

**Theme:** Sustainability Action

**Title:** Leaf Exploration: Visual Element of Leaves Through Natural Resources; Khao Nam Khang National Park.

## **Introduction**

Technological advancements apparently affect the relationship between humans and nature that their interaction seems to become more distant. The objective of this research is to create new connections between people and nature to stimulate a wider discussion about forest conservation and sustainability in the contemporary society. The research uses illustrative methods and visual narrative then combining them with illustration and motion graphics to communicate via written story about forests and deforestation. The underpinned illustration structure is derived from experimentation with proportional systems of the Fibonacci sequence and the L-system, alongside with extensive visual analysis of leaves from Khao Nam Khang National Park, Thailand. The study results in a sequence that demonstrates a narrative communication on how nature can evolve and adapt to overcome challenges from human intervention, flood and decay.

Aiming to explore the beauty of nature, the research has applied visual elements from “Leaf” together with fundamental of L-system and Fibonacci theory. Although “Leaf” is only a small element, it can represent trees in the forest. It also demonstrates a small universe about life and beauty. Furthermore, leaf is able to tell us about climate change, seasons and ecology. In other words, visual elements, occurred in leaves, are able to tell us about life nourishing and growing. The purpose of this creative research is to collect data from leaf which composes of visual elements such as shape, form, color and vein’s pattern to decode and use in visual communication design system. It was found out that all elements showed on leaf can be developed and applied in many design fields.

## **Principles and Concept**

The concept is exploring a new and compelling way to create a visual narrative about forests and deforestation. Also to convey the story about how climate change effect human life by using Fibonacci sequence and L-system to apply in the artwork. By dividing in 3 parts: Human and nature, Climate change, Back to the nature.

## **Process and Methodology**

1. Research Area: “Khao Nam Khang National Park”
2. Collecting Data: Leaves
3. Visual Elements: Decode from leaves
4. Theory and Principle: Applies Fibonacci theory and L-system into artworks.
5. Illustration: Narrate the story about relationship between human and nature.
6. Awareness: Build up the awareness to the society.

## **Tools and Techniques**

1. Hand Drawing on paper (4.7 x 1 Meter)
2. Motion Graphics
3. AR (Augment Reality)

## **Results and discussion**

The illustration is intended to create a conversation, discussion and critical analysis about forest sustainability and its connection to climate change. It represents the power of nature and asks why climate change and deforestation issues have become so important in contemporary society. In the artwork, we used a Fibonacci sequence in conjunction with L-systems to generate grid and story lines which allow the audience to follow the story visually. We used biomimicry of leaf veins to produce a map and landscape that lead viewers to all parts of the illustration.

## **Reference**

- Andrew Hall, *Illustration*. London: Laurence King, 2011
- Connie Malamed. *Visual Language for Designers: Principles for Creating Graphics that People Understand*. USA: Rocket Publishers, 2011.
- Fractal Foundation (n.d.). Lindenmayers Systems (L-systems). Accessed July 4, 2019 <https://fractalfoundation.org/OFC/OFC-2-4.html>
- Fractal Foundation (n.d.). Fibonacci Fractals. Accessed July 4, 2019 <http://fractalfoundation.org/OFC/OFC-11-2.html>