

MBB 980N
Neuroaesthetics
Fall 2022: Thursday 12-2pm

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Description :

This course will focus on neuroaesthetics, an emerging field offering a scientific perspective on the nature of art and the ways that art reveals human nature. The course materials and discussions will integrate findings from neuroscience, psychology, evolutionary biology, and philosophy, as well as scholarship in the arts and humanities.

We will begin with a brief history of ideas on aesthetics, art, beauty, and pleasure. We will examine the neural underpinnings of response to art in the brain's reward system and default network.

Among the questions considered:

Why are people drawn to art that is neither conventionally beautiful nor entirely pleasurable?

What does it mean to "enjoy" sad music or experience chills and thrills in response to fiction or film?

Is art a vehicle for simulating experiences and understanding other minds?

Can the s art promote well-being?

The course will range across the arts but will focus on visual art, fiction, film, and music, and on response to art rather more than its creation.

Notes: Preference to juniors in MBB tracks or MBB secondary field. Students from the arts and humanities are also encouraged to apply.

Requirements

The seminar is discussion-oriented and will be a collaborative exploration of the materials and topics.

Students will be required to:

Read everything assigned every week.

Present. Your presentation will be 20-25 minutes in length and will briefly summarize a few key points of the assigned readings. The presentation should highlight the ideas and findings that you found novel, provocative, insightful, and worthy of class discussion. The presentation should include discussion questions. Depending on class size 1 or 2 students will present each week.

Remember: The presentations should not be a point-by-point summary of the readings.

If you include music, films, podcasts and other materials in your presentation they should be brief and directly relevant to the week's topic.

Write:

Four mini-papers. The mini-papers should be up to 1 page single spaced. Submit these to our canvas site by Wednesday at 8pm.

*Final project: Choose the topic and format in consultation with the instructor. You will need approval on your topic. Final projects are due December 10.

Possible projects

1. A paper requiring immersion in empirical literature outside of the class reading. The paper may explore a topic not covered in depth in the course or investigate a novel hypothesis within the material covered.
2. A project in another format (such as a video, a short story, a creative work in music or dance) that directly responds to and enlarges on the topics explored in the class. The project must be accompanied by a commentary on the piece that explains how it was informed by course ideas and materials.
3. A project analyzing a single work or body of work from an artist in light of the ideas presented in class with the aim of understanding the artistic work from a neuroaesthetics perspective.

Final grades will be based on class participation (25%) class presentation (30%), mini paper assignments (20%) and final project (25%)

Required Reading: No books. All articles and videos will be available on our canvas site for download. Please note that you should hit "date created" to get the syllabus in order from first to last.

Class civility: Please do not use laptops or mobile phones in this class unless you are using them to take notes or refer to class readings.

Affirm your awareness of and abide by the Honor Code: Harvard College is an academic and residential community devoted to learning and the creation of knowledge. We – the academic community of Harvard College, including the faculty and students – view integrity as the basis for intellectual discovery, artistic creation, independent scholarship, and meaningful collaboration. We thus hold honesty – in the representation of our work and in our interactions with teachers, advisers, peers, and students – as the foundation of our community.

The Harvard College Honor Code

"Members of the Harvard College community commit themselves to producing academic work of integrity – that is, work that adheres to the scholarly and intellectual standards of accurate attribution of sources, appropriate collection and use of data, and transparent acknowledgement of the contribution of others to their ideas, discoveries, interpretations, and conclusions. Cheating on exams or problem sets, plagiarizing or misrepresenting the ideas or language of someone else as one's own, falsifying data, or any other instance of academic dishonesty violates the standards of our community, as well as the standards of the wider world of learning and affairs." (from <https://honor-fas.harvard.edu/honor-code>)

Schedule:

September 1. Introduction to the course and course materials.

We will discuss the content of the course, and consider some of the questions posed above.

September 8. What is art? Perspectives from the arts & sciences

Is art a means to "infect" others with one's own feelings and experiences?
Are works of art more like people than artifacts?
Is art dead?
Can fashion be art?

Read:

Leo Tolstoy (1899). What is art? (selections). New York: Thomas Y. Crowell

Arthur C Danto (1964). The ArtWorld. The Journal of Philosophy, 61.

Denis Dutton (2006). A naturalist definition of art. The Journal of Aesthetics and Art Criticism.

George E Newman et al (2014) Are artworks more like people than artifacts: Individual concepts and their extensions. Topics in Cognitive Science.

S Wolz, & C.C. Carbon (2014). What's wrong with an art fake: Cognitive and emotional variables influenced by authenticity status of artworks Leonardo, 47

Mini-paper Assignment 1: Spend some time (preferably 30 minutes) looking at 2 works on the Harvard Art Museum or on its website. Do you consider each of them a work of art? If you saw these works outside of a museum context would you still consider each of them art?

Does fashion qualify as art? Does ornamented or beautifully crafted weaponry qualify as art? If so, why?

September 15. What is pleasure? What is beauty?

Where we consider art that is familiar or novel, easy or difficult, and beautiful or sublime, and where we begin to explore the brain mechanisms of reward and pleasure.

Read:

Edmund Burke A Philosophical Enquiry into the Origin of our ideas of the sublime and the beautiful (1757)

Dutton D A Darwinian theory of beauty (2014). Philosophy and Literature

Cutting, J. E. (2006). The mere exposure effect in aesthetic preferences (book chapter)

Vessel, E.A., Starr, G.G., Rubin, N. (2013). Art reaches within: aesthetic experience, the self and the default-mode network. Frontiers in Neuroscience

Mini-paper Assignment 2: Consider works of art (music, literature or visual art) that you consider beautiful or sublime (bring examples). What qualities in the work elicit this feeling or judgment? Consider next whether art must be pleasing, beautiful or sublime. What about art that is difficult or disturbing?

September 22. Neuroscience & architecture. From environmental psychology to NeuroArchitecture.

Where we consider whether neuroscience inspired insights into the design process further well-being, health and attention restoration in the built environment?

A Coburn, O Vartanian A Chatterjee (2017) Buildings, Beauty, and the Brain: A Neuroscience of Architectural Experience, JCN

R Kaplan (2001) The Nature of the View from Home: Psychological Benefits Environment ew.

Ulrich, R et al 1984) View through a window may influence recovery from surgery. Science

Chatterjee and Vartanian (2014) Neuroaesthetics. Trends in Cognitive Science

Mini paper 3: Consider the environment at Harvard. Can you think of ways that our built environment from classroom to dorm room might better facilitate intellectual, social, and emotional growth and greater well-being? What suggestions would you make?

September 29. Making a case for aesthetic emotions

Can art induce pleasurable nostalgia, enjoyable melancholy, sweet sadness? Can art cause hedonic reversals?

What does it mean to be "moved"?

Read:

Cova F., Deonna J. A. (2014). Being moved. Philos. Stud.

Johnson-Laird P, Oatley K (2022) How poetry evokes emotions. Acta Psychologica

Keltner D., Haidt J. (2003). Approaching awe, a moral, spiritual, and aesthetic emotion.

Konečni V. J. (2005). The aesthetic trinity: awe, being moved, thrills. Bull. Psychol.

Boym, S. (2001) Nostalgia and its discontents (adapted from the book The Future of Nostalgia)

De Diego, D and Ots, C. Nostalgia: a conceptual history (2014)

October 6: Can reading literary fiction improve theory of mind?

Can fiction help us to imagine equality, foster revolutions

Why do we care about people who do not exist?

How and why do humans create fictional worlds?

What does it mean to be "transported"?

Read:

Steven Pinker Toward a consilient study of literature. Philosophy and literature 31, 161-177.

B. Vermeule (2009.) Why do we care about literary characters? Johns Hopkins Press Chapter 2. The cognitive dimension (chapter 1 **The fictional among us is optional**).

Melanie Green, C Chatham, and MA Sestir (2012) Emotion and transportation into fact and fiction. Scientific study of literature 37-59

Lynn Hunt (2007). Torrents of emotion: Reading novels and imagining equality, In Invent-

ing Human Rights (Norton).

David Comer Kidd and Emanuele Castano, (2013) Reading literary fiction improves theory of mind. *Science*,

October 13: The human face and the philosophy of beauty

Hour 1: The human face

Roland Barthes, (1957) "The Face of Garbo," *Mythologies* (1957).

Doane, Mary Ann (2003) *The Closeup: Scale and Detail in the Cinema*. *Differences; a journal of feminist cultural studies*

Barratt et al (2016) Does the Kuleshov effect really exist? *Perception*,

Croley, J.A. et al (2017) Dermatological features of Classic Movie Villains *JAMA dermatology*.

Aharon, Etcoff et al (2001) Beautiful faces have variable reward value: fmri and behavioral evidence. *Neuron*.

Hour 2: The philosophy of Beauty

Guest Lecturer: Michael Spicher PhD

Dr. Spicher earned a PhD in philosophy focusing on aesthetics and political philosophy. He is a lecturer at both Boston Architectural College and Mass College of Art and Design, where he is teaching a new course, "The Philosophy and Science of Beauty."

Readings:

Yuriko Saito (2001) *Everyday Aesthetics Philosophy and Literature*, Volume 25, 1. 87-95

Richard Shusterman *The End of Aesthetic Experience* (1997) *The Journal of Aesthetics and Art Criticism*, Vol. 55, No. pp. 29-

October 20.

The art and science of engagement: How do writers, artists, and film makers rivet attention and create suspense?

Bordwell, D. (2002) *Intensified continuity. Visual style in contemporary American film*

Hoeckner et al (2011) *Film music influences how viewers relate to movie characters.*

M Bezdek et al (2013) "Run for It!": Viewers' Participatory Responses to Film Narratives *Psychology of Aesthetics Creativity and the Art*

Lehne, M and Koelsch (2015) *Toward a general psychological model of tension and suspense. Frontiers in psychology.*

Cutting J and Candan A, *Movies, evolution and Mind.*

October 27 Mind wandering and Mental Drifts

Guest Lecturer: Moshe Bar PhD, neuroscientist

head of Cognitive Neuroscience lab, Bar-Ilan University.

Author of *Mindwandering: How your constant*

mental drift can improve your mood and boost creativity

Our brains are noisy; certain regions are always grinding away at involuntary activities like daydreaming, worrying about the future, and self-chatter, taking up to forty-seven percent of our waking time. This is mind wandering—and while it can tug your attention away from the present and contribute to anxiety and depression, cognitive neuroscientist Moshe Bar is here to tell you about the method behind this apparent madness.

November 3. Bringing neuroaesthetics into exhibition design in art museums.

Can we lessen “museum fatigue” Or “Why [do] we walk much further in many other contexts without getting tired?”

Guest Lecturer: Tedi Asher PhD., Neuroscientist, Peabody Essex Museum.

<https://www.artsy.net/article/artsy-editorial-art-museum-hired-neuroscientist-change-way-art>

Bitgood (2009) Museum fatigue: A critical review. *Visitor Studies*. B.I. Graham (1916) *Museum Fatigue*. *The Science Monthly*

Vessel, E.A., Starr, G.G., Rubin, N. (2013) Art reaches within: aesthetic experience, the self and the default-mode network. *Frontiers in Neuroscience*,

EA Vessel, N Maurer, AH Denker, GG Starr (2018) Stronger shared taste for natural aesthetic domains than for artifacts of human culture. *Cognition*.

[Minipaper 4: Reflect on your last experience at a museum \(of any sort\). What advice would you have for PEM for increasing engagement and meaning? For attracting a diverse audience? For combating museum fatigue? For creating a moving experience?](#)

November 10: Are clothes, jewelry and fashion art?

Watch:

Valerie Steele (2012) (video) Can fashion be art? Video. Talk at Museum of Modern Art Vienna, 2012. <https://www.youtube.com/watch?v=weB-SQ-XP-c>

November 17. Music, the brain and the beat.

Guest Lecturer: Dr. Susan Rogers.

“This is what it sounds like”

Berklee School of Music.
Director: Music Perception and Cognition Lab

Prior to her academic career, Susan Rogers was a sound engineer for Prince, and worked with Tricky, David Byrne, Bare Naked Ladies and other recording artists.

December 1. Can art heal?

Carolyn Beans (2019) Searching for the science behind art therapy PNAS

J Lobban, D Murohy (2019) Understanding the role of art therapy can take in treating veterans with chronic PTSD.

Trupp MD, Bignardi G, Chana K, Specker E and Pelowski M (2022) Can a Brief Interaction With Online, Digital Art Improve Wellbeing? A Comparative Study of the Impact of On-line Art and Culture Presentations on Mood, State-Anxiety, Subjective Wellbeing, and Loneliness. *Front. Psychol.* 13:782033.