



## Healing From Trauma: Art And The Brain

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Trauma: our reality is tainted, our trust is shattered, and our emotions are unpredictable.

The greater the trauma, the more impact on the neurological function of the brain. The brain is clever and protects itself from overload by cutting off parts of the brain. Thus the imprints of the trauma are organized as fragments, sensory and emotional traces that don't make sense.

Yet the mind seeks wholeness, and it lets us know through disturbances and distress that things are not right. Healing from trauma consists of reactivating the brain, reconnecting the disconnected parts, and making the unconscious "conscious." One-way to do that is through the creative process and making art.

Making art seems to reconnect parts of the brain and hence help heal trauma in four ways. First, because trauma seems to have no boundaries, and often times has no physical boundaries, the edges of the paper provide those boundaries and a container for images and emotions that may not be able to be expressed verbally. With trauma the left hemisphere, specialized for perceiving and expressed language, and the Broca's area (within the left hemisphere), which puts feelings into words, are often disconnected from the rest of the brain.

Secondly, the physical act of making marks, especially repetitive movements, activates a part of the brain called the cerebellum vermis, which stimulates affect regulation. This starts the containment of negative emotions in the right limbic area, which is where traumatic memory is stored.

Third, as the image appears, the left hemisphere is activated to assess the complex situation through its ability to process logically, linguistically, and linearly. Through the image, the right hemisphere expresses its internal reality. Yet the distress is externalized without re-experiencing it because the left hemisphere is now on-line, and there are words and a symbolic representation to express feelings.

Fourth, the externalized image of the distress puts the trauma into a context of time and place. The mind discerns that the trauma happened "there and then" and is not happening "here and now". Therefore, "I am safe now," the mind says. This deactivates the amygdala, which is the decoder of sensory input. If the sensory input computes to be unsafe, the amygdala floods the limbic area of the right hemisphere with stress hormones and negative feelings are activated. Making art can reset the amygdala to a here-and-now orientation.

With the reconnection of the disassociated parts of the brain, information processing is returned, the brain is balanced, and distress is relieved. Thus healing can begin, as the mind is able to see the tragic event as a whole, in a new way, and then to make personal meaning out of it. There may be no way to compensate for an atrocity, but there are ways to transcend it. Art is one such way as it bears witness to and processes the horror and helplessness of a traumatic event.