Title: Schizophrenia in the Flesh

Bio: Sohee Park is a Professor of Psychology at Vanderbilt University. Previously, she was an assistant professor of psychology at Northwestern University.

She was originally trained in cognitive neuroscience and experimental psychopathology at Harvard as a doctoral student. For post-doctoral fellowship, she worked with individuals with schizophrenia at McLean Hospital, a part of Harvard Medical School, and with neurological and psychiatric patients at the University Hospital of Zurich. As reflected in her training, her work lies at the intersection of neuroscience, cognitive psychology and clinical science. The major aims of her research are to elucidate etiology and endophenotypic factors that give rise to schizophrenia and related conditions in order to better understand the nature of the self, how the self is constructed and how it is disrupted in disease. Three representative lines of research from her lab are: Investigations of working memory and internal representation in schizophrenia spectrum conditions; studies of social perception and cognition in psychosis; examinations of the bodily self disturbances in psychiatric disorders.

Abstract : Splitting of the self and bodily self-disturbances, symptom that were central to early conceptualization of schizophrenia, are highly salient and disruptive to individuals with schizophrenia throughout the course of their illness. However, there exists a chasm between the phenomenology that defines one's subjective illness experience, and the current biological understanding of schizophrenia as a brain disorder. We propose to bridge this divide.

An implicit understanding of one's own body as a continuously unified entity across time with fixed boundaries is necessary for establishing a sense of self, and this experienced unity of self and body is indispensable for adaptive interpersonal functioning. Thus, specifying neurocognitive and social mechanisms underlying self-disturbances in schizophrenia has significant practical implications for developing targeted interventions, but progress in this area of research has been limited by the subjective nature of bodily self-experiences, and the scarcity of reliable methodological tools to quantify them.

To help close this gap, we investigate cognitive contributions (e.g., working memory, mental representation, imagery, simulation) to the phenomenology bodily self-experiences to elucidate spatial components of self-disturbances that are closely aligned with anomalous agency, body ownership and embodiment. Results indicate that a unique profile of cognitive deficits and enhancements, when combined with social isolation may contribute to an altered bodily self-boundary, dissociative experiences and abnormal embodiment of emotions. Furthermore, preliminary intervention studies targeting social attention and simulation have yielded promising outcome.

To summarize, mechanistic understanding of the origins and consequences of bodily self-disturbances is beginning to crystallize within the framework of social cognitive neuroscience but much remains unresolved. Leveraging recent advances in neuroscience and technology could lead to a better understanding of the elusive behavioral core of schizophrenia in the flesh.