

The Art of Parkinson's

*Not the tremors themselves
but what the tremors portend:
craters swallowing the city,
the mine collapsing,
the cliff-face toppling into the sea.
Also some fault in the self
that will go on opening
for as long as we live
and cannot be repaired.*

'Tremors' - Frank Ormsby¹

Frank Ormsby is a poet living with Parkinson's Disease. Since his diagnosis, his poetry and his disease have become intertwined, with the symptoms and side effects providing a focus for his work. This synergistic relationship between art and Parkinson's is far from rare, and the links between the two are complex. The condition can both limit and enhance artistic expression; and producing art despite motor symptoms can be both challenging and remedial.

Parkinson's is a disease often described solely in terms of loss and deficit. The loss of dopaminergic neurons in the substantia nigra. The loss of free-flowing movement. The loss of independence. It is seldom asked what is to be gained following a diagnosis of this chronic neurodegenerative condition, but art may hold the answer to this question - can the spark of creativity thaw those frozen by symptoms of Parkinson's?

Art as a symptom

Whilst patients with Parkinson's may feel increasingly physically restricted by the limiting motor effects of the disease, they may experience an unexpected freedom in their imagination and creativity.

Conditions of neurological damage, whilst negatively affecting cognitive abilities, may paradoxically augment artistic abilities. Such an effect has been previously described in epilepsy, autism, stroke, and various dementia syndromes^{2,3}. Despite the effect of Parkinson's disease on fine motor skills, patients

may retain artistic abilities well into the course of their disease. It is noted that artists with Parkinson's continue to produce art, even with tremor affecting their dominant hand⁴. In a case report by Chatterjee *et al.*, a patient with Parkinson's described a rare element of control over his movements when painting, frustratingly absent in other contexts of daily tasks⁵. This was accompanied by an intense sense of urgency to express himself artistically, which was absent before living with Parkinson's disease. Such urgency is also described by artist Tsipi Shaish, who is noted as saying "I go to the canvas because I feel curious, I feel an uncontrollable urge" ⁶.

It has been postulated that this surge of creativity may be iatrogenic, as a result of dopaminergic medication⁷. Indeed, an increased rate of artistic output is seen in both established artists, and *de novo* artists (i.e. someone that begins to produce art after disease onset) treated with dopaminergic medication.

It is believed by some that this creative surge with dopaminergic medication is associated with an increase in other behaviours relating to impulse control, such as excessive gambling and shopping⁷, but such an association has not been shown unanimously in prior literature⁸. A study by Inzelberg *et al.*⁹ is supportive of the suggestion that a creative surge results from dopaminergic medication, with higher scores in creativity tests seen in individuals on the highest amounts of dopaminergic medication. However, this study refutes the idea that a creative surge is a manifestation of poor impulse control.

Rather than increased creativity resulting from medication alone, it has been suggested that the disease process and subsequent treatment act in synergy, with medication enhancing creativity in the presence of background neurological damage. In the context of this damage, there may be a propensity for creative expression that can be unlocked with an added surge of dopamine. Inzelberg suggests that increased creativity would not be seen in neurologically typical individuals treated with the same medication⁹. The neurological damage of disease progression is described by Frank Ormsby in his poetry in terms of a fault in a cliff face. Following on from the findings of Inzelberg's study, this fault could be considered less of a chasm, and more a doorway to artistic expression.

In contrast to this increased creativity and imagination described by some artists with Parkinson's disease, it has also been described that the early stages of the disease may limit visual creativity. A case is described of an artist in whom the first symptom of Parkinson's was a change in artistic style

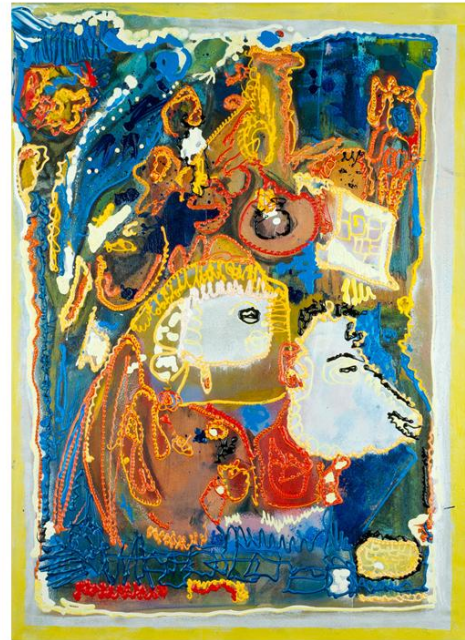


Fig. 1: Strange Brilliance - Tsipi Shaish⁶

from abstract to realism¹⁰ (Fig 2). Parkinson's disease is typically characterised by a reduction in qualities essential to creativity, such as conceptualisation and visuospatial abilities¹¹, which may explain the shift in artistic style to one requiring less abstract thought. This also supports the role of medication in the generation of a creative surge, rather than the disease itself. With the underlying pathophysiology occurring in the absence of medication, the artist felt his imagination and creativity were both diminished.



Paintings of an artist with Parkinson's disease, showing a change in artistic style, from Shimura *et al.*¹⁰

Art as a therapy

Art media can be used as a means of expression and communication in a form of psychotherapy, known as art therapy¹². This may be used therapeutically in the management of Parkinson's Disease,

providing both physical and emotional benefits to patients¹³, resulting in restoration of functional independence and improving overall quality of life.

The troubling motor symptoms of Parkinson's may be alleviated by art therapy. Specifically, the use of physical artistic media such as clay may allow for more fluid movements of the hands, temporarily easing the symptoms of tremor and rigidity¹⁴. Specifically, a woman with Parkinson's disease described a feeling of relaxation and reduced tension in her hands whilst experiencing clay therapy¹³. Music is another form of art therapy with additional specific benefits in treating motor symptoms. In addition to improving patients' psychological wellbeing, the nature of rhythm may enhance the connections between auditory and motor systems¹⁵. This may ameliorate Parkinson's motor symptoms by increasing stride length and speed of walking¹⁶, renewing individuals with an ability to move. Auditory cues may be additionally helpful in the process of initiating movements, known to be of difficulty for people with Parkinson's¹⁵.

The emotional benefits of art are also apparent. Art therapy provides an outlet to aid emotional expression, both through the production of art, and through creative discussions with art therapists¹³. In addition to easing somatic symptoms, the use of clay in art therapy was also found to ease emotional distress in individuals¹⁷. Clay therapy in particular may placate troubling mental symptoms of depressive thoughts and anxiety¹⁴, which are unfortunately common in those with Parkinson's disease¹⁵.

Living with Parkinson's disease, as with other chronic neurodegenerative conditions, can be associated with loneliness and social isolation¹³. Owing to a combination of physical disability, limited communication and emotional distress, it can be difficult for individuals to maintain their levels of social interaction¹⁸. The presence of an art therapist, or other individuals with Parkinson's in a group setting, is a simple measure to encourage social interaction. In addition, art therapy may specifically help communication difficulties through providing a space in which individuals may speak in a calmer environment, or simply use their art as a means of non-verbal communication. This may ease speech difficulties caused by the symptoms of diminished volume and altered speech pattern¹⁷.

Conclusion

It is clear that art can bring a great deal of happiness to people living with Parkinson's disease. Regardless of the underlying mechanism of increased creativity in Parkinson's disease, whether it is a symptom of disease or medication, the blossoming of artistic expression can be one of the few gifts given by disease. Similarly, the impact of art in improving quality of life through therapy cannot be underestimated, and this should remain a focus for all those involved in the care of people living with Parkinson's.

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