Aalto University
School of Arts, Design
and Architecture

What will come after the Web and the Social Media?

Teemu Leinonen

Three Things

1. The history of the future
2. The future: mirrorworld(s)
3. Example: AR sandbox

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1. The history of the future
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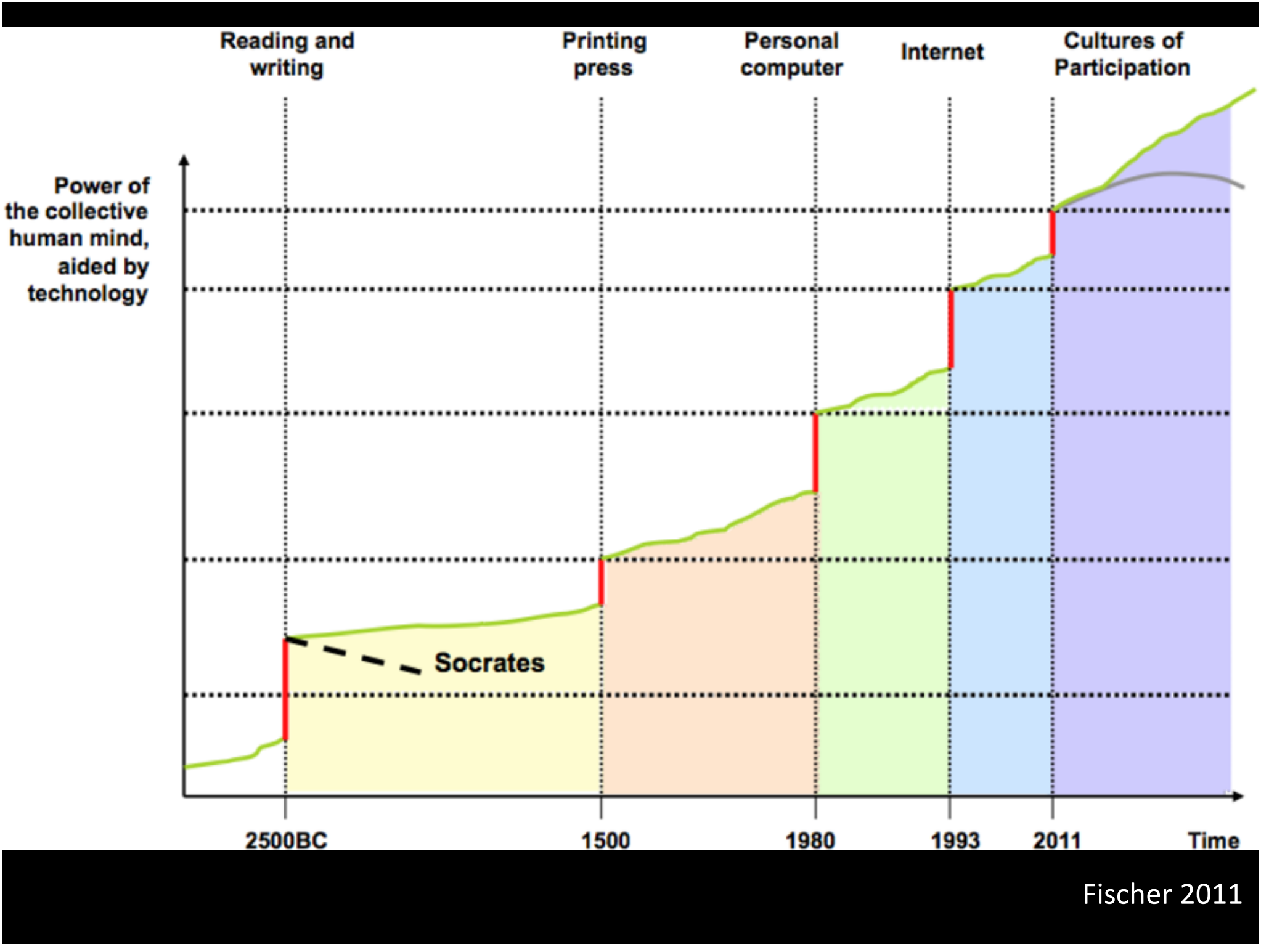
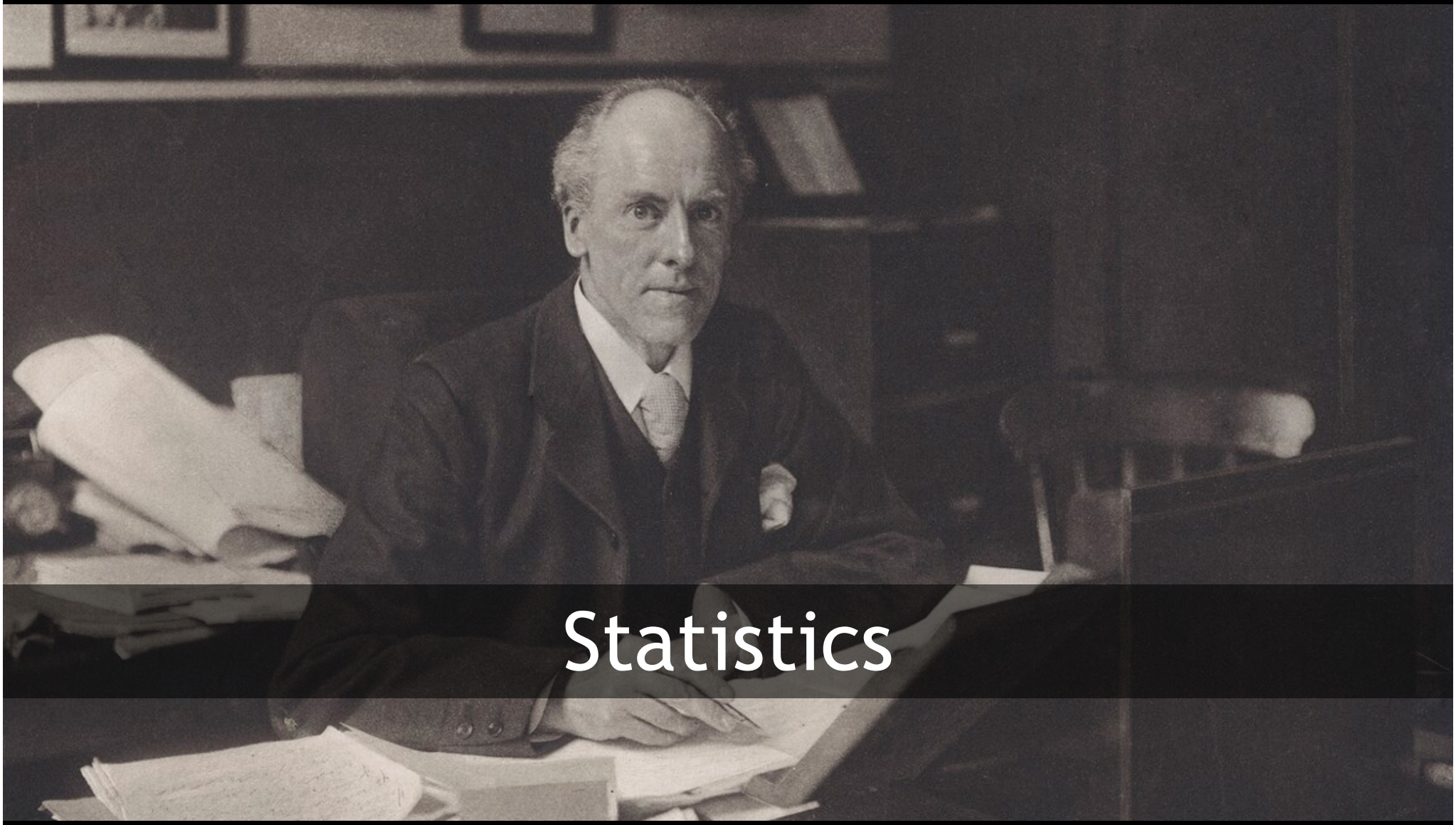


Fischer 2011

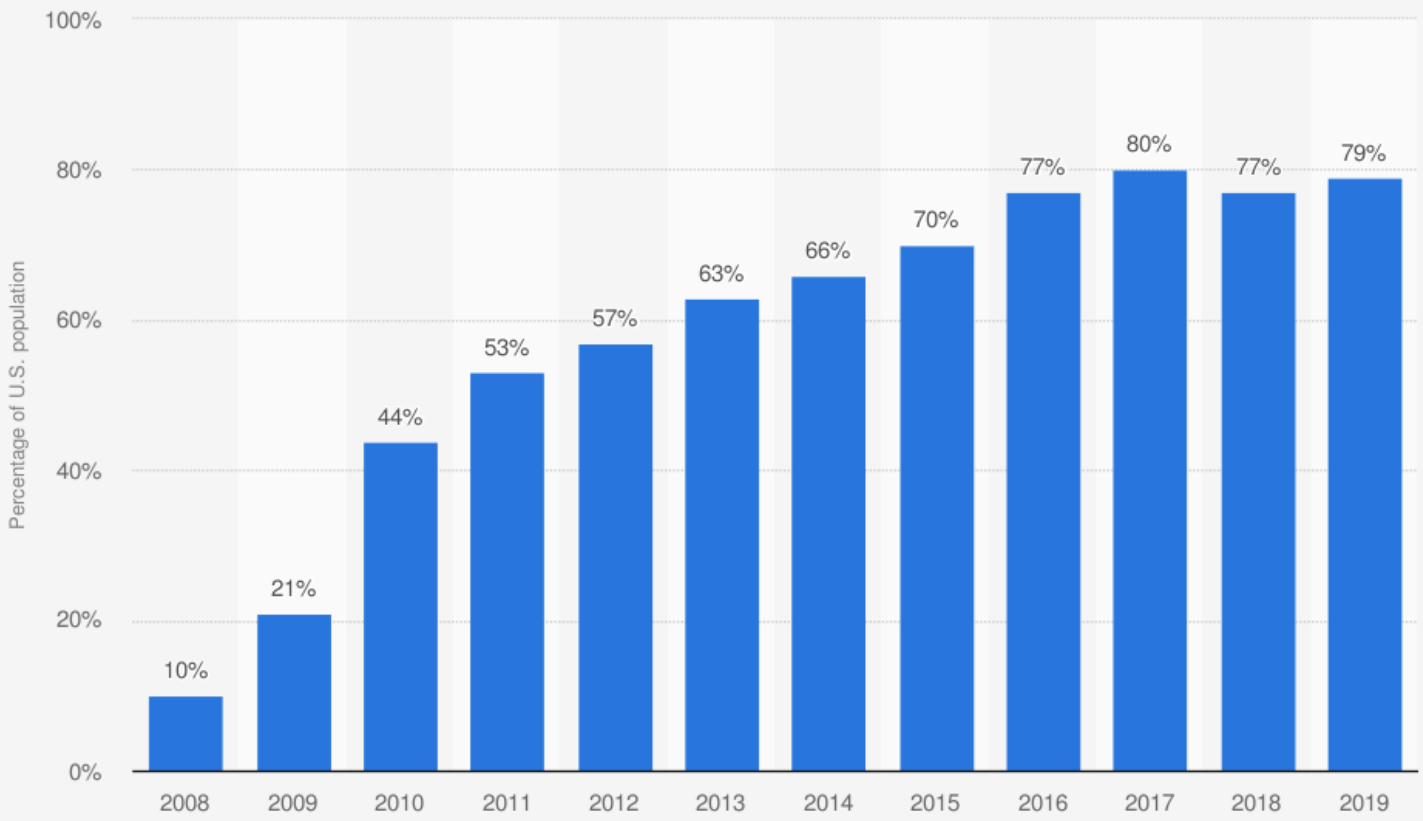
"Programming is the second literacy. The first one gives you knowledge, the second allows you to implement it in practice."

1985-1986: Chkalovski Village School No. 2, Pravetz 82 computers.



Statistics

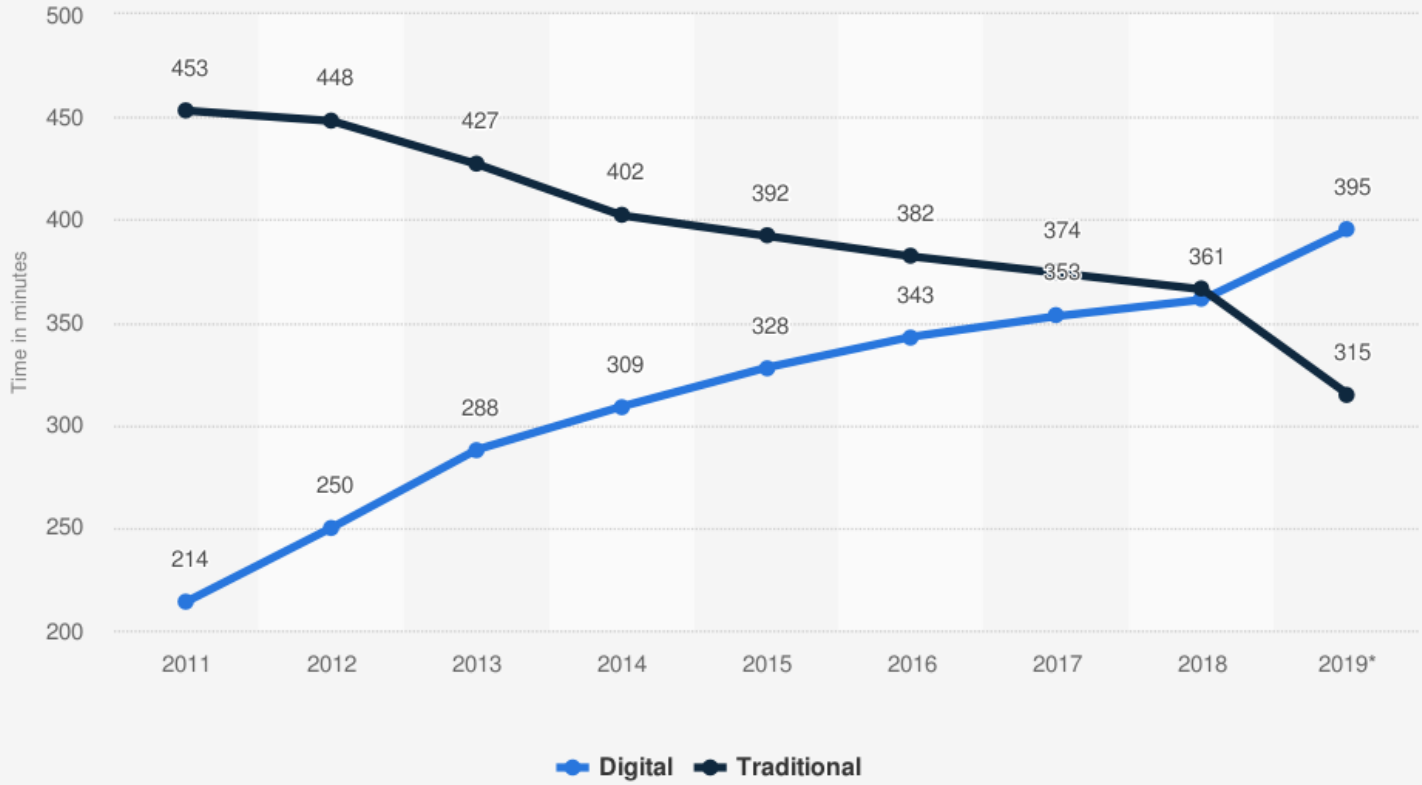
Percentage of U.S. population who currently use any social media from 2008 to 2019



Sources
Edison Research; Triton Digital; Salesforce.com
© Statista 2019

Additional Information:
United States; Edison Research; Triton Digital; 2008 to 2019; 1,500 respondents; 12 years and older; currently ever use F
Instagram, Pinterest, or LinkedIn; Telephone interview

Time spent per day with digital versus traditional media in the United States from 2011 to 2019 (in minutes)



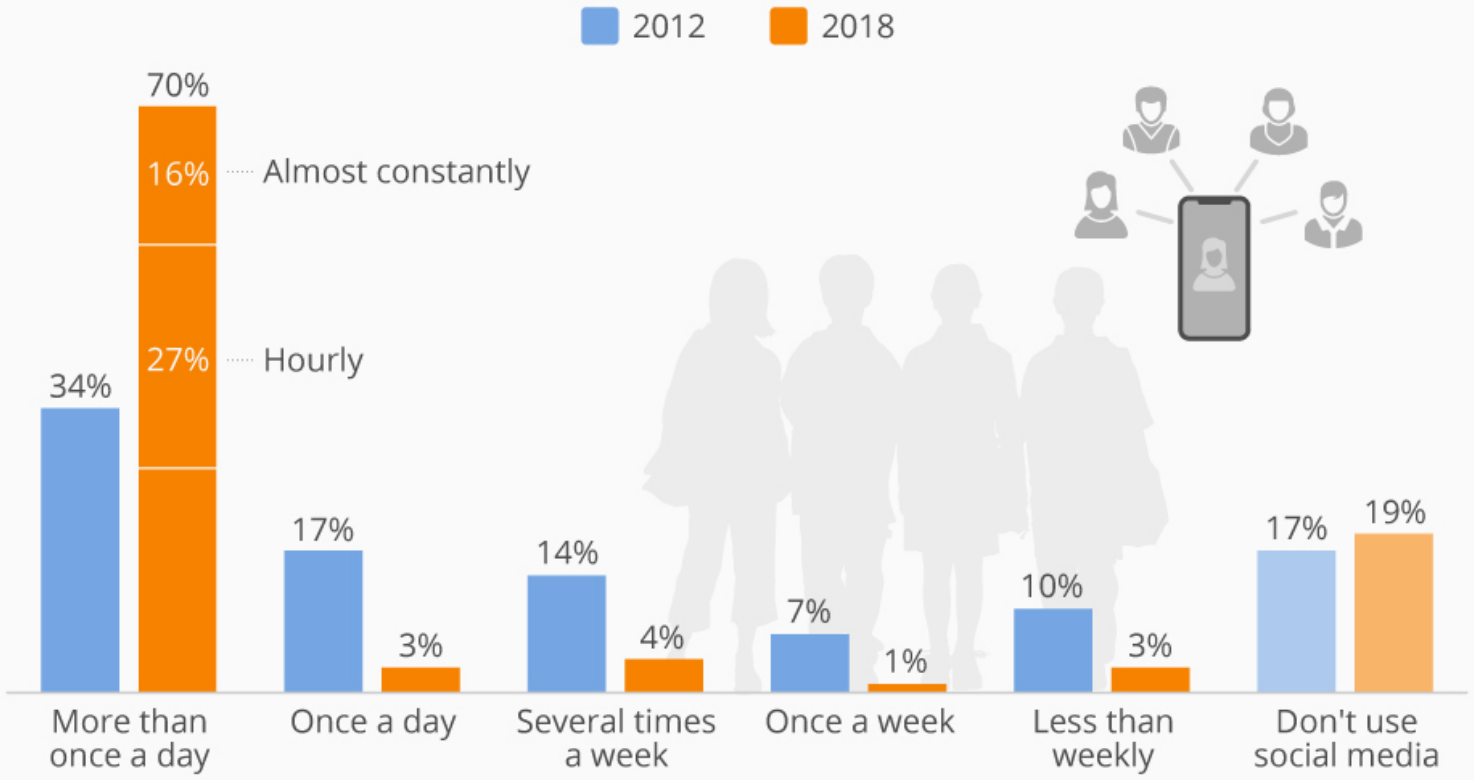
Sources
eMarketer; MediaPost

© Statista 2019

Additional Information:
United States; eMarketer; 2011 to 2019; 18 years and older

Teens' Social Media Usage Is Drastically Increasing

Percentage of 13- to 17-year-olds in the U.S. who check social media...



Based on surveys of 1,000+ U.S. teens (ages 13 to 17) conducted in 2012 and 2018

Source: Common Sense Media

@StatistaCharts

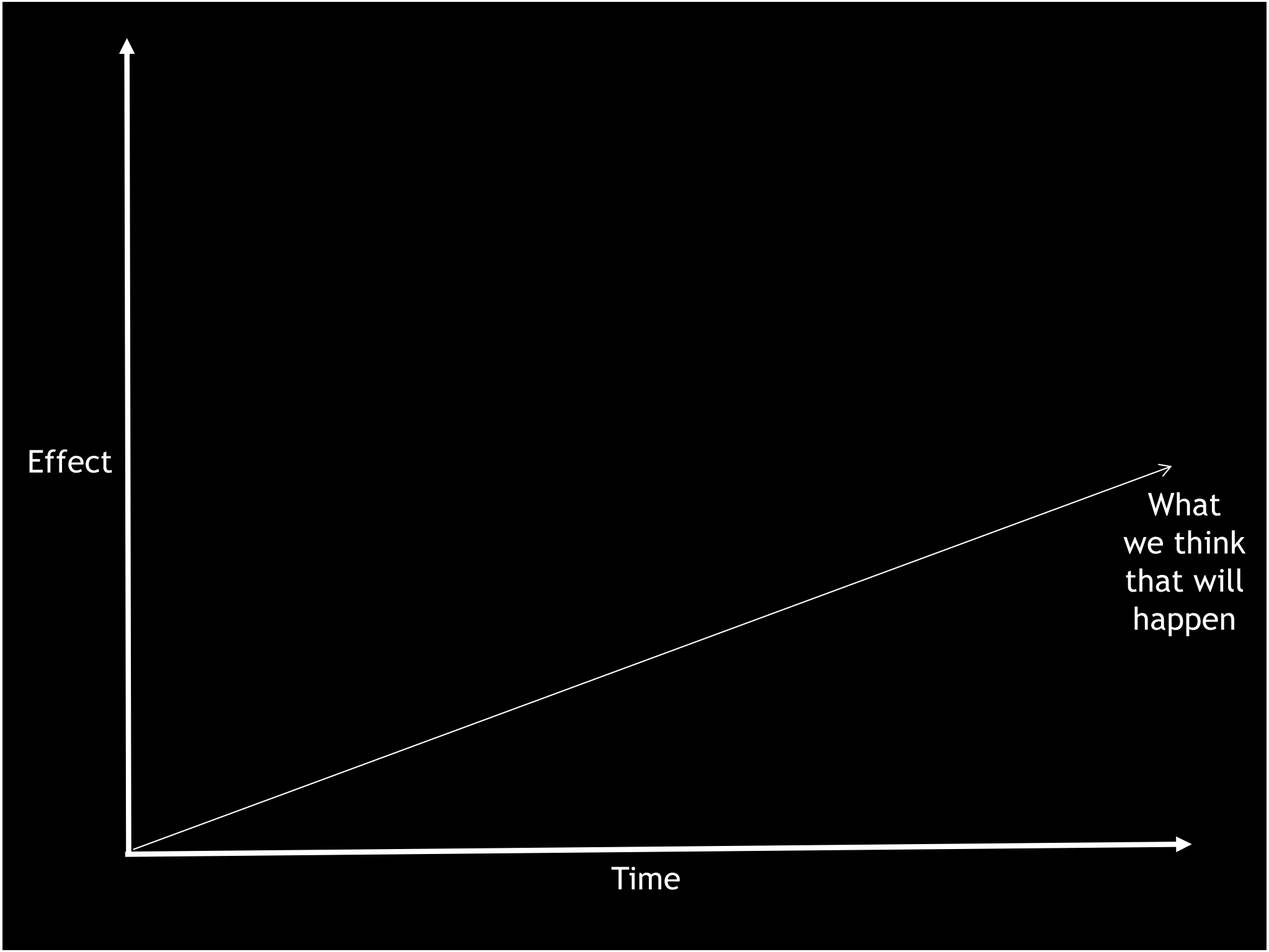
statista

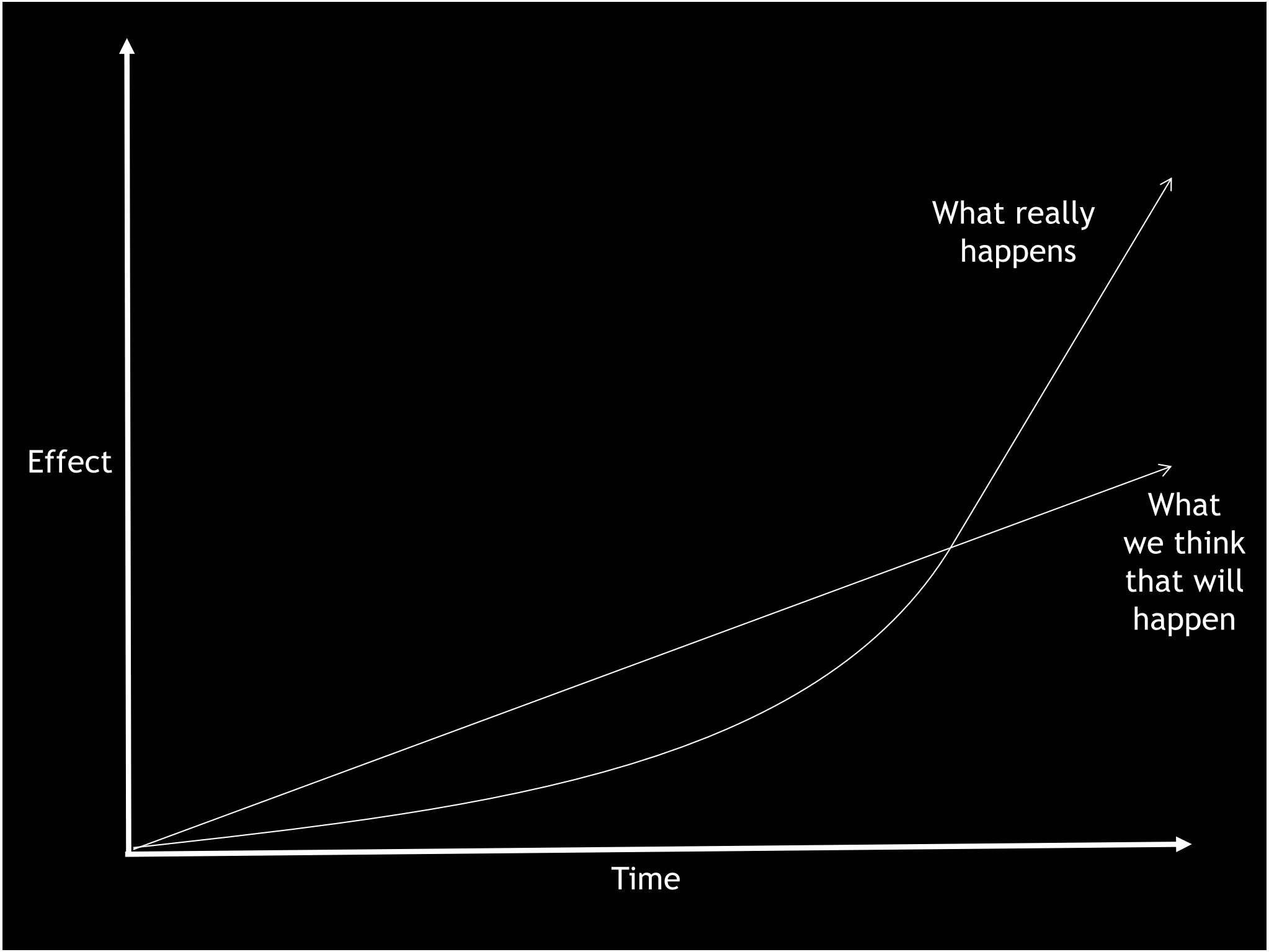
The future ?

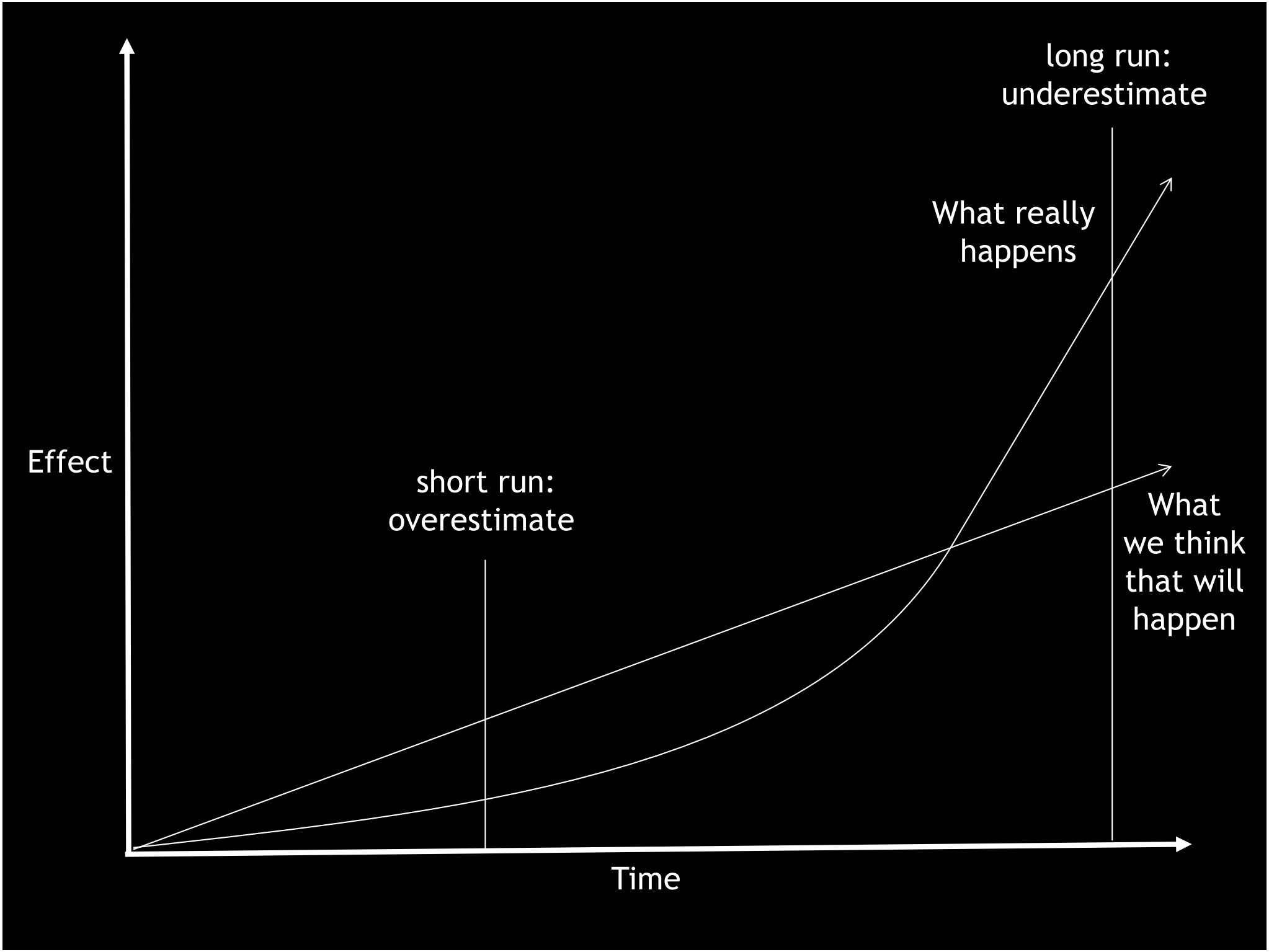
"We tend to overestimate the
of a technology
in the short run
and
underestimate the effect
in the long run."

"We tend to overestimate the of a technology in the short run and underestimate the effect in the long run."

Roy Amara (Amaras Law)
The Institute for the Future / Stanford Research Institute


Effect
What we think that will happen
Time


What really happens
What we think that will happen
Effect
Time


long run:
underestimate
What really
happens
Effect
short run:
overestimate
What
we think
that will
happen
Time

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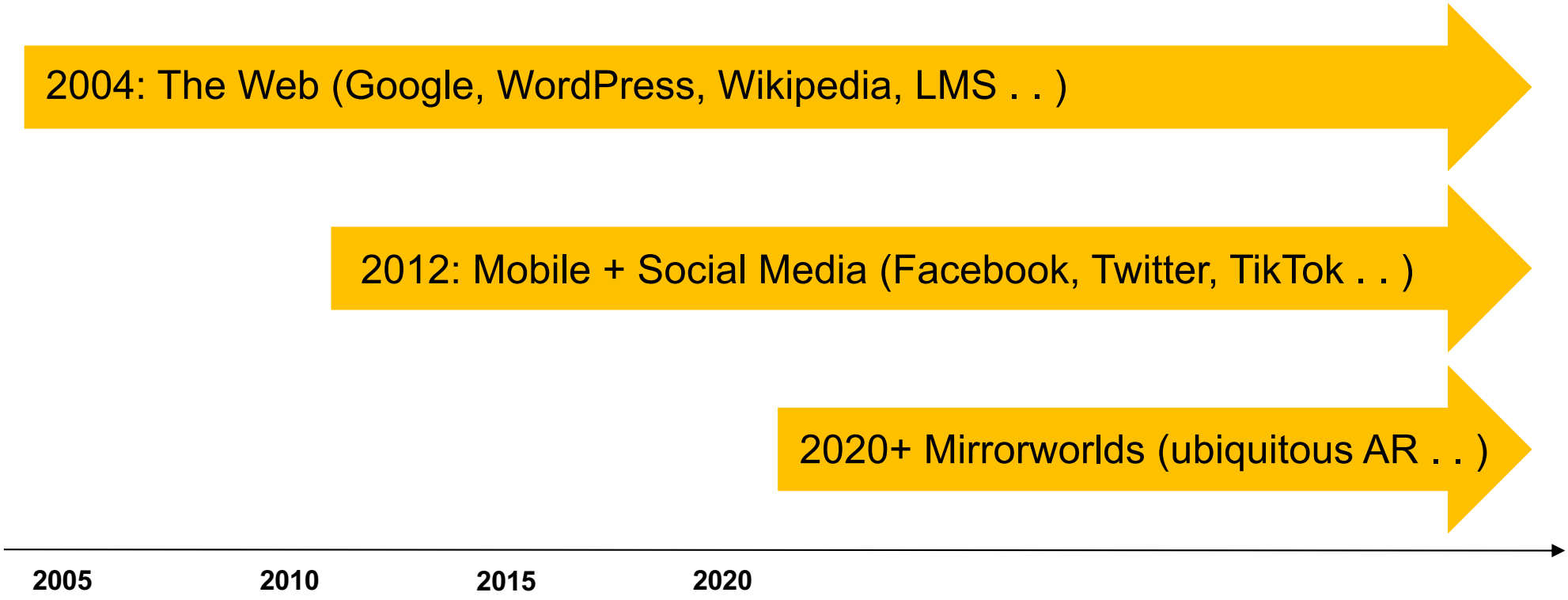
Mirrorworlds

00:39

00:39

Three generation of digital platforms



(Leinonen, Vartiainen, Brinck, 2021)

2020+ Mirrorworlds (ubiquitous AR)

- Platform where everything in the real world—every place, building, lamppost, and room—will have its digital twin.
- Layers of information, meaning, and functions integrated with the digital twin of the real world.
- Possible to interact with and manipulate: modify, shape, and program.

(Kelly, 2019; Leinonen, Vartiainen, Brinck, 2021)

Three Things

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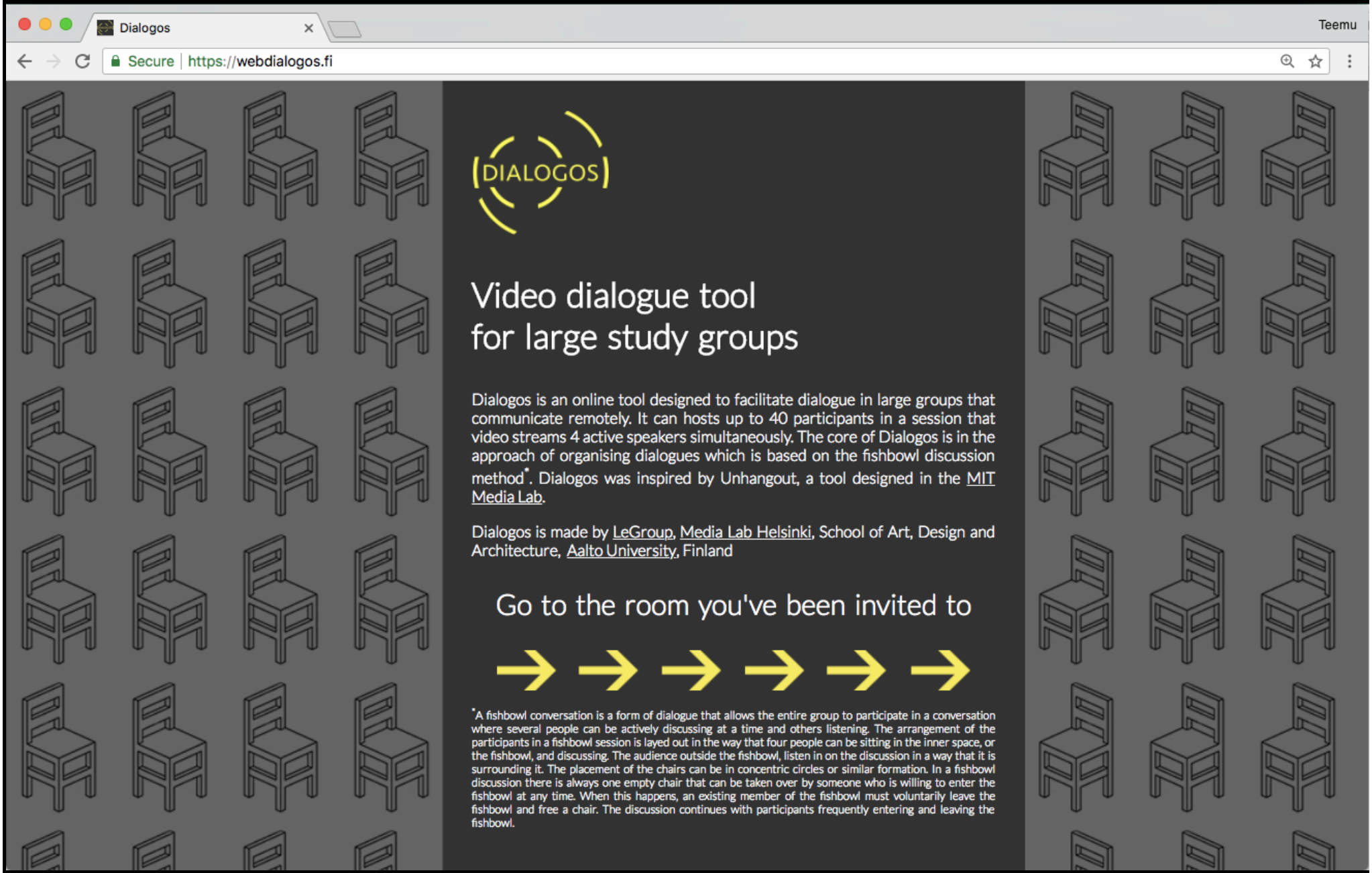
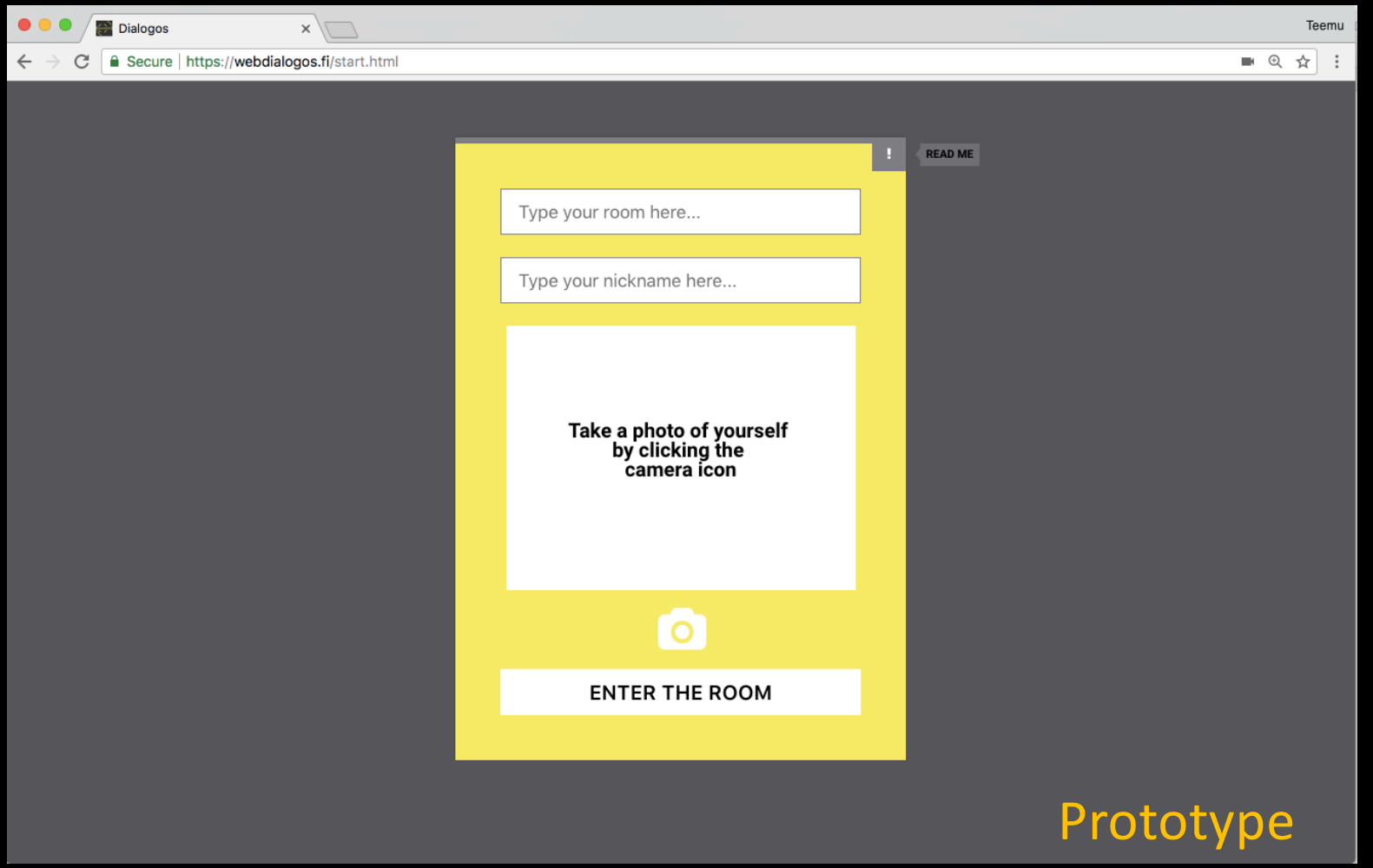
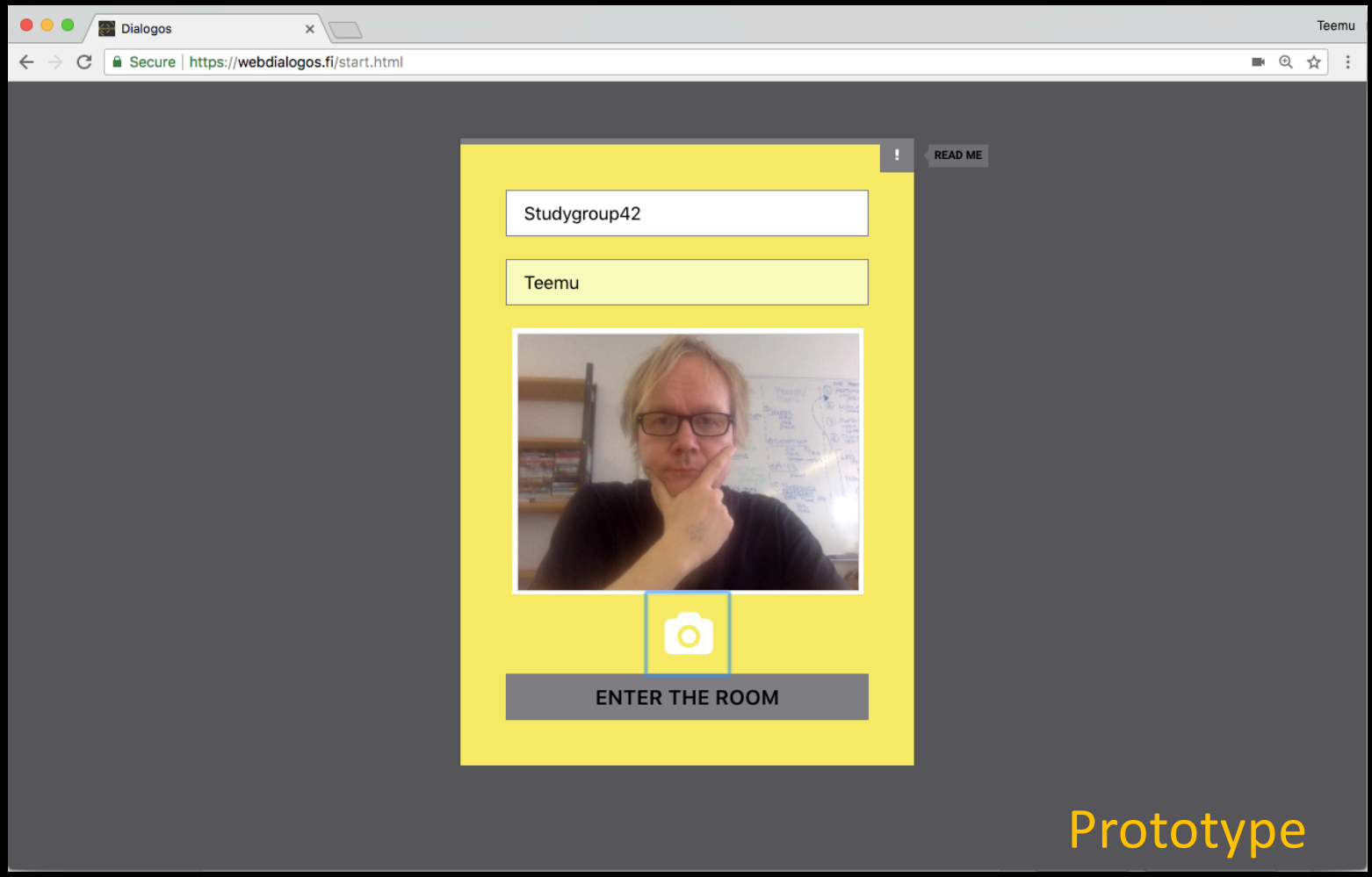
3. Examples


Dialogos
Teemu
Secure | https://webdialogos.fi
DIALOGOS
Video dialogue tool
for large study groups
Dialogos is an online tool designed to facilitate dialogue in large groups that communicate remotely. It can hosts up to 40 participants in a session that video streams 4 active speakers simultaneously. The core of Dialogos is in the approach of organising dialogues which is based on the fishbowl discussion method*. Dialogos was inspired by Unhangout, a tool designed in the MIT Media Lab.
Dialogos is made by LeGroup, Media Lab Helsinki, School of Art, Design and Architecture, Aalto University, Finland
Go to the room you've been invited to
*A fishbowl conversation is a form of dialogue that allows the entire group to participate in a conversation where several people can be actively discussing at a time and others listening. The arrangement of the participants in a fishbowl session is layed out in the way that four people can be sitting in the inner space, or the fishbowl, and discussing. The audience outside the fishbowl, listen in on the discussion in a way that it is surrounding it. The placement of the chairs can be in concentric circles or similar formation. In a fishbowl discussion there is always one empty chair that can be taken over by someone who is willing to enter the fishbowl at any time. When this happens, an existing member of the fishbowl must voluntarily leave the fishbowl and free a chair. The discussion continues with participants frequently entering and leaving the fishbowl.

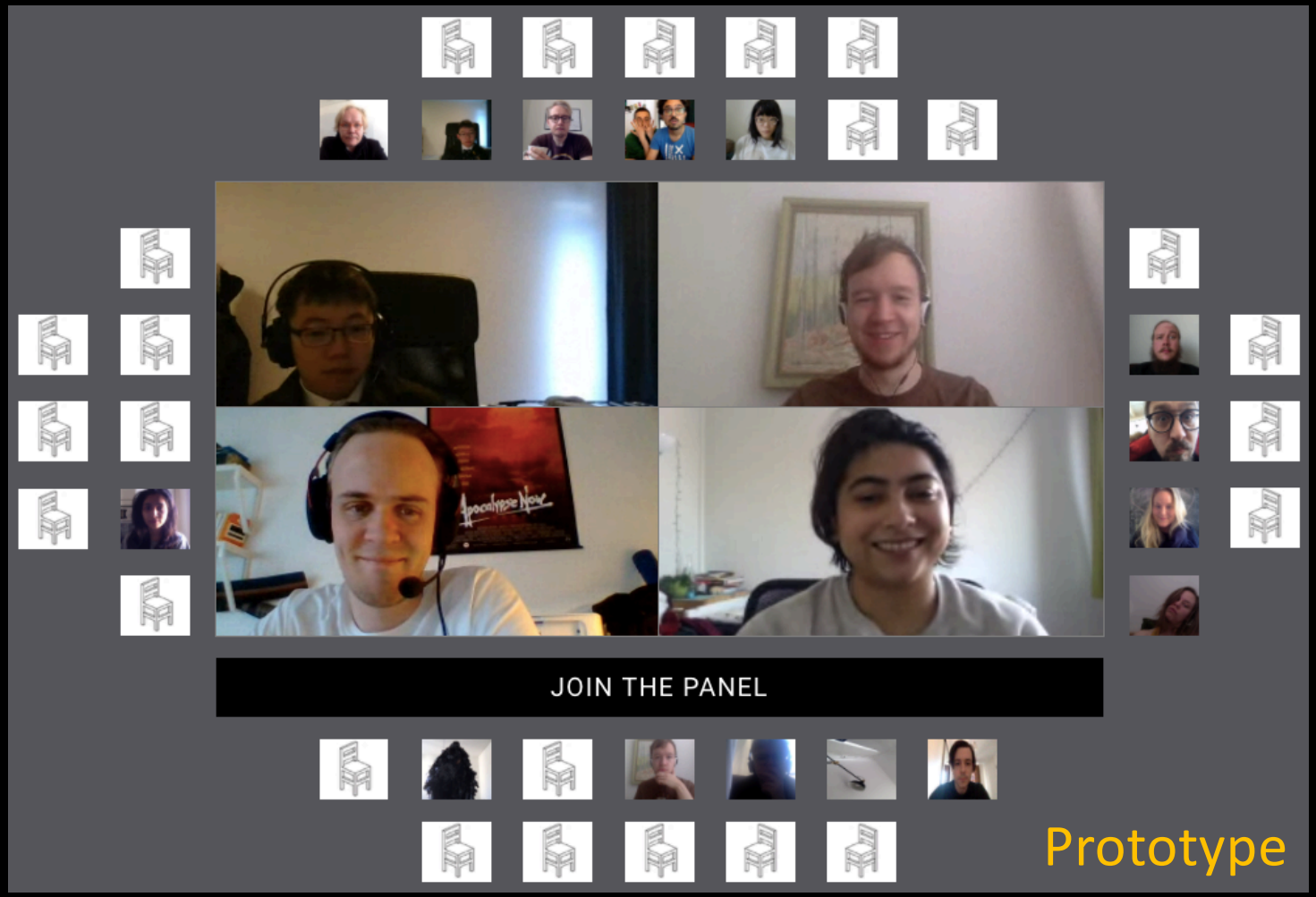
2018


Dialogos
Teemu
Secure | https://webdialogos.fi/start.html
!
READ ME
Type your room here...
Type your nickname here...
Take a photo of yourself by clicking the camera icon
ENTER THE ROOM
Prototype

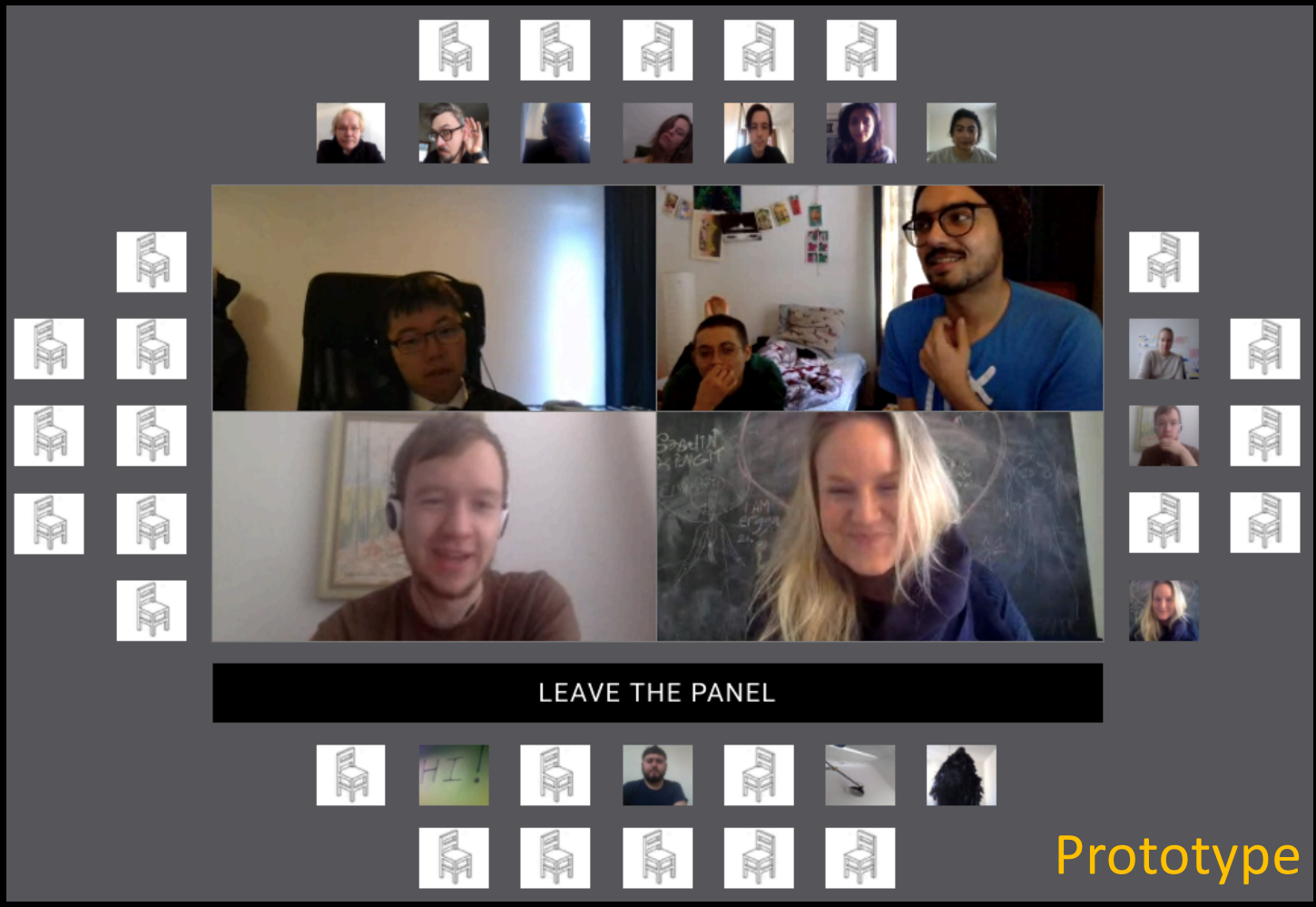
2018


Dialogos
Teemu
Secure | https://webdialogos.fi/start.html
!
READ ME
Studygroup42
Teemu
ENTER THE ROOM
Prototype

2018

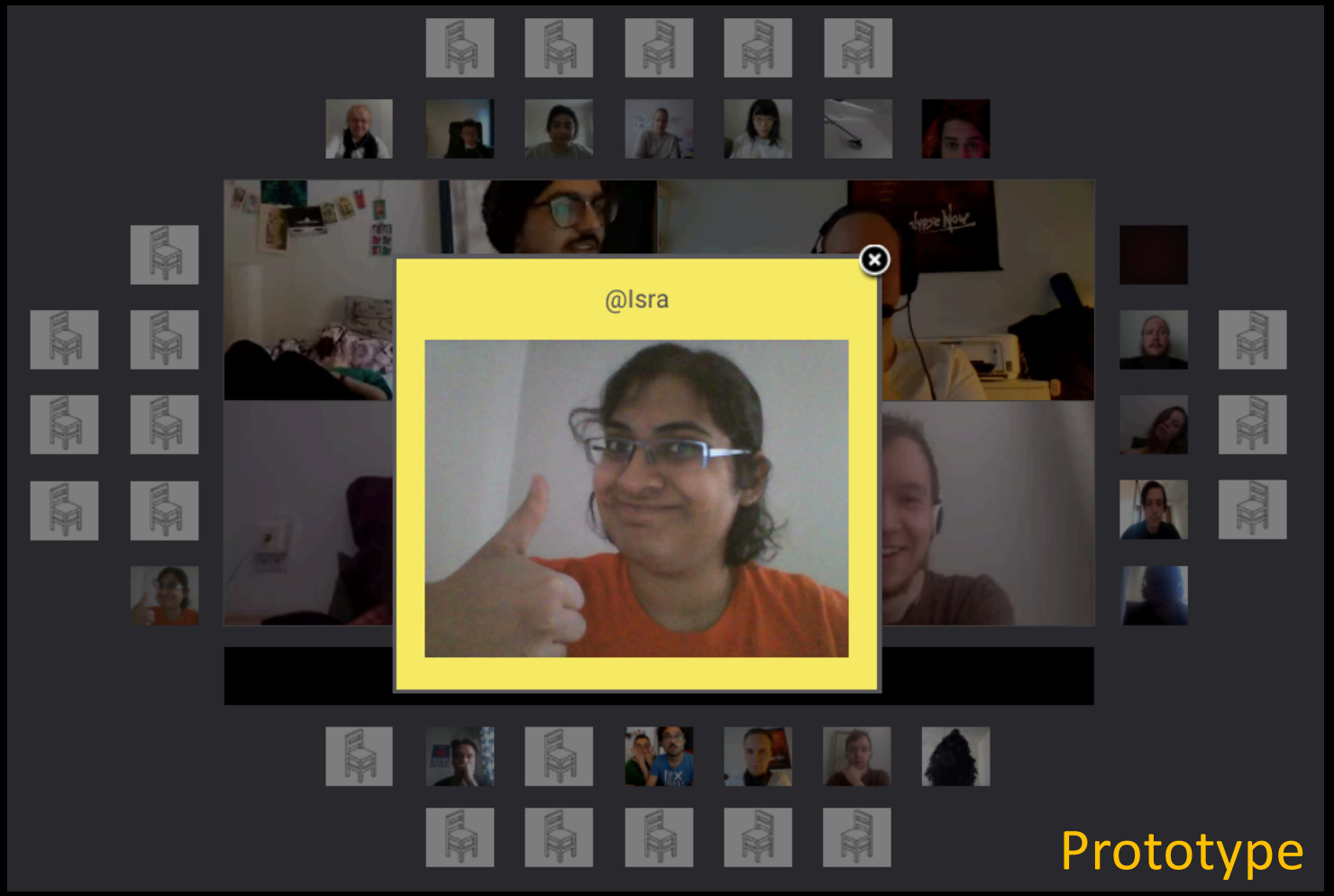


2018



Prototype

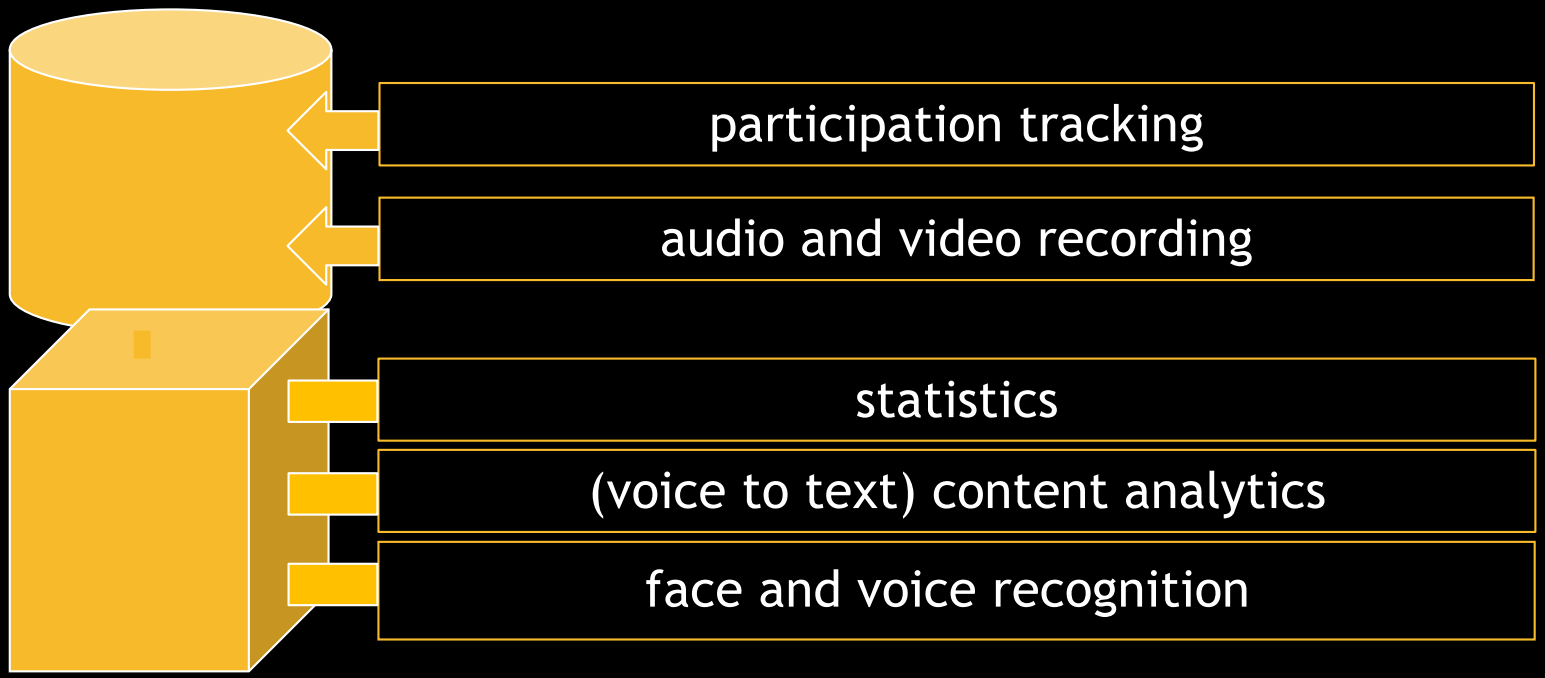
2018



Prototype

2018

Analytics (for reflection and self-regulation)



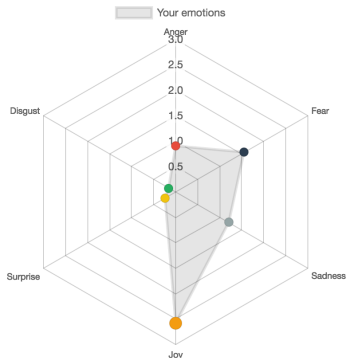
emotion tracking

sentiment analytics

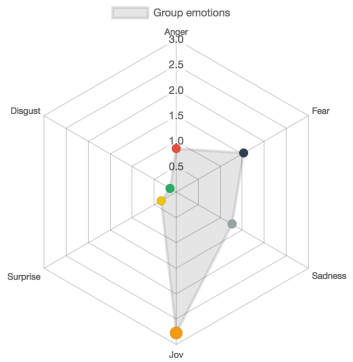
2018

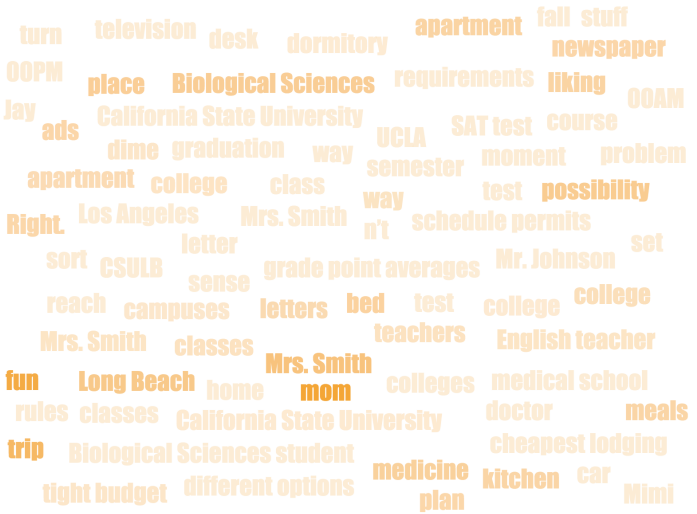
Current selected user: alice Anger Fear Sadness Joy Surprise Disgust Email: Export

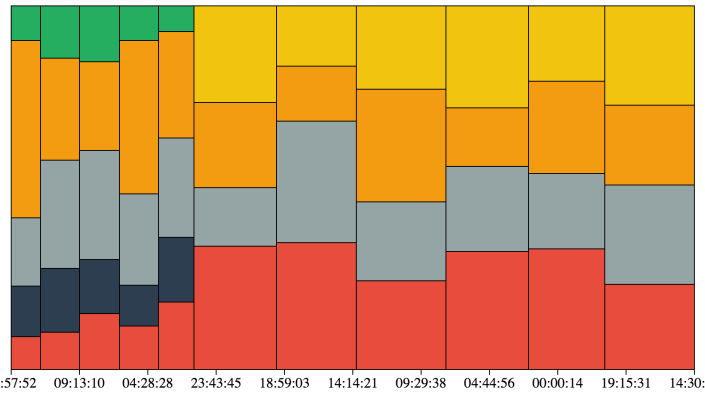
Your emotions

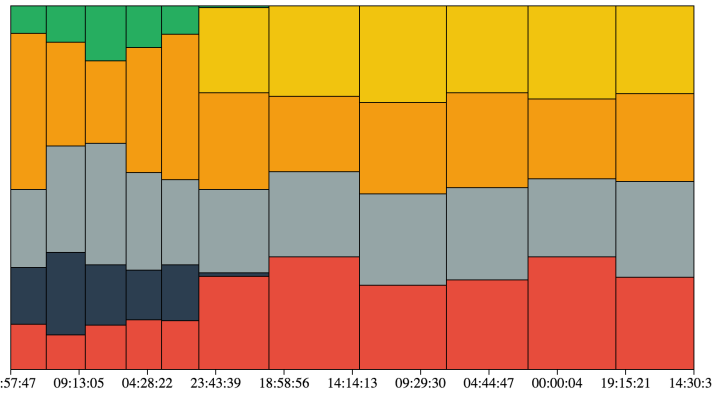


Group emotions

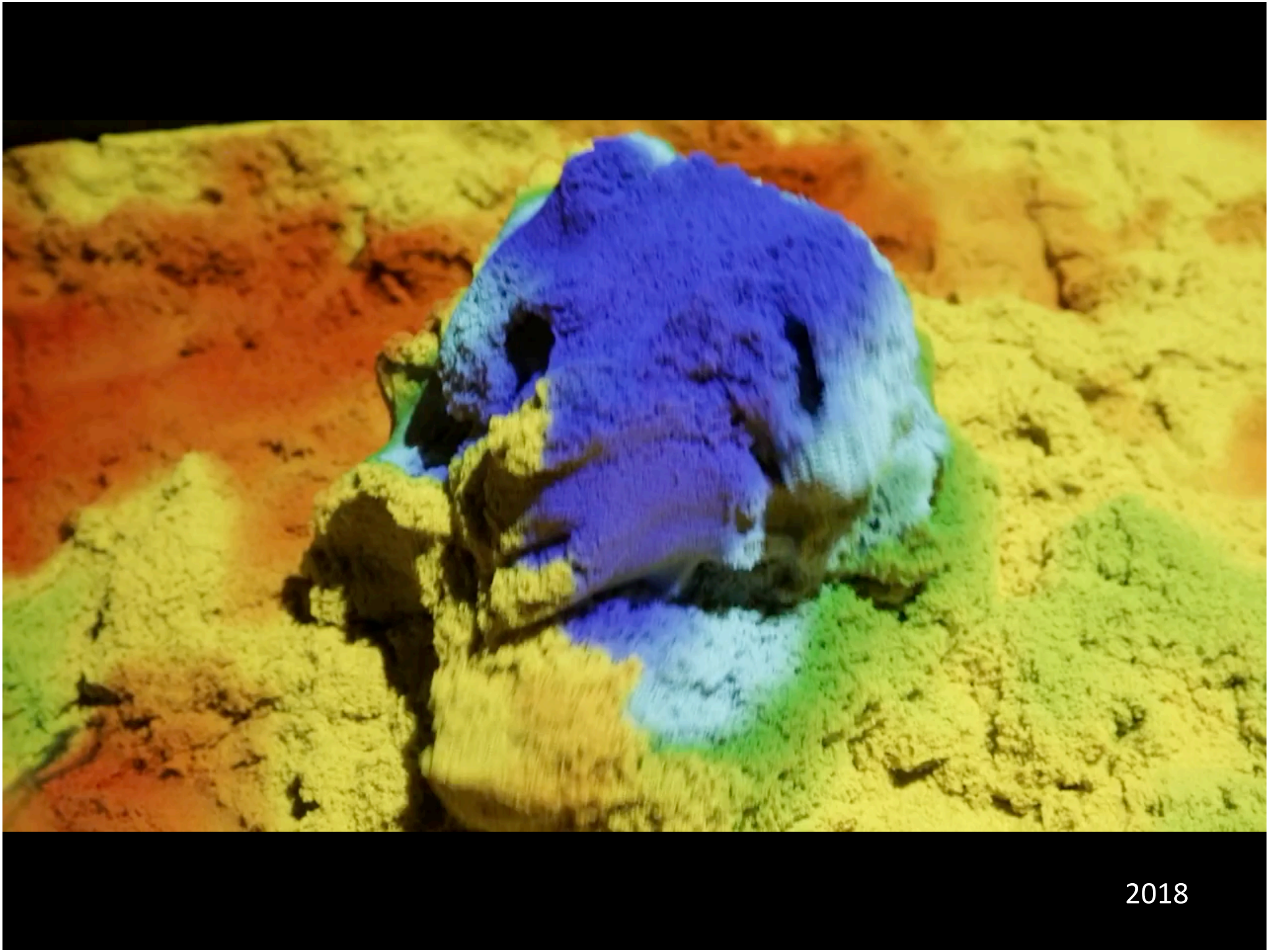




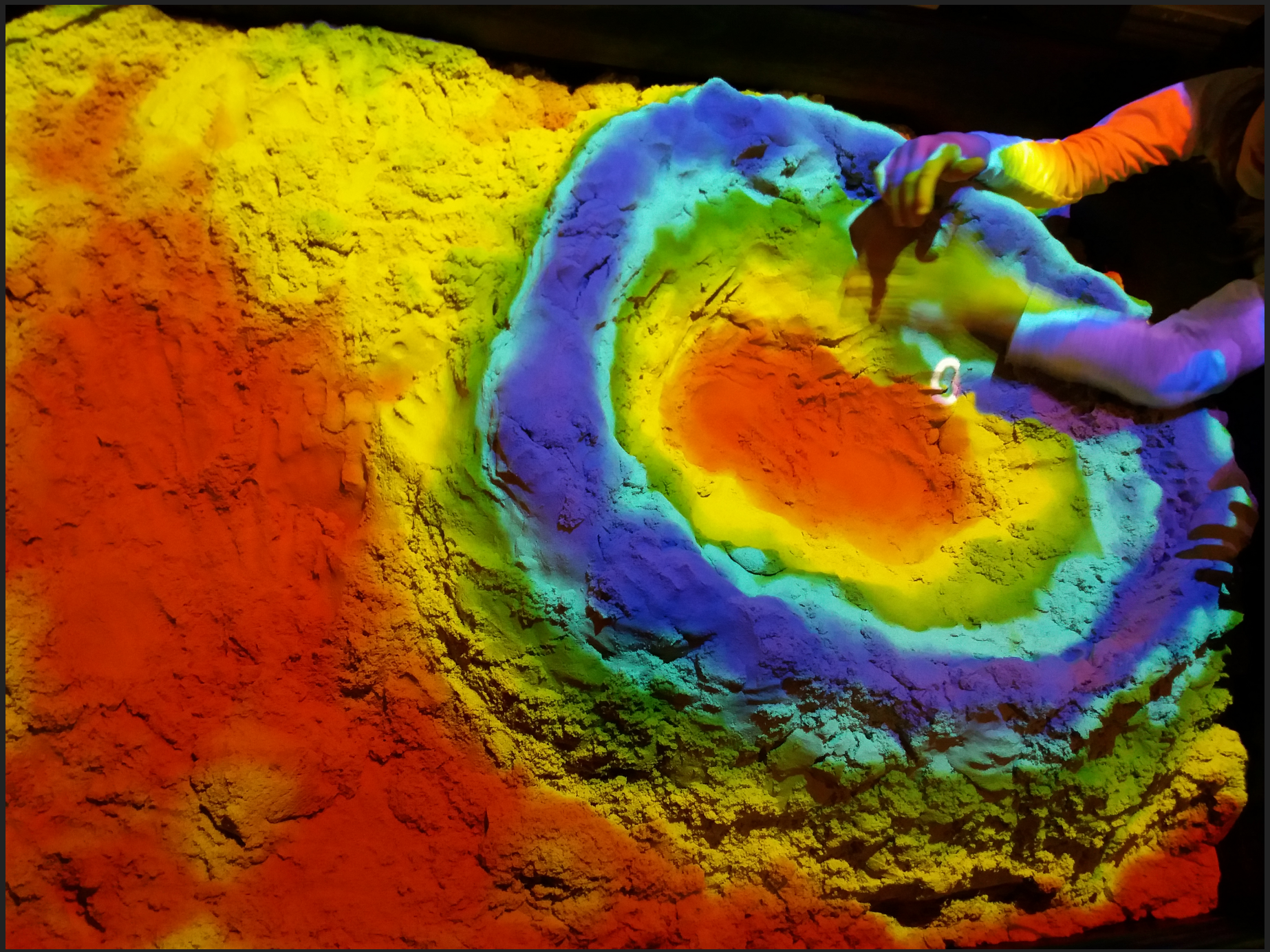




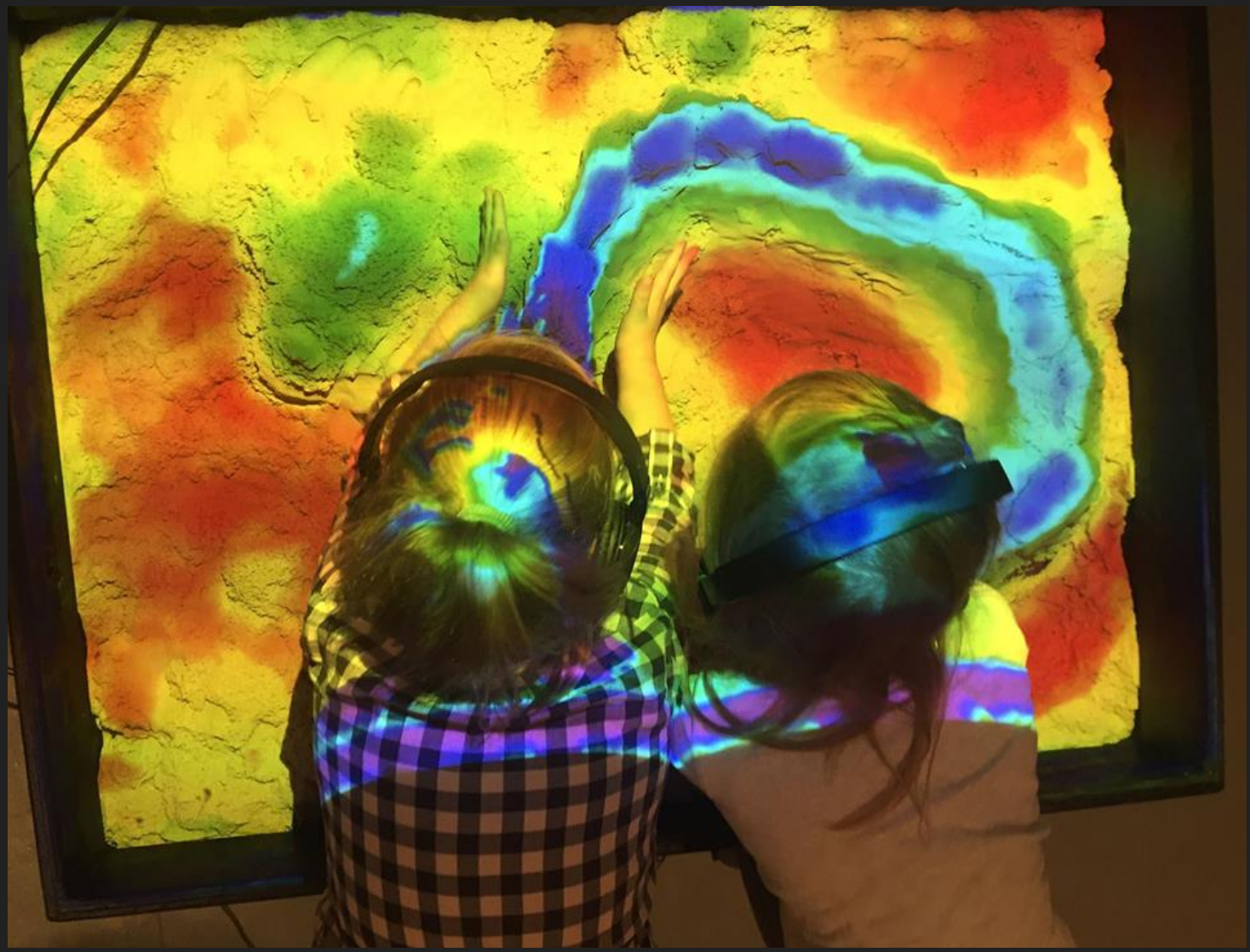
2018



2018



California: Designing Freedom, 10.11. 2017 – 4.3. 2018, Design Museum, Helsinki



Upota sormet sateenkaarenväriseen hiekkamassaan – Designmuseossa on nyt tarjolla itseterapiaa lisätyn todellisuuden hiekkalaatikolla

Designmuseon uudessa näyttelyssä pääsee käsiksi uuteen teknologiaan yllättävässä muodossa.

Virve Rissanen HS

10.11.2017 14:27

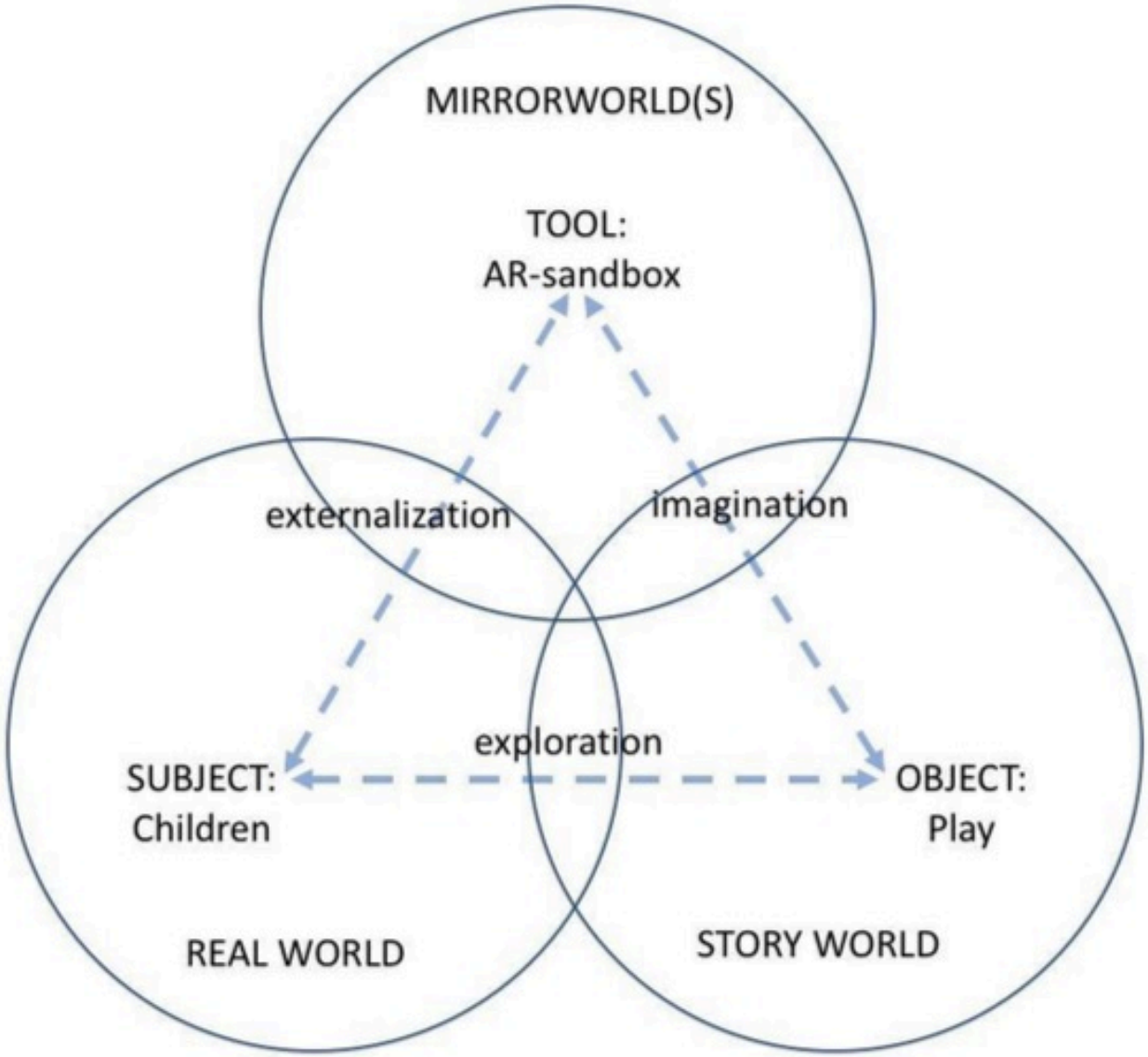
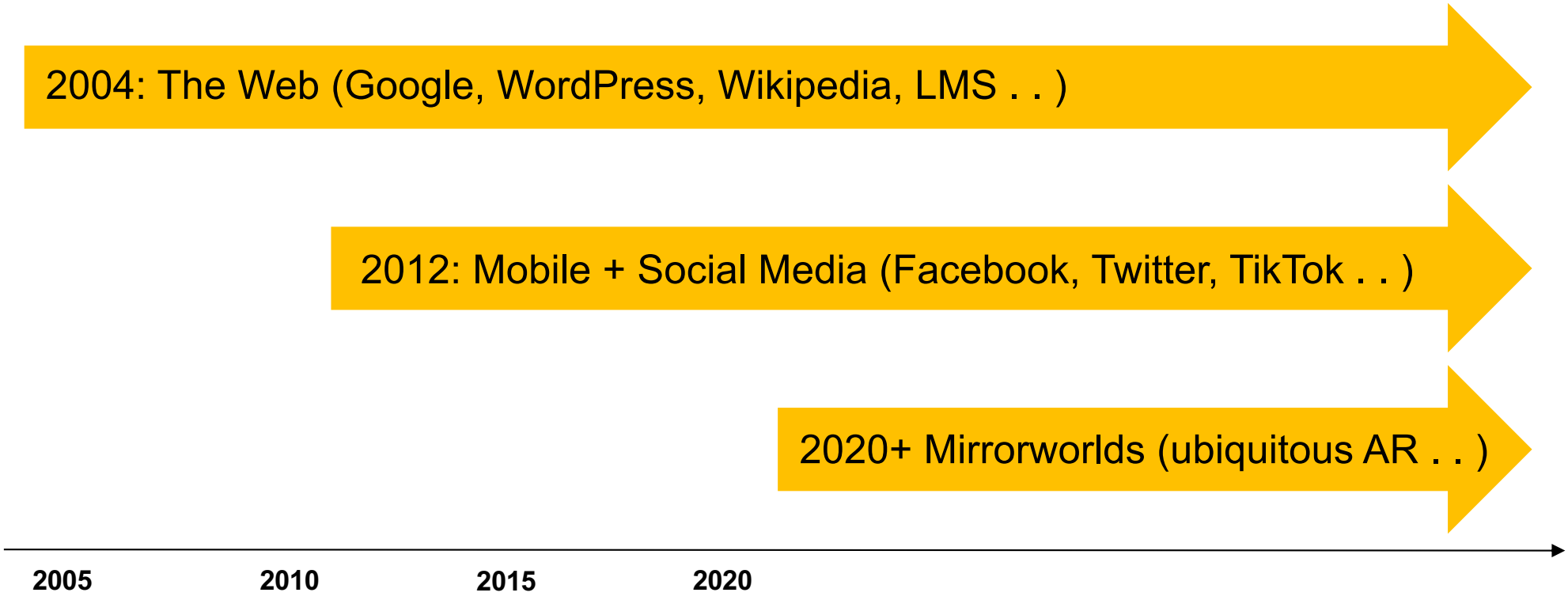


Figure 1: Interplay of child, AR sandbox, and play in the intersection of mirrorworlds, story worlds, and the real world

(Leinonen, Vartiainen, Brinck 2021)

Three generation of digital platforms



(Leinonen, Vartiainen, Brinck, 2021)

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Thank you!

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