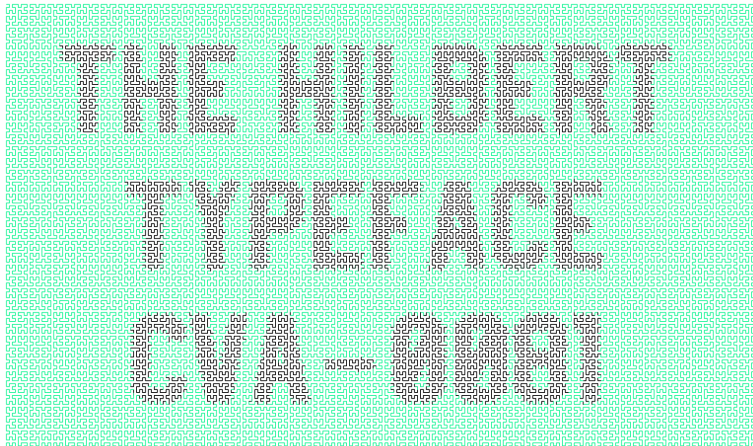


The Hilbert Typeface - Info Doc

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Project Link: <https://natharyan.github.io/Hilbert-Typeface/>



This project started with a fascination - how can I push the boundaries of traditional type design and create something truly unique? My answer came from combining the simplicity of the Agunte typeface and the complexity of the Hilbert's curve.

I got this idea from image rendering done using the Hilbert's curve. The blocky and thick form of the Agunte typeface was a good fit to do rendering on a typeface.

Before rendering, I used the following principles taught in class to re-imagine the Agunte typeface:

1. Kerning: Rendering using the curve makes boundaries merge more with the background, in contrast with sharpness of the original typeface. I experimented with kerning the letters to make sure the rendered did not look too clustered and looked visually cohesive.

2. Weight: I experimented with changing the font weights while building my template font, and the stroke sizes of the curve to create a sense of depth and dimension within each letter.
3. Looking at the variety of font and background color combinations and the effect conveyed by each, I decided to give users the freedom to make their own combinations. Each of these conveying their own effect.

Considering the blocky and captivating nature of the font, I see it being used for the following:

1. For grabbing attention in headlines of posters, websites, or even social media posts.
2. Due to its block and unique, I see the font being used in billboards and t-shirts, especially when paired with contrasting colours.
3. The different combinations of colours give space to a versatile usage of the font. So at most the font is open to experimentation in use.

Here's the math I used for constructing the Hilbert's curve:

1. Start with 4 coordinates $[(0,0),(0,1),(1,0),(1,1)]$ manually added to create the order 1 curve. Will adding these to the canvas, add an offset to ensure margin spacing.

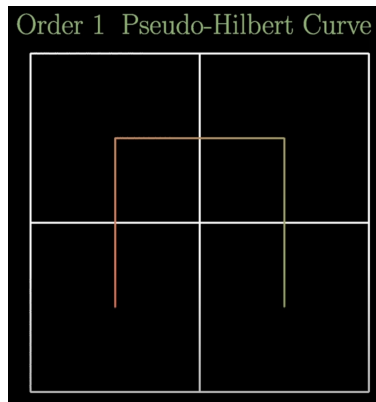


Figure 1: Order 1 Curve

3. The same is for the order 3 curve, I duplicated the order 2 curve in 4 quadrants to get the following vertices.

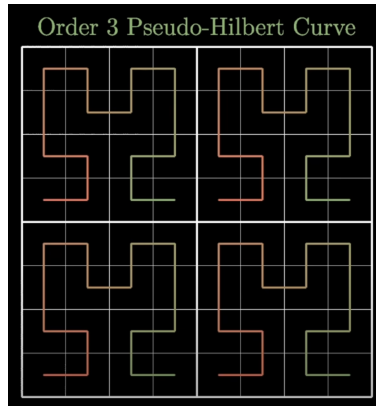


Figure 4: Order 3 Curve

Then again I swapped vertices to make the curve less awkward:

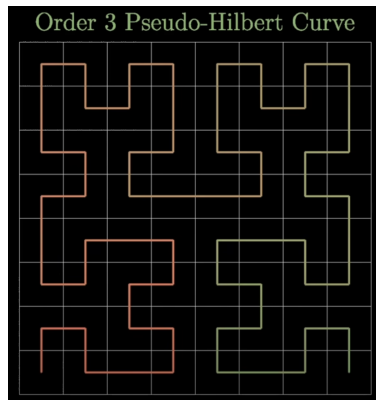


Figure 5: Order 3 Curve

This is done everytime for the next order curve. The order of the curve I have used in my font is 8.