

## Illuminating Theology With Psychological Science

Aesthetics: Finding  
and Forging Common  
Ground for  
Theology/Philosophy  
and Psych Science



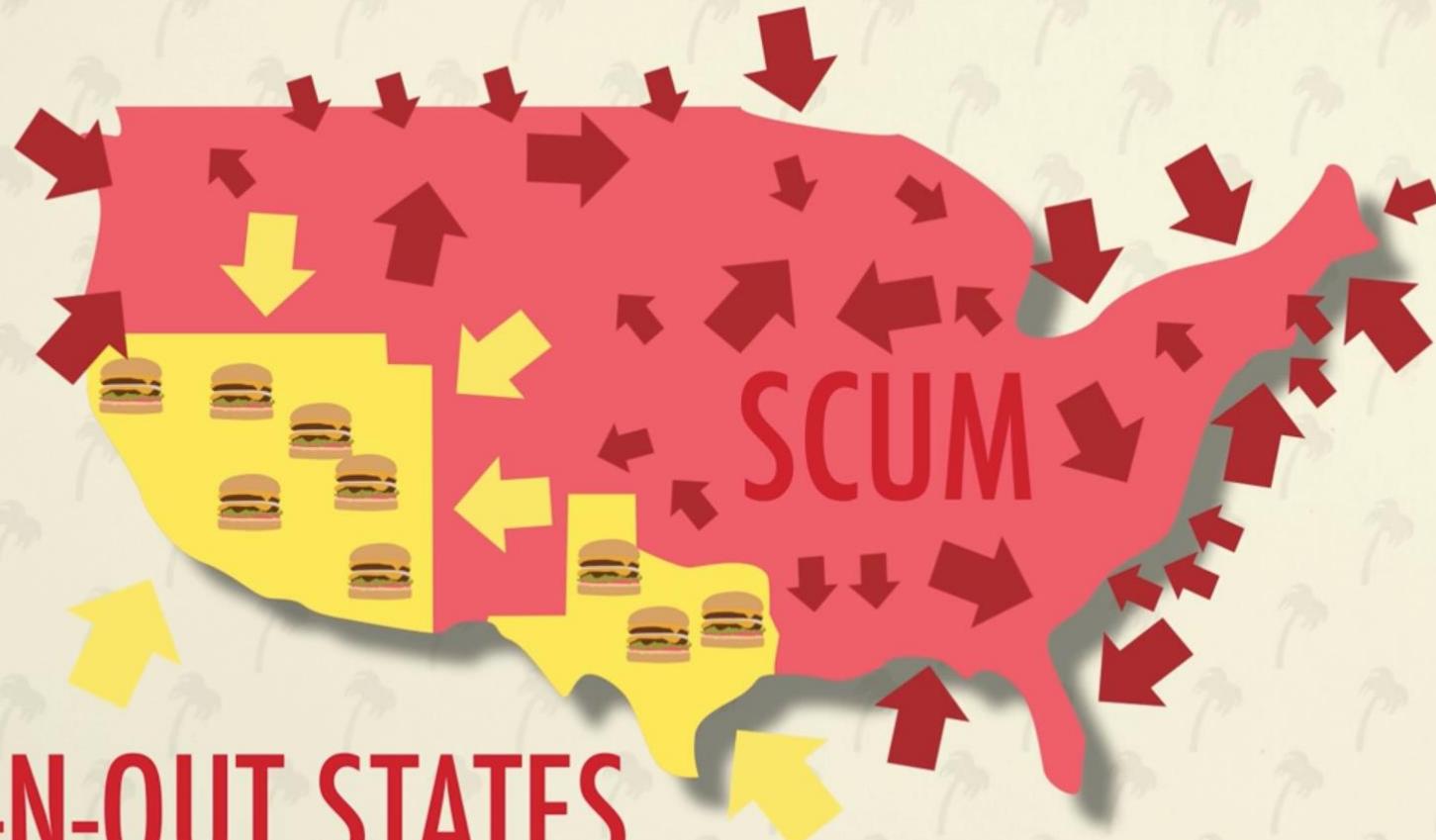
*This work was created by Kutter Callaway and is licensed under a CC-BY-NC-SA license.*

# Aesthetics

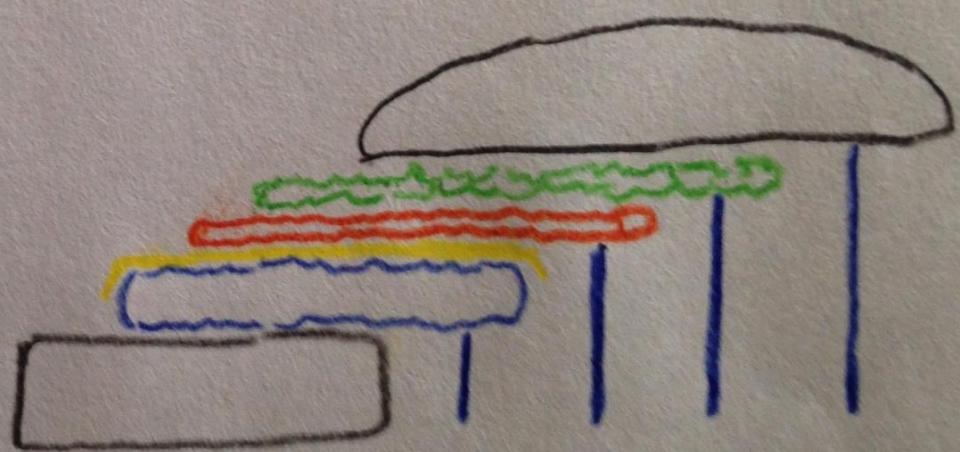
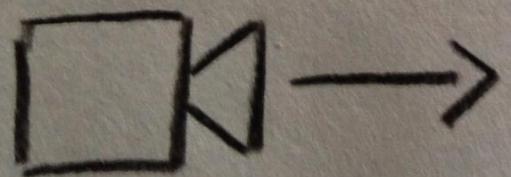
Finding and Forging Common Ground for  
Theology/Philosophy and Psych Science

Kutter Callaway

**IN-N-OUT STATES**









# Wait ... what?

- What does all this have to do with the psychological study of aesthetics?!?
- When we talk about “aesthetics,” what exactly are we talking about (both intra- and inter-disciplinarily)?
- What is our actual object of inquiry?
- When can we get lunch?

# A Few Observations about Double-Doubles with Fries

- Not about beauty per se, but the aesthetics of sensory-motor perception
- Formal aesthetic categories guide and constrain viewers thoughts, feelings, and behaviors (i.e., an objective basis for sensory valuation)
- An excess of meaning – burger’s “goodness”(i.e., its deliciousness) is not reducible to descriptive precision of brute facts
- Ontic illusion is Good/True/Beautiful

# Skov & Nadal (2020)

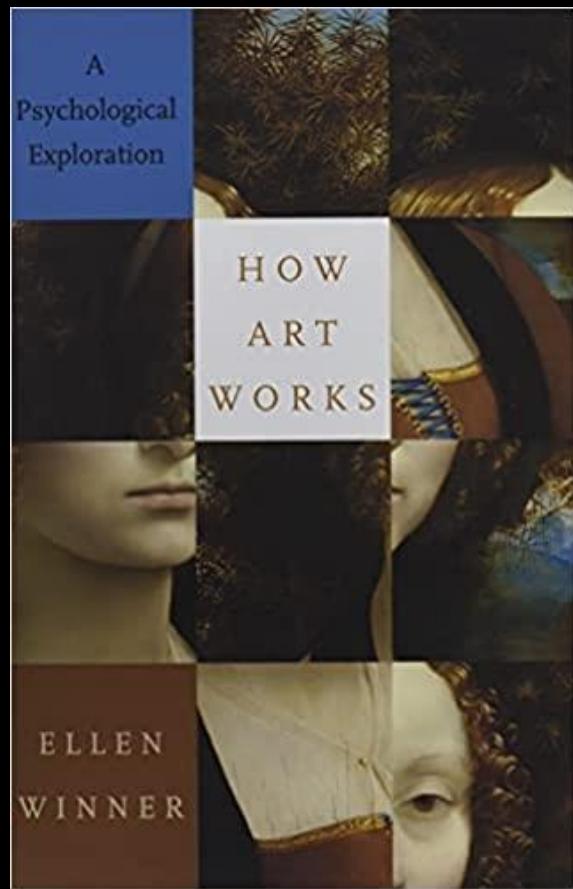
## Cognitive Science of Aesthetics:

Studies the aspect of sensory valuation that refers specifically to understanding how and why perceptual representation of a sensory stimulus leads to a given hedonic value

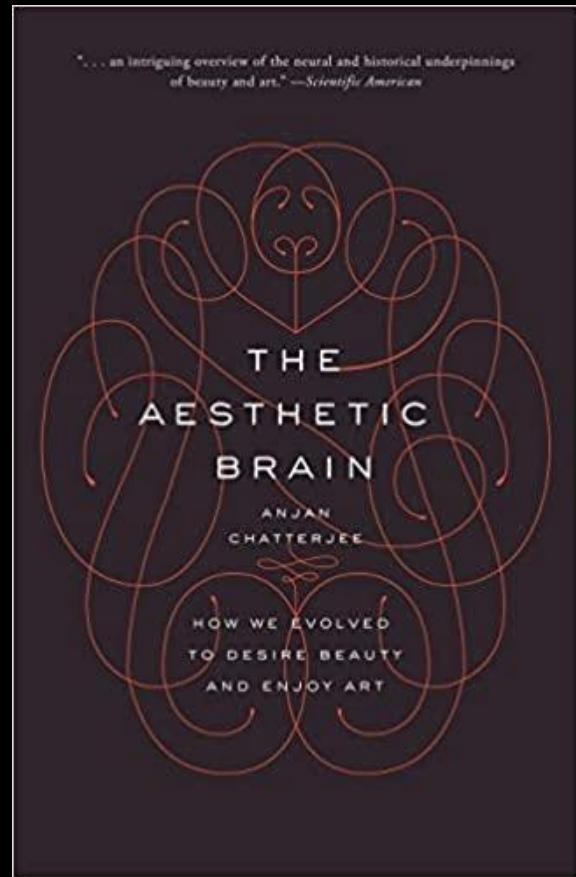
## Cognitive Science of Art:

Seeking to understand more fully the psychological processes associated with the experience of artistic stimuli.

## Psychology of Art



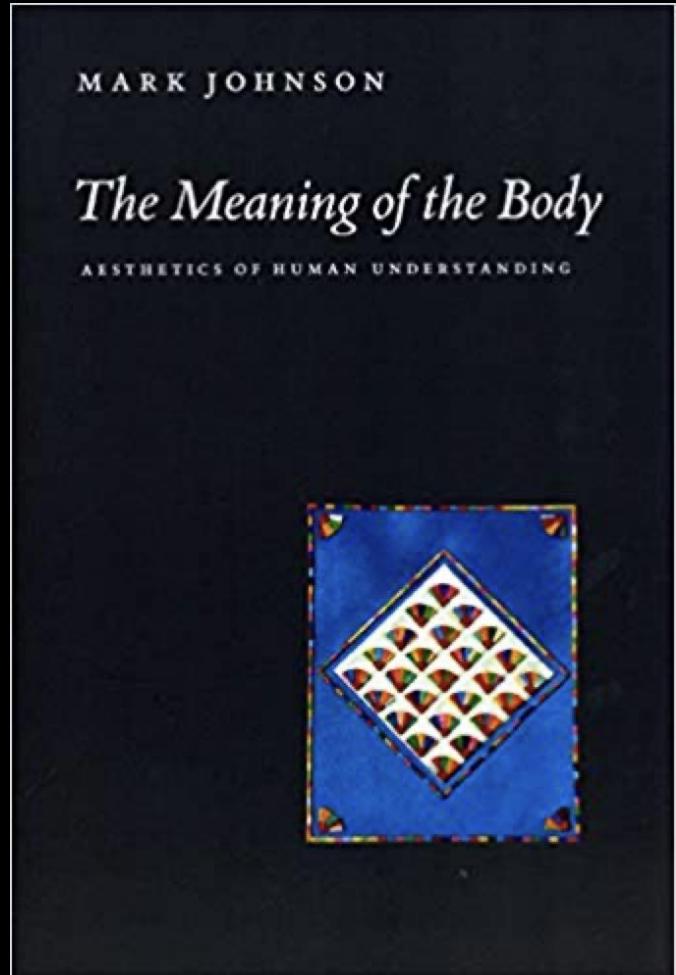
## Cognitive Science of Aesthetics



"... an intriguing overview of the neural and historical underpinnings of beauty and art." —*Scientific American*

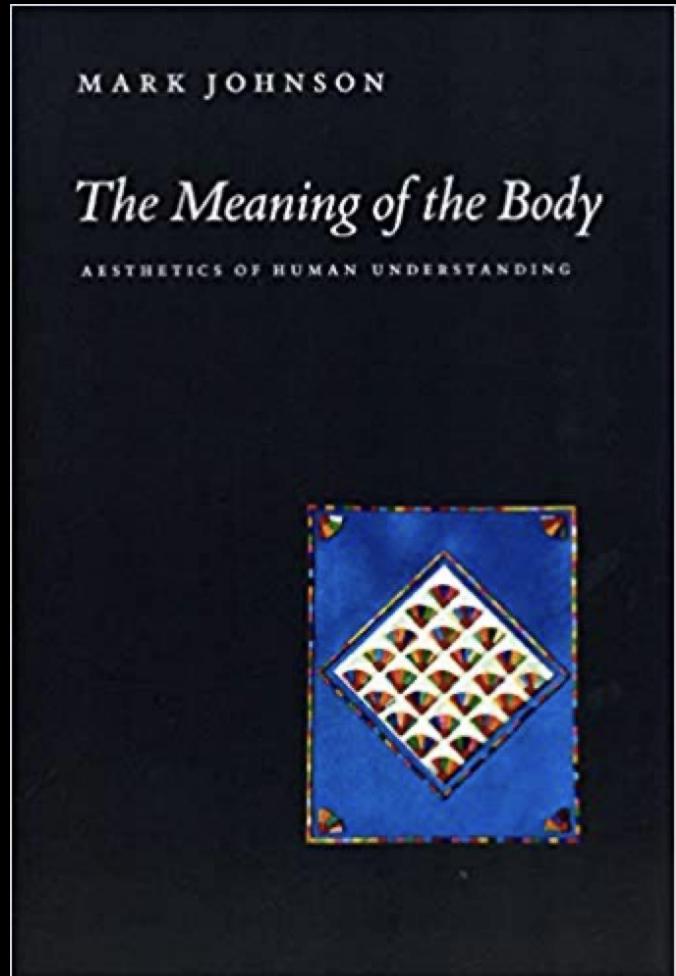
## The “meaning” of “meaning”

- “Meaning” is not representational but immanent
- The meaning of something is a matter of relations and connections, grounded in bodily organism-environment coupling, or interaction.
- “Aspects of our experience take on meaning, then, insofar as they activate for us their relations to other actual or possible aspects of our experience” (p. 268).
- So meaning doesn’t exist “out there,” but rather emerges as we engage the world as embodied creatures.
- [KDC] When we describe something as “meaningful,” it is a way of talking about those moments when our embodied-relation-to-the-world rises to the level of conscious awareness.



## Aesthetics and Meaning

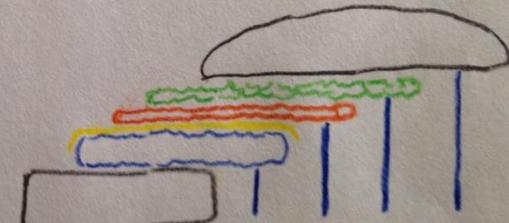
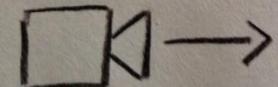
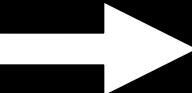
- “Meaning” is not restricted to words, and meaning-making in the arts is exemplary or even paradigmatic of all human meaning-making
- “Art matters because it provides heightened, intensified, and highly integrated experiences of meaning, using all of our ordinary [i.e., embodied] resources of meaning-making” (Johnson, 2007, p. 208).
- “Aesthetics” is thus not a theory, but “the study of how humans make and experience meaning” (p. 209).
- Aesthetic/embodied meaning precedes and creates the conditions for linguistic and propositional “meaning.”





Analytics: "Eew – that's messy and gross!"

Continents: "It's as appealing as it is real, which is to say, it isn't."





Measuring the (Im)measurable  
aka  
Taking Pictures of Cheeseburgers

# Research Question(s) for Pilot studies

## Overarching

Do art and aesthetic experiences give rise to religious, transcendent, and/or spiritual understandings?

If so, is this phenomena **quantifiable**?

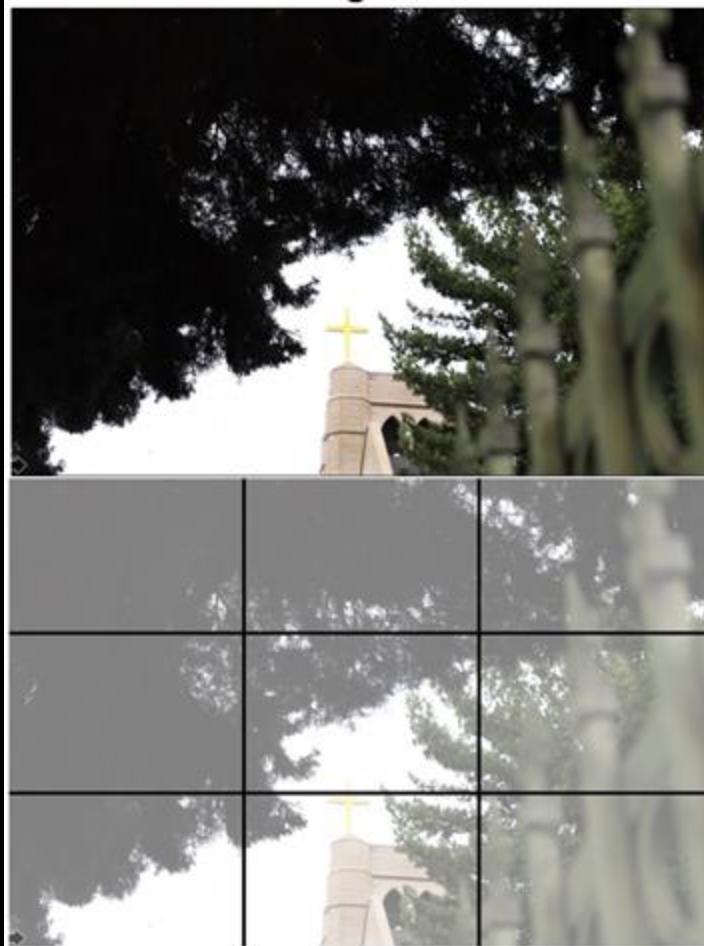
## More focused

Does the **quality** of a given artwork affect whether and to what degree it prompts spiritual understanding?

## Pilot

Does the **formal composition** of a photograph predict the **kind and depth** of spiritual understandings that visual stimuli engender?

Original = “Good/Appealing”  
Adheres to Rule of Thirds



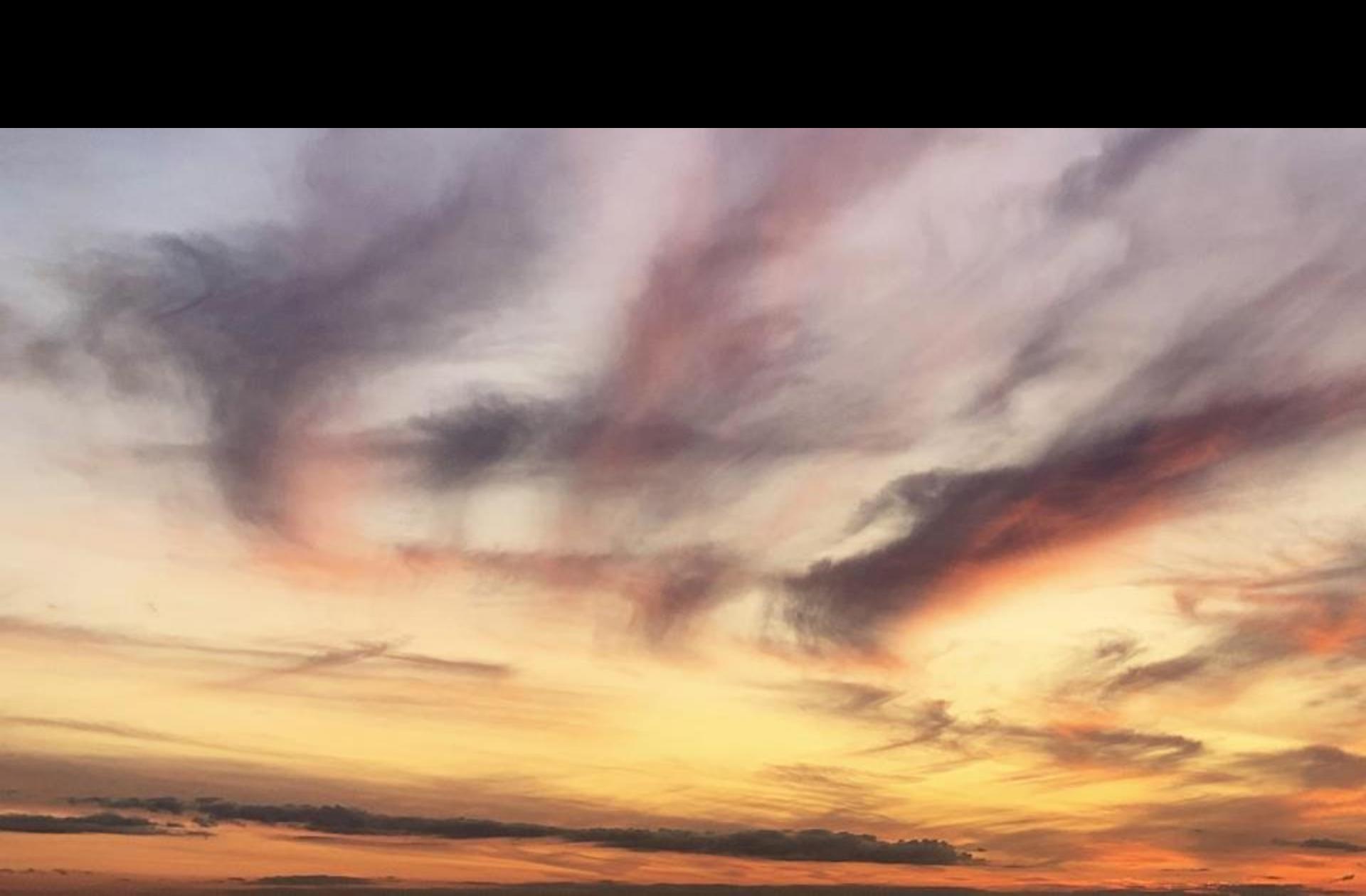
Modified = “Bad/Unappealing”  
Violates Rule of Thirds



Comparison = International Affective Picture System (IAPS)







## Spiritual/Religious Outcome Variables

CAN be moved:

Art vs. Non-Art

**AND**

Good Art vs. “Meh” art

Significantly associated with changes in state-like variables: Awe, Gratitude, Elevation, Spiritual-Transcendence

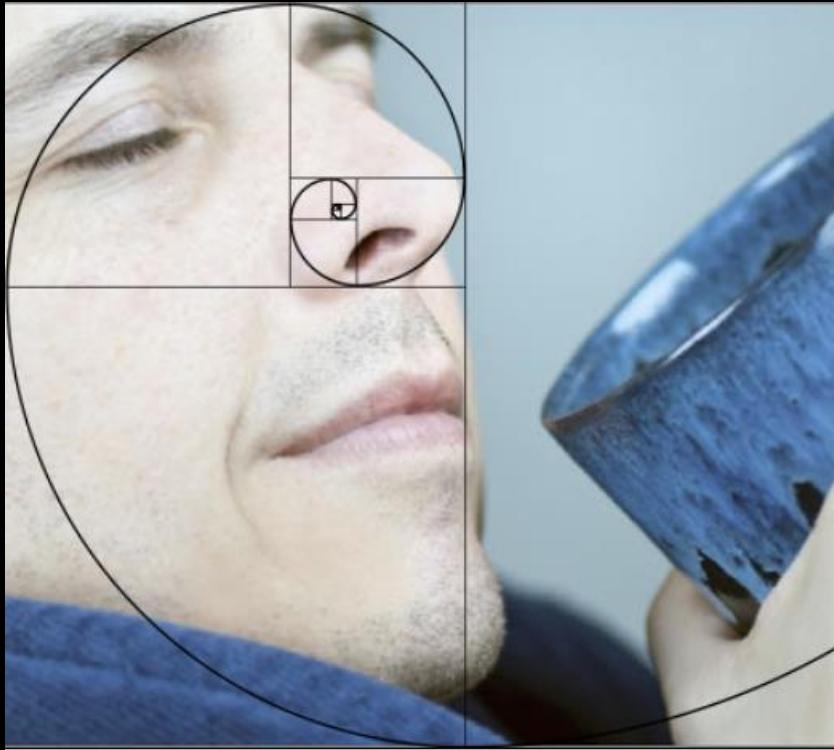
**BUT**

Trait level Spirituality/Religion much more stable (e.g. LAMBI, Belief in God, Non-theistic supernatural beliefs)

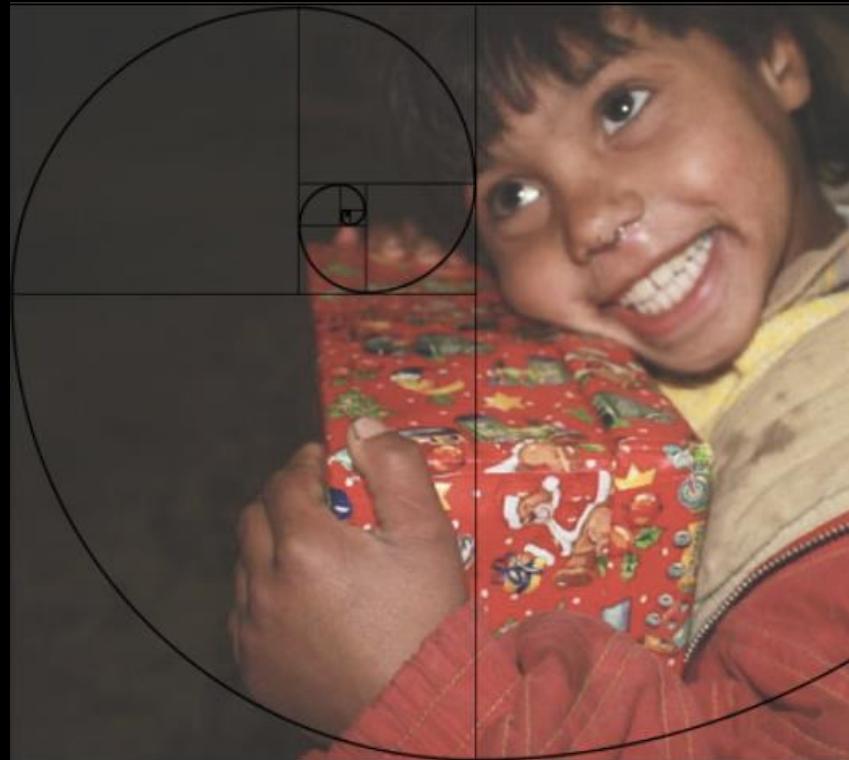
---

\*Happy to share draft of paper for anyone who is interested

# The Aesthetics of Empathy

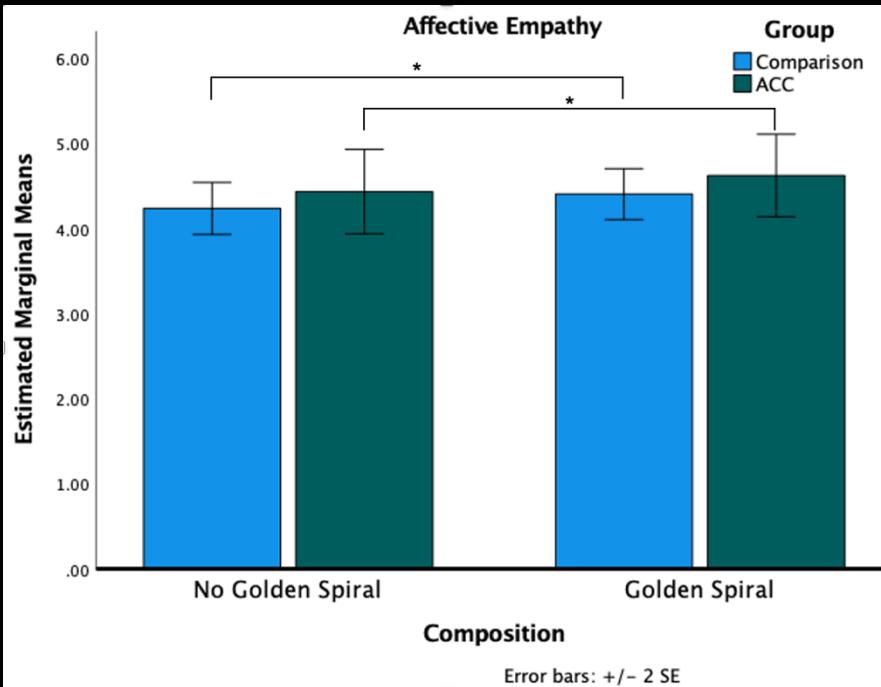


Golden Spiral  
Stimulus

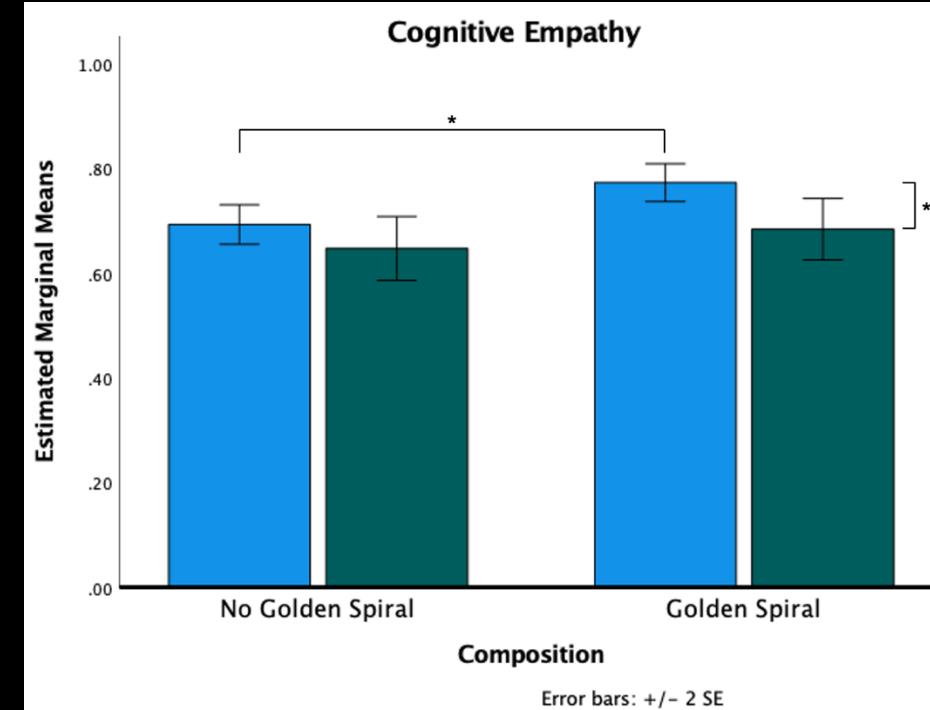


No Golden Spiral  
Stimulus

MET stimuli examples. Cognitive and affective empathy scores are typically higher on stimuli composed according to the “Golden Spiral” (Callaway, 2023)



Affective Empathy (Fig. 3)



Cognitive Empathy (Fig. 4)

- main effect of group = n.s.
- group x condition = n.s.
- Both groups - higher for Golden Spiral stimuli (ACC,  $\eta_p^2 = .071$ ; control;  $\eta_p^2 = .136$ )

- significantly lower overall in ACC than controls,  $\eta_p^2 = .065$
- group x condition = n.s.
- (exploratory post-hoc) Control group only - higher for Golden Spiral stimuli ( $\eta_p^2 = .254$ )
- (exploratory post-hoc) ACC significantly lower than controls only on Golden Spiral stimuli,  $\eta_p^2 = .090$

# Early Conclusions

- Photo composition influenced affective empathy ratings in both ACC and control groups.
- Adults with ACC had diminished ability to give cognitive labels to the emotional states of others, which was not enhanced by the formal aesthetics of stimuli.
- The corpus callosum seems to facilitate the ability to cognitively label emotions by facilitating visual attention.
- The corpus callosum does not seem to facilitate affective empathy, in part because it does not appear to determine whether formal aesthetics influences the processing of visual stimuli in ACC or neurotypical controls.
- Something more/other than our corpus callosum is involved with affective empathy ... something Aesthetic in nature.









QUESTIONS?