

Report of 2013 Research Committee on Literature and Neuroscience, June 18, 2013

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The research committee program this year has undertaken the interdisciplinary study of consciousness, the “hard problem” of neuroscience that literature is in a unique position to illuminate. This is the second topic in my three-year agenda, which treats the higher brain functions of memory, consciousness, and creativity from a perspective that encompasses both literature and the latest findings in neuroscience. By the end of this three-year sequence, at least one volume of original essays drawn from these topics will be underway.

The study of consciousness has had a formidable history, from the cognitive revolution of the 1990s to the current day. Leading neuroscientists have called consciousness “the challenge of the century.” The list of books by both neuroscientists and neurophilosophers on the subject is enormous, involving prominent figures such as Jean-Pierre Changeux, Antonio Damasio, Gerald Edelman, Giulio Tononi, Francis Crick, Daniel Dennett, Bernard Baars, Paul Churchland, Ned Block, and Jaak Panksepp. Volumes on consciousness and theory continue to appear, with Oxford UP and MIT UP especially active in this area. Several scientists, recognizing the limits of lab research, have begun to reach across the disciplinary divide, and it is imperative for humanists to respond in kind, as this committee is doing. Literature provides a gold mine of experiential data that can be used productively by philosophers and neuroscientists who have been immersed for years in this investigation. For instance, there is an ongoing debate over “qualia,” or the subjective qualitative experience of consciousness. Our interdisciplinary research may very well help to approximate that elusive element through humanistic avenues of exploration.

The four sessions I have planned for the ICLA Paris Congress (July 22-23, 2013) demonstrate the span that the inquiry of this committee is taking. In one session, we probe the domain of consciousness from literary, philosophical, and scientific vantage points. In another, we focus on the processing of consciousness, as shown by both neuroscience and literature. A third session concentrates on pathologies of consciousness, and a fourth on consciousness and culture. In all the sessions, connections are drawn between literary findings and leading scientific theory. The participating neuroscientists at the meeting will respond to the literary information. This interchange has the potential to yield original findings and to spur further collaborative research in neuroscience and literature.

These ICLA sessions, with their different emphases --domain, processing, pathology, and culture—move from the neuron to the environment in the analysis of consciousness. The sessions address such questions as: How is consciousness generated? What is the link between subjective conscious experience and measurable neuronal activity? What is the interaction between conscious and nonconscious processing? How can we describe alternative states of consciousness, like pathological ones? How do cultural constructions infiltrate consciousness and become associated with specific brain networks?

The comparatists involved in the sessions are drawing on a wide range of literature for analysis. Portrayals of conscious experience are discussed in writers such as Cervantes, Henry James, Emily Dickinson, Joyce, Woolf, Kafka, Hesse, Faulkner, Lawrence, Camus, Beckett, Nabokov, Conrad, Ian McEwan, Richard Powers, Shiga Naoya, and Miyazawa Kenji. Additional writers will be drawn into this interdisciplinary analysis as we proceed next year to the third topic of this committee: the interdisciplinary study of creativity.

This committee is also dedicated to developing new interdisciplinary methodologies. In the study of consciousness, a range of approaches are being evaluated through our literary studies. We are considering causal mechanistic theory vs. emergent mechanistic theory to help study the complexity of this systems-level functioning of the brain. Internalist approaches and representational theory regarding the individual brain are also being distinguished from extended mind theory, including embodied consciousness and the notion of shared social and public consciousness. In the fashionable field of cognitive literary criticism, having emerged especially from English departments across the U.S., extended mind theory has gained popularity, without real recourse to the scientific study of the brain. As these cognitive critics themselves admit, their brand of study is an extension of poststructuralist and reader-reception theory. In contrast, our forum of comparatists who, like philosophers, are naturally attuned to synthetic analysis, can take up the challenge of assuming a truly scientific approach to interdisciplinary investigation. If a debate arises in the consideration of embodied cognition in this neuroliterary research, it will be based on scientific plausibility.

The research of this committee is, therefore, on the cutting edge of solid interdisciplinary work, opening up new possibilities for the true consilience of science and the humanities.