THE ANALEMMA – Infinity Symbol or Lemniscate

The Analemma - as the figure-of-eight or infinity form on our website is known - is a form *invisible to the human eye,* whilst being a 'real' form revealing the path of the Sun through the year, accessible from earth with special instruments or expanded senses.

The image of the analemma echoes several core processes in the 7000 HUMANS.

Firstly, 7000 HUMANS has 4 phases. The journey we embark on through the 4 Phases of the 7000 Humans, is similar to the working with the phases and seasons in the everyday world. After sowing and working, we harvest and reap new seeds and knowledge.



The original image [below] was produced by the astronomer and Maciej Zapiór and his colleague, Łukasz Fajfrowski.



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See this image and more of their analemma images on www.analemma.pl

Read Maciej Zapiór text below for more on the ANALEMMA

ABOUT THE ANALEMMA

Analemma in Solargraphy / Text by Maciej Zapiór, January 2022

"The solargraphy technique requires a specific human quality: patience. However, the attempt to capture the analemma requires more than this. It requires the knowledge necessary for its capture and registration. It requires thinking through the entire project deeply and considering its various aspects: the direction of the field-of-view of the camera, exposure period, exposure time, how to solve the problem of accurate timing, power supply, etc. If all this goes to plan 365 times, then success is possible. The analemma captured by solargraphy is unique: it is recorded on a single frame without overlapping or digital image capture. It is the first ever analemma recorded by an everyday exposure.

The analemma is a record of movement of the celestial spheres inaccessible to human senses. The ability to capture analemma is only possible if the astronomical knowledge required is matched with persistence, consistency, and patience. The analemma becomes visible when one records the position of the Sun in the sky throughout a year, every day and exactly at the same time. It's like going to the gym every day: each day the muscles repeat the same movements, thousands of times, creating the effect. A visible effect. When we see the result, we can imagine the amount of work. As in the paths people tread in the grass. In the hollow on a chopping board. Or in the stone steps of old churches, worn smooth by feet being placed in the same place by different people for centuries. You can compare catching the analemma to such repetitive processes.

The analemma also has aesthetic as well as scientific value. Visually, at first glance, you can see a big figure eight in the sky. The shape of this figure, however, is determined by celestial mechanics. By the laws of physics, which are valid for all objects in the universe. All atoms, molecules, living creatures, planets, stars, and galaxies. To understand the mechanisms that govern the shape of analemma one needs mental effort, which opens further and deeper areas of aesthetics, stored in the structure of the Universe. It's like the pattern formed by glass balls that are scattered randomly. A pattern, which is stable and reproducible, but visible only at certain moments and in certain places only for someone who knows how to look. The atoms which are diffused randomly organize themselves through the laws of physics in an increasingly hierarchic structure. No longer are they single atoms, but stars, planets, people, subject to the eternal laws of motion. Earth, as one of the planets, is on a particular orbit and not another, with a particular period of revolution, orbit ellipticity, inclination of the axis and period of rotation. These periods and shapes affect the shape of the analemma."

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