



Ellen Friis

**SIX SAINTS
2008-2013**

INTRODUCTION

SIX SAINTS 2008-2013 is a series of six performative works inspired by six Danish researchers, scientists and thinkers, who investigated matters of light, energy and time. They are: *Tycho Brahe, Ole Rømer, H.C. Ørsted, Søren Kierkegaard, Niels Bohr and Lene Vestergaard Hau*. They did not all work specifically with time, but rather with concepts of light and energy.

Light and energy are electromagnetic waves with a constant speed of 299 792 458 m/s in a vacuum. This is also the speed of gravity: If the sun were to disappear right this instant, the earth would continue its orbit for 8 minutes (the time it takes light to reach the earth from the sun), before the orbit would be perturbed by the sun's absence.

Nothing can happen faster than light. That is why light, energy and time are closely connected.

The starting point of **SIX SAINTS** series was from the fact, that performance art is a so called time-based art form. Contrary to books, paintings and even films, it is impossible for the audience to relive a live performance. They have to grasp everything immediately, and can only return to it in their memory.

It is impossible to replay a live performance. For this reason, it is always new to the observer. The concept of newness is essential to the performing arts, and more so than to any other art form.

Experiencing something as new means not knowing what it is, which again means taking in one sensation after another. The mind can only focus on one conscious experience at a time. Watching a performance, the audience is presented with sensations in a specific order designated by the artist.

Gradually, the information is pieced together in the mind and memory of the observer. This process of drawing conclusions slowly builds up the performance into an object.

The cognitive process changes the performance from being a time-based order of singular observations into becoming an object; something solid and constant; something that the observer has formed an opinion about and remembers as a unit. This object represents lived time, and is formed out of lived time, but is now in itself a timeless concept.

Perhaps, this cognitive process can be compared to a baby's experience of the world, when it is newly born. Take a table for example: a baby probably experiences legs, surface, smell, colours, in a haphazard fashion. Aided by the memory of it, the mind subsequently combines the various details into an object.

The baby forms a hypotheses about the table, which is tested and confirmed through everyday use; such as crawling around it, placing objects on it or by accident knocking into it. Growing up, people forget the early years, when a table was a confusing blur of individual sensations. Instead, they come to regard it a unity that is given a name: TABLE.

SIX SAINTS 2008-2013 were utilizing performance art to demonstrate simplified models of the processes of cognition. With literature and painting, it is completely possible to return to the original source to confirm one's first impressions. In real life, too.

But in the time-based art forms, this is impossible. The cognitive processes in the performing arts are, more so than in other art forms, divided into seeing versus remembering, and perception versus construction of the experience of the performance.

Furthermore, the six works claim precisely that for human beings, depending on their individual history and culture, time is being accumulated as matter.

The works represent six different methods of transforming lived time into space. Each of the methods applied in the **SIX SAINTS** series is extracted from or inspired by a famous Danish scientist, who in turn represents a historical era, and the relationship between time and space typical of that era.



OLE RØMER

Ole Christensen Rømer (1644-1710) was a Danish astronomer. In 1675, Rømer proved that light does not possess an infinite speed, as hitherto believed. He calculated its finite speed with relative precision. In 1681, Rømer was appointed professor of astronomy at the University of Copenhagen. He was active as an observer, both at the University Observatory in Rundetårn and at home, using instruments that he augmented and constructed himself.

SIX SAINTS: OLE RØMER

In April 2008, I was invited to the Blauverschiebung Festival in Leipzig. The annual festival is organized by the KUB gallery and promotes art and performance in the public space of Leipzig.

”Blauverschiebung”, blue shift, is an astronomical term. The opposite effect is referred to as the red shift. Most celestial objects are red shifted, meaning that they are moving away from Earth. This reveals that the universe is expanding. A blue shift is most commonly caused by a relative motion towards the observer.

When I was a kid, I often speculated about the size of the universe and the absence of its limits and borders. I had a torch and wondered what would happen when I shone it into the dark night sky for seconds or minutes. Would the light proceed out there forever? What if I turned it on and off? Would there be broken pillars of light floating through an empty space? Could I send a Morse code signal to an alien in a million years?

The light of the stars carries an image of what they looked like millions of years ago, when the light was emitted. It takes time for light to carry that information to Earth. Travelling as a wave through space renders the light visible. The time, it takes, provides light with a certain spatial existence. It has extension and visibility, though it never gets as solid and constant as everyday objects moving at a slower speed.

SIX SAINTS: Ole Rømer is an investigation of the spatial qualities of light. Light as having substance, however tiny.

I erected a pillar of light by sending a beam of 8,28 minutes in length into the universe. This duration equals the distance between Earth and the Sun (=one AU; astronomical unit). Somewhere out there, my pillar of light is still flying further away from Earth; a monument in space for Ole Rømer.

In Leipzig, the searchlight was positioned on the top of the Moritz Bastei, an old military fortress. Should I ever present this work in Copenhagen, the perfect location for it would be the roof of Rundetårn, the Round Tower, as this used to be Ole Rømers observatory.

In the summer of 2009, the performance was reconstructed by Henrik Vestergaard Friis with a torch at GlogauAIR in Kreuzberg, Berlin.

Duration: 8,28 minute (= one AU), but the pillar of light is still flying out there, as a 1:1 physical representation of the time, the performance took.


Supported by the Blauverschiebung Festival and GlogauAIR
Images: unknown photographers

SIX SAINTS: Søren Kierkegaard

Amagertorv

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Læderstræde

 = my walk, beginning from Læderstræde



SØREN KIERKEGAARD

Søren Kierkegaard (1813-1855) was a Danish philosopher and an early conceptual artist. Using his own life and body as a starting point, he performed various live investigations into and about reality. He tested different personalities. In many instances, he published his books in the name of a theatrical alter ego, such as "Constantin Constantius" in the book "The Repetition" with the subtitle "A Venture into Experimental Psychology".

Investigating the concept of "Repetition", he decided to visit Berlin twice, where he repeated everything he did the first time in order to understand if a true repetition can exist. Apart from these two journeys to Berlin, he hardly ever left Copenhagen, where he spent all of his life. He spent his days walking and talking in the streets of Copenhagen. His nights were spent at home, writing and thinking.

It is my belief, that his own daily rhythm inspired his famous dictum that "Life must be understood backwards. But (...) it must be lived forwards".

His concept of the repetition was in a sense an artificial solution to the dilemma of either understanding or living life. A repetition is "remembering forwards", he concludes:

"Repetition and recollection are the same movement, except in opposite directions, for what is recollected has been, is repeated backward".

SIX SAINTS: Søren Kierkegaard

May 2008, I was invited to participate in Kitt Johnson's "Mellemrum" Festival in the public space of Copenhagen. A long semi-private passage in the pedestrian area of Copenhagen was my venue. I plotted a Kierkegaard quotation (in Danish) onto the entire length of the passage, so that each word and each pause corresponded to a step:

"Above all, do not lose your desire to walk. Everyday, I walk myself into a state of well-being and walk away from every illness. I have walked myself into my best thoughts, and I know of no thought so burdensome that one cannot walk away from it. But by sitting still, and the more one sits still, the closer one comes to feeling ill. Thus if one just keeps on walking, everything will be all right."

I walked through the passage, mostly backwards, speaking backwards, but in short sections also forwards, speaking forwards, so that the audience would recognize the quotation and grasp a sense of what the text was about. I did not stop at any point. I just kept on walking, and eventually left the passage, still walking backwards.

SIX SAINTS: Søren Kierkegaard is an investigation into the relationship between experiencing and understanding; in particular in the performing arts, that are characterized by the impossibility of a true repetition. While watching a performance, one simply experiences it. Once it is finished, the viewer is able to look back on its entirety and understand the artwork. Differing from books or paintings, which can be experienced again and again, a performance exists mostly in the memory of those, who saw it.

Duration: 16 minute performance. But since the action was connected, meter for meter, to the physical length of the passage, the inherent time of the performance was of a spatial character.

Supported by the Mellemrum Festival

Images: map by Ellen Friis, photo by Per Morten Abrahamsen


Gentagelsen af
Gjentagelsen

Et forsøg i den eksperimenterende Psychologi

af

~~Constantin Constantius~~

Ellen Friis


Kjøbenhavn.
~~1843~~ *2010*

GENTAGELSEN AF GJENTAGELSEN

In 2009, I returned to Copenhagen after having lived for several years in Berlin. Inspired by Søren Kierkegaard, I investigated the concept of repetition by taking the same walk every day in a month and analysing it. The resulting book was called “Gentagelsen af Gjentagelsen”, The Repetition of the Repetition.

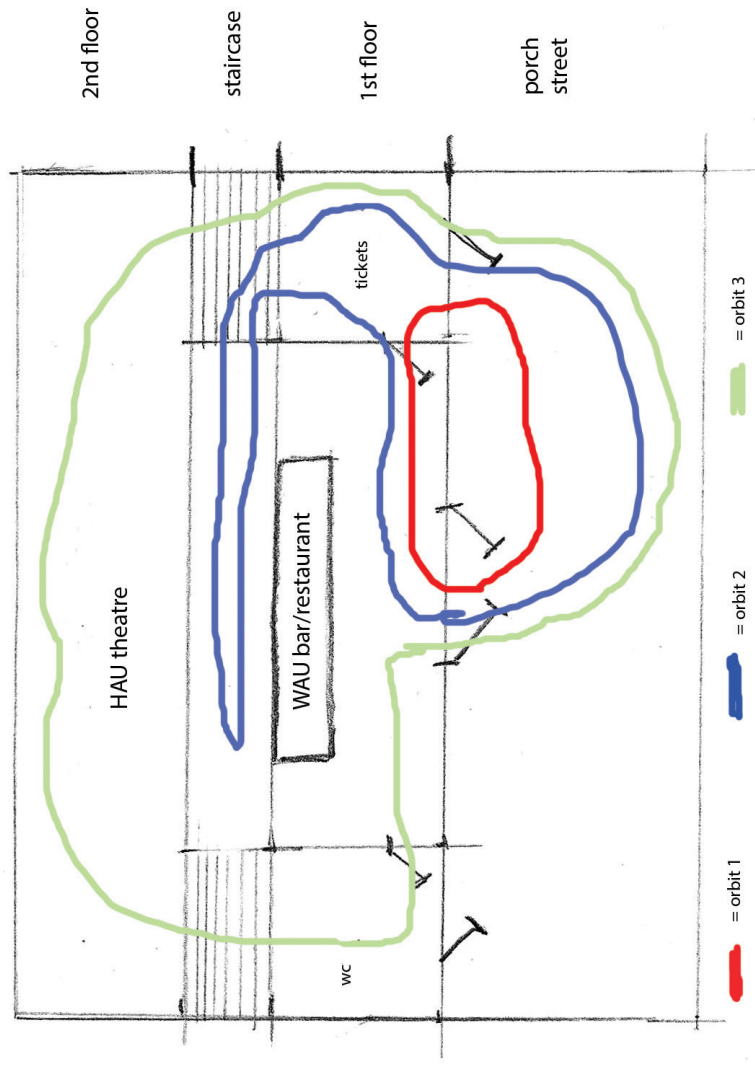
Here, I kept returning to the dilemma of the repetition, without finding a final solution: if you perform a repetition, you know it is a repetition, and then it can not be a repetition, because you did not have that knowledge first time round. But if you can only repeat something unconsciously, you will never know if you succeed.

However, the very first time you perform something, you often do not know, what you did. The act does not become an act until it has been repeated. So the first two times of any action have a special status of establishing and confirming the act as a fact. Only then, perhaps, can it become a real repetition.

Duration: a timeless repetition, which can be read repeatedly

Supported by the Danish Arts Council
Image: book cover design by Ellen Friis

Six Saints: Niels Bohr



NIELS BOHR

Niels Bohr (1885-1962) was a Danish physicist who made fundamental contributions to understanding atomic structure and quantum theory. He developed the Copenhagen Interpretation of quantum mechanics, which also embraces Werner Heisenberg's uncertainty principle:

The position of an electron within an atom cannot be pinpointed by an observer; only its sphere of probability; its orbit. The electron jumps from a smaller orbit to a greater one, or the other way round, dependent on whether it receives energy or gives off energy.

Actually observing the electron is only possible if you stop it. But that would interrupt the attempt at a neutral observation. Were the electron a performance artist, it would be theoretically performing in all possible spaces at the same time, because checking on the exact position would stop, and so ruin, the performance.



Duration: durational and multi-spatial performance in 3 orbits.

Supported by the Diskurs Festival and the Nordwind Festival
Images: drawing by Ellen Friis, photos by Christopher Hewitt.

SIX SAINTS: NIELS BOHR

October 2009, I was invited to perform at two festivals; Nordwind Festival at the HAU theatre in Berlin, and the Diskurs Festival in Giessen, Germany. I chose Niels Bohr for his collaboration with the German Werner Heisenberg, that made him more likely to be known in Germany than other scientists in the SIX SAINTS series.

In my SIX SAINTS: NIELS BOHR, I played with the idea that I could hypothetically be in more than one place at the same time. I wanted to create something ongoing and entertaining; a game with the audience.

Most festivals have a bar or a café, a place where people hang out while waiting for the next performance. The bar and restaurant in the HAU theatre is called WAU. Translating Niels Bohr's model of the atom to the venue, the bar was the natural centre.

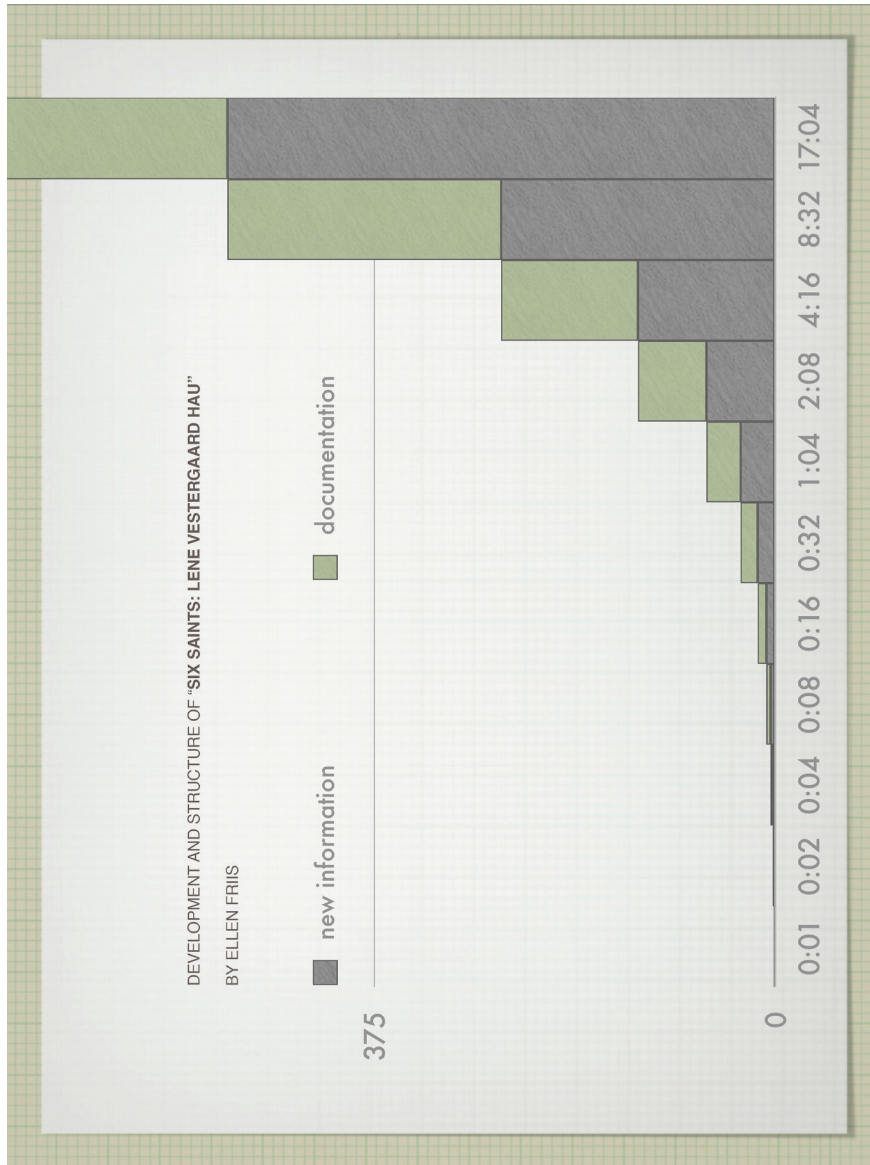
With three differently coloured chalks, I marked three orbits around the bar; a small one, a greater one, and one that took me up and all around the HAU theatre.

I took the role of the atom and circled the bar in a silver-coloured costume carrying a tray. On the tray were ten little glasses of schnapps. On my back I had a sign saying, "Ask me what I am doing". When I was stopped, I explained to the listeners – who had already had a glass of wine or two on their own, I guess – all about Niels Bohr, the Copenhagen Interpretation and the uncertainty principle of quantum physics.

I explained to them how they "ruined" my performance by stopping me in my orbit. Then I offered them a glass of schnapps, or asked them for a contribution, depending on whether I was in a greater or smaller orbit and needed to either give or take energy to jump into another orbit.

After 3 hours, the festival was ending, and my original ten glasses of schnapps had all been exchanged into sweets, packs of condoms, pieces of bread, little notes and other things.





Stopping time

The acts of “new information” with the time, it took to perform each act:

- 0:01 getting off a bike
- 0:02 holding a cigar
- 0:04 filling the cigar with toothpaste
- 0:08 taking my temperature
- 0:16 presenting sugar cubes in a box
- 0:32 recording light from a lamp
- 0:64 writing A=U-TS on a whiteboard.

The Helmholtz function:

A = Arbeit/ work; useful information obtained from the lecture

U = potentiality of the idea

T = Temperature/ stamina and health of the artist

S = entropy

2:08 spilling sugar cubes, trying to get them back in the box

4:16 Singing “De små synger”

8:32 Handing out graph describing the structure of the performance

17:04 ... and so on

LENE VESTERGAARD HAU

Lene Vestergaard Hau (1959-) is a Danish physicist. In 1999, she led a Harvard University team that succeeded in slowing a beam of light to about 17 metres per second, and, in 2001, was able to stop a beam completely.

The secret behind this feat was a Bose-Einstein condensate; a cloud of atoms frozen to almost absolute zero of minus 273 degrees Celsius. At this temperature all movement stops, which is why the atoms can be rearranged manually in a tight pattern, like sugar cubes in a box, that light cannot pass.

SIX SAINTS: LENE VESTERGAARD HAU

I was invited to present a work at the ACTS festival at the Museum of Contemporary Art, Roskilde. I wanted to create a performance installation. With Lene Vestergaard Hau and the Bose-Einstein condensate as the starting point, I asked myself, what condensate could stop progress and development of a live performance.

I decided that "documentation" could be such a condensate. The modern urge to document and broadcast everything one does in social media seems to interfere with the simple ability to exist in the now. Hence the ever-growing extent of surveillance and documentation of people's worlds which have been created through such technological possibilities as social media.

The structure of the performance consisted in a number of live actions. But for each new action, I documented everything, including the documentation of the documentation that had happened during the performance. This meant that the intervals between each new live proceeding action, grew and grew exponentially, driving the performance towards a point where the audience would have to wait years for the next action – and eventually forever.

Each documented action was recorded live and presented in a loop on a monitor. The monitors were arranged on the top of each other to show the accumulation of documentation.

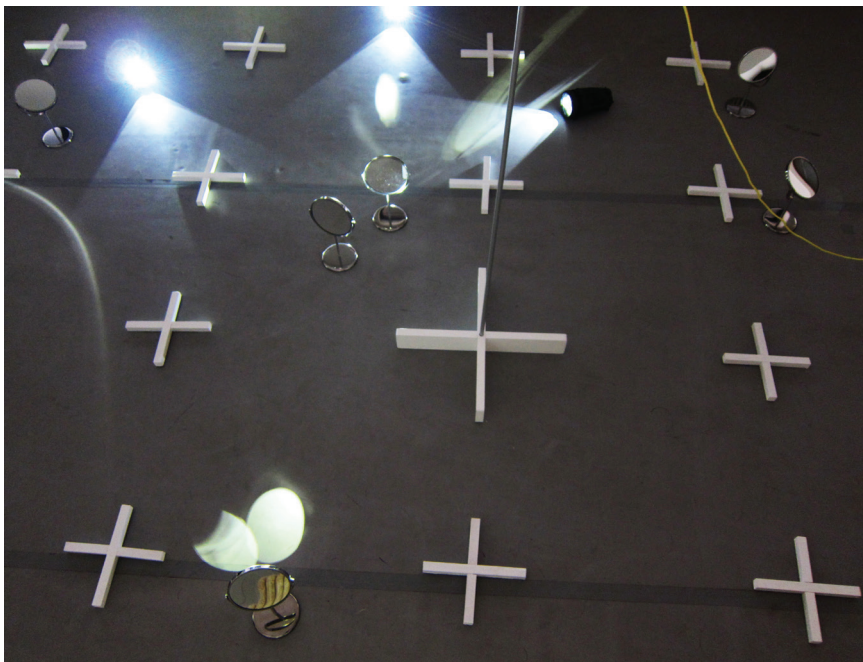
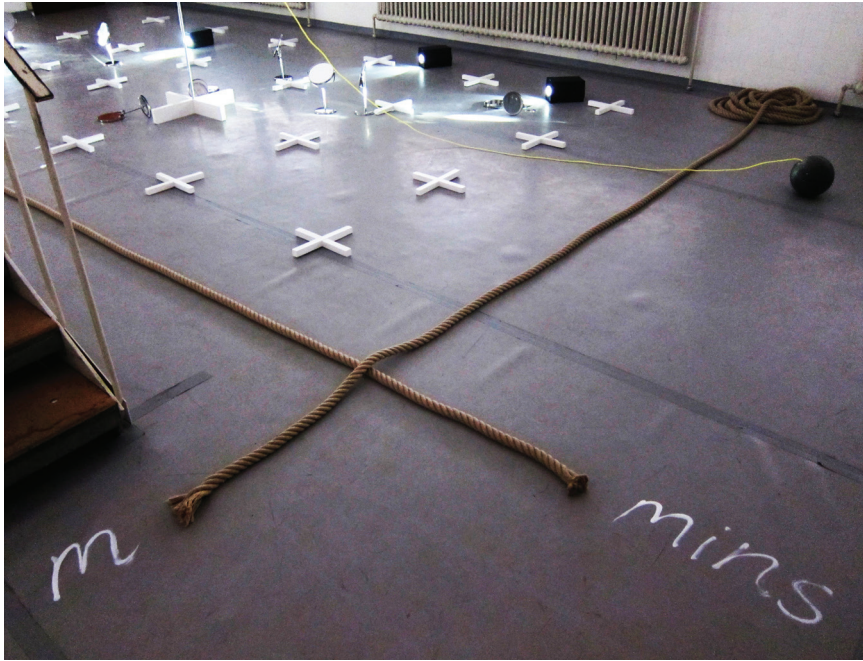
The first version lasted until the closing hour of the festival; the second version was a short presentation of 20 minutes accompanied by a sheet of paper explaining the continued development of the performance.

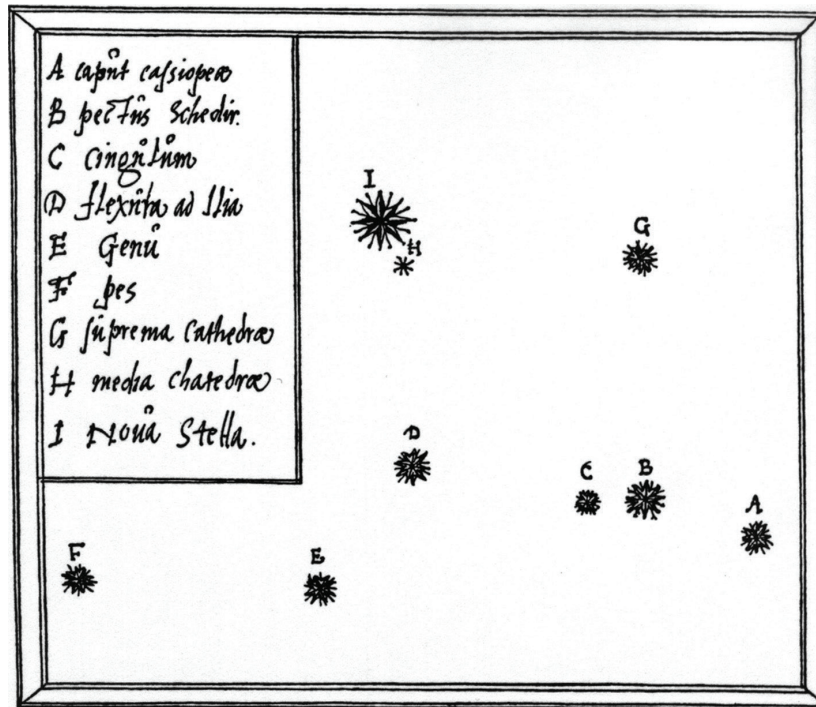
Duration: 3 hours at the ACTS festival, Museum of Contemporary Art, Roskilde. May 2011. 20 minutes at the Performing Science Contest, Giessen, September 2011, where the performance was awarded with second prize. 20 minutes at a Samtalekøkken performance night in Nikolaj Kunsthal, November 2012.

Inherent time of the performance: eternal, slowly turning any movement into material; proceeding action into a massive monument of documentation of time that keeps accumulating and never ending.

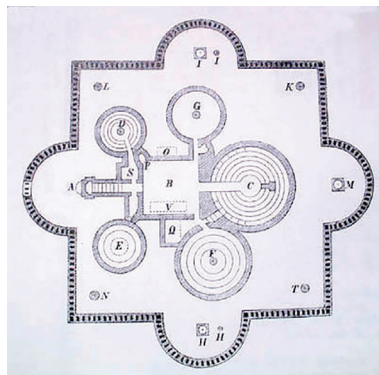
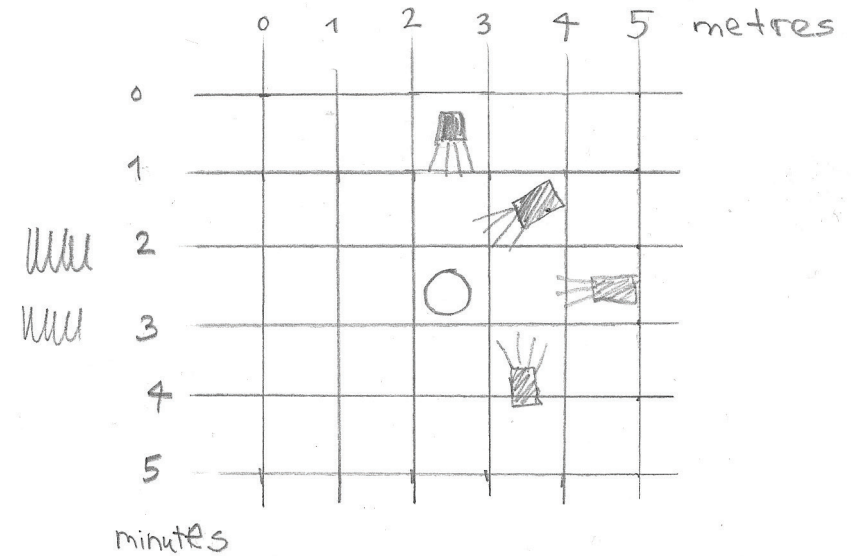
Supported by the Danish Arts Council, the ACTS festival and Performing Science.

Images: graph by Ellen Friis, photos by Henrik Vestergaard Friis





SIX SAINTS: Tycho Brahe



TYCHO BRAHE

Tycho Brahe (1546-1601) was a Danish nobleman known for his accurate and comprehensive astronomical and planetary observations. Tycho Brahe was the first astronomer to refute the classical belief in an unchanging celestial realm.

In his De nova Stella of 1573, he described a new star. His meticulous observations of the night sky provided evidence, that the star was a truly new phenomenon. Today it is known, that the new star was a dying star, spreading its matter in a violent explosion.

Shakespeare's Hamlet was probably inspired by Tycho Brahe, who was related to the real Rosencrantz and Guildenstern, studied in Wittenberg and lived not far from Elsinore.

Tycho Brahe was granted an estate on the island of Hven and the funding to build Uranienborg, an early research institute, where he built large astronomical instruments and took many careful measurements, and later the underground Stjerneborg, when he discovered that his instruments in Uranienborg were not sufficiently reliable.

Images: photos and drawing by Ellen Friis, drawing of De nova Stella and the floor plan of Uranienborg by Tycho Brahe.

SIX SAINTS: TYCHO BRAHE

Tycho Brahe's primary claim to fame is De nova stella, which is typical for the Renaissance, where so many new discoveries were made, clocks became commonplace and the whole concept of Time obtained the modern connotations of progress, change and development.

But Tycho Brahe himself lived with one foot in the Middle Ages, in a remote feudal society on an island. Nobody had a clock, and sowing and harvesting, spring, summer, autumn and winter, followed age-old patterns. He lived in a static world; a world without time, using geometry to determine the exact time of his observations, since the clocks of his day were still too imprecise.

The time concept for my SIX SAINTS: Tycho Brahe had to be "no time". What would a performance art piece look like, if it had no time and only space? A performance with no movement? A performance, where everything had happened already and the remnants were left for the audience to interpret; like a map.

I hired a choreographer, Kristoffer Andrup from the DON*GNU company, to perform 5 minutes of dance based on a text from Shakespeare's Macbeth, that reads like a manifesto for the relation between stage and life.

I was the only witness of the beautiful DON*GNU choreography. I recorded it with two video cameras and found a method to translate the dance into an installation, that was basically a map of the time and space of his performance. Visitors were provided with a text (see next page) as a key to reading the map.

Duration: individual/no duration, a map of a performance which lasted five minutes.

The installation was presented next to SIX SAINTS: H.C.ØRSTED at Bora Bora Theatre, Århus. Kunstraum T27 in Berlin (MPA festival). Pumpehuset in Copenhagen (Hitparaden Festival). Supported by above, and by the Danish Arts Council, 2013.

Hand-out from the live presentation in 2013:

SIX SAINTS: Tycho Brahe

A performance, that happens in space only.

The construction of this performance is created from the theories of a German mathematician, Werner Große, who investigated what happens, if the time axis and one spatial axis are exchanged in a coordinate system, where X and Y are spatial axes, and the Z-axis represents time. He uses video recordings to this purpose: A second of a film normally consists of 25 frames. 12 seconds result in 300 images. If the images are 300 pixels wide and are placed on the top of each other, a new film of 12 seconds can be created by slicing this symmetrical block into 300 new images and presenting them one after another.

In the new film, every single frame read from left to right (or reversed), shows everything that happens during these 12 seconds of film in a specific vertical stripe. The more, something moves – the more sections the object originally appeared in - the wider the object will appear in the manipulated film, and therefore more recognizable. Something standing still, will be played through in exactly the same manner for each 1 pixel slice of the original film, and appear as an abstract pattern. A recording of an Italian flag will be transformed into a film, where the first third is all green, then all white, and finally all red.



As a basis for my own application of Werner Große's theories for "zeitkippen/tilting time", I paid for a 5 minute choreography by Don*Gnu.

During the 5 minutes, the dancer gradually advanced 5 metres towards the audience rows, where I sat. In my installation, I have exchanged one spatial axis (=depth) for a time axis, which means that each meter in the depth of the stage corresponds to one minute of the performance. The lamp, he placed in four positions is represented by four lamps.

Certain intangible observations, that were also an important part, like shadows on the wall to the left, are represented as two piles of sand outside the coordinate system. A ball of energy that was invisible, yet present in every second of the performance, is also placed outside.

Every row parallel to the audience now represents ALL of the stage in any given moment. This means that the objects will be pressed flat – to one fifth of their original shape. On the other hand, every row parallel to the time axis in the depth of the stage will be a time journey that shows everything happening in this selection of the stage from 0-5 minutes.

Werner Grosse's selection of pixels and 1/25 second is of course coincidental. The starting point could have been a film of 48 frames a second. Or the slices could be only half a pixel wide. The more detailed, the more liquid and abstract images will appear.

My parameters of minutes and metres are coarser, but the onlooker can inspect the work physically and in two ways – along the X axis or the Y axis – as a incision through the time of the work, at a certain point in space. Or as an incision through the space in a certain moment.

(Please google "Werner Große" and "Zeitkippen" for examples).

H.C.ØRSTED

Hans Christian Ørsted (1777 – 1851) was a Danish physicist and chemist who discovered that electric currents create magnetic fields, an important aspect of electromagnetism. He had been looking for a relation between electricity and magnetism for several years.

When he found it in 1820, he regarded it proof of his belief, that the world's true and eternal substance is "change". All material objects and bodies are but temporary. The energy uniting and igniting the world is symbolized through electricity, and through language; the current that transfers ideas from one person to another. H.C. Ørsted was also a poet and a linguist, who added about 2000 self-invented words to the Danish language.

SIX SAINTS: H.C.ØRSTED

Hans Christian Ørsted's preoccupation with energy and change made me wonder, what a performance art piece would look like, if it had no space and no material dimension. Just time, flow, progress.

Using the same choreography by DON*GNU as described under SIX SAINTS: Tycho Brahe as my starting point, I recorded a detailed, verbal recount, with all my associations and interpretations of his dance.

I wanted to portray an audience. Not so much my own personal take of it, but rather as the act of watching the performance itself: How does a person observe the actions on stage, while at the same time sensing the seat, remembering, associating, trying to figure out the meaning, adjusting ones assumptions...?

For at a live performance, you cannot turn the pages and return to the live experience, when it is gone.

The recording of my description was played live in a theatre space. The audience sat in front of an empty stage and listened to my description that utilized as many of H.C. Ørsted's self-invented words as possible, in an attempt to transmit his energy across the world and the centuries and transfer it to a modern audience.

From my script:

"Words like ilt, brint, billedkunst, udødelighedshåb, oxygen, hydrogen, visual art, immortality hope, vintertilværelse, værekraft, udyb, tvivlsgenstand, tordensvælg, trængjhjernet, morgenfølelse, mælkevejsverden, mørkeskræk, natvinter (altså når man taler om Saturn), narrow brained, morning feeling, milkywayworld, darkness fear, night winter (when speaking of Saturn) medborgersind, lykkeformål (i ægteskabet), lysafskygning, meningsadvokat (som i "blot en sandhedsgransker og ingen meningsadvokat"), lyvefrihed som i "man vænner sig til at tro at der til trykkefriheden hører en vis lyvefrihed." Pæreprøve, æderedskab, råberør og rødkålsvand. A no-sayer is the opposite of a yes-brother.

And when you read all his words, poems and dialogues, then you realize how language itself is a current of constant change and experience, an energy that unites the world and the people in it by transferring images, emotions, thoughts and memories from one person to another..."

Duration: 30 minutes extensive description of a performance that originally lasted only 5 minutes.

This performance was presented next to the installation SIX SAINTS: TYCHO BRAHE and performed in the Bora Bora Theatre, Århus. Kunstraum T27 in Berlin (MPA festival). Pumpehuset in Copenhagen (Hitparaden Festival). Supported by these institutions and by the Danish Arts Council 2013.

Images: photos by Henrik Vestergaard Friis (signing the contract) and Peter Lind (the audience).

CONTRACT

between Ellen Friis and Don*Gnu

Hereby, Don*Gnu accepts a fee of DKK 10.000 for a choreography based by the text below. Don*Gnu donates the exclusive rights to this artwork to Ellen Friis, who will be the only person ever to watch it. However, it must always be clearly stated in all press material and contexts, that the choreography was created by Don*Gnu. Ellen Friis will use it for her production of an installation and a monologue, named

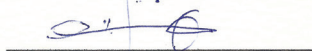
Six Saints: Tycho Brahe, Six Saints: H.C.Ørsted.

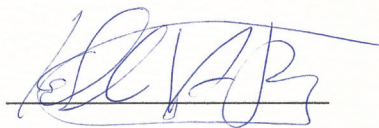
To-morrow, and to-morrow, and to-morrow,
Creeps in this petty pace from day to day,
To the last syllable of recorded time;
And all our yesterdays have lighted fools
The way to dusty death. Out, out, brief candle!

Life's but a walking shadow, a poor player,
That struts and frets his hour upon the stage,
And then is heard no more. It is a tale
Told by an idiot, full of sound and fury,
Signifying nothing.

Macbeth (Act 5, Scene 5, lines 17-28)

Name and date: 8/2-2013







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www.ellenfriis.dk

