

# Niki Passath's Robotic Situations: the painting machine/robot as musical instrument

by Elisabeth Saubach, MA

## **Abstract:**

The current review is focused on a recent body of paintings by Austrian musician and artist Niki Passath, who has achieved a unique symbiosis between a robotic painting tool and a visual artist.

He builds kinetic, three-dimensional objects out of wire, wood, motors, and sensors, which he then uses as instruments in his robotic symbiotic performances.

Each series of works uses a different robotic tool that always leaves its own mark on the canvas. The end result is a performance resembling classical music, with variations on a theme and ever new interplays of movement and color.

*Keywords: Niki Passath, robotic art, art and technology, art and techno sciences*

## **1. Introduction**

Niki Passath is a media artist who recently decided to focus primarily on painting as his primary medium of expression outside of media art. He created the idea and artistic process for Robotic Symbiotic Performance, which results in Robotic Symbiotic Painting, over the course of his artistic career. Passath's works are marked by performative strategies (Saubach 2021): The possibilities and concepts of painting performance or action are discussed and questioned, as well as the image and imagery of performance. The creation of works of art consistently involves the use of digital tools and technological processes. As seen in the artist's most recent painting series, classical music is not an insignificant starting point. This artist portrait will examine the specific connection between classical music and the artistic performance concept in relation to painting in Passath's body of work. Following an examination of the artist's process, the thesis "the painting machine as musical instrument" will then be supported with specific examples. The important question is when classical

music techniques are applied, modified, or applied to the context of works of art—not when classical music is used as the background. When does classical music, along with its staging representation and design elements, become an essential component of artistic performance? As F.E. Rakuschan stated, "Niki Passath originally went to the University for Music and Dramatic Arts in Graz to study cello, an instrument that is very similar to the human voice, and therefore, we should also look for connections in the field of music." (Rakuschan 2017)

With this constant interdisciplinary, performative and especially cross-genre approach that is hypostatized in the artist's works, Passath takes an outstanding position within contemporary visual art. Performative works are made that manifest the processes and traces of the movements performed and fix them on the canvas and in the object between the plastic-kinetic performance relic and the work in the form of a panel painting, between "performance and/as image" (Janecke 2004), between stillness and movement. That delicate relationship is being attempted to be questioned in an experimental human-machine symbiosis: At what point is the robot no longer an "instrument", "painting prosthesis" or "emotional prosthesis" (Weibel 2017), but an autonomous actor within an art performance? How could forms of human creativity be immediately interpreted by robots? What would be the expressive possibilities and forms for a machine and would it not only need painting utensils, but also feelings?

## **2. Robotic Situations – „Zoe“ and „Kurt“**

At the age of eleven, Passath dedicated himself to cello studies. He later studied architecture at the Technical University in Graz and received his diploma in "digital art" from the University of Applied Arts in Vienna in 2004. His architectural era is evident in the repeated line networks that cover the canvas or the significance of a particular multidimensionality. But despite the fact that his early machines did not paint, they instead moved through space and explored it, or they used ink to leave an abstract tattoo on the artist's forearm based on a generative drawing. This is how his artistic career began. Passath uses straightforward programs that he designs on the "Arduino platform" and incorporates into his objects rather than the artificially intelligent algorithms that many other artists use. As a result, it is incorrect to claim that the artist's works contain AI. Instead, according to "artistic intelligences" (Passath 2022), "social entities" (Lindner 2010) are the ones that are exploring their surroundings. (Passath has also referred to specific robots as his pets, including "Volker" (Fig. 9), an artificial being that resembles a robot; Passath 2016) However, the artist has been playing with associations about AI from the beginning, about its potential and negative aspects for humanity. According to the artist, by invoking a certain dynamics in the movements of the objects: "If a robot is able to perform various patterns of movement in seemingly meaningful succession and there are no more response schemes to be recognized, then we interpret this response as being intelligent, goal-oriented and dynamic." (Passath 2013, p. 72.) So it is about "interpreted artificial intelligences", as the artist stated in a conversation with Oswald Wiener about his works. (Passath 2022 / audio file "conversation between Wiener and Passath") From the beginning, Passath also raises the question of "prosthesis" - in a symbiotic interplay with a seemingly living social entity: For whom is the prosthesis? "What will happen if soon all the manufacturing processes are implemented purely by machines and artificially intelligent systems and robots don't need any human prostheses anymore? What do we do now when the human becomes obsolete?" (Passath 2019, p. 133.) The works - "Zoe" (Fig. 2) - an installation with insect-like robots and "Kurt" (Fig. 1), a tattoo robot constructed by

the artist himself, mark an important path for Passath. With these works, the first artistic approaches and debates become evident, as well as the significant influences on the young artist.

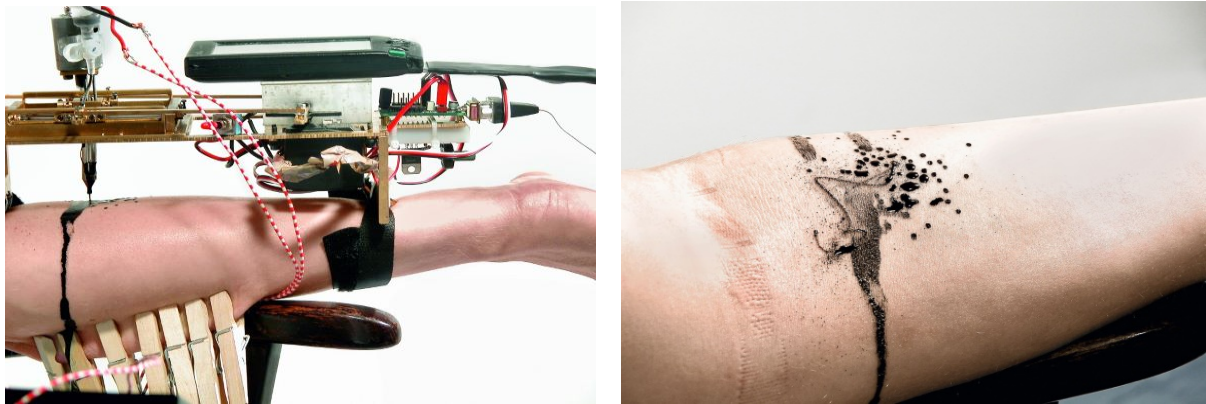


Abb.1. Niki Passath, „Kurt“, robotic tattoo machine, plastic/brass/electronics, 50 x 35 x 20 cm, 2004, photo: © Susanne E. Sellinger and detail of the tattoo by „kurt“, photo: © Susanne E. Sellinger, courtesy: Collection University of Applied Arts Vienna

In "Kurt" (Figure 1), we are dealing with the work with which Passath, among others, graduated from Peter Weibel in 2004: a robot that left a permanent mark on the artist's skin with a needle. As artist Margarete Jahrmann and artists Shusha Niederberger and Ngyuen van Ngoc noted in their texts on "Kurt," this performance involved the artist becoming a sort of "fashion cyborg" (Niederberger/van Ngoc 2017): in symbiosis with an artificial being, a fundamentally fashionable accessory was created, which also references the desired "body modification" (Jahrmann 2017) through self-optimizing prostheses. The performance was captured in staged photographs and a performance video. In 2019, the tattoo performance was repeated in Tokyo in a reenactment. A new object called "Kurt 2.0" was developed by the artist. Further tattoos on the artist's arm attest to the performance, which is still performed today - in Athens, Vienna, and most recently in the form of a wedding ritual. (See the publication "Los Dadores de Dolor" for more information) The tattoo consists of abstract, black lines that converge into a galaxy-like shape - a vector drawing that was "drawn" onto the artist's skin by the small computer working in the machine (Schöpf/Stocker 2005, p.218.). "Through this intervention, a close connection with the machine is created in the consciousness of the person who is tattooed, which is just as permanent as the drawing itself." (Schöpf/Stocker 2005, p.218.)

The Viennese Actionism and, in particular, three of its representatives - Peter Weibel, Arnulf Rainer and Hermann Nitsch - are clear influences on Passath's artificial practice. Viennese Actionism developed in Austria from 1962 and ended around 1971. It mainly took place within a small group carried by a few artists. Günter Brus, Hermann Nitsch, Otto Mühl and Rudolf Schwarzkogler were the main protagonists of this new actionist style, which made the body an artistic instrument. Already an artistic role model in the circle of Viennese Actionists, Peter Weibel can also be named as one of the fathers of Austrian media art. He is an artist, curator, and art theorist and his works include categories such as performance, video, computer art, experimental film, conceptual art and media art, as stated on his website in his short biography: "Starting from semiotic and linguistic considerations [...], Peter Weibel develops an artistic language that leads him from experimental literature to performance in 1964. In his performative actions, he not only examines the "media" language and body, but also film, video, tape, and interactive electronic environments. He critically analyzes their function for the construction of reality." (Weibel, artists homepage)

Passath studied under Weibel at the University of Applied Arts in Vienna. In regard to Passath's artistic practice, reference should be made to two aspects that represent essential impulses for the artist: performativity in the context of artistic action and the focus on the body, as well as the materiality and physicality of media and technology. In addition to Fluxus and performance art of the 70s and 80s, the Viennese Actionism is the most significant influence, as can be seen in a consideration of painting. Thus, Weibel stated in regard to "Kurt": "A machine has no emotions when you use it, of course, but you can use it to produce emotions." (Weibel 2017) This statement was later to be defining for Passath's artistic practice: his robots no longer only produce emotions through their special appearance or movements, but they imitate the emotional through the addressing of an artistic gesture through their choreographed body movements, with which an image is created. In the artist's monograph "Niki Passath. Thinking like a machine - An Artists Journey Into Robotics" there is a text with the title "Conversation Bast - Reder - Weibel - Passath", where Weibel reflects on emotions as a theme in Passath's works and asks the artist the following (Weibel 2017):

„Weibel: I would like to return again to the issue of emotion [...]: would you say that one aspect of your work could be described using the concept „emotional prosthesis“? [...] A special robot that tattoos you touches you in a real sense. [...] Are you inclined toward the robot as an emotional prosthesis, in the sense that the robot stimulates certain emotions in the human being, or do you want to give art a new level, that of empathy?“

Passath: Both, whereby my primary focus is on the stimulation of emotions. The materiality and the operating noises make it very difficult to conceive a robot that stimulates emotions. The question arises of what you have to do to give it just that element of liveness that in the end stimulate emotions. It is very much a matter of perceptual mechanisms: which patterns, which processes, which defects in the system allow emotions to arise? Is it precisely the defects that are the key, and the extent to which I can conceptualize them?“

That question always accompanies us in the work of Passath. Through the generative and algorithmic programming of the object, a kind of unpredictability of the drawn/painted/tattooed line is evoked. The robot can only ever give one interpretation of the vector drawing, for example, that was previously generated by the artist. This is a significant element of the artist's abstract visual language to this day. In Passath's performative painting, lines and shapes are consciously left to chance and calculation, as already evident in the conversation about „Kurt.“

„Reder: Does this artificial „creature“ also do things that surprises you as its creator – as if it were a being that had taken on a life of its own?“

Passath: That is exactly what is so great about things that are generative, algorithmic. Even as their constructor, I cannot predict what will happen next, or when. [...]“



Abb.2. Niki Passath, „zoe“, staged photography, plastic/wood/electronics, 16,5 x 23,4 cm, 2010, photo: © Susanne E. Sellinger

The second starting point for Passath's experimentation with the artistic potential of machines was the installation "Zoe" (Figure 2). In this installation, small robots moved in an installation arrangement with the "help of tracking systems" (Bucher Trantow 2019, p.135) on the floor of the exhibition space. The machines explored the surrounding spatial conditions through their specific sequences of movement. This led Passath to an interest in the question of how movement can be represented in the form of visual traces - the first "robotic movement studies" were created (Passath 2022).

The first version of the installation presented at the Museum Tinguely as part of the group exhibition "Robot Dreams" featured an external machine that "choreographed" the eleven small robots through surveillance with a camera from above, studying their behavior and controlling them individually via radio. The second version of the installation was shown at the Kunsthaus Graz: each robot was equipped with the simplest relay-self-holding circuit, and the inaccuracies in the construction of the robots' bodies resulted in something like "interpreted artificial intelligence" for the audience, through the movements. In the construction of the objects, a sort of "hereditary principle" was applied, where the second machine was a copy of the first, the third machine was a copy of the second and so on, so that the functioning errors were essentially passed on. In the exhibition catalog, the curator Katrin Bucher Trantow states of „Zoe“:

"He uses models, codes, and algorithms to show patterns in encoded or generated protocols, whose beauty lies in their faults. In [his] works [...], it becomes clear how little we read programmed machines and their activities - especially their apparent weaknesses - as emotional reactions. Who hasn't caught themselves cursing, pleading with, or even petting a blocked computer, as if it could hear us and as if it were - in the moment of malfunctioning - a creature with a soul?" (Bucher Trantow 2010, p.135.)

Through this question of the authorship of the work, Passath also later in his performative painting, playfully explores the possible creative potential of a machine through specific moments of emotionalization, imperfection and unpredictability.

### 3. The painting machine as performer



Abb.3. Niki Passath, Untitled, from the series „thinking like a machine“, gesso/chalk/electronics on canvas, 120 x 80 x 20 cm, 2018, photo: © Niki Passath / Abb.4 Niki Passath, „CMYK\_1“, from the series „painting traces“, acrylic on canvas, 70 x 50 cm, 2014, photo: © Niki Passath

Passath developed the concept and method of Robotic Symbiotic Performance after some drawing series and series on cardboard. The "painting traces" series (Fig. 4) is an early example. Robots, which resemble remote-controlled toy cars for children at first, move across the linen and distribute the dripping paint with brushes. The colors are from the CMYK digital color scheme, which is still the basis of the artist's own color mixtures today. There are also series like "thinking like a machine" (Fig. 3), in which the machine is directly mounted on the canvas and the linen is stretched on a wooden frame. Before the performance, the canvas is hung on the wall. When Passath activates the "painting," the performance begins.

The objects (Fig. 5) are assembled from materials such as wood or wire by the artist: "In a combination of robotics, code, and algorithms, he creates non-human, social entities whose reduced expressive repertoire follows simple protocols." (Lindner 2010) Motors, motion sensors, or 3D



printing elements are integrated, and the possible movements are "implanted" depending on the mode of movement. A priori, in relation to this specific work complex in the artist's oeuvre, three levels of work genesis arise: from the construction of a plastic-kinetic, robotic object, to a symbiotic performance between the artist and the machine, which can take place in the studio or as a public performance, to the stretching of the resulting drawing or painting work and positioning the robot on a pedestal."

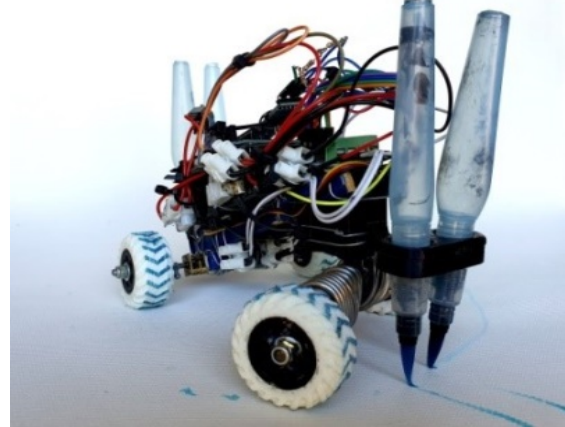
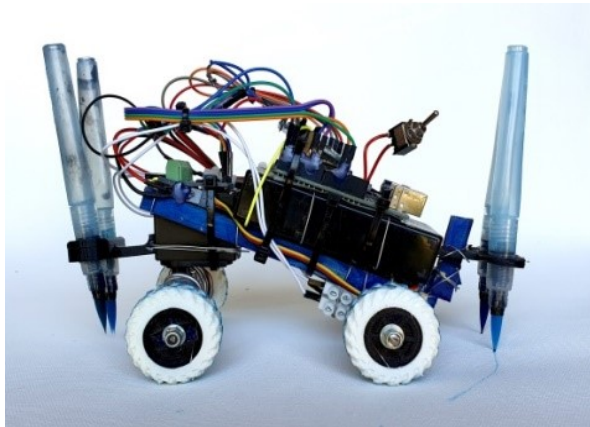


Abb.5. Niki Passath, Untitled, Robots I – IV, u.a. electronics/wood/plastic, 12 x 23 x 15 cm and 12 x 12 x 23 cm, 2020, photo: © Niki Passath

The painting performance follows a similar and almost repetitive principle: first, a "stage" is created by spreading white paper or canvas on the floor of the exhibition space. Then, the object and other attributes, such as plastic syringes for filling the paint tank, are prepared. The artist starts punctually and silently his staging by turning on the object and the robot starts its choreography. Through the movements of the artist and the robot, lines and shapes are created on the canvas.

## **4. Robotic Symbiotic Painting and Performance**

In the early Robotic Symbiotic Paintings, such as "painting traces" (Fig. 4) or "thinking like a machine" (Fig. 3), two significant possibilities for the later artistic practice are revealed in the way the robot can leave its mark in the painting process: Using a polar graph constructed by the artist, digital vector drawings generated by the artist are interpreted and transferred to the canvas with a pen or chalk, or the color is applied to the canvas by means of objects that run over the canvas, which are equipped with brushes, paint brushes and wheels and are subject to different systems of movement programming.

Once the robot is set in motion, its body movements are always directed differently - sometimes through fixed, prescribed programs, sometimes in randomly running programs, or through programs controlled by other devices (such as in "Zoe 1" at the Museum Tinguely). The robots are in this sense "not programmed, but instructions or choreographies have been implemented" (Passath 2022). Choreography generally means a fixed sequence of movements that follow a specific performance. In the context of Passath's works, the ancient Greek meaning of the word is particularly interesting, because it not only refers to dance [Choreo-] as movement, but also to the writing [-graphie] of movement - fixed movements (of dance). Often it is a combination of different modes of movement that make up the increasingly dense imagery of the artist.

## **5. Robotic Situations – the painting machine as musical instrument**

In the artist's latest series of works, classical music becomes an increasingly constitutive aspect of the performance, as the painterly composition is preceded by a specific set of instructions. The robots have become "extended instruments" (Passath 2022), as the artist often calls them. They are instruments that act beyond the musician and imitate "creative independence". What initially appears to be a cornerstone in the artist's biography is actually a significant conceptual aspect of his artificial practice. Passath adopts methods from classical music, particularly its performance forms in the sense of concert situations and its design principles in the sense of composition, and applies them to artistic performance with his robots. An example of this is the "quarantine sessions" series (Fig. 6), which were created during the lockdowns due to the Covid virus in studio performances.



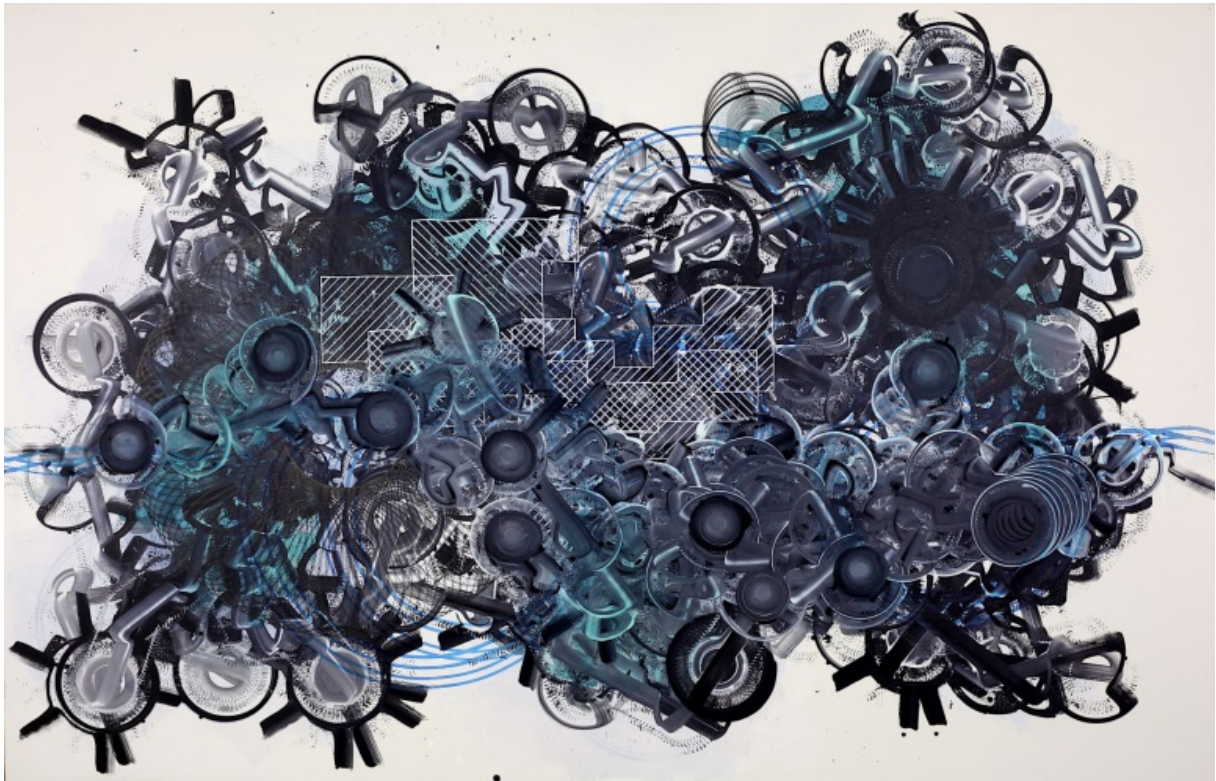


Abb.6. Niki Passath, „pandemische landschaft“, from the series „quarantäne sessions“, ink/varnish/ gesso/acrylic on canvas, 130 x 200 cm, 2020, photo: © Niki Passath, courtesy: Andreas Binder Gallery, DE

In the "quarantine sessions" series, wheeled, via a smartphone remotely controlled objects, as well as a polargraph and a pen plotter, are used. With these machines, due to the artists desired blurry construction, vectorizations can only be interpreted as "error-stimulating" (Passath 2022). In the "quarantine sessions," "a composition in multiple acts" (Passath 2022) was created. The application of objects is divided into acts: first, vehicle-like robots are used, which work on the linen in fine lines with blue ink in circular formations. This is followed by an act with robots that leave their traces in acrylic with brushes, then an act with a black pen using a polargraph system, and then a level with a pen plotter - creating the shaded areas - followed by further acts with other painting robots. From one overpainting to the next, the painterly variation of a certain composition is generated. Not only do different types of objects come into use in different performances, but the artist also incorporates his own painterly and drawing elements into the painting.

The painting of Viennese Actionism is characterized by a consistently performative character; the focus is always on the process in which the painterly work is created. An outstanding position in the context of Actionist painting is taken by the artist Arnulf Rainer; not least because after a trip to Paris with Maria Lassnig, he brought Informel to Austria. Like no other Actionist, Rainer shaped the concept of overpainting; as the artist and art historian Günther Holler-Schuster states in an exhibition text from 2019 about painterly works by the artist: "The resulting methods - overpainting, overdrawing of others' as well as his own works - explore the possibilities of painting in relation to the performative. Painting as a process [...]" (Holler-Schuster 2019) Stylistic models for the Viennese Actionists are the artists of the Informel and in particular of Tachism. For the Viennese Actionists, a goal of their works was to evoke a kind of social taboo-breaking to consciously provoke state and church systems. Often the actions in public aroused the audience - the moral breach was sometimes so violent that the police had to intervene and artists were regularly arrested. The body was central -

it became an artistic material and presentation surface; a stage of often violent and self-injurious staging. Body fluids such as sperm or blood were used as aesthetic means of expression. The actions were often documented or staged on video or photography.

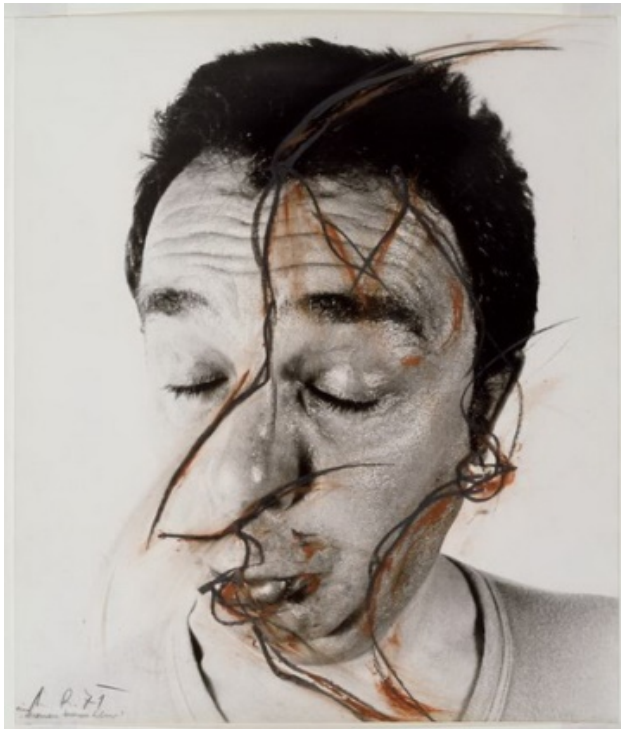


Abb.7. Arnulf Rainer, Eine Nasenkorrektur (Face Farce), oil pastel on photograph on paper, 60,8 x 50,7 cm, 1971, photo: © Arnulf Rainer, courtesy: Collection Tate since 1982, source: <https://www.tate-images.com/preview.asp?image=T03391> (published in: The Tate Gallery 1984-86: Illustrated Catalogue of Acquisitions Including Supplement to Catalogue of Acquisitions 1982-84, Tate Gallery, London 1988, p.551)

The movements of the object are performatively inscribed in the color surface or canvas in Passath's work; the act of movement evokes the creative potential of the machine and thus its "artistic ability" by imitating the painterly gesture. However, Passath does not want to evoke a social taboo, as the Actionists did in the 60s, nor is his art content to be analyzed politically. Rather, the artist is interested in exploring and questioning societal (or human) systems in relation to technology and the environment. A phenomenon that can be found in performance art since the 70s. By no longer placing the individual self or the body at the center of the artistic engagement, but rather bringing the external world and its themes into the focus of the artist and discussing them through physical actions in the performance. (Cf. Jappe, p.32 ff.) For example, in performances by Ulrike Rosenbach, Valie Export and Peter Weibel or Marina Abramovic and Ulay.

In Passath's work, the painting becomes a creative expression of those possibilities of movement; as Holler-Schuster states in relation to the works of Arnulf Rainer: "The painting becomes a testimony of a process." (Holler-Schuster, 2019) Another characteristic that Passath incorporates from the Vienna Actionists into his art is the special form of documentation of his actions (Fig. 8.): While the studio performance is often not or poorly documented, the audience performance in the gallery space is always documented in video or photography. In addition, there are so-called "staged photographs" in which the artist captures or has his performances captured (Fig. 8.). However, these are more to be analyzed as performance relics than as mere photographs, similar to the case of the Vienna Actionists.



Abb.8. Niki Passath, „Tätowierroboterreenactment 2018 Tokyo“, performance still, photo: © Elisabeth Saubach, Tokio 2018, source: artists website (published in: „Los Dadores de Dolor“)

In the works of Passath, "performative" also means that they are paintings that define themselves as a synthesis of event and work, of presence and representation, immateriality and materiality. (Nollert 2003, p.4.) In analogy to classical music, the cello becomes a robot and the artist's hand becomes a bow - both follow a certain composition of movements. The robot becomes an instrument, similar to how the bow extracts a tone from the musician's embodied narrative through gentle or passionate movements. Different musical or painterly variations of the same composition theme are created with each work series. The objects have evolved over the years of artistic activity, like a metamorphosis or evolution. They receive new movement functions according to new requirements. As Passath stated in a conversation with Weibel about the work "Volker" (Abb.9.): "Passath: Yes, they are always one-of-a-kind pieces. Although VOLKER has been followed by a VOLKER RELOADED, an improved version. But I see that in more of an evolutionary sense." (Passath 2017, w.p.) Without going further into "Volker," the following aspect should be highlighted: Passath views his objects in an evolutionary context, in a natural development, corresponding to new and developing (environmental) conditions. His objects develop in the construction process according to an "evolutionary algorithm" (Passath 2022).





Abb.9 Niki Passath, VOLKER RELOADED, staged photography, photo: © Lena Mayer, VOLKER, robotic symbiotic creature, plastic/aluminium/electronics, c. 70 x 32 x 15 cm, 2004

In his performances, Passath applies methods he learned during his cello studies and his many performances as a musician. The absence of words in the presentation is a characteristic element, as can be seen particularly in the performance videos. Even though the artist is frequently interrupted during his performance in front of an audience and asked to explain what is going on, similar to an interruption in a classical music performance asking the musician to explain what they are doing, the purpose of the absence of words is to create a specific "situation." The wordless staging, dedicated to each individual sound of the instrument, is directly transferred to an artistic performance.

After the performance, the robot is placed on a pedestal and thus brought to a standstill. Displayed there, it embodies the processes that took place during the performance. At the same time, in this moment of the work's genesis, the object can be interpreted as the cello that is now packed back into its case and waiting for its next performance.

An example is the installation-style presentation of the work series "If only you could see what I've seen with your eyes" (Fig. 10) from the Andreas Binder Gallery at the SPARK ART Fair Vienna. The entire work series had previously been photographed by the photographer Rene Hümer for a brochure at the Lukas Feichtner Gallery in Vienna. A similar installation as later in the exhibition hall was chosen for the photographic shots. Works from the series had already been presented in the Lukas Feichtner Gallery. "If only you could see what I've seen with your eyes" references a quote from the sci-fi classic "Blade Runner": When the Replicant Roy Batty enters the artificial eye makers laboratory, he recites a poem in which that line of text also appears. The title of the work series refers to that specific film scene in which the Replicants of the Nexus 6 series gain human consciousness before their built-in decay period is over, and this is due to the experiences they have made in the environment of humans and as their tools. As it says in the film: "I've seen things you people wouldn't

believe. Attack ships on fire off the shoulder of Orion. I watched c-beams glitter in the dark beneath the Tannhäuser Gate. All those moments will be lost in time. Like tears in the rain." Passath plays with the title of the work series on the perception of a robotic being and its desire to become immortal by manifesting itself in an artistic trace. Does his robots also paint what they have seen? In the work series, oil paint is applied for the first time. With the different paint levels, blurry, fluid backgrounds are created in front of which the robots perform their movements in poetic scenes.

In this series of works, "machine-programmed actions in a composition with four themes" (Passath 2022) were created. Each painting in the series consists of four different themes that correspond to different "physical acts" (Passath 2022), "two are forwards and two are backwards" (Passath 2022). For this, the artist generated two forward movements and two backward movements that resulted in different lines and thus shapes on the canvas. The robots followed these pre-programmed movements in their actions. When confronted with an obstacle (such as the end of the canvas), the robots switched their movement mode - from forward to backward and vice versa, with the robots being able to remember the change of forward or backward movement until all four themes were painted. Passath's abstract visual language refers to leaving a trace as a cultural practice. The repertoire of forms and lines uses simple motifs. The circle, one of the oldest symbols of mankind, is recurring.

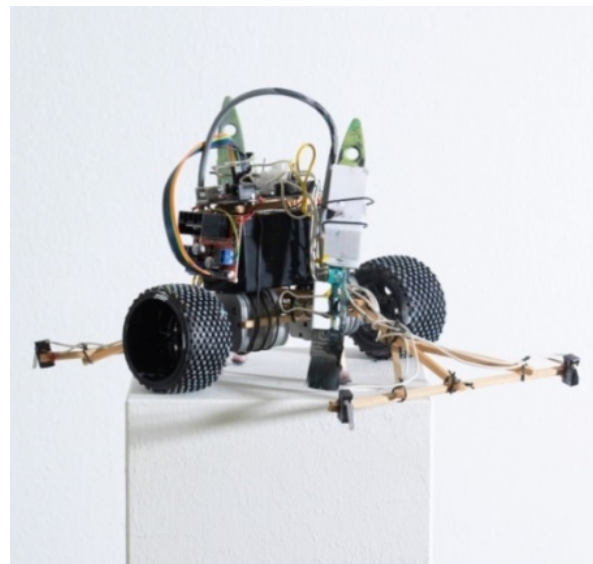


Abb.10. Niki Passath, Untitled, from the series „If only you could see what I've seen with your eyes“, oil on canvas, 200 x 130 cm, 2022, photo: © Rene Hümer, and detail photo of the robot, photo: © Rene Hümer courtesy: Gallery Andreas Binder, DE and Gallery Lukas Feichtner, AT

In an interview, artist and curator Jung In Jung asked the artist: "What made you start making drawing robots even though you have a classical music background?", and Passath responded:

„I started playing the Violoncello when I was five years old. Not so long ago I realised that playing a Violoncello was a beginning step towards building robots that make art. A musical instrument is an ‘interface’ between an artist and programmed scores (traditionally music notes). As a musician who needs an instrument to make music, I also need a robot or a machine to make paintings.“ (Passath zitiert nach Jung 2016)

A cross-genre moment between classical music and performance art can be seen throughout art history and can be demonstrated through various specific examples. This is also the case with the works of the Vienna Actionists, and in particular with the performative works of Hermann Nitsch. This refers to the "Orgies-Mysteries Theater" (OMT). Following the example of the Wagnerian "Gesamtkunstwerk" (total work of art), Nitsch developed the OMT, a play lasting up to six days, divided into acts, as he himself said, fixing "theater on the picture surface" (Nitsch 2015). Inspired by Tachism, Informel, and abstract expressionism, Nitsch created a form of action painting that places the performative and physicality at the center. The performance of the OMT follows explicit instructions from the artist; actors perform the movement motives directed by the artist. The stage architecture, costumes, and movements of the actors in the context of a specific action being performed were developed by Nitsch in the drawing. In the theatrically designed painting action, paintings are created that manifest the processes and traces of the play, as Nitsch formulated it: "The painting process becomes an event in time. Theater has occurred on the picture surface" (Nitsch 2015). The music follows compositions developed by the artist that "contain all necessary information to be able to play them," as the conductor of the OMT once stated. Music is an essential aspect of the OMT as a total work of art. Unlike Passath, Nitsch actually composes music that is performed by musicians. Passath, on the other hand, transfers the design principle of a concert situation to his performance, but the music never goes beyond its underlying methodology, no music is performed. In Nitsch's OMT, painting is an aspect of the total work of art. Extracted from that context, it is a performance relic, similar to the special objects used during the OMT performance. As Wieland Schmied stated regarding the OMT: "Painting is only part of the Orgies Mysteries Theater, as music, drawing, architecture, and the course of the play are parts of the Orgies Mysteries Theater" (Nitsch 2015). In Passath's Robotic Symbiotic Performance, cross-genre methods are "assembled" (Passath 2022) to raise the question of "robotic painting." This shows the divergence of artistic approaches between the actionist "total work of art" and the interdisciplinary transfer of different artistic and/or scientific methods into a picture. What the artists have in common is the moment of a specific performance situation in which the painting is created as a process and a performative image of that process. Similar to Nitsch, Passath generates explicit instructions to be executed by robots and/or the performance audience, as in the series "the entertaining aspect of destruction." Although risk and spontaneity are important factors in Nitsch's OMT, in Passath's work, the emphasis is on the question of control and the relationship between human and machine.

## 6. Conclusion

Classical music and visual arts are disciplines that have constantly intersected in various ways. The question is when design principles are actually transferred or structural analogies occur. Historically, the Vienna Actionism movement in Austria developed in relation to action painting from the Informel, specifically Tachism (from "la tache" = the color stain) with a trip to Paris by Arnulf Rainer and Maria Lassnig. As Elisabeth Jappe states in her seminal publication on 20th century performance



art, "Performance, Happening, Fluxus, Actionism, all these forms of expression of the second half of our century are not imaginable without the activities of preceding decades [...]" (Jappe 1993, p.11.) As Jappe notes, the first "tendencies [...] to break away from the static panel painting" (Jappe 1993, p.14.) already manifest themselves in Tachism. Unlike in the Informel, where the "gestural trace [...] locates the work in an as yet "unformed", or informal area" and "signs, gestures and matter" (Meneguzzo 2008) are the basic pillars of artistic engagement, in Vienna Actionism, physicality is additionally brought into the focus of the painting actions.

In Passath's work, no canned paint drips onto the canvas like in Jackson Pollock's, nor is blood splattered on a canvas like in Hermann Nitsch's, or a "live brush" (Kuni 2004, p.219.) snuggles up to the linen like in Yves Klein's. Instead, in Passath's work, there are robotic figures that paint with their bodies in a choreographed performance, yet remain a kind of musical instrument and thus a "creative prosthesis" for the artist. Already Jean Tinguely generated machines from scrap that painted or played music, and Nam June Paik as one of the most important representatives of Fluxus developed the first "robotic performance artist" named "K 456" that was able to shock the performance audience in many ways. (Jappe 1993, pp.16ff.) However, "paint performances, where the painter, often inspired by dance and music, worked on his canvas in front of an audience, mostly resulted in poor pictures and had nothing to do with the meaning of a performance, because there the action served not (only) the production of a product, but also had a symbolic meaning." (Jappe 1993, p.40.). In contrast, Passath: in reference to the method of "action painting" by Jackson Pollock or the "pouring picture" by Hermann Nitsch, Passath has developed an actionist form of painting within the performance with the method of Robotic Symbiotic Painting, addressing the performative and the (painterly) bodily gesture in a contemporary context by artificially generated bodies that perform the painting process in a performance. The symbolic meaning of this bodily gesture is manifested in the performativity of the painting. Or as Holler-Schuster once stated in relation to Rainer's works: "At the same time, the painterly and the bodily gesture condense into a new unity, into a completely new context of meaning." (Holler-Schuster 2019)

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