

Dominik Jałowiński

Facing the Other

*Iterations and permutations in painterly creation **

In the constantly evolving world of contemporary art, where boundaries are constantly being redrawn, painting endures. A testament to the adaptability of this medium is the fact that contemporary artists continue to find ways to innovate within it, exploring both new concepts and classic motifs. One such approach is the use of permutations and iterations in painting.

A historical prelude

To understand what permutations and iterations are in painting, one must first understand the cyclical nature of art history. For example, Renaissance masters often repeated biblical and mythological narratives, offering unique perspectives on established stories. In the modern era, artists such as Claude Monet repeatedly painted the same subjects in different settings, showing that even within the framework of repetition there is great variability and room for exploration.

The concept of permutations in painting

Permutations suggest an arrangement of elements in which the order is crucial significance. In painting, this can be interpreted as compositional choices made by the artist, the arrangement of objects and even the order of brushstrokes of the brush. Each new decision made by the artist creates a divergent path, leading to a completely different end result. It can be argued that Gerhard Richter's paintings, with layers of color scraped across the canvases, present permutations. Each stroke, each layer, changes the result. There is a tangible sense of "what if" Richter had applied a different pressure, used a different color, or stopped in a different place.

Iterations: An evolutionary exploration

Where permutations focus on sequence, iterations deal with repetition - doing something again, perhaps with subtle differences. Iteration suggests a sense of evolution. A series of images can evolve, each one slightly different from the previous one, illustrating a deepening of the subject, or a changing artist's perspective on a given subject. Take, for example, Yayoi Kusama's iconic dots. The motifs, to which the artist has returned to throughout her career, evolve in size, color and placement. Each iteration is a familiar, but also distinct, endless exploration of a single concept that, in Kusama's words, represents an infinite universe.

Iterative ideation

From an iterative perspective, generative machine learning allows artists to create countless variations of an artwork with little nuance. By adjusting various parameters, artists can create a series of paintings that reflect a single theme but differ in execution, but they can also create paintings made similarly but dealing with completely different subjects. This iterative process becomes less associated with manual repetition and more with evolution through technological interpretation. Cultural implications and the search for

identity. In a globalized world, our individual and collective identities are subject to constant change. Iterations in contemporary painting can be seen as a metaphor for the constant search for self. Each revision of a theme or motif is like a look into a mirror, in which we see a slightly altered reflection each time. It is a nod to the belief that while the basic elements of identity may remain, the layers and sequences in which they manifest themselves can change.

The infinite potential of contemporary painting

In the context of painting, permutations and iterations are not mere techniques or styles. They are a reflection of the times we live in, the tools we use, and the identities we use. They show the ever-present possibilities within what is familiar. In this sense, contemporary painting becomes a dialogue -not only between artists, but between artist and viewer, past and present, the familiar and the new. Generative learning algorithms machine learning offer not only a tool, but also a partner for collaboration, encouraging artists to push boundaries, challenge conventions and re-imagining what contemporary painting can be in this technologically augmented era.

The digital age and its impact

Digital algorithms and tools allow infinite recombinations, providing artists with a previously impossible kaleidoscope of possibilities. The impact of digital tools enables easier thinking in layers, sequences and variations. As we move deeper into the 21st century, the synergy between art and technology is becoming increasingly apparent. Generative algorithms of machine learning are at the forefront of this convergence, offering contemporary artists a revolutionary means to re-imagine thinking in terms of permutations and iterations. This is a testament to the ever-evolving nature of art, in which each era introduces new tools and media, challenging and expanding our understanding of artistic expression.

Algorithmic abstraction

Generative machine learning creates works of art based on data input. Artists can input thousands of subjects, as well as images, sketches, and even unrelated visual data to generate new, unique works of art. The generated results, although born from algorithms, have a purely human nature, as they are created not only from human intention, but also from the based on previously created and collected data by him. It is also important to remember that each new data point, each new artistic nuance introduced into the algorithm, changes its final result. In essence, the machine becomes both a tool and a collaborator, introducing an unpredictable but systematic element into the creative process. The interpretation of a sequence by an algorithm, adds a rich layer to the conceptual depth of permutations and iteration in art.

Machines and the subconscious

A noteworthy aspect of generative algorithms is their potential to tap into the collective subconscious of the art world. When a machine is trained on a wide range of artworks, it accumulates centuries of artistic thought, technology and culture. The works it generates can be seen as a reflection of this collective memory, offering a fresh, unbiased perspective that remains free from the individual biases or limitations of a single artist. In this way

generative algorithms can be compared to a form of contemporary surrealism, drawing on the dreamy reservoir of a shared artistic heritage.

Summary

As the boundaries between man and machine blur in the art world, permutations and iterations are taking on a new dimension. Generative learning algorithms machine learning offer not only a tool, but also a partner for collaboration, encouraging artists to push boundaries, challenge conventions and re-imagining what contemporary painting can be in an era augmented with the help of digital technologies.

* An essay on the nuances of the processes of iteration and permutation, and their meanings in shaping the contemporary painting, written by the artist with help of a machine learning algorithm.