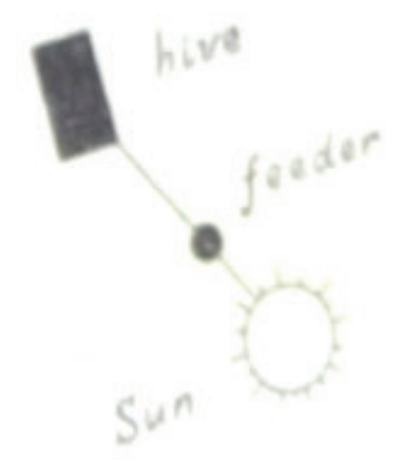


objects

pratheek
irvathur

1

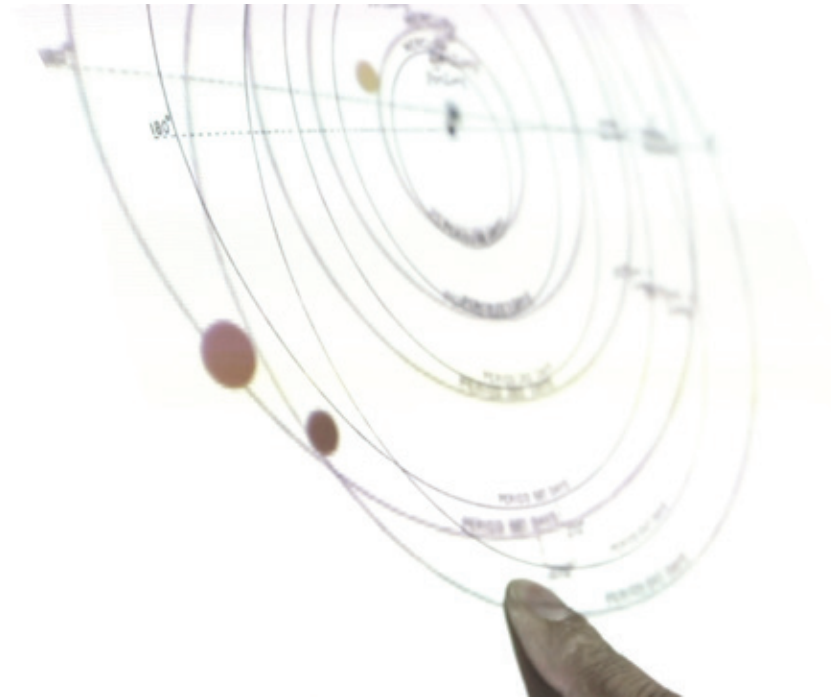


Interactive Illustrations

(Programming, Projection, Electronics, Animation)

The charm of a book, is irreplaceable. The flexibility of digital platform is incredible too.

The illustrations of a book were imparted with motion in order to make them move around the page and illustrate

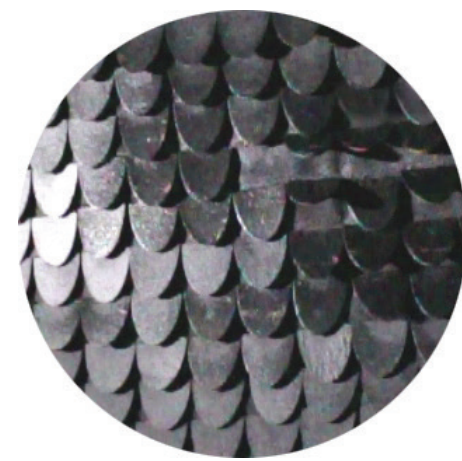


scientific concepts by playing them out. These illustrations responded to the users touch on the pages of the book.

These books could be read as any other regular book, but on being plugged into specialized reading areas, their illustrations would come alive and respond to the reader and reveal the underlying information in a new manner.

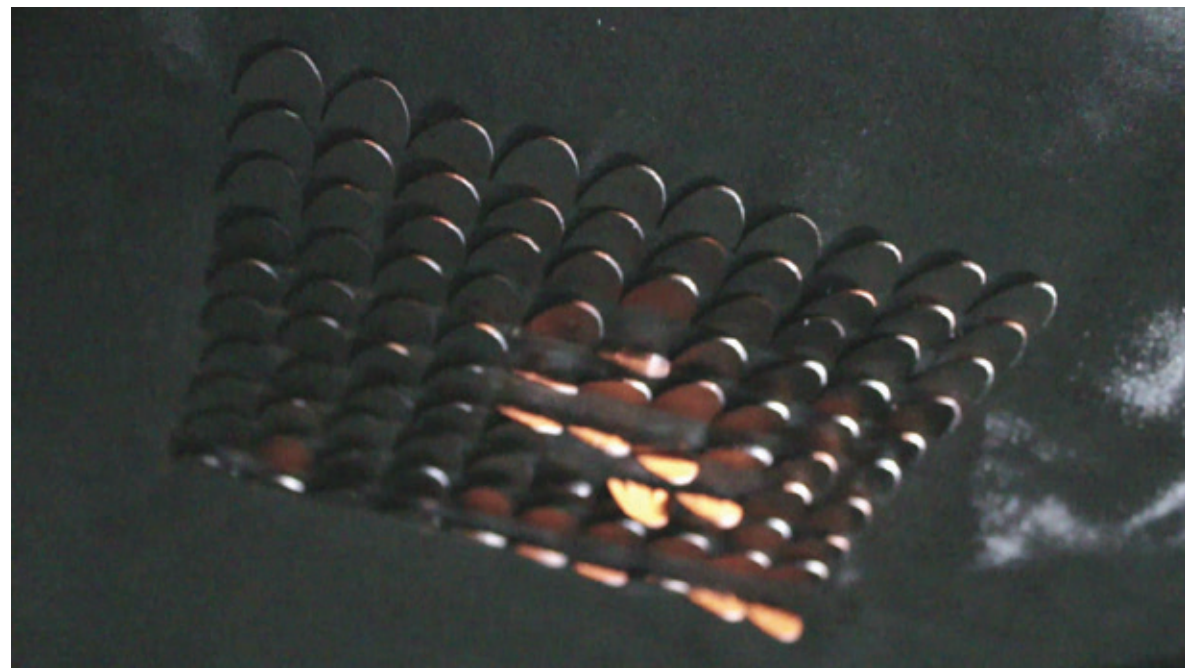
Video Link : <https://www.behance.net/gallery/36368401/Interactive-illustrations>

2



Programmable structures embedded in textiles

(Product Design, Textile, Programming, Installation)



A woven structure presents innumerable possibilities to play with. The drape and flow of the fabric lends it movement, in terms of its visual language. But what if we were able to impart movement, literally to a fabric? What kind of applications would such a fabric have?

Movement of a substrate that is on the surface of one's body, is something with both primitive and futuristic undertones.

It can mimic an animal whose fur stands up on its end when provoked. It can act to express and be stimulated by one's physical and mental state, and act as an extension of oneself.

The fabric therefore, becomes an expressive appendage which can be lent functionality as well. The fabric that one wears, also becomes a low resolution display of sorts, with each programmable structure acting like a pixel.

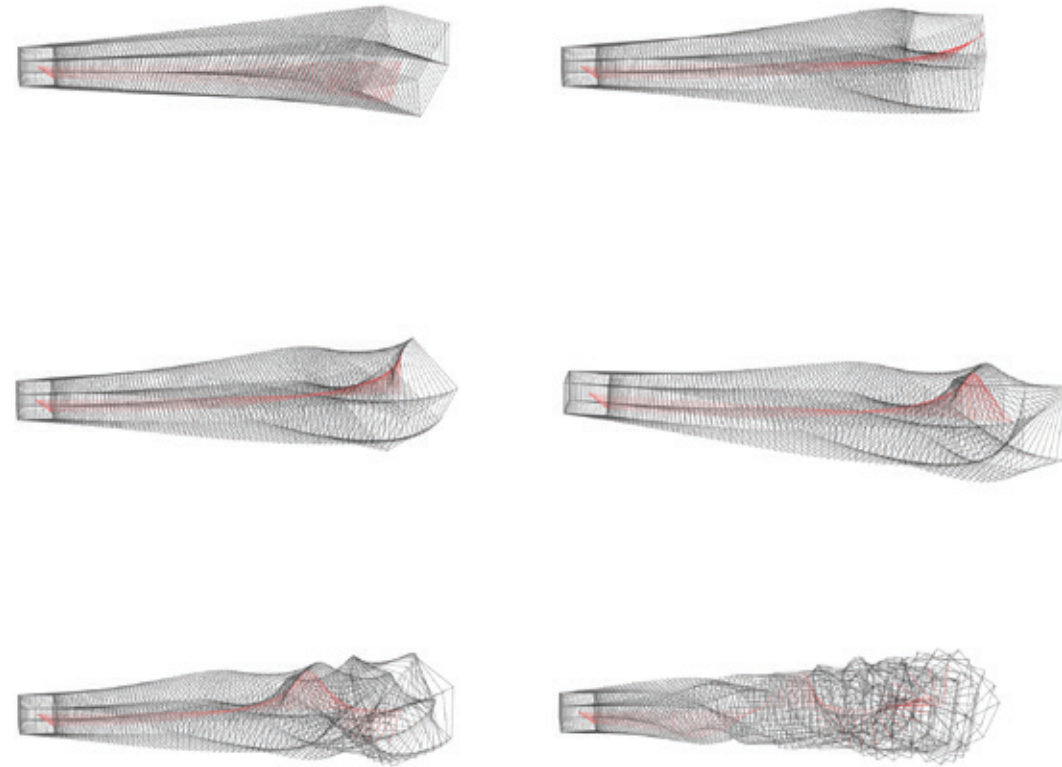
It can act as a visual signal, or a mechanical part with a more subtle function such as regulating the insulation properties of the fabric. Even as a stand alone structure, when fed with data of any kind, it can become a kinetic sculpture that expresses data through a choreographed movement of its structure.

This product was developed, as an intersection of art & design. It

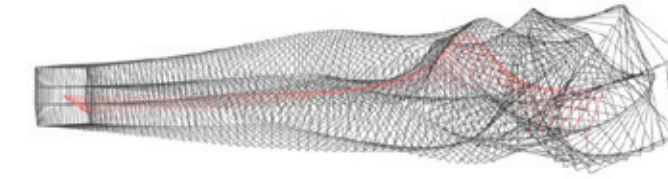
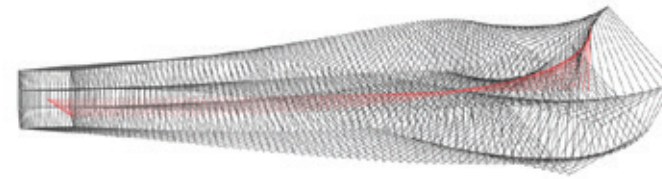
also tried to blur the distinction between form and function, with the two complementing and widening the horizons of each other as the identity of the product shuttles between the one dictated by its form and its function.

Video Link : <https://www.behance.net/gallery/36480123/Evoke>

3



**An interactive projection, to make
apparent the versatility of what
can be created through iteration &
simple mathematics.**
(Video/Projection , Processing)

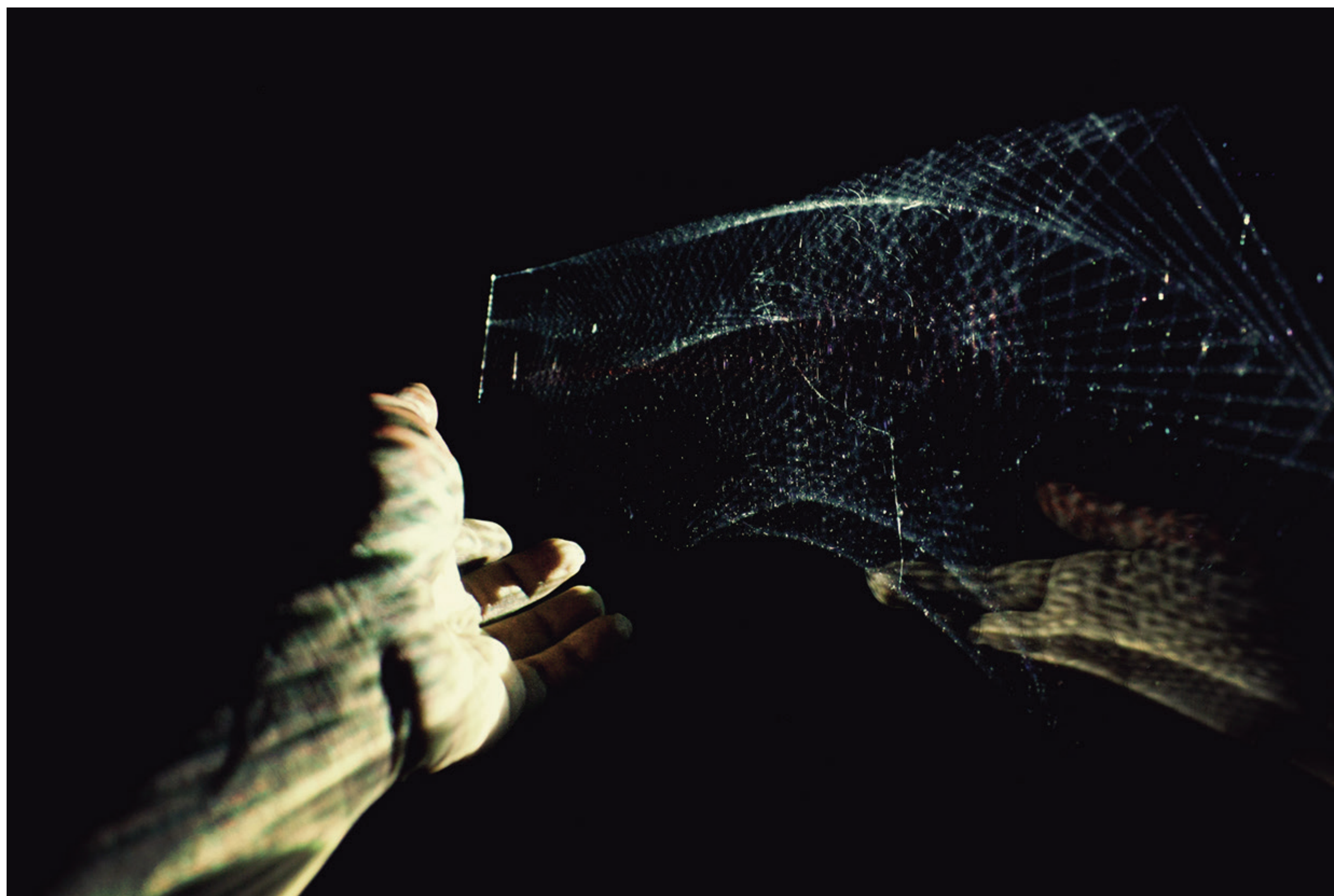


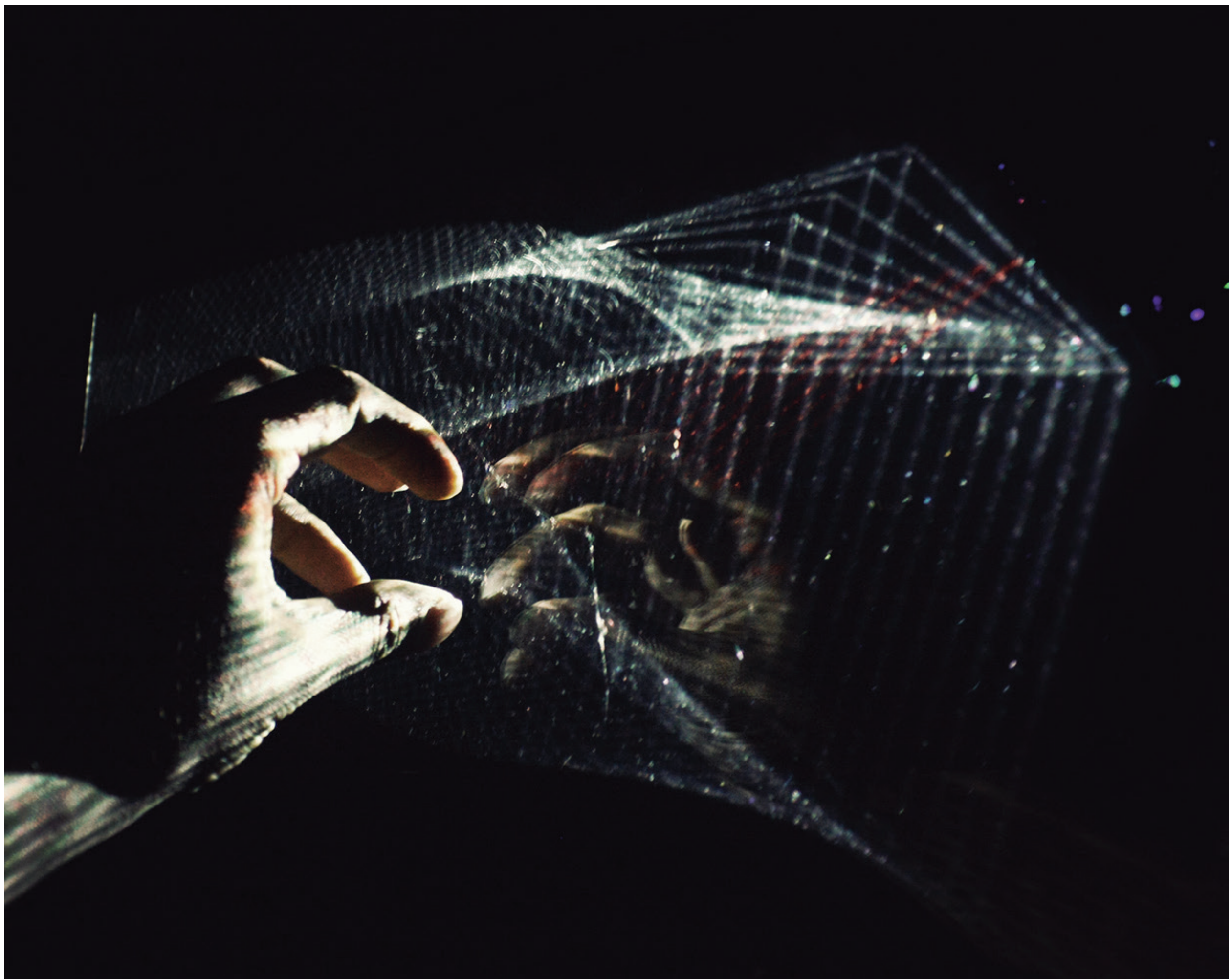
(Image : Frames from the triangular number series)

This installation focused on showing how iteration of the simple, can create beautiful structures.

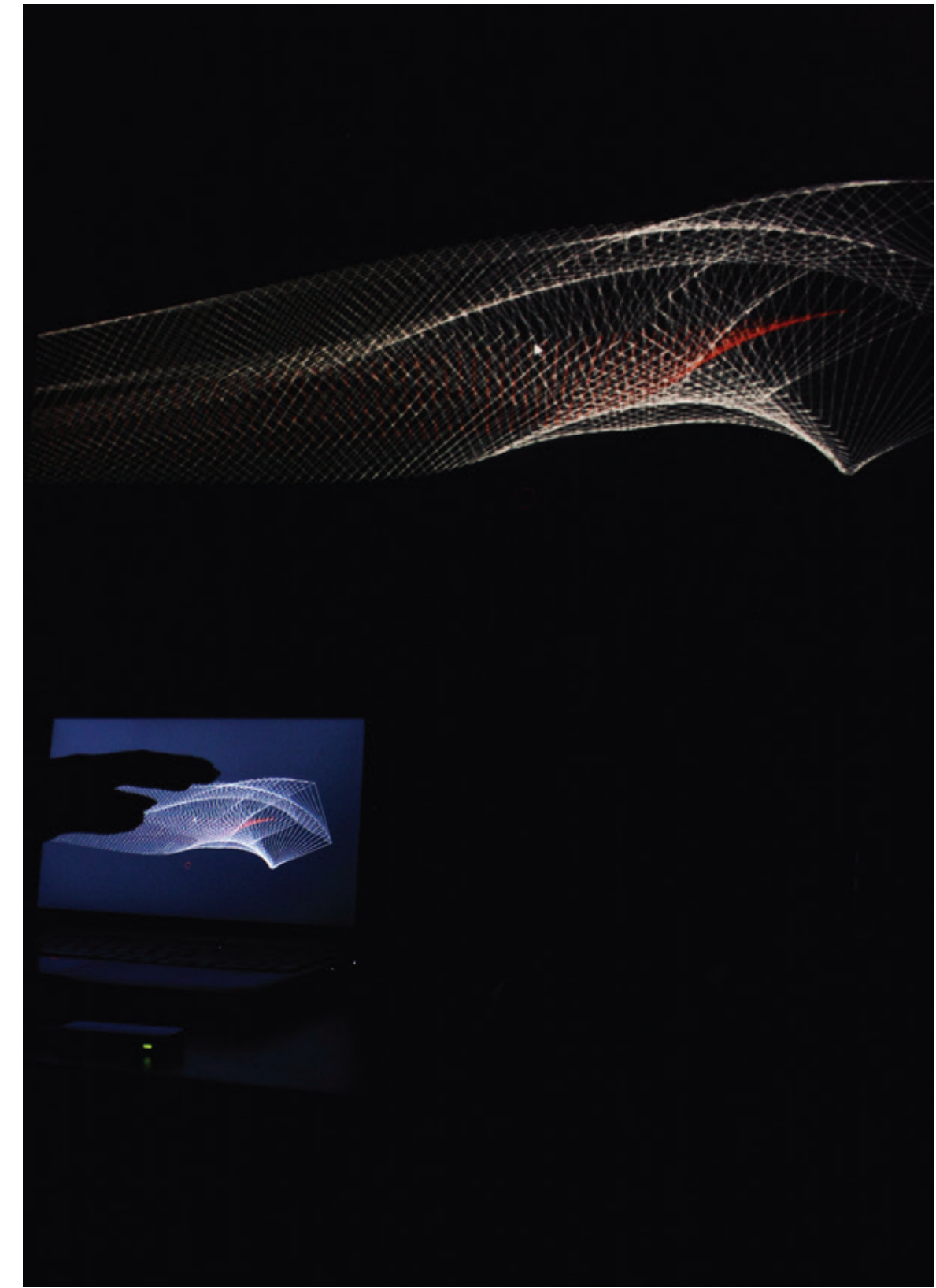
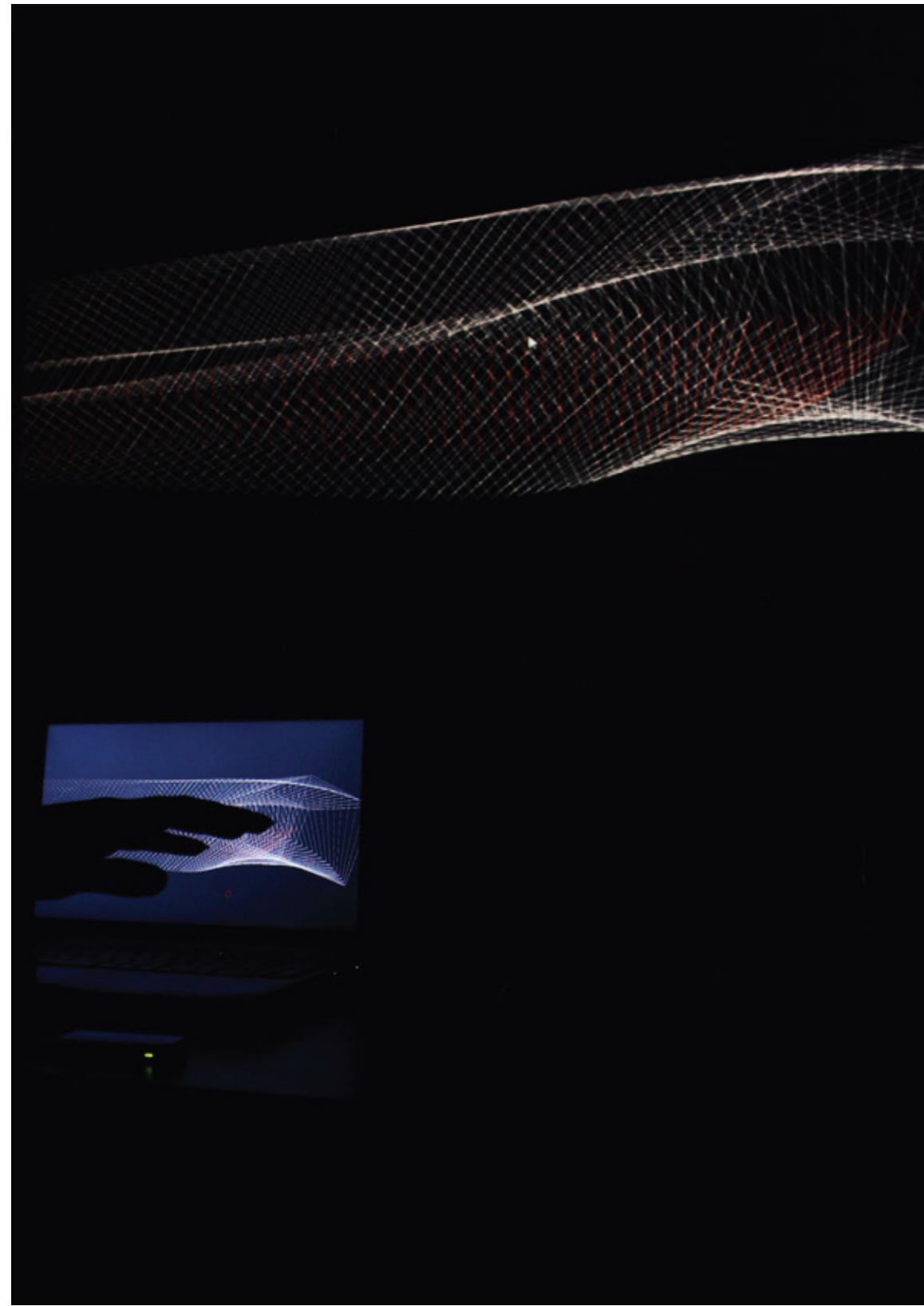
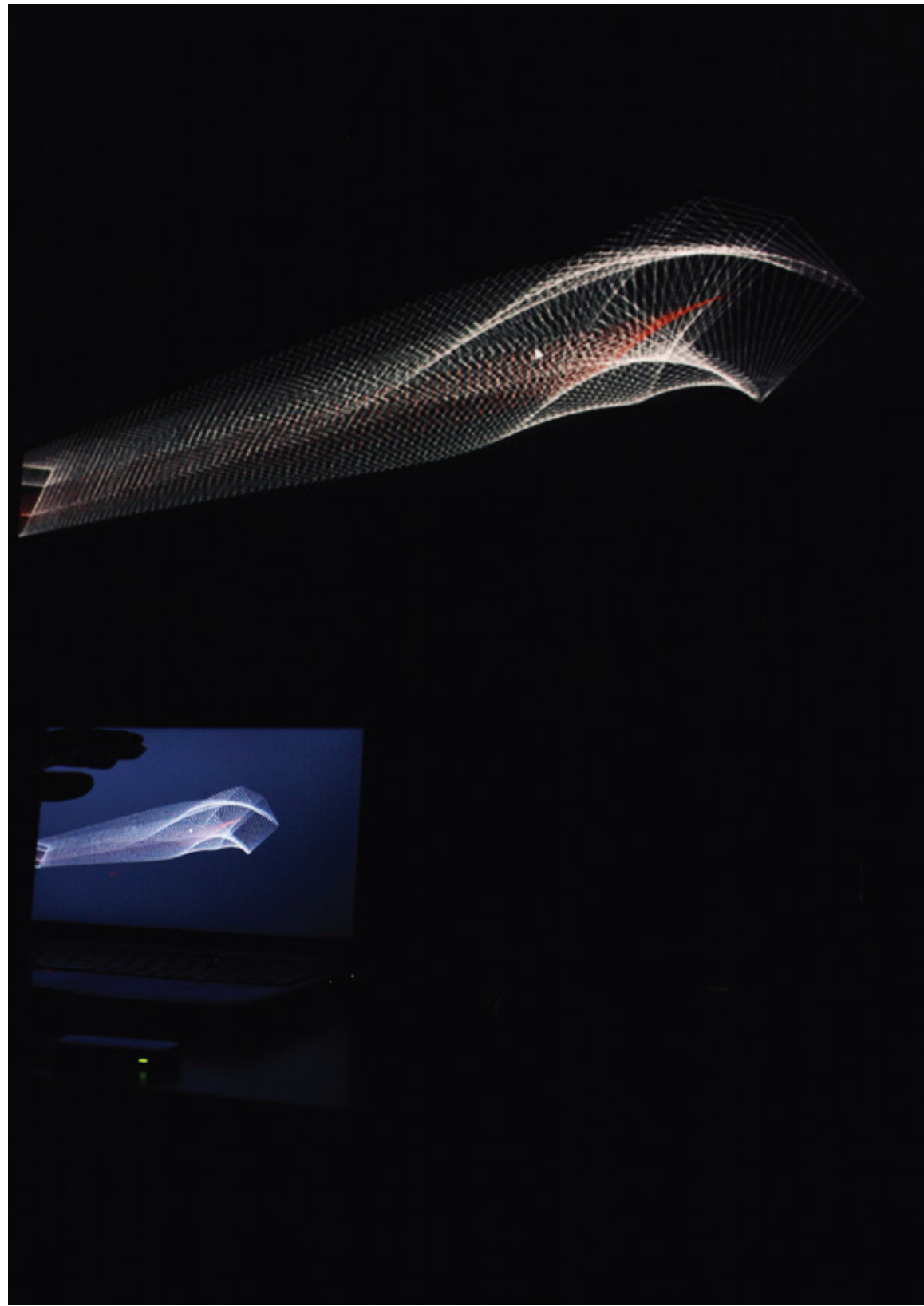
The visuals created were based on number series that most of us are familiar with - triangular numbers, prime numbers & Fibonacci numbers. The position of each element of the visual, the rotation & size were made a function of the number, in the series that they represented.

The resulting dynamic structures, were allowed to be manipulated through a sensor, which takes the hand position and movement as an input. Thus, the user could 'run' his/her fingers through the structure while it reacted to the user's movements.

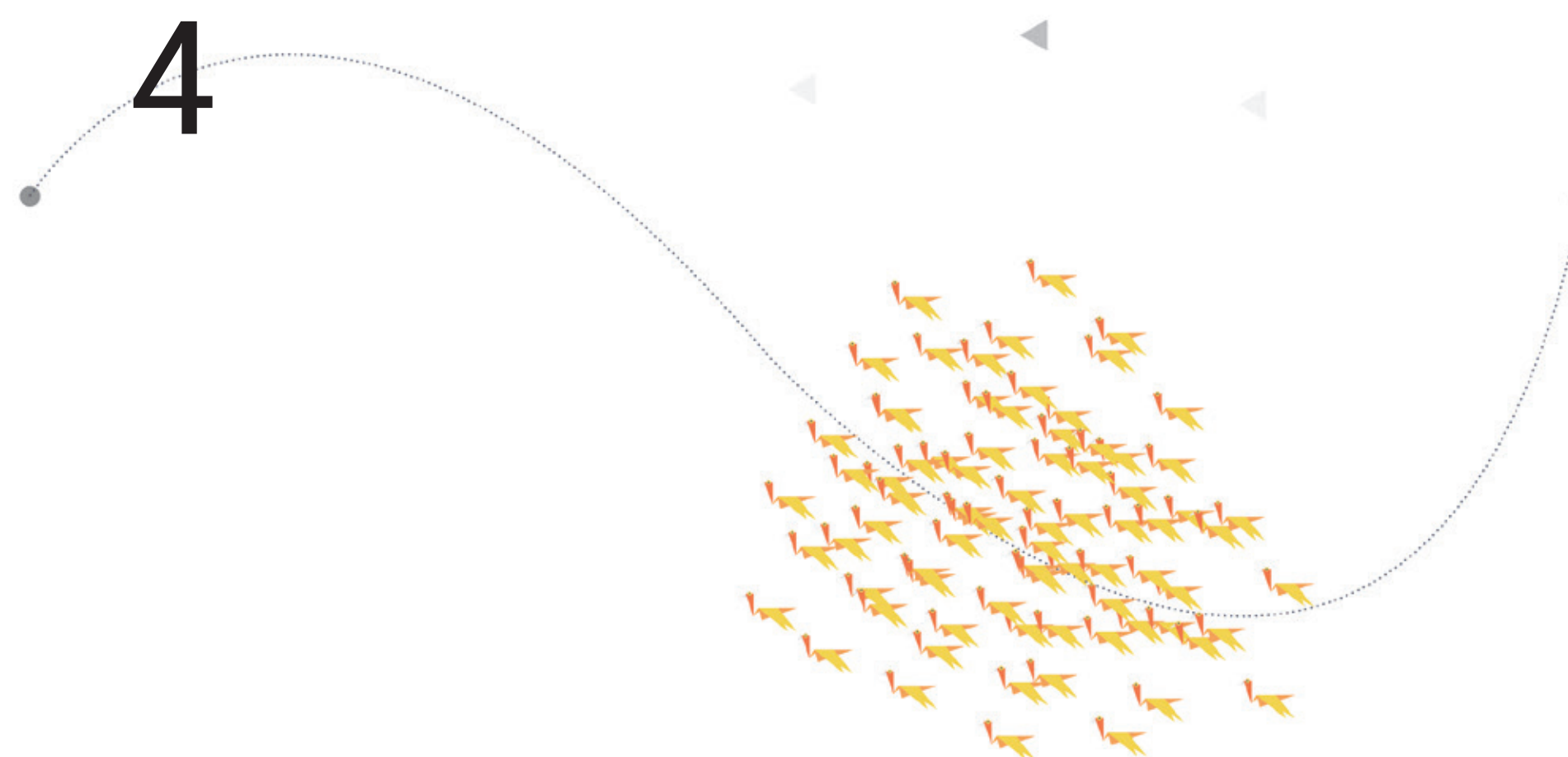




*Interaction using a leap motion
sensor on a faux-holographic
screen*



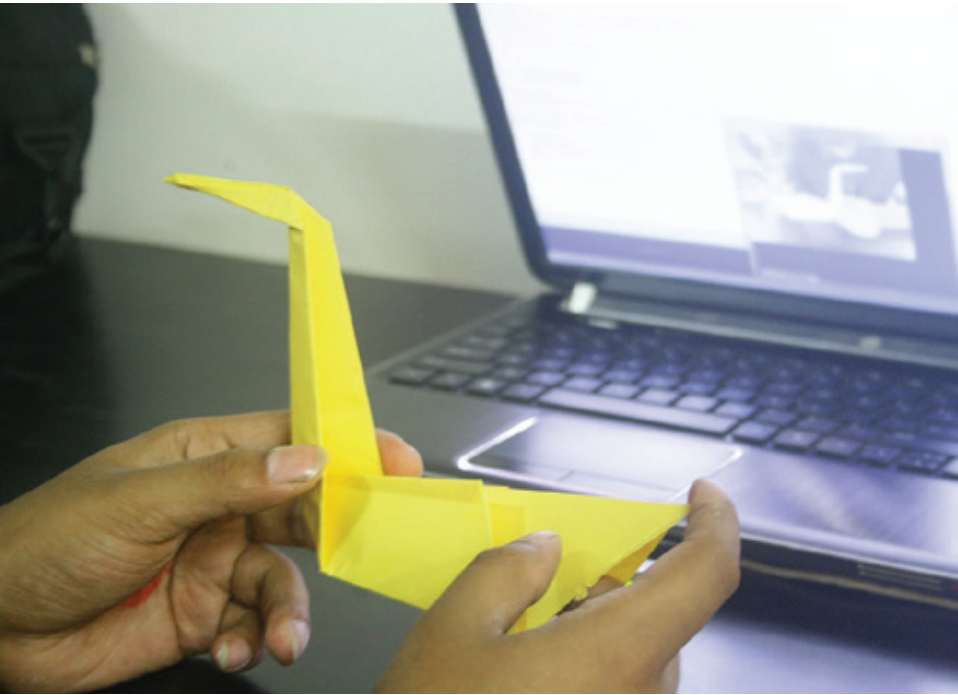
The progression of the form continues in response to the hand movement (seen changing a the bottom left)



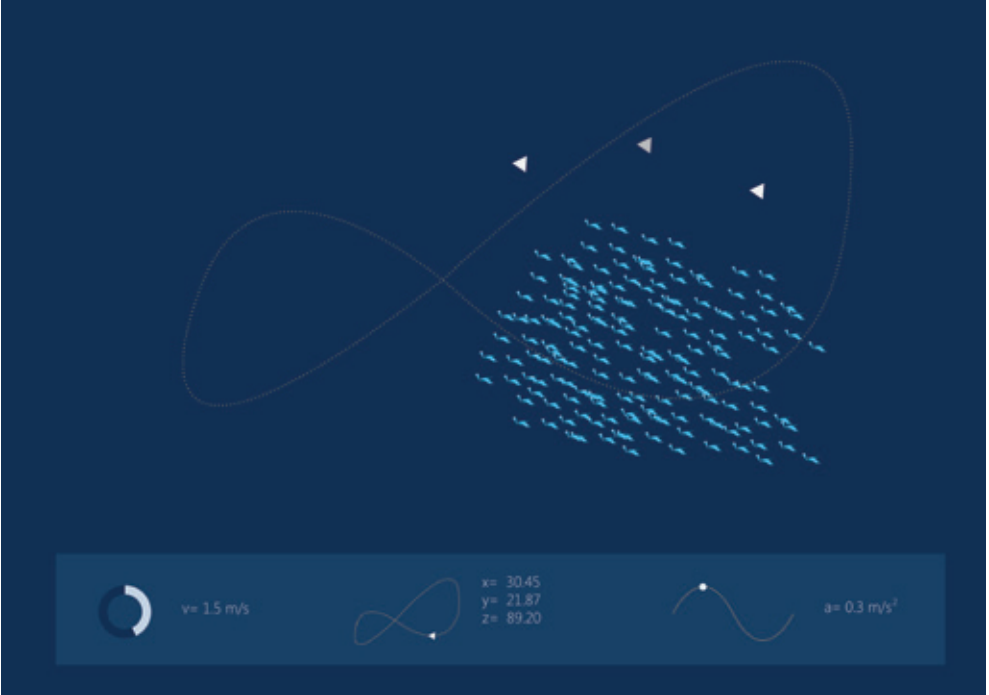
An interactive exhibit for the mathematic section of a science museum

(Video/Projection, Origami, Processing 2.0, Adobe Illustrator)

An exhibit was designed with the intention of helping the users realise the mathematical aspect of what was seen as appealing, around them, such as flocks in flight, seashell patterns, trees etc.



Video link:
<https://www.behance.net/gallery/15831963/Making-Mathematics-Tangible>

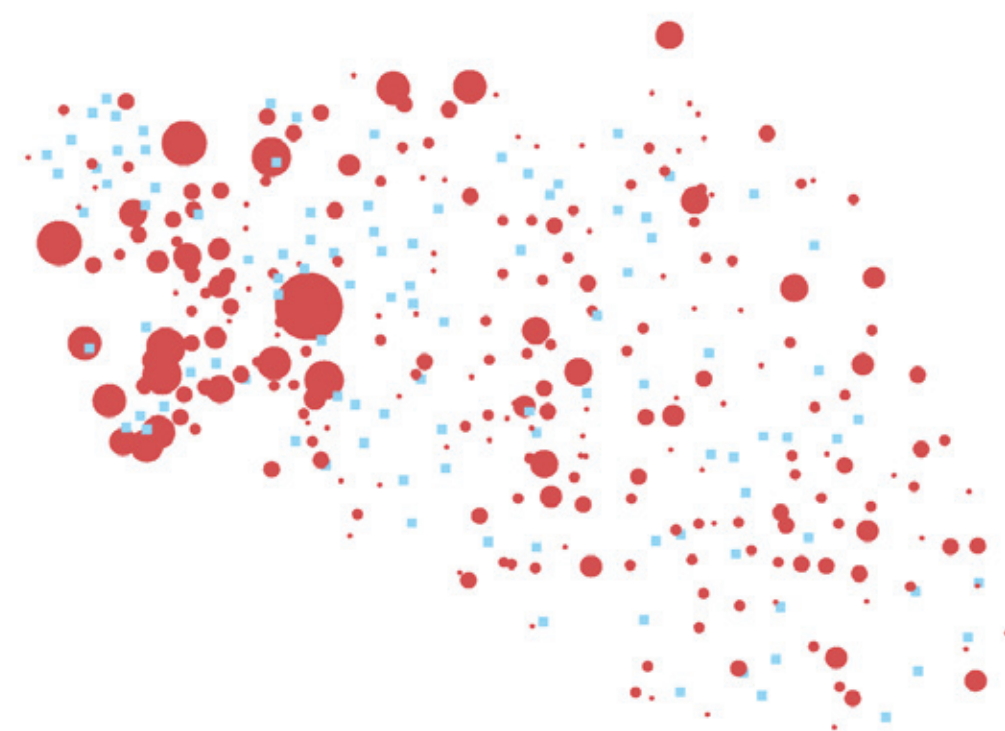


The users fold a simple origami bird, and place it on a pedestal, and a projection is initiated around them by this action. The images projected, take them through an immersive, gamified experience, where they are exposed to a new facet of the familiar.

Interaction with the space was through gestures, that the users would normally use in conversations when describing an experience or a visual.

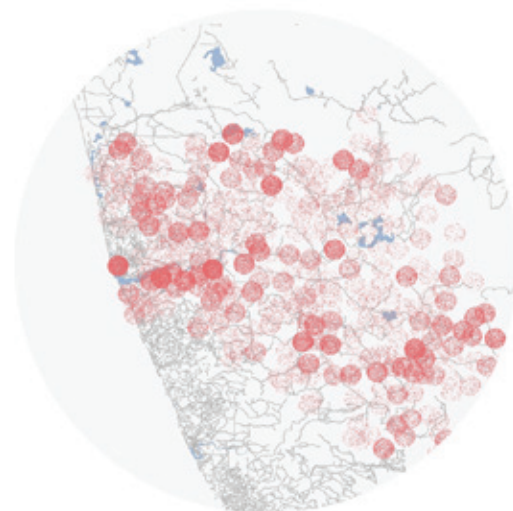
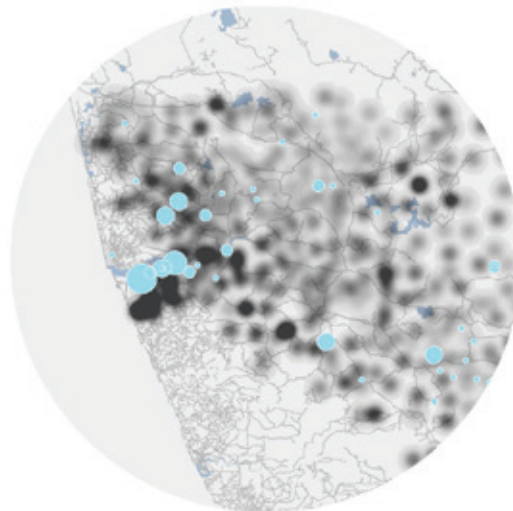
A system is picked, following which a topic is chosen. On the topic being chosen, various parameters are input using natural gestures used while conversing, such as showing how the flock moved, using one's hands. The program then reveals the mathematics of the input. Further on, the user is directed to guide the visual while keeping in mind the mathematics revealed, to change the visual behaviour, in a gamified manner.

5



A self-learning system, that utilises collective human intelligence & visual modes of model building to help understand problems better

The disease surveillance network of India collects large amounts of data at a highly granular level. This data sits idle. A system was designed to help visualise this data, while bringing all government collected data under a single computational framework & allow human users to build models through visuals.



The model building happens by identifying visually prominent patterns and by incorporating all possible government datasets.

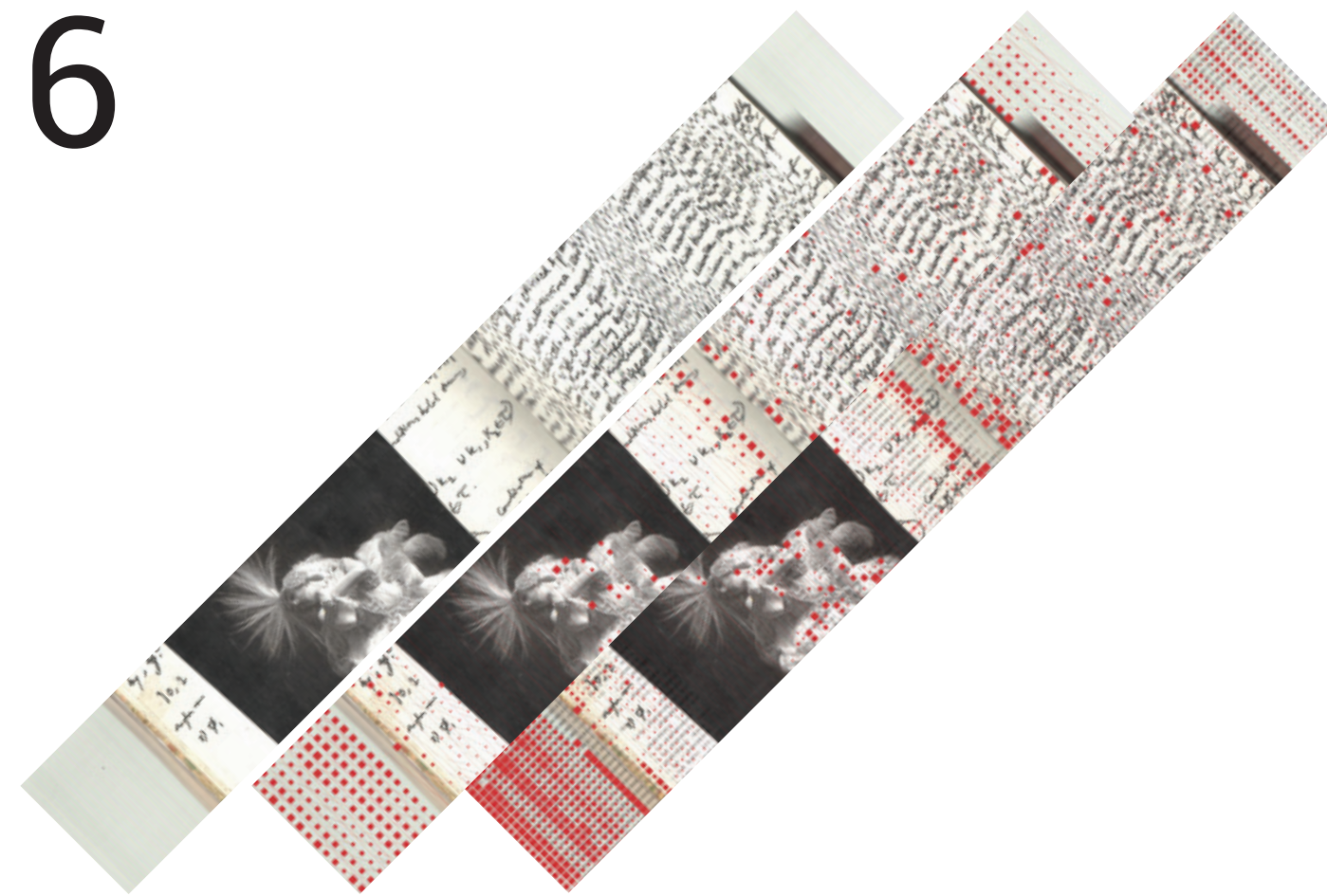
For example, a researcher in Southern India, might build an influenza model using rainfall, weather & census data. Yet another researcher in the Himalayas might build an influenza model using temperature fluctuations & solar radiation data.

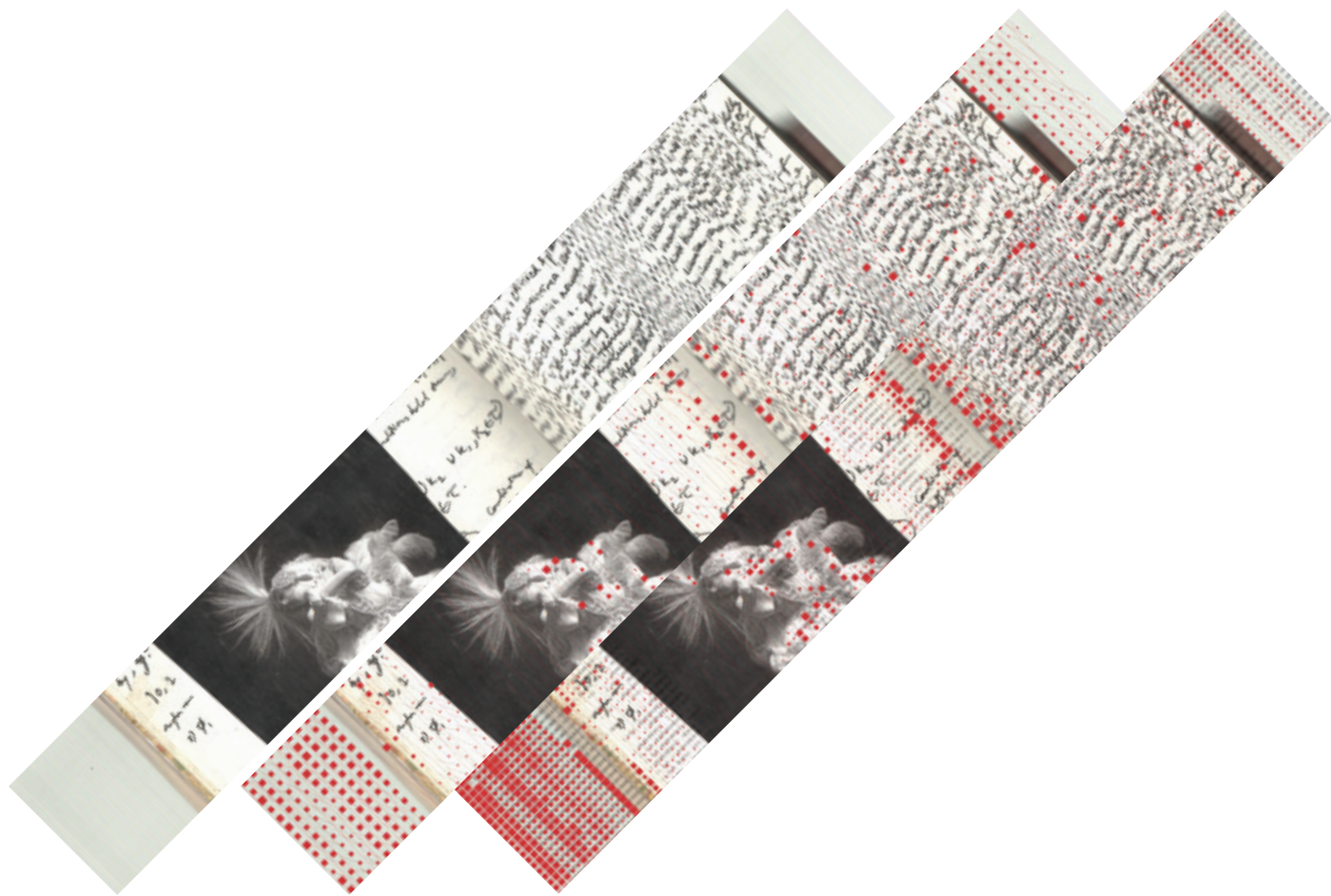
The proposed model picks up all these various inputs to build a collective influenza model to aid all the users gain better insight into the problems that

exist, learning with each new input utilising a machine learning framework.

Preliminary test-runs of the system helped identify localised circuits through which influenza, spreads, in the Dakshina Kannada district.

6





Triptych. Explores what an image contains and what it means

(Collage, Ink on paper, Scanner, Processing)

When scanning the pages to document and store the contents of the book, the scanner as a tool, came across as a very polite observer, who saw the work in the sketchbook, perceiving it in terms of light information alone, faithfully & quietly. The image it then created through its means of understanding, was only a representation of the object.

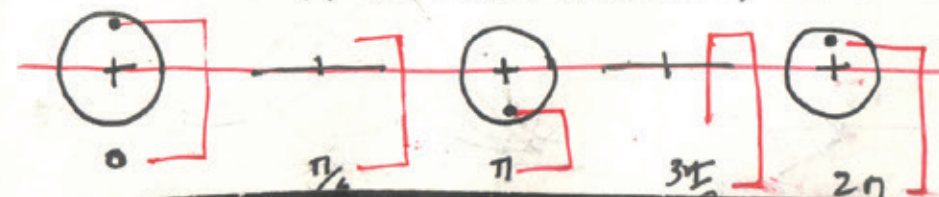
A spread was scanned from my notebook, and an information layer, was overlayed on top of it, using geometric forms, that were indicative of the brightness, color etc.

Noise was introduced in the system, wherein the lines that connected the dots, skewed a little here and there, but always within their cells. This process was meant to reproduce (just like the poor scanner), the way in which one quantises one's surroundings, tries to boil things down to a black/white in spite of

knowing the grey areas & then connect the dots to form a world view, while not realising the skewing that is inherent in one's own system.

The set of 3 images goes from being the untouched scan to detecting brightness to assigning words & numbers to understand a visual & represent it.

The angle θ is given by $\psi = \sum c_n \psi_n(\theta) \phi_n(q - \lambda_0 \Delta t)$
 in the interval $(0, 2\pi)$ ~~contains~~ all possible states that can
 collapse into.



The wave
 produced
 by, ψ
 $10, 2$
 after m
 $2) \phi$



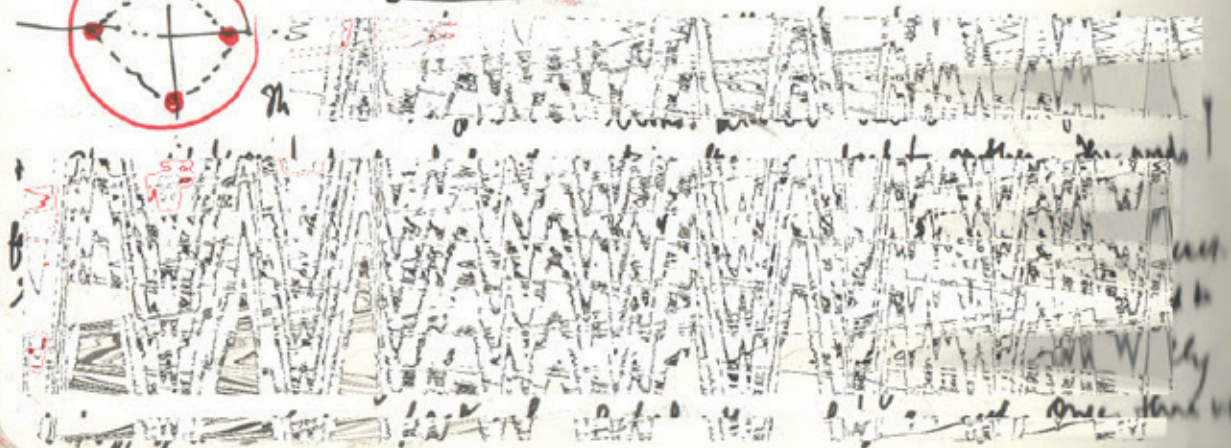
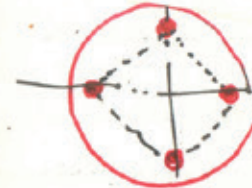
... $k_2 \vee k_1, k_2 \in \mathbb{Z}$
 $\in \mathbb{Z}$.

... $\psi \rightarrow \psi, \psi$

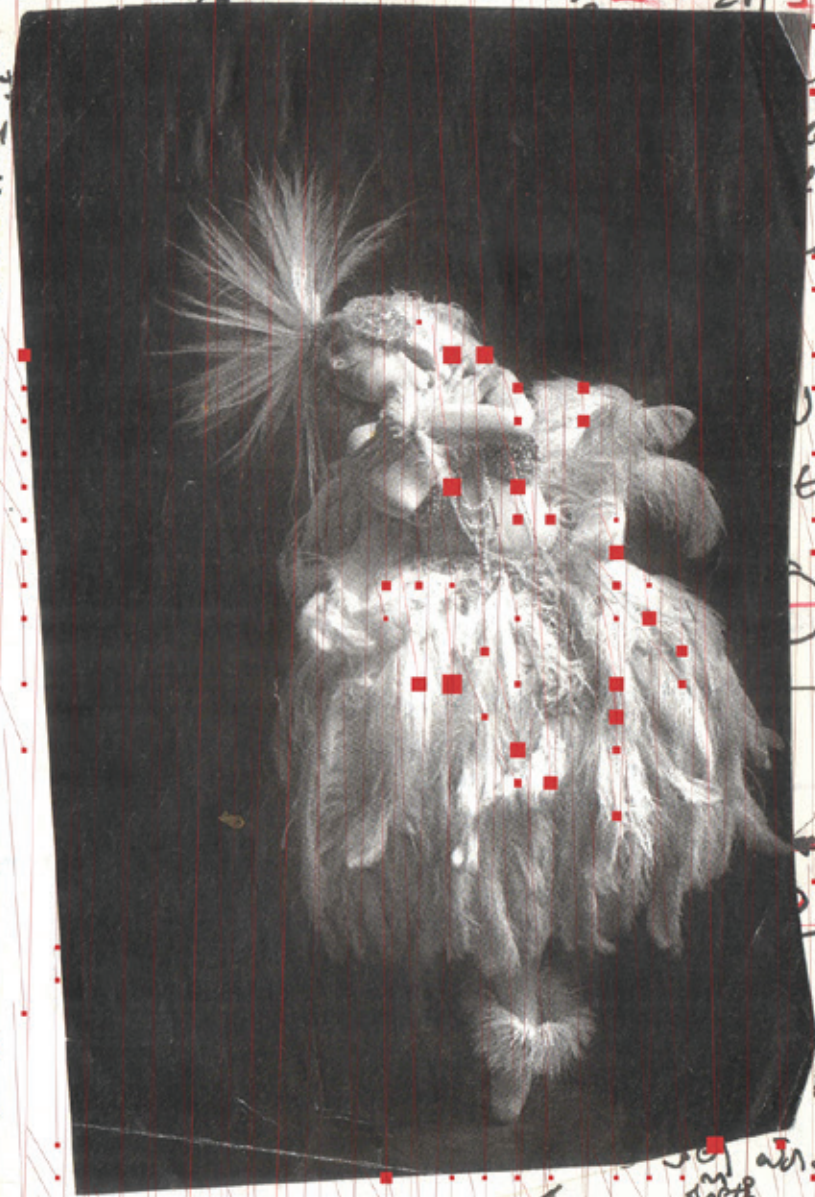
... $\psi \rightarrow \psi, \psi$

... $\psi \rightarrow \psi, \psi$

... $\psi \rightarrow \psi, \psi$



[The right page of the notebook is filled with dense, handwritten text in cursive script, covering most of the page.]



The trace
is reproduced
by, say, T
10, 2
as for in
2) ϕ .

between a δ -interval
for δ up, given
intervals $(\delta, 2\delta)$
additions hold true,

$$\forall k_2 \vee k_1, k_2 \in \tau$$

containing
28 days ~
2, 1 year

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42 E 20

$$0 \div \{ \rightarrow 0, 0, 0 \leftarrow$$

అ.వి. అద్వైతం

2008, 第(2008)号

of the ...

The following are some of the most important
principles which I have learned from my
experience in the study of the history of
the world. They are principles which I
have found to be true in all ages and
in all countries. They are principles which
I have found to be true in all ages and
in all countries. They are principles which
I have found to be true in all ages and
in all countries.

I have found that the most important
principle in the study of history is to
understand the causes of events. It is not
enough to know what happened; we must
also know why it happened. We must
look at the social conditions, the political
conditions, the economic conditions, and
the intellectual conditions of the time.
We must see how these conditions
influenced the actions of the people.
We must see how the actions of the
people influenced the course of history.

I have also found that it is important
to understand the character of the people
of different times and places. We must
know their habits, their customs, their
beliefs, and their feelings. We must
know what they were capable of doing,
and what they were not capable of doing.
We must know what they loved, and
what they hated. We must know what
they thought was right, and what they
thought was wrong.

I have also found that it is important
to understand the progress of civilization.
We must see how far the people have
advanced in knowledge, in art, in science,
in industry, and in morality. We must
see how much better off they are than
their ancestors were. We must see how
much more powerful they are than their
ancestors were. We must see how much
more civilized they are than their
ancestors were.

I have also found that it is important
to understand the future of the world.
We must see what is likely to happen
in the years to come. We must see what
are the chances of peace, and what are
the chances of war. We must see what
are the chances of progress, and what
are the chances of retrogression. We
must see what are the chances of
happiness, and what are the chances of
misery.

I have also found that it is important
to understand our own place in the
world. We must see how we fit into
the great scheme of things. We must
see what our duties are, and what our
responsibilities are. We must see what
we can do to make the world a better
place. We must see what we can do to
make ourselves happier.

I have also found that it is important
to understand the value of education.
We must see how education has helped
the world to advance. We must see how
education has helped the individual to
advance. We must see how education
has helped us to understand the world,
and how it has helped us to improve
ourselves.

I have also found that it is important
to understand the power of religion.
We must see how religion has helped
the world to advance. We must see how
religion has helped the individual to
advance. We must see how religion has
helped us to understand the world,
and how it has helped us to improve
ourselves.

I have also found that it is important
to understand the influence of literature.
We must see how literature has helped
the world to advance. We must see how
literature has helped the individual to
advance. We must see how literature has
helped us to understand the world,
and how it has helped us to improve
ourselves.

I have also found that it is important
to understand the importance of family.
We must see how family has helped
the world to advance. We must see how
family has helped the individual to
advance. We must see how family has
helped us to understand the world,
and how it has helped us to improve
ourselves.

I have also found that it is important
to understand the importance of friendship.
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the world to advance. We must see how
friendship has helped the individual to
advance. We must see how friendship has
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and how it has helped us to improve
ourselves.

I have also found that it is important
to understand the importance of love.
We must see how love has helped the
world to advance. We must see how love
has helped the individual to advance. We
must see how love has helped us to
understand the world, and how it has
helped us to improve ourselves.

I have also found that it is important
to understand the importance of hope.
We must see how hope has helped the
world to advance. We must see how hope
has helped the individual to advance. We
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helped us to improve ourselves.

I have also found that it is important
to understand the importance of faith.
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world to advance. We must see how faith
has helped the individual to advance. We
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understand the world, and how it has
helped us to improve ourselves.

I have also found that it is important
to understand the importance of charity.
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world to advance. We must see how charity
has helped the individual to advance. We
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helped us to improve ourselves.

I have also found that it is important
to understand the importance of justice.
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world to advance. We must see how justice
has helped the individual to advance. We
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helped us to improve ourselves.

I have also found that it is important
to understand the importance of truth.
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world to advance. We must see how truth
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I have also found that it is important
to understand the importance of goodness.
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the world to advance. We must see how
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I have also found that it is important
to understand the importance of beauty.
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world to advance. We must see how beauty
has helped the individual to advance. We
must see how beauty has helped us to
understand the world, and how it has
helped us to improve ourselves.

I have also found that it is important
to understand the importance of health.
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world to advance. We must see how health
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I have also found that it is important
to understand the importance of wealth.
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world to advance. We must see how wealth
has helped the individual to advance. We
must see how wealth has helped us to
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I have also found that it is important
to understand the importance of power.
We must see how power has helped the
world to advance. We must see how power
has helped the individual to advance. We
must see how power has helped us to
understand the world, and how it has
helped us to improve ourselves.

I have also found that it is important
to understand the importance of honor.
We must see how honor has helped the
world to advance. We must see how honor
has helped the individual to advance. We
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I have also found that it is important
to understand the importance of glory.
We must see how glory has helped the
world to advance. We must see how glory
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helped us to improve ourselves.

I have also found that it is important
to understand the importance of fame.
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world to advance. We must see how fame
has helped the individual to advance. We
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helped us to improve ourselves.

I have also found that it is important
to understand the importance of respect.
We must see how respect has helped the
world to advance. We must see how respect
has helped the individual to advance. We
must see how respect has helped us to
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helped us to improve ourselves.

I have also found that it is important
to understand the importance of admiration.
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the world to advance. We must see how
admiration has helped the individual to
advance. We must see how admiration has
helped us to understand the world, and
how it has helped us to improve
ourselves.

I have also found that it is important
to understand the importance of awe.
We must see how awe has helped the
world to advance. We must see how awe
has helped the individual to advance. We
must see how awe has helped us to
understand the world, and how it has
helped us to improve ourselves.

I have also found that it is important
to understand the importance of wonder.
We must see how wonder has helped the
world to advance. We must see how wonder
has helped the individual to advance. We
must see how wonder has helped us to
understand the world, and how it has
helped us to improve ourselves.

I have also found that it is important
to understand the importance of joy.
We must see how joy has helped the
world to advance. We must see how joy
has helped the individual to advance. We
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understand the world, and how it has
helped us to improve ourselves.

I have also found that it is important
to understand the importance of happiness.
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the world to advance. We must see how
happiness has helped the individual to
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ourselves.

I have also found that it is important
to understand the importance of peace.
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world to advance. We must see how peace
has helped the individual to advance. We
must see how peace has helped us to
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helped us to improve ourselves.

I have also found that it is important
to understand the importance of harmony.
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the world to advance. We must see how
harmony has helped the individual to
advance. We must see how harmony has
helped us to understand the world, and
how it has helped us to improve
ourselves.

I have also found that it is important
to understand the importance of unity.
We must see how unity has helped the
world to advance. We must see how unity
has helped the individual to advance. We
must see how unity has helped us to
understand the world, and how it has
helped us to improve ourselves.

I have also found that it is important
to understand the importance of concord.
We must see how concord has helped the
world to advance. We must see how concord
has helped the individual to advance. We
must see how concord has helped us to
understand the world, and how it has
helped us to improve ourselves.

I have also found that it is important
to understand the importance of agreement.
We must see how agreement has helped
the world to advance. We must see how
agreement has helped the individual to
advance. We must see how agreement has
helped us to understand the world, and
how it has helped us to improve
ourselves.

I have also found that it is important
to understand the importance of consent.
We must see how consent has helped the
world to advance. We must see how consent
has helped the individual to advance. We
must see how consent has helped us to
understand the world, and how it has
helped us to improve ourselves.

I have also found that it is important
to understand the importance of assent.
We must see how assent has helped the
world to advance. We must see how assent
has helped the individual to advance. We
must see how assent has helped us to
understand the world, and how it has
helped us to improve ourselves.

I have also found that it is important
to understand the importance of acquiescence.
We must see how acquiescence has helped
the world to advance. We must see how
acquiescence has helped the individual to
advance. We must see how acquiescence
has helped us to understand the world,
and how it has helped us to improve
ourselves.

I have also found that it is important
to understand the importance of compliance.
We must see how compliance has helped
the world to advance. We must see how
compliance has helped the individual to
advance. We must see how compliance has
helped us to understand the world, and
how it has helped us to improve
ourselves.

I have also found that it is important
to understand the importance of obedience.
We must see how obedience has helped
the world to advance. We must see how
obedience has helped the individual to
advance. We must see how obedience has
helped us to understand the world, and
how it has helped us to improve
ourselves.

I have also found that it is important
to understand the importance of submission.
We must see how submission has helped
the world to advance. We must see how
submission has helped the individual to
advance. We must see how submission has
helped us to understand the world, and
how it has helped us to improve
ourselves.

I have also found that it is important
to understand the importance of surrender.
We must see how surrender has helped
the world to advance. We must see how
surrender has helped the individual to
advance. We must see how surrender has
helped us to understand the world, and
how it has helped us to improve
ourselves.

I have also found that it is important
to understand the importance of defeat.
We must see how defeat has helped the
world to advance. We must see how defeat
has helped the individual to advance. We
must see how defeat has helped us to
understand the world, and how it has
helped us to improve ourselves.

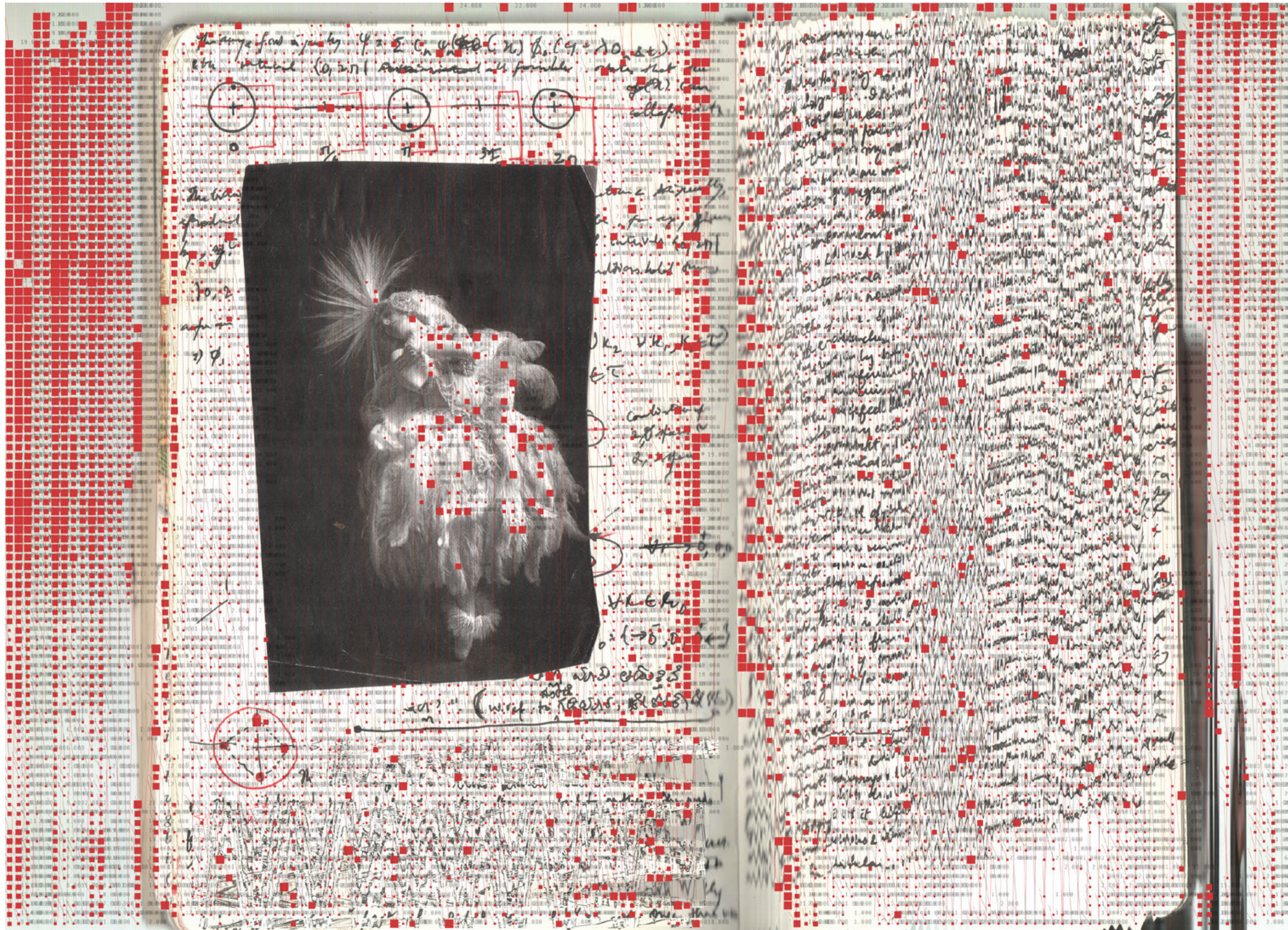
I have also found that it is important
to understand the importance of loss.
We must see how loss has helped the
world to advance. We must see how loss
has helped the individual to advance. We
must see how loss has helped us to
understand the world, and how it has
helped us to improve ourselves.

I have also found that it is important
to understand the importance of grief.
We must see how grief has helped the
world to advance. We must see how grief
has helped the individual to advance. We
must see how grief has helped us to
understand the world, and how it has
helped us to improve ourselves.

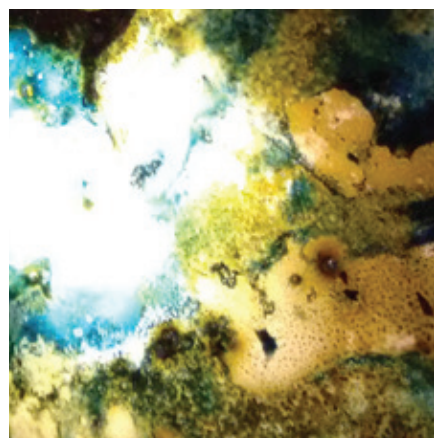
I have also found that it is important
to understand the importance of sorrow.
We must see how sorrow has helped the
world to advance. We must see how sorrow
has helped the individual to advance. We
must see how sorrow has helped us to
understand the world, and how it has
helped us to improve ourselves.

I have also found that it is important
to understand the importance of pain.
We must see how pain has helped the
world to advance. We must see how pain
has helped the individual to advance. We
must see how pain has helped us to
understand the world, and how it has
helped us to improve ourselves.

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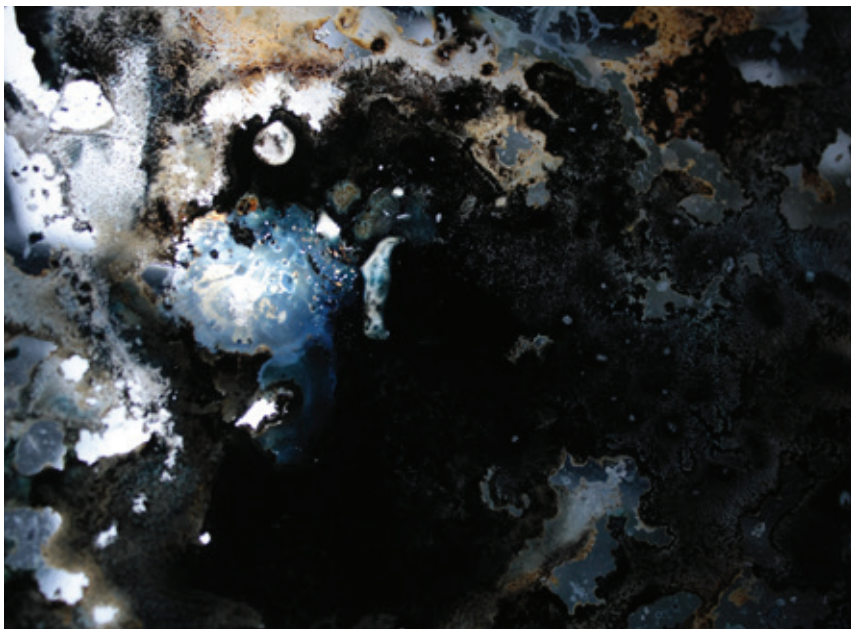


7



Generative art using nature's code
(Glass, Photosensitive Chemicals, Misc.)

Look closely enough & you'll find visuals reminiscent of nebulae in the fluid streams of a hot cup of coffee, and structures that resemble the roots of a climber, in some geological formations.



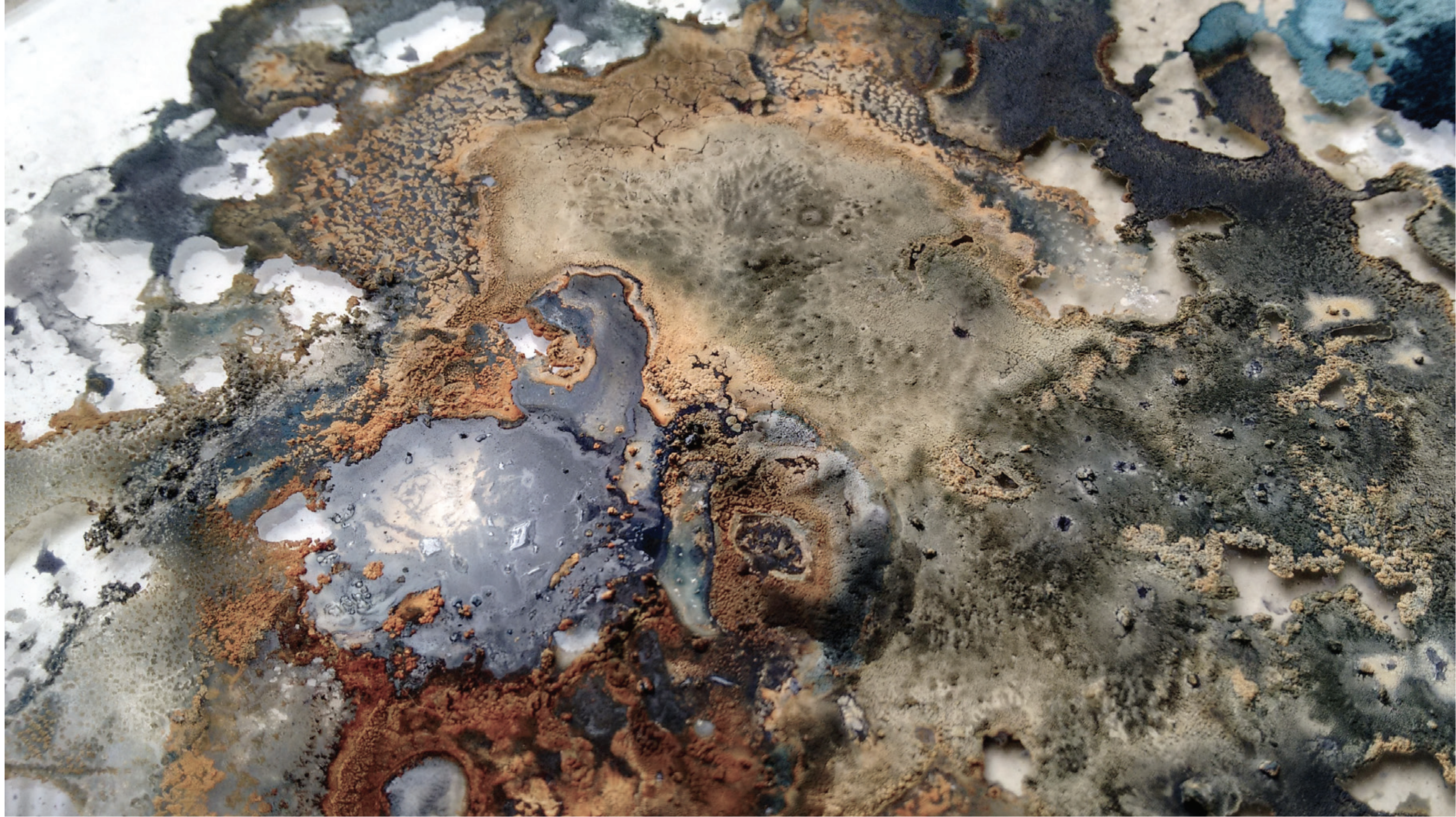
The science behind patterns is overwhelmingly beautiful.

Utilising principles of chemistry & physics(Solubility, pH levels, oxidation/reduction, fluid mechanics, crystallisation, photo-sensitivity), I attempted to create a structure using Ammonium Ferric Citrate, Potassium Ferricyanide, Tannic Acid, Sodium Chloride & water, on a 1'x1' sheet of glass.

During the course of creation, various patterns emerged, disappeared & changed.

The purpose was to demonstrate a mode of creation of systems & visuals, where one 'seeds' the initial space with the building blocks & lets the system create the visuals & structures on its own, as opposed to creating the end product by carving out each detail.

Video Link: <https://www.behance.net/gallery/21453071/Terra>



Salt formations that resemble landforms



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