

# Human-Computer Counter-Choreographies

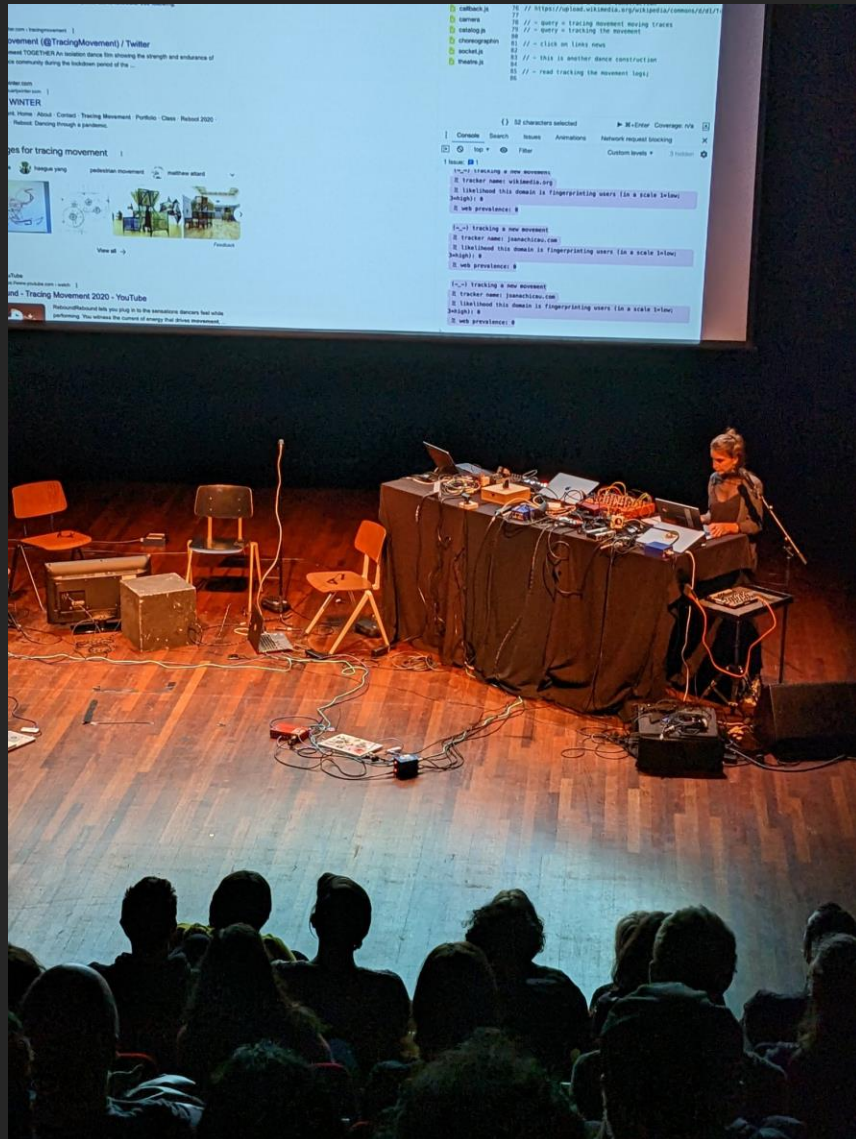
by Joana Chicau

Supervision team:

Prof. Rebecca Fiebrink

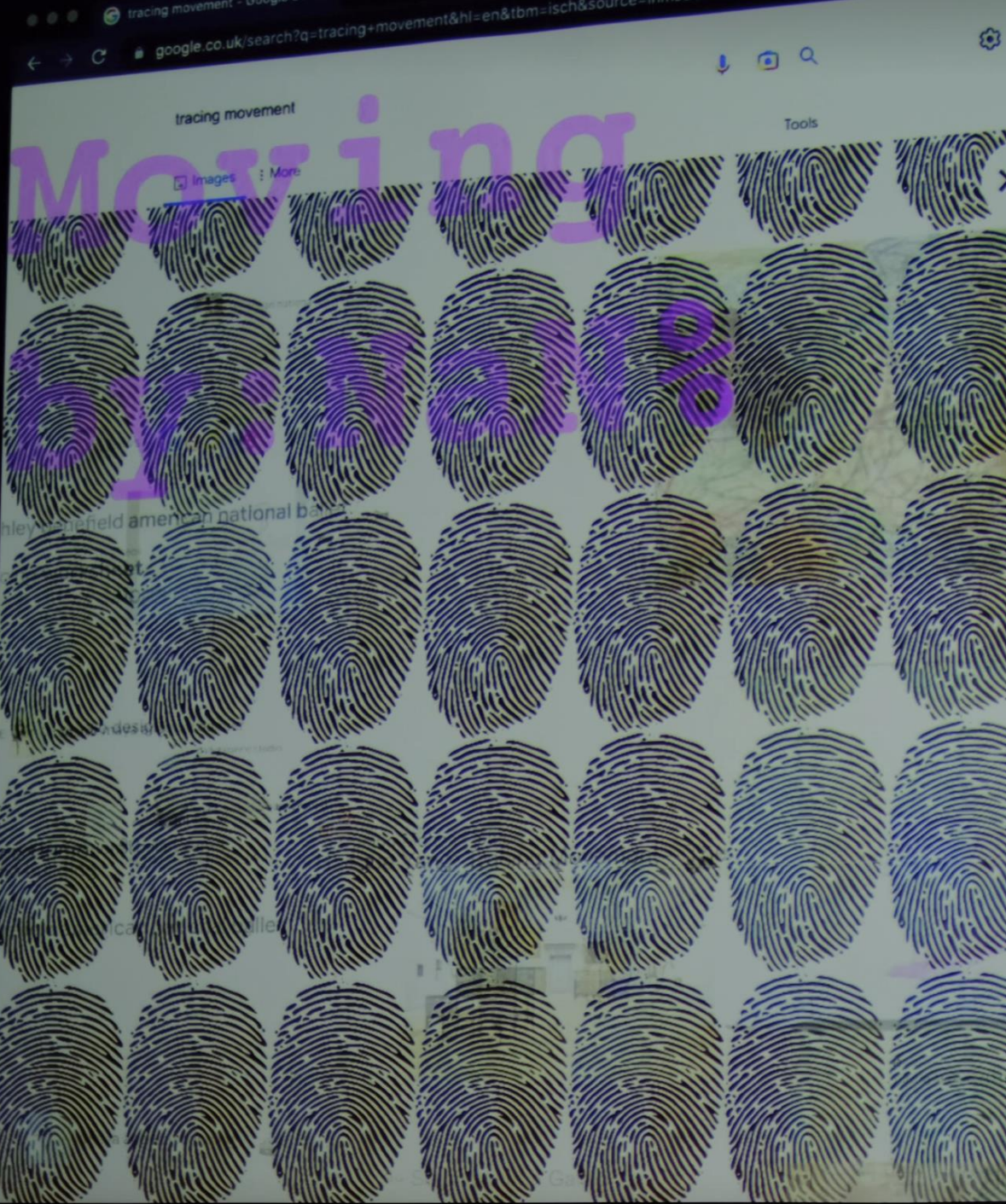
Dr. Sarah Fdili Alaoui and Dr. John Fass

@ Creative Computing Institute, University of the Arts London



Images from performance at International Conference for Live Coding , 2023. Photos by Creative Coding Utrecht and Joana Chicau.





```
<html lang="en" dir="ltr" itemscope itemtype="http://a.org/SearchResultsPage">
<head> ... </head>
<body id="yDmH0d" jscontroller="pJICDe" jsaction="rcuQ6b:npT2md; click:FABpgf; auxclick:FABpgf;UjQMac:.CLIENT;c0v8t:.CLIENT;keydown:.CLIENT;keyup:.CLIENT;keypress:.CLIENT;nHjqDd:.CLIENT;LhiQec:.CLIENT;qako4e:.CLIENT;GvneHb:.CLIENT" class="tQj5Y ghyPEc IqBfM ecJEib eejsDc uirfo notranslate EILDfe b30Rkd cJGgHb d8Etdd Wq3Ysf LcUz9d" data-has-header="true" data-has-footer="true" data-init="1" style="min-height: 1078px;"> ...
  <script aria-hidden="true" nonce="window.wiz_progress66window.wiz_progress();</script>
  <style nonce="...</style>
  <div id="lb" style="z-index: 1001; position: absolute; top: -1000px;">...</div>
  <script>
    <wiz jsrenderer="d0oKXdd" jssshadow jsdata="deferred-i1" data-p="%@."tracing movement","isch",[["/search?q\u003dtracing+movement\u0026source\u003dlms",null,null,"All",false,null,null,null,null,"WEB",[0],null,null,dlns\u0026tbm\u003disch",null,null,"Images",true,null,null,null,"IMAGES",[6],null,null,6],["/search?q\u003dtracing+movement\u0026source\u003dlms\u0026tbm\u003disch",null,null,"VID",null,null,"Videos",false,null,null,null,"VID",null,null,121],["/search?q\u003dtracing+movement\u0026source\u003dlms\u0026tbm\u003disch",null,null,121],["/search?q\u003dtracing+movement\u0026source\u003dlms\u0026tbm\u003disch",null,null,121]]]>
  </script>
</body>
</html>
```

```
body {
  background-color: #fff;
  color: rgba(0,0,0,0.87);
  font-family: Roboto,HelveticaNeue,Arial,sans-serif;
  font-size: small;
  margin: 0;
  position: relative;
  -webkit-font-smoothing: auto;
}

body {
  overflow: visible;
  overflow-y: scroll;
  background-image: url(https://upload.wikimedia.org/);
  background-size: 150px;
}

body {
  height: 100%;
  overflow: hidden;
  -webkit-font-smoothing: antialiased;
  color: rgba(0,0,0,0.87);
  font-family: RobotoDraft,Helvetica,Arial,sans-serif;
}
```

Filter

Custom levels 1 Issue: 1 18 hidden

Fingerprint\_picture.svg.png);

'url(https://upload.wikimedia.org/wikipedia/commons/thumb/b/bf/Fingerprint\_picture.svg/1413px-Fingerprint\_picture.svg.png)'

(-\_-) tracking a new movement

≡ tracker name: wikimedia.org

≡ likelihood this domain is fingerprinting users (in a scale 1=low; 3=high): 0

≡ web prevalence: 0

(-\_-) tracking a new movement

≡ tracker name: joanachicau.com

≡ likelihood this domain is fingerprinting users (in a scale 1=low; 3=high): 0

≡ web prevalence: 0

(-\_-) tracking a new movement

≡ tracker name: wikimedia.org

≡ likelihood this domain is fingerprinting users (in a scale 1=low; 3=high): 0

≡ web prevalence: 0



*¿Research Questions?*

What can a choreographic approach to data tracking in human-computer interaction look like?

What can a **choreographic approach to data tracking** in human-computer interaction look like?

How can choreographic approaches help question algorithmic models in web interfaces and improve user **awareness**?

How can this new approach configure resources and conditions for **user empowerment**?

# **data tracking algorithms + choreography**

# STAND UP

if your age is between 35-44.

What is choreography?

# ROTATE

What is choreography?

if your age is between 35-44  
and you live in Brussels.



What is choreography?

...one of the crucial questions of our times: how to claim agency for our movements and actions within our highly (even if subtly) choreographed societies of control (...)  
Dance and choreography display and practice how bodies get to be mobilised as well as made passive.

(Lepecki in Martin, 2015: 44;46)

What are online tracking algorithms?

'Have you ever read a newspaper and noticed a stranger reading it over your shoulder? Reading the news online is like having Google, Facebook, or Twitter doing the same thing.'

Source: TacticalTech.org

## **Practice-base PhD:**

- \* 4 workshops**
- \* 1 tool (browser extension)**
- \* 3 performances**
- \* 1 'longitudinal' study**

# \* 4 workshops

## **Control Shift Festival**, Bristol UK April 2023

Audience: artists and creative technologists; academics;

## **Space2**, Leeds UK May 2023

Audience: local artists and other professional backgrounds;

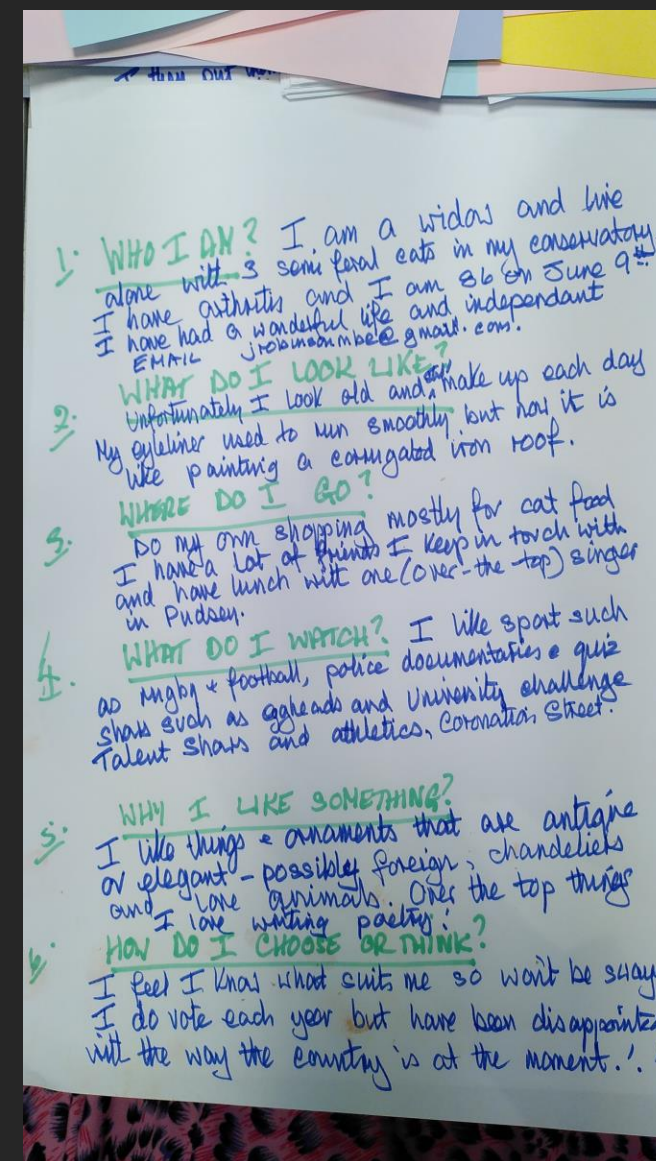
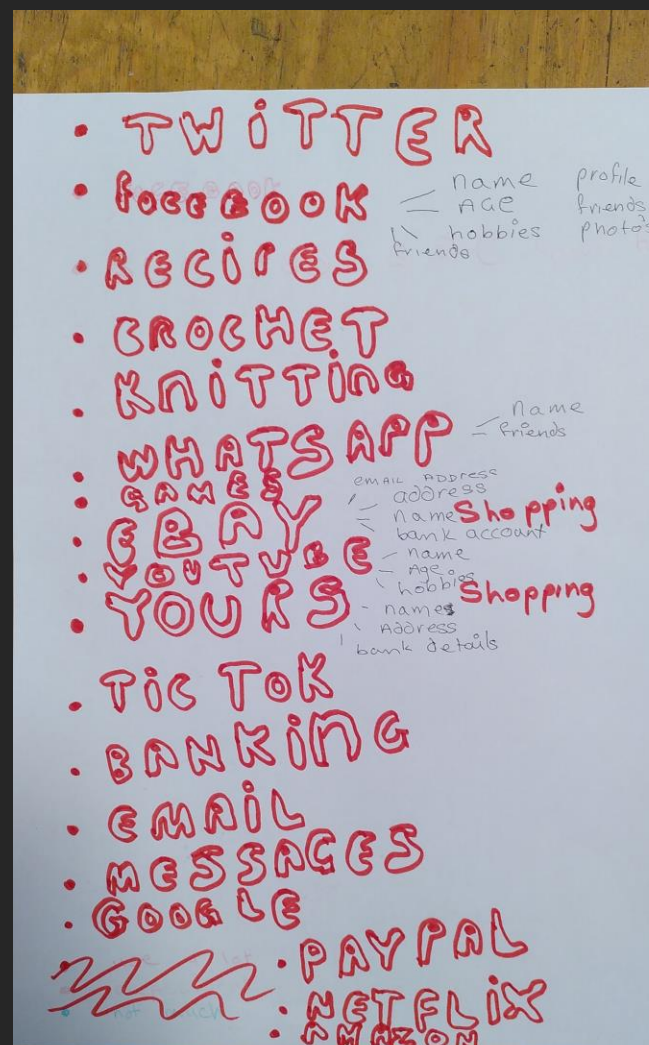
## **PAF**, France July 2023

Audience: professional artists mostly in performing arts;

## **CCI**, London UK October 2023

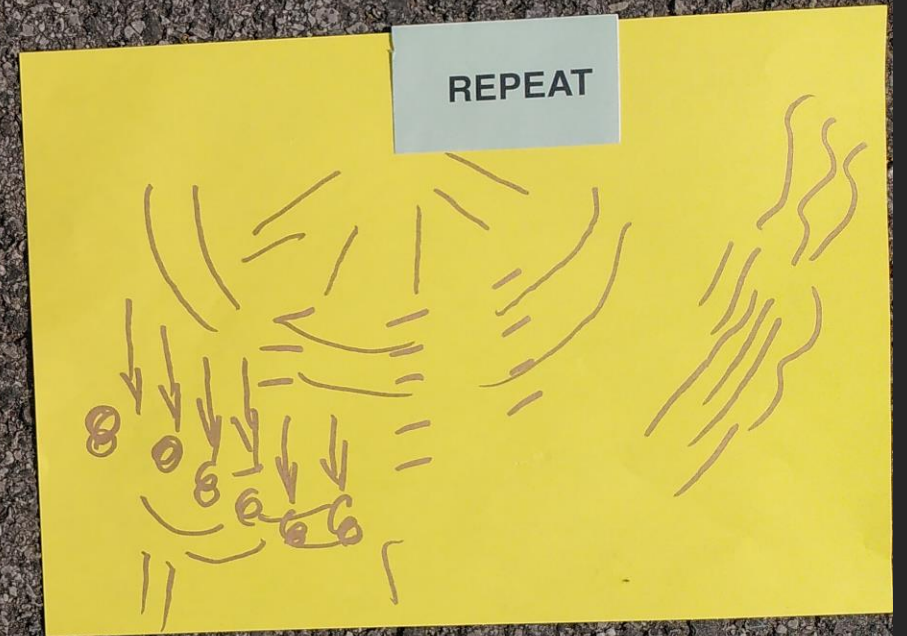
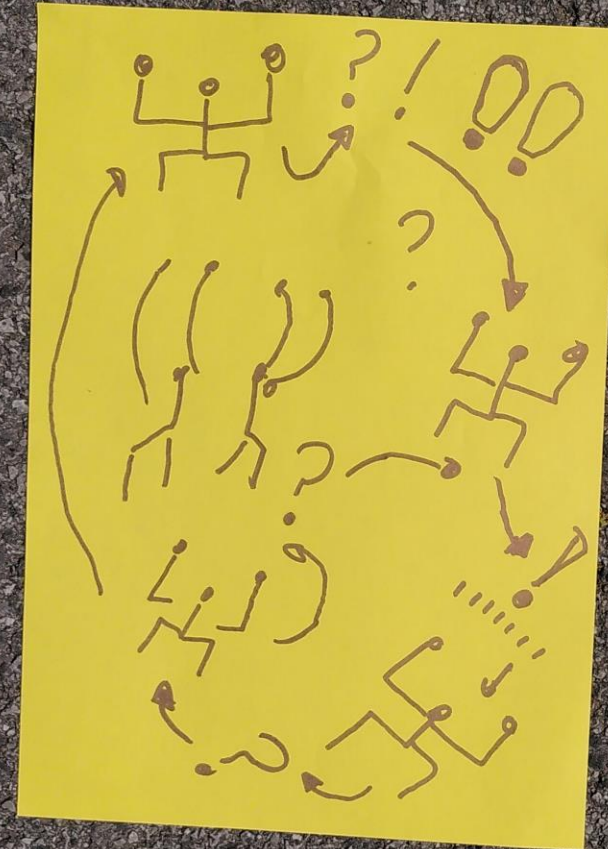
Audience: professionals in art, design, human-computer interaction, software development and policy working in industry and/ or academia whose practice and research relates to data ethics, digital rights and algorithmic justice.



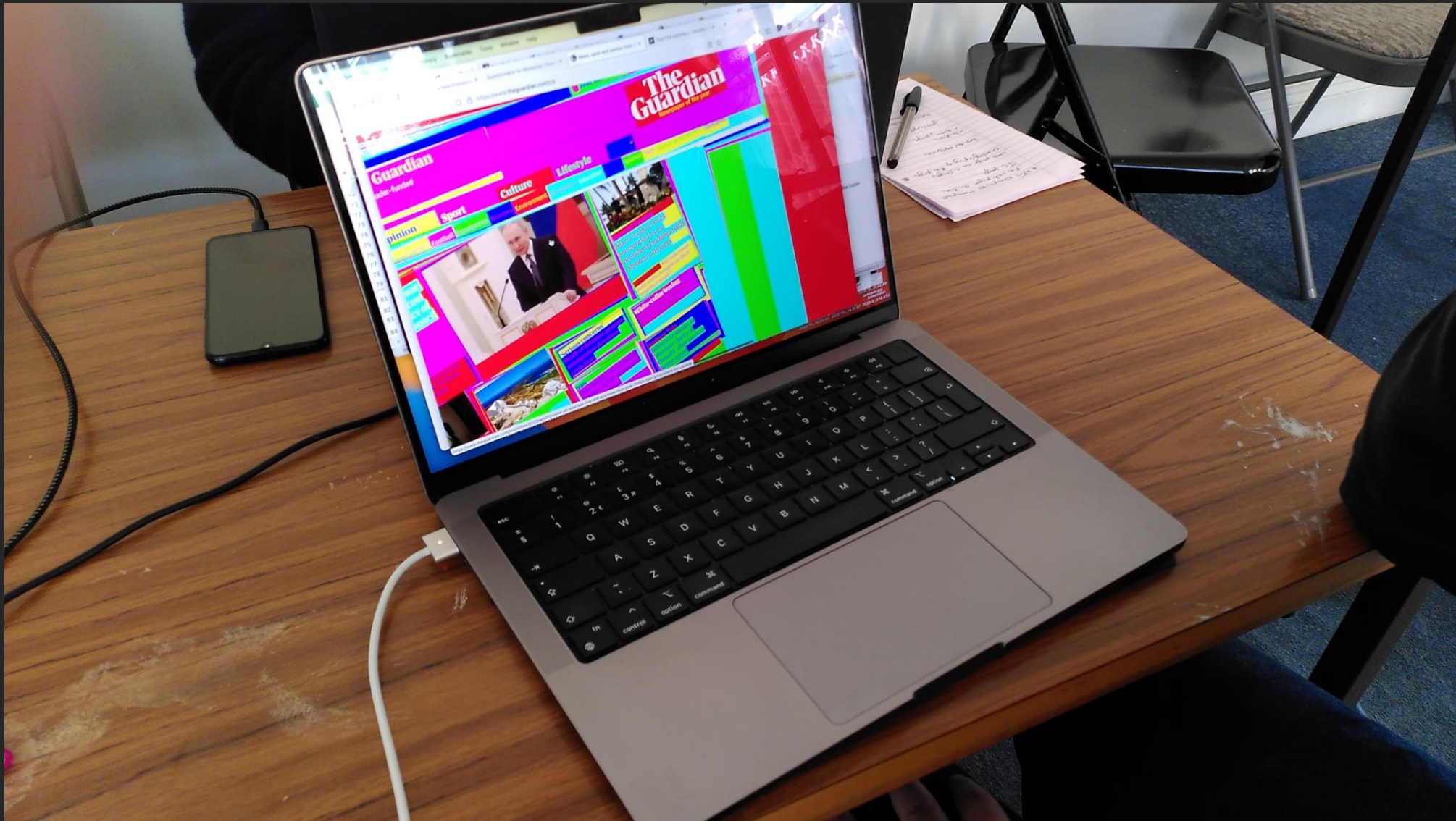


Images from workshop at Space2, 2023. Photos by Joana Chicau.









Images from workshop at Control Shift, 2023. Photos by Joana Chicau.



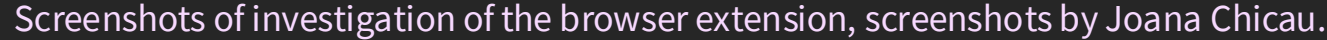
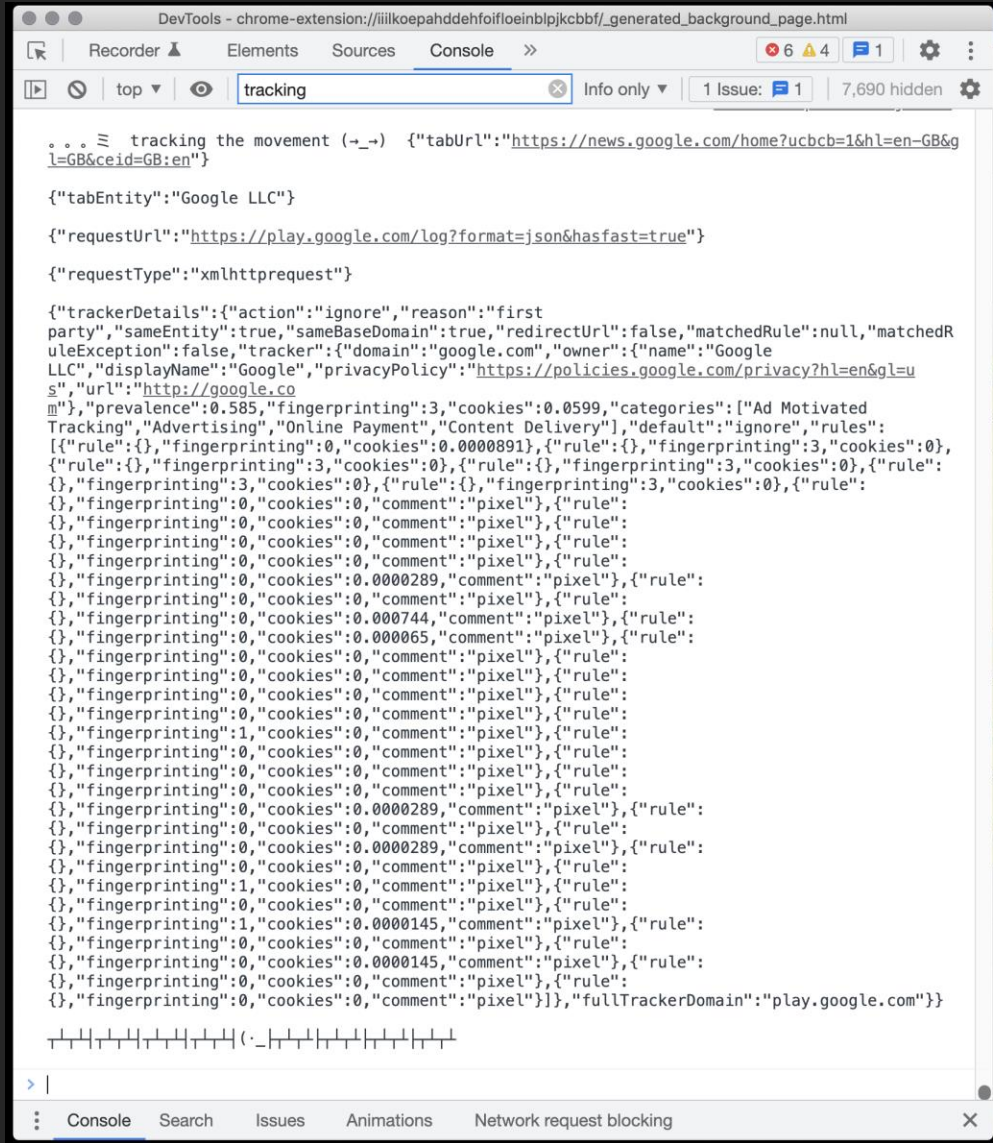


SCALE	CLICKING
REMOVE	SCROLLING (%)
REPEAT	IDLE TIME
SUBSTITUTE	BROWSER HISTORY
ADD	ENGAGEMENT TIME
FREEZE	LOCATION

Images from workshop at CCI, 2023. Photos by Joana Chicau.



\* tool development



choreographing you = ( ) = Δ

From now perform any online gestures at 50% intensity. This means you may have to slow down.

concept, design and code by [Joana Chicau](#); further documentation [here](#); typeface CirrusCumulus by Clara Sambot.

re-coding.technology

## \* 3 performances

**International Conference for Live Coding (ICLC)**, The Netherlands April 2023

Audience: artists and creative technologists; academics;

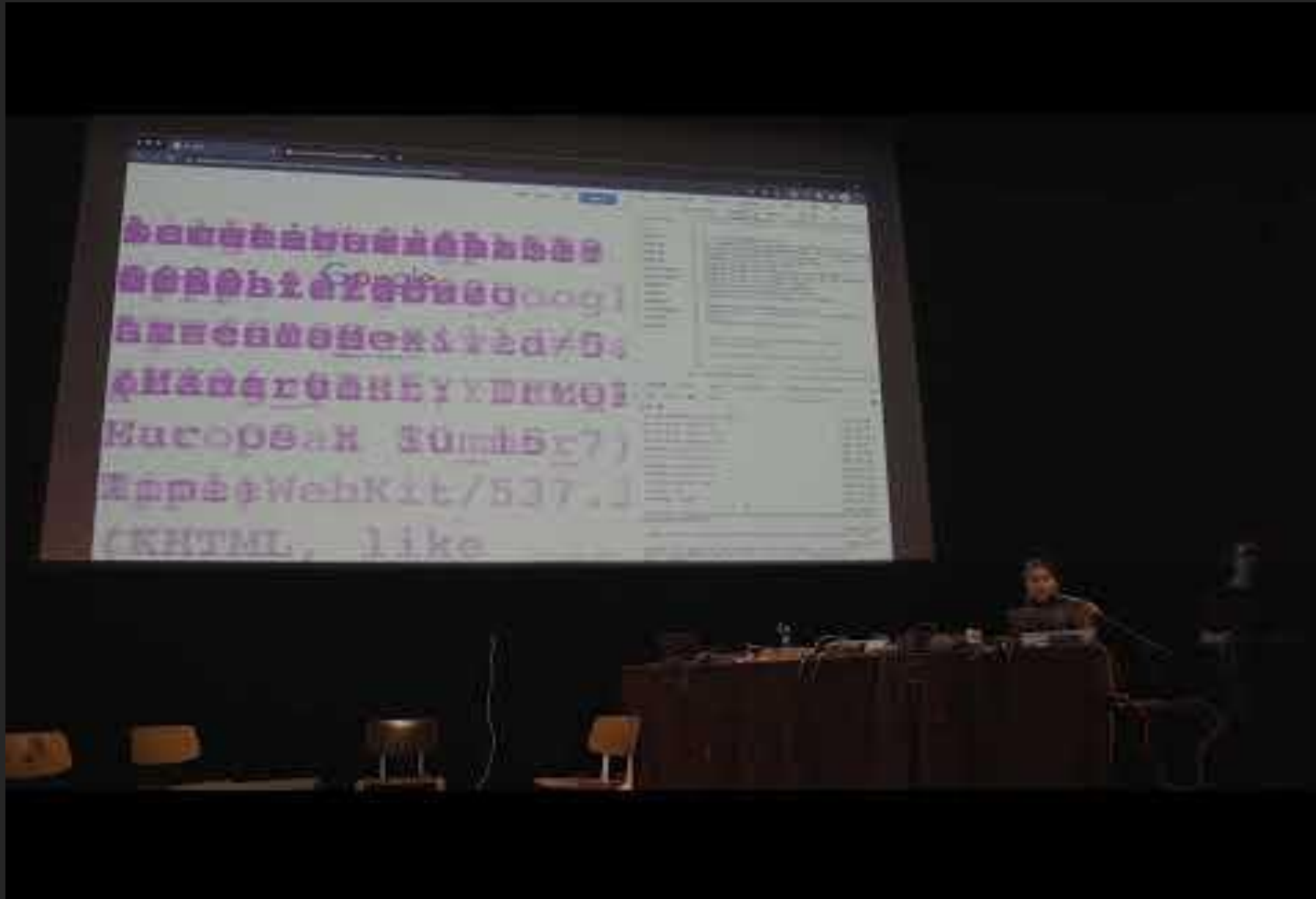
**Critical Making and Social Justice (HASTAC)**, USA June 2023

Audience: designers, artists, activists, academics;

**Conference on Computation, Communication, Aesthetics & X (xCoAx)**, Italy July 2024

Audience: designers, artists, academics;





[Link](#) to video from performance at International Live Coding Conference, 2023. Videographer: Dan Gorelick.

*'The manipulation and the dancing elements of the webpage also helped metaphorically outline the tracking processes and decomposed the web into moving and traceable parts.'*

*'The performance was very clear in its aim and really felt like it was making underlying web processes more exposed and explainable to an audience.'*

*'Connecting choreography with algorithmic life was profound and meaningful - and I have found myself thinking about it long after the workshop.'*

*'Revealing the invisible framework behind our movements.'*

*'I enjoyed the parallel between physical and digital space, and the way we leave our marks on both.'*

# \* 'longitudinal'study

Audience: people without professional background or specialist knowledge in data tracking or similar topics.

## Study details:

- 5 participants over two weeks;
- 1 website with 12 scores;
- Daily form and one final interview;

## Preliminary Findings:

- engaging with the scores fostered awareness and reflection on agency regarding online tracking;
- it highlighted the significance of bodily involvement in the process;
- it encouraged behaviour changes related to tracking.

# HUMAN-COMPUTER COUNTER-CHOREOGRAPHIES

Dear user, welcome!

Date: Tue Jan 14 2025 12:15:32 GMT+0000 (Greenwich Mean Time);  
Location: MacIntel;



**SELECT TODAY'S CHOREOGRAPHY:**

☐ ADD ☐ REMOVE ☐ REPEAT ☐ SCALE ☐ SUBSTITUTE ☐ FREEZE

WARM-UP!

GETTING PERSONAL

DAILY GESTURES

50%

RANDOMISE

SOUND OF COOKIES

TRACING MOVEMENT

ANTI-PREDICTION

BREATHING SCROLLING

AD-SELF

VIRAL DANCING

LIKE NO ONE IS WATCHING

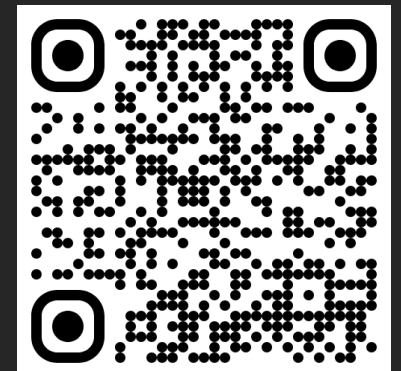
COUNTER-CHOREOGRAPHY BY BARBIE

COUNTER-CHOREOGRAPHY BY JUANA

COUNTER-CHOREOGRAPHY BY RUIYANG

CREATE YOUR OWN!

[joana.art/counter-choreographies](https://joana.art/counter-choreographies)





## ¿Next steps?

- Exhibition 'Everyday Algorithms' in Newbridge, Newcastle UK;
- Finish writing the thesis and submit → *wish me luck!*
- I am looking for place to share my project and research (e.g. podcasts, magazines, exhibitions...) → *advice welcome!*

audience.innerHTML =

' ≡ thank you ≡

(→\_→) raise your hands if you 👍 or 💜 or ★  
this presentation;

[j.chicau@arts.ac.uk](mailto:j.chicau@arts.ac.uk) or [web@joanachicau.com](http://web@joanachicau.com)

Mastodon: [post.lurk.org/@joanachicau](https://post.lurk.org/@joanachicau)

Colophon: Source Sans Pro font; custom theme light pink (#f7d9ff)