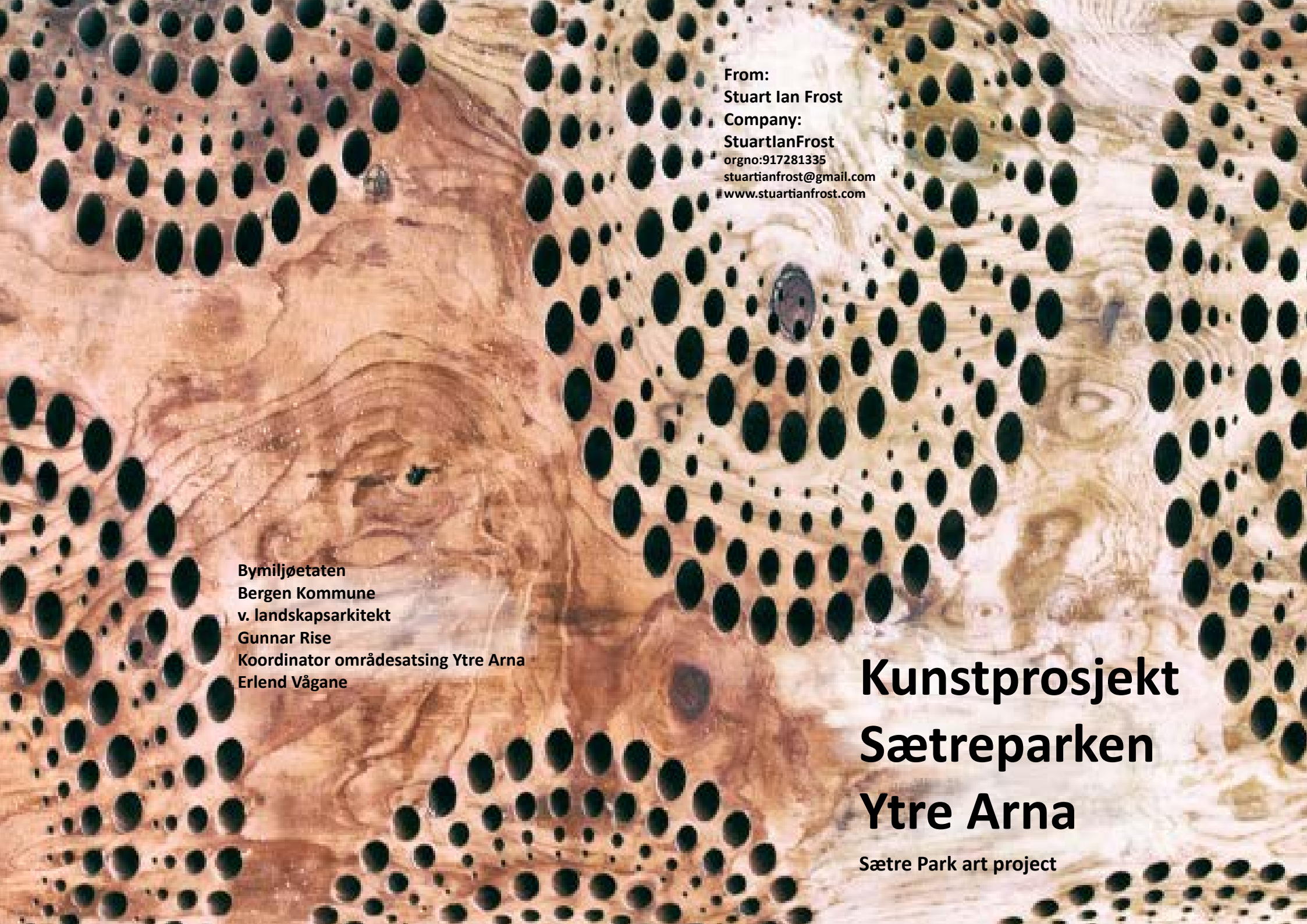


From:
Stuart Ian Frost
Company:
StuartIanFrost
orgno:917281335
stuartianfrost@gmail.com
www.stuartianfrost.com

Bymiljøetaten
Bergen Kommune
v. landskapsarkitekt
Gunnar Rise
Koordinator områdesatsing Ytre Arna
Erlend Vågane

Kunstprosjekt Sætreparken Ytre Arna

Sætre Park art project

Introduction:

In May 2017 I was invited to put forward a proposal for the project at Sætre parken in Ytre Arna. The thought of having the chance to work in Arna struck an immediate interest in me, as I had previously lived for five years in Seimshovden, Indre Arna, in a house that overlooked the fjord to Ytre Arna.
To be able to live a mark in this particular spot in Bergen would be an honour as it was previously when I carried out a site-specific project for Bymuseum in Alvøen. A work that over the years has become a recognised landmark.

Cog in the Wheel

Kunstprosjekt
Sætreparken Ytre Arna
2017

Innholdsliste/List of content:

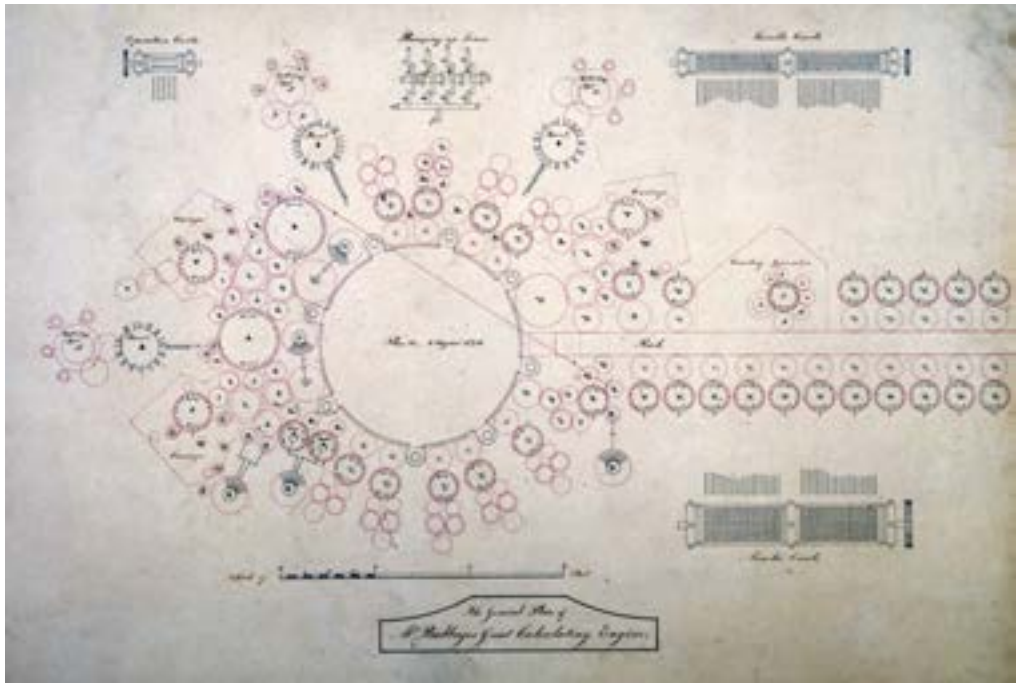
My name is Stuart Ian Frost I am a British Environmental
Artist working in the International arena who has lived and worked in Norway for the past 20 years. Through the whole of my artistic career, I have sought out specific places in various countries including, Italy, France, United States of America, Mexico, Korea, Peru, Taiwan, Philippines, Canada, Denmark, Sweden, Japan, United Kingdom, Portugal, Germany and carried out so-called site-specific projects. More specifically, I have been searching for each chosen places identifiable characteristics/qualities such as history, topography, architecture, culture, and specifically raw material etc. Almost like “searching through ruins”, I look for anything, literally anything that might be of interest. These relationships in differing scales are generally the basis for the development of my artwork. The interest for the landscapes particularities and the natural objects physical characteristic and exclusiveness to one environment – with their associated culture, myths, and history are a general characteristic feature with my production.

II.Concept

Ytre Arna is principally known as a place for industry often associated with A/S Arne Fabrikker, the location for the first mechanised cotton mill in Norway. My idea in relationship to language which has been the overriding focal point, as given by Byetaten Bergen Kommune,
has been inspired through this industries use of symbolic signs that ultimately produced visual patterns. As languages such as Hebrew, Arabic, and Hieroglyphs, developed.
This project is based upon Semiotic representation. The concept behind my proposal titled “Cog in the Wheel” for Sætrepark art project has been inspired by the symbols that created the abstract language of coded holes that could be read and turned into understandable commands that were originally developed for use in the textile industry, as in Ytre Arna.
The factory in Ytre Arna was established in 1846 some ten years after the pioneering work of Charles Baggage, a British mathematician, who in 1837 produced the very first description of a computer, the Analytical engine. The Analytical engine was designed to work by using sets of coded cards.
The idea for Charles Babbage’s machine came from the jacquard loom a machine that used punched hole cards that could read a set of sequential instructions. The Jacquard machine invented by Joseph Marie Jacquard in 1804 is a device fitted to a power loom that simplifies the process of manufacturing textiles with such complex patterns as brocade, damask, and matelassé. A «chain of cards» controlled the loom. These punched cards were laced together into a continuous sequence. Multiple rows of holes were punched out of each card, with one complete card corresponding to one row of the design.

Charles Babbage designed these sets of coded cards together with Ada Lovelace, the daughter of Lord Byron. Lovelace understood that such a machine could not just be programmed by the use of a special melody, but also with the rules for music composition in symbolic representation. With the use of these rules, it is also possible to generate new combinations. Lovelace was the first person that understood the power behind symbolic calculation, making her the world’s first programmer. She published in her notes, «The analytical engine, she said, will weave algebraic patterns like jacquard looms weave flowers and leaves”.

Below is a drawing of: The “General Plan” of the Analytical Engine.



II.Concept

It was not until the 20th century that we began to see scripting and transformation technology in the form of electric bits that could manage to decipher abstract symbols and perform the rules they contained. The condition of a computers bit, on or off, 0 or 1; but the meaning with bits can change dependent upon the type of data structure they are part of. The same bits can be understood as a number, a letter, pixel on a screen, exhibited or abstract symbol. Abstraction is the principle strategy for representation within information science, a practice that underlies all representational media.

Image of the Jacquard machine:

My idea loosely combines the images produced on the punch cards associated with textile production in combination with the drawing and workings of the analytical engine. Through studying the system employed in the production of these punch cards and the workings of the analytical machine, I have developed my own sequential system.

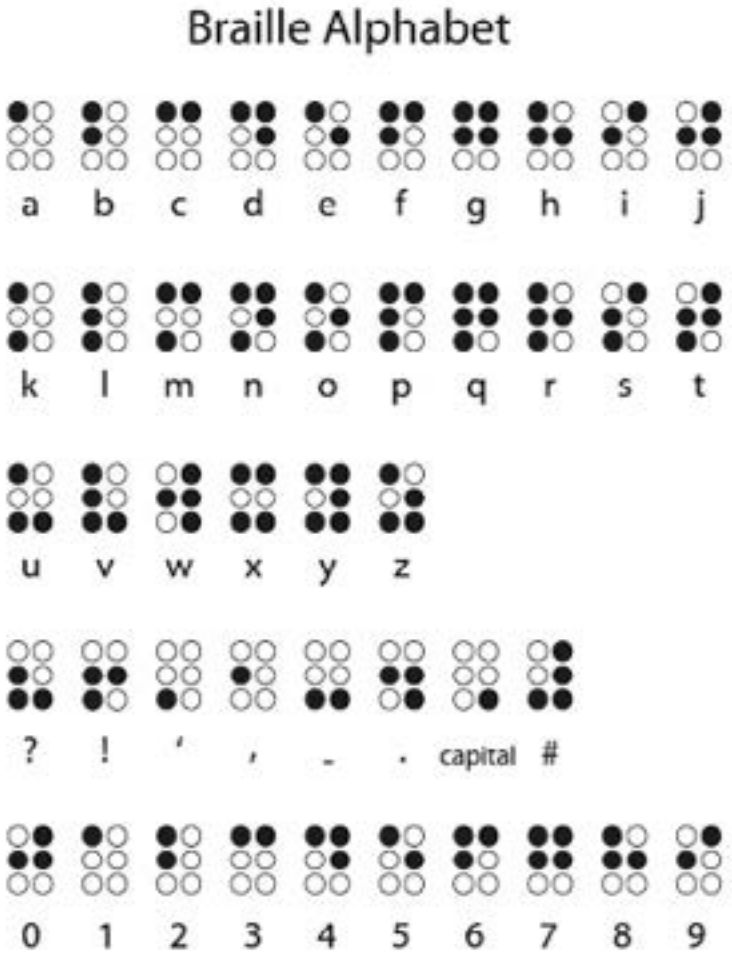
My system uses a sequence of four holes (one for each tree) each hole being half the size/diameter of the previous that radiate out from the central point in a circular pattern. I have chosen the number 16 as it is the smallest number with exactly five divisors, its proper divisors being 1, 2, 4 and 8. The number 16 is the base of the hexadecimal number system, which is used extensively in computer science, as it is easily dividable by four.

The designs that encircle each of the four hemlock trees have been calculated and designed to be read as a series of coded sequential abstract images that could have been used in an early coded driven computer. The sets of abstract dots that make up the four unique designs follow a sequential coding system not unlike those produced to relay information in relationship to early textile production. Each dot being a part of a readable code that equates to either a number or letter that then produces a set of abstract symbols.

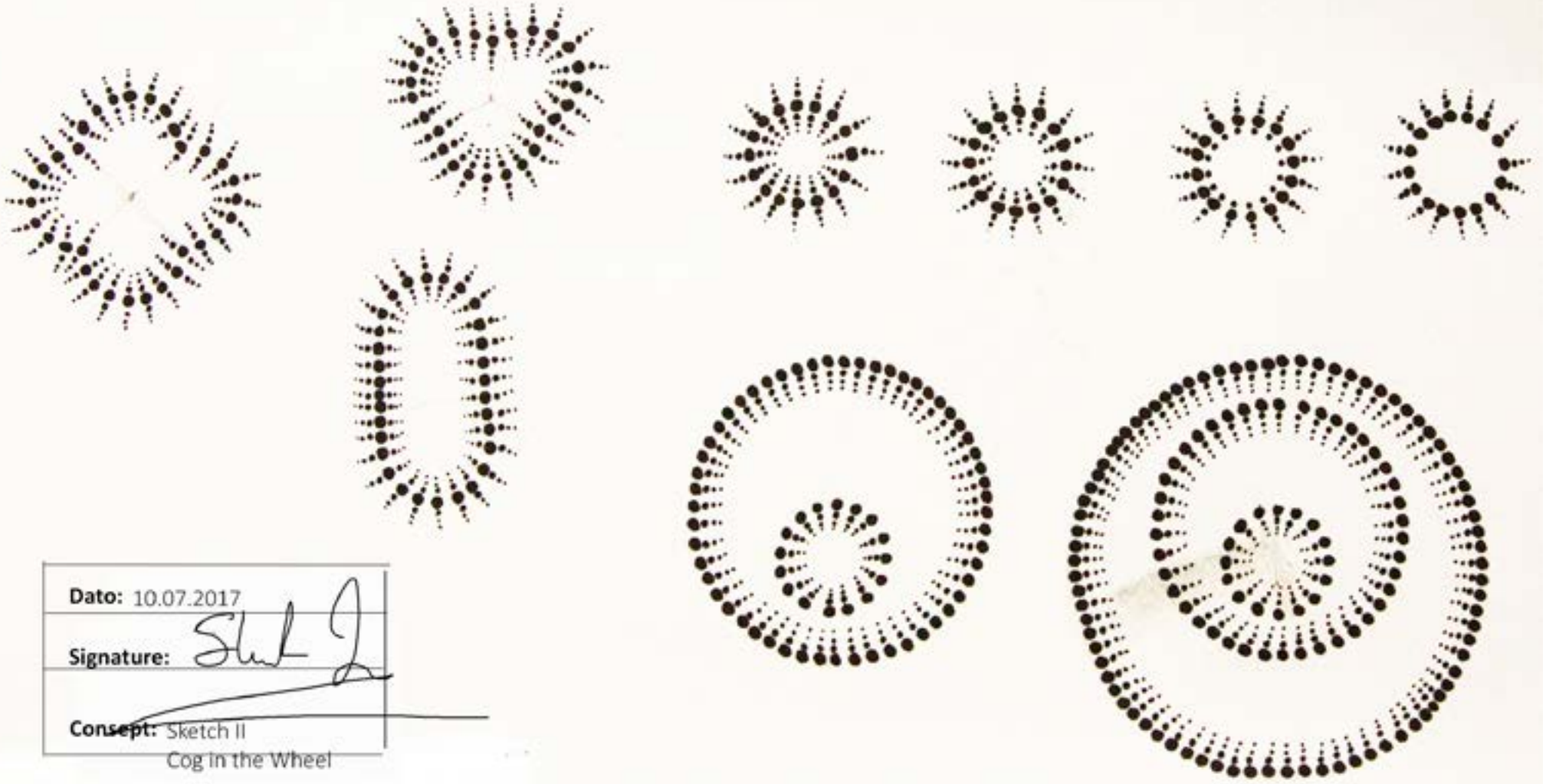
II.Concept

Other relevant forms worth mentioning in this context for communication and inspiration using abstract symbols include Morse code and braille. Morse code is based on a series of sounds that are transcribed. Each symbol represents either a text character (letter or numeral) or a prosign and is represented by a unique sequence of dots and dashes. The duration of a dash is three times the duration of a dot. Braille also uses a particular coded system. The braille code is physically presented as raised dots usually arranged in cells of up to 6 dots and its likeness to other forms of coding cannot be ignored albeit that it uses the sense of touch rather than sight which it was developed to assist/replace.

Morse code:



On the following page are the series of sketches that I developed on paper for my sequential coding for the four Hemlock trees:



Dato: 10.07.2017

Signature:

Consept: Sketch II
Cog in the Wheel

II.Concept

Figure I

Figure II

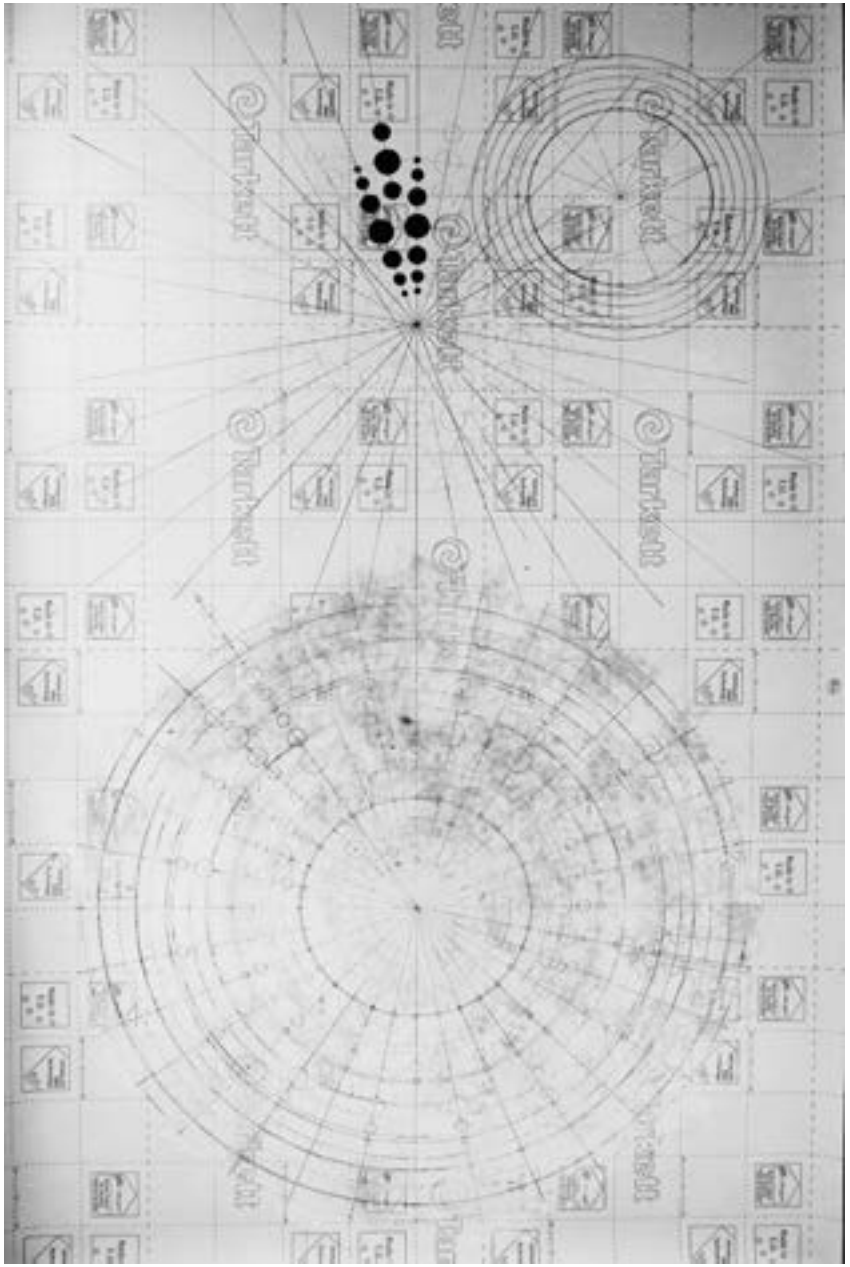
Figure III

Figure IV

IV.Artistic Intervention

IV. Artistic Intervention

Experiments carving in wood: from left to right: willow, beech,ceder, poplar, pine and oak.



Technical drawing for Cog in the Wheel:

V. Technical Implementation


Digital images &Graphic design : Gunhild Lien &Stuart Ian Frost 2017