippl (ed.), *Handbook of intermediality: Literature – Image – Sound – Music*, Berlin, De Gruyter, 2015.

Herger, M., *Kreative Intelligenz: Wie ChatGPT und Co. die Welt verändern werden*, Kulmbach, Plassen Verlag, 2023, <https://www.businessinsider.de/gruenderszene/perspektive/midjourney-dall-e-stable-diffusion-so-funktionieren-prompts/>.

Scorzin, P., *AI body images and the meta-human: on the rise of AI-generated avatars for mixed realities and the metaverse*, "IMAGE. Zeitschrift für interdisziplinäre Bildwissenschaft", 37/1 (2023), pp. 179-94, <https://image-journal.de/ai-body-images-and-the-meta-human/>.

Jacobs, H., *The ARTnews accord: Refik Anadol, Beeple, and collector Ryan Zurrer speak on the future of digital art, NFTs, and AI*, in "ARTnews", October 12, 2023, <https://www.artnews.com/art-news/artists/refik-anadol-beeple-ryan-zurrer-future-of-digital-art-nfts-and-ai-1234682145/2/>.

Klarer, M., *Ekphrasis*, in D. Herman, M. Jahn, M.-L. Ryan (eds.), *Routledge encyclopedia of narrative theory*, London, Routledge, 2005, pp. 133-4.

Merzmensch (Alexeev, V.), *Kollaboration von Mensch und Maschine, KI-Kunst* Berlin, Verlag Klaus Wagenbach, Digitale Bildkulturen, 2023.

Mitchell, W. J. T., *Ekphrasis and the other*, in Id., *Picture theory. Essays on visual and verbal representation*, Chicago, University of Chicago Press 1994, pp. 151-83, https://complit.utoronto.ca/wp-content/uploads/COL1000-Week11-Nov25_WJT_Mitchell.pdf.

Lindhé, C., "A visual sense is born in the fingertips": towards a digital ekphrasis, "Digital humanities quarterly", 7 (2013), pp. 1-21.

Pfisterer, U., *Ekphrasis*, in Id. (Hrsg.), *Metzler Lexikon Kunstwissenschaft: Ideen, Methoden, Begriffe*, Stuttgart, J. B. Metzler, 2019, pp. 99-103.

Refik Anadol Studio, *Unsupervised – machine hallucinations – MoMA*, 2023, <https://refikanadolstudio.com/projects/-unsupervised-machine-hallucinations-moma/>.

Schappert, R., *Kunst mit KI-Bildgeneratoren*, in “KUNSTFORUM International”, 289 (2023), pp. 206-9.

Scorzin, P.C., *Daten als Pigment. Refik Anadol im Interview*, in “KUNSTFORUM International”, 278 (2021), pp. 162-75.

Scorzin, P. C., *Kunst, KI und Ko-Kreativität. Zur algorithmisierten Ästhetik der AI Art*, in L.C. Grabbe, Ch. Wagner, T. Held (Hrsg.), *Kunst, Design und die „technisierte Ästhetik“*, Marburg, Büchner Verlag, 2023, pp. 232-49.

Webb, R., *Ekphrasis ancient and modern: the invention of a genre*, “Word & image”, 15/1 (1999), pp. 7-18.

Webb, R., *Ekphrasis. Imagination and persuasion in ancient rhetorical theory and practice*, London, Routledge, 2016.

Figures

Figure 1: Screenshot of a tweet mentioning different versions of an AI-generated Pope Francis in a rap music video while sporting a Balenciaga white puffy jacket. The original image was created by Guerrero Art (Pablo Xavier). Image: Kris Kashtanova’s Twitter post.

Figure 2: Deepfake of Pope Francis wearing a white puffer coat, generated by AI model Midjourney, posted to Reddit on March 24, 2023.

Figures 3-7: Generative images of the shield of Achilles created with Adobe’s Firefly 2 (December 2023) by Pamela C. Scorzin (@levanialehr).

Figures 8-9: Refik Anadol. Sample data visualization of *Unsupervised — Machine Hallucinations — MoMA — Fluid Dreams*, 2022. Data sculpture: custom software, a generative algorithm with artificial intelligence (AI), real-time digital animation on LED screen, and sound. Dimensions variable. The Museum of Modern Art, New York. © Refik Anadol Studio. Courtesy: Refik Anadol.