

**Location:** In and around the Oudemanhuispoort 4-6, Amsterdam **Dates:** 24-27 August 2022





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## introduction

Where were you when Covid-19 turned the world upside down? We were getting ready to visit Nijmegen. Rob van Lier, chair of the ECVP, was going to give his inaugural lecture 'Between Perception and Reality' on March 13th 2020. We were about to take the train from Amsterdam to Nijmegen when we learned that all university events were canceled. Next week all university buildings closed down and we all know what happened afterwards.

Over the next period, doubts about a physical VSAC started to grow. We all enjoyed virtual conferences as they have brought us many unexpected and unique experiences. But with a single click you are back behind your desk. While your mind is still at the conference, your body is already doing the dishes. The Aristotelian units of time, place and action are violated.

If you are reading this introduction in a physical program booklet, you are *really* here. You are at the real, physical VSAC. When it was decided that the European Conference on Visual Perception 2022 would be held in Nijmegen, we thought it would be a great opportunity to organize the VSAC in Amsterdam, stretching the definition of a 'satellite symposium' somewhat.

The VSAC is a wonderful conference to organize. The topic can always count on great enthusiasm and as there is no formal society behind it, organizers have a large degree of freedom. Yet there are boundary conditions, expectations raised by past conferences since Baingio Pinna pioneered the first VSAC in 2012. Indeed, 10 years young, including two involuntary gap-years, some conventions are gradually being formed.

Meeting up to expectations is obviously on the mind of every organizer, and when we started to conceive the conference we immediately decided to do something meaningful with respect to the location. Amsterdam is a city with many contemporary artists and it also prides on its important role in the history of art. Therefore, we wanted to organize something around contemporary art *and* art history. Nim Goede, chair of the contemporary art program, selected four artists that work on the intersection between art and science

with a strong relation to vision and cognition. Together, they will replace the traditional 'keynote lectures' and will present their work and views, but also engage in dialogues during their sessions. The art historical event centers around Rembrandt's approach to vision and art, focussing on the *Night Watch*, his renowned masterpiece. Art historians Arjan de Koomen and Jeroen Stumpel asked fellow experts from art history, material science and computer science for a unique symposium that will be the finale of VSAC 2022.

Besides these two 'special events', the VSAC is mostly shaped by you: visitors and contributors. This year, five symposia were accepted to the program. The symposia turn out to be a very important element of the VSAC as there seems to be a natural tendency to combine artists and scientists. We hope this will continue in the future, so the VSAC will maintain its relevance and support the creative cooperation between vision scientists and artists. Besides the thematic symposia, you will enjoy five talk sessions, and two poster sessions covering a wonderfully large variety of topics.

This year we introduced an overall theme, to have something to hold on to, to make the VSAC somewhat more tangible. The theme became *realities*. The plural form directly hints at the idea that "reality" is an aggregate of the various co-existing perspectives on a lively, ambiguous and continuously unfolding nature. It also refers to Rob van Liers' inaugural lecture mentioned in the beginning, that did not take place and marked the start of a strange and difficult period. Furthermore, it seemed to resonate with you, as 35% of the abstract submissions in EasyChair were marked as 'related to realities'. But lastly, the theme obviously reflects our outlook over the past year, with a hope that seems to be granted: VSAC is *really* happening. There will be a unit of time, place and action and you will be part of it. Enjoy Amsterdam, enjoy the presentations and most of all, enjoy each other.

On behalf of the VSAC organization,

Maarten Wijntjes

**SATURDAY** 

27/08

# timetable

The academic program of VSAC 2022 will start on Wednesday the 24th and end on Saturday the 27th at 6pm.

On the right you see a general overview of the program, and you can find a more in depth program with all speakers on the following page.

You can find the program with abstracts of each speaker at *vsac2022.tudelft.nl* or through the QR code below.



	24/00	23/00	20/00	27700
9:00 —			TALK SESSION III:	
10:00 —		TALK SESSION I: SPACES & SENSES	ESTABLISHING PREFERENCE	TALK SESSION IV: STYLE, CONVENTION CONVERSATION
11:00 —		COFFEE BREAK	COFFEE BREAK POSTER SESSION	BREAK
12:00 —		SYMPOSIUM III: UNEXPECTED REALITIES	SYMPOSIUM IV: EYE-TRACKING &	TALK SESSION V:
-	LUNCH & REGISTRATION		ART APPRECIATION	NEURO AESTHETICS
13:00 —	CEREMONY SYMPOSIUM I:	COFFEE BREAK POSTER SESSION	LUNCH POSTER SESSION	VSAC BUSINESS MEETING
14:00 —	REALITIES OF GEOMETRIES		ARTISTIC KEYNOTES:	BREAK
15:00 —	MINI BREAK TUTORIAL	ARTISTIC KEYNOTES: NIM GOEDE	EDWIN ZWAKMAN CORÁLIE VOGELAAR	NIGHTWATCHING I
- 16:00 —	BREAK	TINE MELZER FLORIS SCHÖNFELD	COFFEE BREAK	
17:00 —		COFFEE BREAK POSTER SESSION	SYMPOSIUM V:	BREAK
17:00 —	SYMPOSIUM II: ARTIS PROJECT	TALK SESSION II:	STROBOSCOPIC LIGHT EFFECTS	NIGHTWATCHING II
18:00 —		PRODUCTION &		
19:00 —	REGERTION			

**THURSDAY** 

25/08

**FRIDAY** 

26/08

6 7

**WEDNESDAY** 

24/08

# full program

## Wednesday 24th

12:00 Lunch and registration

13:00-13:15 Opening ceremony

13:15-14:30 Symposium I - Realities of Geometries

Martin Skrodzki

3D printing the geometry of sound

Teresa Hunyadi and Dave Murray-Rust Material Deformations of Penrose Tiling

**Rinus Roelofs** 

Folding polyhedra inspired by Albrecht Dürer

Anna Maria Hartkopf and Johanna Michaels A VR journey through the geometry of space

14:30-14:45 Mini break

14:45-15:30 Tutorial

Anne-Sofie Maerten and Derya Soydaner Art and machines: A tutorial on AI generated art

15:30-16:30 Break

16:30-18:30

Symposium II - How are the arts related to

transformations in our everyday life? How can a visual science of art capture this impact? An overview of the ARTIS project.

Joerg Fingerhut, Matthew Pelowski and Eftychia Stamkou

Art and Transformation: An embodied, enactive theory of the arts and interpretation of recent findings.

# Stephanie Miller, Joerg Fingerhut and Matthew Pelowski

What are the shared ways we might respond to art? Network Modeling and Latent Class Analysis of both big and small "arts engagements" in gallery and across multiple facets of everyday life

#### Corinna Kühnapfel, Joerg Fingerhut and Matthew Pelowski

How do we move in front of art? Capturing, quantifying, and linking movement patterns, eye-tracking, emotion, and evaluations in an ecologically-valid gallery setting

#### Rohan Dunham, Gerben Van Kleef and Eftychia Stamkou

Artists' Motives for Creating Art and Their Impact on Social Perceptions and Aesthetic Judgements

## Mackenzie Trupp, Giacomo Bignardi, Eva Specker, Ed Vessel and Matthew Pelowski

Who Benefits from Art Viewing and How: The role of Pleasure, Meaningfulness, and Trait Aesthetic Responsiveness in Online Computer-based Art Interventions for Well-being

## Yagmur Ozbay, Suzanne Oosterwijk and Eftychia Stamkou

Art Engagement on Interpersonal Outcomes: Does visual art facilitate social-cognitive abilities?

19:00 Reception

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[full program - WEDNESDAY 24] [full progam - THURSDAY 25]

## Thursday 25th

9:00-10:30 Talk session I - Spaces and Senses

> Christina Krumpholz, Cliodhna Quigley, Karsan Ameen, Leonida Fusani, Christoph Reuter and Helmut Leder Audiovisual interaction and integration of human attractiveness

**David Phillips** 

Does Visual Music Have a Future?

Joe Geigel

Theatre in the Metaverse: Reflections on the Realities of Distributed Performance

Qasim Zaidi, Akihito Maruya, Crystal Guo and Erin Koch

**Oblique Experiences** 

Jan Koenderink and Andrea van Doorn Tafereel

10:30-11:00 Coffee break

Symposium III - Unexpected realities: how uncertainty 11:00-12:30 and imperfection influence perception and interpretation in digital visual studies

Dejan Grba

Poetic Contingencies: Uncertainty and Imperfection in Al Art

Valentine Bernasconi

Imperfect tools - When uncertainties of automated recognition reveal pictorial peculiarities

Nanne van Noord

What is the right task?

**Robin Champenois** 

Happy Accidents of the Artificial Unconscious

Eva Cetinić and Darío Negueruela del Castillo

The Doors of Multimodal Perspectives: Deep Learning

and the Kaleidoscopic Embeddings of Culture

Coffee break & Poster session 12:30-14:15

14:15-16:15 **Artistic Keynotes I** 

Nim Goede

The Emancipatory Potential of Neuroart

Tine Melzer Shifting Realities

Floris Schönfeld

PUK\* - A Neurodiverse History of Artificial Intelligence

16:15-17:00 Coffee break & Poster session

17:00-18:30 Talk session II - Perception and Production

Pierre Lelièvre and Peter Neri

Perceptual Exploration of Latent Space for Pictorial Composition

Rebecca Chamberlain, Margot Dehove, Jan Makuni, Takumi Tanaka, Tomohiro Ishizu, Corinna Kühnapfel, Helmet Leder and Matthew Pelowski

Cross-cultural comparison of emotion recognition in abstract drawings

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+ (speaker list continues on next page)

[full program - THURSDAY 25] [full program - FRIDAY 26]

Claudia Damiano, Pinaki Gayen, Archi Banerjee, Gobinda Banik, Priyadarshi Patnaik, Dirk B. Walther and Johan Wagemans

Emotion depictions in abstract visual art by artists and non-artists

Marius H. Raab, Ludwig Hanisch, Jennifer Tesch and Claus-Christian Carbon

The creative potential of digital constraints

Marina Iosifian and Judith Wolfe

Everyday life vs art: Effects of perceptual context on the mode of object interpretation

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## Friday 26th

9:00-10:30 Talk session III - Establishing Preference

John Maule, Sérgio Nascimento, Martina Guido, Yasmin Richter, Alice Skelton and Anna Franklin The development of visual preference for color composition

Alex Swartz, Martina Guido, Alice Skelton, Jenny Bosten, Anna Franklin and John Maule

The contribution of chromatic and spatial scene statistics to aesthetic perception varies with autistic traits in the general population.

Maria Pombo, Aenne Brielmann and Denis Pelli When judging beauty, order matters only if the stimuli are homogeneous

Lisa-Maria Van Klaveren and Ralf F. A. Cox Moved by movement to move: Reacting to movement in artworks depicting animals, humans, movable or immobile objects, and abstract works of art Eva Specker, Jozsef Arato and Helmut Leder How are real artworks and reproductions judged?

10:30-11:15 Coffee break & Poster session

11:15-12:30 Symposium IV - What eye-tracking can reveal about perception and appreciation of art

Anna Miscena and Raphael Rosenberg

Two Ways of Seeing: Investigating the perception of a painting's surface versus of its subject in light of Wollheim's theory of twofoldness.

Stefanie De Winter, Michelle Jansens and Johan Wagemans

Hiraqla's Chromatic Eclecticism: New Insights from the Tracking Frank Stella Study

Bettina Bläsing and Elizabeth Waterhouse

Effects of experience on spectators' visual attention while watching a video recording of William Forsythe's choreography "Duo"

Christopher Linden and Johan Wagemans

Eye-tracking Pieter Vermeersch: Artworks elicit specific explorative behaviors

12:30-14:00 Lunch & Poster session

14:00-15:45 Artistic Keynotes II

Edwin Zwakman
At Night I See the Future

Coralie Vogelaar Noise versus Signal

15:45-16:15 Coffee break

# 16:15-17:45 Symposium V - Stroboscopic light effects on perceptual and cognitive experiences

#### Michael Rule

Mathematical models of geometric visual hallucinations induced by flickering light

#### Rasa Gulbinaite

What do neurons mean when they say: "That totally resonates with me"

#### Miriam Loertscher

How Cinema Learned to Stop Flickering and Love the Bytes

## Guy Edmonds.

Flicker in Early Cinema: Artifact as Experience

#### Matthijs Munnik

Flicker observatorium

### **Arthur Crucq**

On and off; in search for the 'punctum' in geometric decorative patterns

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## Saturday 27th

## 9:15-11:00 Talk session IV - Style, Convention Conversation

Viktoria Sommermann and Claus-Christian Carbon Icons of Photo journalism: References and connectivity to pictorial archetypes

Claus-Christian Carbon and Alexander Pastukhov The sun from top left: Anaesthetic default from the Renaissance is not available for laypersons

#### Peter Hall

Can Subjective Style be Measured Objectively?

Gregor Hayn-Leichsenring and Katja Thömmes "How I need you to pose" - Understanding the left hemiface bias of artists when painting portraits

Erkin Özmen and Gregor Hayn-Leichsenring Beauty and the Beasts - The Aesthetics of Propaganda Posters

#### Nicole Ruta, Rebekah Dyer, Dhanraj Vishwanath and Brendan Wolfe

Reconnect, reiterate and reveal:a multidisciplinary framework to integrate artistic and scholarly research

11:00-11:30 Break

#### 11:30-12:45 Talk session V - Neuroesthetics

Giacomo Bignardi, H. Lina Schaare, Brad Verhulst, Beate St Pourcain, Simon E. Fisher, Simon B. Eickhoff and Sofie L. Valk

Brain-wide functional alterations of the principal gradients of human brain connectivity relate to aesthetic sensitivity

# Theresa Rahel Demmer, Matthew Pelowski and Nina Fasan

Edmund de Belamy and the Art of Transmitting Emotions -Exploring Perception and Emotion Sharing in AI generated Art using fNIRS

Blanca Thea Maria Spee, Thieme Stap, Julia Crone, Jan-Jurjen Koksma, Marjan Meinders, Sirwan Darweesh, Bastiaan R. Bloem and Matthew Pelowski Unlocking the Muse: Insights Into the If, When, and Why Artistic Creativity Might Emerge, Change, or Be Applied as Art-Based Intervention in People with Parkinson's Disease.

<sup>+ (</sup>speaker list continues on next page)

[ full program - SATURDAY 27 ] [ posters - THURSDAY 25 ]

Guido Orgs, Laura Rai, Haeeun Lee, Matthias Sperling, Federico Calderon and Jamie A. Ward The Neurocognition of Liveness 12:45-13:15 **VSAC** Business meeting 13:15-14:30 Break 14:30-16:00 Nightwatching: the perception of Rembrandt's preeminent painting (part I) A short introduction Arjan de Koomen Staging a portrait Jeroen Stumpel Rembrandt's brushwork and perception Lisa Wiersma Redoing the Night Watch 16:00-16:30 Break 16:30-18:00 Nightwatching (part II) Robert Erdmann Closing in on the Night Watch Joost de Winter Eye-tracking the Night Watch Joris Dik Reproducing Rembrandt's surfaces Discussion

# posters

## Thursday 25th

12:30 - 14:15 Erick Gustavo Chuquichambi, Enric Munar, Martin Skov and Oshin Vartanian

How universal is the effect of visual curvature?

16:15 - 17:00 Gregor Hayn-Leichsenring

CryptoPunks - Aesthetics of non-fungible tokens predict

@ VOXPOP their value

Christina Krumpholz, Cliodhna Quigley, Leonida Fusani and Helmut Leder

Vienna Talking Faces: A stimulus database of voices, pictures, and synchronized videos of speaking humans (ViTaFa)

Hannah Alexa Geller, Ralf Bartho, Katja Thömmes and Christoph Redies

Higher Aesthetic Ratings for Computer-Generated Abstract Images With Statistical Image Properties Similar to Traditional Artworks

Samantha Wutuh and Masashi Nakatani

Haptic Vibrotactile Palette: Enhancing Tactile Material Perception in Digital Experiences

Pik Ki Ho and Gregor Hayn-Leichsenring

Gazing at the realistic - Eye movements during aesthetic appreciation of Baroque, Impressionist, and Expressionist art portraits

[ posters - THURSDAY 25 ] [ posters - THURSDAY 25 ]

#### Claudia Muth, Gesche Westphal-Fitch and Claus-Christian Carbon

Experience and interest shape the perception of order. How affinity for art and de sign changes our look at visual patterns

## Sean Dageforde, Daniela Parra, Robin Jensen, James Brockmole and Gabriel Radvansky

Encounters and Memory for Representational and Abstract Art

#### Akira Asano, Nao Nishimura and Chie Muraki Asano

Harmony and dissonance in continuous color changes

## Surabhi S Nath, Franziska Brändle, Eric Schulz, Peter Dayan and Aenne Brielmann

Spatial complexity and intricacy predict subjective complexity

# Boris Quétard, Christopher Linden, Stefanie De Winter and Johan Wagemans

Uncovering modes of viewing abstract art works in museum contexts by analysing eye movements with hidden Markov models

## **George Mather**

1/f colour statistics of visual art

# Uwe C. Fischer, Stefan A. Ortlieb and Claus-Christian Carbon

United colours of kitsch: How associations modulate aesthetic evaluations

#### Anya Hurlbert

Real Greens in Visual Art: A Case Study

## Anna Fekete, Eva Specker and Helmut Leder

Does beautiful art influence pain and stress experience?

#### Vera M Hesslinger, Lena K Pieper and Claus-Christian Carbon

Greater than the sum of its components: Exploring differences in analytic and synthetic art perception

#### Trent Davis and Wilma Bainbridge

Determinants of a Painting's Memorability Both Online and In-Person - Looking at Features Ranging from Size to Semantics

## Dominik Lengyel and Catherine Toulouse

Architectural Design as a Translator of Scientific Realities

## Yuguang Zhao, Huib de Ridder, Jeroen Stumpel, Maarten Wijntjes

Line versus paint: material perception across different media

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## Friday 26th

10:30 - 11:15	Andrea van Doorn and Jan Koenderink
æ	Teal & Orange
12:30 - 14:00	Aleksandra Igdalova and Rebecca Chamberlain Mindful Viewing in the Gallery: Behavioural and
@ VOXPOP	Physiological Responses to a MBE While Viewing Artworks in an Ecologically-Valid Setting

#### Kirren Chana and Helmut Leder

Reading in the City: everyday encounters with text in an urban setting

[ posters - FRIDAY 26 ] [ posters - FRIDAY 26 ]

## Shino Okuda, Rina Furusawa, Moeka Matsumura, Satoko Taguchi, Sayako Kuroda, Hirotaka Kakizaki and Katsunori Okajima

Preferred Lighting for Appearance of Art Works: A Study of Hummingbirds in John G ould's "Folio Bird Books"

# Adam Peter Frederick Reynolds, Emiliano Ricciardi and Edward Vessel

Dissociating Incentive Salience from Aesthetic Appeal.

# Marc Welter, Axel Bouneau, Fabien Lotte and Tomàs Ward

Towards curating personalized art exhibitions in Virtual Reality with multimodal Electroencephalography-based Brain-Computer-Interfaces

# Gemma Schino, Lisa-Maria Van Klaveren, Héctor G. Gallegos Gonzalez and Ralf F. A. Cox

A multiple case study for measuring the experience of Virtual Reality and physical art installations in the museum

# Philip McAdams, Megan Chambers, Alice Skelton and Anna Franklin

Spatial complexity predicts adults' pleasantness ratings and infants' visual preferences for Van Gogh landscapes

## Itay Goetz, Lara Bernhardt, Lisa Egerer, Vanessa Leonie Kauffman, Friederike Margarata karg, Elena Matschl, Ana Helena Wittchen and Claus-Christian Carbon

Functional functionlessness: People approach immoral content differently within the context of art

Mitchell van Zuijlen, Sylvia Pont and Shin'Ya Nishida Measurement of the visual light field within paintings using real-time rendered probes

# Doris Braun, Matteo Toscani, Paulina Wolf, Alina Gogel and Karl Gegenfurtner

Context effects on the perception of saturation of fruit colours in still lives

#### Teresa E. Müller and Vera M. Hesslinger

Lack or abundance? A cross-cultural study on the perception of emptiness in simple architectural spaces

Stefan A. Ortlieb, Anne C. Kleindienst, Alexander K. Jiranek, Tegist E. Renner and Claus-Christian Carbon Toward a canvas of kitsch: Exploring different types of kitsch based on a combination of cluster and content analyses

## Jenny Mc Namara

Minimalism and the Modular Mind

#### Nao Kokaji and Masashi Nakatani

With a Hint of Sudachi: Food Plating Can Facilitate the Fondness of Food

Lena K Pieper, Vera M Hesslinger and Claus C Carbon Two sides of Fechner's Medal - Investigating differences in the experience of design objects depending on personal narratives vs formal descriptions

Olivia McConnell and Rebecca Chamberlain Expertise and Embodiment of Drawing Movements

## **Maarten Wijntjes**

Perceptual gamuts in art history

## Cehao Yu, Mitchell van Zuijlen, Sylvia Pont, Maarten Wijntjes, Anya Hurlbert

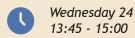
Depicting time: the relationship between image statistics and perceived time of day in Western arts

# symposia

## Symposium I - Realities of Geometries

Organizer: Dr. Martin Skrodzki

Geometry is arguably one of the oldest interests of humankind. Even before the Greeks explored it rigorously in antiquity, people drew geometric configurations of stars and planets. Geometric ideas and concepts are mostly accompanied by visualizations, in the form of sketches, sculptures, or other models. It is these realizations of the geometry that provide the abstract mathematical concept with their own, personal reality. This symposium is devoted to discussing four different kinds of such realizations, which are utilizing different media and which are exploring different geometric phenomena. Their common ground is that they all make abstract entities tangible.





Oudemanhuispoort Lecture hall

#### Speakers

Martin Skrodzki
3D printing the geometry of sound

Teresa Hunyadi and Dave Murray-Rust.

Material Deformations of Penrose Tiling

#### **Rinus Roelofs**

Folding polyhedra inspired by Albrecht Dürer

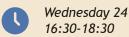
Anna Maria Hartkopf and Johanna Michaels.

A VR journey through the geometry of space

Symposium II - How are the arts related to transformations in our everyday life? How can a visual science of art capture this impact? An overview of the ARTIS project.

Organizers: Matthew Pelowski, Joerg Fingerhut and Eftychia Stamkou

We present a new H2020 project ("Art and Research on Transformations of Individuals and Society") devoted to theory development, empirical assessment, quantification, and application of the arts to a range of issues in contemporary life. Speakers introduce techniques for considering arts in real-life contexts, regarding topics such as how art impacts our movements, our well-being, empathy, and why artists might make, and how we might all share, similar responses to art. We also discuss—as a main theme—the need to conceive of empirical visual aesthetics in transdisciplinary, embedded perspectives, uniting findings to implications for mediating and understanding everyday-life.





Oudemanhuispoort Lecture hall

#### **Speakers**

Joerg Fingerhut, Matthew Pelowski and Eftychia Stamkou.

Art and Transformation

Stephanie Miller, Joerg Fingerhut and Matthew Pelowski. What are the shared ways we might respond to art?

Corinna Kühnapfel, Joerg Fingerhut and Matthew Pelowski.

How do we move in front of art?

Rohan Dunham, Gerben Van Kleef and Eftychia Stamkou.

Artists' Motives for Creating Art and Their Impact

Mackenzie Trupp, Giacomo Bignardi, Eva Specker, Ed Vessel and Matthew Pelowski

Who Benefits from Art Viewing and How.

Yagmur Ozbay, Suzanne Oosterwijk and Eftychia Stamkou. Art Engagement on Interpersonal

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Outcomes

# Symposium III - Unexpected realities: how uncertainty and imperfection influence perception and interpretation in digital visual studies

Organizers: Darío Negueruela del Castillo, Eva Cetinić and Valentine Bernasconi.

Uncertainty and imperfections are important aspects of applying computational methods in research and creative practices within arts and visual studies. The symposium brings together researchers and practitioners in the field of computer vision, computational art history, digital visual studies and AI art to discuss the creative potential of computational imperfections and unexpected results. Instead of focusing on increasing specific metrics or cherry-picking successful data examples, we discuss the fruitful aspects of errors and inaccuracies - how they open new research directions, guide methodological choices, shape poetics and cultural inquiries, as well as foster serendipity and discovery.





Oudemanhuispoort Lecture hall

#### Speakers

#### Dejan Grba

Poetic Contingencies: Uncertaintyand Imperfection in Al Art

#### Valentine Bernasconi

Imperfect tools - When uncertainties of automated recognition reveal pictorial peculiarities

#### Nanne van Noord What is the right task?

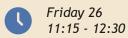
#### Robin Champenois Happy Accidents of the Artificial Unconscious

Eva Cetinić and Darío Negueruela del Castillo.
The Doors of Multimodal Perspectives

# Symposium IV - What eye-tracking can reveal about perception and appreciation of art

Oranizer: Johan Wagemans

In order to see the world around us, we need to move our eyes. The way we move our eyes and when, where and for how long the eyes stand still can inform researchers about the kind of information our visual system needs to fulfil a particular task. This provides the foundation for the use of eye-tracking in research on the perception and appreciation of art. It also comes with separate challenges, however. In this symposium we will discuss what eye-tracking can reveal about perception and appreciation of art, as well as some of the challenges and limitations.





Oudemanhuispoort Lecture hall

#### **Speakers**

Anna Miscena and Raphael Rosenberg. Two Ways of Seeing

Stefanie De Winter, Michelle Jansens and Johan Wagemans. Hiragla's Chromatic Eclecticism

Bettina Bläsing and Elizabeth Waterhouse.

Effects of experience on spectat

Effects of experience on spectators' visual attention...

Christopher Linden and Johan Wagemans.

Eye-tracking Pieter Vermeersch

# Symposium V - Stroboscopic light effects on perceptual and cognitive experiences

Organizer: Rasa Gulbinaite

In this symposium, artists and scholars from different disciplines (art history, film restoration, media psychology, visual composition, mathematics and neuroscience) will share their explorations on the effects of stroboscopic light ("flicker") on cognition and perception. The audience will experience flicker-induced hallucinations and learn the neural origins of art "generated" by their mind through the lens of neuroscience and modeling studies; will hear how flicker was used as artistic means in 1960s avant-garde cinema; will learn how flicker in analog film projections is not a nuisance but rather an integral part of movie-watching experience.





Oudemanhuispoort Lecture Hall

#### **Speakers**

#### Michael Rule

Geometric visual hallucinations induced by flickering light

#### Rasa Gulbinaite

What do neurons mean when they say: "That totally resonates with me"

#### Miriam Loertscher.

How Cinema Learned to Stop Flickering and Love the Bytes

#### Guv Edmonds.

Flicker in Early Cinema: Artifact as Experience

## Matthijs Munnik

Flicker observatorium

#### Arthur Crucq

On and off; in search for the 'punctum' in geometric decorative patterns

## **Nightwatching**

#### Organizer: Arjan de Koomen and Jeroen Stumpel

In this special symposium, we intend to discuss various ways of looking at the Night Watch.

The late art historian Professor Ernst van de Wetering has paid much attention to Rembrandt's approach to painting in relation to ideas about perception and illusion during the 17th century. Professor Jeroen Stumpel will discus this very topic during this symposium.

The Rijksmuseum, in cooperation with NICAS (Netherlands Institute for Conservation, Art and Science) is engaged in state-of-the-art technical research of the Night Watch,

including the production of an incredibly detailed 44.8 gigapixel image of the entire painting, under the guidance of Professor Rob Erdmann.

The art historian and artist Lisa Wiersma has independently undertaken to paint a life size, meticulous copy of the entire composition. Also, very precise attempts have been made to copy some of Rembrandt's complex painted surfaces with sophisticated 3d-printing, under the guidance of Professor Joris Dik.

All these ways of getting closer to the Night Watch, will be discussed here, including recent experiments in eye-tracking (Dr. Joost de Winter). Dr. Arjan de Koomen will present an historical and theoretical introduction to the Night Watch, particularly aimed at a VSAC audience.

This event had been partly organized as a tribute to Ernst van de Wetering, who passed away August 2021, now exactly a year ago. The symposium has been generously co-sponsored by NICAS, for which we are very grateful.







UvA Universiteitstheater

#### **Speakers**

Arjan de Koomen Staging a portrait

**Jeroen Stumpel** *Rembrandt's brushwork and perception* 

**Lisa Wiersma** *Redoing the Night Watch* 

Rob Erdmann Closing in on the Night Watch

Joost de Winter Eye-tracking the Night Watch

Joris Dik Reproducing Rembrandt's surfaces

# artistic keynotes

From its conception the Visual Science of Art Conference has aimed to foster the reciprocal exchange of insights and ideas between visual scientists and artists. While previous editions focused primarily on research using art as its object of study, this year we want to shake things up a bit and place due emphasis on art as research. To accomodate this we have invited four renowned artists to talk about their artistic practice. With these keynote presentations we hope to contribute to the re-evaluation of artistic practice as a legitimate research tool in academia and beyond.

What binds the artistic research of Tine Melzer, Floris Schönfeld, Coralie Vogelaar, and Edwin Zwakman together are their unique affiliations with this year's theme "realities". Accordingly their works traverse both offline and online realities; re-evaluate dominant scientific realities; bring to life fictional and speculative realities; explore a variety of different human or other-than-human perspectives on realities; and carefully examine the mechanisms through which shifts in our interpretations of realities occur. At times, the conventions of a traditional portfolio presentation might even be broken when the boundaries between fact and fiction, theory and practice, representing and performing begin to crumble.

We have also asked each of the artists to pick out a fellow researcher from this year's program whose work resonates with their own either thematically, methodologically, or otherwise. These pairs will get to know one another's work leading up to the conference and will engage in a dialogue following the artistic keynote. We anticipate that these conversations will get the broader discussion flowing and look forward to seeing what fruitful and unexpected new realities will unfold as a result of them!

Nim Goede

## artistic keynotes I



Thursday 25 14:15 - 16:15



Oudemanhuispoort Lecture hall

## Nim Goede: The Emancipatory Potential of Neuroart

Bio: Nim Goede is a PhD-candidate at the Amsterdam School for Cultural Analysis (Promotor: Prof. dr. Patricia Pisters; Supervisor: Dr. Machiel Keestra). He finished a research master in Art Studies (University of Amsterdam) after obtaining his research master's degree in Cognitive Neuropsychology (Vrije Universiteit, Amsterdam), switching from a scientific to a humanities perspective on the brain. Currently he explores how "neuroart" has the potential to emancipate the viewer from dominant and naturalized ways of thinking about and relating to the brain in present-day neuroculture.

Abstract: How can artworks intervene in how we think about or relate to our own brain? In recent decades conceptions like "mind is what the brain does" and "we are our brains" have become naturalized. This so-called "neuroculture" has been criticized by scholars in 4E cognition, feminist studies and science and technology studies for its inherent neurocentrism, neuroreductionism and neuroessentialism. Making use of the aesthetic framework developed by philosopher of 4E cognition Alva Noë, Nim Goede will show how neuroart—artworks that explicitly deal with the brain and with neuroscientific tools, methods or concepts—has the potential to emancipate the viewer from these dominant and engrained ways of thinking about or relating to the brain.

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## Tine Melzer: Shifting Realities

Dialogue partner: Nim Goede

Bio: Tine Melzer is an artist, philosopher of language and author. She studied Fine Arts and Philosophy in Amsterdam and received her PhD in England, published as Taxidermy for Language-Animals (2016 / 2020). She works as a lecturer at European art schools and universities, currently teaching at the Bern University of the Arts HKB. She conducts transdisciplinary research on aspect change in image, text and poetics.

Aspect change means seeing something as something else: it influences our minds, our linguistic practices, and our worldviews. Melzer's current research project 'Atlas of Aspect Change' reflects shifting meanings viewed through the prism of language and intersubjective exchange. It elicits phenomena of perspective and reveals how words and images influence each other. It activates understanding of complex and ambiguous situations and shows how to stimulate and refine interdisciplinary discourse.

Floris Schönfeld:

PUK\* - A Neurodiverse History of Artificial Intelligence
Dialogue partner: Robin Champenois

Bio: Floris Schönfeld (1982) is a visual artist and filmmaker based in Amsterdam. He works mainly with film and performance. The focus of his work in the last years has been the relationship between fiction and belief. In his work he is constantly trying to find the line between defining his context and being defined by it. This has led him explore and interact with many different worlds ranging from Star Trek fan communities, Hatian Vodou gatherings to the personal world of an intergalactic movie star. He holds a BA in Time Based Arts from the Gerrit Rietveld Academie in Amsterdam and an MFA studio practice degree from the California College of Art in San Francisco. He was a graduate fellow at the Headlands Center for the Arts in the San Francisco and has done residencies at Rupert in Vilnius and most recently at the Rijksakademie voor Beeldende Kunsten in Amsterdam.

Abstract: In this lecture I present an alternative history of AI based on neurodiversity rather than rationality. This history begins with a story about two chatbot computer programs that were developed in the 1960's; ELIZA and PARRY. ELIZA was developed as a psychologist chatbot that could mimic the role of a classic therapist for patients. PARRY was originally conceived as a paranoid schizophrenic chatbot patient for the psychologist ELIZA. In the lecture, I propose a new speculative history of AI development based on the psychopathology of PARRY, rather than the rationality of ELIZA.

The lecture is an extension of my PUK\* project in which I investigate the peripheral area between neuroscience, psychiatry and artificial intelligence. In the project I work with a group of neurodiverse experts to develop an alternative form of artificial intelligence called PUK\*. The lecture is an origin story for PUK\* that chronicles the emergence of this new form of intelligence. With this myth as a starting point, the story takes several points from the history of the development of psychiatry and artificial intelligence in the last 60 years and merges them into a new surprising story.

artistic keynotes II



Friday 26 14:00 - 15:45



Oudemanhuispoort Lecture hall

Edwin Zwakman: At Night I See the Future Dialogue partner: to be announced

Bio: Visual artist Edwin Zwakman employs staged photography, miniature models, augmented reality installations and architectural objects in public space to challenge our perception of reality. Exploring what lies beneath the rational grids of man-made infrastructure, architecture and urban planning, which he perceives as indicative of the mentality of its makers.

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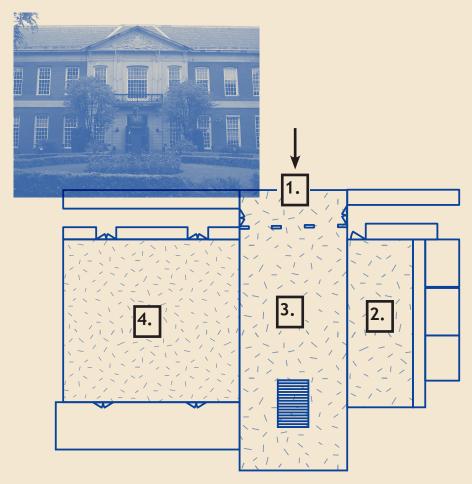
Abstract: At Night I See the Future is a long term research project in which Zwakman speculates about a post-apocalyptic Netherlands. A sci-fi scenario in which half the country is a lagoon. With all major cities and vital areas flooded, a radically new approach to housing, agriculture, industry and infrastructure had to be developed with a speed and urgency that left no time and resources for ideal solutions. But his scenario is neither utopian nor dystopian. Instead it focuses on visualizing the banality of everyday life in which even the biggest catastrophes play out. "What do I see when I look from my window?"

# Coralie Vogelaar: Noise versus Signal Dialogue partner: Theresa Rahel Demmer

Bio: Coralie Vogelaar is an interdisciplinary artist who combines social science such as behavioural studies with the artistic imagination. Vogelaar investigates the relationship between human and machine by applying machine logic to the human body. Her work manifests itself in the form of performances and video and multimedia installations, for which she works together with experts from various disciplines including data analysis, choreography, and sound design.

Places where her work has been shown include HeK Basel, ZKM - Karlsruhe, Veem House for Performance, Fotomuseum Winterthur, Kunstverein Kassel, Photographers' Gallery London, Stedelijk Museum Amsterdam, Science gallery Dublin, Noorderlicht Festival, Museum für Gestaltung Zürich, MU Artspace, FOMU - Antwerp and Kunstfort bij Vijfhuizen. Her performance Emotion Recognition from an Algorithmic Point of View was featured in The Most Iconic Works of 40 years V2 - Lab for the Unstable Media. in 2021 she was nominated for the Prix de Rome.

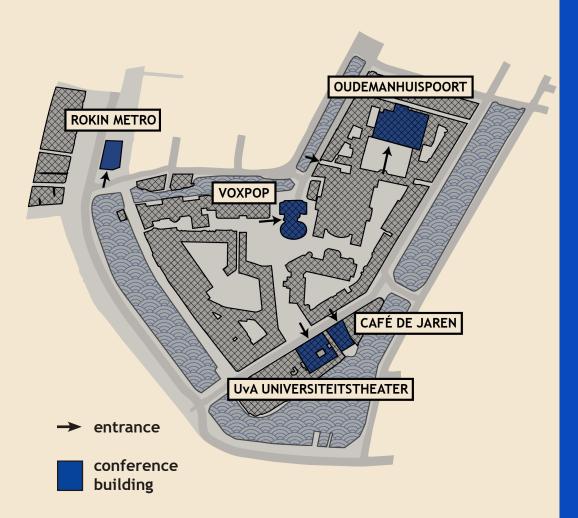
# oudemanhuispoort map



- 1. entrance
- 2. registration
- 3. lunch
- 4. lecture hall

# area map





Booklet design, layout & graphics: David Tiemstra

Press: De Kijm & Zonen

## VSAC 2022 organizing committee

Maarten Wijntjes
Nim Goede
Arjan de Koomen
Jeroen Stumpel
Margit Lukacs
Catelijne van Middelkoop
Yuguang Zhao
Cehao Yu
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