

Theatre

Art speaks where words fail

When Anne Adams chose not to return to her job as a cell biologist after an unexpected career break, and instead decided to become a painter, her husband, Robert, thought she might be having a mid-life crisis. However, as her artistic talent blossomed, she also became less socially inhibited, and started to experience memory lapses, migraines, and aphasia, which led to a diagnosis of primary progressive aphasia. The connections between her artwork and her condition are profound, and raise questions about the relationship between art and the brain; this relationship forms the key theme of *UnRavelled*, a semi-biographical play about Adams written by Jake Broder, and produced in association with the Global Brain Health Institute.

When Adams first started painting in 1986, she produced straightforward representational art, particularly strawberries. However, shortly after deciding to paint full-time, she became obsessed with a single piece of music: Maurice Ravel's *Boléro*, a one-movement orchestral piece which premiered in 1928. This piece of music inspired her first major abstract work, *UnRavelling Boléro*, which represents the structure of the music as a series of patterned shapes. From there, she worked on a series of other abstract paintings, including representations of the mathematical constant pi and a migraine, and she also proposed a solution to her town's traffic problems that was inspired by the structure of the human heart. By a startling coincidence, the artist who inspired her, Ravel, might have had the same form of dementia, and his story is told in *UnRavelled* through the use of scenes from the composer's life and imagined conversations between Adams and Ravel.

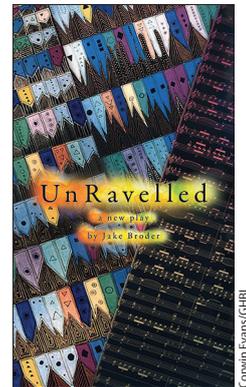
In 2000, Adams was diagnosed with primary progressive aphasia, and in 2002 she was referred to neurologist Bruce Miller (Co-Director of the Global Brain Health Institute), who had noticed a tendency among people with progressive aphasia to develop a passion for creating art. Miller and his colleague William Seeley (both represented in the play by Miller's character) charted the progression of Adams' disease and the transformation in her brain using an earlier MRI scan, taken for an unrelated condition, as a baseline. This old scan showed that she already had subtle signs of degeneration in her frontal cortex in 1994, although these went unnoticed at the time. The dementia caused loss of tissue in the front and left of the brain, reducing her language skills and social inhibitions, but other areas of her brain started working harder, which led to her blossoming talent. The brain scans also revealed that the areas of Adams' brain that integrate sensory information showed increased grey matter volume and hyperperfusion, and Miller suggested that she might have developed new neural connections as her language centres deteriorated.

As her verbal skills declined and her visual processing skills were enhanced, she became more aware of patterns, and understood the world around her in visual terms rather than by explaining it verbally, as she might have done before. This awareness is mirrored in her artwork, which is highly structured and draws attention to the repetitions in the object of her study. This high level of structure is also present in her original inspiration, Ravel's *Boléro*, which consists of the same musical motifs being repeated on different instruments, growing in volume as the piece progresses. By the end of the play, Adams had lost most of her ability to move and speak, but was able to paint an incredibly accurate reconstruction from memory of the hotel window view from a recent holiday.

Adams' condition raises philosophical questions about the nature of art and its connection to the brain, and Broder discusses these points through the portrayal of Miller, who argues that certain patterns and shapes might have a deep primal meaning. In the play, Miller draws an analogy with seagull chicks, who try to feed when they see the pattern of yellow stripes and a red dot usually found on a mother seagull, even when that pattern is painted on stick and presented to them by a scientist. The character argues that, if seagulls went to art galleries and saw this same pattern, they would feel moved by a feeling of maternal love. Perhaps, then, art can be considered a language of symbols and patterns that most of us do not fully use, which enables us to express ideas that seem subtle and transcendent to most of us because it is not our native tongue. One might even speculate that Adams became obsessed with Ravel's *Boléro* because she recognised something in the music that resonated with the way in which her own brain was changing.

However, it is all too easy to focus on the positive aspects of Adam's transformation and lose sight of the real suffering at its heart: she was losing her ability to function and express herself verbally. As her disease progressed, her husband increasingly came to doubt whether the woman he once knew still existed in the body of his wife. However, despite her inability to communicate verbally, she managed to show her husband that she was still there and that she loved him through an abstract gesture: rolling her wheelchair over dry leaves from the tree under which they were married. Perhaps, in the end, that act reveals more about the nature of artistic expression than any other aspect of her life: art serves to communicate the things that we need to say but cannot express through more conventional means.

Robert Stirrups



Carwin Evans/GBHI

UnRavelled

Directed by Nike Doukas
2021, Online performance,
Feb 25, 2021, and March 3, 2021

For more on **UnRavelled** see
<https://www.gbhi.org/unravelled>

For more on the **Global Brain Health Institute** see
<https://www.gbhi.org/>

For more on **UnRavelling Boléro** see <https://www.newscientist.com/article/dn13599-bolero-beautiful-symptom-of-a-terrible-disease/>

For more on **Ravel's diagnosis** see *Eur J Neurol* 2002; **9**: 75-82

For more on **Miller's interpretation of Boléro** see *Brain* 2008; **131**: 39-49