

THESIS IDEATION

A Project by– Mahira Noor

B R A I N S T R O M I N G

Existing personal experiences

Relationship with objects around me

Natural disasters in relation with human experience

My religious and societal beliefs today in relation to my
preconceived notions

Impact of my parents on me

QUESTIONS

- M
- 47 ~~Aura~~ Aura → human energy
- 48 Signage → to make the city look less capitalised & more humanised like life. Right now everything is hard to grasp and unreal. Billboards etc.

49 local classical / historical / stories / characters / people accessible to kids at any age people who need recognition and have done a lot for the nation. EBooks that have a QR code / where a certain image is scanned & history of the event or person will be briefly shown.

50 Millennial Culture in ~~Pakistan~~ Pakistan.

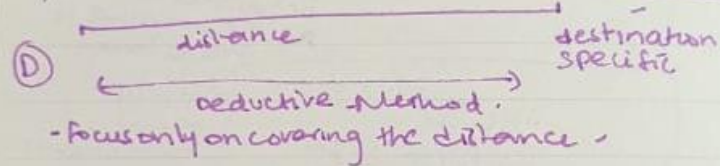
51 Shia Sunni beliefs

- ergonomics of the human body

52 olfactory → Imagery. how it affects our surroundings.

* INDUCTIVE & DEDUCTIVE BEHAVIORS. (43)

creativity / imagination / rhythm / feelings / day dreaming
specific / to the point / no details
; for example human behaviour ; OCEAN (is an)



I Focus on going under the ocean to see what is inside (Journey Oriented).

* Dreams confused reality. (44)

45 Intuition ;

46 Atoms & ELECTRONS + Photon (messenger)
Our body is constantly releasing biophotonic energy that delivers messages between atoms.

- communicating & sending information

- people have certain energies that they release.

- Urdu language → as a medium of expression

- what is Urban Planning?

* Laughter is a therapy → Laughter therapy
(24)

* Social Isolation → Public Health Problem
* [18 - 22 yrs] (15)
↳ Is our surrounding environment responsible for isolation.

• different ways it can be interpreted? Subjective
Suburb vs Cities? (9)

* ~~Why do Public Parks not feel safe~~ Why do Public Parks not feel safe; Why can't we rely on public spaces for social interaction. (13)

* Is Art a Religion? (37)
Art a religious practice -

• Sight Seeing in Lahore; how can it be improved

(11)
① Bride culture in Pakistan

↳ different religious cultures / diversification of brides in different cultures / societies

- their rituals; Hindus / Christians / Sikhs / Parsi / Muslim

- using different social enclosures; Upper / Lower / Middle

- class structure impacts the festivity

→ South Asian stories

↳ The Brown Gaze (13)

→ Personality Disorders (14)

→ Dependent Personality Disorder.

→ How different colors make you stand out → mind / Psyche. (15)

→ Physical Pain → experienced. (18)

→ Urdu Typography (17)

→ Earth

→ sustainability / Product Design -

→ Absurd / Exaggerated Characters in (18)
weird unnatural positions / environment

→ WHY DO WE STOP BELIVING IF OUR PRAYERS ARE NOT HEARD. (19)

→ Identify who we really are? Identity Crisis (20)

→ Technology is making us Lonely (21)
Public Health Problem → Social Isolation
our society is designed like that now.

- Does Loneliness come from our environment?

↳ is it Contagious -

↳ Mental Health -

↳ Built environment.

~~Urban Planning → Social Interaction~~

• Does nature play a role in feeling less isolated. (23)

• Tall Building / Crowded Places / indoor places

→ Claustrophobic enclosed spaces. & the impact on humans. (22)

MAJOR

- How is DESIGN EFFECTING THE ENVIRONMENT (5)

- AI WEI WEI → ARTIST

• HOW CAN REALITY BE CREATED BY GOING INTO A PARTICULAR SPACE? (6)

→ REFERENCING NATURE INTO ART/DESIGN

→ HOW CAN WE FEEL IN EARTH QUAKE? (7)

• EYE AND THE BRAIN IS EASILY FOOLED (8)

• ELAS HJORLEIFSSON

- DANCE AS A MEDIUM OF EXPRESSION (9)

↳ PHYSICALITY & SPACE / MOVEMENT / GEOMETRY

→ ELIPSE MIRROR → ANAMORPHIC SHAPES

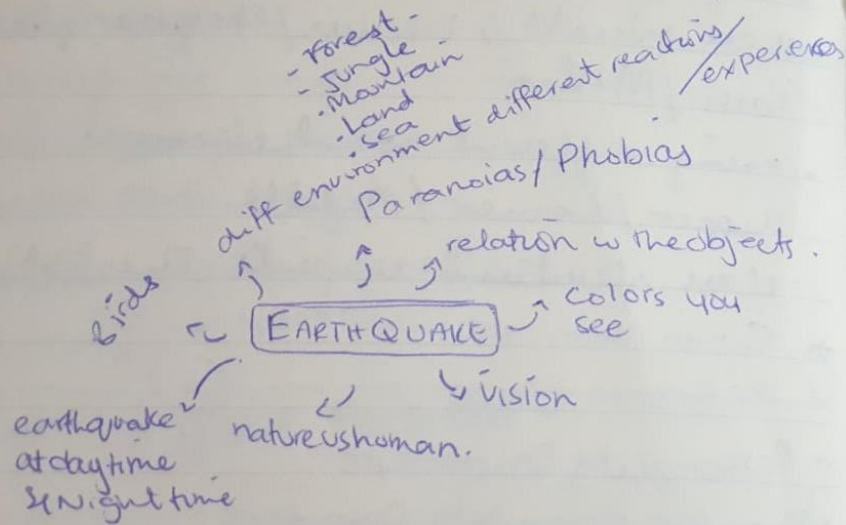
- BUCKMINSTER FULLER

SIGNAGE → CITY OF SIGNS (10)

PAULA SCHER

• CONCEPT OF NAZAR A MYTH? → (11) The Power of subconscious mind.

URDU.



- why do humans live/survive on validation that comes from social media. (25)
- Do you dress up for yourself or the people. ^{you}
- the elite culture, how it separates the different cultures. (26)
- **Social Control** on the human mind; (27)
- Does writing your thoughts on a piece of paper help? (28)
- **Comic Book**
- Books for ^{poor kids} disabled people. (29)
- ~~Books~~ Sound/Music impact on the mind. (30)
- ~~Are books~~ Imaginary friends in a ^{real} ~~imaginary~~ world. (31)
- Future? (32)
- Parenthood → Parenting as an effect on Today's children in relation with traditional norms. →
- Dog Phobia → (33)

Human response

Physical Experiences

Environment

Society in Pakistan

nature

Architecture

Behavior

therapy

KEYWORDS

Mundane
behaviors

influences

Local culture

Design

Aura

Behavioral conflicts

Subconscious mind

space

Isolation

CATEGORIES



Society and Behavior

Memory/learning
Surveillance
Is technology making
Us lonely?
Is mental health
contagious?
Parenting behaviors
And what children learn from
Them?
Sight seeing in Lahore
Social experiments with
Objects and beliefs around us



Environment

Sound as a language
Architecture effecting
the environment
Indoor Earthquake
Authority figures and
Social control on the human
Mind
Urban Planning?
Public Spaces for social
Interaction



Fiction

Is Nazr a myth?
Why do we stop
Believing if our prayers
Are not heard?
Imaginary friends
Is Art a religion?
What are the voices
in my head saying?
Stones and their
Spirituality in beliefs
Intuition



Psychology

Dependent
Personalities
Do Colors make
You stand out?
Physical Pain
Experiences
Absurdum
Tall Buildings/
Crowded places/
Restaurants evoke
Claustrophobia
Does writing on
A piece of paper help?
Social Experiments



Nature Vs. Nurture

Bride Culture in
Pakistan
Cultures / Societies
/ rituals
The brown Gaze
Earth quake /
Hurricane in an indoor
Space
Why do we
Conform?
Auras
Millennial Culture

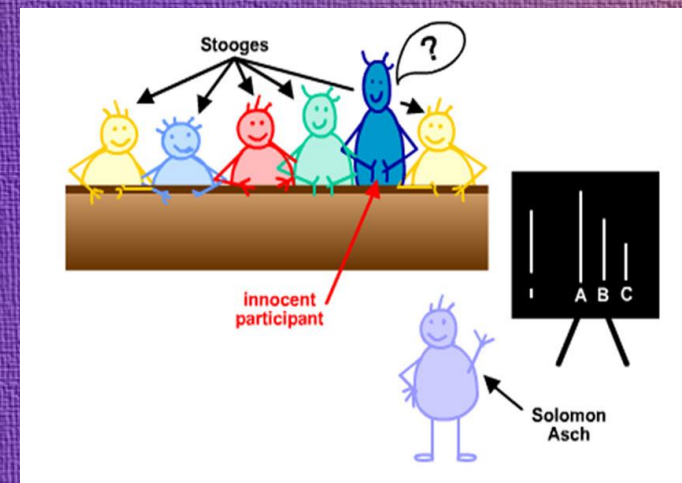
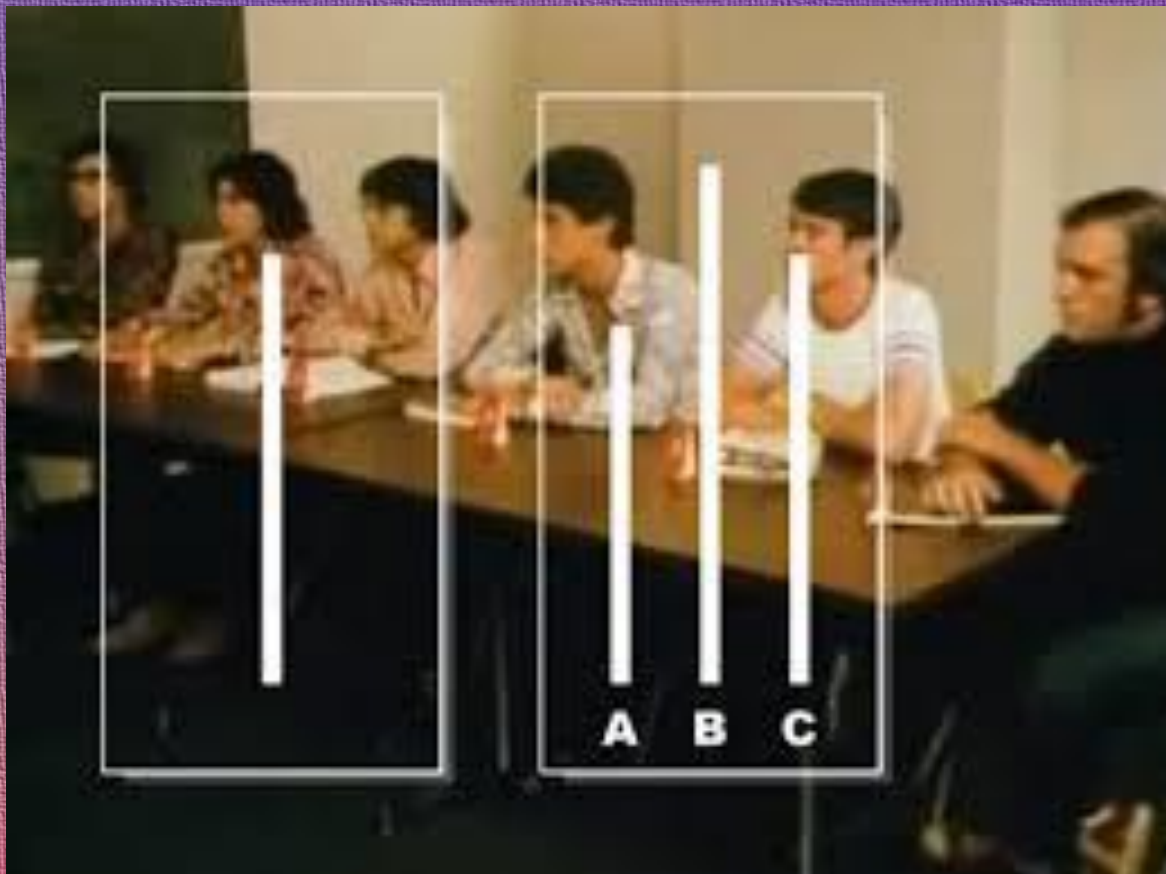
What is a social experiment?

Social- n. social gathering, especially one organized by a club, congregation, etc.

Experiment- n. procedure for testing a hypothesis, etc.

The Asch Conformity Experiments

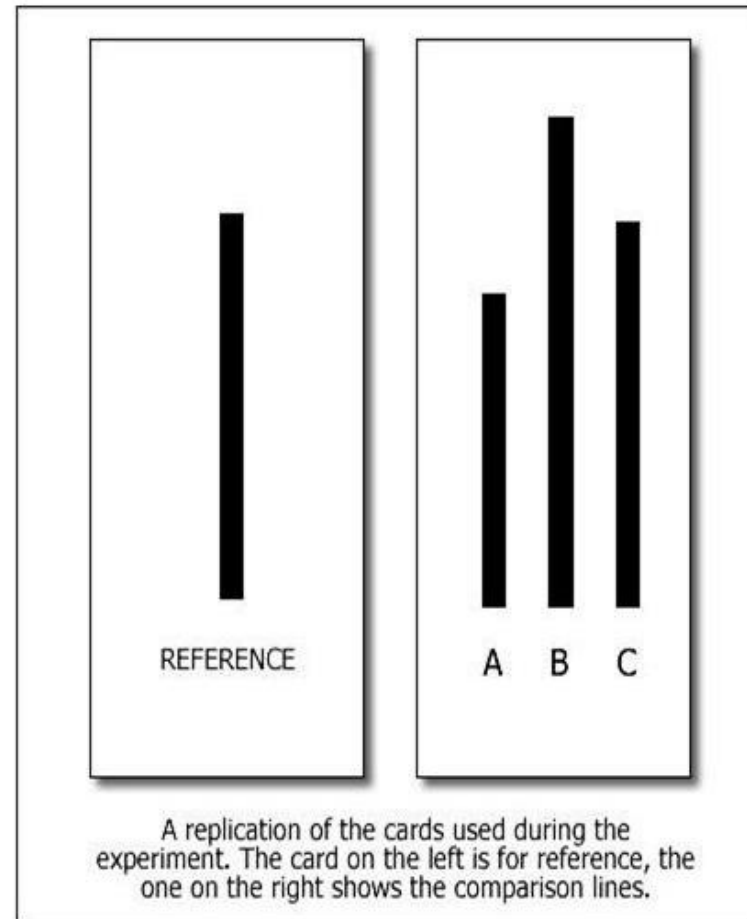
What Solomon Asch Demonstrated About Social Pressure



Stooges: A secret informant

Group Pressure and Conformity

- Conformity- adjusting one's behavior of thinking to coincide with a group standard
- Solomon Asch Experiment- Actors pick the wrong line and then people are coerced by conformity to pick something they know is wrong
- Alone- less than 1% made mistake
- In Groups- wrong 33% of the time



The Bobo Doll Experiment

- Tested how children learn and imitate aggressive behavior

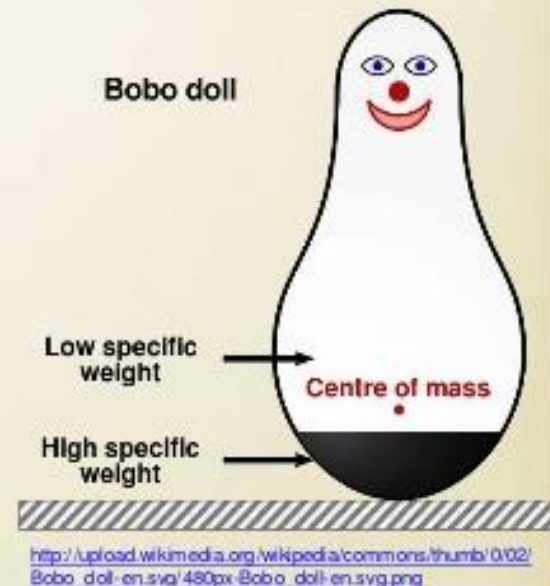
(Bandura, Ross & Ross, 1961)

- Genetic predisposition & abusive homes combined with the media increases “violent criminal behavior”

(Heath, Kruttschnitt, and Ward, 1986)

- Biggest factors contributing to media violence: *desensitization* and limited *consequences*

(Dale, L.D., DiLoreto, J.D., Couto, M.C., Klein, J.K., Borto, J.B., McDonald, K.M., Pidano, A.P., McEvoy, K.M. & Olson, H.O., 2013)



Bandura Bobo Doll Study Stage 3: Test for delayed imitation

<https://vimeo.com/90317388>

The room is full of aggressive and non-aggressive toys

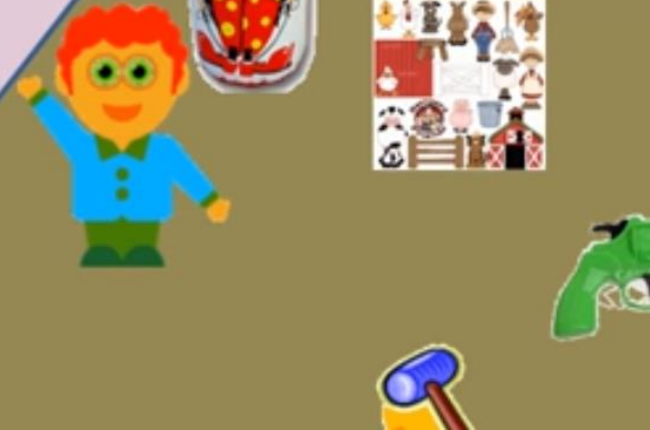


They are looking for:

- Imitative aggression (physical and verbal)
- Partial imitation
- Non-imitative aggression

ROOM 3

2 observers are behind the mirror





<https://www.youtube.com/watch?v=xjP8eRaW3M8>

Bully A Plant: Say No To Bullying



IKEA Bullying Experiment Promotes Fraud and Fragility

Posted May 17, 2018

<https://www.youtube.com/watch?v=Yx6UgfQreYY>

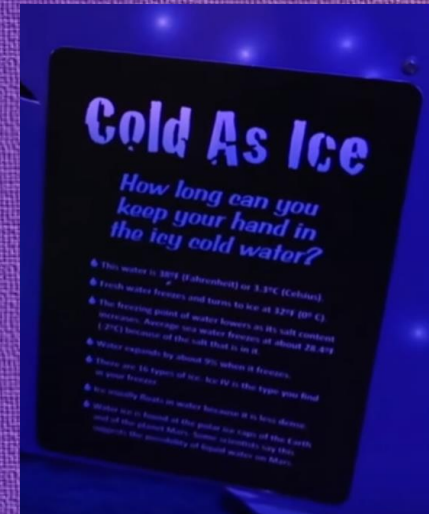
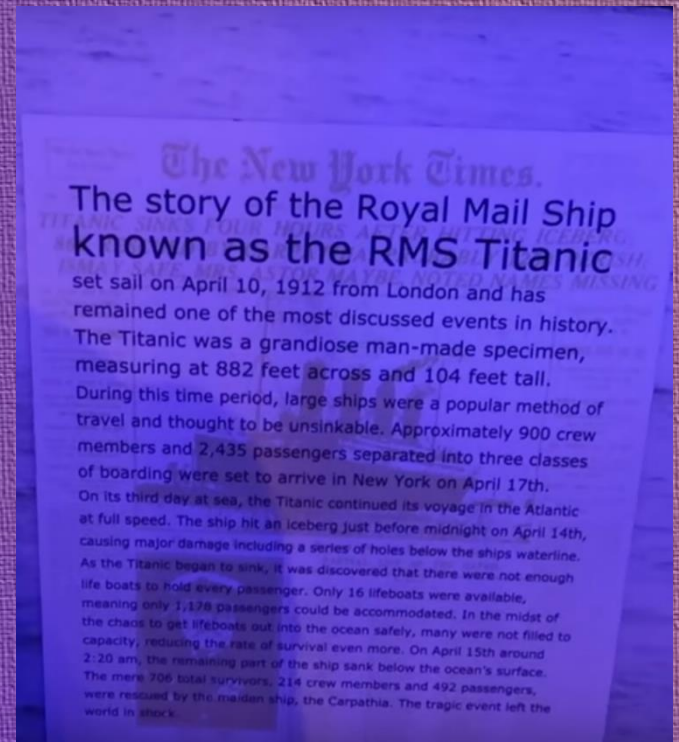
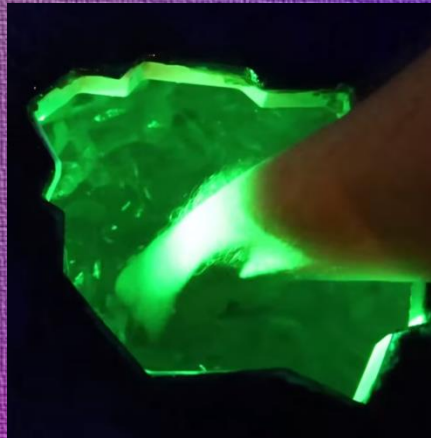
Bully A Plant: Say No To Bullying

Natural Disasters and the Human Experience

Indoor Amusement Park



Wonderworks Orlando The Upside Down Building



04:11 – 04:57

<https://www.youtube.com/watch?v=sp206x8DIRM&list=PLa5y0u1t6g>

The sinking of the Titanic on April 14, 1912 on April 14, 1912

"Stephanie Peters is sharing her paintings on natural disasters. "These paintings reflect something about the world I live in, like I believe cave paintings once did for prehistoric man. My natural disaster series includes stitches to reflect humanity healing from natural disasters, and how we just stitch ourselves up rather than evolve or adapt to the changes the earth is making." - Elizabeth Pickens



"Flood"
2012. Acrylic & String. 18x24"



"Blizzard"
2012. Acrylic & String. 18x24"



"Hurricane"
2012. Acrylic & String. 18x24"



"Earthquake"
2013. Acrylic, String & Dirt. 30x40"



"Volcanic Eruption"
2012. Acrylic & String.
24x36"

"Representations of catastrophes emotionally involve the viewer, making him or her become emotional and stirring feelings of compassion," explains Markus Bertsch

Social Isolation and Architecture

Our Cities Are Making Us Lonely

Here's how urban planners want to change that.

By **VICE Staff**

Dec 17 2018, 2:28pm [f Share](#) [Tweet](#)



IMAGE: MARIA CHIMISHKYAN



The VICE Guide To Right Now

View term

The VICE Guide to Right Now

ecast.

Our Cities Are Designed for Loneliness

Dec 17, 2018 · 12 min

The VICE Guide to Right Now Podcast,
VICE's Ankita Rao
to learn how urban planners are trying to design a way out of this problem.

18 – 22 years

Is our environment responsible for isolation?

Suburbs vs. cities?

Technology is making us lonely and inter connectivity?

Built environment

Does nature make us feel less lonely?

How to know if you are lonely? Melbourne School of Design, Author provided

Can you successfully borrow \$2000 from your neighbors?

Who is he? I never met him.
Is he really my neighbor? Is he a liar?

Hello, I'm your neighbor.
Can I borrow \$2000
from you?

<https://theconversation.com/designing-cities-to-counter-loneliness-lets-explore-the-possibilities-104853>

“social engagement paraphernalia”

Rail station;
killing time without
engaging with the person
next to you?

convert railway carriages
into “sensory experience cabins”
explore the in-built gallery spaces
listen to other people’s stories
while commuting.

The Loneliness Express. Melbourne School of Design, Author provided



Crowded places / restaurants lead to noise pollution



Why restaurants became so loud — and how to fight back

“I can’t hear you.”

By Julia Belluz | @juliaoftoronto | julia.belluz@voxmedia.com | Updated Jul 27, 2018, 9:26am EDT

<https://www.vox.com/2018/4/18/17168504/restaurants-noise-levels-quiet-declines>



HAROON MIRZA: THE NIGHT JOURNEY

SEP 7 —
DEC 9, 2018

Electricity comes alive in *The Night Journey*, a mesmerizing light and sound installation by London-based multimedia artist Haroon Mirza. This site-specific, immersive artwork arises from the artist's interests in Sufi mysticism, meditation, trance music and other consciousness-altering practices as alternate ways to experience the world.

Image: *Haroon Mirza: A C I D G E S T*, Pérez Art Museum Miami, 2017–2018. Photograph by Oriol Tarridas.

Sufi mysticism, meditation, trance music and other consciousness-altering practices as alternate ways to experience the world.

Haroon Mirza has won international acclaim for installations that test the interplay and friction between sound and light waves and electric current. He devises kinetic sculptures, performances and immersive installations, such as *The National Apavillion of Then and Now* (2011) – an anechoic chamber with a circle of light that grows brighter in response to increasing drone, and completely dark when there is silence. An advocate of interference (in the sense of electro-acoustic or radio disruption), he creates situations that purposefully cross wires. He describes his role as a composer, manipulating electricity, a live, invisible and volatile phenomenon, to make it dance to a different tune and calling on instruments as varied as household electronics, vinyl and turntables, LEDs, furniture, video footage and existing artworks to behave differently. Processes are left exposed and sounds occupy space in an unruly way, testing codes of conduct and charging the atmosphere. Mirza asks us to reconsider the perceptual distinctions between noise, sound and music, and draws into question the categorisation of cultural forms. “All music is organised sound or organised noise,” he says. “So as long as you’re organising acoustic material, it’s just the perception and the context that defines it as music or noise or sound or just a nuisance” (2013).

Haroon Mirza was born in London, UK in 1977 where he lives and works. He has a BA in Painting from Winchester School of Art, an MA in Design Critical Practice and Theory from Goldsmiths College, London, UK (2006) and an MA in Fine Art from Chelsea College of Art and Design, London, UK (2007). Recent solo exhibitions include ‘ããã’, Pivô, São Paulo, Brazil (2016); Nam June Paik Center, South Korea (2015); Matadero, Madrid, Spain (2015); Museum Tinguely, Basel, Switzerland (2015); Museum Haus Konstruktiv, Zurich, Switzerland (2014); Le Corbusier’s Villa Savoye, Poissy, France (2014); IMMA, Dublin, Ireland (2014); Le Grand Palais, Saint-Nazaire, France (2014); The Hepworth, Wakefield, UK (2013); MIMA, Middlesbrough, UK (2013); The New Museum, New York, USA (2012); Kunst Halle Sankt Gallen, St Gallen, Switzerland (2012); University of Michigan Museum of Art, Ann Arbor, USA (2012); Camden Arts Centre, London, UK (2011) and A-Foundation, Liverpool, UK (2009). His work was included in the 7th Shenzhen Sculpture Biennale, China (2012) and the 54th Venice Biennale, Italy (2011), where he was awarded the Silver Lion. He was awarded the Northern Art Prize in 2011, the DAIWA Foundation Art Prize in 2012, the Zurich Art Prize in 2013, the Nam June Paik Art Center Prize in 2014 and the Calder Art Prize in 2015.

https://www.art-s3.amazonaws.com/uploads/attachment/file/body/13469/Haroon_Mirza_Biography.pdf



2017
Modified Marshall cabs, LEDs, bespoke media device,
XLR4 cables, score Installation view of 'Haroon Mirza':



<https://www.youtube.com/watch?v=Gdm1IRybn1Y>



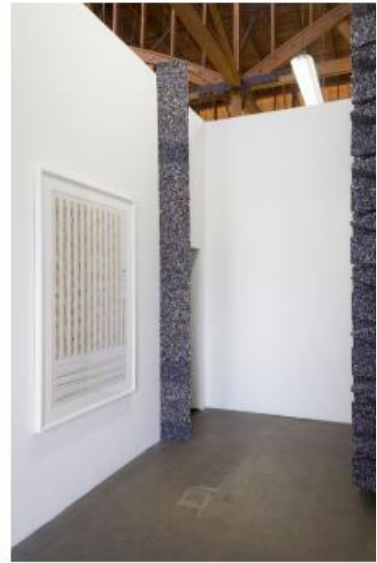
Haroon Mirza

<https://www.youtube.com/watch?v=fSLJx-Af7U>
<https://www.youtube.com/watch?v=12uCeD3IRD4>

A Chamber for Horwitz; Sonakinatography Transcriptions in Surround Sound, 2015

Custom audio visual device, LEDs, speakers, foam Dimensions variable

© Photography Bettina Matthiessen



The top room is pitch black, but you can always hear yourself, whether brain or body. Your brain starts to create images, populate with remnants of what you saw before you entered the room.

Architecture seems to have a troubled relationship with darkness: from the radical groups of the 1960s like Superstudio who thought discos should be a home for everything, to the artificially light-flooded renderings of today's architectural culture. What do you think of darkness, how do you use it?

Sadly it's not just architects. The hunger for more information and control is not a symptom of architecture, but a symptom of technology. What's the ultimate goal of this new software? To simulate reality, to offer a sort of endgame that gets as close as possible to being full experience of reality, but it's not actually, so it's safe. A zero risk scenario. Darkness helps undo this obsession with power and perception and allows for an alternative understanding of reality. In my current show at the Zabudowicz, the top room is pitch black, but you can always hear yourself, whether brain or body. Your brain starts to create images, populate with remnants of what you saw before you entered the room.

Why is the location is so important?

That particular stretch of desert is indigenous to the psychedelic cactus paeote, which indigenous communities would consume to get high and have these mystical encounters in the desert. The plant played a huge role in the local culture heritage over the past 2,000 years, but peyote itself is migrating south into the Chihuahuan Desert in Mexico because of climate change. Meanwhile, the stones I use are brought up from Mexico. Marfa rock is limestone that is coral aggregate, so a reddish-yellow; these rocks are dark grey with streaks of white veins. So in the landscape, the circle looks totally alien: its otherworldliness is crucial to the project.

How is a dark space used?
Reality Simulation
Darkness undo obsession
with power and perception

Chapter 6

Participatory Culture

Understanding participation

Das Wissen muß ein Können werden (Carl von Clausewitz).

Book Title: Bastard Culture!

Stable URL: <https://www.jstor.org/stable/j.ctt46n23s.10>

Is the Family Still a Source of Social Control?

Essays, UK. (November 2018).

Retrieved from <https://www.ukessays.com/services/example-essays/sociology/is-the-family-still-a-source-of-social-control.php?vref=1>

- Socio economic status
- Gender roles
- Nuclear family structure
- Education
- Competition (Family planning)

The work was commissioned for the newly renovated clinic for the younger cancer patients but has had an overwhelming appeal to older patients, hospital staff and visitors, light floating in space.



Betsy Connors
Light Pond and the secret garden, 2014
Holography
30 x 30" each
Charles Dana Building, Floor 3

Simulation

Diegesis

Adrenaline

Kinetic Art

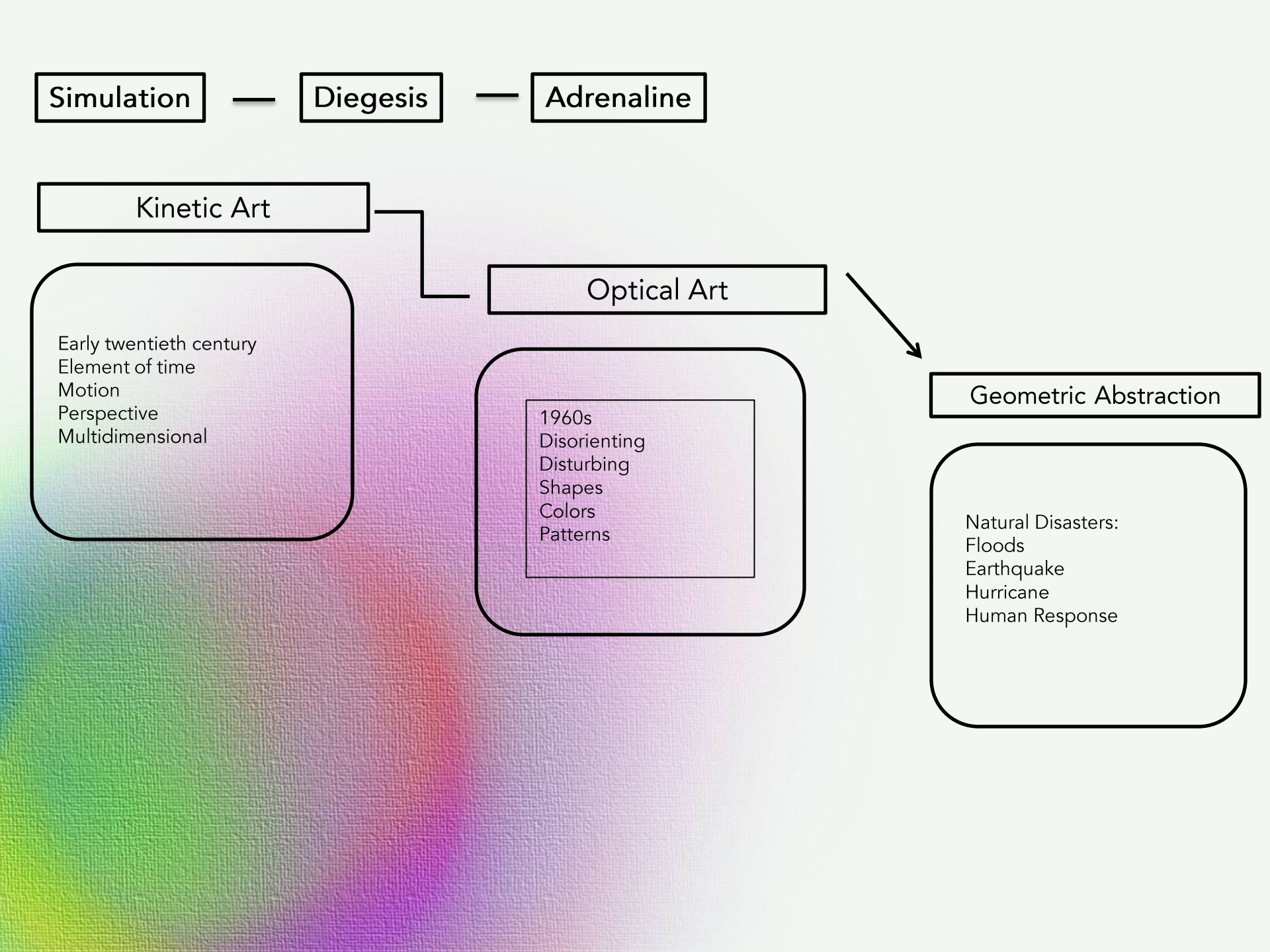
Early twentieth century
Element of time
Motion
Perspective
Multidimensional

Optical Art

1960s
Disorienting
Disturbing
Shapes
Colors
Patterns

Geometric Abstraction

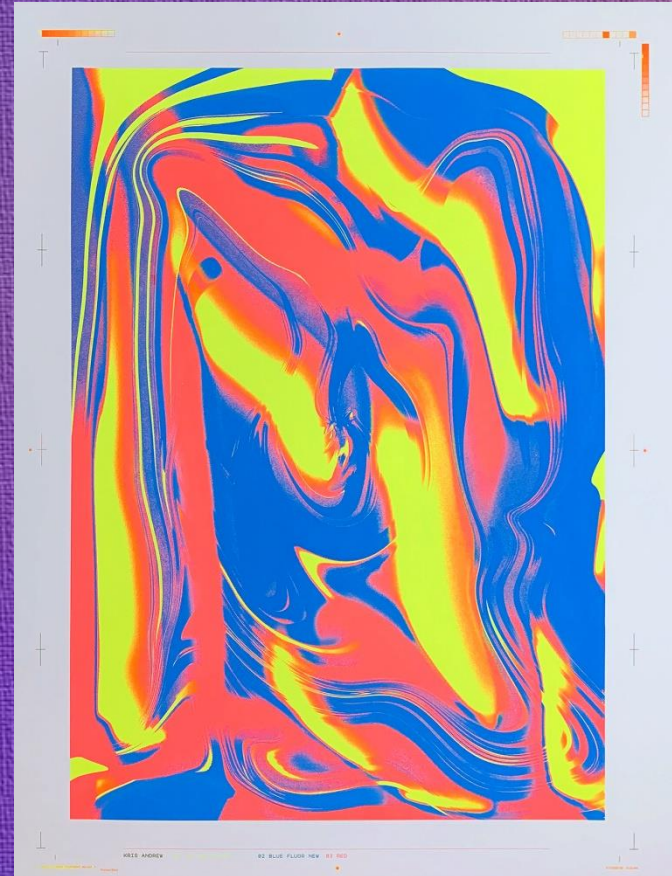
Natural Disasters:
Floods
Earthquake
Hurricane
Human Response



Kris Andrew Small

His psychedelic constellation of work: lucid textural pieces, photo-based collages and kinetic type-based compositions that vibrate off the page with their own brand of hyperactivity.

explosive typography
kaleidoscopic patterns
overactive mindset
saturated colors
tropical adolescence
Hallucinatory
modern identity
energetic aesthetic

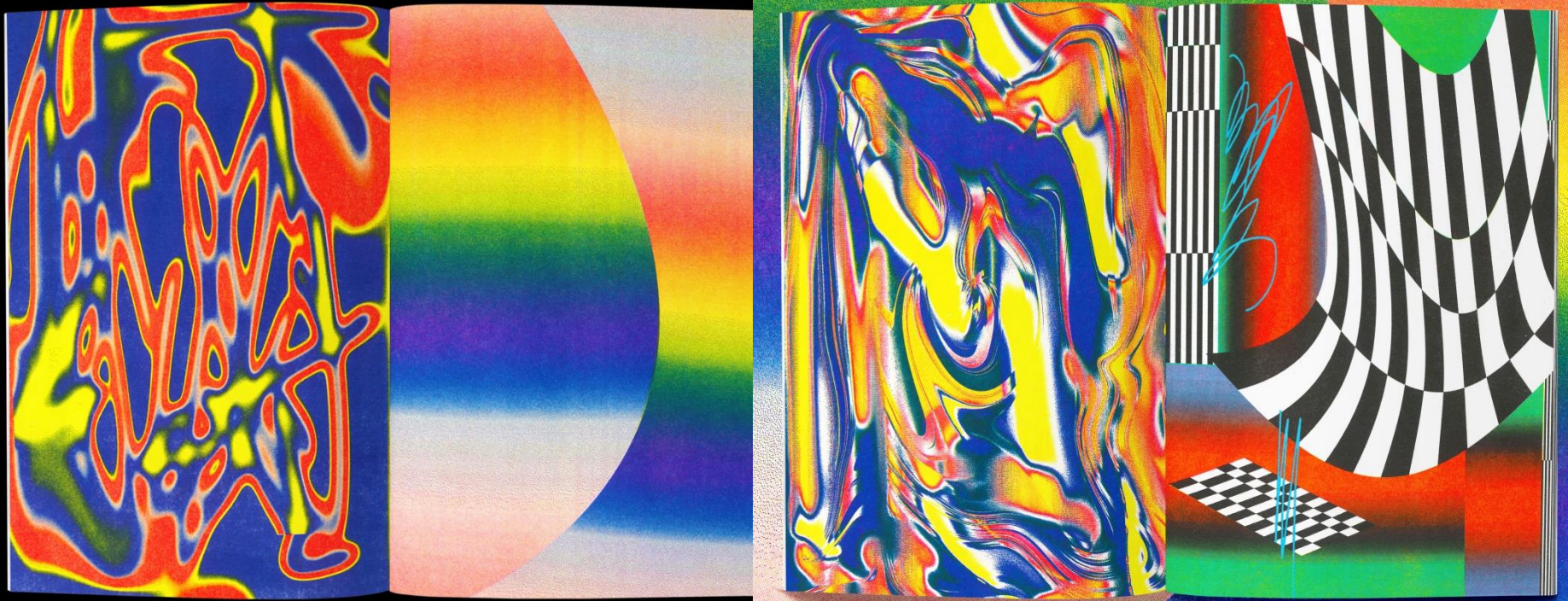


WILD NIGHT

A2, 3 Color screen print, printed by The Archivist, Bangkok, Thailand.

<https://krisandrewsmall.com/BOYS-A-Zine-With-Corners>

BOYS - A Zine with Corners



Visual Representation of Hong Kong, through neons



Bridget Riley

Nataraja 1993

Tate

© Bridget Riley 2019. All rights reserved.



Nataraja means Lord of the Dance, and refers to the Hindu god Shiva. This is like a dance too, with its diagonal lines and bright colors.

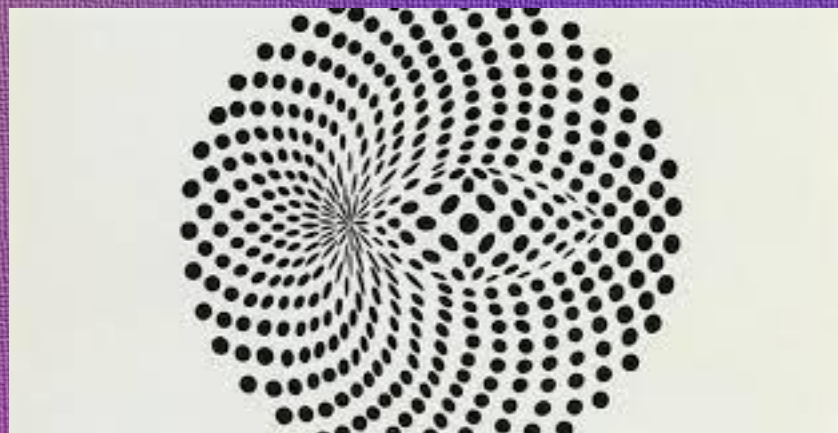
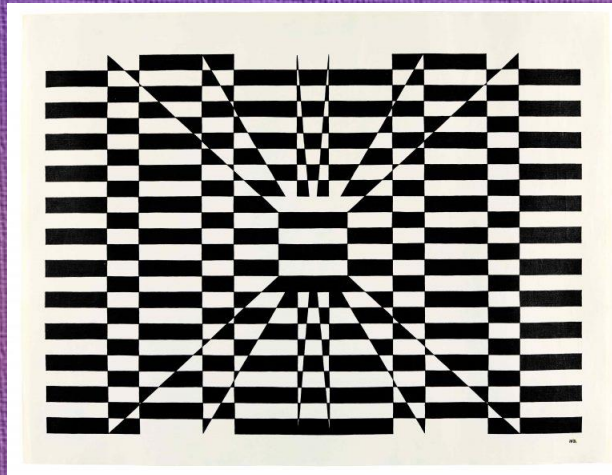
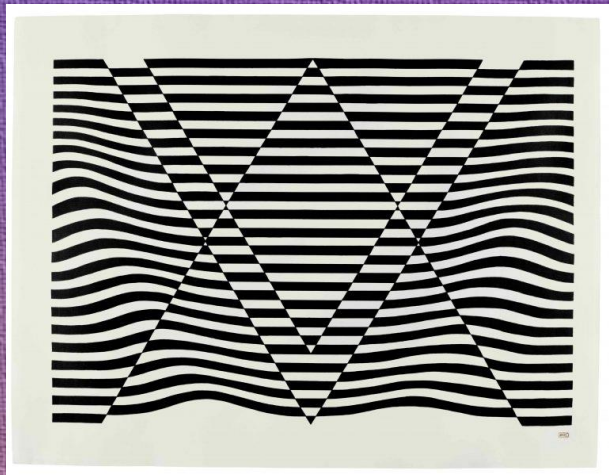
<https://www.tate.org.uk/arts-explains/who-is/who-bridget-riley>

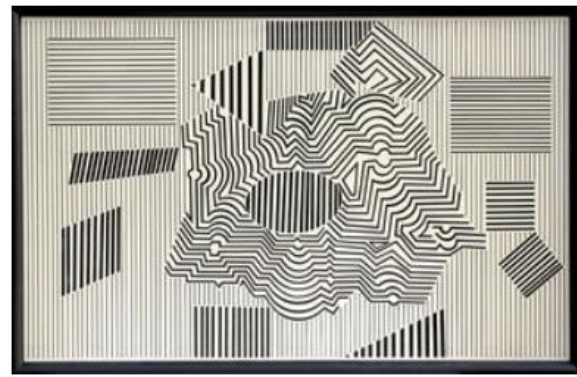


Ernesto Briel: Pioneering Op Art

by Mark Westall

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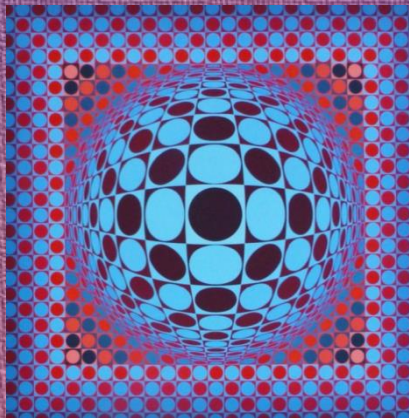


Victor Vasarely

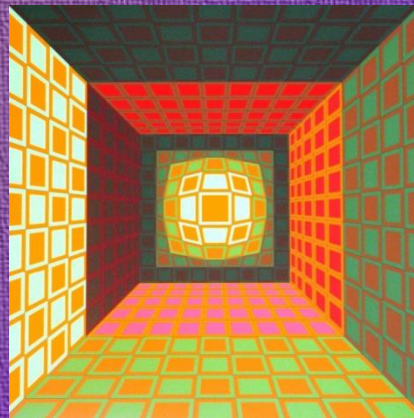
Hungarian-French, 1906-1997 3,573 followers

<https://www.artsy.net/artist/victor-vasarely>

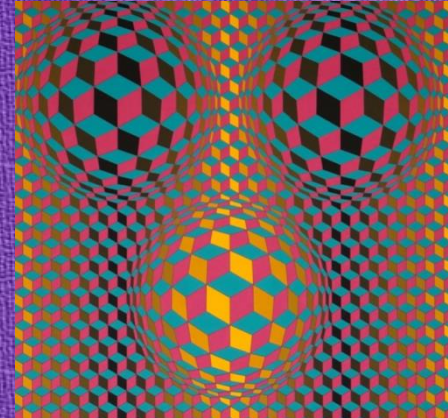
lines, geometric shapes, colors, shading, depth, movement, and three-dimensionality.



Hang, 1979
Silkscreen
32 x 30 in
81.3 x 76.2 cm

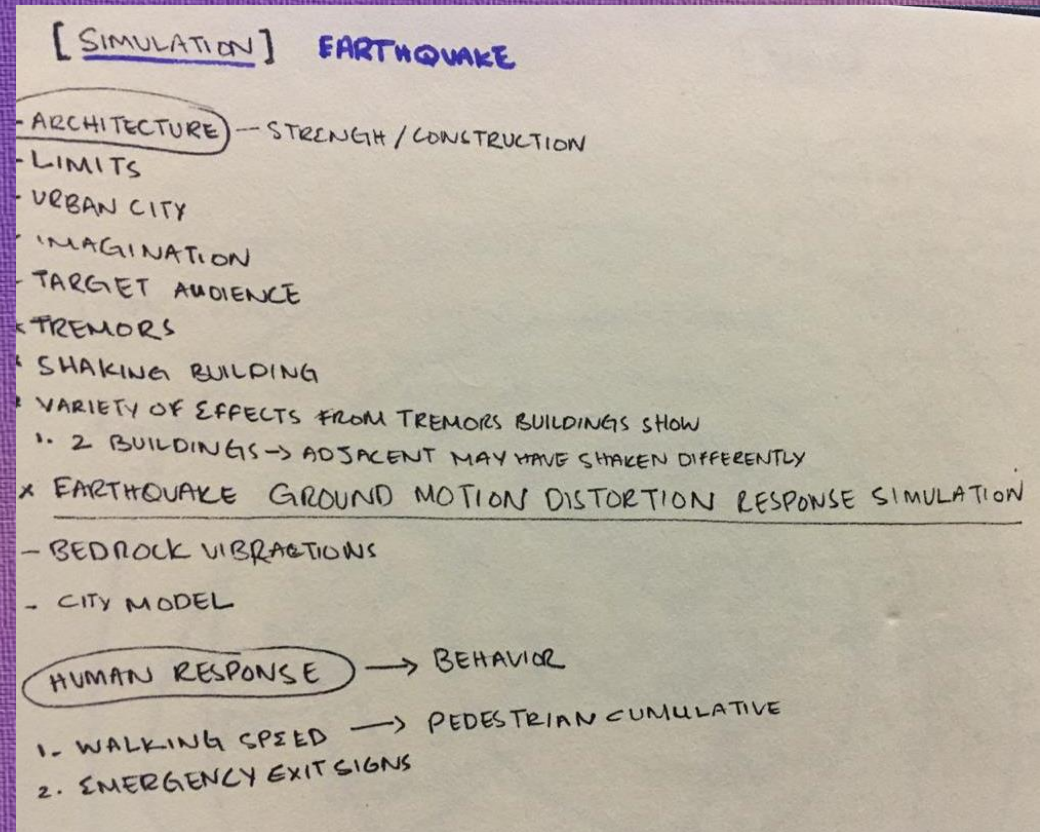
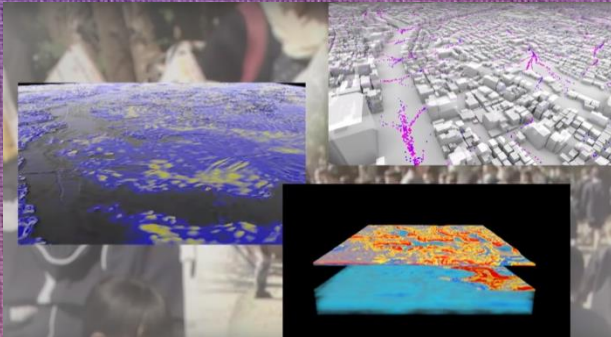


Kaldor, 1980
Silkscreen
34 x 30 in
86.4 x 76.2 cm



Virgo, 1982
Silkscreen on paper
29 9/10 x 29 9/10 x 1 3/5 in
76 x 76 x 4 cm

Earthquake Simulation in Japan

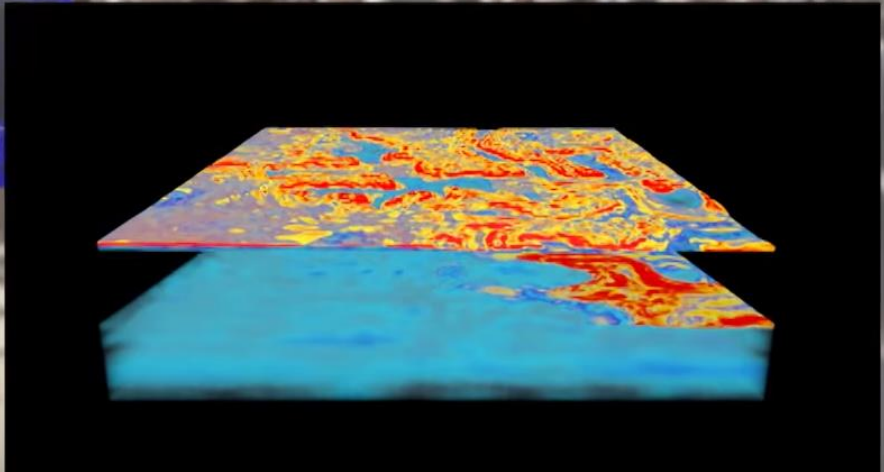
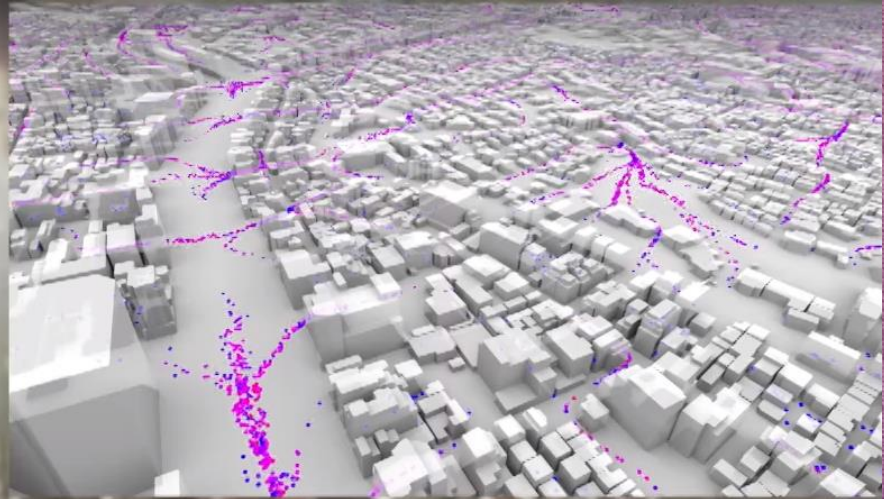
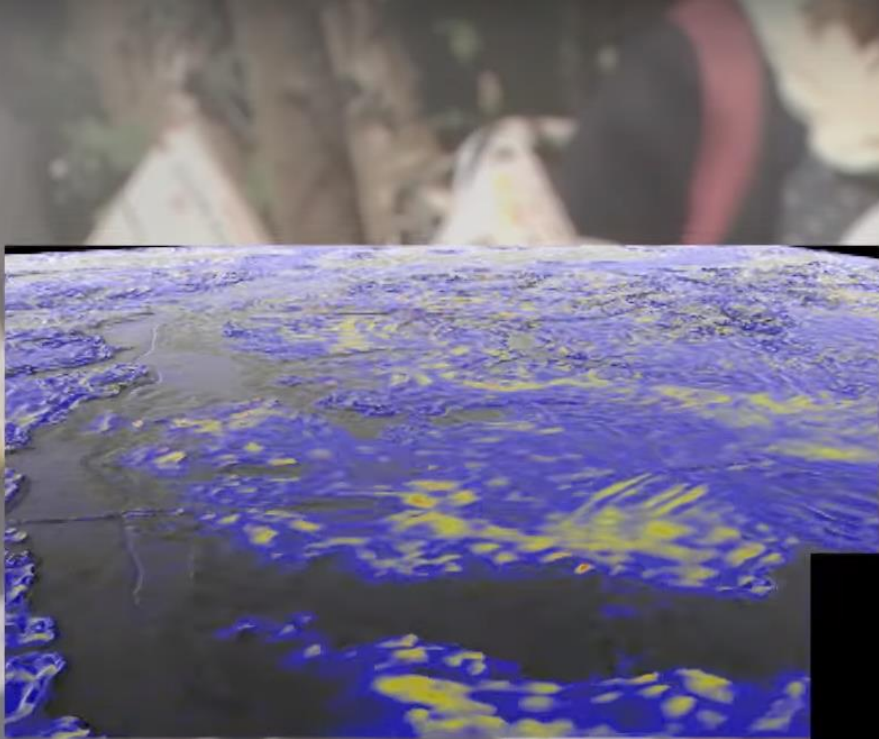


This video gives an overall picture of the integrated total city simulation that is being developed in cooperation with local governments with the goal to prevent or mitigate damage from earthquakes using the K computer, which has made many world-class achievements, as well as the types of research that will be carried out on the post-K computer.

K computer Simulation: Prevention and Mitigation of Natural Disasters (full ver.)

tsunehisa

<https://www.youtube.com/watch?v=gXDuNZbVYMs>



Kinetic art

Optical art

Geometrical Abstraction

- ❖ Kaleidoscopic Movements
- ❖ 3D Illusion
- ❖ How does the brain create these visuals that we see?
- ❖ Josef Albers : Color Illusion / Eye Movement / Contrast / High Contrast
- ❖ M.C Escher – Op art / Vertigo

OPTICAL ILLUSIONS

Search this site

Seeing is not
always BELIEVING
!

What are Optical
illusions?

History of Optical
Illusions

HOW WE SEE..

Types of Optical
Illusions →

TOP Optical
illusions !

Types of Optical Illusions

An **optical illusion** is characterized by visually perceived images that are deceptive or misleading. The information gathered by the eye is processed by the brain to give a perception that does not tally with a physical measurement of the stimulus source. There are three main types of illusion – literal optical illusions that create images that are different from the objects that make them, physiological illusions that are the effects on the eyes and brain of excessive stimulation of a specific type – brightness, tilt, color, movement, and cognitive illusions where the eye and brain make unconscious inferences.

1. [Literal Illusion](#)

2. [Physiological Illusion](#)

3. [Cognitive Illusion](#)



A face or a scenery ?



How many people are in this picture?



Could you see an old woman?

Literal optical illusions are illusions that create images that are different from the objects that make them.

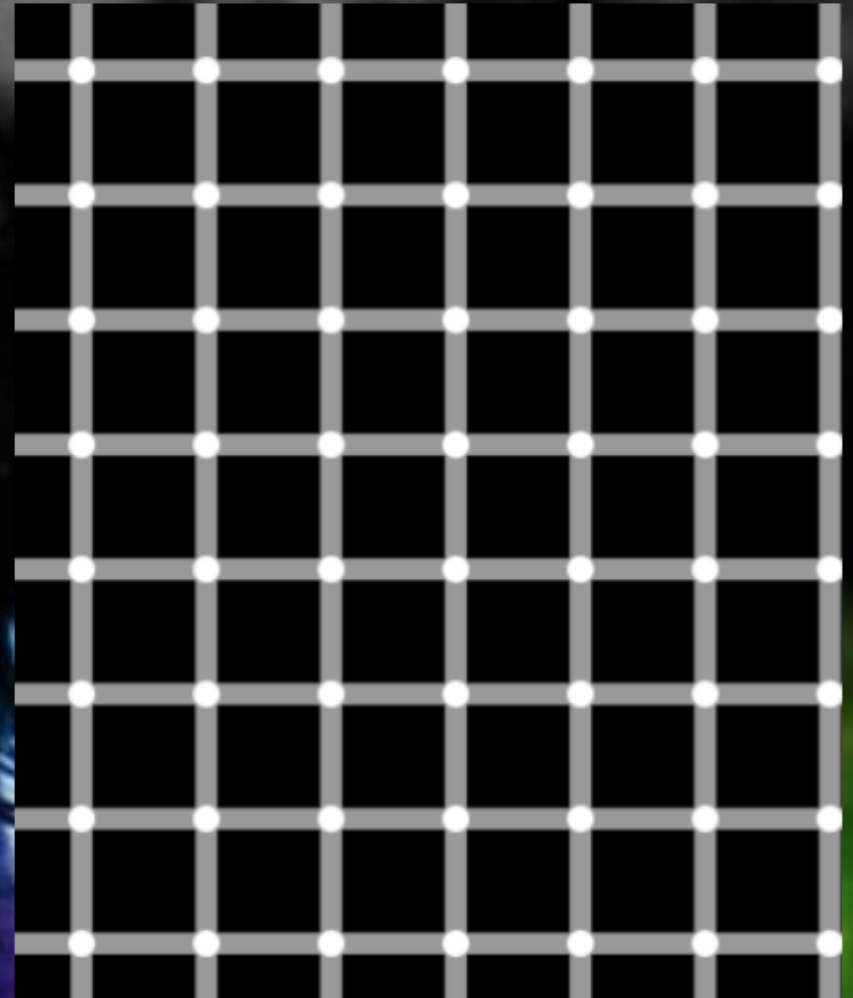
Physiological Illusions

Physiological illusions, such as the **afterimages** following bright lights or adapting stimuli of excessively longer alternating patterns (contingent perceptual aftereffect), are presumed to be the effects on the eyes or brain of excessive stimulation of a specific type - brightness, tilt, color, movement, etc.

The theory is that stimuli have individual dedicated neural paths in the early stages of visual processing, and that repetitive stimulation of only one or a few channels causes a **physiological imbalance** that alters perception.

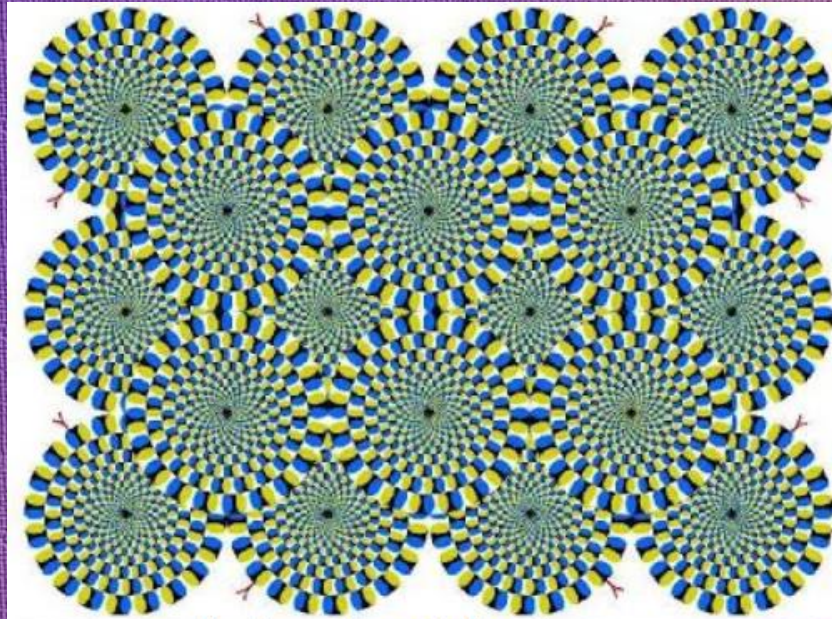
A scintillating grid illusion. Shape position and colour contrast converge to produce the illusion of grey dots at the intersections. -----

>>

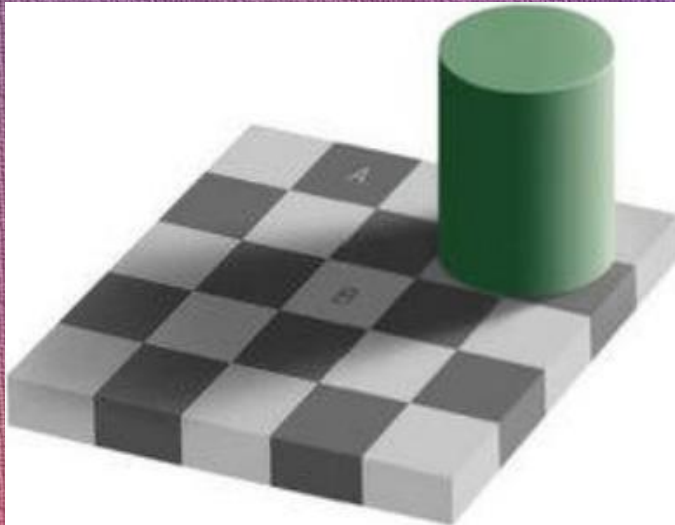


How many black dots do you see ?

Neural networks are a set of algorithms, modeled loosely after the human brain, that are designed to recognize patterns. They interpret sensory data through a kind of machine perception, labeling or clustering raw input.



Is it really rotating?



Which square is darker, A or B?



Do you see the two shades of green above?

Illusions of Space

Multidisciplinary artist Damien Gilley

“Reconfigure the built environment to provide alternative viewing experiences that complicate rational space.”

Alter his viewers' perceptions of reality

Materials including paint, masking tape, drywall, vinyl, wood, and foam core

Fake walls extending out from real walls

Tape drawings

Imaginary hallways emerging off of flat surfaces

Reality and illusion

flat surfaces into 3D space

Incomprehensible and Deceptive

explore historical, current, and potential environments.

<https://www.widewalls.com/artist/damien-gilley/>

June 7, 2016

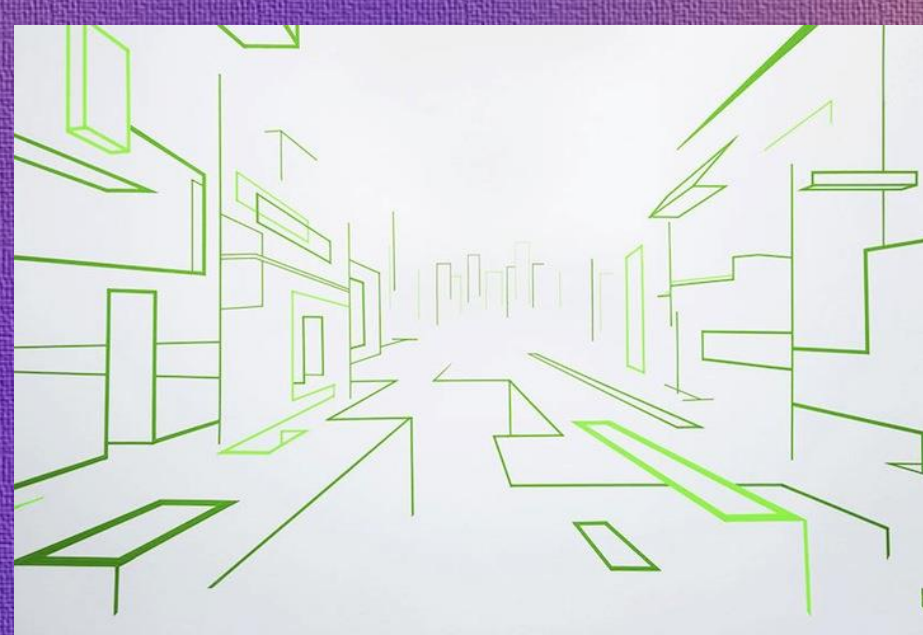
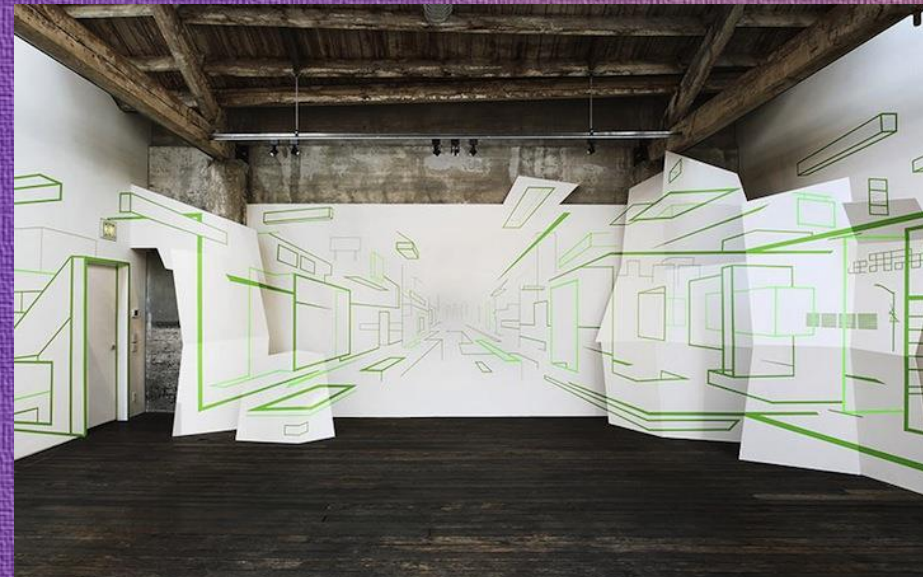
Jasmine Lark

Damien Gilley's main interest is a phenomenology of perception

Decoy: a perceptual play of doubling, approximate symmetry, flatness and color vibration (ubiquitous spaces like offices, showrooms, and tradeshow)

The artist explores the possibility of contour





Hap

about
happened

hapworks
join mailing list



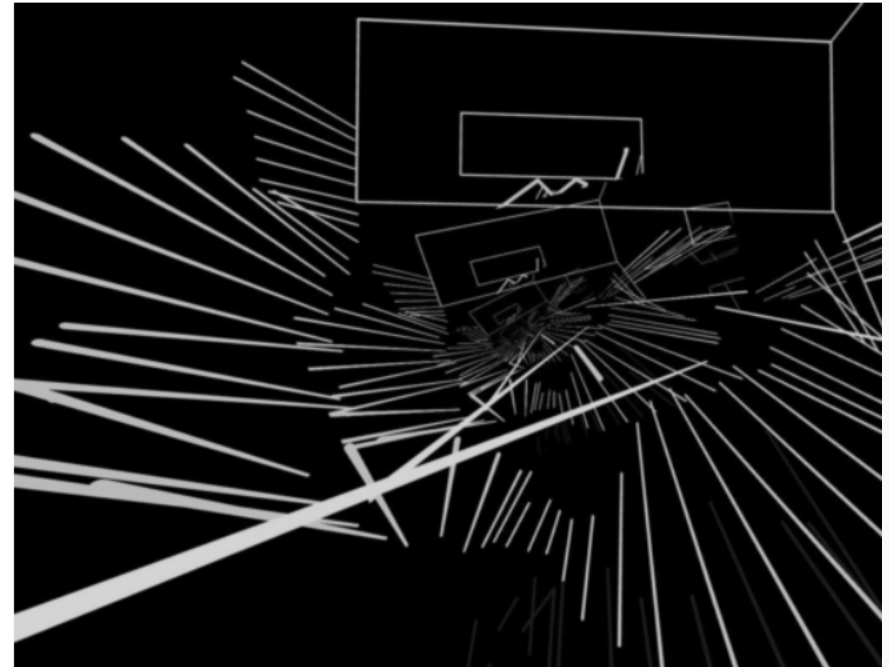
Damien Gilley
Specular
June 2–July 9, 2016

In *Specular*, Damien Gilley presents his first work in virtual reality, developed during his residency with Portland-based creative and production studio dotdotdash. In this exhibition, Gilley explores drawing as sculpture in an immersive environment where the work is experienced as objects in space.

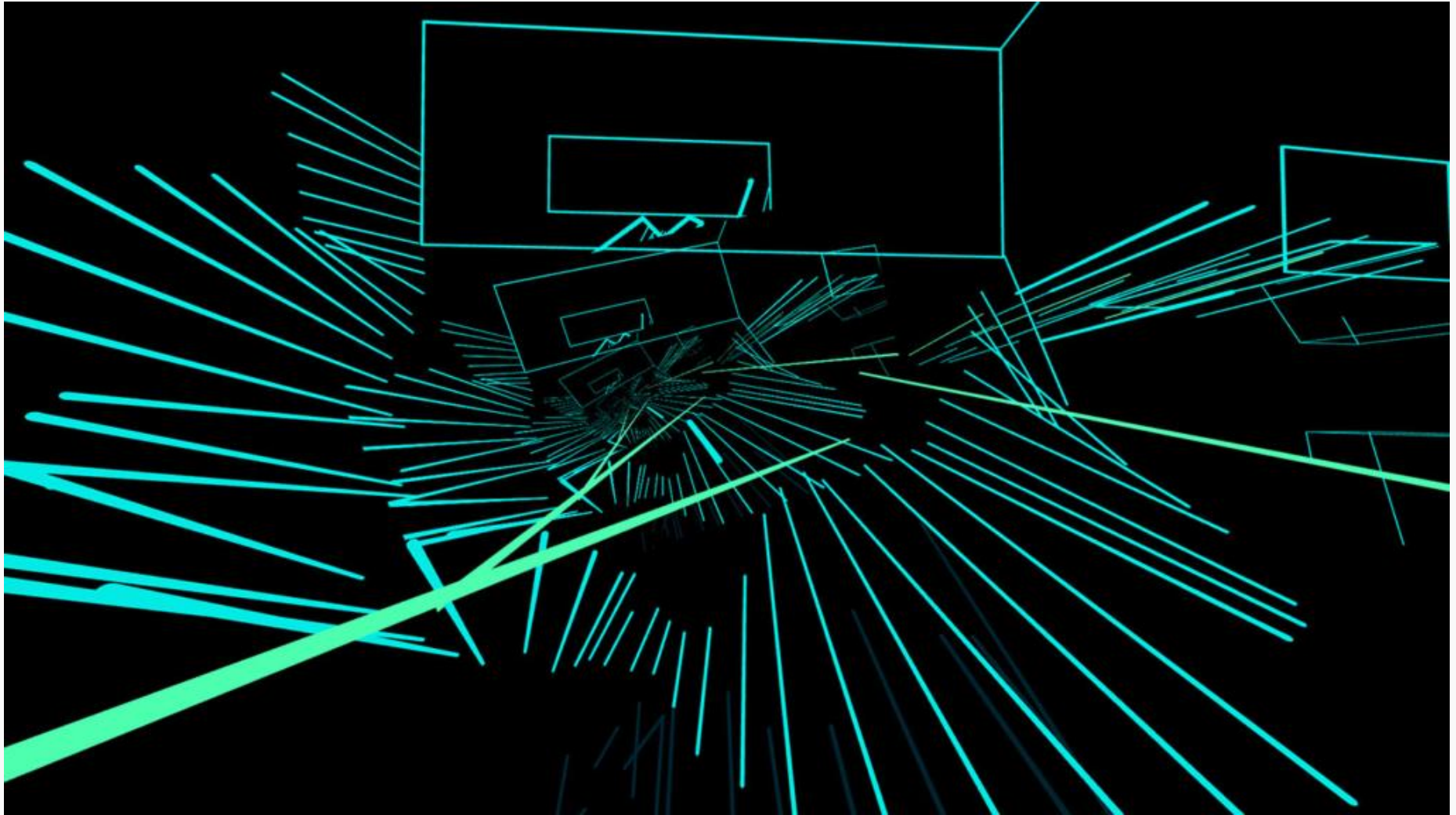
Specular leads and suggests—like a map or architectural sketch—luring the visitor to participate in the act of viewing. The experience raises questions about the relationship between the seen and unseen, the digital and human scale, the virtual and real, and how these matters might be navigated as artists embrace new technologies.

A limited edition of sixty custom-fabricated brass pendants by the artist accompanies the exhibition. Titled “Decoder Ring,” the pendants are a counterpoint to the immersive character of the exhibition and represent Gilley’s affection for immaterial architecture and metaphysical geometry.

Damien Gilley has exhibited in Portland, OR, at Carl & Sloan, the Pacific Northwest College of Art, and Linfield College as well as nationally including at The Belfry, Hornell, NY; and Suyama Space. Seattle. WA. He has shown



[INQUIRE](#)



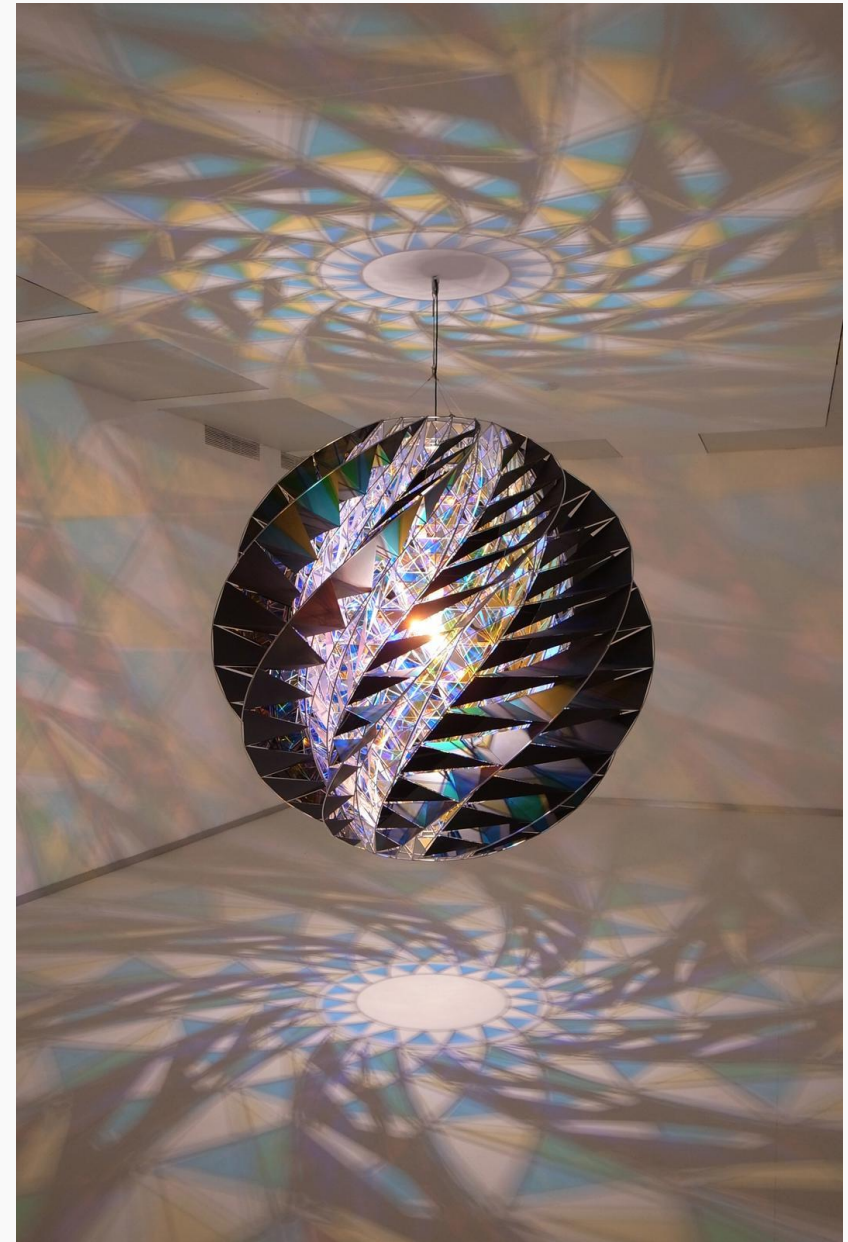
- *Specular* leads and suggests—like a map or architectural sketch
- Relation b/w the seen and unseen, the digital and human scale, the virtual and real, and how these matters might be navigated as artists embrace new technologies.

Olafur Eliasson

According to the artist's words: *"A view of things to come gives us a view of ourselves from without, and to see yourself from the outside is to see yourself as part of the world. You see that being in space makes a difference, that you have responsibility. Before we act, we have an idea. But before the idea, there is a space – the space where the known and the unknown meet. It's uncertain, unstructured, and open. This is where we realise that reality is relative –that we can change what is real– and we see a view of things to come"*.

Olafur Eliasson

Lamp for Urban Movement



Details

Materials Stainless steel, colour-effect filter glass (cyan, yellow), black glass, aluminium, bulb

incremental pattern

kaleidoscopic

luminous

multiple reflections

sphere

surroundings

yellow

colour

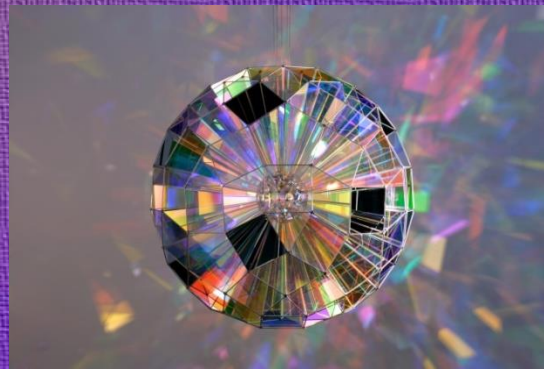
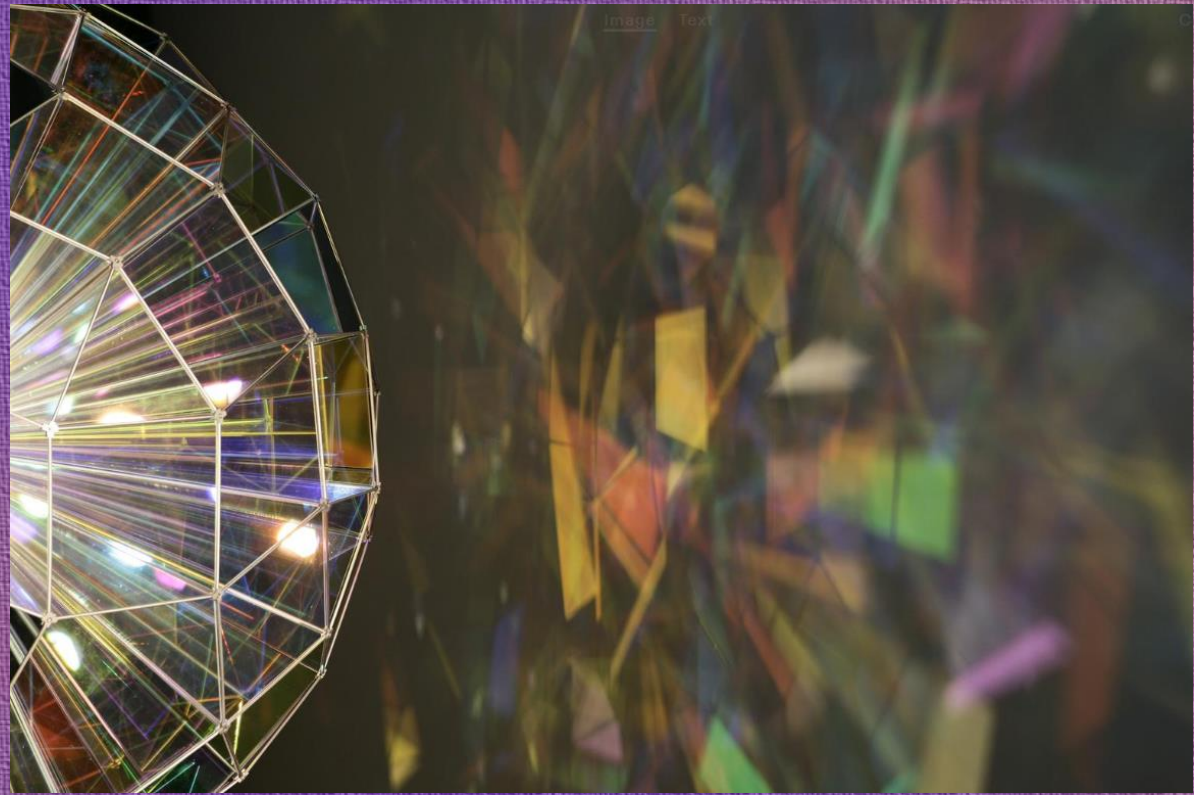
coloured shadow

In Reversed silver moon, the geometrically decorated sphere casts a braid of geometric shapes on the surrounding walls so that the original space is difficult to make out. Eliasson connects the bright crystalline organic structure with the ability to divide and multiply.



The work – in geometric terms a hectoicosaduohedron (20 faces) – is made up of squares fixed around a pentagon to create a complex pattern of pentagons, squares, triangles and rhombi. Facets of mirrored or dichromatic glass taper towards the center, but stop short of the core.

When viewers look into one of the square openings, the kaleidoscopic effect of the reflective glass generates the illusion of a sphere made up of squares. Multiple fragmented coloured reflections are cast onto the surrounding surfaces.



Echo activity, 2018
Galería Elvira González,
Madrid, 2018
Photo: Cuauhtli Gutiérrez

Merging
object, space,
time,
movement
and
spectator,



- Multiple reflections
- Walk through
- Tunnel
- Connecting space
- Mirror





James Alec Hardy British, born 1979

James Alec Hardy's *160804* holds the key to the visual puzzle in the space. At first glance we are seduced not only by the structural repetition playing on the monitors, but by the plugs and wiring that wrap around them. The interplay between the symbolic color shifts suggests something of Man Ray's revolving door paintings, with their clarity of colour overlaps. But Hardy introduces another element - the sculptural metamorphosis of the screens themselves, allowing the whole shape to become another form.

160804 James Alec Hardy, 2016, VGA monitors and video system, 225 x 130 x 130 cm approx. Image courtesy of Fold Gallery.



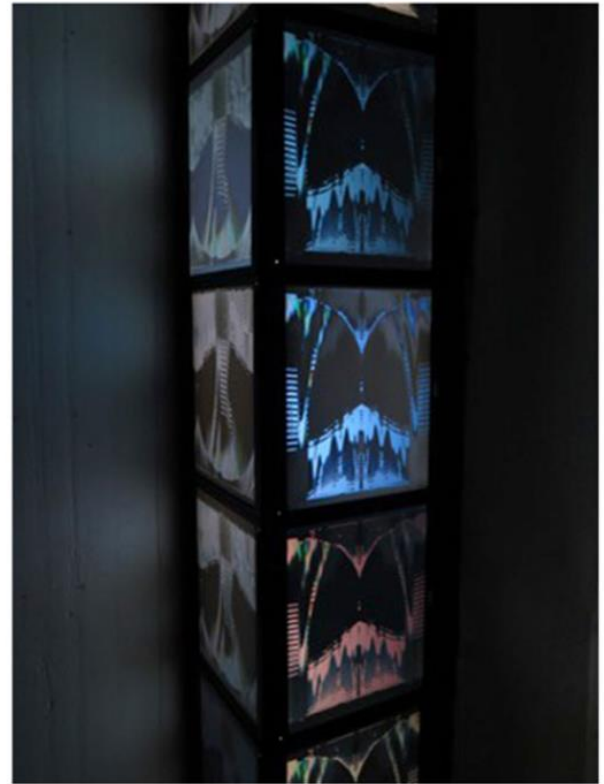
Man Ray, Revolving Doors

Between 1916 and 1917, the artist and photographer Man Ray created a series of collages he called "Revolving Doors." He included the series in his third solo exhibition at the Daniel Gallery in New York, in 1919. The collages, whose geometric shapes combine machine-like and anthropomorphic forms, were framed and installed on a rotating pole that the viewer could spin. The original collages were destroyed, but Ray later reproduced them in this series of stencil prints, published by Éditions Surréalistes in Paris.

When Man Ray exhibited the Revolving Doors, he wrote labels to accompany each work. He later published the entire series in the Surrealist periodical *Minotaure* 7 (1935). The original, typewritten document is in the collection of the J.P. Getty Museum, Los Angeles. Texts and images © 2013 Man Ray Trust / Artists Rights Society (ARS), New York / ADAGP, Paris.

The Revolving Doors: The concern of a period of time often leads to the disappearance of material space. That is what the images in two dimensions shown here tend to prove; by a mutual action, they give birth to a series of events escaping from the control of all diversion.





2 / 5 - 160212
Year: 2016
Medium: VGA monitors and video processor system
Size: 262 x 40 x 40 cm

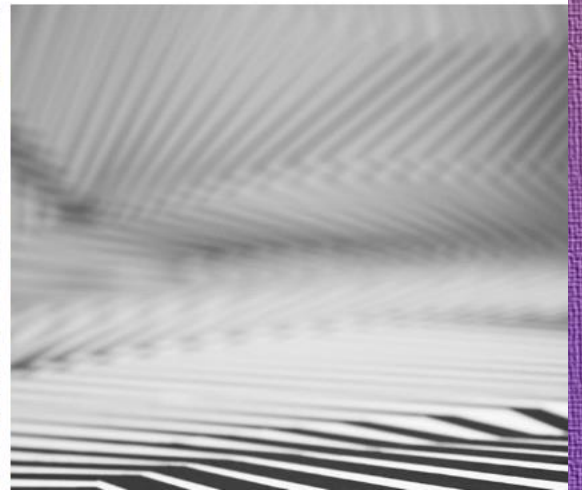
dimensional line drawings and
immersive tape installations
Optical and spatial perception
lines to shape and bend the
perceived dimensions of a surface
or a space
patterns of nature

Darel Carey, visual artist based in Los Angeles

Artist Statement

A line on its own is simple. When combined with many other lines in a consistent, precise manner, the lines become more than just the lines; as a whole they form something more complex than what they are individually. That is why the organic process of creating these works is integral to what they become. My approach follows a natural process which manifests emergent properties similar to those found in nature, as in complex mobile bodies emerging from clusters of cells, or consciousness which is not physical emerging from the physical brain. In a similar way, several two dimensional lines can imply depth and curvature where they don't actually exist.. but they do exist, in an emergent way. Looking at my work, you can see the curves formed by the way the lines meet at corners, but the lines individually don't know they're part of making these curves, and nothing in each line would indicate a property for making a curve, but together they make the curves anyway. Zooming out and seeing all of them together, you can notice these traits. When creating these works, I think about the big picture and pay attention to the details, and everything in between figures itself out.

In order to use the most simplicity to extract the clearest complexity, I keep certain characteristics of the lines consistent within each work, e.g. all the lines are straight, all the lines are the same width, etc. Keeping these characteristics as simple as possible allows other traits of the arrangement to be prominent. Rather than changing the thickness of a line to imply depth, I alter the distance between lines. Gradual change with time creates a harmonious, natural pattern, and is important for the perceived dimensional experience to take effect. My art compels you to look at a surface or a space differently, to contemplate your own perception and the environment around you. I find simplicity creating complexity a beautiful thing and something profound to think about. It informs my philosophy on life, and on the nature of the universe.



Vertigo-Inducing Room Illusions by Peter Kogler

DECEMBER 23, 2016

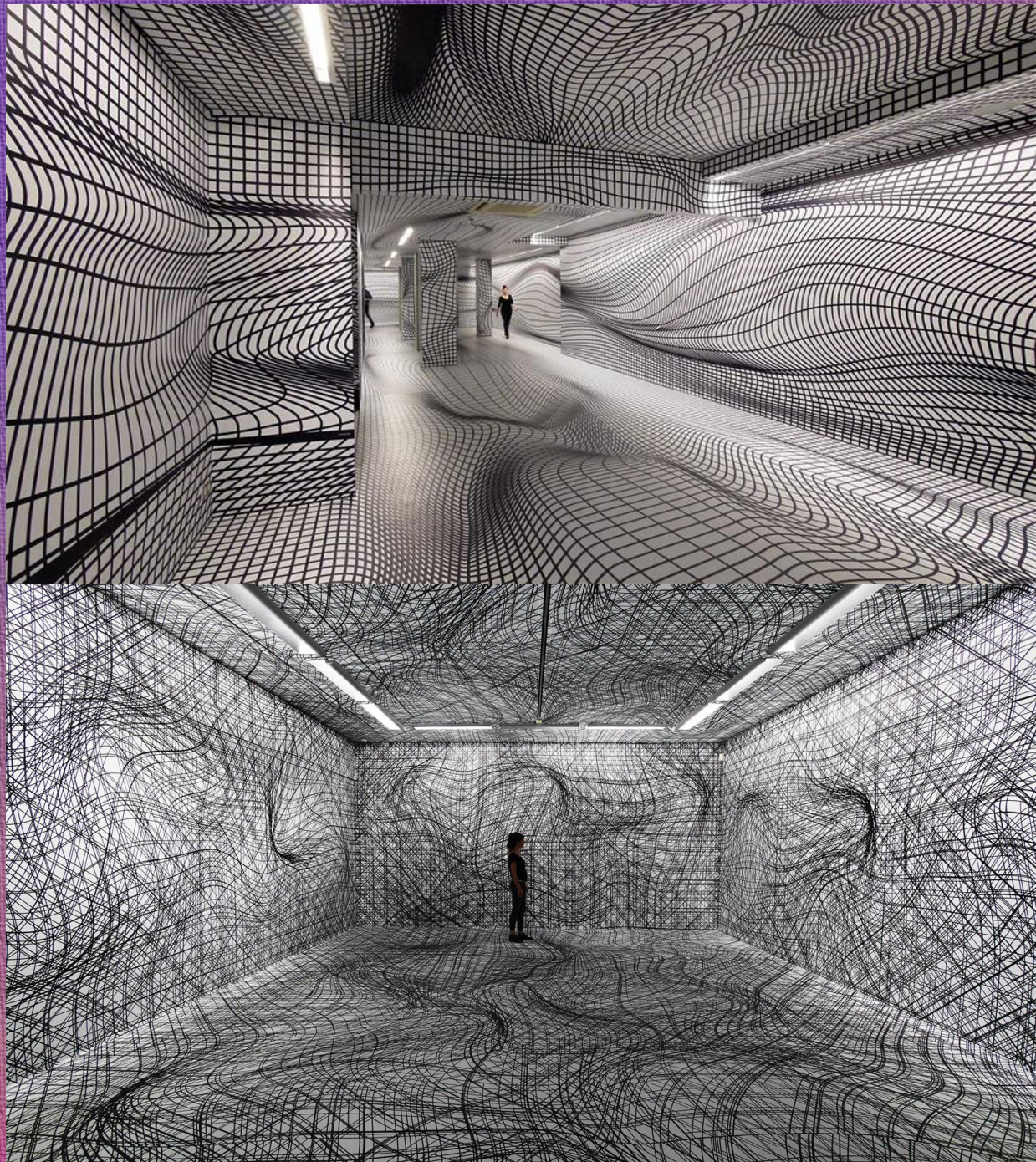
CHRISTOPHER JOBSON



[Peter Kogler](#) transforms ordinary galleries, transit centers, and lobbies into near hallucinatory experiences
Intersection of architecture and new media
warped funhouse mirrors



Galerie im Taxispalais, Innsbruck, 2014. Photo courtesy Atelier Kogler.



<https://www.thisiscosmos.com/2016/12/20/inducing-rooms-illusions-by-peter-kogler/>

Why do certain architectural spaces make us feel isolated and disconnected with ourselves?

We say it's technology taking a toll on our lives, but in actuality it's the certain objects that let our environment have an impact on us. Their attached meanings don't allow us to think otherwise. Just like humans, architecture also conveys emotions and states of mind. The feeling of nostalgia, claustrophobia, shock, escapism. Through creating illusions of geometric shapes, patterns, colors and lines - inside small spaces to allow viewers to transcend into physical realms in their minds.

Vertigo is an **illusion** of movement, often horizontal and rotatory. Associated nausea and vomiting indicate a peripheral rather than central cause.

Light receptors within the **eye** transmit messages to the brain, which produces the familiar sensations of **color**. Newton observed that **color** is not inherent in objects. Rather, the surface of an object reflects some **colors** and absorbs all the others. We **perceive** only the reflected **colors**.

Social Experiments



Natural Disasters and the human behavior



Simulation in a controlled environment



Literal and figurative natural disasters

Earthquake / flood



logic and creativity



Sonic booms / Diegesis / Sound / Narration / Mimicry

Visual



KINETIC ART

3D illusion/ Optical art / Neural Networks/ Anamorphic

Architecture/isolation

SPACE, SOUND,
LIGHT

Natural disasters and human behavior

How can an earthquake be simulated through line, light, and sound in an architectural space

Understanding the Topology of the Earthquake

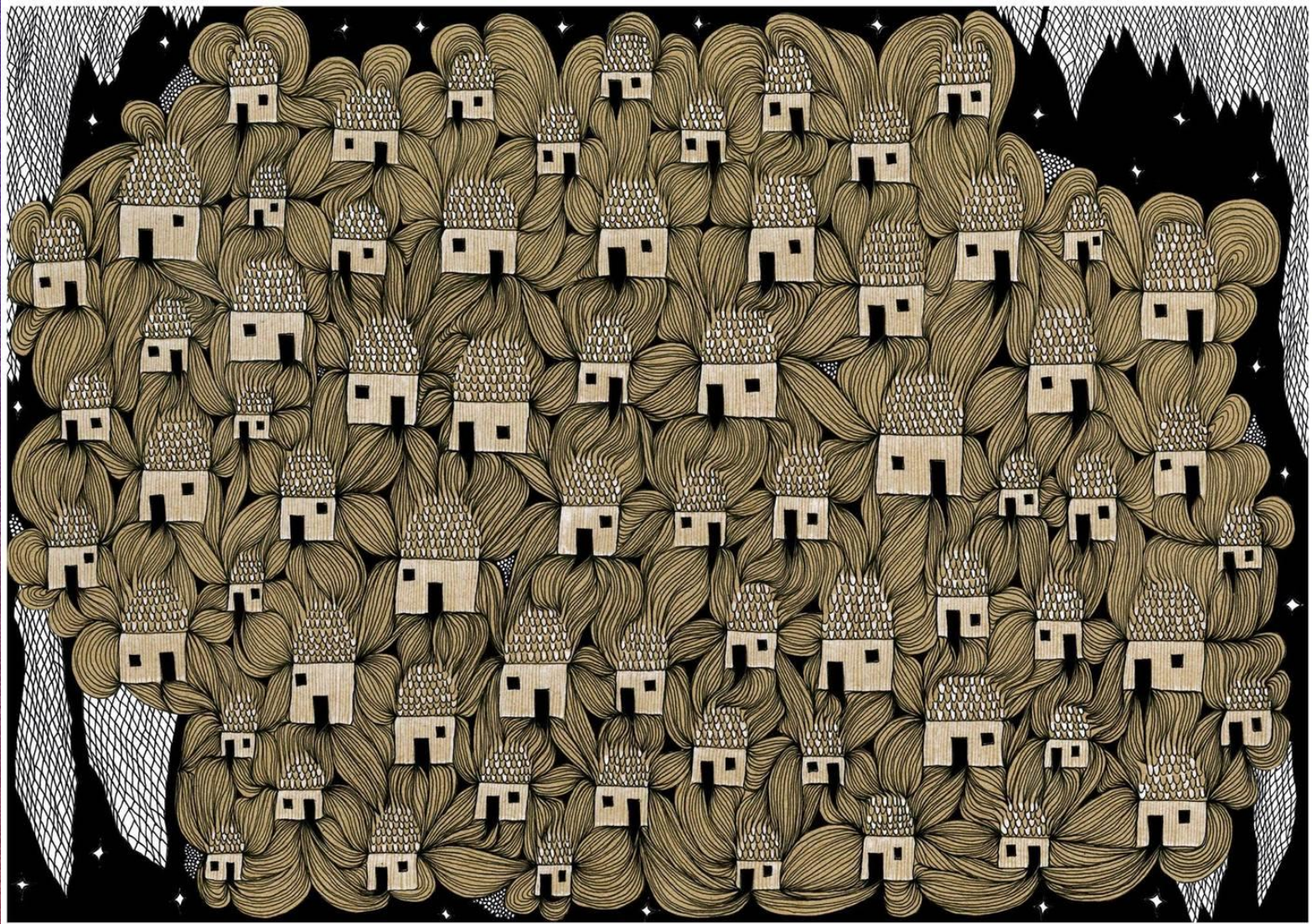
What does an earthquake feel like?

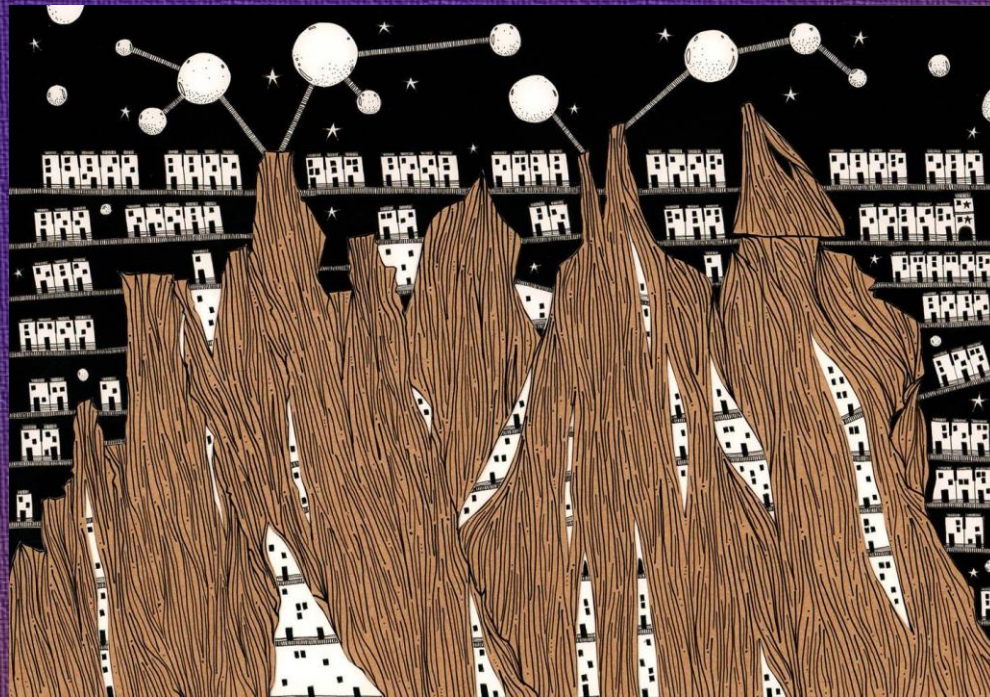
The way an earthquake feels depends on where you are, where the earthquake is, and how big the earthquake is:

- A large earthquake nearby will feel like a sudden large jolt followed quickly by more strong shaking that may last a few seconds or up to a couple of minutes if it's a rare great event. The shaking will feel violent and it will be difficult to stand up. The contents of your house will be a mess.
- A large earthquake far away will feel like a gentle bump followed several seconds later by stronger rolling shaking that may feel like sharp shaking for a little while.
- A small earthquake nearby will feel like a small sharp jolt followed by a few stronger sharp shakes that pass quickly.
- A small earthquake far away will probably not be felt at all, but if you do feel it, it will be a subtle gentle shake or two that is easier to feel if you're still and sitting down.

The type of crustal material the seismic waves travel through on their way to you, and the type of shallow crustal structure that is directly below you will also influence the shaking you feel. Soft thick sediments will amplify the shaking and hard rock will not. If the energy happens to bounce around and get focused on where you are, that will also amplify the shaking. Low-level vibrations that last for more than a few seconds is not indicative of an earthquake, but is more likely a man-made environmental source.

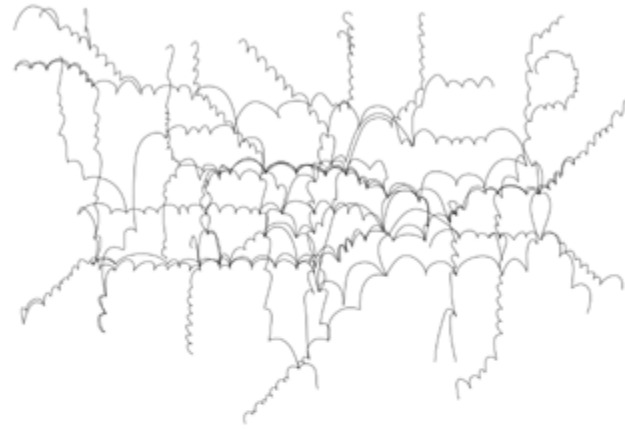
Italo Calvino's 'Invisible Cities'





Trude: the London tube map redrawn as if it were an airline route map.

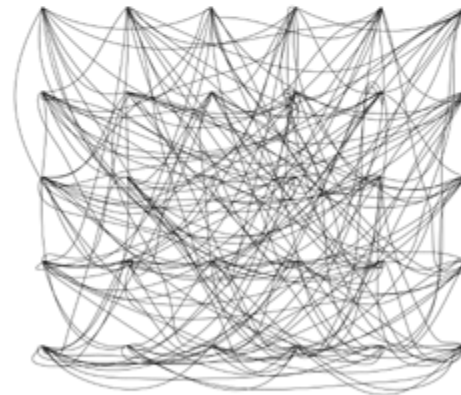
Ersilia: a network of curved lines connecting to every other node on a 6 x 5 grid.



Other: Invisible Cities
Antonio Italo Calvino

The pattern of roads that cut over the city seems written in the sky. The lines are not straight, they are wavy, they are curved, they are irregular. They are like the veins of a stone, or like the veins of a tree. They are like the veins of a man, or like the veins of a woman. They are like the veins of a city, or like the veins of a country. They are like the veins of a world, or like the veins of a universe.

The lines are not straight, they are wavy, they are curved, they are irregular. They are like the veins of a stone, or like the veins of a tree. They are like the veins of a man, or like the veins of a woman. They are like the veins of a city, or like the veins of a country. They are like the veins of a world, or like the veins of a universe.



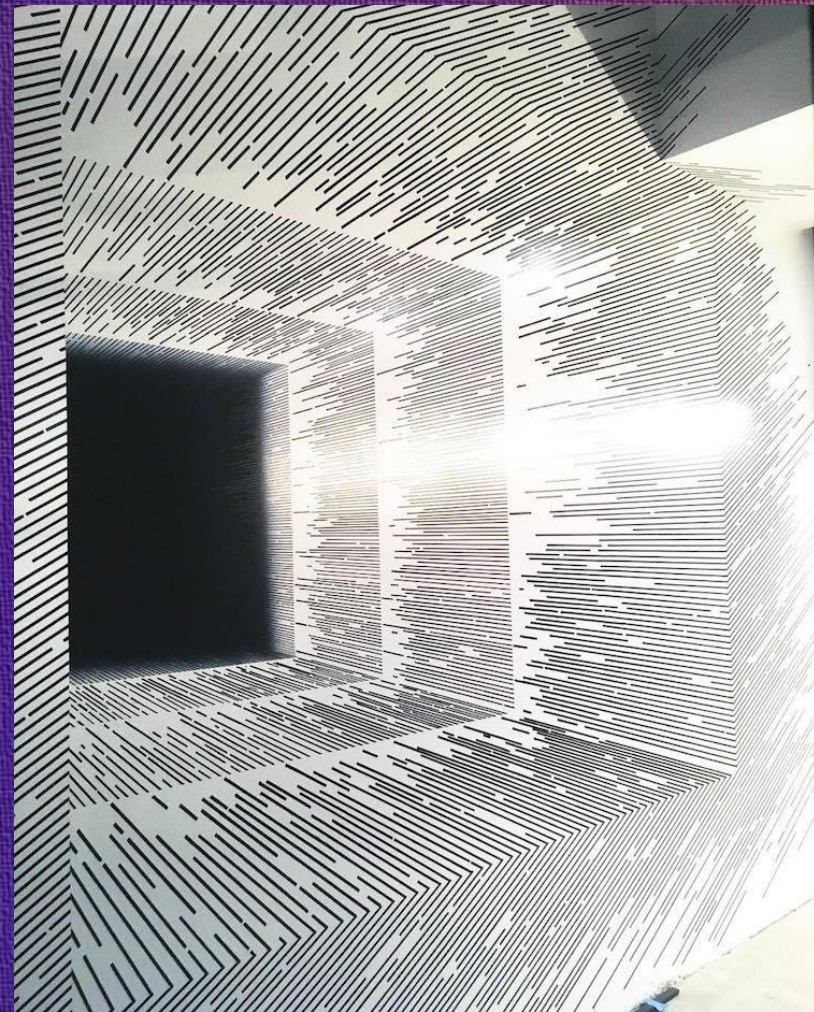
Other: Invisible Cities
Antonio Italo Calvino

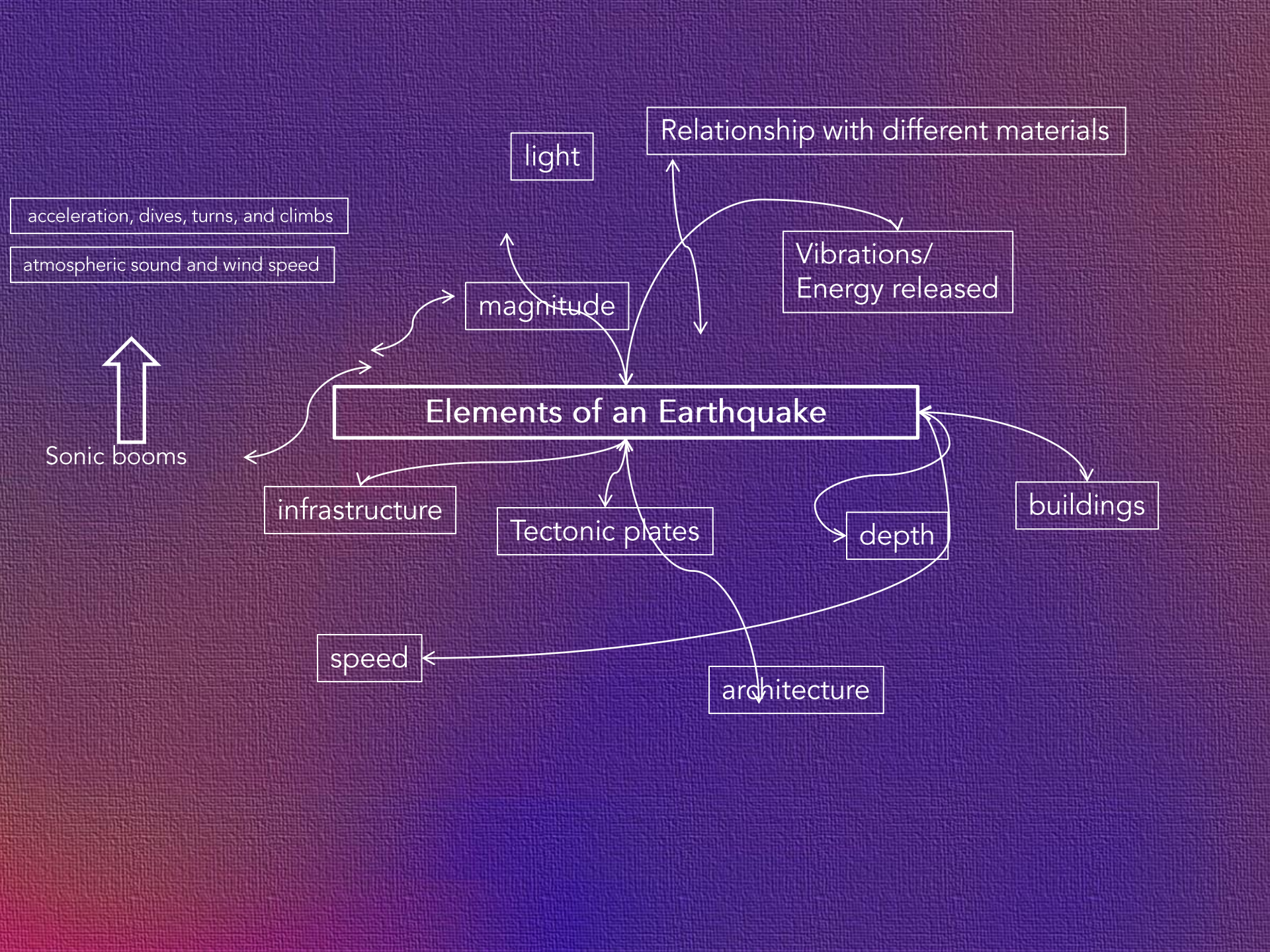
In order to establish the network of roads that connect the cities, the architect must draw the lines of the roads. The lines are not straight, they are wavy, they are curved, they are irregular. They are like the veins of a stone, or like the veins of a tree. They are like the veins of a man, or like the veins of a woman. They are like the veins of a city, or like the veins of a country. They are like the veins of a world, or like the veins of a universe.

The lines are not straight, they are wavy, they are curved, they are irregular. They are like the veins of a stone, or like the veins of a tree. They are like the veins of a man, or like the veins of a woman. They are like the veins of a city, or like the veins of a country. They are like the veins of a world, or like the veins of a universe.

KATY ANN GILMORE

<http://www.denkgallery.com/exhibitions/katy-ann-gilmore-visual-field?view=slider#8>





Color to Sound correspondence

“light” symbolizes hope and civilization

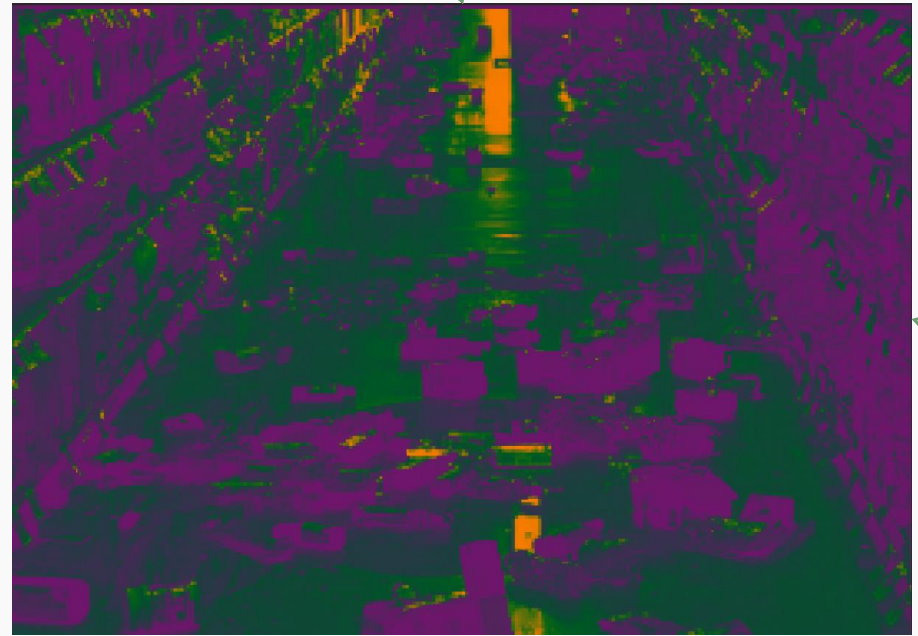
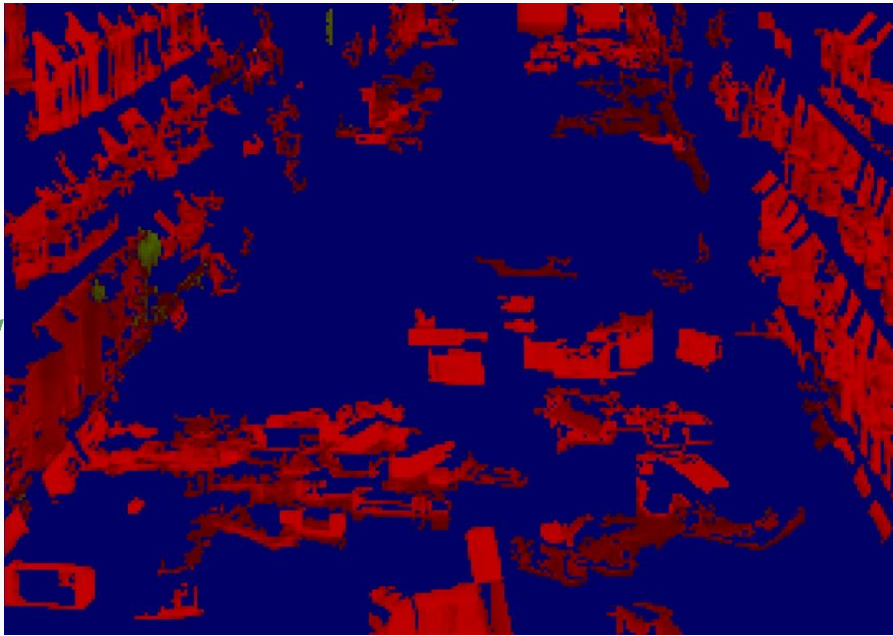
the colors of our surrounding environment not only reflect the inner self, but also perpetually shape the mind and heart

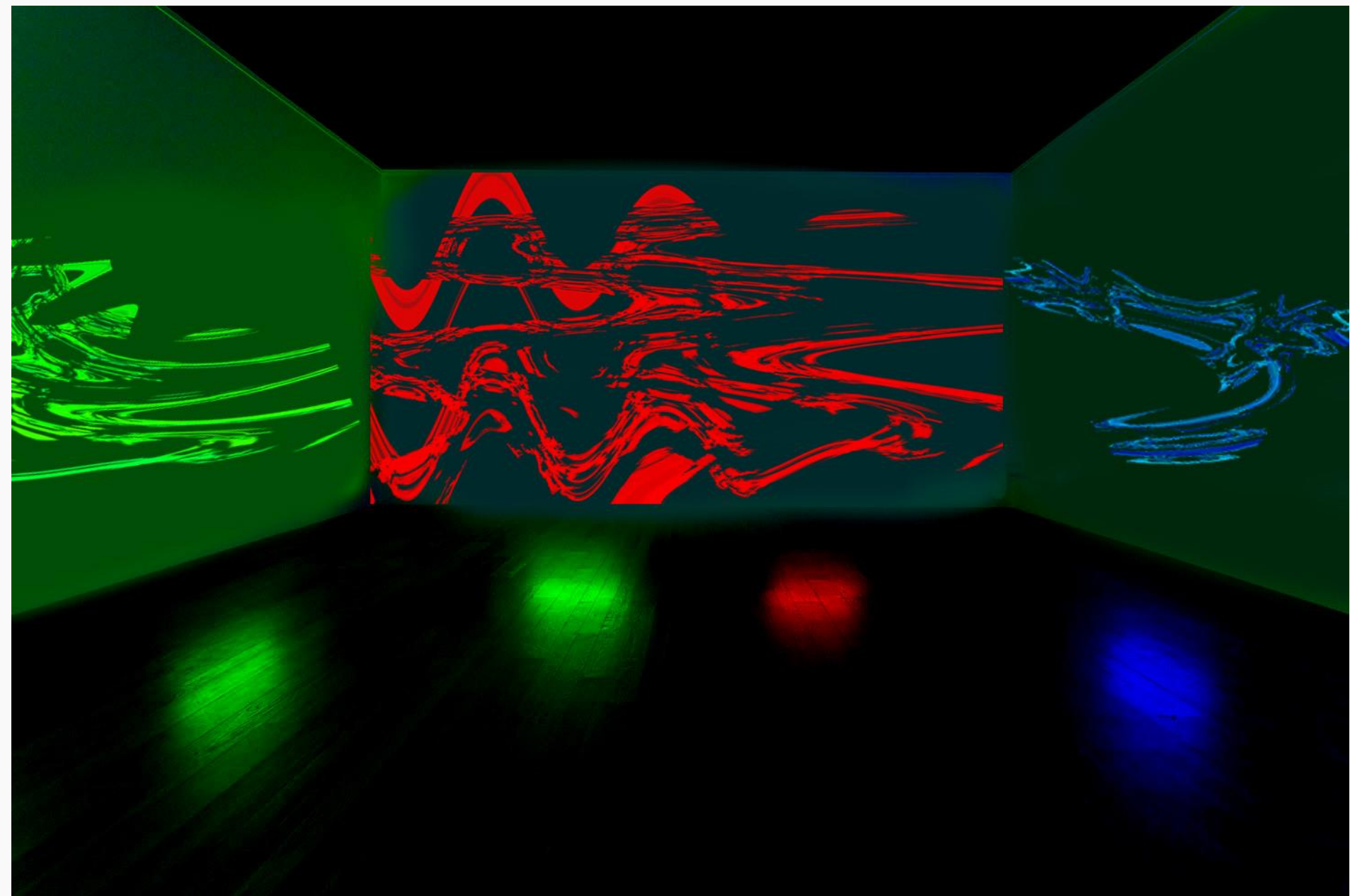
An **earthquake** (**quake**, tremor or temblor) a sudden release of energy in the Earth's crust that creates seismic waves.

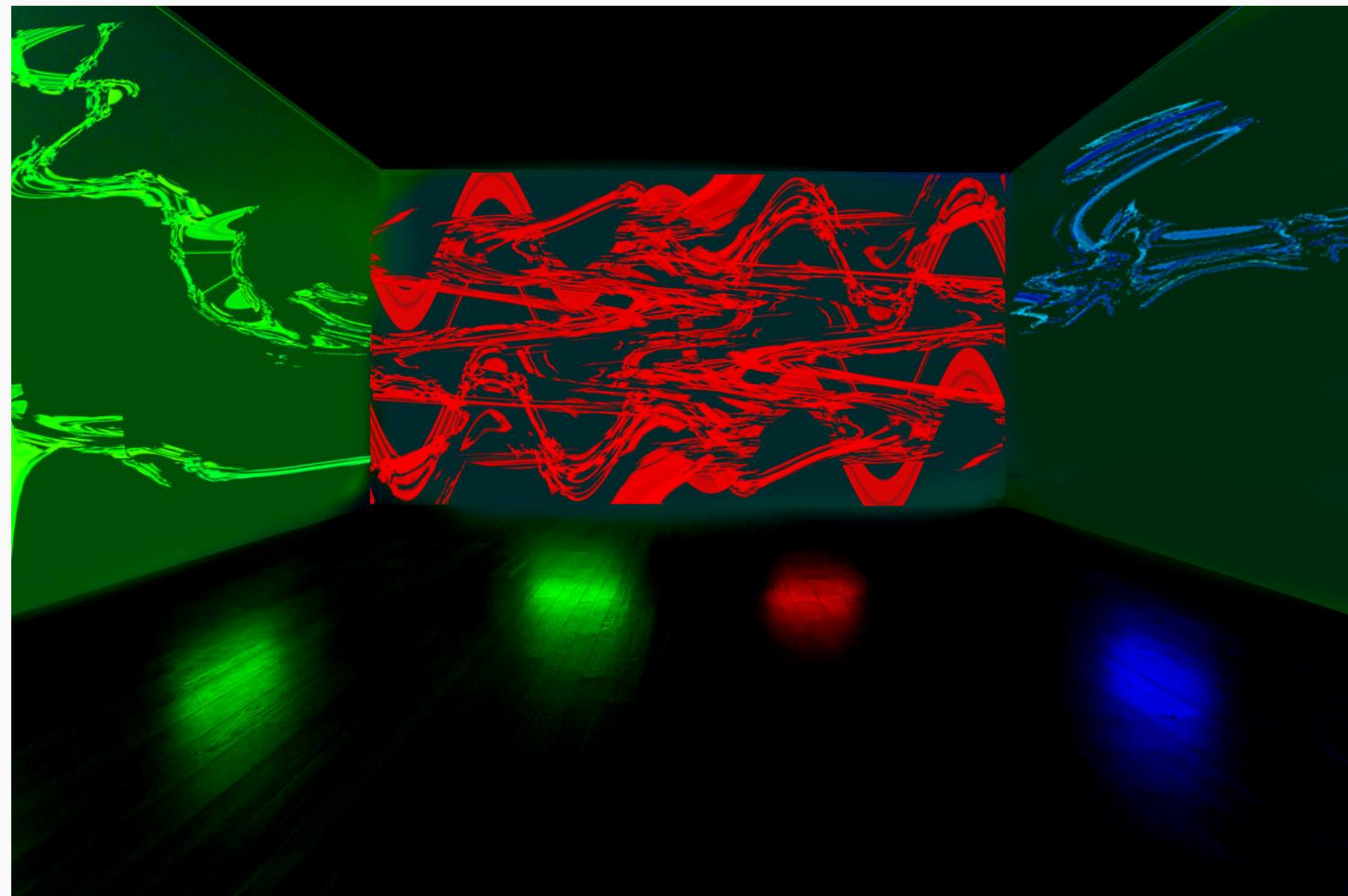
The seismicity or seismic activity of an area refers to the frequency, type and size of **earthquakes** experienced over a period of time.

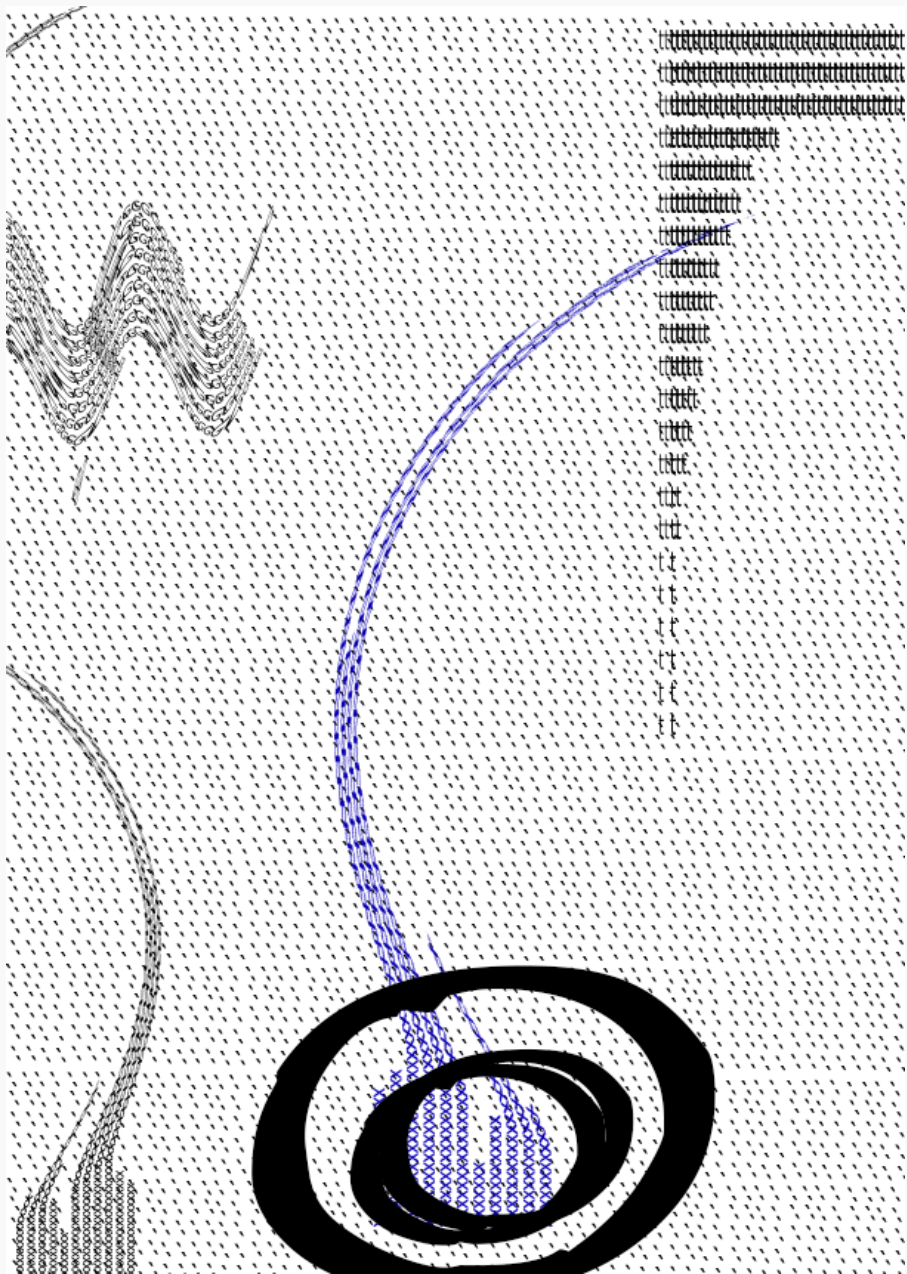
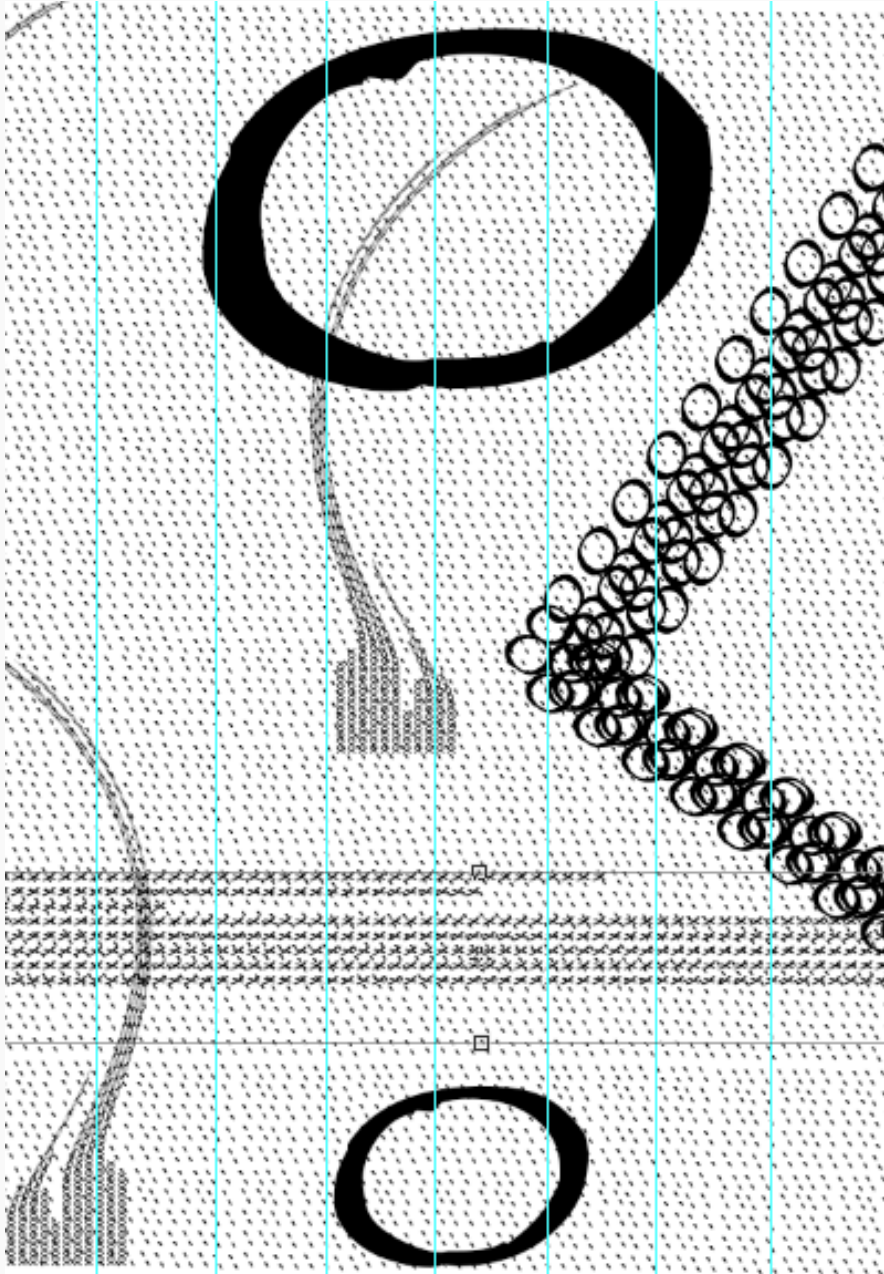
Most **earthquakes** are **tectonic earthquakes**, which happen when the large, thin plates of the Earth's crust and upper mantle become stuck as they move past one another. They lock together, and pressure builds up. When they finally release, **earthquakes** occur.

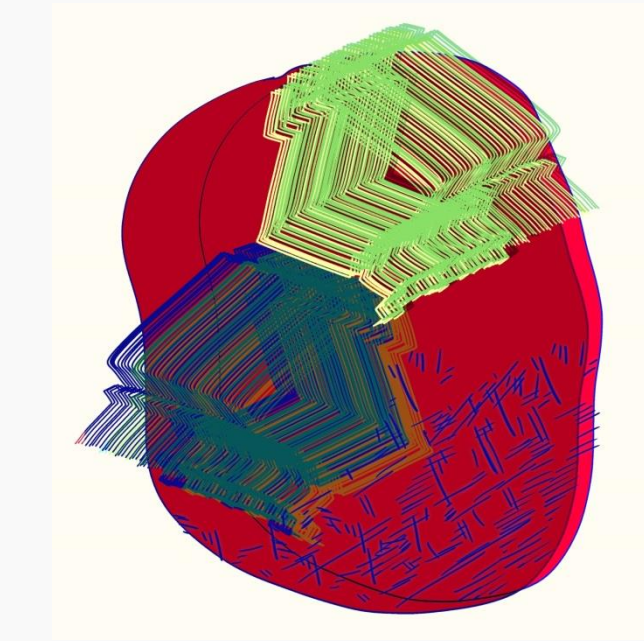
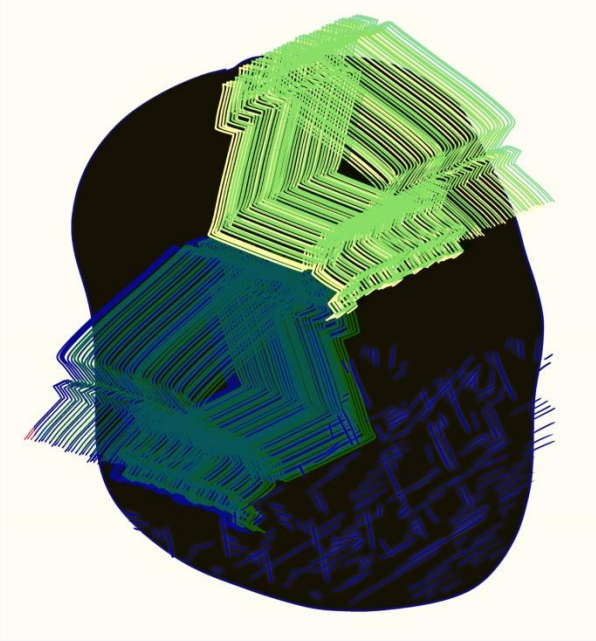
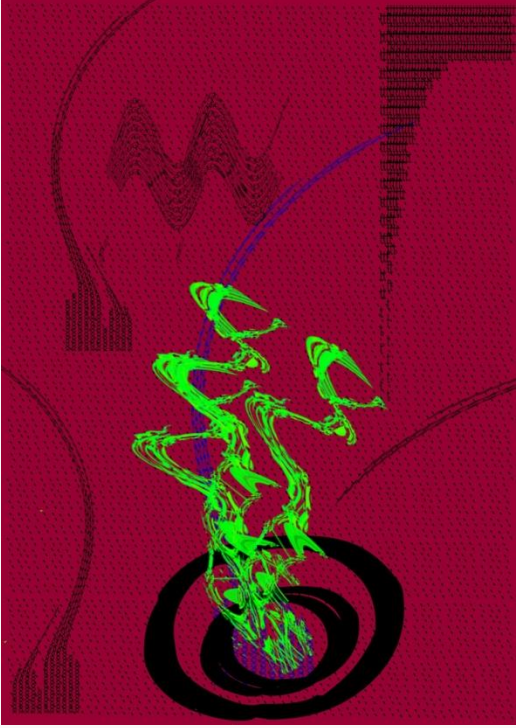
I Started developing visuals after
conducting major research of what
themes I'm highlighting in the
process

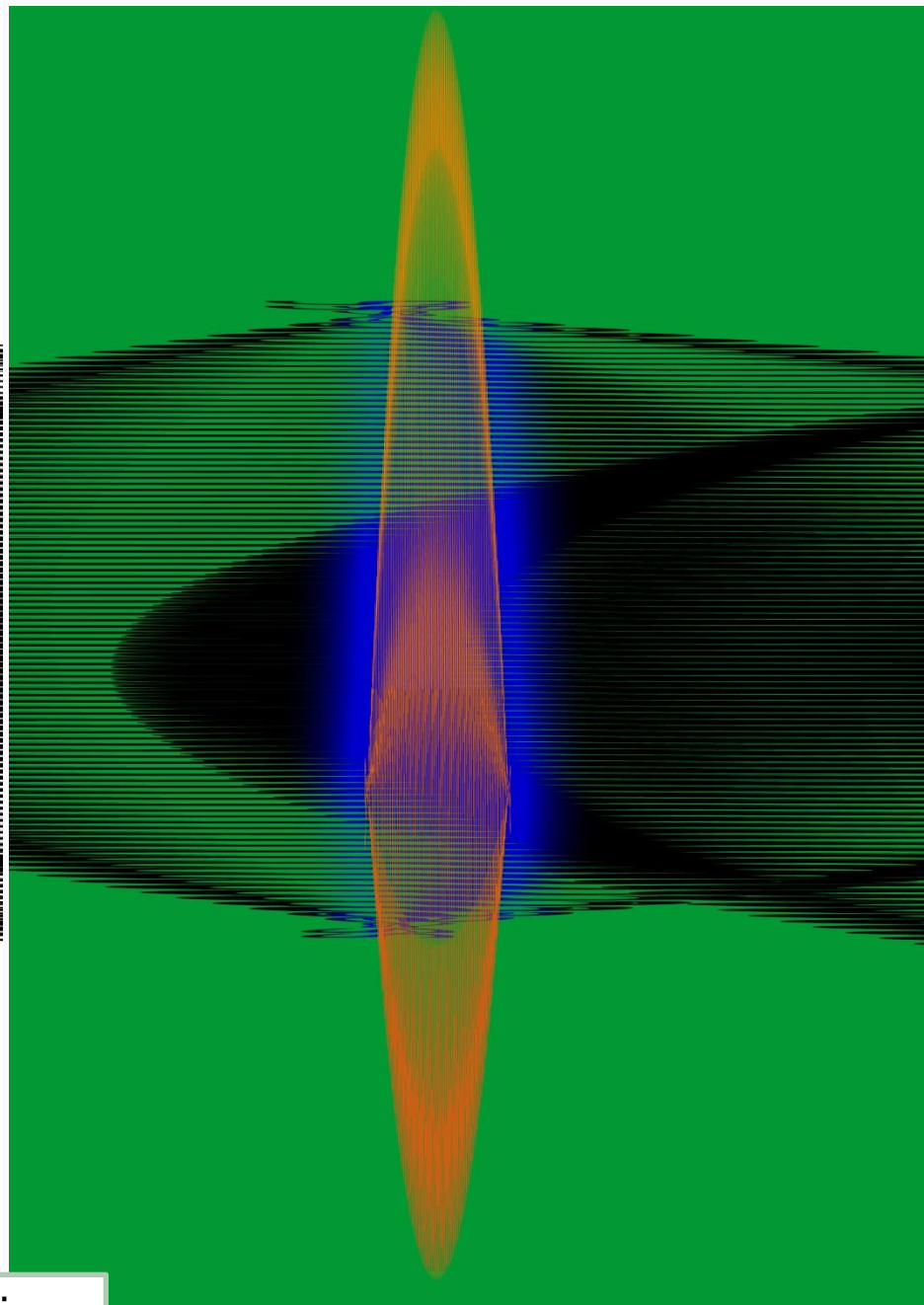
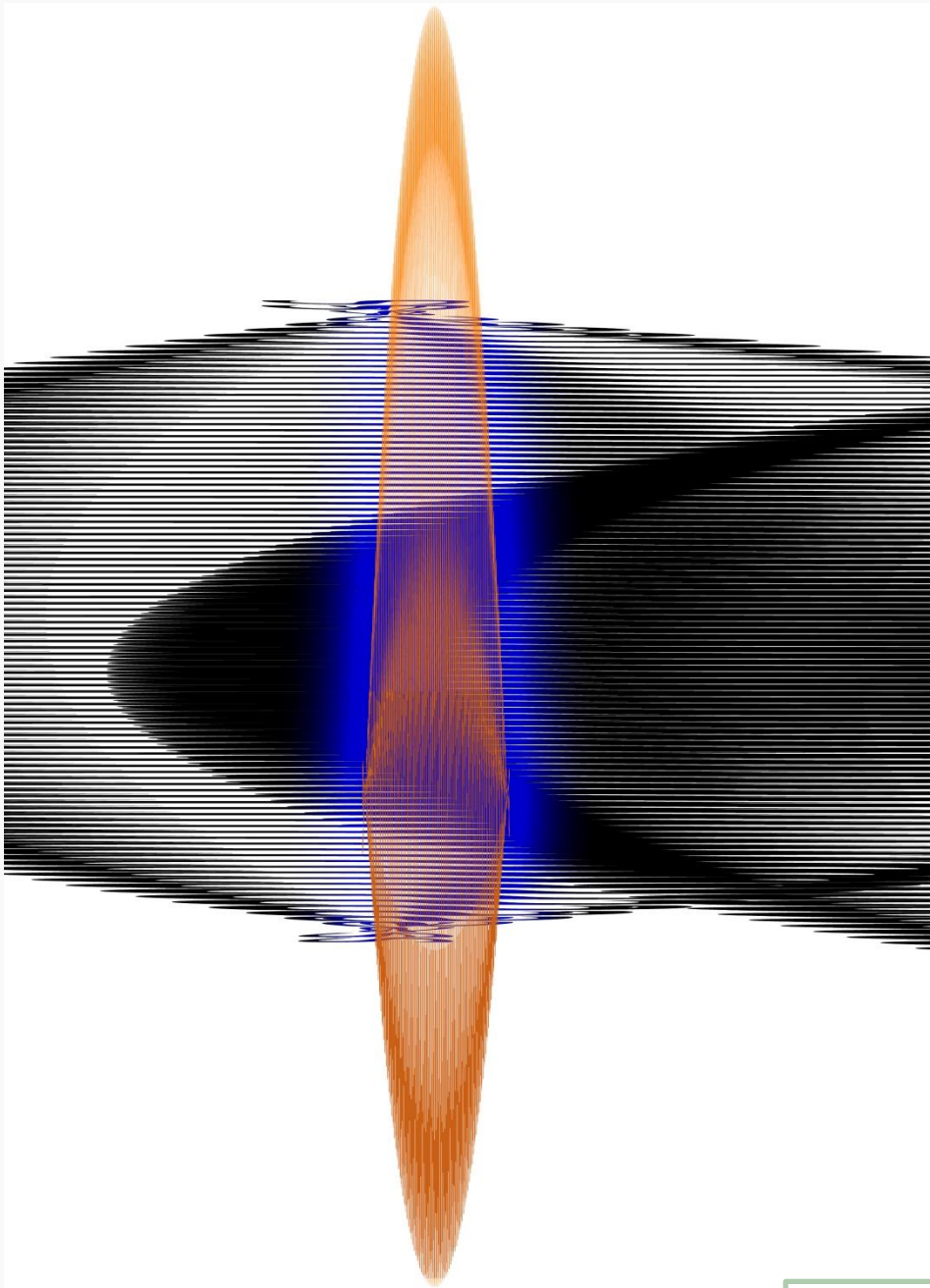












Vibrations

The artworks in *Specular* are triggered in response to viewers' perspectives and movements within the space. The Hap Gallery writes, "The structural drawings lead and suggest like maps or architectural sketches might, yet read more like a game or puzzle to be solved." Walking through the space, viewers will discover structures and spatial relationships that were once hidden. Michael Hill, one of the interactive engineers at dotdotdash, points out that with a VR headset, an artist or curator can place the viewer in a space much bigger than the one they're actually in. The result is an explosion of the concept of the art show, and Gilley and the dotdotdash studio hope to explore it further with their new experience.

Sounds associated to an Earthquake

Sonic Booms

booming sounds

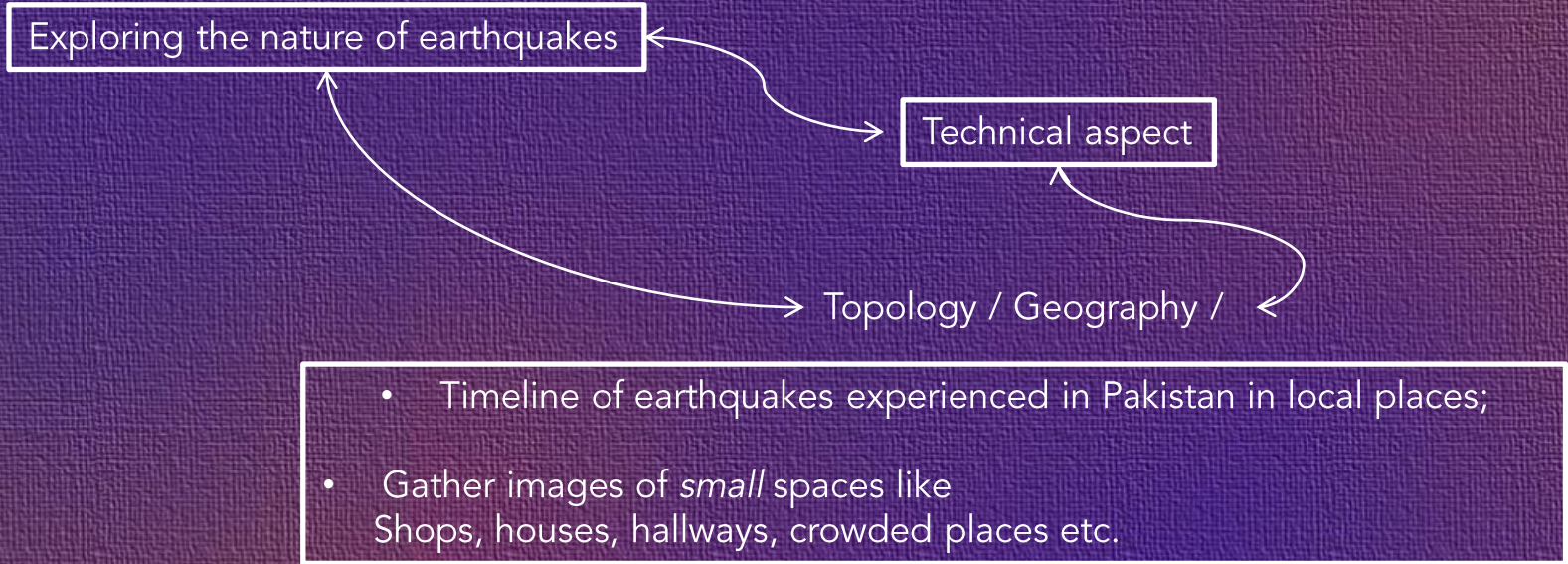
blowing wind

energetic enough to rattle windows and doors

distant aircraft was passing

"explosive" , "rushing and rolling"

"artillery"-like sounds



Visual experience of the disaster and the after effects felt by the people and the objects in a space.

Seismic base
isolation
installed between the
ground and the upper
structure.

Accounts of people experiencing the Earthquake

Support Concern's earthquake response: [Donate Now](#).

Early Monday afternoon, I was in our second floor office in Islamabad when our building began to sway like a pendulum. Looking out the window, I saw the neighboring structures come closer and then move away, and I feared our building itself might collapse.

OUR LOCAL PARTNER TEAMS WERE ALREADY IN THE AREA... AND IMMEDIATELY MOBILIZED TO ASSESS THE DAMAGES CAUSED BY THE EARTHQUAKE.

The epicenter in the Hindu Kush range means those affected in Pakistan are living in remote areas, prone to extreme cold, heavy snowfall and serious access issues. The terrain is very difficult with nominal road links. Thankfully, our local partner teams were already in the area, carrying out OFDA-funded **RAPID** programming, and immediately mobilized to assess the

"IT WAS LIKE YOU WERE ON A HIGH SEA IN A SMALL BOAT," RAO SAID.

Timeline of major earthquakes in Pakistan: 1971-2018

Dawn.com | January 31, 2018

 94     9

On January 31, 2018, a 6.1-magnitude earthquake jolted various parts of Pakistan, including Quetta, Karachi, Lahore, Islamabad, Peshawar, Charsadda, Murree, Sargodha, Shangla, Haripur and Gujranwala.

According to the United States Geological Survey, the epicentre of the quake, which was also felt in parts of India and Kashmir, was 35 kilometres south of Jarm in Afghanistan.

Below is a timeline of all the major earthquakes that have struck Pakistan.

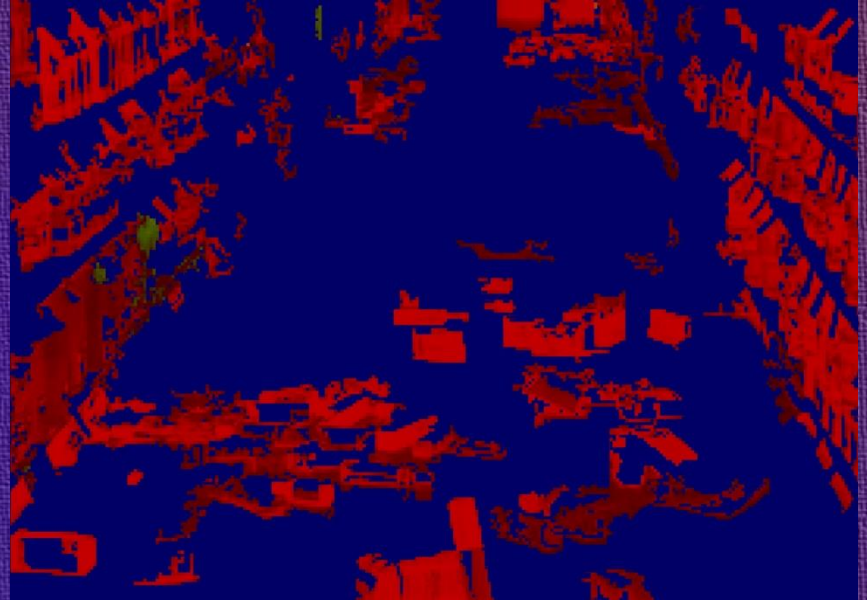
February 08, 2017



Iconoclasm

refers to the destruction of images or hostility toward visual representations in general.

—the destruction of images—how the relationship between a subject and abstracted information extracted from it and converted into another form can be understood, whether as an appropriation, another type of depiction, or a form of censorship.



City as an Earthquake from the lens of the local experiencing it in places that we visit everyday. A lot of such experiences are pushed further back in our memory after some time hence we get immune to the idea of natural disasters causing disruption to the architecture and the human experience. Visually destructing the images of the Earthquake traced back in time that cant be felt to touch today but transformed to other mediums such as sound and light. Finally those images can be read as a substitute for the missing natural experience itself.

Abstract

A Hazard and a Disaster are two different words commonly misused. A Natural phenomenon becomes disastrous when it destructs the living surroundings and affects the human mind. A lot of times, after experiencing traumatic events, those events become memories and those memories are then pushed further back into our memory lane thus making it hard for us to access them right away. Similarly, Natural disasters such as Floods and Earthquakes are most commonly experienced in Pakistan and suggest the inevitable subjectivity and cultural baggage that bring us to this judgment. The Media talks about the aftermath only such that the next day onwards it feels like nothing happened and we move on. Such conflicts raise questions and references of what the society is doing and the type of conversations we are having with each other. These references allow us to think about tolerance, collaboration, segregation and separation - what do all these different things mean.

How can we get into the minds of those who have witnessed such disasters and gather visual information and dismantle it? Words are the most prominent form of communication however; what if there was only sound, light and line to depict the disastrous narrative in the survivors mind. Humanizing such an experience takes the form of a physical analogue that is trying to have a conversation with the viewer by dismantling 2D images of the disasters, identifying their patterns and then transforming them into sometimes noise and sometimes silence. A space that feels oddly homey, personal, and comforting—especially striking hence becomes impossible to discern which patterns of sound and light are real and which are merely created in the mind of the listener.

Natural Disasters

Hazard Vs. disaster

- **Food Scarcity**

food often becomes scarce.

destroyed crops and loss of agricultural supplies
food prices rise, reducing families' purchasing power
and increasing the risk of severe malnutrition or worse.

- **Emotional Aftershocks**

traumatic for young children.

scenes of destruction and the deaths of friends and
loved ones, many children develop post-traumatic
stress disorder (PTSD), a serious psychological
condition resulting from extreme trauma.

- **Displaced Populations**

population displacement.

people have to abandon their homes and seek
shelter in other regions.

disrupt accessibility of health care and
education, as well as food supplies and clean
water.

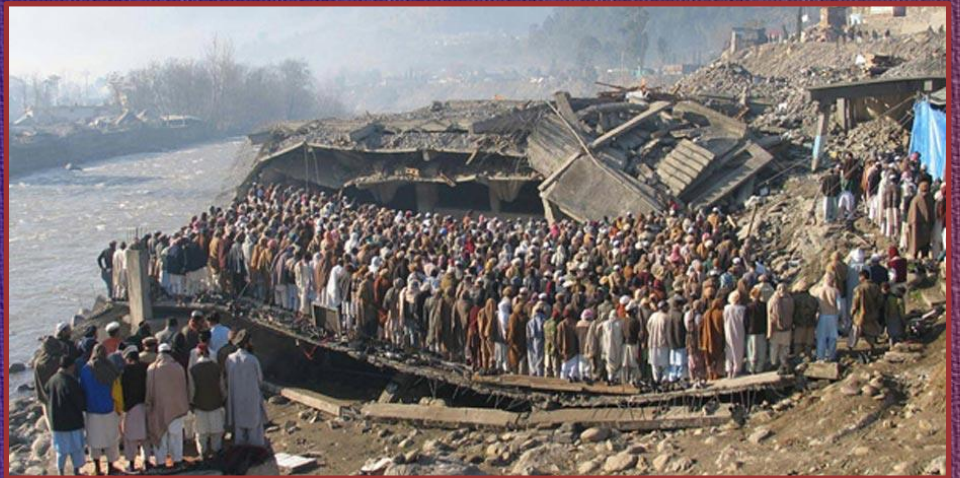
- **Health Risks**

stagnant water that allows breeding of
waterborne bacteria and malaria-carrying
mosquitos.

death tolls can rise even after the immediate
danger has passed.

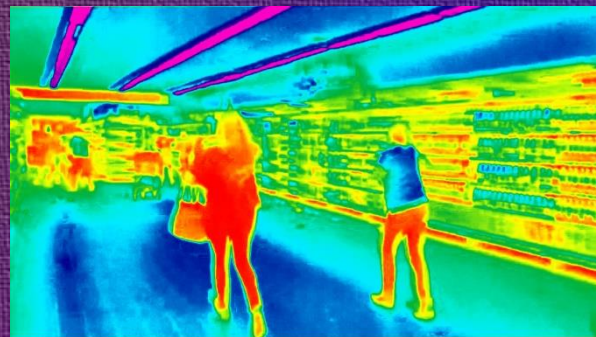
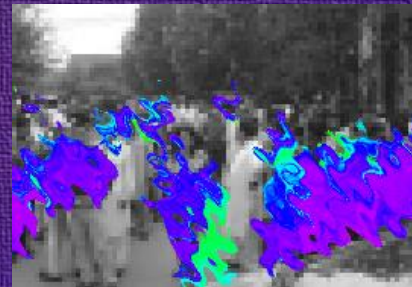
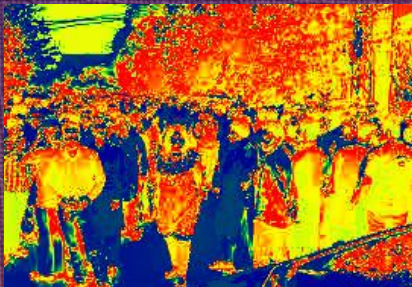
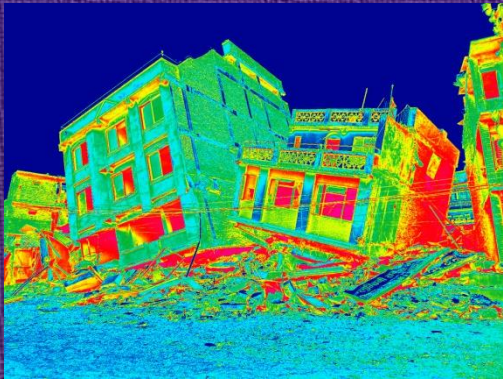
GALLERY



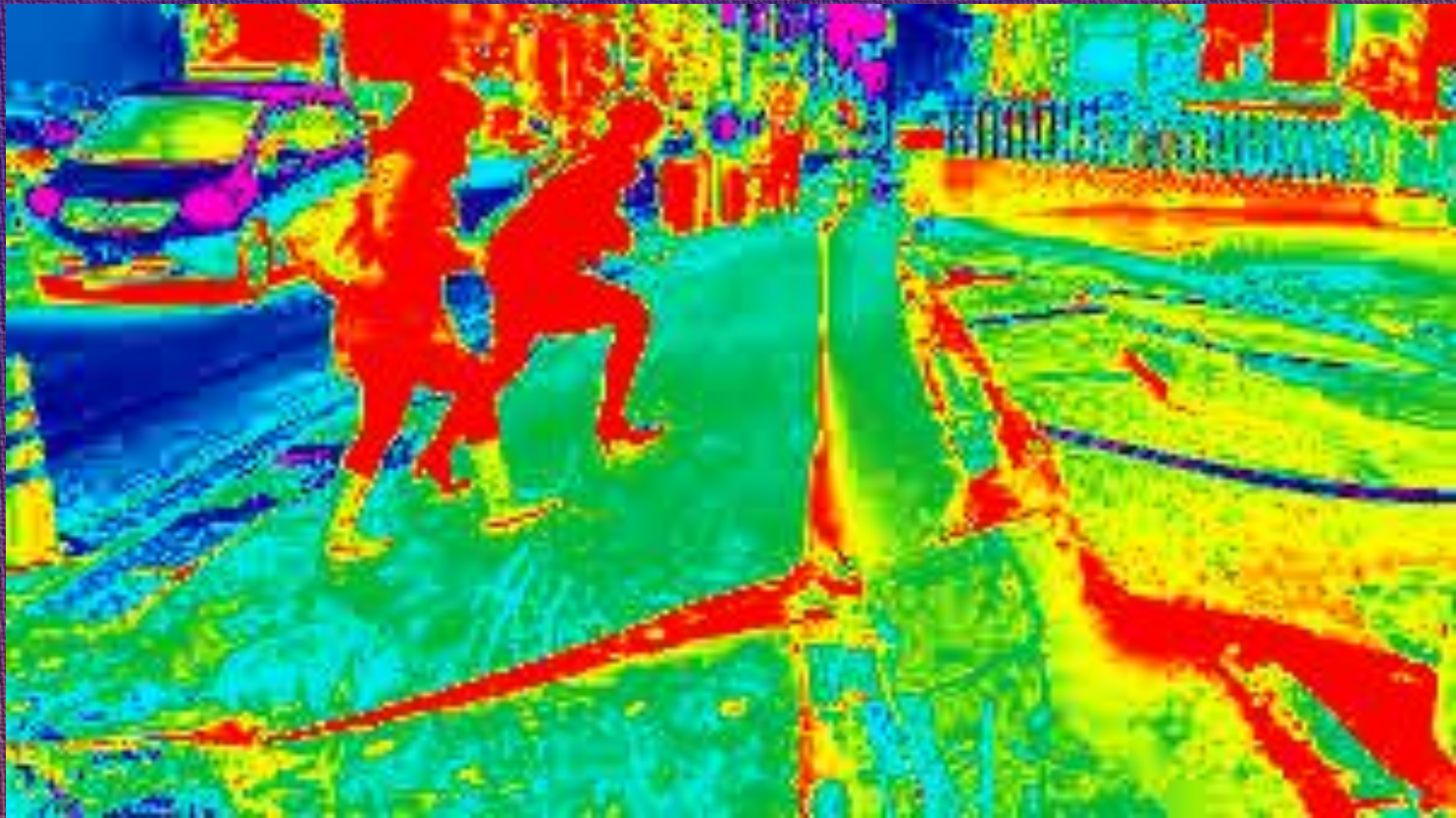


More Visualization Process

Heat Map Colors



<https://www.youtube.com/watch?v=kTI6geIBG9M>



Japan, earthquake on Shikoku island: 17 injured

<http://www.asianews.it/news-en/Japan-earthquake-on-Shikoku-island:-17-injured-30556.html>

SOUNDS

<https://www.youtube.com/watch?v=kTi6gelBG9M>

<https://www.youtube.com/watch?v=mgLBmLoL2Aw>

<https://www.youtube.com/watch?v=uKeENdylluI>

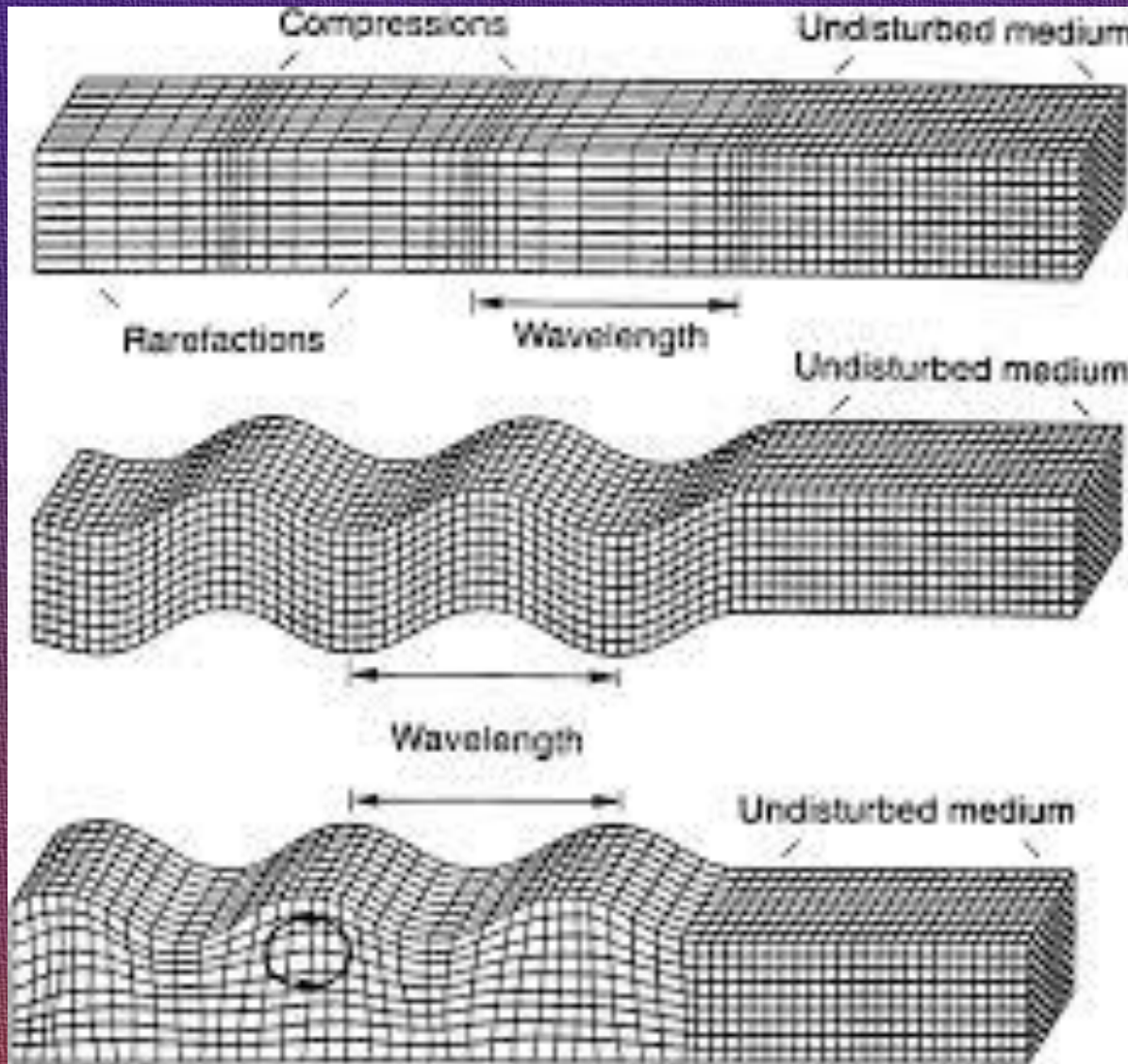
<https://www.youtube.com/watch?v=BzRJkZPgJk>

<https://www.youtube.com/watch?v=YxvuDSUmuN8>



Building Collapse

Up next



Seismic waves are waves of energy that travel through the Earth's layers, and are a result of earthquakes.

- **Elastic:** material that returns to its original shape after being deformed (i.e., rubber).



- **Inelastic:** material that does not return to its original shape after being deformed.

two main subcategories of inelastic materials:
brittle (material that cracks or fractures easily without much stretching, such as glass) and
ductile (material that can be drawn, stretched, or compressed into a deformed shape).



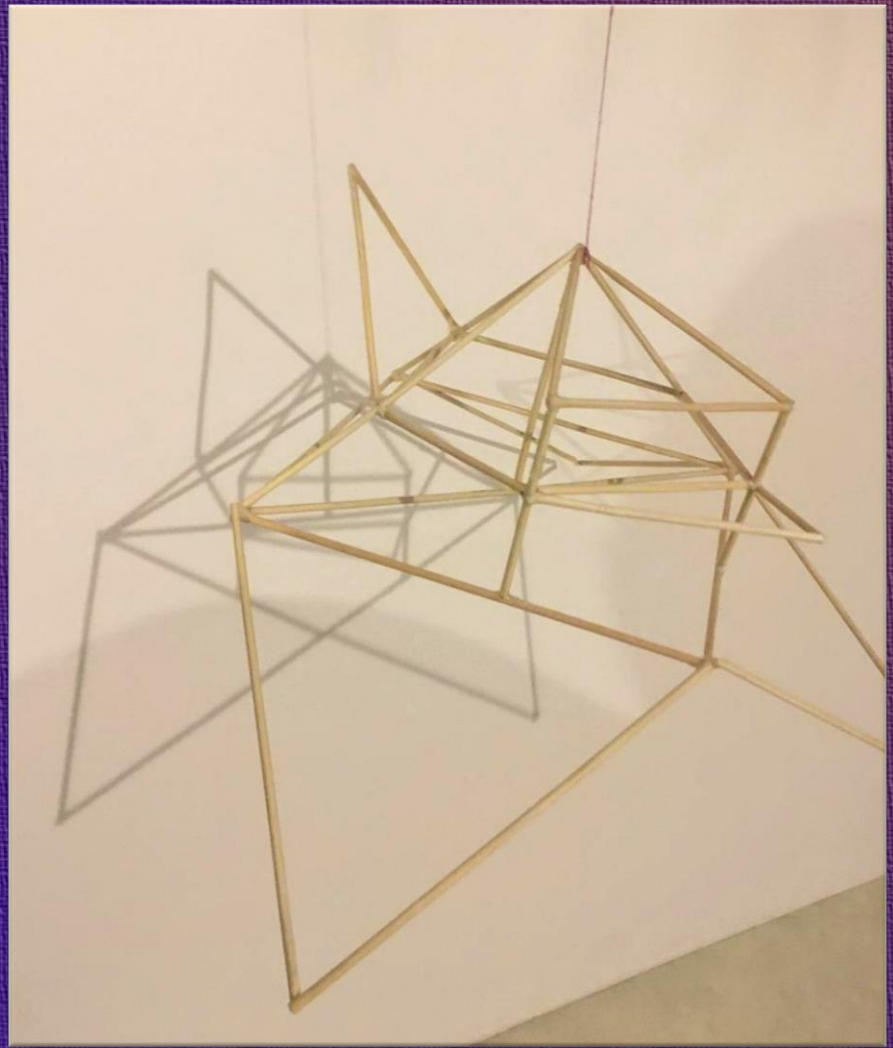
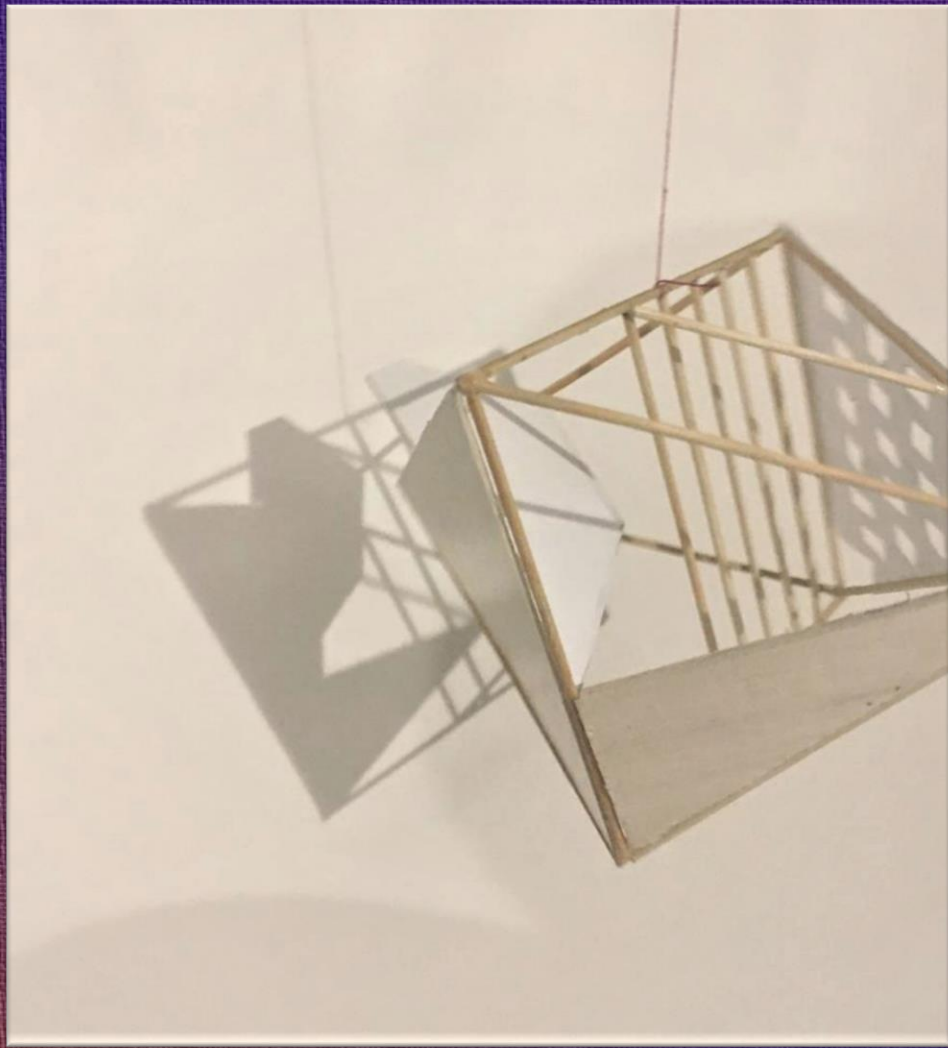
Sarah Sze is a contemporary American installation artist. Her large-scale sculptures often employ found objects, plants, photographs, wiring, and food detritus. Sze constructs her work by hand, building intricate and often gravity-defying towers that fill entire exhibition spaces.

growth and decay

<https://www.youtube.com/watch?v=DafdUVgwQcQ>



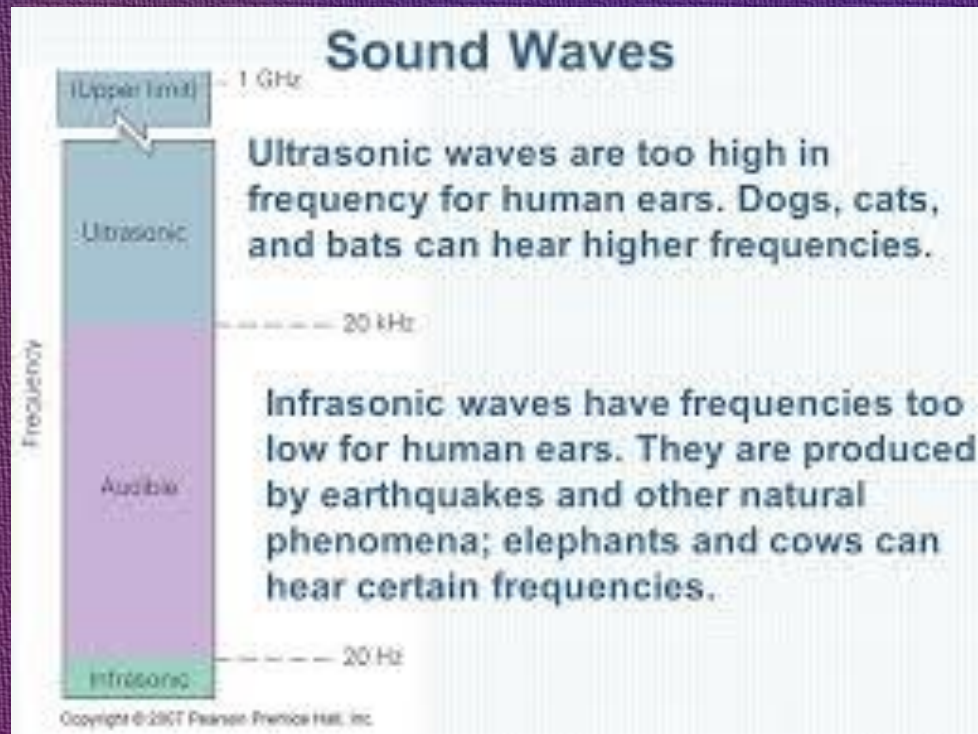
Lost Image Standing (Fragment Series),
2015



Interpreting
footsteps and motor
sounds, doors
opening

<http://janicecaswell.com/work/mapping/#>

- “To a certain extent, earthquakes are like thunder. Something happens and sound waves go out.”
- Hellweg: “Earthquakes do produce sounds, and people do hear them. What I heard when the P wave came was a noise that was kind of like a freight train going by but not very loud... and then the S wave came that actually shook the house and you could hear the house shaking and stuff like that.”



This video presents a visualization of how the Atwood Building in Anchorage, Alaska, shook during the M_w 7.0 November 30, 2018, Anchorage, Alaska, earthquake. The building was instrumented by the U.S. Geological Survey to obtain data to study its behavior and performance during strong shaking. Such data are useful in making decisions about improving the performance of the building.

Note that relative to the height of the building, the motions are magnified by a factor of 100 to show how the building deforms. Translational (back-and-forth) motion (more dominant in the east-designated direction) and limited torsional (twisting) motions are both observed, as well as limited beating effects (alternating cycles of generally increasing and decreasing levels of motion that occur when the structural damping of a building is low and when frequencies of translational and torsional motions are close).

An earlier video of the Atwood building visualizing shaking during the M_w 7.1 January 24, 2016, Iniskin, Alaska, earthquake can be found at:

Humans perceive an enormous amount of information about physical processes through sound; we do it all the time, mostly subconsciously. Interpreting footsteps and motor sounds, doors opening—this processing becomes conscious when we do not know what the sound is. because large earthquakes repeat on time scales that can be longer than our generational memories, people lose sight of the hazard. most of an earthquake's vibrations are too slow for our ears to hear.

120°W

115°W

SHAKING	<i>Not felt</i>	<i>Weak</i>	<i>Light</i>	<i>Moderate</i>	<i>Strong</i>	Very strong	Severe	Violent	Extreme
DAMAGE	none	none	none	Very light	<i>Light</i>	<i>Moderate</i>	<i>Moderate/Heavy</i>	<i>Heavy</i>	<i>Very Heavy</i>
INTENSITY	I	II-III	IV	V	VI	VII	VIII	IX	X+

Processed: Tue Dec 3 21:22:38 2019 vmdyfi1

Dec to Jan

Post Mid – Crit

Feedback / Progress

Light and Earthquake

What could cause earthquake lights?

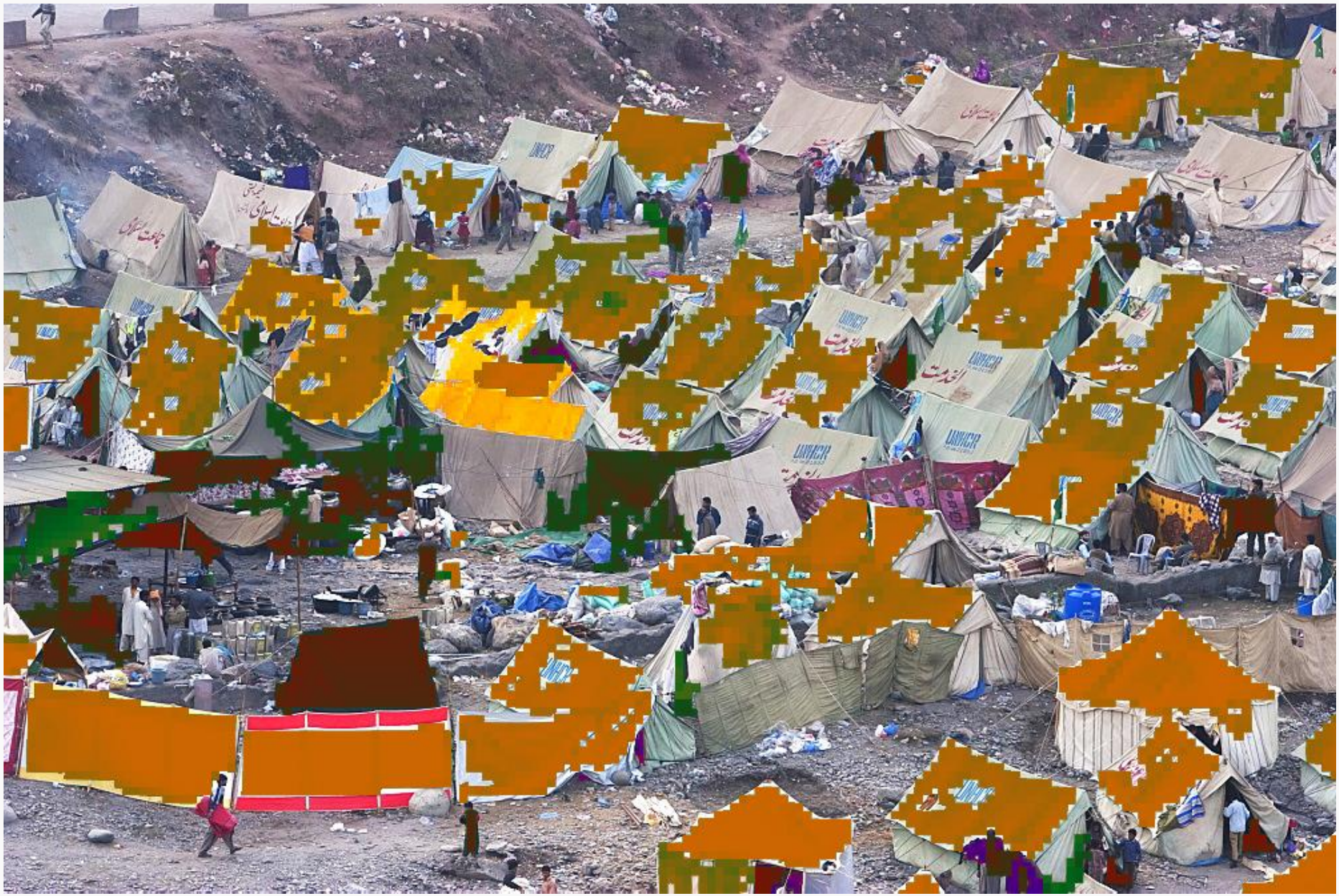
Analyzing 65 earthquake light incidents for patterns in the 2014 study, Freund and colleagues theorized that **the lights are caused by electric charges activated in certain types of rocks during seismic activity**, "as if you switched on a battery in the Earth's crust."

<https://www.nationalgeographic.com/environment/natural-disasters/reference/earthquake-lights/>

<https://pubs.geoscienceworld.org/ssa/srl/article-abstract/85/1/159/349010/Prevalence-of-Earthquake-Lights-Associated-with?redirectedFrom=fulltext>

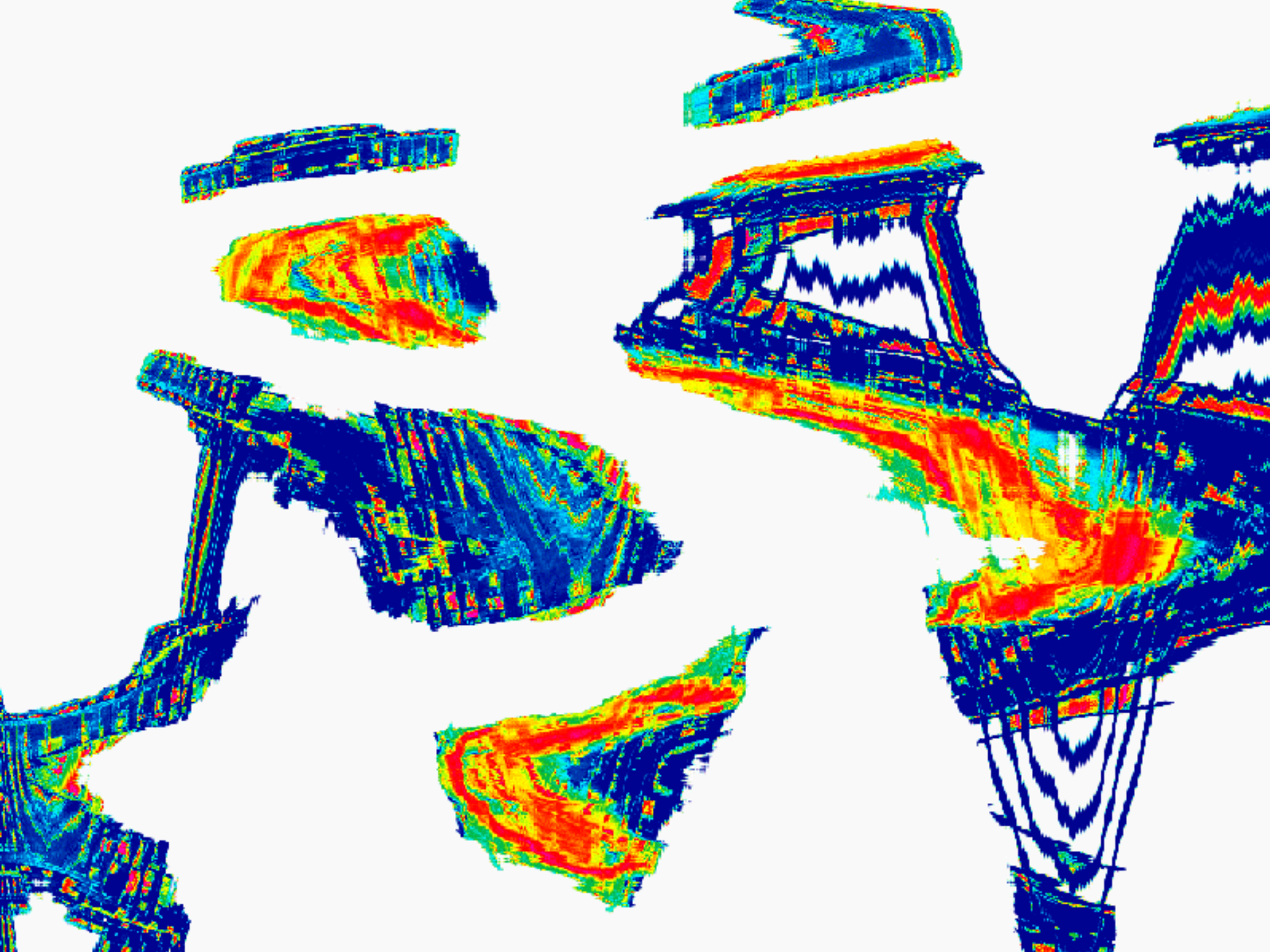
https://www.eurekaalert.org/pub_releases/2014-01/ssoa-ell122013.php

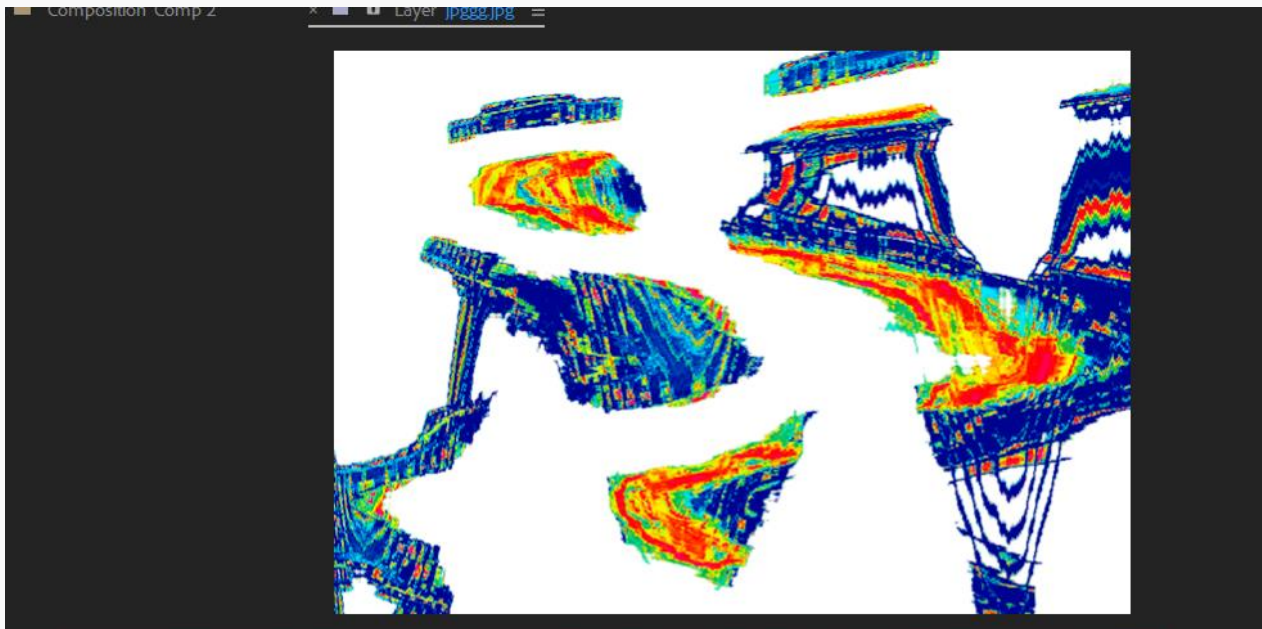
<https://www.youtube.com/watch?v=C-V1uXeyGmg>






The





After Effects

 After Effects error: unbalanced unlock.
(7 : 40)

OK

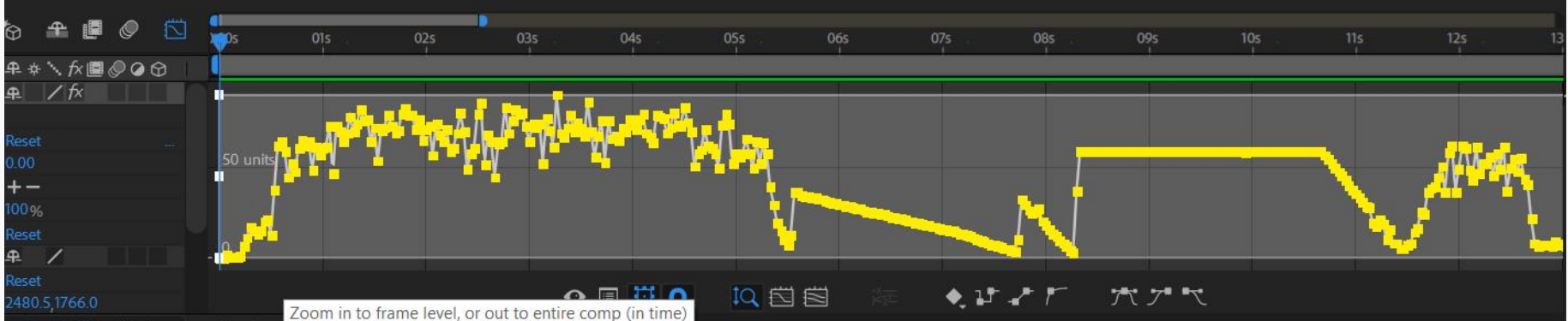
20s 25s 30s 35s

05s 10s 15s 20s 25s 30s 35s 40s 45s 50s 55s 00:02f 05s

100% 0:00:00 0:01:06:19 Δ 0:01:06:20 View: Masks Render

(12.5%) 0:00:52:11

- ▶ Expression Controls
- ▶ Generate
- ▶ Immersive Video
- ▶ Keying
- ▶ Matte
- ▶ Noise & Grain
- ▶ Obsolete
- ▶ Perspective
- ▶ Simulation
- ▶ Stylize
- ▶ Synthetic Aperture
- ▶ Text
- ▶ Time
- ▶ Transition
- ▶ Utility









experiment2.mp3

Sounds of:

Door opening and closing

Buildings collapsing

Friction between walls

Sound of an airplane

Plates colliding

Rocks moving up and down

Choose a preset!

Load picture... Save sound as...

Reload picture Save sound

About... Create or Play sound

Upgrade...

Program help...

Loop sound Time taken: -

- Rotate 90°
- Flip X
- Flip Y
- Invert colours
- Normalize volume
- Stereo

Wav quality: 16 bit
44100 <<<

- Factory settings
- Save pic with project
- Save project as...
- Save project
- Load project...
- Reload project
- Open saved picture when loading project
- Project:



Show HQ Filename: 161658_2979464_updates.jpg Pic size: 640 x 480
ms/pixel: 6.3

Gamma: 1.05

Volume: 0.99 Fade in (ms): 50.00
Stereo (%): 25 Fade out (ms): 50.00

Quality (waves): 256

Sound time (sec): 4.0000

Lowest freq (Hz): 37 Feather 1.0

Highest freq (Hz): 10000 0.8

Brightness: 1.00

Tone: 1.00 Linear Log Invert freqs

Harmonics: 1 Step: 1 H-Tone: 1.00

Instrument and harmony quantization

Stretch partials: Yes -0 Map mode: Pseudo linear Load.. Save..

Note harmonics: 1 to 40 Select...

Chord notes: -12 Select...

-1 +1 -1 octave +1 octave Middle C

Harmonic brightness: 0.70

Quantization strength: 15.849

Base pitch (Hz): 270.588 Mid C

- Show waves
- Defaults
- Random settings...
- Random

<https://www.youtube.com/watch?v=p1xStVAtQvQ>



<https://www.phon.ucl.ac.uk/courses/spsci/acoustics/week1-10.pdf>

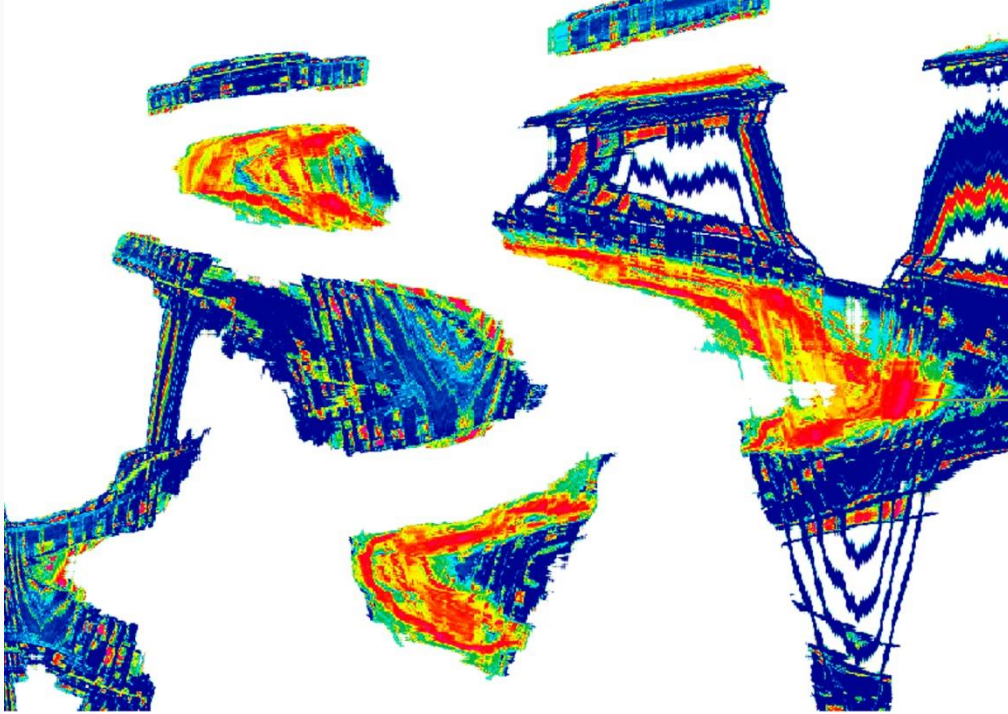
Studying Spectrograms

Quality of sound that is produced

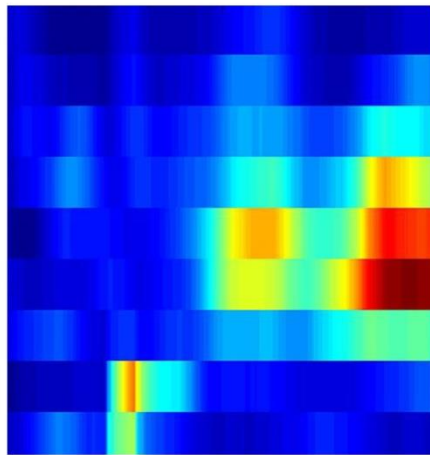
Overtone of different sounds that are produced

Brightness and darkness of the lines show low and high frequency sounds

Amplitude of the frequency

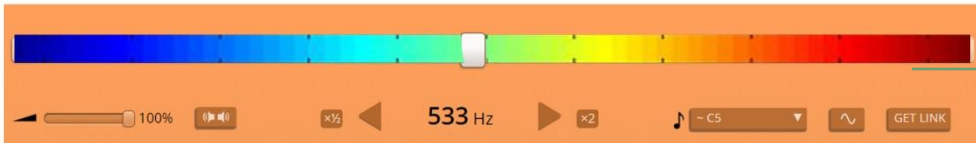


Visual that will be converted to pixels



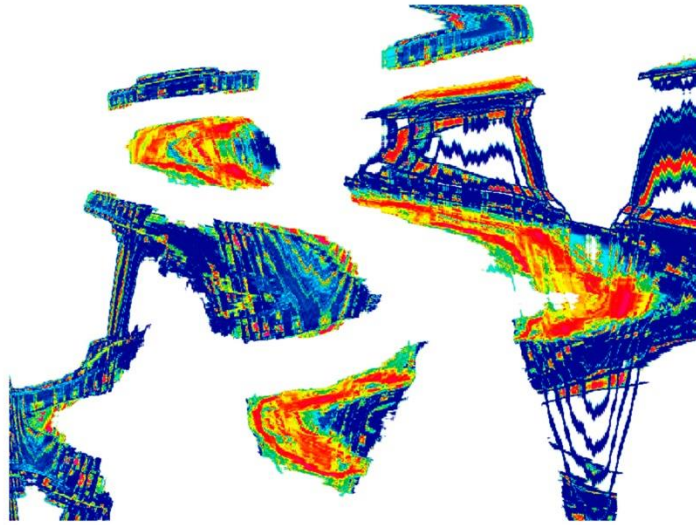
Spectrogram

signal strength, or “loudness”, of a **signal** over time at various frequencies present in a particular waveform.

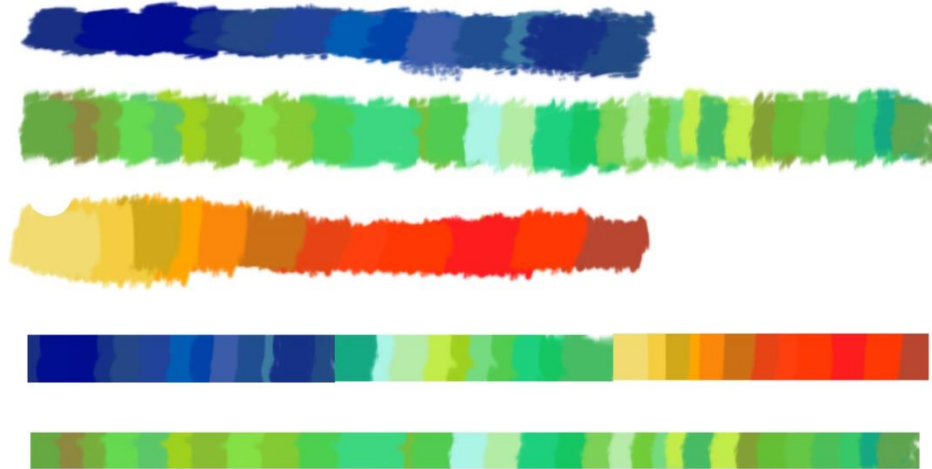


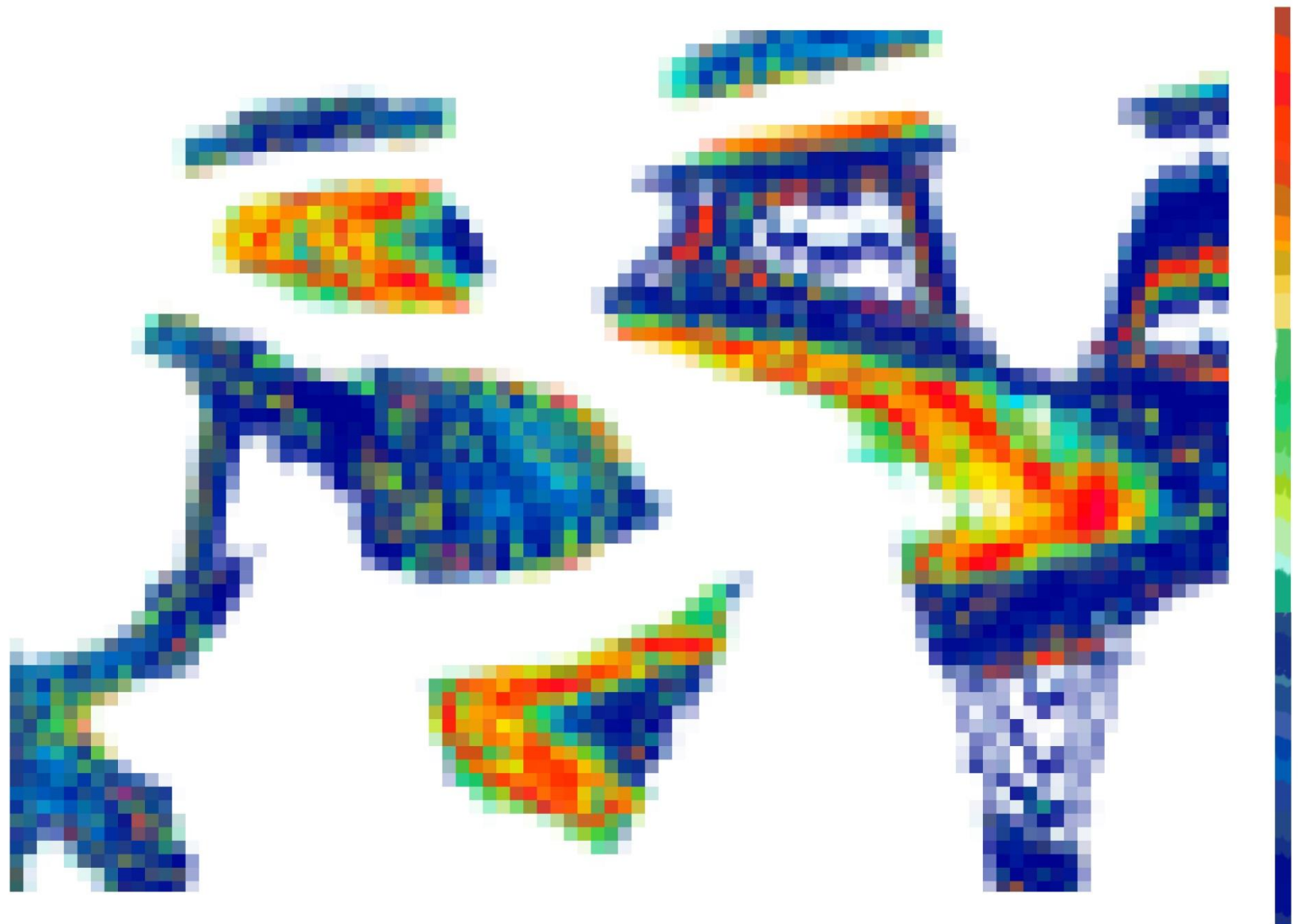
Tone generator

**SPECTROGRAM
COLOR STUDY**



**BLUE -
RED**





<https://musiclab.chromeexperiments.com/Spectrogram/>



experiment2.mp3

**F
R
E
Q
U
E
N
C
Y**
(HZ)

1
2
0
0
0
h
z

quiet

HIGH FREQUENCY

Loud
frequency

LOW FREQUENCY

5
0
h
z



experimentttt

File Edit Select View Transport Tracks Generate Effect Analyze Tools Help

MME Microphone (Realtek Audio) 2 (Stereo) Recording Cha Speakers / Headphones (Realtek)

0.0 1.0 2.0 3.0 4.0 5.0 6.0 7.0

8k 6k 5k 4k 3k 2k 0k

Mute Solo

earthquakes

8k 6k 5k 4k 3k 2k 0k

Mute Solo

equake4

8k 6k 5k 4k 3k 2k 0k

Mute Solo

equake5

8k 6k 5k 4k 3k 2k 0k

Mute Solo

QUAKE+1

8k 6k 5k 4k 3k 2k 0k

Mute Solo

quake+6

8k 6k 5k 4k 3k 2k 0k

Mute Solo

Preferences: Spectrograms

Devices
Playback
Recording
MIDI Devices
Quality
Interface
Tracks
Tracks Behaviors
Spectrograms
Import / Export
Extended Import
Projects
Libraries
Directories
Warnings
Effects
Keyboard
Mouse
Modules

Scale
Scale: Linear
Min Frequency (Hz): 0
Max Frequency (Hz): 3000
Colors
Gain (dB): 20
Range (dB): 0
High boost (dB/dec): 0
Grayscale

Algorithm
Algorithm: Frequencies
Window size: 4096
Window type: Blackman
Zero padding factor: 1
 Enable Spectral Selection

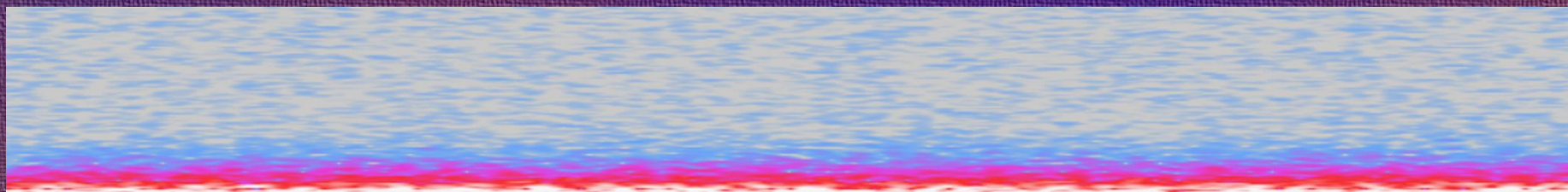
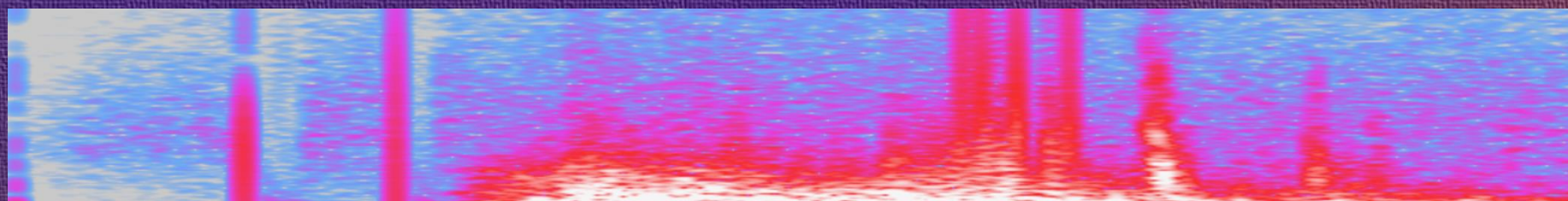
Preview OK Cancel ?

Project Rate (Hz) Snap-To Audio Position Start and End of Selection

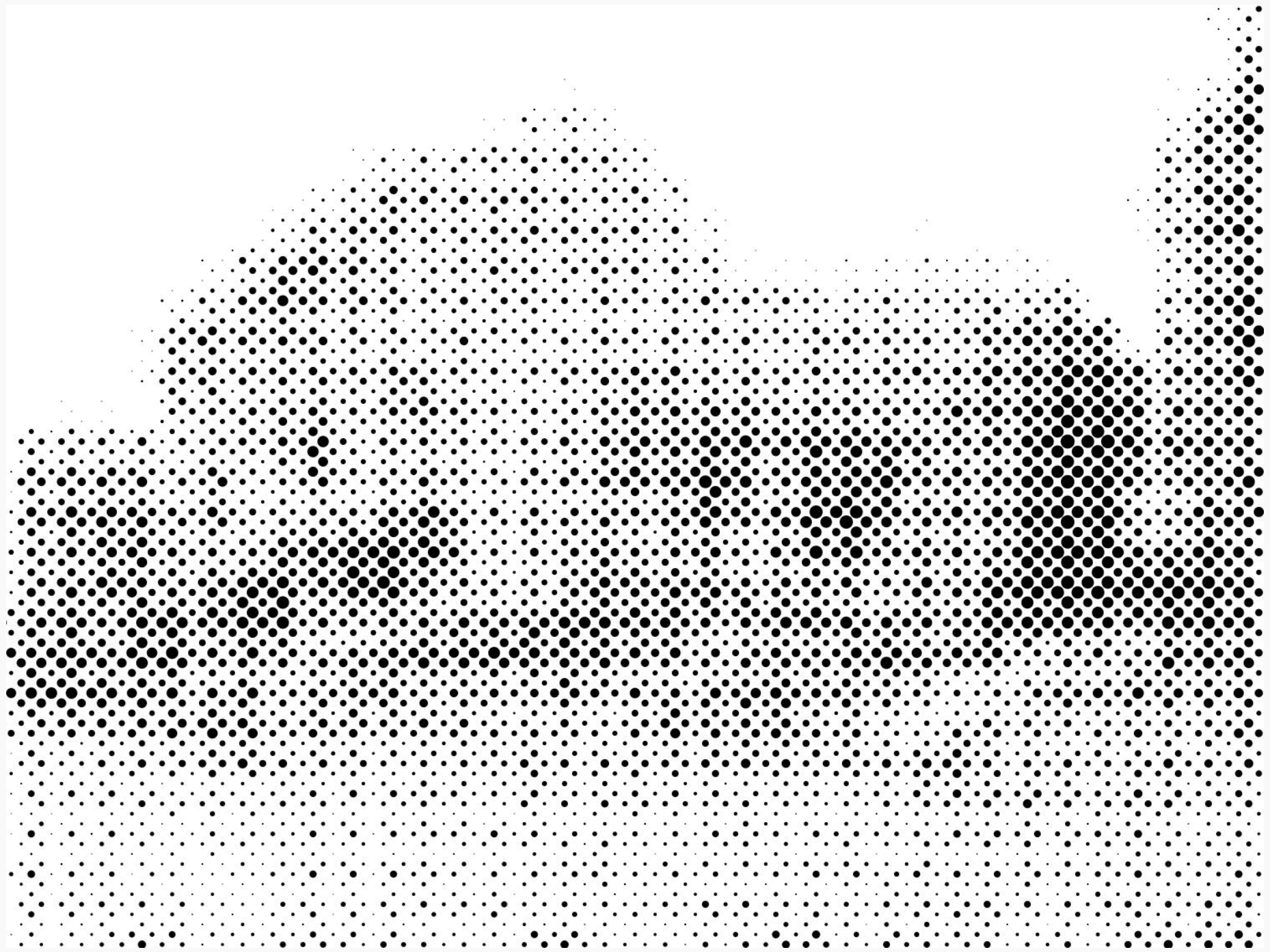
44100 Off 00 h 00 m 00.079 s 00 h 00 m 00.079 s 00 h 00 m 00.081 s

Stopped.

Windows taskbar: ENG 12:56 AM UK 12/31/2019







The city of Balakot was destroyed by a intensity of X (EMS98 scale). Many buildings were destroyed in Muzaffarabad (Figures 5 and 6). The isoseismal map for 8 Oct 2005 earthquake (Figure 7) is prepared based on the total destruction of epicentral zone (Balakot and Muzaffarabad) and studying the reports of remote places such as Srinagar in India and Lahore in Pakistan. This map is essentially based on field visits of IIEES reconnaissance team. The visits were taken place in less than three weeks after the epicentral mainshock . The maximum intensity was estimated to be around Balakot and along Muzaffarabad fault, with a width of 10-15 km around fault.



Figure 4: landslides in southern Balakot (the white color patches on the slops).

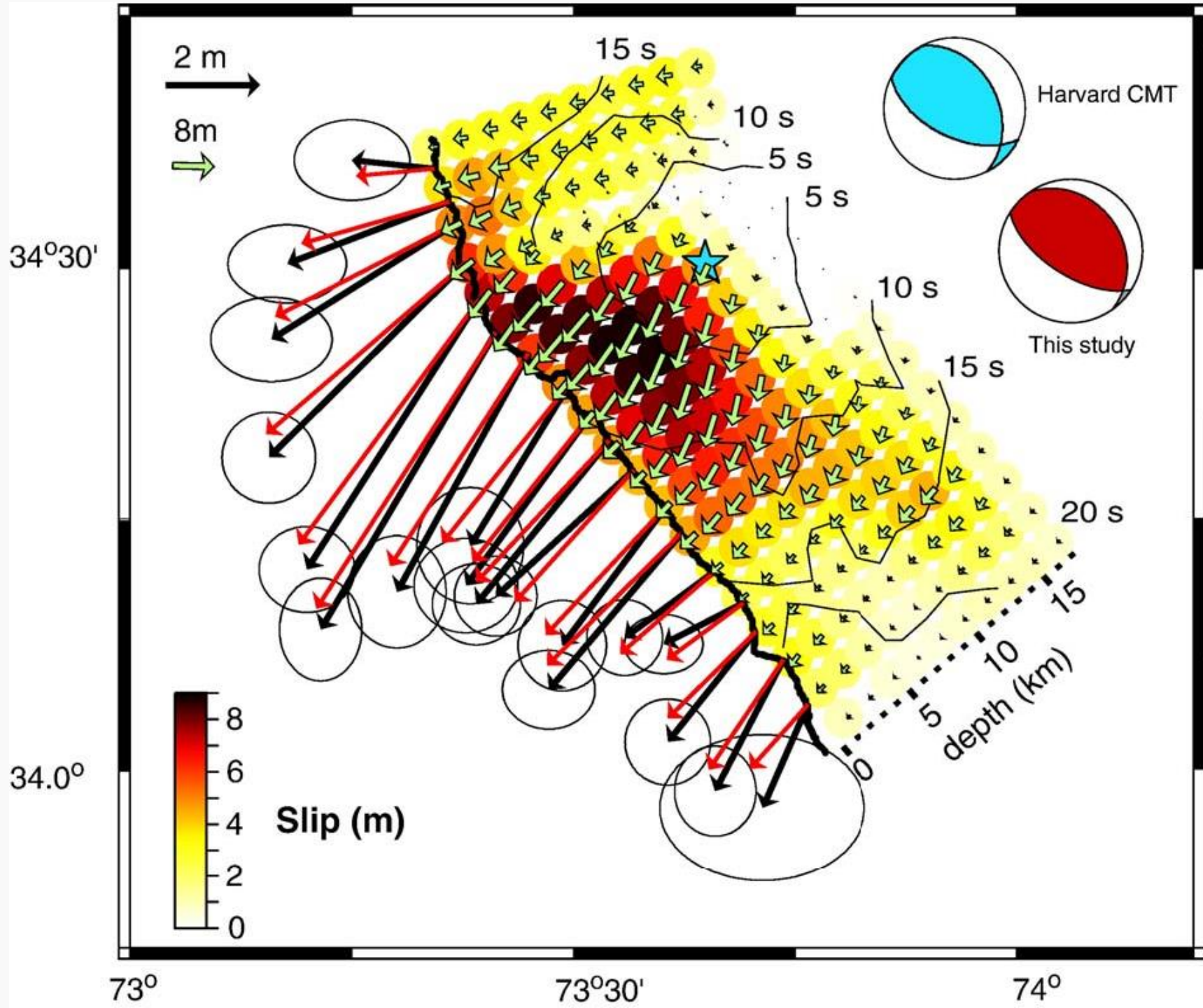
The 14th World Conference on Earthquake Engineering
October 12-17, 2008, Beijing, China



Figure 5: Crunched Hospital building (Ijaz Golab Hospital), in Muzaffarabad.



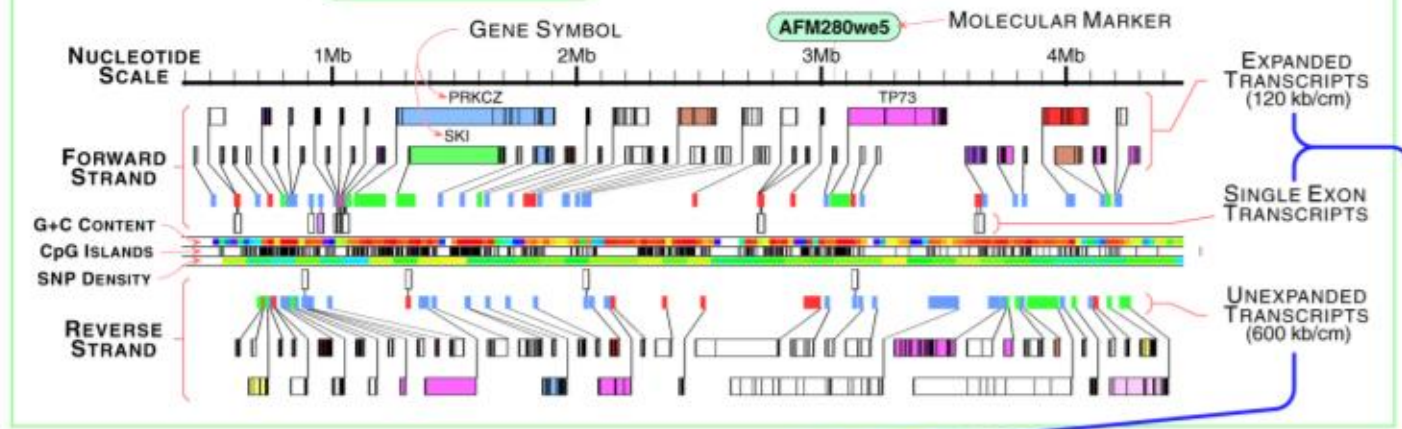
Figure 6: Collapsed Sangam Hotel building (in Muzaffarabad).



Residents of Balakot traversing a bridge after Pakistan's 2005 earthquake



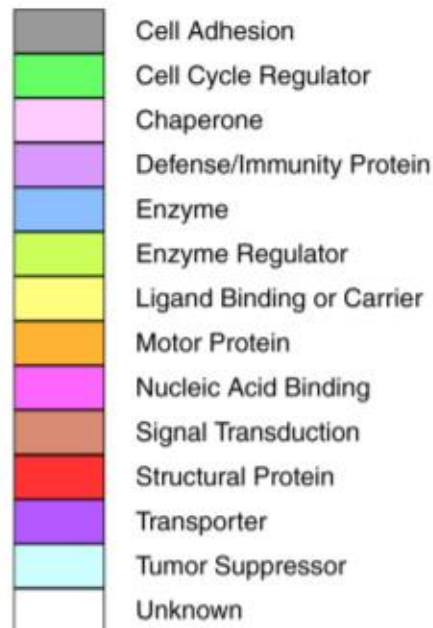
FIGURE ELEMENTS



GENE AUTHORITY



GENE ONTOLOGY CATEGORIES



The Sequence of the Human Genome

J. C. Venter et al. – FIGURE 1

Supplement to: *Science*, Vol. 291, No. 5507.

COLOR GRADIENT FEATURES

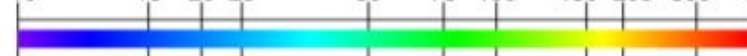
G + C CONTENT: Asymmetric Ranges (per 25 kbp)

10 15 20 25 30 35 36 37 38 39 40 45 50 55 60



SNP DENSITY: Logarithmic Scale (per 100 kbp)

10 15 20 25 50 75 100 150 200 300 400



Ben goes onto explain his belief that there are at least four aesthetic aspects of treemaps:

1. Layout design (slice-and-dice, squarified, ordered, strip, etc.)
2. Color palette (muted, bold, sequential, divergent, rainbow, etc.)
3. aspect ratio of the entire image (square, golden ratio, wide, tall, etc.)
4. prominence of borders for each region, each hierarchy level, and the surrounding box



Ideation behind designing the maps

The earthquake occurred within the Hazara-Kashmir syntaxis of the Himalayan fold belt. The main identified feature in this zone is the Balakot- Bagh fault (Hussain 2005), which is the likely source of the Earthquake. The fault plane solution shows a strike of 338 degrees, dipping about 50 degrees in the N-NE direction near the surface with a more gentle dip at depth. Net slip for this event, estimated by field survey and radar range changes, is 4.2 ± 0.5 m, with a maximum slip of approximately 5m.

How did I design my own sounds?

a rock thrown into water, the initial splash would be the tone (or note) and the *distance* between each ripple would be the harmonic overtones.

- It takes **3 or more notes** to create a musical chord.
- Odd-harmonics (1,3,5,7, etc) which would be the composition of your musical "pixel".
- colors are a frequency also: Frequency means rate of change of something.

The longer-wavelength infrared waves produce heat and include radiation emitted by fire, the sun and other heat-producing objects; shorter-wavelength infrared rays do not produce much heat and are used in remote controls and imaging technologies.

Most **earthquake** waves have a **frequency** of less than 20 Hz, so the waves themselves are usually not heard. Most of the rumbling noise heard during an **earthquake** is the building and its contents moving.

Earthquake-induced seismic wave frequencies span several orders of magnitude, from about 20 hertz up to 20k hertz. Low-frequency waves can travel long distances but usually do not cause much damage, whereas the highest-frequency waves tend to dissipate in the ground very close to the earthquake source. But relatively high-frequency waves of up to several tens of hertz can still travel over long distances, posing a potential danger to buildings and bridges, many of which are most vulnerable to damage by seismic waves.

Feedback JAN

<https://processing.org/>

<https://ayeshasaeed.com/artists-books/letters-archive/#jp-carousel-607>

<http://hint.fm/wind/>

<http://luftwerk.net/>

<https://www.youtube.com/watch?v=-yy5Rc4jMDI>



Iceberg is a playful immersive work that tells the story of an iceberg, from its calving into Arctic waters to its final melting near a southern shore. In their natural state, the crevasses within an iceberg resonate like gigantic organ pipes whose tonalities change as the iceberg gradually melts. Inspired by this monumental natural musical instrument, Iceberg consists of a series of illuminated metallic arches that each produce a particular sound. Arranged as a tunnel, the arches beckon visitors to enter, listen to and play this giant organ, whose notes and light travel from end to end of the musical corridor. Human activity "warms up" these ice monuments and transforms their original nature into a visual and auditory symphony.

Ongoing explorations of waveforms – how they are perceived, the emotional and physical responses they create and the various ways in which we relate to them.

' I want to hear light and see sound '

The light

Four circuits of LED strips—basically, Christmas lights—are red, green, and blue, the primary colors of light. "When the lights fade, there's a buzzing," explains Mirza. "And when they flash, there's a pulse." These LEDs, however, are not the ones we hear: The sounds come from another set, on the motherboard. The rest are for "occupying and amplifying the architecture," defining the space around the columns in the room.

There's a raw, unpainted wall toward the back of the room—"a ruin" from its previous life as a restaurant-supply store—that Mirza was excited to reuse. "There was already a two-way mirror there, installed right in the wall, so I just made use of it." He wedged red and blue LEDs between the layers of reflective surfaces, then set up a fan behind it, causing the glass to shake. The result: a lo-fi "infinity mirror," a quivering, pulsating window into another dimension.

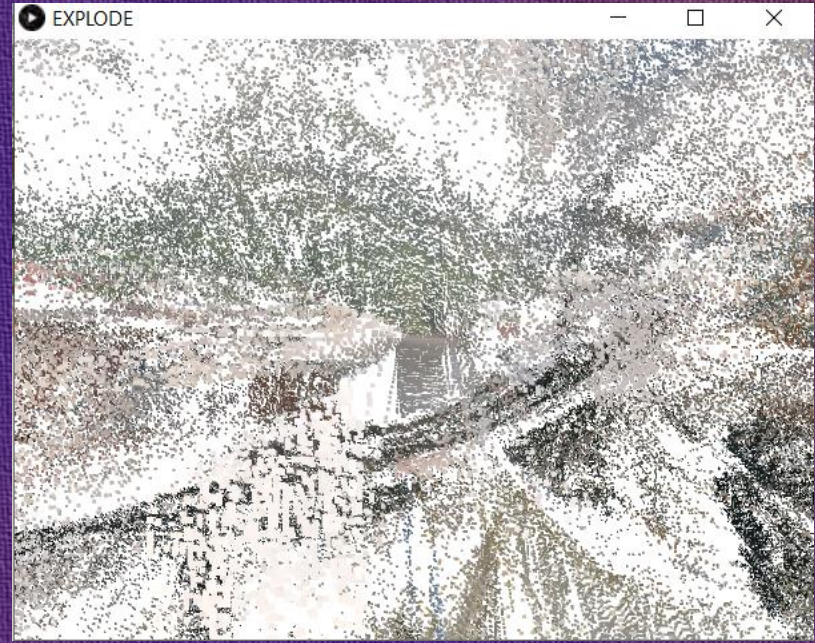
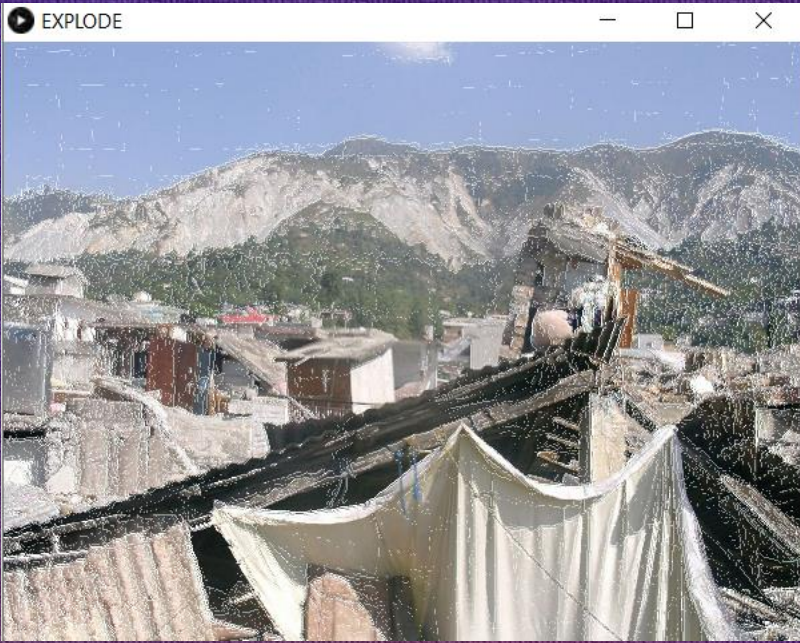
<https://nymag.com/arts/art/features/preoccupied-waveforms-2012-10/>

How I imagined my space to look like?



A **social experiment** is a kind of psychological or sociological research for testing a people's reaction to certain situations or events. The **experiment** relies on a particular **social** approach, when a main source of information is people with their own knowledge and point of view.

recontextualising



More interactive experiment done on processing

Sound Development

This shift in the ground produces two kinds of sound waves — P waves and S waves. The low rumbling noise at the beginning is P waves and the S waves' arrival is the big bang you hear.

<https://news.berkeley.edu/2018/01/12/transcript-berkeley-seismologists-capture-earthquakes-rumble/>

By honing in on these visual and sound patterns, researchers can improve their understanding of the natural phenomena that created the patterns. Specifically for sound, "the human auditory system can perceive a great deal of subtlety in seismic data, including direction, earthquake source, and also the physical nature of the crust near the seismometer," Holtzman said.

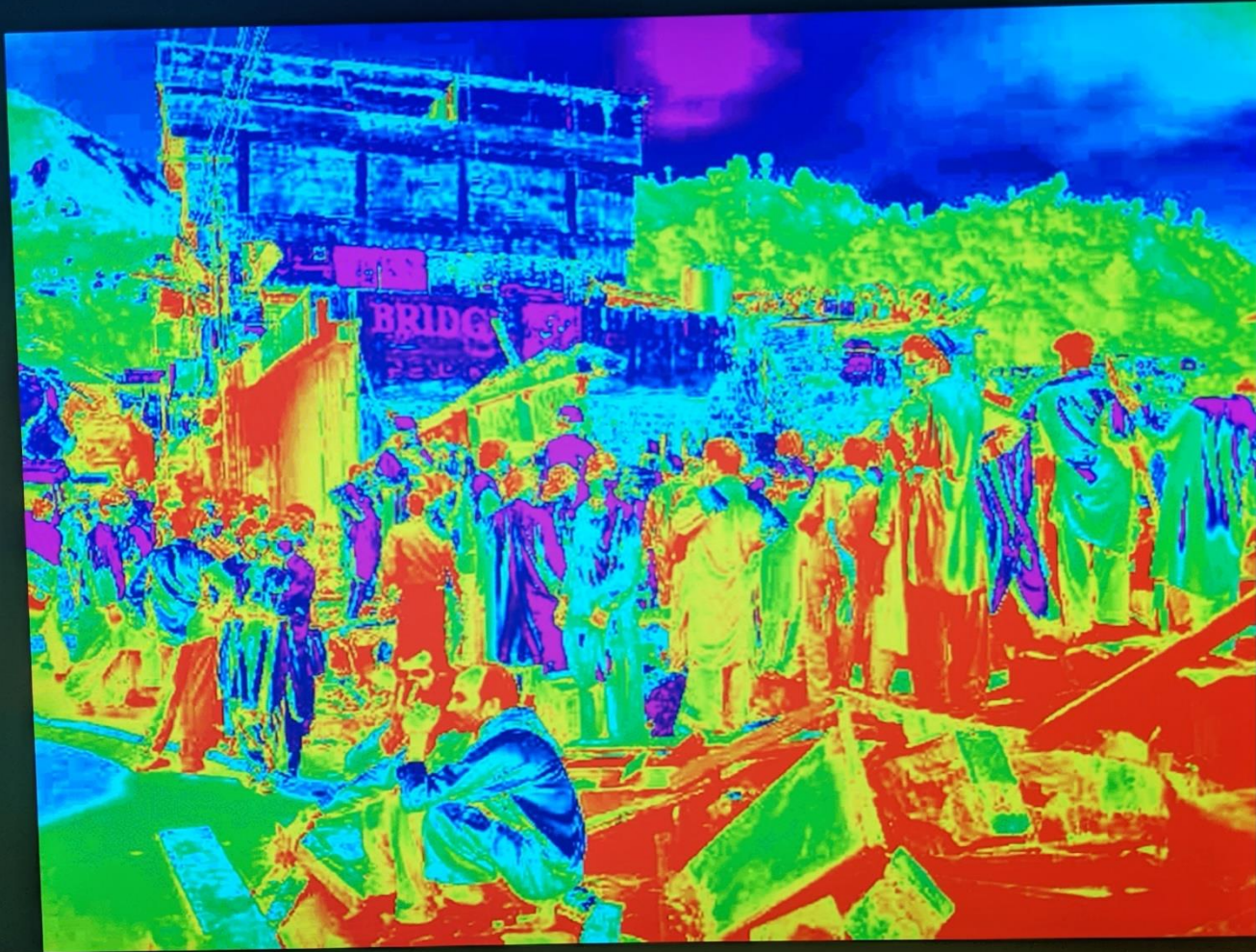
are not trying to simulate the experience of being in an earthquake; rather, as observers seek meaning in the sounds and images, they grapple with the magnitude of this shift. In a subliminal way, these sounds can bring people to realize how fragile and transient is our existence, as well as a fundamental curiosity about the planet

We worked with an amazing team led by [Tellart](#) to design the Museum of the Future exhibition at the 2016 World Government Summit in Dubai. The team consisted of [Marshmallow Laser Feast](#), [LUST](#), [Idee und Klang](#).

We developed the overall interior design and architecture of the exhibition. The theme of this year's museum was *Machinic Life*. We used the architecture of each zone as an opportunity to augment the many interactive and visual experiences developed by the team. Including a complex tensile space that contained products from the future to a large crystalline clad room that reflected a large interactive LED column.

Photographs: Tellart





FEBRUARY PROCESS / RESEARCH

- Points to study

Emotional Response

Is sound the only outcome?

How do I decide which sound is used when?

Do the pixels provide us with data?

Why cant the pixels take another form?

19 Days

- Building my own photo Gallery
- learning/ Exploring Processing
- Research/ Gathering facts
- Sound/ Visualization
- Reflection on feedback

MON	TUE	WED	THU	FRI	SAT	SUN
10 <small>understand coding, look at examples and read them</small>	11	12	13 <small>collect photos of sites i will be using / research ATLEAST 100</small>	14	15 <small>Make sounds and use code to make visual examples. AT LEAST (one processing example)</small>	16
17 <small>continue work on processing</small>	18 <small>Execution ideas and the mechanism of the installation (research)</small>	19	20 <small>Circuits & construction</small>	21	22 <small>finalise images that will be used ATLEAST 50</small>	23 <small>recognising sounds with every image</small>
24 <small>make more sounds / data visualization</small>	25 <small>more image process examples</small>	26	27 <small>PROTOTYPE OF IMAGES WITH SOUND</small>	28	29 BREAK	

2020 FEBRUARY

DELIVERABLES: Sound Variations and 3 coded images PROTYOYPE

Visualization

Image processing / Pixilation

Building my own photo Gallery

Using code to manipulate existing images

PHOTO GALLERY

- Muzaffarabad
- Balakot
- Islamabad

Quick Links

State of AJK



SERRA-MIS



Picture Galleries



Downloads



Documentary



WEBMAIL



02-MUZAFFARABAD 2

[View All Albums](#)

Page 1 of 2 [1](#) [2](#) »»

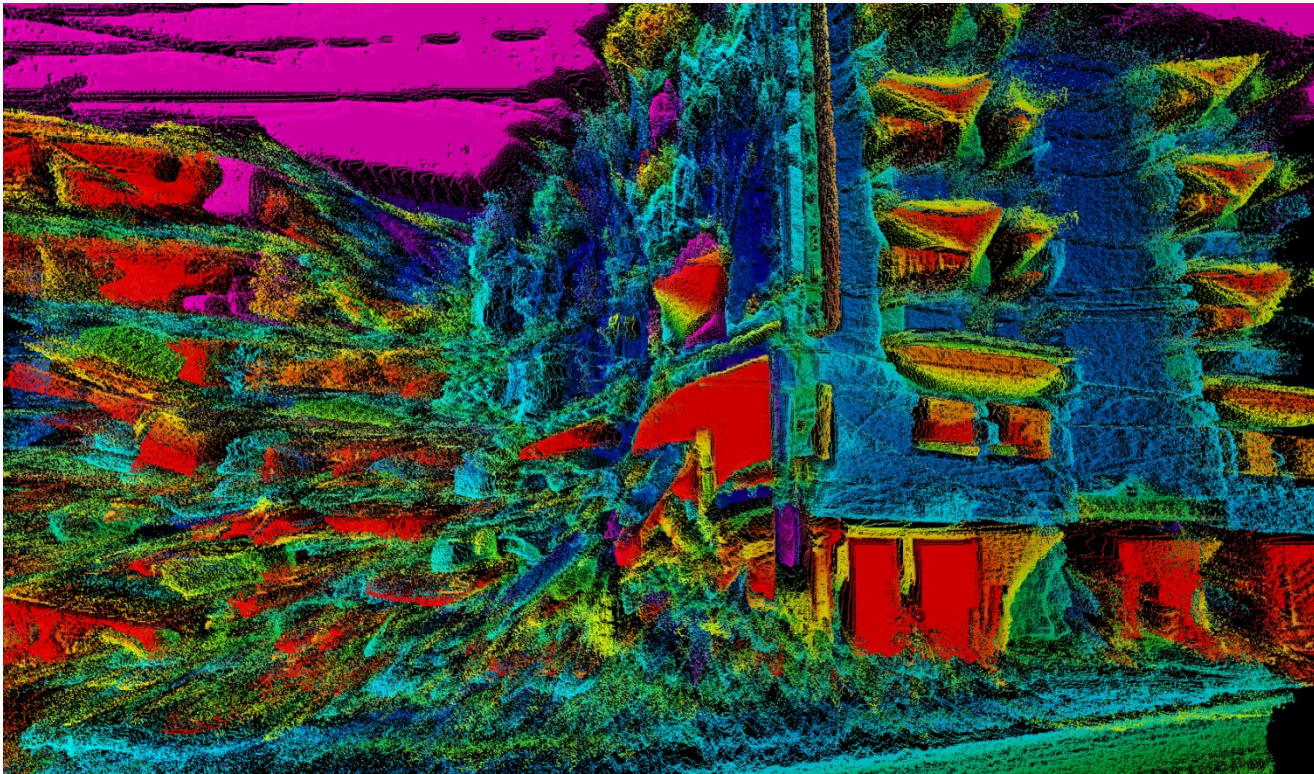
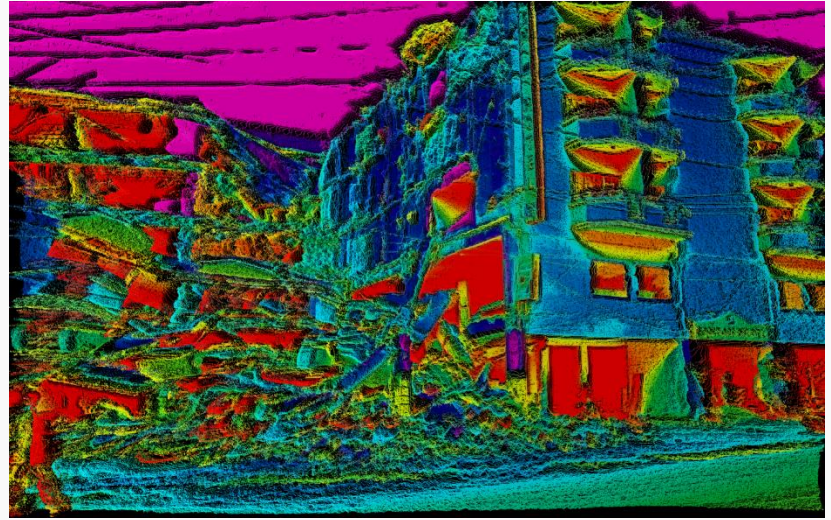
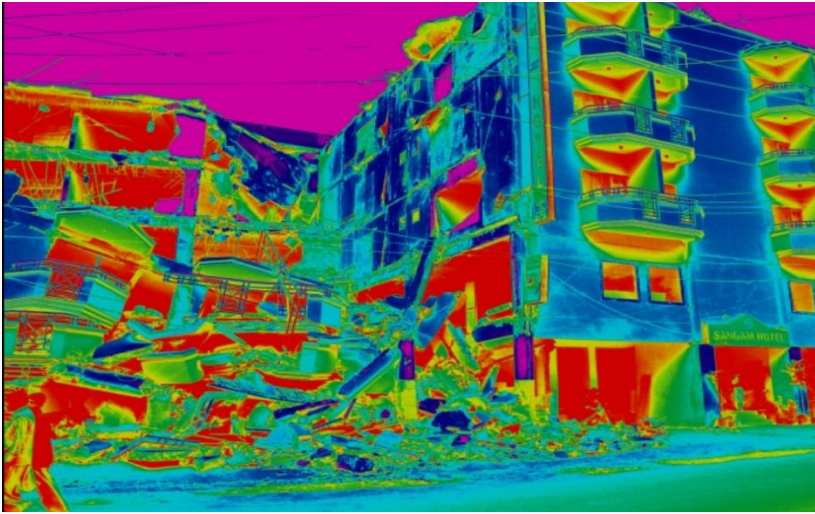


<http://serra.gov.pk/gallery.php?album=02-Muzaffarabad+2&name=Earthquake%202005>

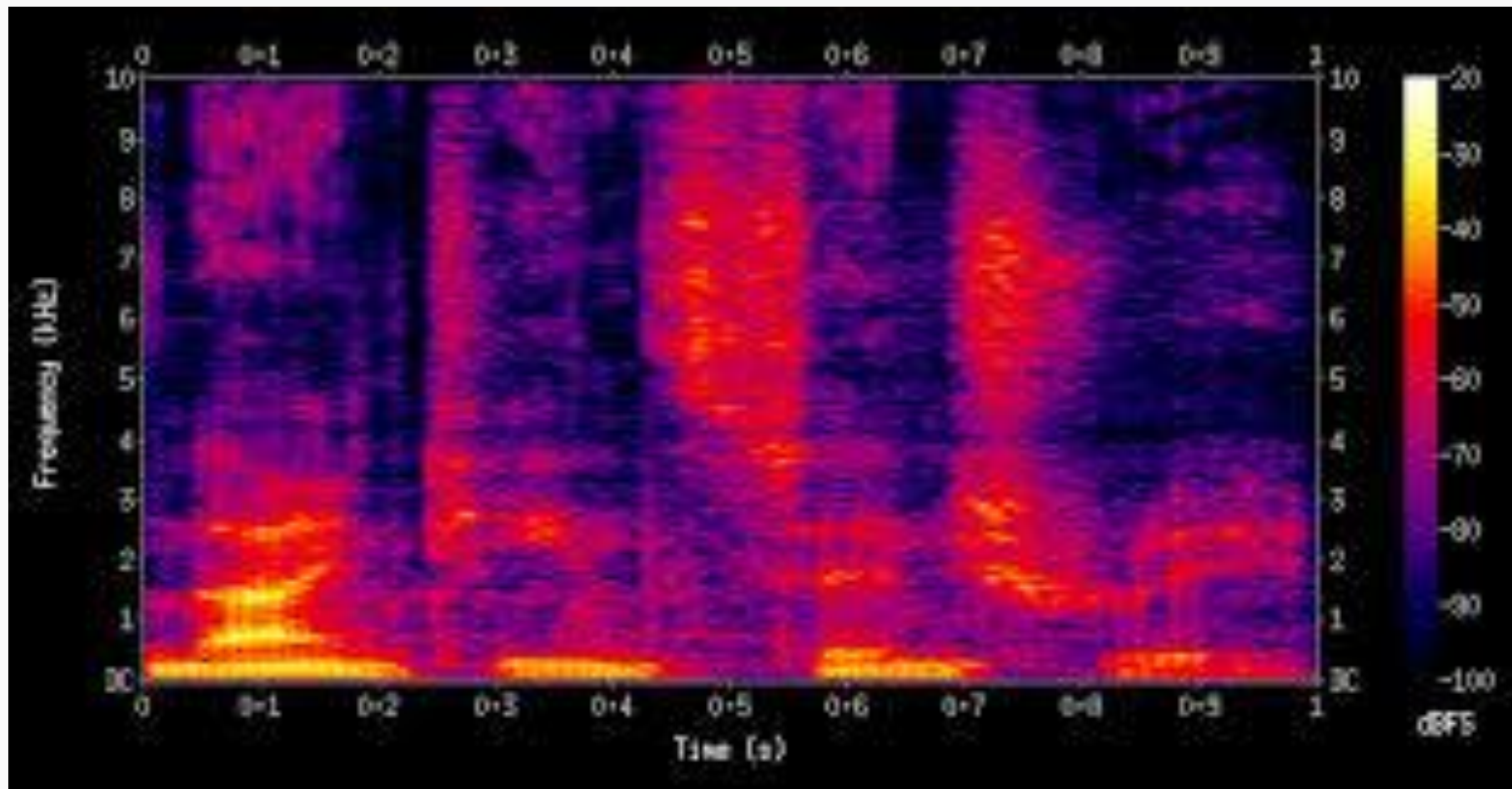


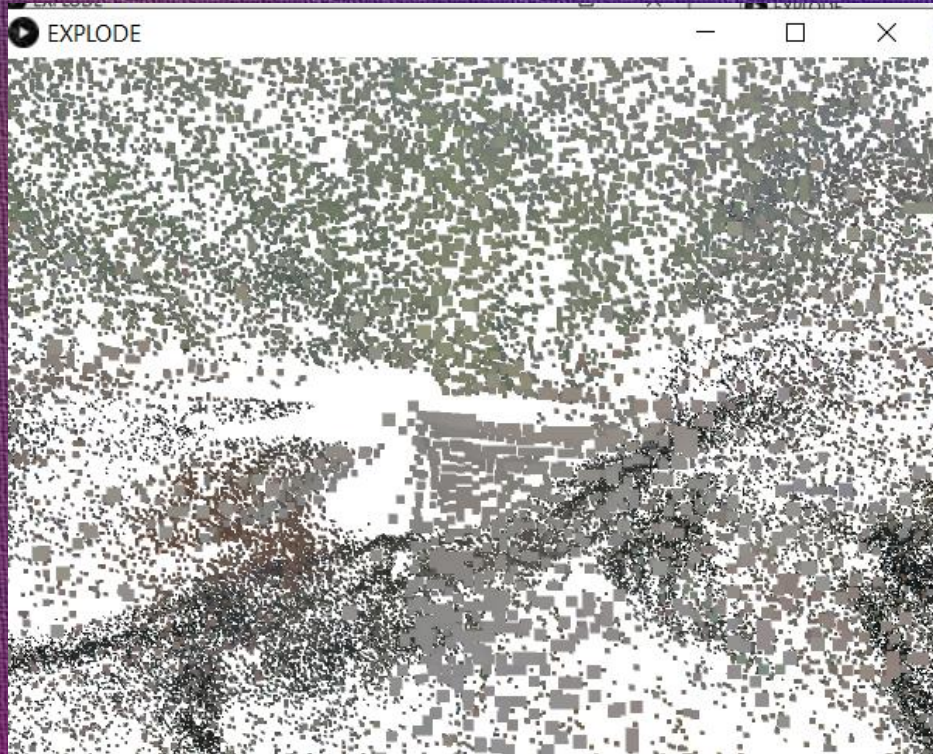
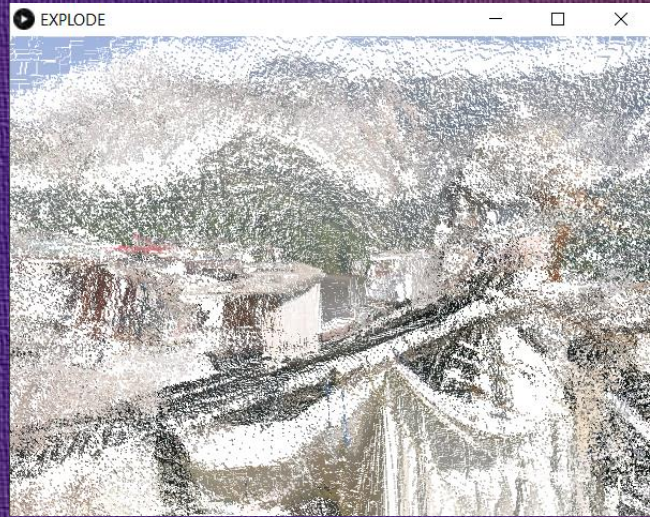
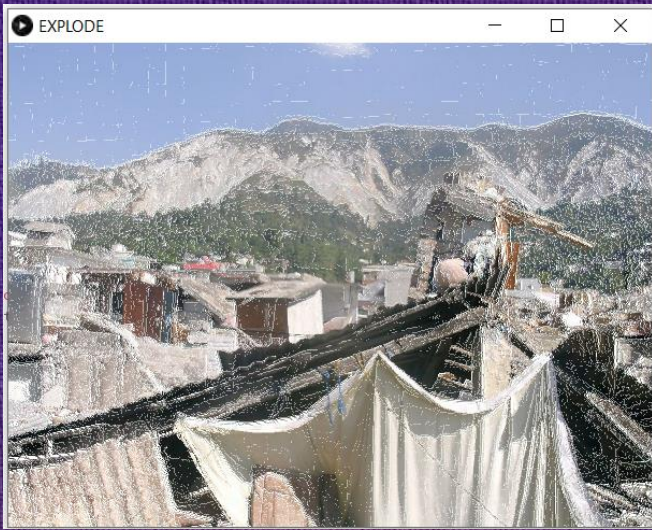


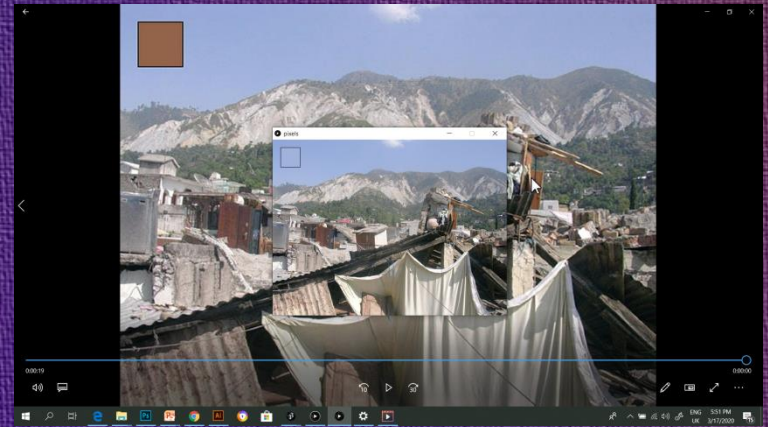
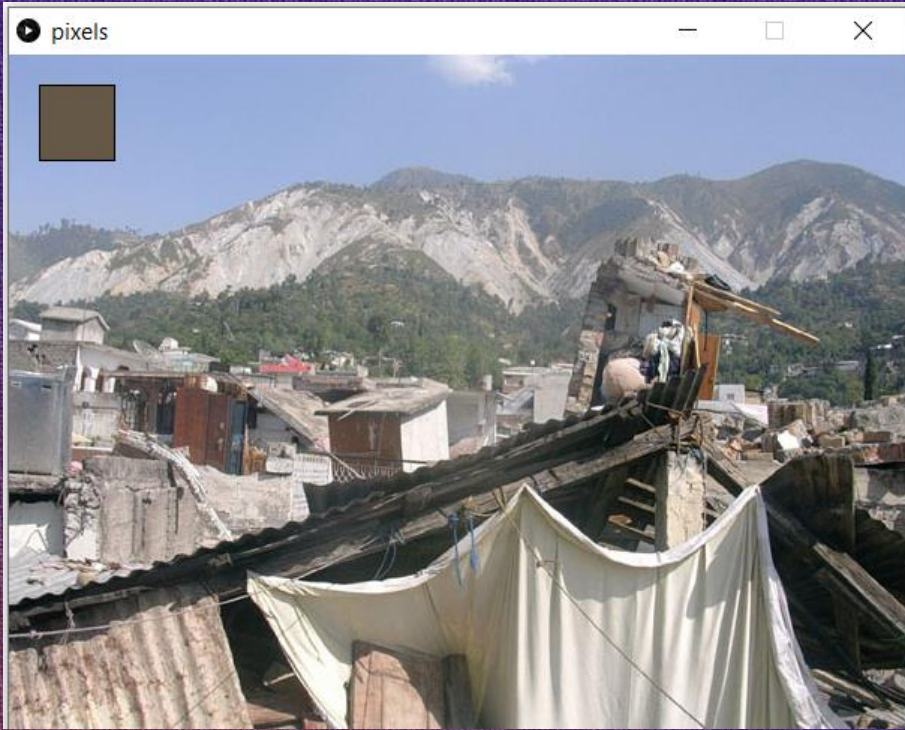
Figure 6: Collapsed Sangam Hotel building (in Muzaffarabad).



SPECTROGRAM







Scanning_Image



Audio visual compositing

<https://www.youtube.com/watch?v=vfZnQHDBNSw>

there is a range of sound frequencies that have corresponding consonant colors.

<https://www.youtube.com/watch?v=hV3bff6BENM>

Pitch [edit]

A single scale can be manifested at many different pitch levels. For example, a C major scale can be started at C4 (middle C; see [scientific pitch notation](#)) and ascending an octave to C5; or it could be started at C6, ascending an octave to C7. As long as all the notes can be played, the [octave](#) they take on can be altered.

Types of scale [edit]

Scales may be described according to the number of different pitch classes they contain:

- **Chromatic**, or dodecatonic (12 notes per octave)
- **Octatonic** (8 notes per octave): used in [jazz](#) and [modern classical music](#)
- **Heptatonic** (7 notes per octave): the most common modern Western scale
- **Hexatonic** (6 notes per octave): common in Western folk music
- **Pentatonic** (5 notes per octave): the anhemitonic form (lacking semitones) is common in folk music, especially in Asian music; also known as the "black note" scale
- **Tetratonic** (4 notes), **tritone** (3 notes), and **ditonic** (2 notes): generally limited to [prehistoric](#) ("primitive") music
- **Monotonic** (1 note): limited use in liturgy, and for effect in modern art music^[3]^[4]

Scales may also be described by their constituent intervals, such as being [hemitonic](#), [cohemitonic](#), or having imperfections.^[5] Many music theorists concur that the constituent intervals of a scale have a large role in the cognitive perception of its sonority, or tonal character.

"The number of the notes that make up a scale as well as the quality of the intervals between successive notes of the scale help to give the music of a culture area its peculiar sound quality."^[6] "The pitch distances or intervals among the notes of a scale tell us more about the sound of the music than does the mere number of tones."^[7]

Scales may also be described by their symmetry, such as being [palindromic](#), [chiral](#), or having rotational symmetry as in Messiaen's [modes of limited transposition](#).

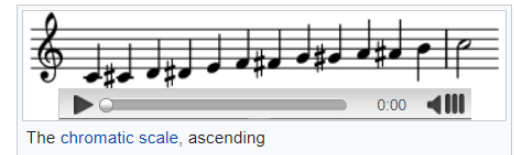
Harmonic content [edit]

The notes of a scale form intervals with each of the other notes of the chord in [combination](#). A 5-note scale has 10 of these [harmonic](#) intervals, a 6-note scale has 15, a 7-note scale has 21, an 8-note scale has 28.^[8] Though the scale is not a [chord](#), and might never be heard more than one note at a time, still the absence, presence, and placement of certain [key](#) intervals plays a large part in the sound of the scale, the natural movement of melody within the scale, and the selection of [chords](#) taken naturally from the scale.^[8]

A musical scale that contains [tritones](#) is called tritonic (though the expression is also used for any scale with just three notes per octave, whether or not it includes a tritone), and one without tritones is *[atritonic](#)*. A scale or [chord](#) that contains semitones is called hemitonic, and without semitones is [anhemitonic](#).

Gb

Diatonic scale in the [chromatic circle](#)



The chromatic scale, ascending

While designing my
sounds these were the
things that I kept in
mind

Is it high?

Is it low?

Is it in the middle?

Is it soft?

Is it loud?

Are there two?

Are there more than two?

Is it a piano?

Why isn't it?

Was it an aeroplane?

Is it a noise?

Is it music?

Is it softer than before?

Is it supersonic?

When will it stop?

What's coming?

Is it time?

Is it very short?

Very long?

Just medium?

user generated seismic sound art mixes•

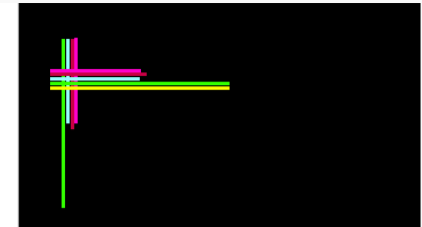
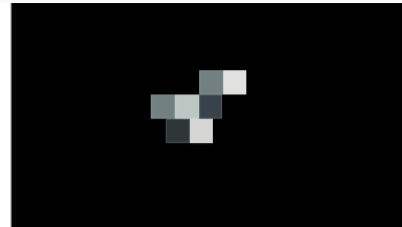
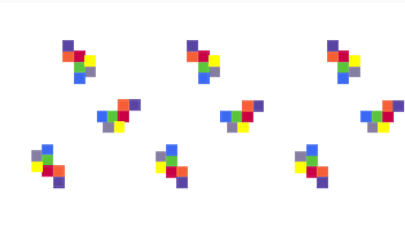
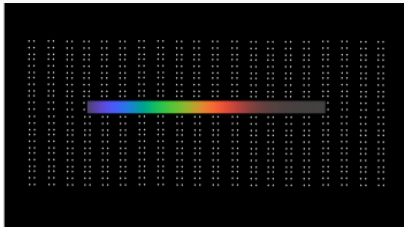
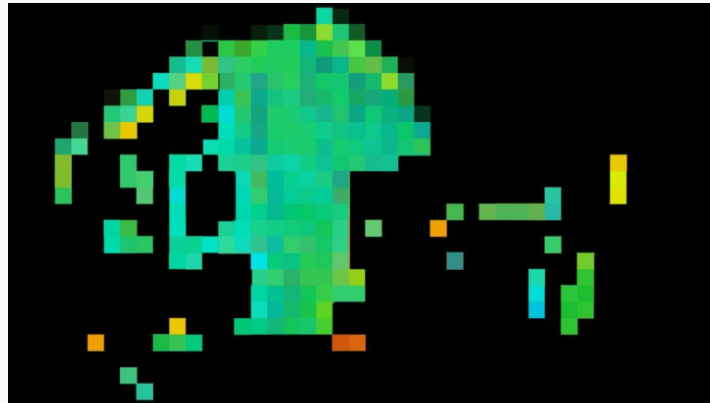
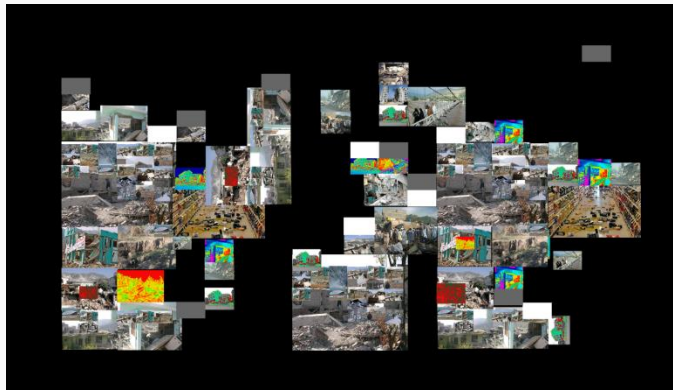
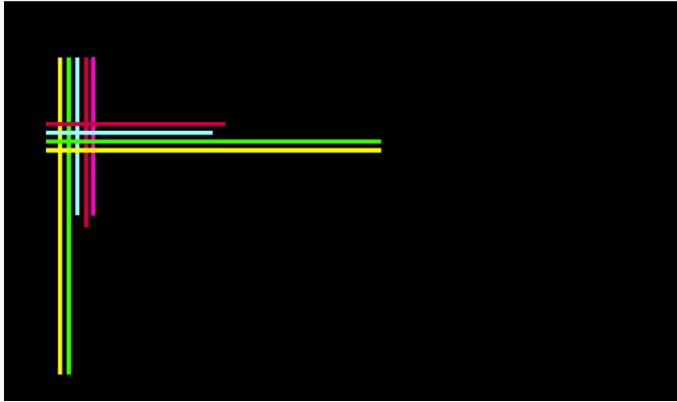
<https://soundcloud.com/seismicsounds>

http://lifeorange.com/writing/McGee_ICAD_2012.pdf

THE MUSIC OF EARTHQUAKES MUSIC OF SEPHERE

Custom software was developed to realize the artist's vision of translating an image into a sonic composition. Although Voice of Sisyphus is based on a particular photograph, the software was designed to be used with any image. Once an image file is imported one may select any number of rectangular regions within the image as well as the entire image itself to sonify. Greyscale pixel values within a region are read into an array, filtered, output as a new image, and read as an audio wavetable. The wavetables of multiple regions are summed to produce polyphonic sound. Consideration was taken for real-time manipulation of region locations and sizes during a performance or installation without introducing unwanted audio artifacts.

I started developing my interface branding



frequency. Since the speed of light is known and fixed, reliable numbers can be generated for the frequencies of the colors. For example:

$$2.997925 \times 10^8 \text{ m/s (speed of light)} / 3.95 \times 10^{-7} \text{ nm (wavelength of violet)} = 7.58968354 \times 10^{14} \text{ Hz (frequency of violet)}$$

Starting from the wavelengths arrived at above, as well as intervening numbers for the tertiary colors, and calculating their frequencies in this manner provides these results:

Color	Wavelength (nm)	Frequency (GHz)
Red-Violet	340	881,742.6471
Violet	395	758,968.3544
Blue-Violet	420	713,791.6667
Blue	450	666,205.5556
Blue-Green	490	611,821.4286
Green	535	560,359.8131
Yellow-Green	555	540,166.6667
Yellow	580	516,883.6207
Yellow-Orange	610	491,463.1148
Orange	645	464,794.5736
Red-Orange	670	447,451.4925
Red	710	422,242.9577

< Back

Hertz	Approximate Colour
440	Orange-Yellow
457.75	Yellow-Orange
472.27	Yellow
491.32	Yellow-Green
506.91	Green-Yellow
511.13	Green
527.35	Green
548.62	Green-Blue
566.03	Blue-Green
588.86	Blue
612.61	Blue-Violet
632.05	Violet-Blue
657.54	Violet
678.41	Ultra Violet
684.06	Invisible Violet
705.77	Invisible Red
734.23	Infra Red
757.53	Red
788.08	Red-Orange
819.87	Orange-Red
845.89	Orange

The infrared radiation from objects in the scene and creates an electronic image based on information about the temperature differences.

Before going any further, I should make it clear that all sound is based on mathematical frequency. Whenever you hear a musical pitch, this can be represented by a number. For the purposes of this document, I am going to give a default value of 1 for the pitch of C. An octave above this (still C), would therefore be 2, and an octave above that would have a frequency of 4 (also, halving would produce lower octaves of C (i.e. 0.5, 0.25, 0.125 etc. etc.)).

Another example is the Major 2nd (D for now - assume a [tonic](#) of C). The default value for D is approx. 1.1224 (200 cents). Suffice to say that the approximate values: 2.245 or 4.49 are still D, but octaves higher. Also 0.561 or 0.281 are still D, but octaves lower. Sound confusing? See the diagram below which should help to clarify things.

The measurement is in 12-equal temperament and uses an accuracy of two decimal places for the frequency.

Note name & amount in cents	C 0c	C#/Db 100c	D 200c	D#/Eb 300c	E 400c	F 500c	F#/Gb 600c	G 700c	G#/Ab 800c	A 900c	A#/Bb 1000c	B 1100c
Pitch Freq. (2dp)	1	1.06	1.12	1.19	1.26	1.33	1.41	1.5	1.59	1.68	1.78	1.89
Octave higher	2	2.12	2.25	2.38	2.52	2.67	2.83	3	3.17	3.36	3.56	3.78
Octave lower	0.5	0.53	0.56	0.59	0.63	0.67	0.71	0.75	0.79	0.84	0.89	0.94

All of the important pitches for one octave can be represented inside the values of 1 and 2 (making 12 pitches).

Later on in this article, I'll be using the term 'normalise'. This simply means using multiples or divisions of two to change the original number to a fraction between 1 and 2 (e.g. if we wanted to normalise the number 7, we would half it until it was lower than 2 and higher than 1 (i.e. **7, then 3.5, then 1.75 (bingo)**)). To the ear, this is the same 'note' as 7, only a couple of octaves lower of course.

Moon Ribas (ES)

Moon Ribas is a Catalan avant-garde artist and cyborg activist best known for developing the Seismic Sense, an online seismic sensor implanted in her feet that allows her to perceive earthquakes taking place anywhere in the planet through vibrations in real time. In order to share her experience, she then translates her seismic sense on stage. Ribas transposes the earthquakes into either sound, in her piece Seismic Percussion; or dance, in Waiting For Earthquakes. In these performances the Earth is the composer and the choreographer; and Ribas, the interpreter. Ribas' seismic sense also allows her to feel moonquakes, the seismic activity on the Moon. Ribas believes that by extending our senses to perceive outside the planet, we can all become astrononauts. Adding this new sense allows her to be physically on Earth while her feet feel the Moon, so in a way, she is on Earth and space at the same time.

Since 2007 Moon has been experimenting with the union between technology and her body to explore the boundaries of perception and to experience movement in a deeper way. Some of her previous research includes transdental communication, 360° perception and the Speedborg. In 2010 she co-founded the Cyborg Foundation, an international organisation that aims to help people become cyborgs, defend cyborg rights and promote cyborg art. Ribas also co-founded the Transpecies Society in 2017, an association that gives voice to non-human identities, defends the freedom of self-design and offers the creation of new senses and new organs in community.



<https://munsell.com/color-blog/neil-harbisson-hearing-colors/>

Neil Harbisson's color wheel and color scale converted to sound.

The planet moves, constantly shaking and moving everyday. I thought it would be amazing to translate the massive and natural movements of the planet in a different way. I think it's unfair that our perception of earthquakes are all bad. Earthquakes are part of the evolution of our planet. The bad thing is that humans haven't adapted to this natural phenomenon. Add this in report

Cyborg art, also known as **cyborgism**, is an art movement that began in the mid-2000s in Britain. It is based on the creation and addition of new senses to the body via cybernetic implants and the creation of art works through new senses. ... The sensory system includes two implants in his cheekbones.

the art of designing new perceptions of reality and sees it as a post-art movement because its practicality makes no distinction between the artist, the work of art, the space where it exists and the audience

mapping the frequency of visible light to the frequency of notes on a scale has far more granularity than most people would be able to differentiate. i wanted to perceive color as pure as possible so I wanted to perceive the frequency of the light and then we could hear red we would hear a note between F and F sharp,

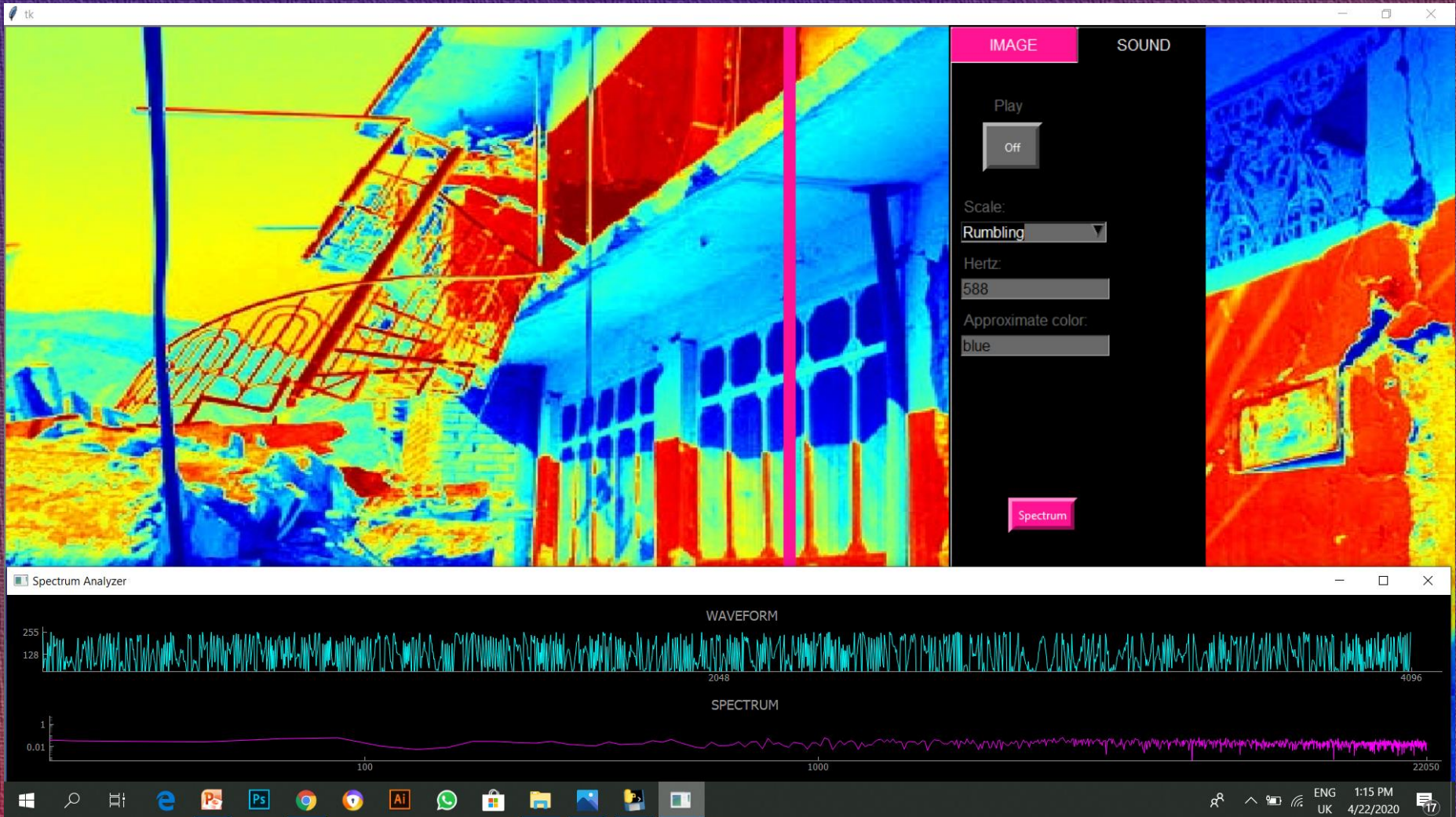
Chromesthesia

Final interface

Chromatic is the music scale in music with 12 pitches and notes and Synthesia is the Color to Sound sensation



A spectrum analyzer is a device that displays signal amplitude (strength) as it varies by signal frequency. The frequency appears on the horizontal axis, and the amplitude is displayed on the vertical



What does my space look like?

