

OSHIN VARTANIAN

Oshin Vartanian, Adjunct Assistant Professor in the Department of Psychology at the University of Toronto. Professor Vartanian received his PhD in experimental psychology from the University of Maine. He is the Editor of *Psychology of Aesthetics, Creativity, and the Arts* and past Editor of *Empirical Studies of the Arts*. His co-edited volumes include *Neuroaesthetics* (Baywood Publishing Company), *Neuroscience of creativity* (The MIT Press), *Neuroscience of decision making* (Psychology Press), and most recently *The Cambridge handbook of the neuroscience of creativity* (Cambridge University Press). His main areas of interest include the cognitive and neural bases of aesthetics and creativity.

The productive and receptive brain: Insights from neuroscience and beyond

Over the last two decades we have made inroads into understanding how the brain produces creative output in the artistic and scientific domains. Perhaps the most important insight to emerge from this body of work is that large-scale neural systems that underlie associative as well as controlled modes of thinking play key roles in creativity. Specifically, in accordance with classical models, it appears that neural systems that underlie the generation of variation in thought predominate in the early phases of creative thinking, whereas those that underlie the evaluation of that output in the service of response selection predominate in the later phases of creative thinking. Over the same period of time we have also gained traction in understanding how the brain evaluates the output of creative processes. Here, too, it appears that large-scale neural systems interact to attach value to ideas and products in domains as varied as music, architecture, painting, and mathematics, to name a few. In this presentation I will review findings