

## **Parkinsons Congress 2019 : Epileptic discharge and global representation: Impairments in motor plan execution Denis Larrivee - Loyola University Chicago, USA**

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### **Abstract**

Current evidence indicates that several prevalent cognitive diseases affect the phenomenal construct of self, diminishing the capacity to unify brain and bodily operation. For example, disturbances of the self mark the clinical determination for schizophrenia, which are characterized by symptoms of an abnormal sense of the bodily awareness, loss of ego boundary, Current evidence indicates that several prevalent cognitive diseases affect the phenomenal construct of self, diminishing the capacity to unify brain and bodily operation. For example, disturbances of the self mark the clinical determination for schizophrenia, which are characterized by symptoms of an abnormal sense of the bodily awareness, loss of ego boundary, and a confused sense of agency. Similarly, degeneration of the default mode network (DMN) in Alzheimer's Dementia progressively diminishes control of self circuitries regulating regional brain states. By extension, the disruption of global operation seen in epileptic discharges, are likely to affect self representation. Increasing evidence indicates that universal constructs like the self emerge from the activity of global brain states that are mediated via recurrent interactions ordered to self-organization. Fundamentally, these dynamical models of cognition link constitutive operational features to properties of stability, flexibility, and hierarchy, which are required for performance and that, give rise to the construct. Among the key mechanisms likely to be affected are those linking motor planning and execution to self agency. Neural representation of the self appears to be configured by somatotopic input, where bodily mapping generates a three dimensional postural image that is invested with protagonist features. This bodily image undergirds neural self representation and is critical to operationalizing motor events. Several observations indicate that epilepsy may influence this construct since a) epilepsy affects global oscillatory events, b) these appear to be evoked

through the global workspace, a phenomenal feature needed in goal directed action, and c) epilepsy affects the basal ganglia, a central subcortical structure mediating motor actions. Accordingly, this talk will explore current evidence pertaining to how epilepsy influences neural self representation in executing the motor plan. and a confused sense of agency. Similarly, degeneration of the default mode network (DMN) in Alzheimer's Dementia progressively diminishes control of self circuitries regulating regional brain states. By extension, the disruption of global operation seen in epileptic discharges,

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