

## **Non objective Exploration**

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### **The Beginning**

Deep rooted in Indian thought is the idea that all forms and names are illusory. The senses announce the existence of a universe through their individual sensations and the mind collectively perceives and interprets. The sensations and the senses do not provide any meaning. They only provide sensory experience. This Knowledge liberates one from the dichotomy of pleasure and pain by dismissing all experiences as illusory. This understanding changed the way I perceived life. From being an Engineer who used Logic and Science to continuously keep solving problems, it let me to simply be and exist gently without the necessity to constantly deal with a purpose. It allowed me to transform into a more natural and eventually artistic existence where expressions happen on their own and with no intended meaning. And while I enjoy the figure and forms, non objectivity gives me the freedom to indulge with the material without any restrictions.

So I approach picture making Independent of a meaning .

### **Initial Explorations (2016-2017)**

Using the elements of point, line, shape, color, and space I compose works that I hope will eventually be visually profound and moving to the viewer.

Using a variety of medium and processes I arrived at various paintings. There was no specific method or idea, it was a more intuitive process, each step leading to the next. I called them Compositions and Improvisations similar to the two acts in music.

Examples of key paintings from this phase

[Non Objective paintings](#)

Paintings with a musical idea or rhythm color overtone etc..

[Rhythm and overtone](#)

At this point I get interested in the idea of using the computer to explore compositions. So I begin to travel in two paths, one in an intuitive manner largely driven by material and the other more programmed and algorithmic using the computer.

One gives me the space for activating and engaging the intellectual left brain which at times can be tiring and time consuming like a construction project. While the other the play with material gives me a very direct intense experience of indulgence, where I don't feel like I am creating anything but experiencing a creation, as if every stroke I make enables me to experience the next iteration of the world that is getting created.

### **Generative Art (2018-)**

The idea naturally evolved to make use of the computer to take care of processes that consumed time if done manually and allowed for explorations of variations. I figured that there

are certain parts of the process that are creative and certain other simple labor. So I am exploring how this can be split between me and the computer. So I create non-trivial steps and make the computer perform these, and then I inspect the results and then further direct it to continue perform further steps.

### **Algorithmic (2018-)**

I approach generative art in a naive manner initially. Just play with the system to create something that is of interest.

#### **Shapes**

Initial attempts included creating shapes with randomly selected points and lines.

Shapes with 4, 5 and 6 vertices. And line width variations

Combined these linear output with a shape

Line as a melody, shapes and color as harmonic and rhythmic accompaniments. Color of melodic lines as timbre, transparency as resonance or reverberation

#### **Random Walk**

I began with a modified version of the random walk algorithm. A random walk begins at a point in space, and the next step is determined through random selection of the 360 degrees that are possible around that point. A straightforward algorithm resulted in non interesting neutral pattern. So I modified the algorithm to travel longer distances on the vertical axis and less on the horizontal axis, this results in a painting made of 'strokes' in the vertical direction. I refined the algorithm to use Perlin Noise algorithm to create a random step that looks more natural and not totally chaotic.

I introduce color. Each "Stroke" is made up of several thousand "steps" of the random walk. for instance a single top down stroke could be made of 30,000 small "stippling" steps. And at end of such a stroke I make the computer change some aspect of the color such as Hue, value or saturation.

I introduce color palette. Instead of working out of a palette with all colors, I allow for specifying a palette and also a color hierarchy.

My idea is to make use of principles of art and parametrize them. In this, among other things I am influenced by Christopher Alexander's idea of 'color and inner light'. (The Nature of Forms Book IV)

I began with a trivial implementation and have been improving with more flexibility. Also I explore modifying the directions of the walk such as a circular radial composition. Here the algorithm is restricted by the length it can travel from a central point, so it walks radially with varying distances.

Examples of the progression of works and algorithms in the form of code listing

[Generative Art](#)

### **Algebraic (2019-)**

Instead of coding the algorithms and make explicit steps using code for the various steps of the process, a more mature approach is to work towards specification of an algebra of

shapes and colors and arrive at a systematic specification of a 'class of paintings', much like we define an algebra in mathematics. Such an algebra would result in a series of works with certain characteristics. And the computer would then work based on this algebra. And the algorithm itself will be more of a generic blackbox. Shape Grammars have existed for long time (Stiny and Gips, '71), but only the advent of fast hardware is now making it possible for real time use. Also it had been approached academically so far rather than artistically. I wish to make some progress there.

## **Approach**

The overall approach to creating the paintings can be divided into the following two

### **1. Formal paintings**

Using the elements point, line, shape, color, and space explore each element as a formal element and variations and possibilities and combine them into a composition.

Essentially you pick an element, say the Point. And see what we can do with it. We can place it in space, we can add more points, we can vary its size, its color can arrange to form a rhythm and so on. Similarly we can take a line play with it by varying its width, color, make it dotted, dashed, etc form shapes using it, arrange them in many ways and so on.

### **2. Visual Idea**

Now we come to the 'idea' or inspiration for creating these works.

Once the mechanism for specifying an algebra and ability to make a computer generate work from this algebra is stabilized, I want to seed each Algebra using 'Visual ideas'.

Hans Hoffman says a musical idea should be expressed through music, a literary idea through literature and a visual/painterly idea through painting. My takeaway on this is, a visual idea is an idea that is best expressed visually.

A particular curve which has a certain movement is a visual idea. The way two shapes connect is a visual idea. Two colors merging is a visual idea. A spiral is a visual idea. These are purely abstract visual ideas.

Visual ideas can also be extracted from what we observe. Transparency, Translucency, refraction etc are visual ideas that occur in nature.

For instance a halo on a misty day around a light source is a visual idea, we can express it with words but best experienced visually. So I want to collect visual ideas, and create algebras out of them that will result in an expression of a more abstract form of this idea.

