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Brain

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**David Freedberg** 

**RESEARCH WORKSHOP** 

**AND LECTURE SERIES** 



Danny Reible

## **Research Workshop and Lecture Series** academic year 2020-2021

<b>THE ARTFULL BRAIN II</b> Examined by The Biology of Mind, Neuroaesthetics, and Semeiotic
October 26, 2020   12 p.m. (CT), 1 pm (ET) Digital Conference
Zoom: Join Zoom Meeting http <b>s://te</b> xa <b>ste</b> ch.zoom.u <b>s/j/</b> 9 <b>2</b> 8967 <b>1</b> 4458
Meeting ID: 9 <b>2</b> 8 9671 4458
Lecture 1 David Freedberg (Columbia University, The Italian Academy for Advanced Studies)
" On the Biology of Mind. Bridging the Two Cultures:Creativity and Reasoning."
<b>Lecture 2</b> Danny Reible (Texas Tech University. Donovan Maddox Distinguished Engineering Chair, College of Engineering)
"Why Do We Need Reflective Engineers and How Art Can Contribute to Their Education?
Panel Discussion

"Reflectivity and Relational Reasoning in Arts and Sciences."

With the participation of invited guests, and Institute members Kenneth Ketner, Michael O'Boyle, Elize Bisanz.

Chair: Elize Bisanz, Institute Director

# THE ARTFULL BRAIN

The research conference targets two major fields of brain study from the interdisciplinary perspective of Semeiotic:

a) Neuroaesthetics, a field that pursues questions such as How knowledge of basic brain mechanisms might inform our understanding of aesthetic experiences? and How we might explore the neural processes-mostly experiences that include perception, interpretation, emotion, and action-underlying our appreciation and production of beautiful objects and artwork?

b) The second field is the widely discussed Biology of Mind, another emerging research activity across the disciplines of behavioral psychology, cognitive psychology, neuroscience, and molecular biology. It studies the structures of Mind, Brain, Feelings and Consciousness, the Cognitive Architecture of the mind, and the how and why of specific functions.

The convergence between Neuroaesthetics and Biology of Mind within the science of Semeiotic is the primary scientific motivation of the research workshop. A study by the Institute's Interdisciplinary Seminar on Peirce has distinguished between multiple forms of neural relations and connections where Semeiotic was implemented to identify their structural features. Results from the workshop will include targeting questions concerning how different scientific issues such as aesthetic perception or cognitive information processing can be combined for a better understanding of the brain.





The Institute for Studies in Pragmaticism is the first and oldest organized center for research on the life and works of American physicist, mathematician, logician and engineer Charles Sanders Peirce (1839-1914), one of the greatest interdisciplinary scientists in history. Founded during the 1971-72 academic year at Texas Tech by Charles S. Hardwick and Kenneth L. Ketner, its mission is to facilitate study of the life and works of Peirce and his continuing influence within interdisciplinary science.

### www.pragmaticism.net

#### **Conference information and contact:**

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### BACKGROUND

The field of Brain Studies has advanced to be a leading scientific area for current research. Consider The National Brain Initiative with participation from public federal government agencies, private industry, nonprofit organizations, foundations, colleges, and universities that have the common goal to understand the inner life of the "human mind." These groups also support and coordinate edge research across disciplines to prevent or cure brain disorders. These efforts testify to the urgency of understanding mind, and to the prevailing scientific goal of advancing study of the brain using interdisciplinary methods.



## **LECTURE I**

David Freedberg is Pierre Matisse Professor of the History of Art at Columbia University and Director of The Italian Academy for Advanced Studies in America.

Long committed to cross-disciplinary work in the sciences and the arts, Dr. Freedberg established the Art, Humanities and Neuroscience project in 2001 at the Italian Academy for Advanced Studies in America. The aim of the project-and of its successful biannual conferences on cutting-edge topics relevant to the understanding of art, music, vision and emotion-has been to encourage critical thinking about the methodological and epistemological paradigms underlying each domain. Freedberg's work is pioneering in the advancement of Interdisciplinary Scientific Methods.

David Freedberg is a Fellow of the American Academy of Arts and Sciences and of the American Philosophical Society, as well as the Accademia Nazionale di Agricultura, and the Istituto Veneto di Scienze, Lettere e Arti. He has served as the director of the Warburg Institute at The Unniversity of London from 2015-17.

His rich list of publications reflect his expertise on several fields of study.

http://www.columbia.edu/cu/arthistory/ faculty/Freedberg.html

### **LECTURE 2**

Dr. Reible is the Donovan Maddox Distinguished Engineering Chair and Paul Whitfield Horn Professor at Texas Tech University. He was previously the Bettie Margaret Smith Chair of Environmental Health Engineering at the University of Texas. Dr. Reible has been active in technical and policy issues associated with the assessment and in-situ remediation of contaminated sites. He has coauthored nine National Research Council committee reports and served on the Board of Environmental Studies and Toxicology. He is a Board Certified Environmental Engineer, a Professional Engineer (LA) and in 2005 was elected to the National Academy of Engineering for the "development of widely used approaches for the management of contaminated sediments".

His recent project explores new territories in using innovative methods, informed by arts and humanities education, to help young engineers become more reflective thinkers who have greater awareness of the complex contexts of their field.

DREAM: an NSF project Developing Reflective Engineers through Artful Methods. Members: Danny Reible, Ryan Campbell, Jeong-Hee Kim, Chongzheng Na, Roman Taraban.

https://www.depts.ttu.edu/ceweb/faculty /danny\_reible/index.php