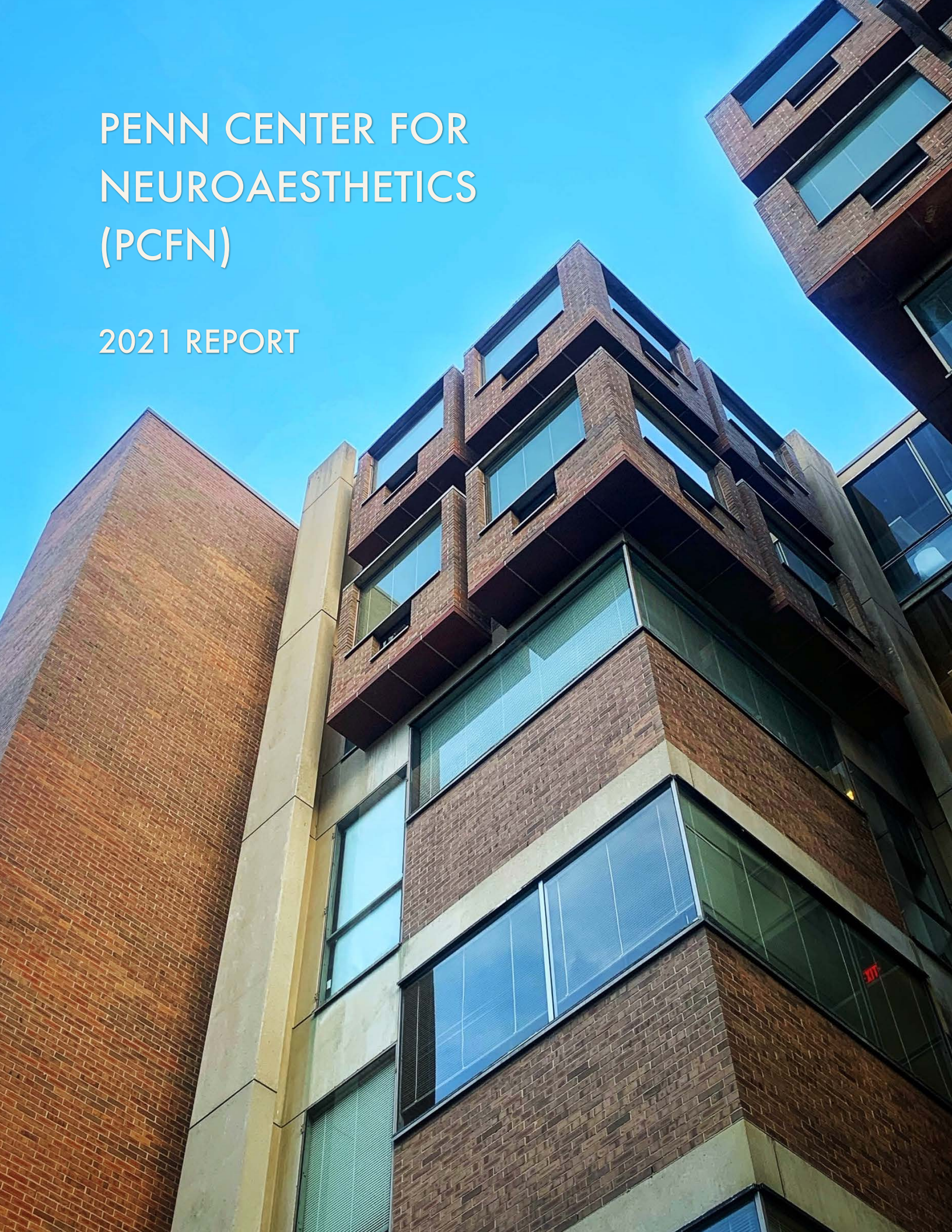


# PENN CENTER FOR NEUROAESTHETICS (PCFN)

2021 REPORT







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## MESSAGE FROM THE DIRECTOR



Track and field played an important role in my education. One message from training always stuck with me. Times when we are exhausted and our limbs no longer feel under our control are

exactly the times to focus on form. Form carries us through.

Most of us are nothing if not tired now. Just when we were ready to wake up from the pandemic nightmare, we were pulled back under by Omicron. Even for those of us lucky enough not to be burdened by immediate threats to our health, the constant choices of how to live--to meet in person or not, to resume on-site research with participants or not, to travel for conferences and talks or not--are exhausting. Here, when so much of the world is not under our control, focus on form can carry us through. Form means being clear about our movement: what we do and how we do it.

To help us focus, after a year's delay, we met with our Advisory Board—first in May in New York City and then in October in Philadelphia. Sheri Parks joined our board of Pauline Brown, Susie Ellis, Katherine Sachs, Rafael Viñoly, and Daniel Weiss. Each board member is a world-renowned expert in aesthetics and its applications to business, wellness, art, architecture, and social justice. In those meetings and subsequent conversations it became clear that the focus of our mission is to address three core questions.

- What is beauty?
- How is the experience of beauty modifiable?
- Why does beauty matter?

In pursuing these questions, we had a productive year. We reported discoveries about how social characteristics influence our behavioral and brain response to the way people look, how we prefer nature in the built environment and order in the natural environment, how people with Parkinson's disease respond to movement in art, and what experts

and naïve people find beautiful in mathematics. Our *Psychology Today* blog Brain, Behavior, and Beauty, where we communicate our research findings to the general public, was viewed more than 34,000 times in the last year.

We also met an important milestone. The book *Brain, Beauty, and Art: Essays Bringing Neuroaesthetics in Focus* that Eileen Cardillo and I edited was published by Oxford University Press. Essays in this unique book were written by scientists working actively in the field. Each essay is anchored by a peer-reviewed paper and contributors answered three questions. What motivated the original paper? What were their key findings? How do those findings apply to neuroaesthetics today and in the near future? The book is a concrete expression of one of our aims—to advance and promote this field, which is still finding its stride.

In continuing local outreach, we were visited by leadership from the Center for Art in Wood, who described the mission and goals of their distinct museum. We began to collect pilot data at the Barnes Foundation, where we will conduct field research on art engagement.

The vagaries of the year ended on an upswing. In December I took my first international trip in two years and gave talks at Sapienza University in Rome. Working with the University of Pennsylvania Museum of Archeology and Anthropology, we hope to set up collaborations in Italy, where neuroaesthetics research is simmering.

We received an award from the Henry Jackson Foundation to partner with the National Intrepid Center of Excellence at Walter Reed Military Medical Center. This award will fund us to conduct the first of its kind research on the use of art therapy to help veterans with post-traumatic stress to regulate their emotions. In December, we also received word that our Templeton Foundation grant investigating how art can promote understanding will be funded.

Federal funding for neuroaesthetics remains scarce. In addition to private foundations, we depend on philanthropy and are deeply grateful for generous donations we received in the last year. We remain committed to the proposition that aesthetics expresses our deepest values and has a profound impact on human relations, understanding, health, and wellbeing.

A handwritten signature in black ink, appearing to read "Amy Watter". The signature is fluid and cursive, with a large, stylized 'A' and 'W'.





*Photo by Anjan Chatterjee*

ENGAGE  
WITH THE  
COMMUNITY

EDUCATE  
THE NEXT  
GENERATION  
OF SCIENTISTS

ADVANCE  
RESEARCH IN  
BASIC AND  
APPLIED  
NEURO-  
AESTHETICS



DISSEMINATE  
OUR SCIENCE,  
WITHIN AND  
BEYOND  
ACADEMIA

FOSTER  
COLLABORATION  
WITH ALLIED  
DISCIPLINES AND  
CREATIVE  
EXPERTS

## ABOUT THE **PENN** **CENTER FOR** **NEUROAESTHETICS** **(PCfN)**

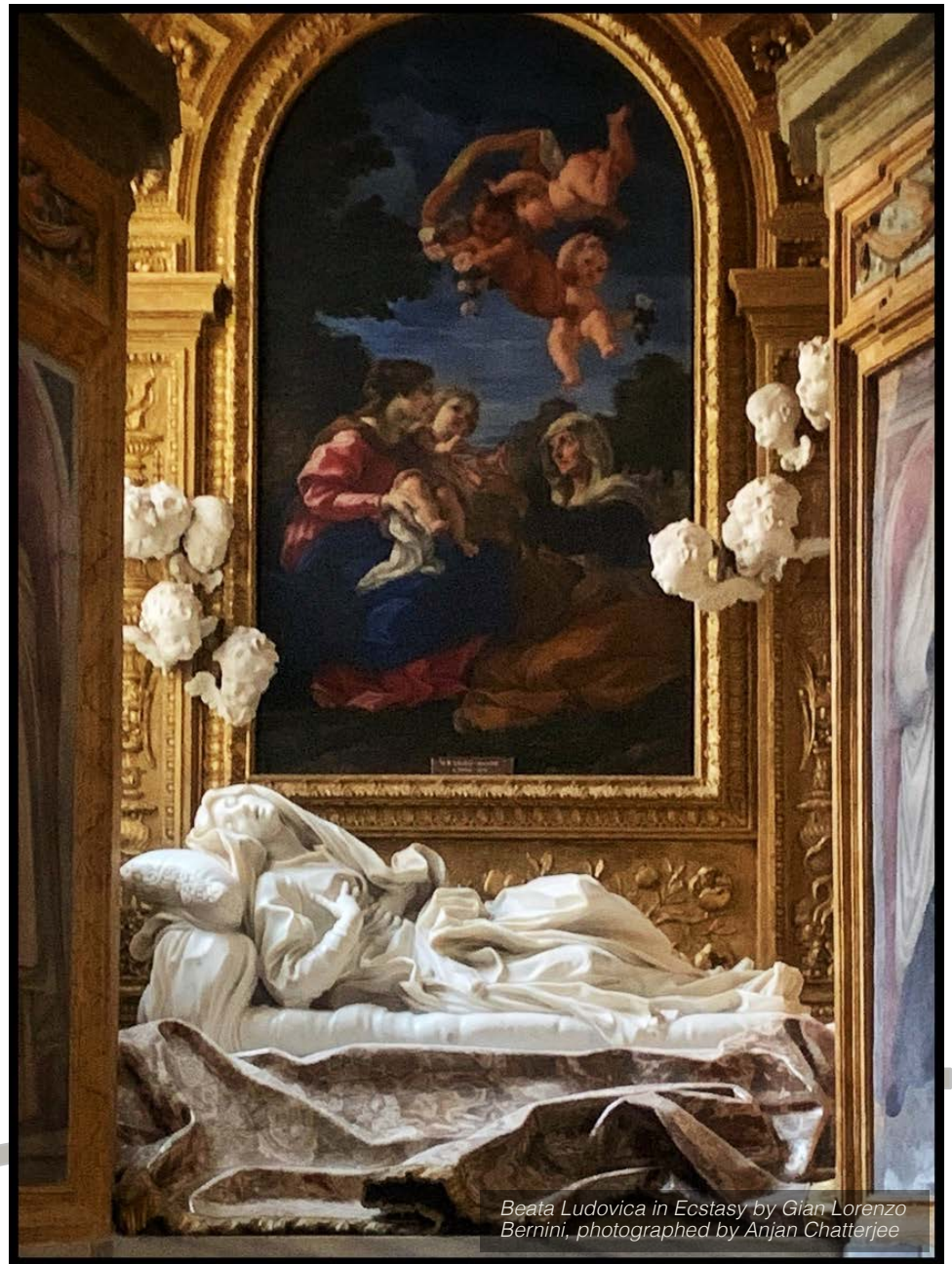
The PCfN launched in July 2018 with support from the University of Pennsylvania's Provost Office, The Perelman School of Medicine Dean's office, The Department of Neurology, The Department of Radiology, and The Center for Human Appearance. Ours is the first center in the US—and perhaps the world—dedicated to advancing cognitive neuroscience research in aesthetics.



# FOUNDATIONAL RESEARCH

The PCfN is motivated by a belief in the fundamental value of aesthetic experiences –they nourish the human spirit, inspire creativity and innovation, stimulate thought, bring people together, catalyze personal and social transformation, express values and meaning, and reveal the human condition.

The brain carves our visual world into people, places, and things. Using this neural organization as a framework, we investigate aesthetic experiences of these domains by asking the following questions:



WHAT IS  
BEAUTY?

HOW IS THE  
EXPERIENCE OF  
BEAUTY  
MODIFIABLE?

WHY DOES  
BEAUTY  
MATTER?





# ADVISORY BOARD

Each member of the PCfN Advisory Board is a world-renowned expert in aesthetics and its applications. Their counsel on how best to achieve our mission is invaluable as our center continues to grow. For more information about each of our board members, please visit [our website](#).



## **Pauline Brown**

*Former Chairman of North America for LVMH Moët Hennessy Louis Vuitton.*

Brown brings extensive industry experience related to consumer behavior, beauty,

fashion, and luxury goods, and is the author of the groundbreaking business book *Aesthetic Intelligence* (HarperCollins, 2019).



## **Katherine Sachs**

*Philanthropist and Art Collector.*

A former curator at the Philadelphia Museum of Art, over the years, Sachs and her late husband Keith have generously supported the arts at

both the PMA and University of Pennsylvania, including the establishment of The Sachs Program for Arts Innovation at Penn.



## **Susie Ellis**

*Chair & CEO Global Wellness Institute and Co-Founder, Chair, & CEO Global Wellness Summit.*

A leading authority on the global wellness economy, Ellis is widely

regarded as an industry trailblazer and known worldwide for her impact on global wellness trends and research.



## **Rafael Viñoly**

*Architect.*

Born in Uruguay, Viñoly settled in New York in 1979 from where he oversees an award-winning practice with projects spanning six continents. His local

projects include the Kimmel Center for Performing Arts and the Perelman Center for Advanced Medicine at the Hospital of the University of Pennsylvania.

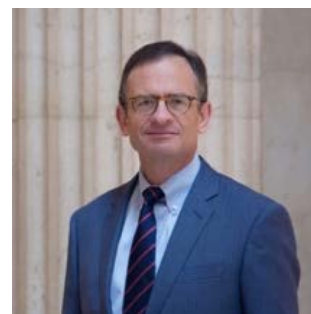


## **Sheri Parks**

*Vice President for Strategic Initiatives at the Maryland Institute College of Art (MICA).*

Park's research specializes in public aesthetics, particularly the ways people find and

create meaning and beauty in their everyday lives, with specific emphasis on race, gender, social class, sexuality, popular culture, and media.



## **Dan Weiss**

*President and CEO, Metropolitan Museum of Art.*

A scholar of art history and seasoned leader of academic departments and institutions, Weiss

has written or edited six books and many articles on the art of the Middle Ages and Crusades, higher education, museums, and American culture.

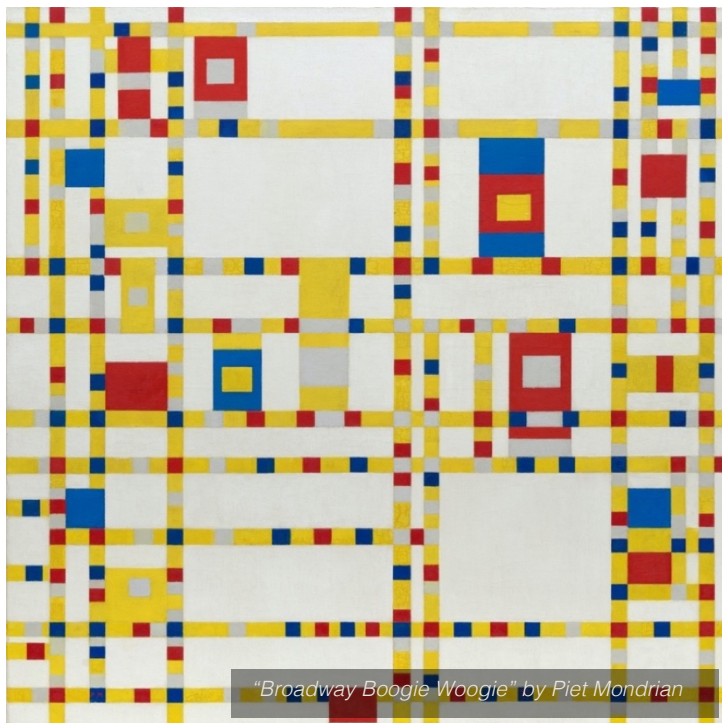




# IMPACTFUL RESULTS

Experimental research, by its nature, advances knowledge incrementally. We made several important claims about the aesthetics of people, places, and things (art) over the past year.

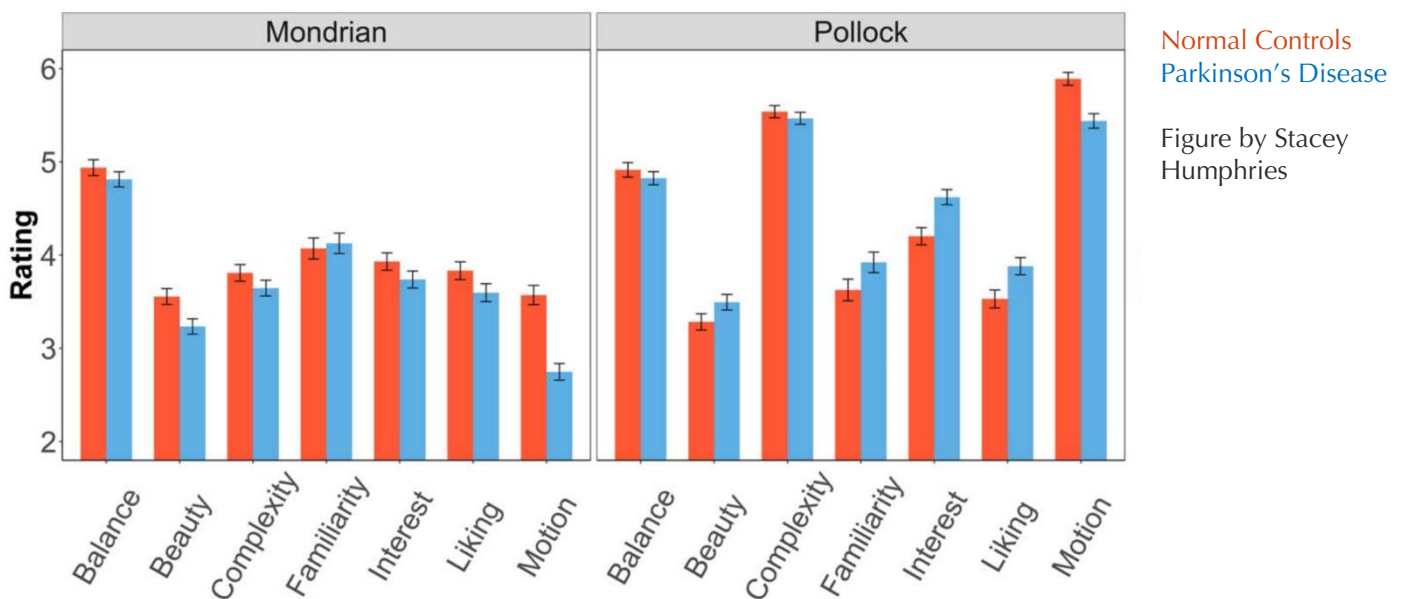
## 1. PARKINSON'S DISEASE CHANGES HOW PATIENTS VIEW ART



Motor areas of the brain are commonly activated when people view static works of art, especially when those artworks are particularly “dynamic.”

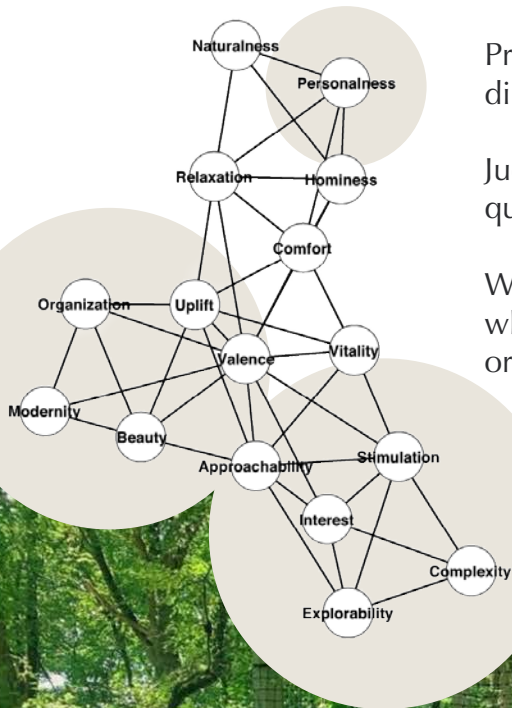
Changes in the networks of the brain that control movement influence the way art is perceived and valued.

Parkinson's disease affects art appreciation specifically when movement contributes to its appreciation.





## 2. PREFERENCES FOR NATURAL VS. BUILT ENVIRONMENTS



Preferences for interior spaces are rooted in three psychological dimensions – **coherence**, **fascination**, and **hominess**.

Judgements of buildings and natural spaces indicate these three qualities also mediate aesthetic responses to exterior spaces.

What counts as homey environment differs depending on whether surroundings are natural or man-made: we prefer more ordered natural environments and more natural built ones.





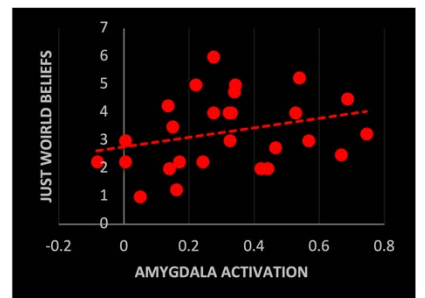
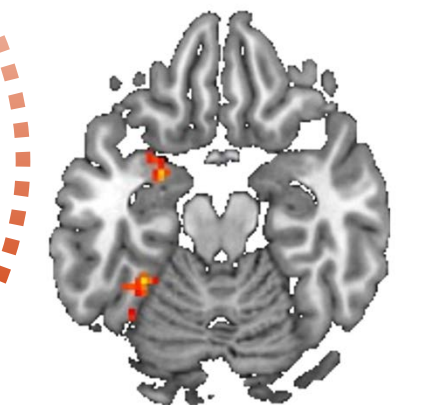
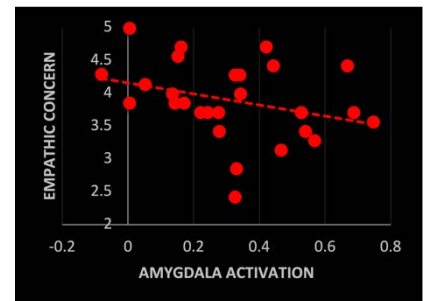
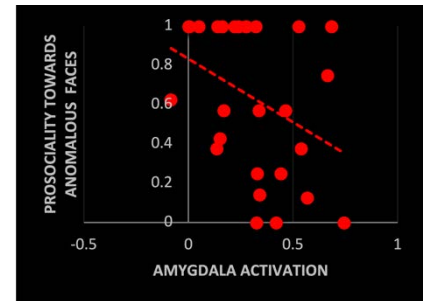
### 3. INTERROGATING BIASES AGAINST FACIAL ANOMALIES

The “anomalous-is-bad” bias complements the “beauty-is-good” stereotype, which describes a tendency to view attractive people more favorably.

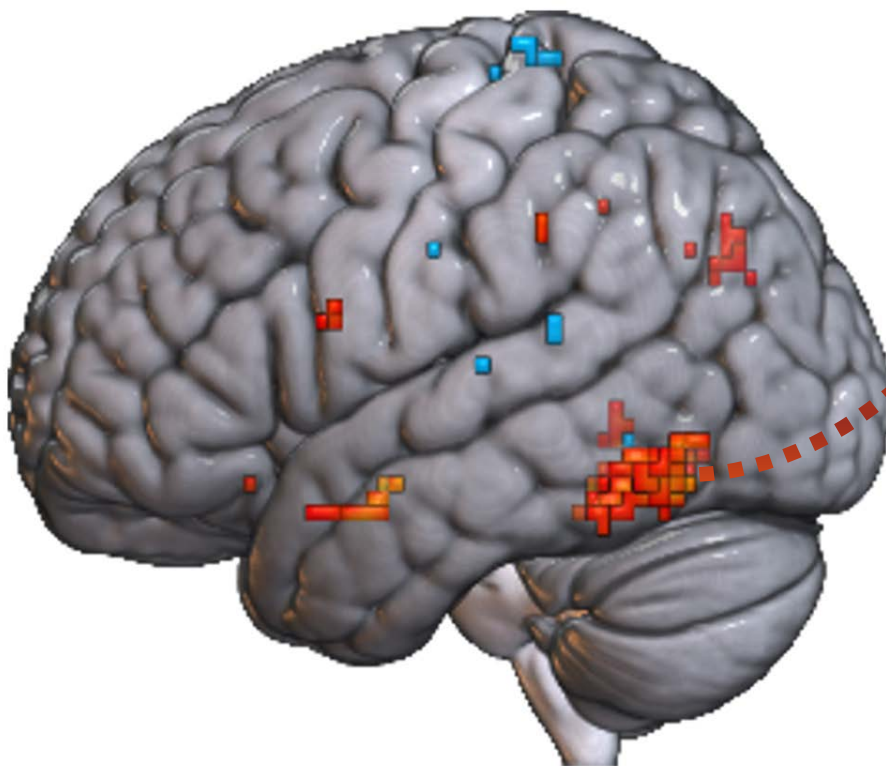
People have biases against those with atypical facial features, like scars or birth marks.

People often perceive anomalous faces as less trustworthy, less content, and more anxious. Brain scans link these biases to neuroanatomic areas linking emotion and visual processing with feelings of disgust.

Understanding these biases can help develop strategies to mitigate them.



Figures by Cliff Workman





## 4. SEMANTIC SPACE OF AESTHETIC COGNITIVISM

Aesthetic cognitivism (AC) is the philosophical position that engaging with art can stimulate knowledge and promote understanding. How would we test such a hypothesis?

We convened a multidisciplinary panel of experts to generate terms relevant to AC.

We analyzed the way the general population associates these words with art engagement.

By mapping the semantic space of AC, we generated a taxonomy useful and relevant for future experimental studies.



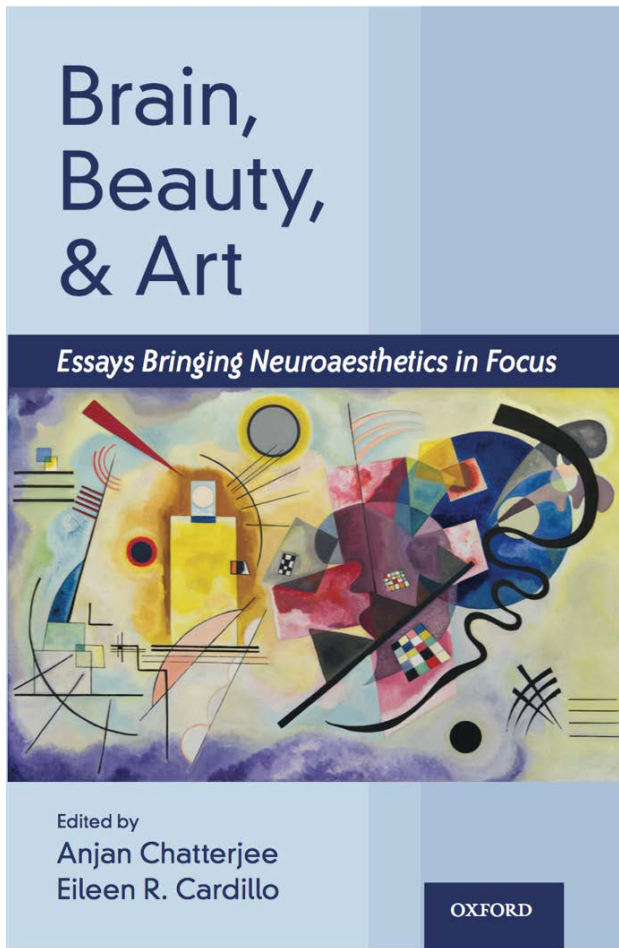
69 IMPACT WORDS

11 FUNDAMENTAL CATEGORIES





# BOOK RELEASE



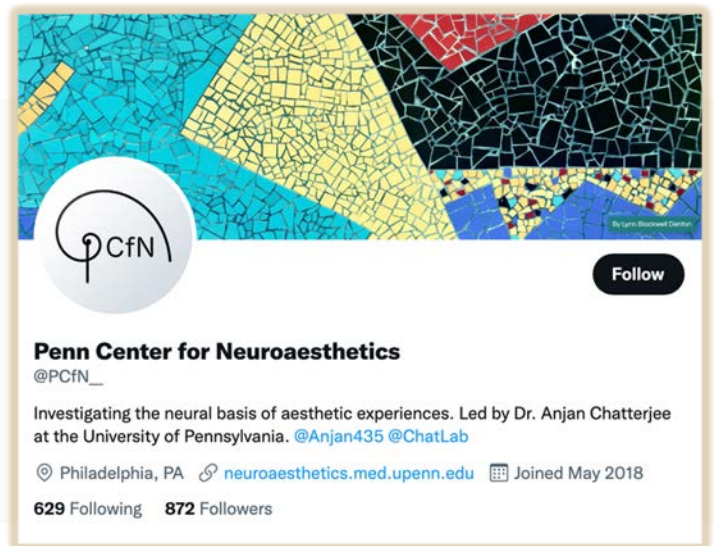
We're pleased to announce the publication of ***Brain, Beauty, & Art: Essays Bringing Neuroaesthetics in Focus***, edited by PCfN Director Anjan Chatterjee, MD and Associate Director Eileen Cardillo, DPhil.

In this collection, leading scholars in the field reflect on the promise of neuroaesthetics to enrich our understanding of this universal yet diverse facet of human experience. The volume consists of chapters from foundational researchers whose empirical work launched the field. Each chapter is anchored to an original, peer-reviewed paper from the short history of this burgeoning subdiscipline of cognitive neuroscience. Contributors addressed three questions: (1) What motivated the original paper? (2) What were the main findings or theoretical claims? and (3) How do those findings or claims fit with the current state and near future of neuroaesthetics? Together, these chapters establish the territory and current boundaries of neuroaesthetics and identify its most promising future directions. Topics include models of neuroaesthetics, and discussions of beauty, art, dance, music, literature, and architecture.

The novel format of the book enables contributors to communicate core knowledge and emerging questions in a clear and engaging way that Chatterjee and Cardillo hope will capture the curiosity of experts, science aficionados, and neuroaesthetics newcomers alike.

Follow us on Twitter to stay up to date with new research by the PCfN, exciting developments in neuroaesthetics, and be the first to hear news for an upcoming international conference.

<https://twitter.com/PCfN>





# SELECTED PCFN MEMBER HIGHLIGHTS



## **Sheri Parks**

*Board Member*

Sheri Parks, Ph.D., who joined our board this year, is Vice President for Strategic Initiatives at the Maryland Institute College of Art (MICA), whose projects include community narratives and public art. She is also an emeritus professor of American Studies at the University of Maryland, where she was Associate Dean of Research, Interdisciplinary Projects and Programming in the College of Arts and Humanities and Founding Director of the Center for Synergy, with projects with the Brain and Behavior Initiative and across the campus. Her signature public projects include Baltimore Stories: Narrative in the Life of an American City, named by funder National Endowment for the Humanities to be a national model of deep community conversations; and two editions of *Fierce Angels* (Random House; Chicago), in which she traces

the Sacred Dark Feminine and the Strong Black Woman archetypes from the first creation stories through American life and culture, named an *Essence Magazine* Editor's Pick. Dr. Parks leads the annual Baltimore Thinkathon and has been an award-winning fixture on Baltimore public radio for two decades. Dr. Parks joined our Advisory Board in Fall 2021.



## **Lynn Meskell**

*Affiliated faculty*

Lynn Meskell is PIK Professor of Anthropology in the School of Arts and Sciences and Professor of Historic Preservation in the Weitzman School of Design. At the Penn Museum she is curator in the Middle East and Asia sections. She is currently AD White Professor-at-Large at Cornell University (2019-2025) and holds Honorary Professorships at Oxford University, University of Liverpool (UK), and the University of the Witwatersrand (South Africa). Previously Lynn was the Shirley and Leonard Ely Professor of Humanities and Sciences in the Department of Anthropology at Stanford University. Over the last decade Lynn has conducted an institutional ethnography of UNESCO World Heritage, tracing the politics of governance and sovereignty and the subsequent implications for multilateral diplomacy,

international conservation, and heritage rights. Her award-winning book *A Future in Ruins: UNESCO, World Heritage, and the Dream of Peace* reveals UNESCO's early forays into a one-world archaeology and its later commitments to global heritage. Building on this research, she is currently examining the entwined histories of colonialism, internationalism, espionage and archaeology in the Middle East coupled with fieldwork exploring how diverse actors and agencies can balance research and preservation efforts with the needs of living communities surrounding heritage sites.





### **Stacey Humphries**

*Lecturer*

Stacey received her PhD in psychology in 2016 at the University of Manchester. Her research focuses on understanding the roles of perceptual and semantic information in aesthetic experiences. Her postdoctoral work at the PCfN included neuropsychological studies of visual art perception and metaphor comprehension, and the role of embodiment in language and art. In April 2021, she left the PCfN to become a Lecturer in the Psychology Department at Goldsmiths, England.



### **Kohinoor Monish Darda**

*Postdoctoral Researcher*

Kohinoor received her Ph.D. in psychology in 2019 from Bangor University, where she explored the neural mechanisms of, and individual differences in, how we perceive and imitate others' actions and movements. She joins the PCfN after being a postdoctoral scholar at the Institute of Neuroscience & Psychology, University of Glasgow, UK and Department of Cognitive Science, Macquarie University, Sydney. Kohinoor is broadly interested in the neural and cognitive mechanisms underlying aesthetic experiences and social interactions. At the PCfN, she looks forward to using behavioral and neuroimaging measures to explore the potential of art to promote knowledge and understanding, as well as in therapeutic settings, and investigate the

cultural and contextual factors that modulate our cognitive and affective responses to art. Outside of the lab, Kohinoor enjoys social interactions with fictional characters in novels, and underwater aesthetic experiences when scuba diving. As a trained Indian classical dancer, she likes to integrate her background in the arts with her interest in neuroscience in both her research and choreographic endeavors.



### **Bella Bobrow**

*Lab Manager*

Bella received her B.S. in Neuroscience from UC Santa Cruz, where she also studied art and architectural theory. At the PCfN, Bella supports daily operations, event planning, communications, and the administration of research studies. Outside of the lab, she does film photography, experiments with fashion design, and fosters shelter cats.

Publicizing neuroaesthetics findings is an important strand of our outreach efforts. We have been featured in popular media broadcasts and in print interviews. We also leverage our blog posts to directly inform the public about our ideas and research.

## VIDEO: TV, FILM, AND WEB



### [You, Myself, and Art \[Trailer\]](#)

Trailer by EGX Film Factory, 2021

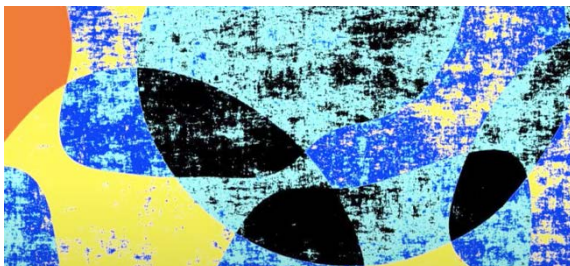
Anjan Chatterjee is featured in an upcoming docuseries about art and artmaking.



### [Coming to Terms with Art.](#)

Templeton Religion Trust, 2021

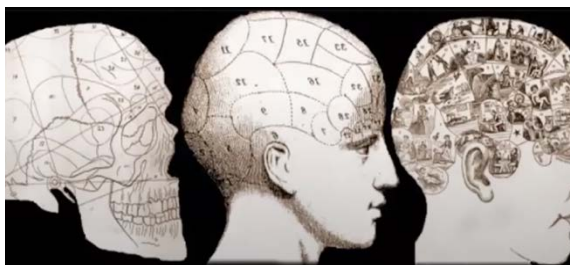
To speak about art, we need to establish a common vocabulary. The PCfN's research establishes a taxonomy of terms to further study aesthetic cognitivism.



### [Analogy across modality: Analogical mapping across sensory and information modalities and evidence for a general analogical ability reasoning factor.](#)

Analogy List Online Seminar at Georgetown University, 2021

Adam Weinberger presents new research on analogical ability with implications for learning and creativity.



### [The Neuroaesthetics of Architectural Spaces.](#)

PAADtalks! at RWTH Aachen University, 2021

How does the brain process built and natural environments? Anjan Chatterjee speaks to faculty and students about the developing study of architecture in a neuroscientific framework.





[CrossTalk with Anjan Chatterjee and Lucas Kelly.](#)  
The Society for the Neuroscience of Creativity, 2021

Dr. Chatterjee and Lucas Kelly discuss how the PCfN's artist residency came about and the benefits of true collaboration between scientists and artists. Conversation moderated by Adam Weinberger



[Anjan Chatterjee: Neurological Disorder and Art](#)  
Closer to Truth via Aeon, 2021

Artists can flourish after brain damage. What does this say about neurology and aesthetics?



[YouTube Channel: Penn Center for Neuroaesthetics](#)

Continually updated with new content related to work at the PCfN—including a [Neuroaesthetics Playlist](#)

## IN PRINT

[What is Alien Hand Syndrome?](#)  
Brain & Life, February 2021

[The Scarred Villain: Study Explores Neurocognitive Basis of Bias Against People Who Look Different.](#)  
Penn Medicine News, February 2021  
Additional coverage: [Penn Today](#), [ScienceDaily](#)

[What Parkinson's Disease Patients Reveal About How Art is Experienced and Valued.](#)  
Penn Medicine News, April 2021  
Reprints: [Neuroscience News](#)

[Parkinson's May Impair Perception of Movement in Abstract Art.](#)  
Parkinson's News Today, April 2021

[What Parkinson's Disease Patients Reveal About Experiencing Art.](#)  
Penn Today, May 2021

[The Best Books on the Science of Art and Aesthetics.](#)  
Shepherd, September 2021

[Opinion: Trump True Believers Have Their Reasons.](#)  
The New York Times, October 2021

[Neuroaesthetics: Mental Health Facilities of the Future.](#)  
NEO.LIFE, October 2021

[The Science Behind Those Comfy, Cozy Holiday Feelings](#)  
FiveThirtyEight, December 2021



## BLOG SERIES

# PSYCHOLOGY TODAY: BRAIN, BEHAVIOR, AND BEAUTY



[What Does Aesthetic Cognitivism Really Mean, Anyway?](#)  
*January 2021*

Psychologist Ellen Winner situates the debate on aesthetic

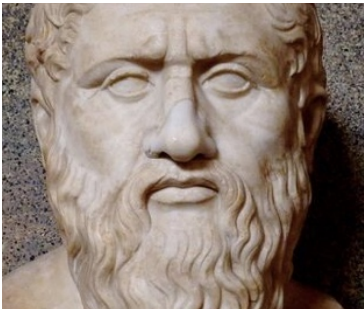
cognitivism in our brain's perceptual framework.



[Art and the Apophatic Horizon.](#)  
*January 2021*

Art historian Matthew Milliner contributes historical knowledge on aesthetic experiences, and

possible limitations of research.



[The Relation of Art and Cognition.](#)  
*January 2021*

Philosopher Noël Carroll offers perspectives on aesthetic cognitivism based on Plato and

Aristotle's teachings. Would we be better off discussing this as a matter of "belief" than "knowledge?"



[Why Are People Biased Against Anomalous Facial Features?](#)  
*March 2021*

New research finds that people often perceive anomalous faces as less

trustworthy, less content, and more anxious. Specific brain regions may be implicated in these perceptions



[Epiphany and Empiricism.](#)  
*January 2021*

Theologian Natalie Carnes reflects on her field's similarities and differences with neuroscience with

respect to aesthetic cognitivism.



[Brains on Metaphor.](#)  
*August 2021*

How does the brain implement our understanding of metaphors? The left hemisphere may play a bigger role than once thought.



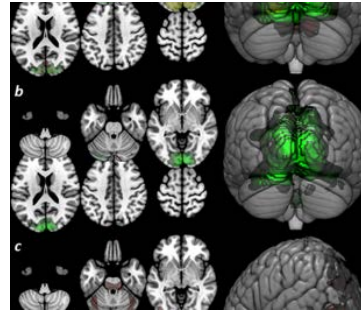


### Does the Motor System Care About Art?

May 2021

Changes in the networks of the brain that control movement can

influence the way art is valued or understood.



### Psychological Responses to Architectural Interiors.

September 2021

Preference for interior architectural spaces is influenced by several psychological

dimensions, which differ in different populations.

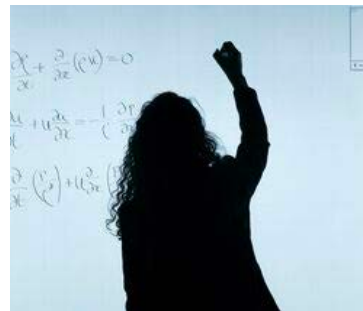


### The Diversity Problem in Face Research.

August 2021

A novel tool connects researchers to face image databases, including a new

database of people with facial anomalies.



### Can Equations Be Beautiful?

September 2021

Mathematics experts and laypeople both find beauty in math equations but judge their beauty by different criteria.

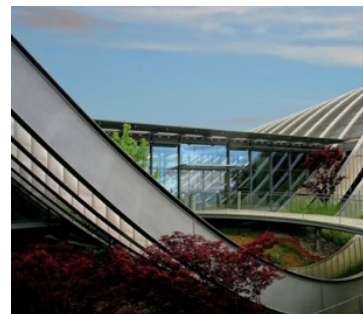


### How Do People Think About Beauty and Wellness?

August 2021

People have a shared understanding of the terms beauty and wellness,

despite some differences across generations and gender in the structure of this understanding. Semantic network analysis offers a window into the conceptual space occupied by these terms.



### What We Like About Built and Natural Spaces

October 2021

People prefer natural objects with a touch of human ordering, and human-made objects

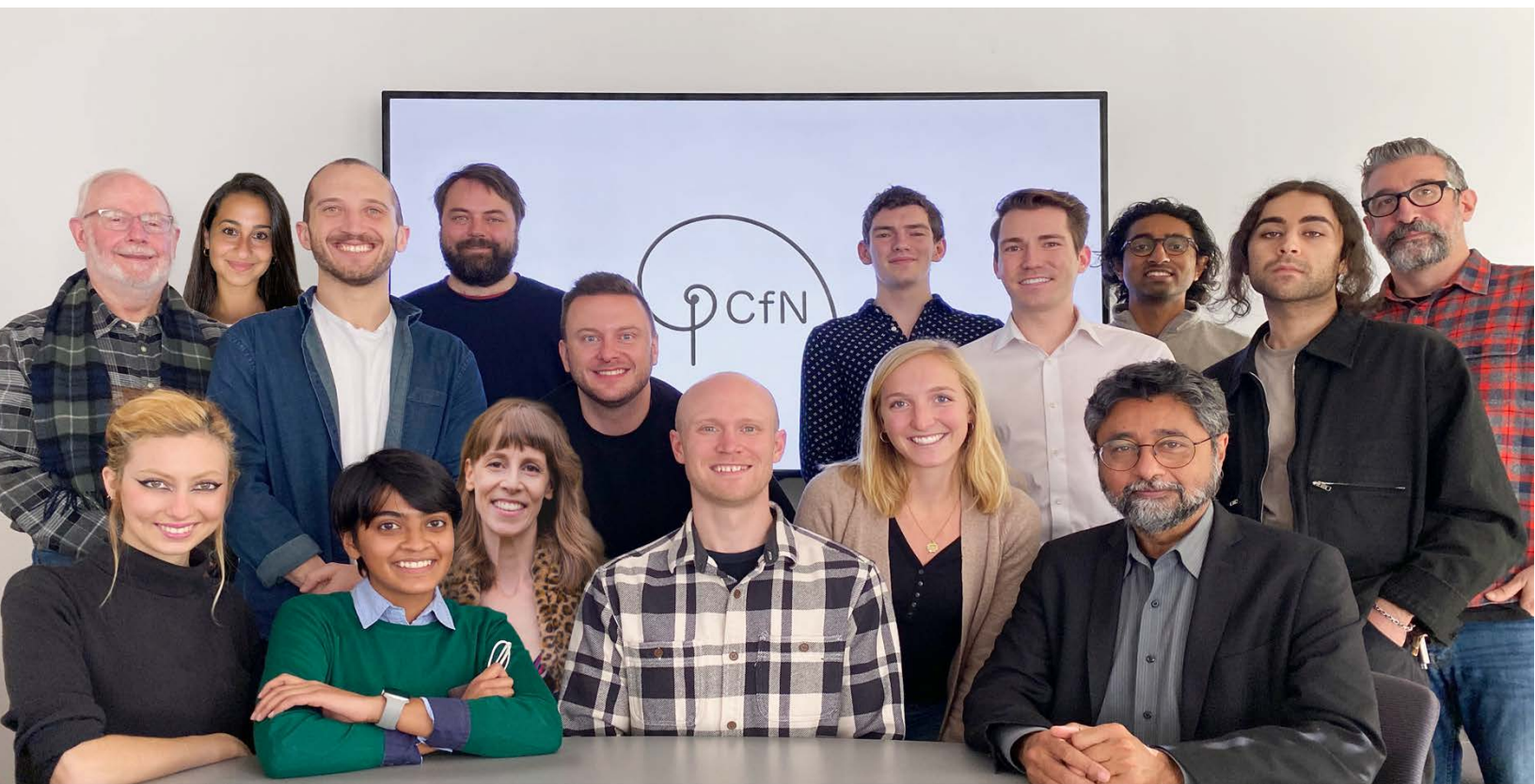
that appear more natural.



### Elegance Versus Beauty in Older Faces

November 2021

How does perceived beauty change with age? It depends on the evaluator and the words used to describe attractiveness.



## PCFN MEMBERS

### Core Faculty and Staff

Anjan Chatterjee, Director  
Eileen Cardillo, Associate Director  
Bella Bobrow, Lab Manager

### Postdoctoral Researchers

Alex Christensen  
Kohinoor Darda  
Nate Klooster  
Adam Weinberger  
Cliff Workman

### Art Historian

Jonathan Fineberg

### Artist-in-Residence

Lucas Kelly

### Student Researchers

Mayank Patel, Medical Student  
Dillan Villavisanis, Medical Student  
Ellie Garside, Graduate Student  
Noha El Toukhy, Undergraduate Student  
Farhan Jivraj, Undergraduate Student  
Will Sturgeon, Undergraduate Student





# COLLABORATORS

## AFFILIATED FACULTY AT PENN

Coren Apicella, School of Arts & Sciences  
Danielle Bassett, School of Engineering  
Liz Brannon, School of Arts & Sciences  
John A. Detre, Perelman School of Medicine  
Martha J. Farah, School of Arts & Sciences  
Gary Hatfield, School of Arts & Sciences  
Elizabeth Johnson, Wharton School of Business  
Joe Kable, School of Arts & Sciences  
Michael Leja, School of Arts & Sciences  
Ken Lum, Weitzman School of Design  
Allyson Mackey, School of Arts & Sciences  
Lynn Meskell, School of Arts & Sciences

Matt Neff, Weitzman School of Design  
James O. Pawelski, School of Arts & Sciences  
Rebecca L. Pearl, Perelman School of Medicine  
Michael Platt, Wharton School of Business  
Megan S. Ryerson, Weitzman School of Design  
Frederick Steiner, Weitzman School of Design  
Nina Strohminger, Wharton School of Business  
Jesse Taylor, Children's Hospital of Philadelphia  
Orkan Telhan, Weitzman School of Design  
Ian Verstegen, School of Arts & Sciences  
Linton A. Whitaker, Perelman School of Medicine



## NATIONAL AND INTERNATIONAL COLLABORATORS

Amy Belfi, Missouri Univ. of Science & Technology  
Beatriz Calvo-Merino, City, University of London  
George Christopoulos, Nanyang Tech. Univ.  
Maurizio Forte, Duke University  
Fraziska Hartung, Newcastle University  
Gregor Hayn-Leichsenring, University Hospital Jena  
Dexian He, South China Normal University  
Xianyou He, South China Normal University  
Stacey Humphries, Goldsmiths, University of London  
Yoed Kenett, Technion

Juliet King, NICoE  
Alexander Kranjec, Duquesne University  
Helmut Leder, University of Vienna  
Marcos Nadal, University of the Balearic Islands  
Janell Payano Sosa, NICoE  
William M. Perthes, The Barnes Foundation  
Chandler Rhodes, NICoE  
Martin Skov, Copenhagen Univ. Hospital Hvidovre  
Oshin Vartanian, University of Toronto  
Edward A. Vessel, Max Planck Inst. for Empirical Aesthetics  
Melissa Walker, NICoE



## AFFILIATED GROUPS



Photos by Anjan Chatterjee





## INVITED TALKS

Invited talks are one indicator of our reputation and the impact of our work. We have disseminated our research findings to neurology and neuroscience audiences, interdisciplinary humanities programs, technology groups, and student organizations.

Anjan Chatterjee. **The Aesthetic Brain.** Goldsmiths College. London (Jan 2021)

Adam Weinberger. **Analogy Across Modality:** Analogical mapping across sensory and information modalities and evidence for a general analogical ability reasoning factor. Analogy List Seminar (Feb 2021)

Anjan Chatterjee. **Traditional Architecture, Urbanism, and Craft in the 21st Century.** Panelist. Washington DC (Feb 2021)

Anjan Chatterjee. World Economic Forum. **Arts and Culture panel** (Mar 2021)

Anjan Chatterjee. **Neuroaesthetics.** Princeton University Music Lab (April 2021)



Anjan Chatterjee. **Neuroaesthetics**. Koc University, Istanbul, Turkey (April 2021)

Jonathan Fineberg. **A Public Conversation about Christo and Jeanne-Claude** with Brady Roberts, Director. Vero Beach Museum of Art (May 2021)

Adam Weinberger. **Understanding how individuals represent God: A multidimensional similarity approach**. Poster at Annual Meeting of the Cognitive Neuroscience Society (May 2021)

Anjan Chatterjee. **Architecture**. Wilmer Yard Conversations. London (Jun 2021)

Anjan Chatterjee. **Architecture and Wellness**. International Positive Psychology Association World Congress (Jul 2021)

Anjan Chatterjee. **The neuroaesthetics of architectural spaces**. Keynote. 8th International Conference on Spatial Cognition. Rome (Sept 2021)

Anjan Chatterjee. **The concept of aesthetic emotions**. Panel discussion. International Association of Empirical Aesthetics (Sept 2021)

Anjan Chatterjee. **Neuroarchitecture**. Wellness Real Estate and Communities Symposium. Global Wellness Institute. NYC (Sept 2021)

Alex Christiansen. **More than "Just a Model": Psychometric Modeling and Scale Scores**. Quantitative Methods Colloquium, Vanderbilt University (Sept 2021)

Adam Weinberger. **Psychological Responses to Buildings and Natural Landscapes**. Poster presented at International Association of Empirical Aesthetics (Sept 2021)







Artwork by Alloyius McIlwaine,  
photographed by Anjan Chatterjee

Clifford Workman. **The Face Image Meta-Database (fIMDb) & ChatLab Facial Anomaly Database (CFAD): A suite of tools to aid research on human facial aesthetics.** Poster presented at International Association of Empirical Aesthetics (Sept 2021)

Anjan Chatterjee. **The Neuroaesthetics of Architecture.** The Institute for Hearing Technology and Acoustics (IHTA), RWTH Aachen University (Oct 2021)

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Alex Christiansen. **More than "Just a Model": Psychometric Modeling and Scale Scores.** University of Virginia Design and Data Analysis Series (Oct 2021)

**Society for Neuroscience and Creativity (SfNC) CrossTalk** – Conversation with Anjan Chatterjee, MD and PCfN Artist-in-Residence Lucas Kelly (Oct 2021)

Clifford Workman. **Morality is skin deep: Linking aesthetic and moral cognition in the brain.** Department of Educational Studies in Psychology, University of Alabama (Oct 2021)

Zak Zapatero. **Challenging the Core Tenants of Facial Scar Design: A National Survey of The General Public.** Talk presented at the 89th Annual Meeting of the American Society of Plastic Surgeons (Oct 2021)

Kohinoor Darda. **The Role of art expertise and culture in human- and computer- generated visual art appreciation.** Center for Elite Performance, Expertise, and Training, MacQuarie University (Nov 2021)

Anjan Chatterjee. **Aesthetics and Morality.** Divinity School, University of St. Andrews (Nov 2021)

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Anjan Chatterjee. **Human Beauty.** Sapienza University, Rome (Dec 2021)

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Photo by Anjan Chatterjee

# FINANCIAL SUPPORT

We wish to harness neuroscience in advocating for the vital importance of aesthetics values. Moving through uncharted scientific territory is difficult when traditional funding sources are cautious in the research agendas they promote. Philanthropic gifts are critical to realizing our vision.



## GRANTS & AWARDS

Anjan Chatterjee was awarded a **3-year grant from the Templeton Religion Trust** titled, *Semantic Space of Aesthetic Cognitivism*. We plan to investigate conditions under which art encourages the understanding posited by Aesthetic Cognitivism. Specifically, we will establish and disseminate visual art stimuli relevant and useful for testing aesthetic cognitivism, and use them in three behavioral and neural studies of art engagement. Building on our recent TRT-funded work, these studies will provide the conceptual and methodological tools necessary for rigorous empirical study of aesthetic cognitivism.

Anjan Chatterjee received an award to conduct a pilot study jointly with the National Intrepid Center for Excellence (NICoE) at the Walter Reed Military Medical Center from the **Henry M. Jackson Foundation and National Endowment for the Arts**, titled *Art Therapy and Emotional Wellbeing in Military Populations with Post Traumatic Stress Disorder (PTSD)*.

## GIFTS

We are grateful to Mr. Steven Smith for continued generous support through the Dolores Smith Innovation Fund, and Mr. Sean Smith for generous support through the ALPAS fund.

For this fledgling field, **your gift** makes a big impact on advancing our understanding of how appearance affects the way we treat each other, how the built environment affects our sense of wellbeing, and why art at every level nourishes our deepest sense of humanity.

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