



WWW.CREATIVECODING.PL

**CODE, ART,
SCIENCE
DESIGN**

**EMBODYING
INTERACTIONS**

INTERACTION DESIGNER
& COMPLEX SYSTEMS RESEARCHER

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HEAD OF CREATIVE CODING

LINKEDIN.COM/IN/WIESLAW-BARTKOWSKI



PROJEKT HUMANE-AI-NERWORK

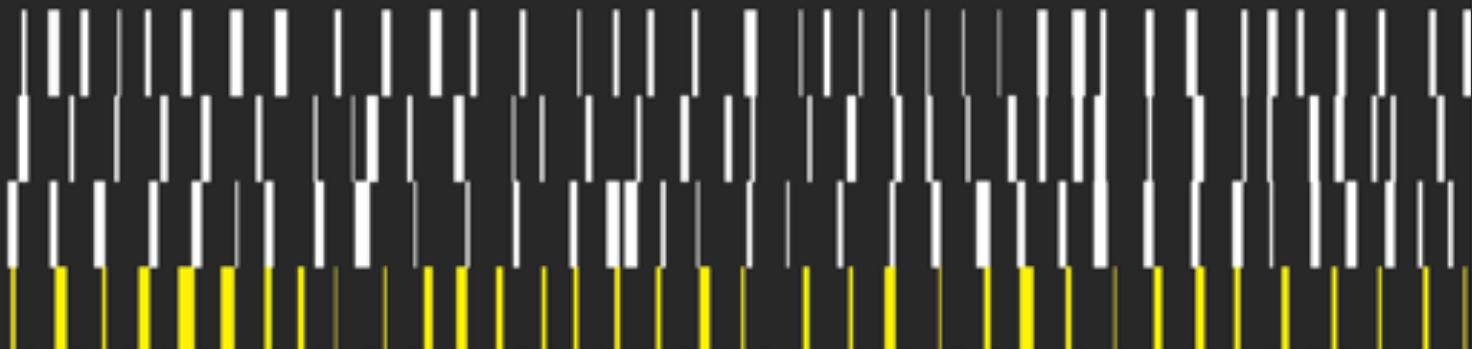


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Materia
The matter
kodu
of code

Wiesław Bartkowski Manifesto

[https://medium.com/
@wieslaw.bartkowski/the-matter-of-
code-14435b4a864b](https://medium.com/@wieslaw.bartkowski/the-matter-of-code-14435b4a864b)



2

Look at the **Code** – the source text of
any program, as a type of material

See the **effects** of the code as a
material manifestation

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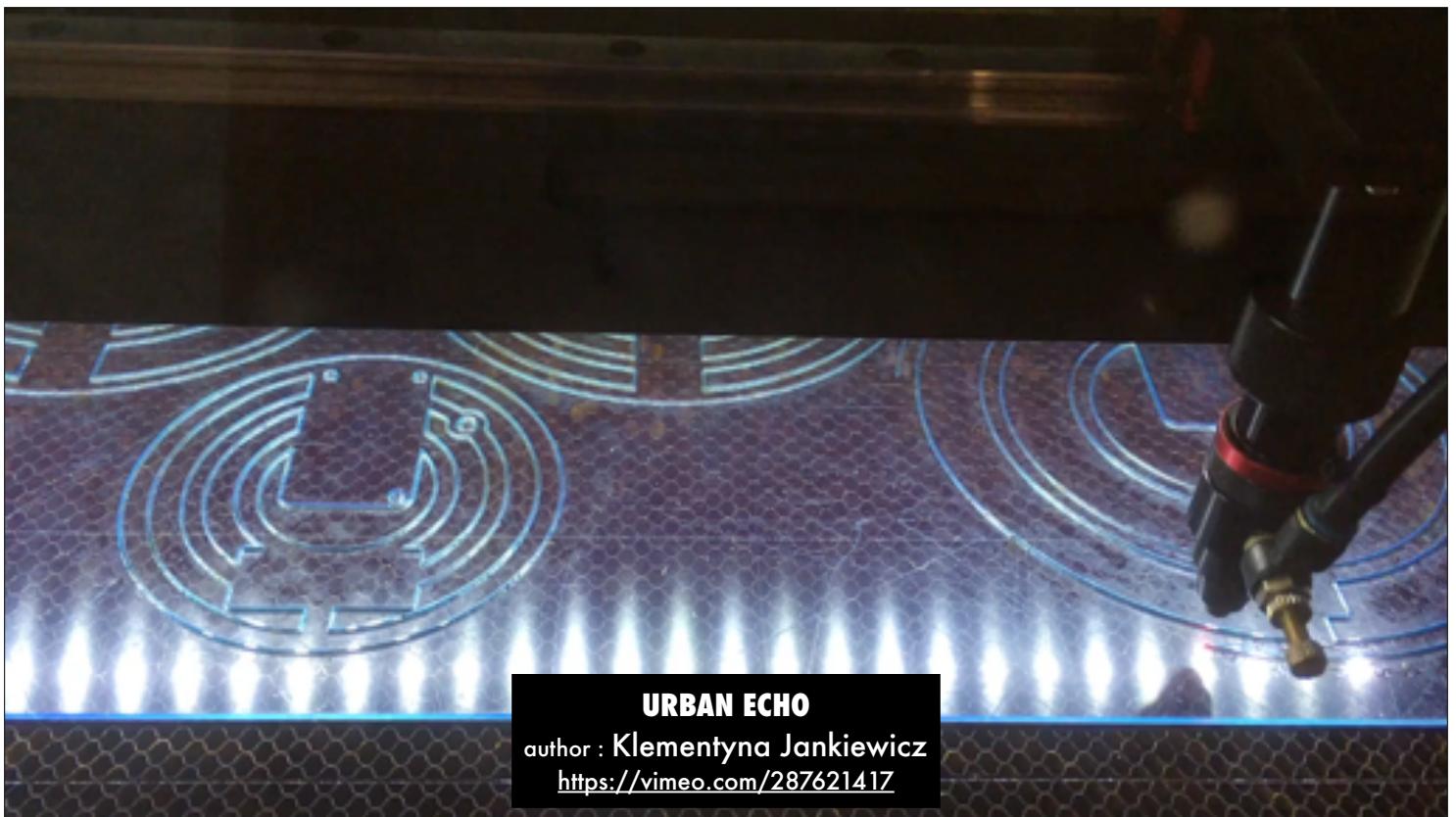
USŁYSZYSZ ECHO. URBAN ECHO
AUTORKA KLEMENTYNA JANKIEWICZ



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URBAN ECHO
author : Klementyna Jankiewicz
<https://vimeo.com/287621417>

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```

void setup()
{
    size(640, 360);
    frameRate(12);
    sx = width;
    sy = height;
    world = new int[sx][sy][2];
}

// Set random cells to 'on'
for (int i = 0; i < sx * sy * density; i++) {
    world[(int)random(sx)][(int)random(sy)][1] = 1;
}

void draw()
{
    background(0);
}

```

CODE



ELECTRONIC

**DIGITAL
FABRICATION**

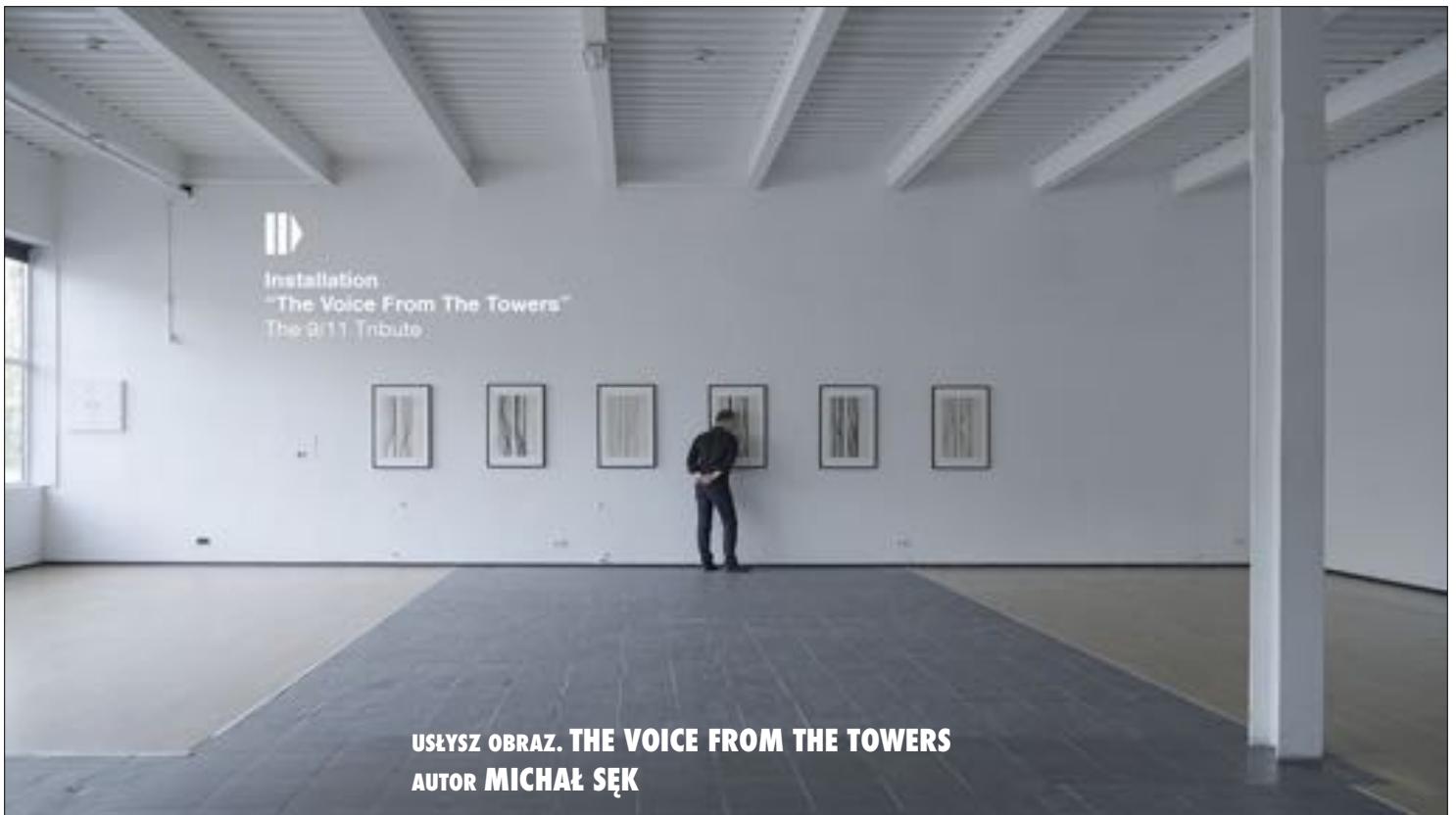


7

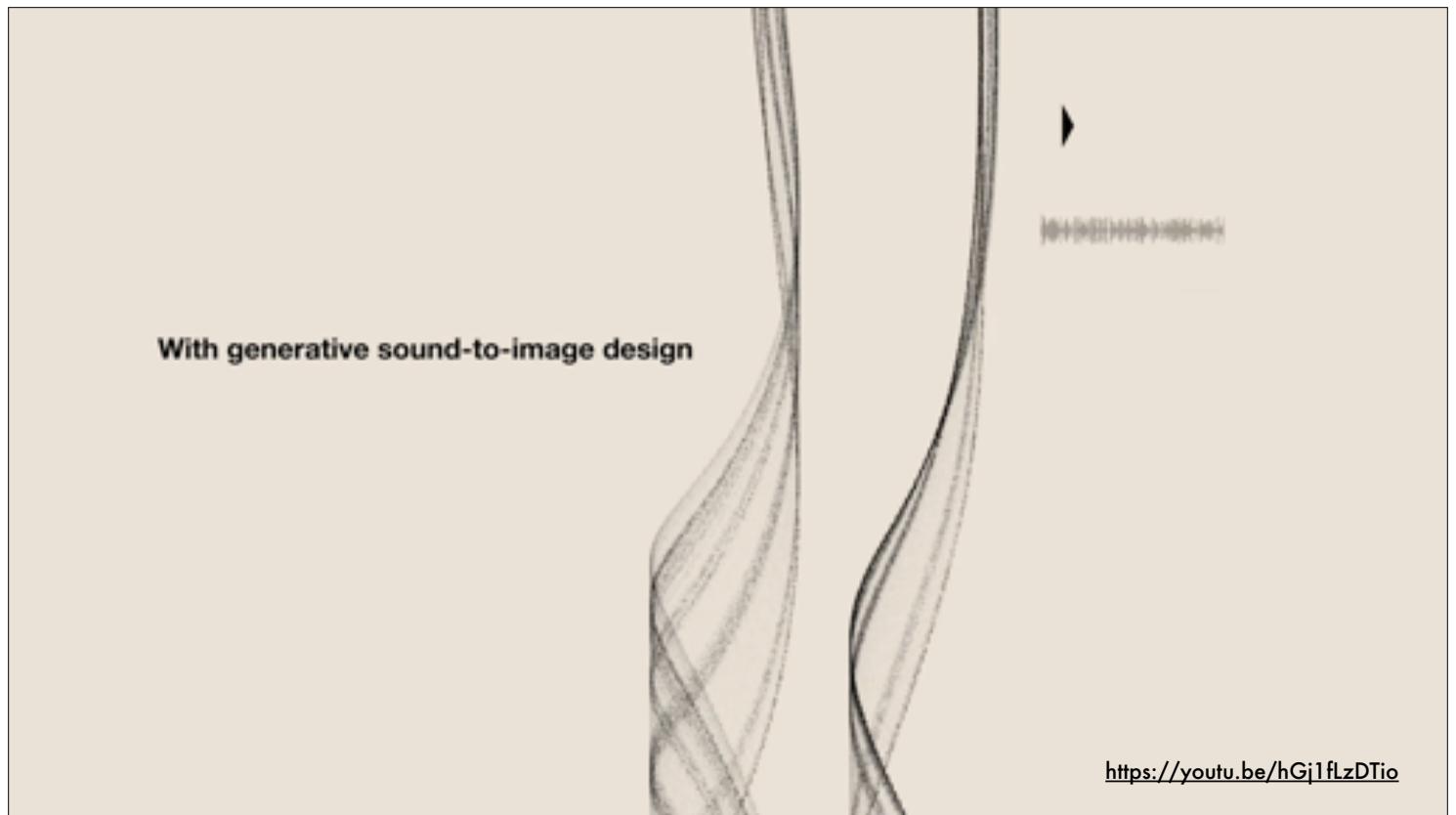
A combination of physical and digital matter that does **not** produce a simple sum.

Its emergent properties allow the creation of a unique experience

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of code



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Screens have created a **distance** from the environment that has shaped us, **destroying** the work of **evolution** has adapted both the mind and body to environment.

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MODERN TECHNOLOGY



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THE
Nicholas Carr

NEW YORK TIMES BEST-SELLING
AUTHOR OF THE SHALLOWS

GLASS CAGE

HOW OUR COMPUTERS
ARE CHANGING US

"Essential." —Daniel Menaker, *New York Times Book Review*

MAP ≠ TERRITORY

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a “material” that
can “blend bits and
atoms” emerges.

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EMBODIED INTERACTION DESIGN

SENSES LOGIC
EMOTIONS VS LANGUAGE
SOCIAL CONTEXT SYMBOLIC OPERATIONS

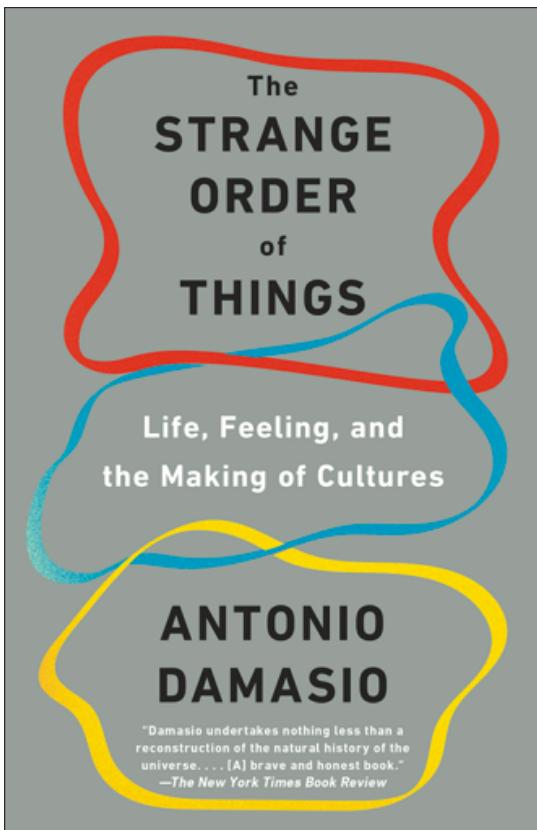
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WE ARE NOT ALGORITHMS

ONCE WE USED TO SAY THAT THE
BRAIN WORKS LIKE A STEAM ENGINE,
TODAY WE SAY IT WORKS LIKE A
COMPUTER

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FRITZ STRACK EXPERIMENT

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our understanding of the world is based
on motion, action, **active** and **bodily**
experience

The Matter of Code allow us to boldly
overcome the barrier of the
screen

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FRIENDLY VENDING MACHINE

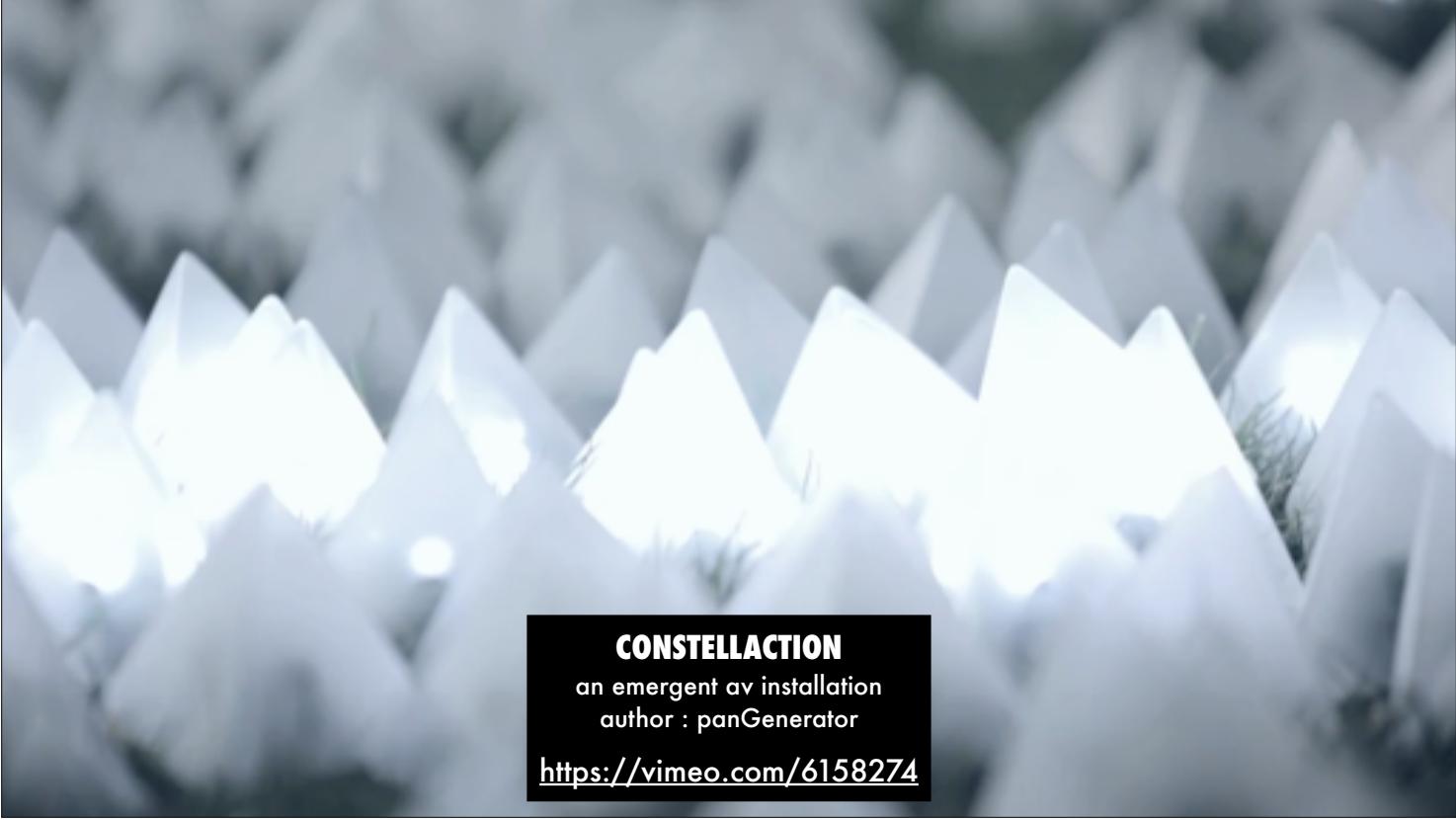
Master Graduation Project Blog by Guus Baggermans
Industrial Design at Eindhoven University of Technology
<https://vimeo.com/6158274>

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The Matter of Code **Crosses**
the **boundaries** between
technology, art,
design and science.

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CONSTELLACTION

an emergent av installation

author : panGenerator

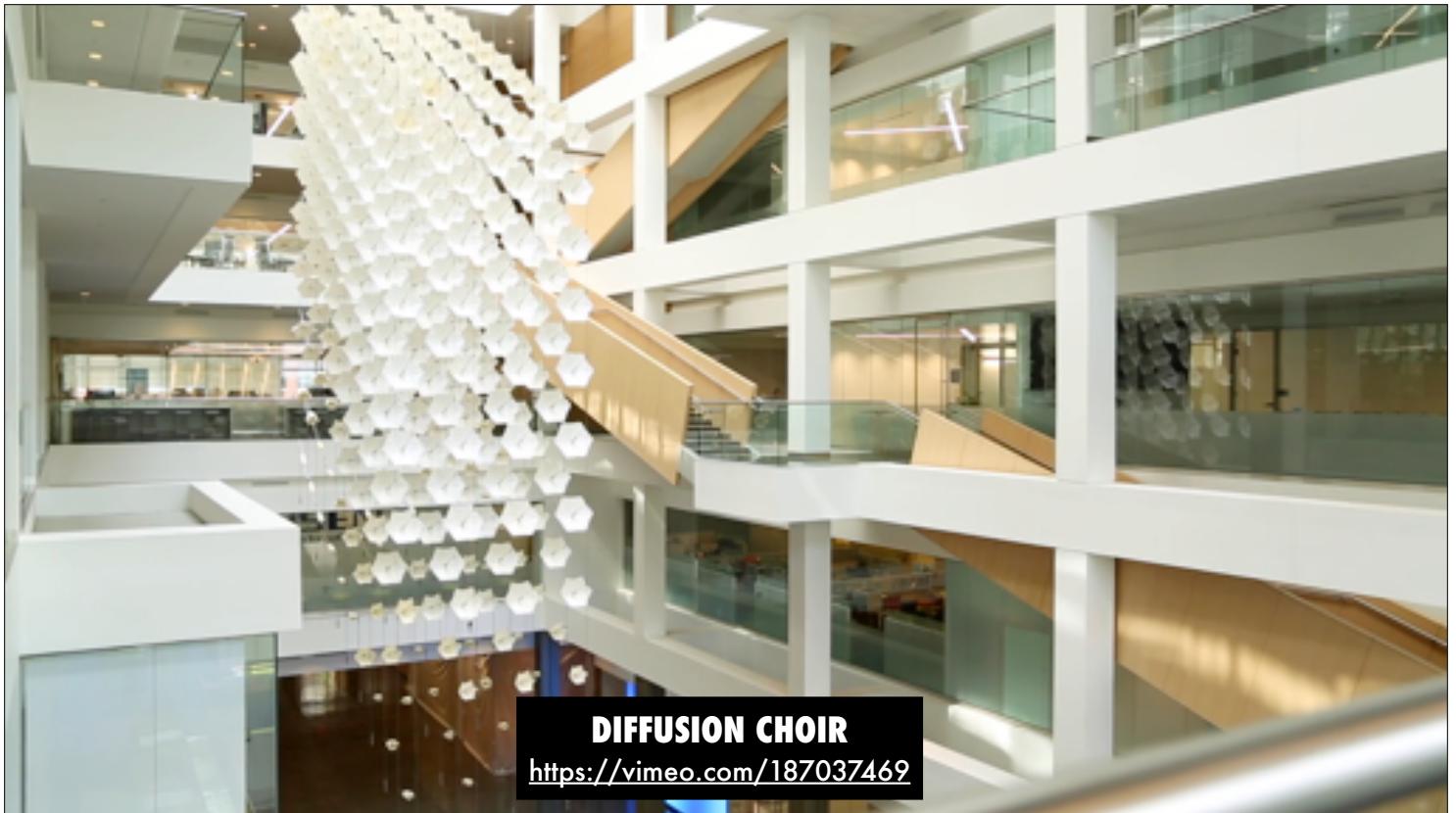
<https://vimeo.com/6158274>

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changing the
experience of Space,
its perceptions, and
subsequently affecting
human emotions.

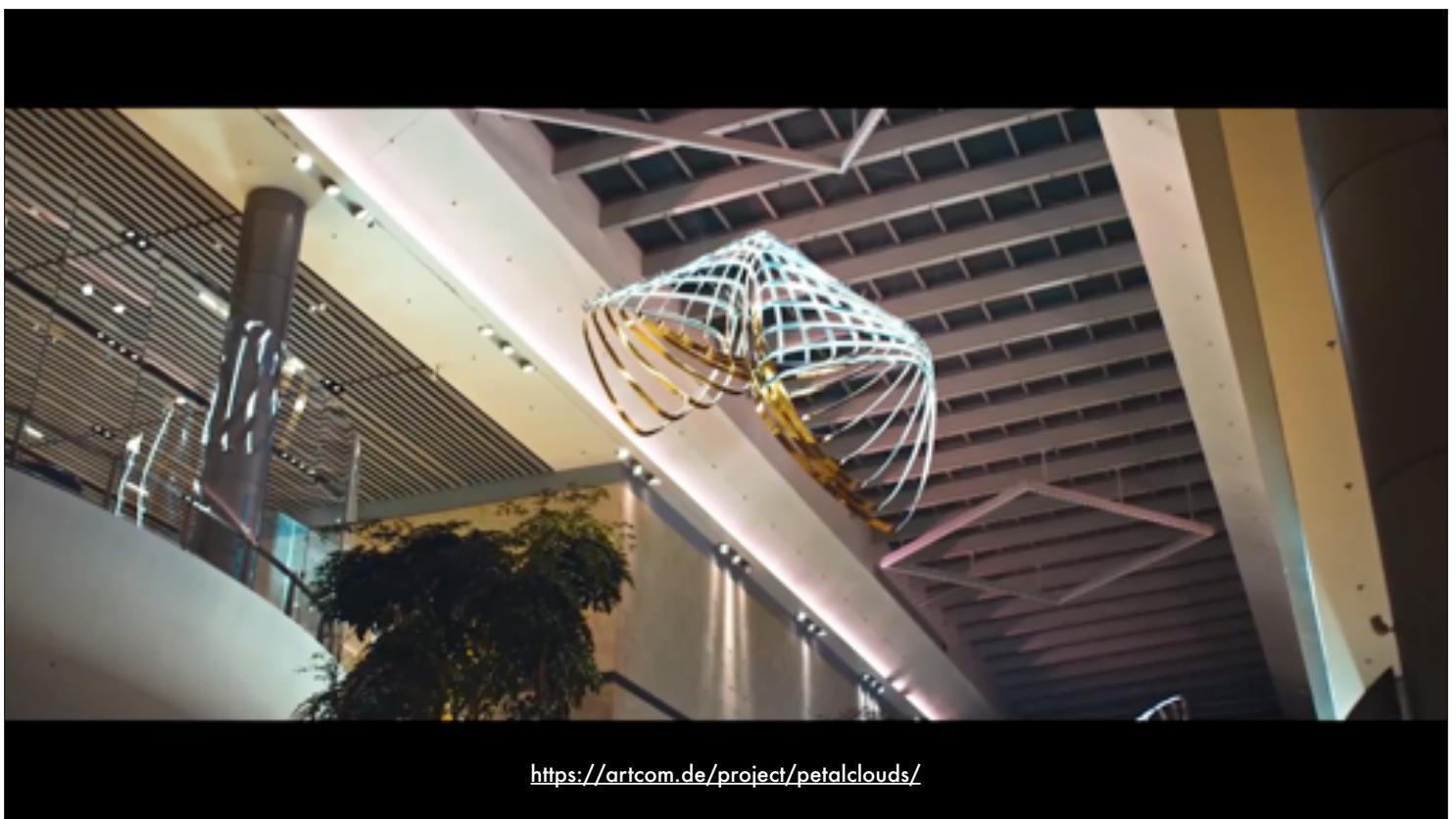
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DIFFUSION CHOIR
<https://vimeo.com/187037469>

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<https://artcom.de/project/petalclouds/>

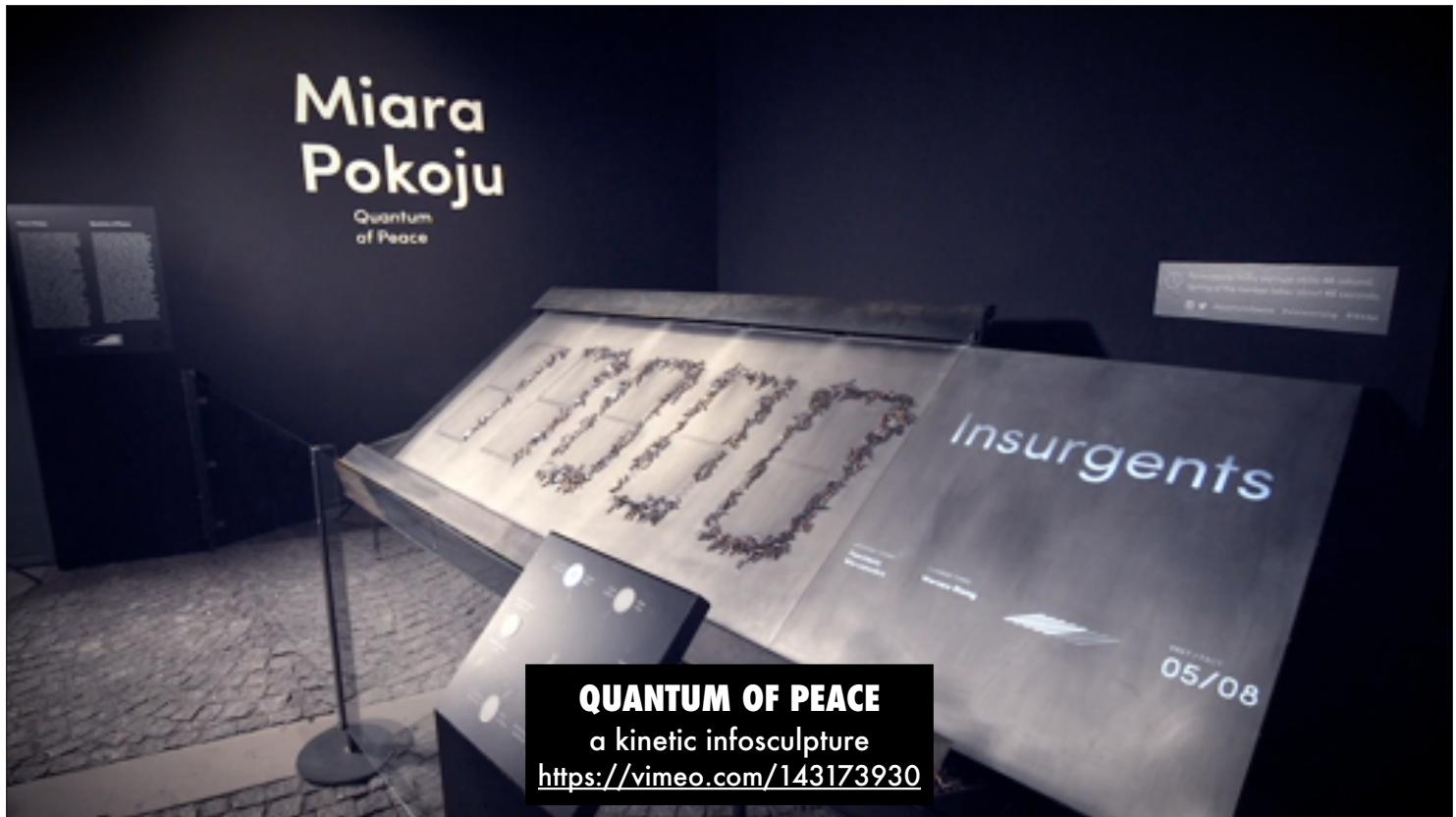
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physical artefacts of digital properties

engage us in the story by multi-sensory / magical experience that encourages

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acts in accordance to how
the world, physically and
kinetically, is experienced.

became an actor

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Krzysztof Garbaczewski
„Sexual Life of Savages”
<https://www.youtube.com/watch?v=9jJHdUDyiHQ>

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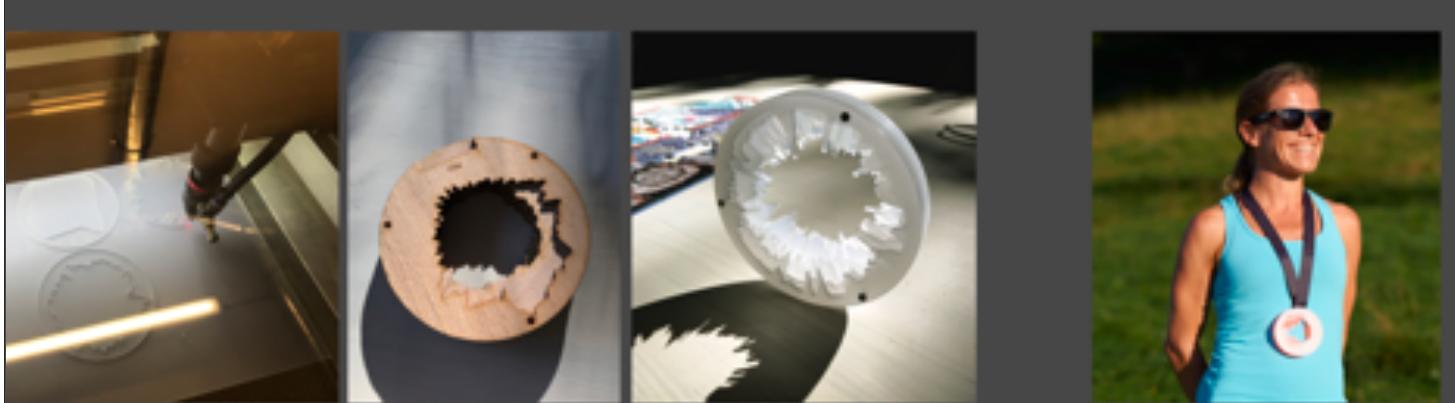


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**Accidental wandering
and openness to error
leads to a wonderful surprise
and a creative discovery**

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GENERATIVE MEDAL FOR RUNERS
Author : Emilka Nyka

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 TURNIA

[contact](#) [facebook](#) [instagram](#)

Meet our friends

Best sky runner ever

Famous Hayden Hawks, great American athlete loves the idea of Turnia. He is one of the first to collect the data for us and create Personal Turnia Award. It was an honor to cut his track of CCC 2017 Ultra-Trail du Mont Blanc ... not surprisingly he was a winner!



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humor and *distance* to your own work

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Designer of not needed things

Permission to **create**
something that is **not needed**

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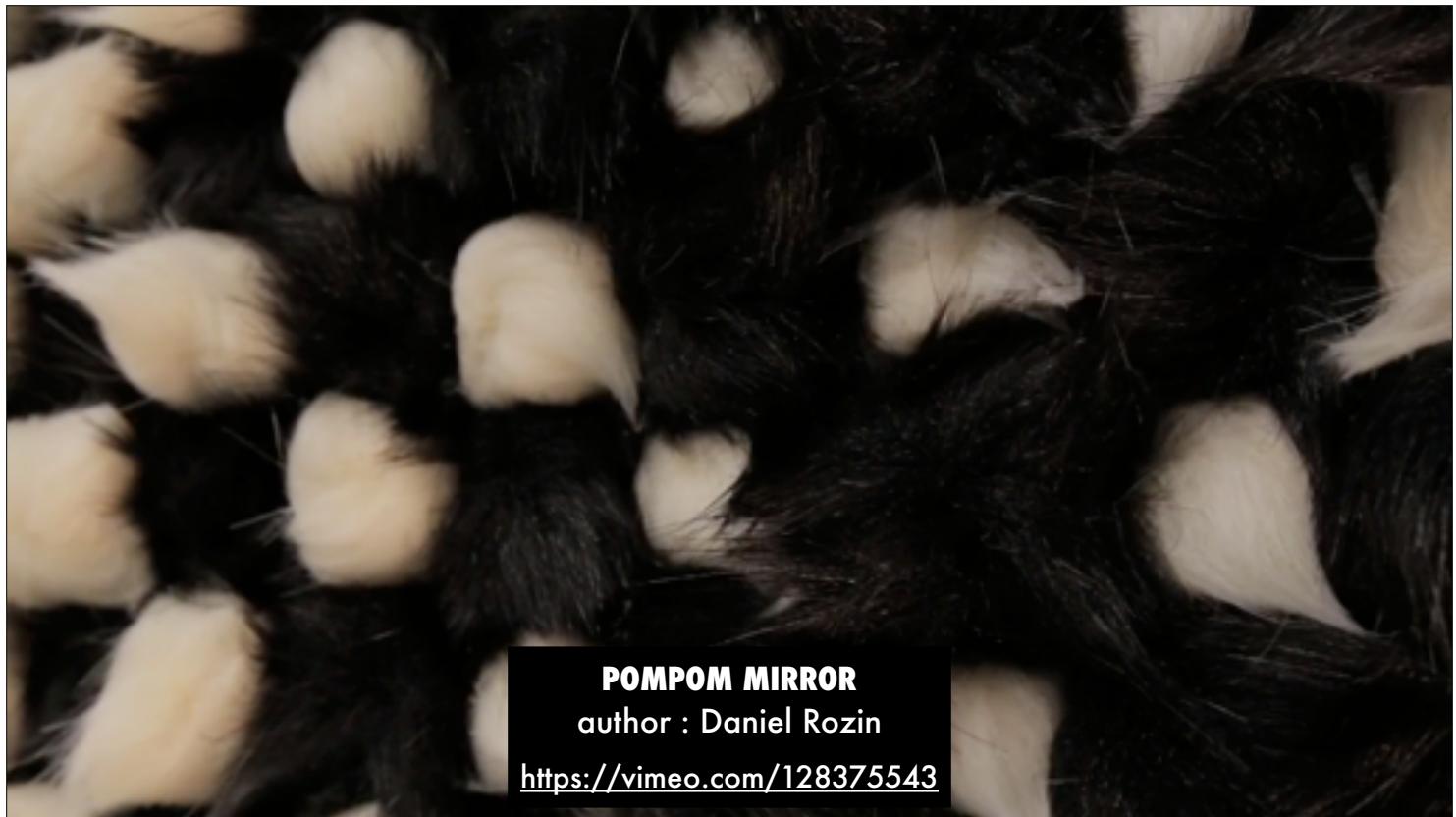
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when you mix bits and
atoms, the only barrier is
your

imagination

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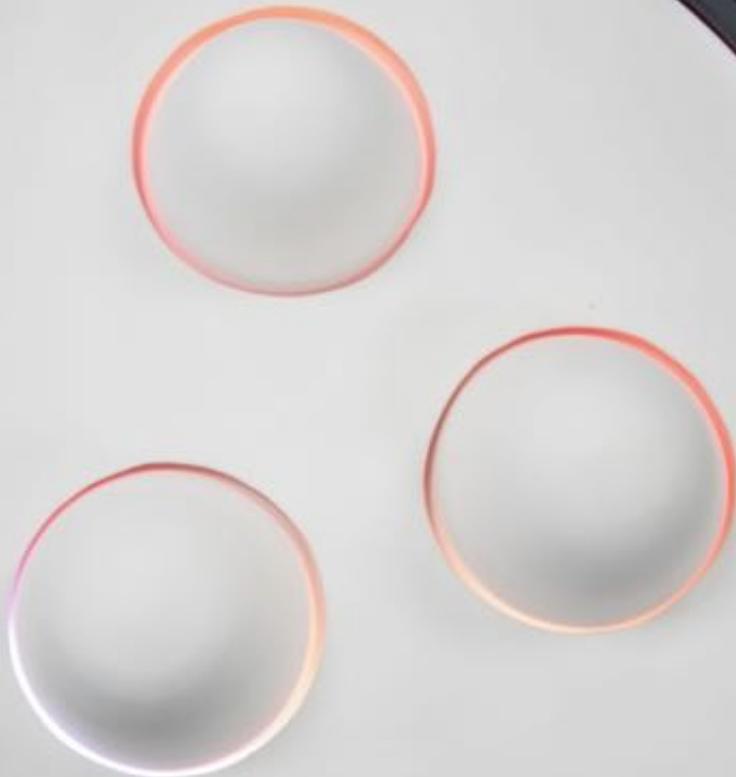
**Hack the way technology
is used, find unexplored areas
of code usage**

show alternatives

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**SPOTKAJ CZŁOWIEKA. SPOTKANIE OGRZANIE
AUTORKA GOSIA NIERODZIŃSKA**



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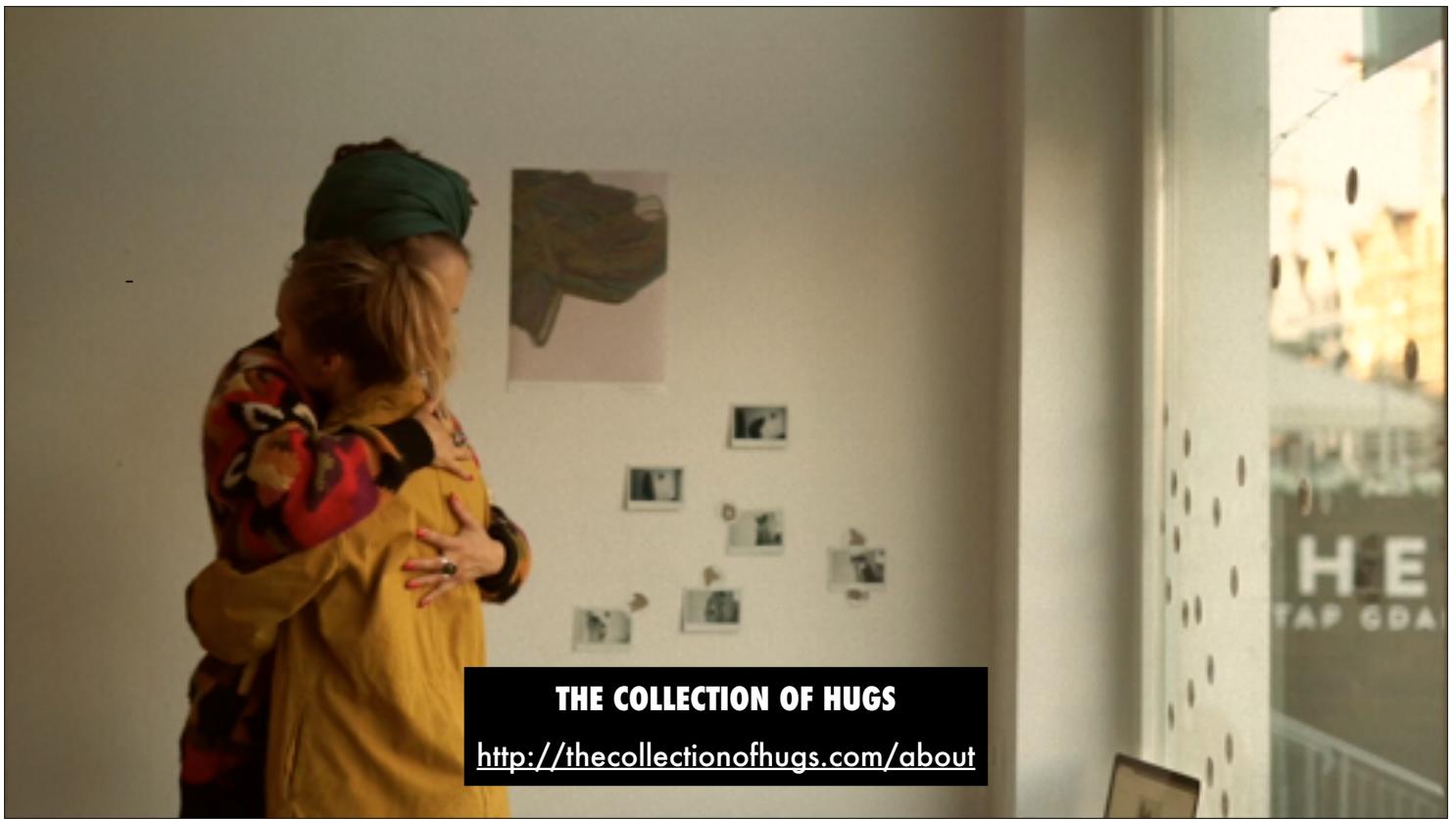
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Opracowanie metody wypalania laserowego inskrypcji dla projektu „Drewniane macewy”. Wykonane z tarcicy modrzewiowej „protopomniki” – wtapiające się w leśne tło drewniane znaczniki, przypominające formą macewy.

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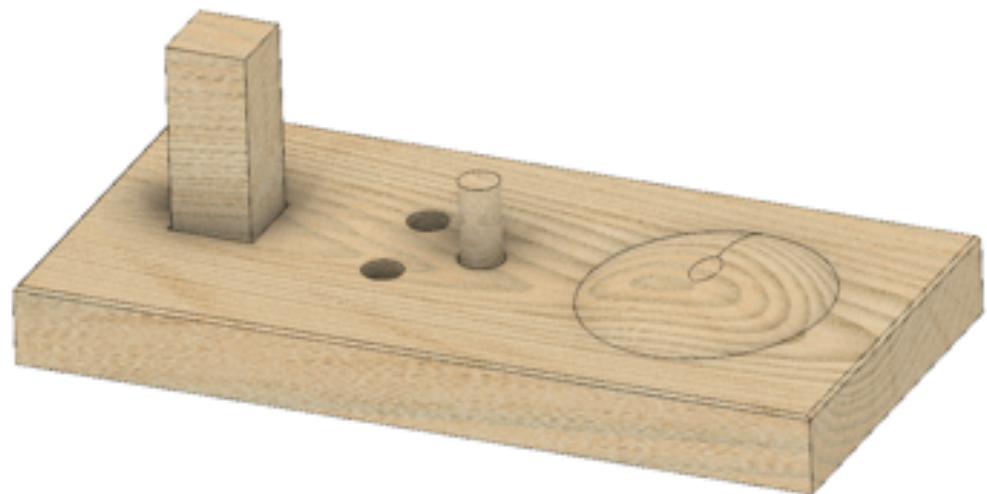


Forma z elementami robotyki i mechatroniki pozwalającymi na niewerbalną komunikację z narzędziem. Zastosowanie metod projektowania interakcji ucielesnionej.

zaangażowania lokalnej społeczności w proces upamiętniania, dzięki samodzielнемu wykonaniu inskrypcji za pomocą proponowanego narzędzia

•

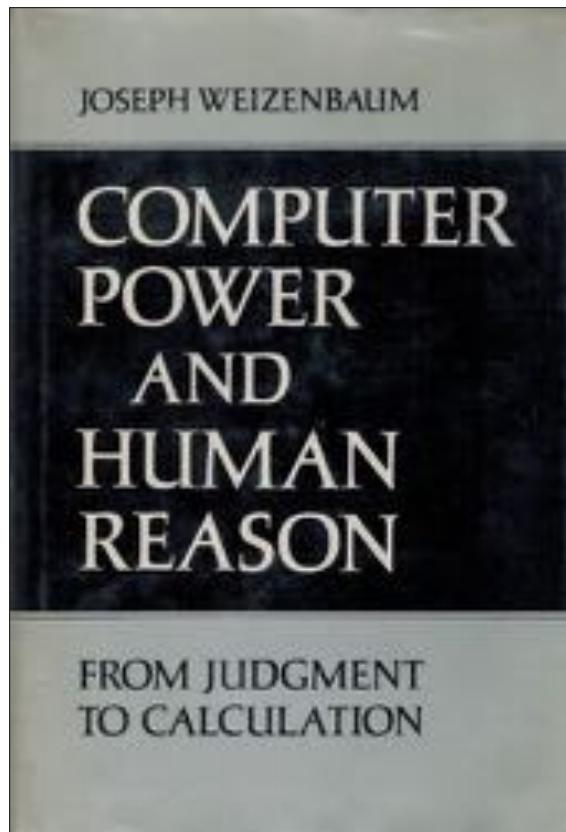
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**WHAT MAKE US MORE HUMAN
IS WHAT IS LEAST COMPUTABLE
ABOUT US**

**REFUSE TO DELEGATE TO
COMPUTER THE MOST HUMAN OF
OUR ACTIVITIES. PARTICULARLY
TASKS THAT DEMAND WISDOM**

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call to start thinking
in an **anti-disciplinary** way

forget the **stereotypical** divisions
humanistic versus **scientific**
mind

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PROGRAM
OR BE
PROGRAMMED
TEN COMMANDS
FOR A DIGITAL AGE



DOUGLAS RUSHKOFF

Program or be programmed

Change **passive** recipients of technology
into its **active** creators

Get access to the civilisation control panel,
gain a **voice** in the **discussion** about
our **future**

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PROJECT ALIAS

BJORN KARmann, TORE KNUDSEN

RENAME YOUR HOME ASSISTANT
AND MAKE SURE IT NEVER LISTENS

SCIENCE, TECHNOLOGY & ARTS - STARTS
THE EUROPEAN COMMISSION'S STARTS PRIZE '19

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<https://www.instructables.com/Project-Alias/>

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simplification of digital technology, open source and open hardware movements, **Do-It-Yourself** culture

allowed **everyone** to master this material through **experience** like sculptor learning to shape wood, stone or clay.

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```
int sx, sy;
float density = 0.5;
int[][][] world;

void setup()
{
    size(640, 360);
    frameRate(12);
    sx = width;
    sy = height;
    world = new int[sx][sy][2];

    // Set random cells to 'on'
    for (int i = 0; i < sx * sy * density; i++) {
        world[(int)random(sx)][(int)random(sy)][1] = 1;
    }
}

void draw()
{
    background(0);
```

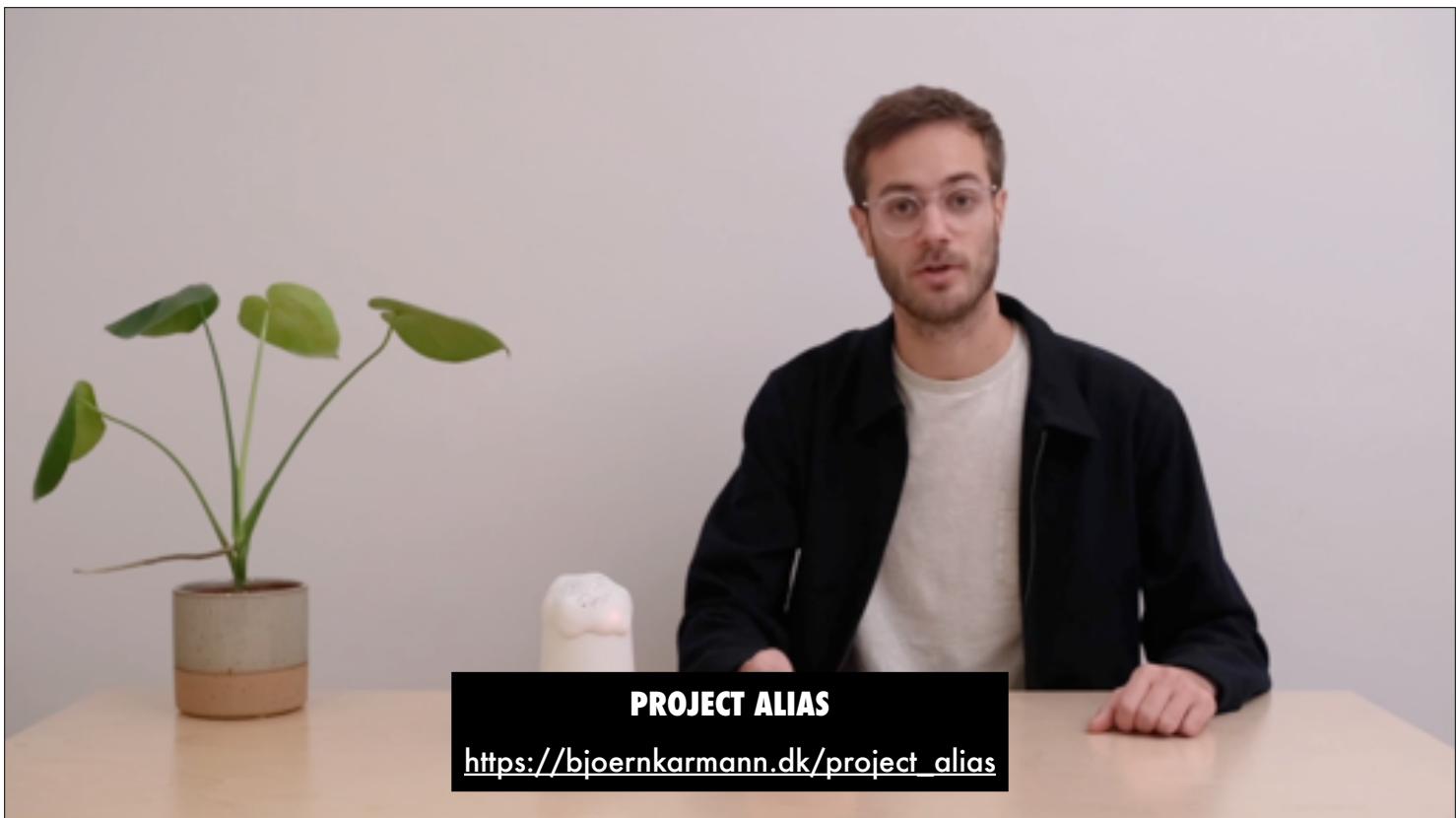


SCULPTING WITH CODE

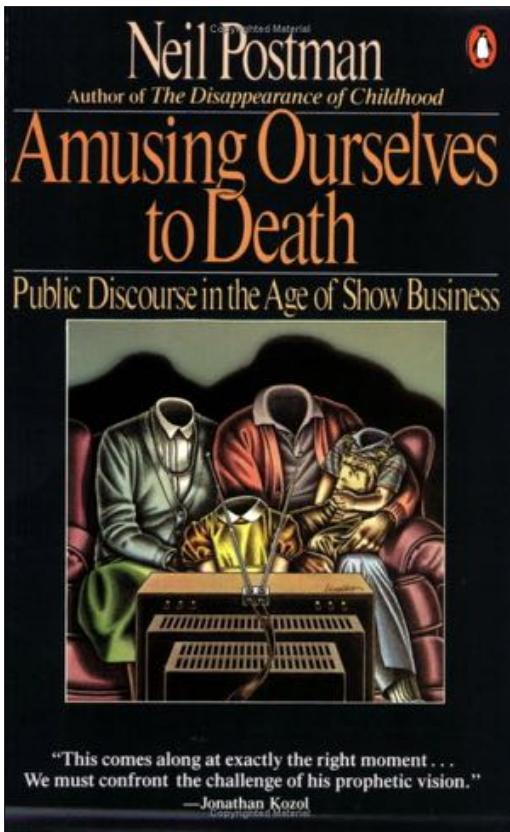
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**TECH GIVES US
SOMETHING
BUT ALSO TAKING
SOMETHING AWAY
FROM US IN RETURN**

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TECHNOLOGIA KOMFORT ALE NIE SPEŁNIENIE / DOBRE ŻYCIE

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OUR TECHNOLOGIES, MARKETS, AND CULTURAL INSTITUTIONS—ONCE FORCES FOR HUMAN CONNECTION AND EXPRESSION—NOW ISOLATE AND REPRESS US. IT'S TIME TO REMAKE SOCIETY TOGETHER, NOT AS INDIVIDUAL PLAYERS BUT AS THE TEAM WE ACTUALLY ARE:

TEAM HUMAN

DOUGLAS RUSHKOFF

**NOT CORPO-CAPITAL VALUES
BUT HUMAN VALUES**

**NOT:
QUANTIFY, OPTIMIZE,
PREDICTABLE, PROFITABLE**

**BUT:
UNPREDICTABILITY
AMBIGUITY
LAZINESS**

**SENSITIVITY TO COMPLEXITY OF
OUR REALITY**

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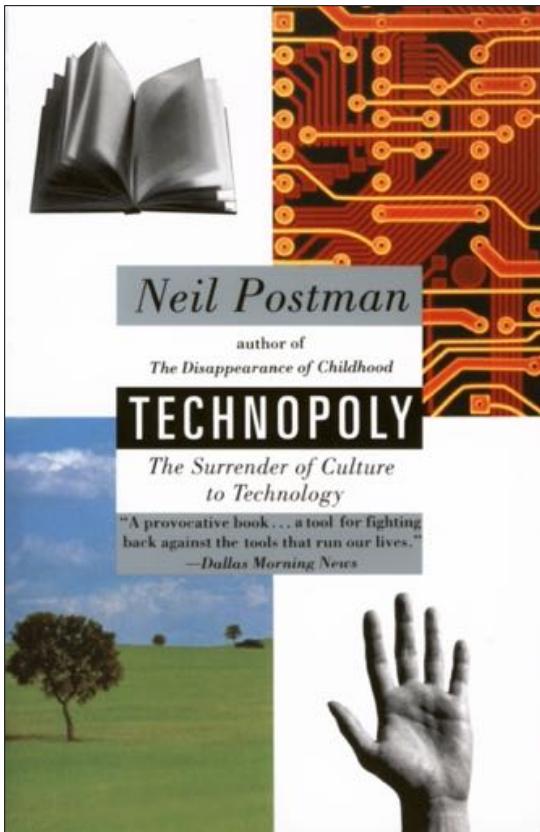


**IN CULTURE, FICTION
LOSES TO LITERALITY**

**THE FIELD OF
IMAGINATION IS
SHRINKING**

**IMAGINATION IS BEING
BLOCKED**

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**SURRENDER OF
CULTURE TO
TECHNOLOGY**

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TEAM HUMAN

DOUGLAS RUSHKOFF

BĄDŹCIE POKRĘCENI

NIEPRZEWIDYWALNI

NIE PODĄŻAJCIE ZA ALGORYTMAMI

PODĄŻAJCIE ZA LUDŹMI

ZNAJDŹCIE INNYCH

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PROJEKT HUMANE-AI-NERWORK



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