

Time, Trauma, and the Brain: How Suicide Came to Have no Precipitating Event.
A talk by Stephanie Lloyd

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On February 15th, 2019 the Social Sciences of Health Interventions Research Group (SSHIRG/GRESSIS) hosted a talk by Stephanie Lloyd, an associate professor of anthropology at Université Laval. Lloyd's presentation was titled "Time, Trauma, and the Brain: How Suicide Came to Have no Precipitating Event," and was based on her work at the McGill Group for Suicide Studies (MGSS), where scientific researchers are doing work on this topic. Her primary argument was that environmental epigenetics helps to show that suicide is not caused by an event that takes place directly before the action, but rather may be traced back to a childhood experience of trauma.

The talk began with a brief look at the relationship between early childhood abuse (ECA), post-traumatic stress disorder (PTSD), and environmental epigenetics. Lloyd then traced the history of ECA and PTSD in academic literature and explored how researchers chose to look at and examine these concepts. One key component from this portion of the talk was the shift from the belief that PTSD was a *normal* response to an *abnormal* experience, to the idea that PTSD is an *abnormal* response to a *normal* experience. There was also an expansion of what could be considered PTSD to include childhood abuse as well as other traumas.

The talk then moved on to how suicide is related to environmental epigenetics. Environmental epigenetics is understood as a change in genetics that occurs *after* birth, as opposed to a genetic form you are born with. Lloyd explained that this change may take place when an individual experiences a traumatic event as a child that is so damaging that it leaves an imprint on their DNA. Research into environmental epigenetics contends that suicide no longer has a precipitating event by arguing that trauma causes a stress-diathesis that sets individuals on a path that leads towards suicide as an un-climatic end. A person, therefore, has a biologically embedded time, and early childhood experience has a key role in a person's life trajectory. However, Lloyd pointed out that certain types of suicide are not consistent with this model, such as suicide of resolve, suicide of protest, or suicide as a way of being. An example of suicides that may not fit within the model is suicide epidemics seen in some indigenous communities. Researchers do recognize that they are dealing with a specific subset of suicide victims, although their model was initially argued to be universal.

During the question-and-answer period of the presentation, questions focused on what constituted abuse, what assumptions researchers make, the idea of resilience, and the deterministic nature of epigenetics. In response to these questions, Lloyd discussed how researchers categorize abuse using a scale. However, this scale is far from perfect, because it fails to differentiate between important factors, such as *who* abused the child, and assumes that trauma occurred early in life. Lloyd added that childhood abuse is thought to cause a rise in methylene in the brain, but it is not possible to track this throughout an individual's lifetime, meaning that the information available is limited, and contextual information is often provided by family members after death. Additionally, the brains that are studied are from people who have committed suicide, so the brains of people who have suffered ECA but do not commit suicide are not tested. While resilience was a not major topic in her talk, Lloyd discussed how it does fit into this theory, as it is possible that people who had good experiences as children are

more resilient, more capable of handling trauma throughout their lifetime, and less likely to commit suicide. In regard to the deterministic nature of epigenetics, Lloyd suggested that environmental epigenetics is no more or less deterministic than other genetic research. Lloyd also spoke briefly to the potential for intergenerational or transgenerational trauma, though her interests have not taken her in that direction as of yet.

If you are interested in the themes from this talk, Stephanie Lloyd recommends *From Social Structure to Gene Regulation, and Back: A Critical Introduction to Environmental Epigenetics for Sociology* by Landecker and Panofsky. People interested in learning about anthropological or STS perspectives on PTSD, and changing perspectives on trauma may also want to take a look at *Our Traumatic Neurosis and its Brain* by Allen Young.