

Poetry as a Mathematical Language

Infinity or Sublime? By Eve-Marie Marceau

How can words be transferred in a mathematical language as to construct a model for evoking the sublime in a poem?

Introduction

Marie Uguay, a modern French-Canadian poet suggested that fragmented language could open on an “[infinity of discoveries]”. The focus of this research is the interpretative process of poetry, aiming to explore the limits of modelling and how part of the qualitative experience remains irreducible.

« tout repose dans le plein songe après démarcations des paysages nous allons aux solitudes quotidiennes de nos proches départs intérieurs »

(Marie Uguay)

Marie Uguay uses the word « [splendor] » to describe astonishing beauty



Method

The research is conducted in an interdisciplinary space as part of the **Building 21 BLUE fellowship**. In collaboration with a PhD colleague in **mathematical logic**. Through a **creative process** involving many discussions and readings, we explored concepts such as Category theory, Graph theory and pathfinding, quasi-isometry and essential singularity in intersection with various linguistic theories.



The Great Day of His Wrath, John Martin, 1851-3.

“whatever is in any sort **terrible** [...] is a source of the *sublime*”

(Edmund Burke)

TRANSFORMATION



By Jurik Peter (Shutterstock).

“language is **always changing**. And I think it’s the poets, the writers, and even the youth — they’re using language to cast **new meaning**”

(Ocean Vuong)

Here’s more of it



Mathematic or poetry?

1. “[tends towards a total **paraphrasability**]” (Jacques Roubaud)
2. **needs constraints** (Cédric Villani)
3. “**produces images in the mind**” (Jacques Roubaud)

Why it matters

“the sublime object looks powerful. And we can get a **rewarding sense of that power** despite not having become more practically powerful in any way.” (Tom Cochrane)

“The “**mathematically sublime**” is that which cannot be captured in full in our imagination, but about which we can nonetheless reason, like infinitude itself. The “**dynamically sublime**” is that which looks to have total power over us — like a massive storm or other monstrous aspects of nature [...]. **In each, we feel pleased that our minds can overcome limitations.**”

(Antonia Peacocke)

Results

Sublime is an aesthetic value that goes beyond the notion of beauty as it is reflexive		Sublime as . . .
Sublime is the strongest emotion one can feel		
Sublime is superior to moral values		
Sublime is sublime		
		A qualitative experience of infinity
		An encounter triggering an absolute receptive state
		A singularity point
		Through movement preceding matter
		Highly contextual

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