

**Alejandro Lopez Rincon**

**Unity (Artworks, Live Performance)**



**Topic: Artwork, Paintings, Performance to show feelings.**

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**Main References:**

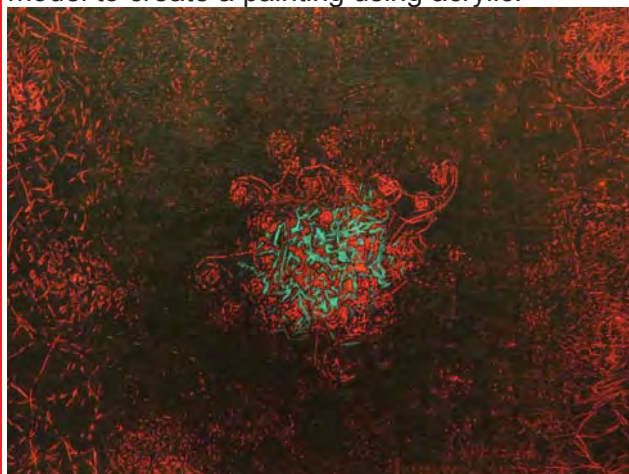
[1] Lopez Alejandro, "Le hasard a l'oeuvre (the random in the artwork)", Generative Art 2013.

**Abstract:**

Is there a way we can show feelings? This is the idea we worked in several artworks and presentations including [1]. The idea is simple: show emotions using the tools made available by art techniques and technology.

In order to show feelings, we decide to measure the electrophysiological signal of the heart, and by the fast Fourier transform, get the coefficients from the different frequencies and introduced them into the spiral model. Following this procedure we are able to generate a sequence of images in real time that depend on the activity of the heart.

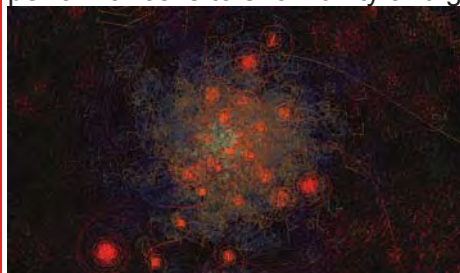
We choose the heart because the symbolism it has in culture and society in connection with emotions. Although this symbolism is due to the changes in heart rate produced by the emotional state in a person. For example in the following artwork, we created a series of images by the phrase "I love you" said by a person in love to the responsible of his affection. Then, one of these images was used as a model to create a painting using acrylic.



*Figure 1. The phrase "I love you" as a painting created using our system.*

The circuit used to generate the images is an electrocardiogram. This device measures in a closed circuit the electrical activity of the heart. The mentioned circuit consists of two measuring electrodes (one in the right arm, one in the left arm) and a reference electrode. This is the standard electrocardiogram.

In the circuit we introduce a second person, although the measured signal has no value for medical analysis, it shows the unity of the two people. Therefore, changes the resulting images and can be done with several people. The procedure is; the reference electrode is given to the new person, and then the individual touches the hand of the person with the measuring electrodes. This puts into an electrical closed circuit both people and the signal reflects the result. The idea of this performance is to show unity and giving it a visual result.



*Figure 2. Image generated by the interaction of 5 people in a closed circuit.*

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**Keywords:**

Interaction, feelings, electrocardiogram, spiral model, fractals