

Decoding the Impact

**Accessibility Overlays
through a Scientific Lens**

✨ Accessibility Overlays ✨





Accessibility Menu (CTRL+U)



English (USA) ▶

Accessibility Profiles

- Motor Impaired
- Blind
- Color Blind
- Df Dyslexia
- Visually-impaired
- Cognitive & Learning
- Seizure & Epileptic
- ADHD

XL Oversized Widget



- Screen Reader
- Contrast +
- Smart Contrast
- Highlight Links
- Bigger Text
- Text Spacing

+ Dyslexia

ON OFF

Navigation Adjustment



- Screen Reader Adjustment
- Keyboard Navigation
- Smart Navigation
- Screen Reader Adjustment
- Keyboard Navigation
- Smart Navigation

Adjust Letter Spacing

Default

Align Right

Color Adjustments

- Light Contrast
- High Contrast
- Adjust Text Colors
- Adjust Title Colors
- Adjust Background Colors

Accessibility Adjustments

ENGLISH

Reset Settings Statement Hide Interface

Unclear content? Search in dictionary...

Choose the right accessibility profile for you

- OFF ON Seizure Safe Profile
Clear flashes & reduces color
- OFF ON Vision Impaired Profile
Enhances website's visuals
- OFF ON ADHD Friendly Profile
More focus & fewer distractions
- OFF ON Cognitive Disability Profile
Assists with reading & focusing
- OFF ON Keyboard Navigation (Motor)
Use website with the keyboard
- OFF ON Blind Users (Screen Reader)
Optimize website for screen-readers

Reset Close

Show shortcuts (d)

Page Structure

Visual Toolkit

- Focus
- Cursor
- Highlight
- Contrast
- Color Shift
- Animation
- Text Size
- Spacing
- Font
- Guide
- Window
- Images

AudioEye Trusted Certification

Settings Help

[HOME](#)[BRACELETS](#)

Center stone shape ▾

Collection ▾

Designer ▾

Diamond setting ▾

Gender ▾

Gemstone color ▾

Metal type ▾

Metal color ▾

Price ▾

Featured ▾

SKU 5524421



SWAROVSKI

SWAROVSKI SILVER TONE CRYSTAL BRACELET

\$85.00

SKU SB234FY

SKU SB236FY



TACORI

TACORI OPEN CRESCENT DIAMOND BRACELET

\$990.00

SKU SB234FW

SKU SB236FW



TACORI

TACORI OPEN CRESCENT DIAMOND BRACELET

\$990.00

SKU SB234FP

SKU SB236FP



TACORI

TACORI OPEN CRESCENT DIAMOND BRACELET

\$990.00

SKU FB825EC55X4LDY



**Accessibility Overlays are
simply AMAZING!?**

Decoding the Impact

**Accessibility Overlays
through a Scientific Lens**

Daniela Kubesch **MSc MSc**

(she/her)

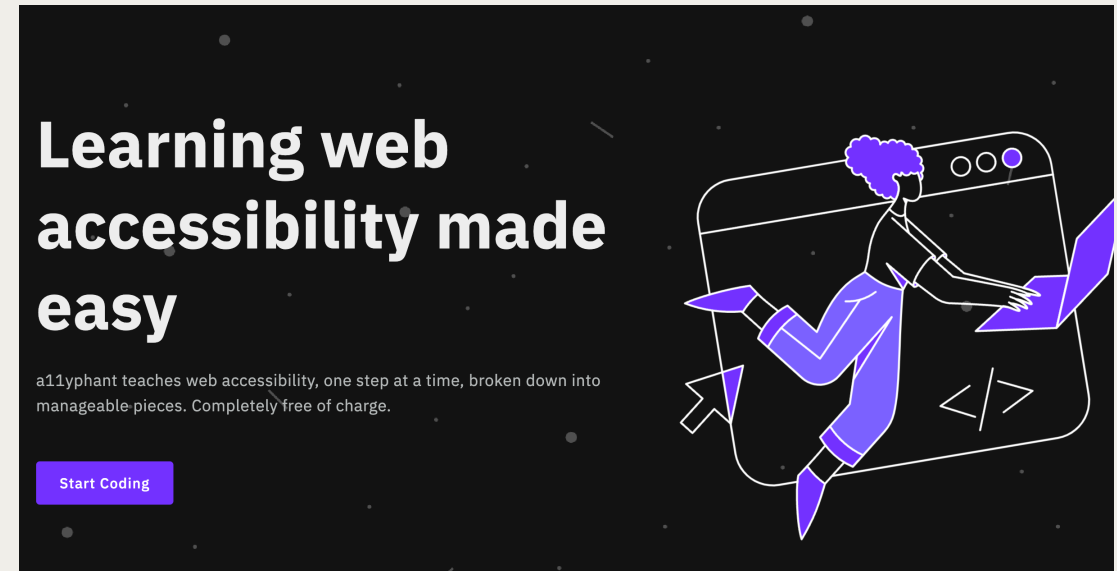
Accessibility Engineer* who is passionate about user experience and inclusive design.

*Coding / Testing / UX Design / Teaching

Studies

Web Engineering [Austria]

Digital Service Innovation [Sweden]

A promotional banner for a11yphant. The background is black with white text and a stylized illustration of a person with a purple afro sitting on a large computer monitor. The person is wearing a purple shirt and pants. The monitor shows a laptop and some code symbols. The text on the banner reads: "Learning web accessibility made easy" in large white font. Below that, in smaller white font: "a11yphant teaches web accessibility, one step at a time, broken down into manageable pieces. Completely free of charge." At the bottom left of the banner is a purple button with the text "Start Coding".

Learning web accessibility made easy

a11yphant teaches web accessibility, one step at a time, broken down into manageable pieces. Completely free of charge.

Start Coding



a11yphant.com

The easy way to learn web accessibility

Study Design

Technical Evaluation

Against WCAG 2.1 AA

User Study

21 individuals with permanent visual impairments

Expert Interviews

2 consultants, 2 company representatives

**In their current state,
accessibility overlays do not
deliver on their promises and
are a disability dongle.***



BUT



**In their current state,
accessibility overlays do not
deliver on their promises and
are a disability dongle.***

***But people with impairments are still optimistic and hopeful
that accessibility overlays will be useful in the future.**



Three Guiding Principles

1.

Do not prioritise some users' experience over the deterioration of others.

26 - 2 (+ 2)

WCAG 2.1 A / AA Violations

Issue

Element Order



Music Festival
07.-24.09.2023



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**COOKIES
AKZEP-
TIEREN**

Issue

Element Order



- **Festival**
- **Future Lab**
- **Kinder/Jugend**
- **News**
- **Service**
- **Kontakt**
- **Über uns**

Suche nach Veranstaltungen oder

SUCHE

Illogical Headings



Martin Brandlmayr Schwaz, Firma Trigonos

Komponist und Perkussionist: Martin Brandlmayr

`span.italic 262.75 x 32.5`

<H3>



- Martin Brandlmayr: ***Dance around the Table.*** 2022, UA, 55'

Martin Brandlmayr (*1971, AUT), Komponist und Perkussionist, Grenzgänger zwischen akustischer und elektronischer Musik, zwischen Notation und Improvisation und Mitglied der Avantgarde-Band Radian, spielt in seinem

Illogical Headings



Music Festival <H1>

Presse <H1>

Sehr geehrte Medienvertreter,

hier finden Sie Presseinformationen, Pressebilder (alphabetisch sortiert) zum Festival und für Ihre Berichterstattung. Darüber hinaus verfügen wir über weitere Pressefotos und senden Ihnen gerne eine Auswahl zu. Alle Bilder sind bei Nennung des Urhebers honorarfrei, solange sie für die Berichterstattung über Schwaz verwendet werden.

Wenn Sie an unseren Presseinformationen interessiert sind, geben Sie uns gerne Ihre Daten bekannt.

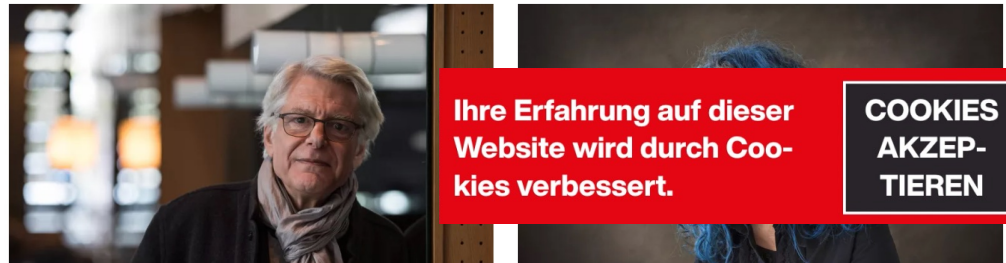
Pressekontakt:

Presseaussendungen <H2>

Schwaz: 31. Festivalausgabe unter dem Motto "Konspirationen"
28.05.2024 | Das Festival steht in diesem Jahr unter dem Motto Konspirationen und will in Zeiten der zunehmenden Polarität den Fokus auf Verbindendes richten. Konspiration lässt sich dabei – im Gegensatz zum landläufigen Verständnis des Begriffes als Aufruf zur Verschwörung – als Inspiration zum kollektiven Erleben verstehen. Programmiert vom künstlerischen Leiter Christof Dienz und "Curating Artist" Eva Reiter.

[-Schwaz-2024---Pressemappe.pdf](#) →

Pressebilder <H2>



Illogical Headings



Music Festival <H1> ←

Presse <H1> ←

Sehr geehrte Medienvertreter, ← <H4>

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Wenn Sie an unseren Presseinformationen interessiert sind, geben Sie uns gerne Ihre Daten bekannt.

Pressekontakt: [redacted] <H4>


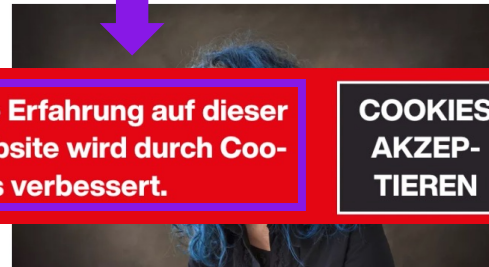
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Schwaz-2024---Pressemappe.pdf → <H4>

Pressebilder <H2> <H3> <H4>

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COOKIES AKZEP-TIEREN

Participant Opinion

“Just because it looks like many elements have now been made accessible doesn't mean it's optimal. If I have one thousand headings, it doesn't really help me to get an overview.”

– Participant T5

Issue

Image Description



A close-up of a cat's face



Issue

Image Description



A group of people in a room



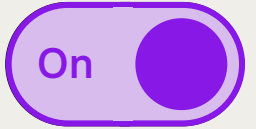
What about improvements?!

Legibility



Issue or Improvement?

Clarity



? role="presentation"

attensam quartett© Barbara Brandstätter

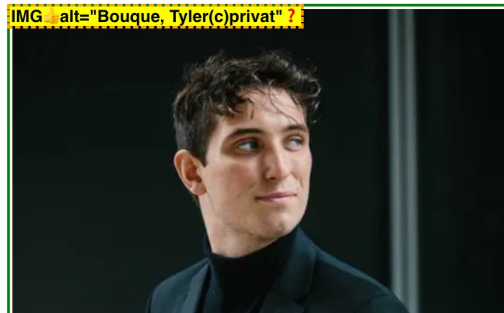
[↓ Herunterladen](#)



? role="presentation"

Bauckholt, Carola (c)Astrid Ackermann

[↓ Herunterladen](#)



“Link, Download”



“Link, This Link Opens
An Image Download”

Do these improvements make it okay to use Accessibility Overlays?

No. Do not prioritise some users' experience over the deterioration of others.

2.

**Nothing about us,
without us!**

~36%

Did not detect an Accessibility Overlay

Issue

Accessibility Overlay Recognition



Opinion

“Is this the symbol for the accessibility overlay?
Such a stick figure does not automatically mean
that it is an overlay, it is just a stick figure.”

– Participant T14

Issue

Terminology

Blind?

Visually Impaired?

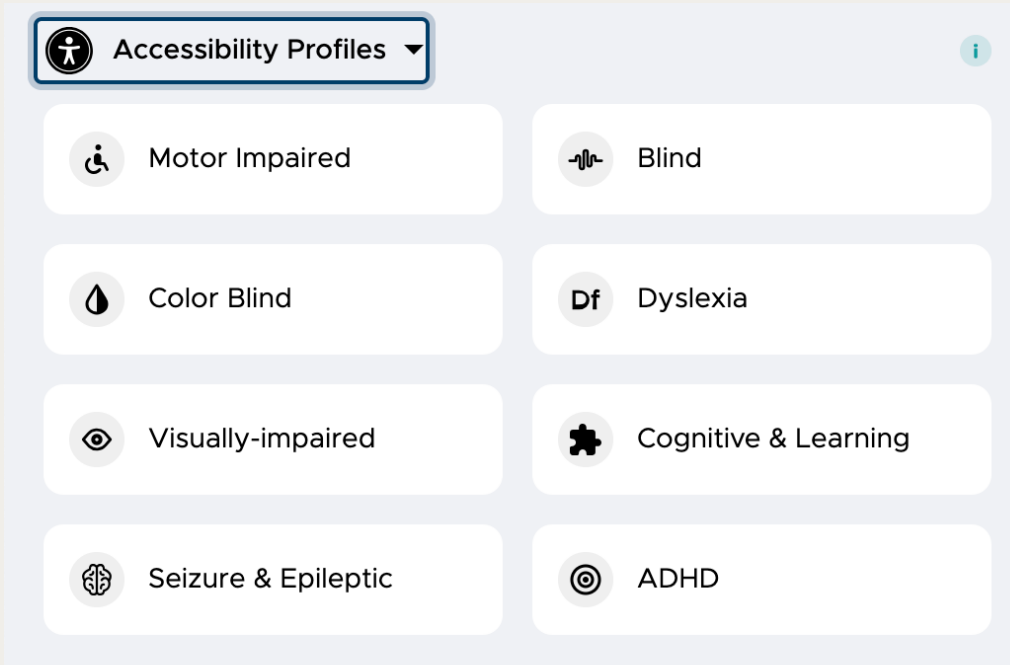
Accessibility?

Approachability?

Issue

Terminology

Impairment Profiles



Opinion

“Do I have to choose a profile now?
What if multiple apply to me?”

– Participant T8

Opinion

“I would have to be very interested in this website to work my way through this.”

– Participant T1

Before

Interaction

After

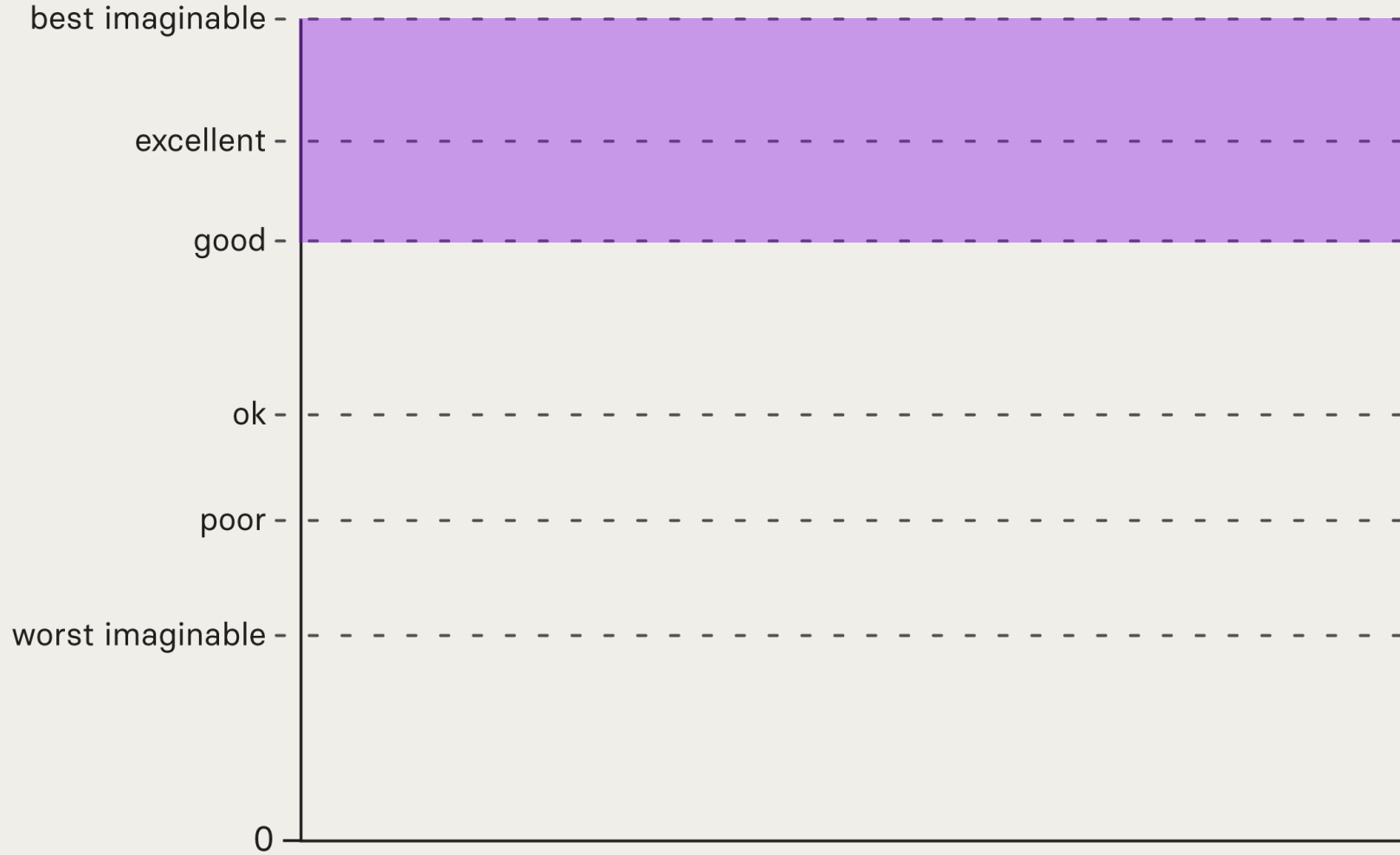
Usability

How effectively, efficiently, and satisfactorily users can achieve their goals.

User Experience

A person's actions, sensations, considerations, feelings, and sense-making before, during and after interaction.

Usability

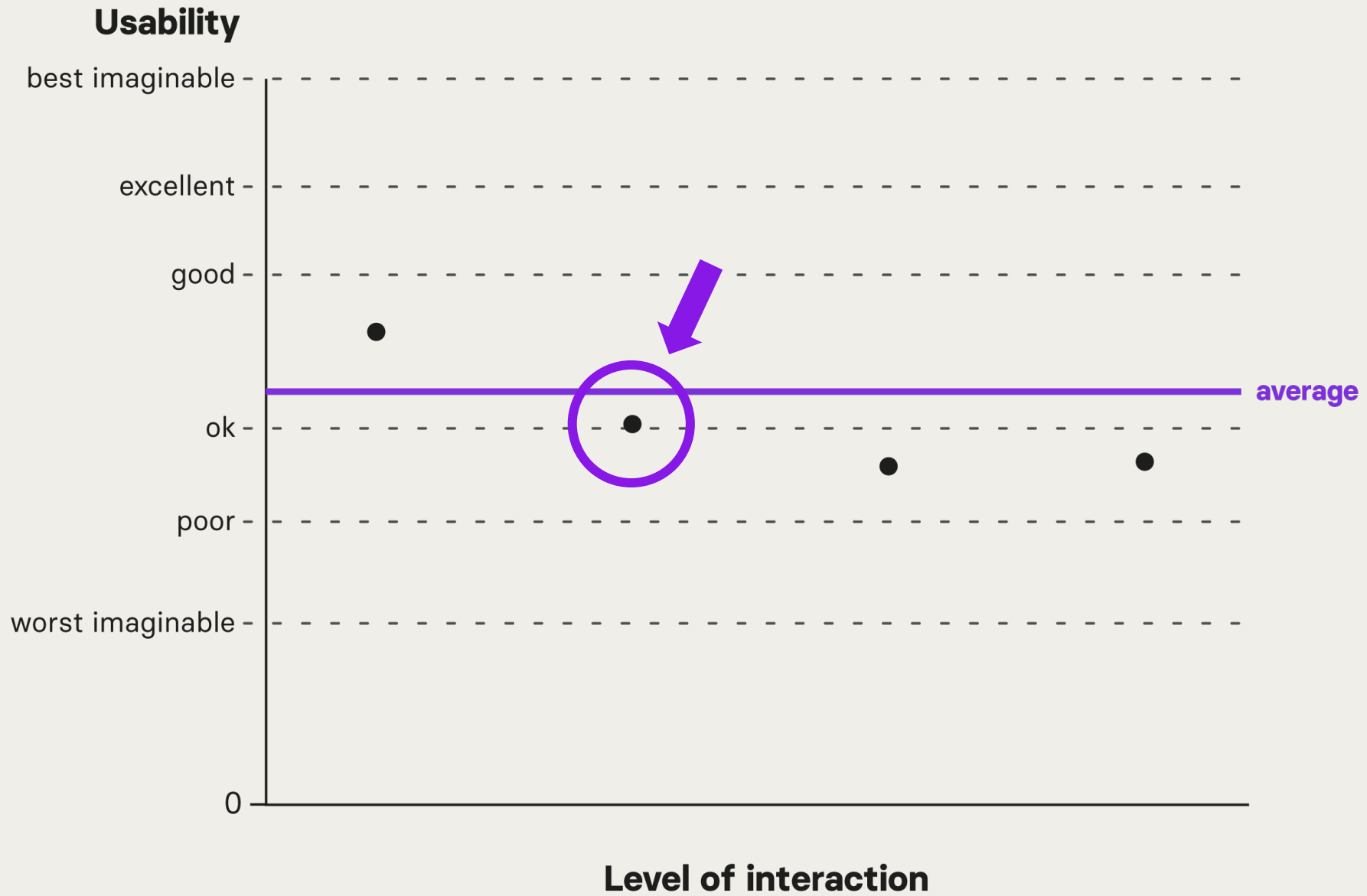


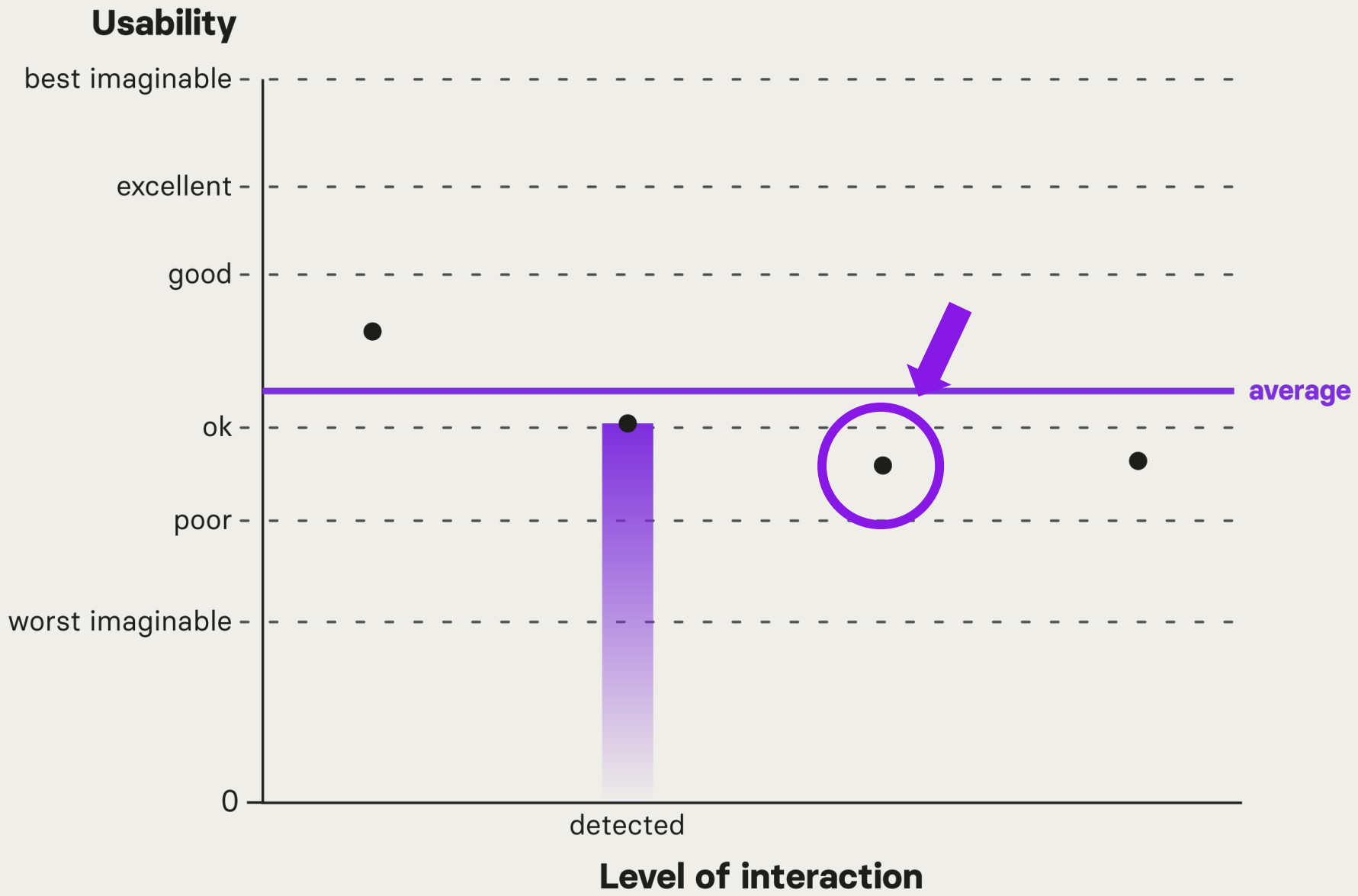
Level of interaction

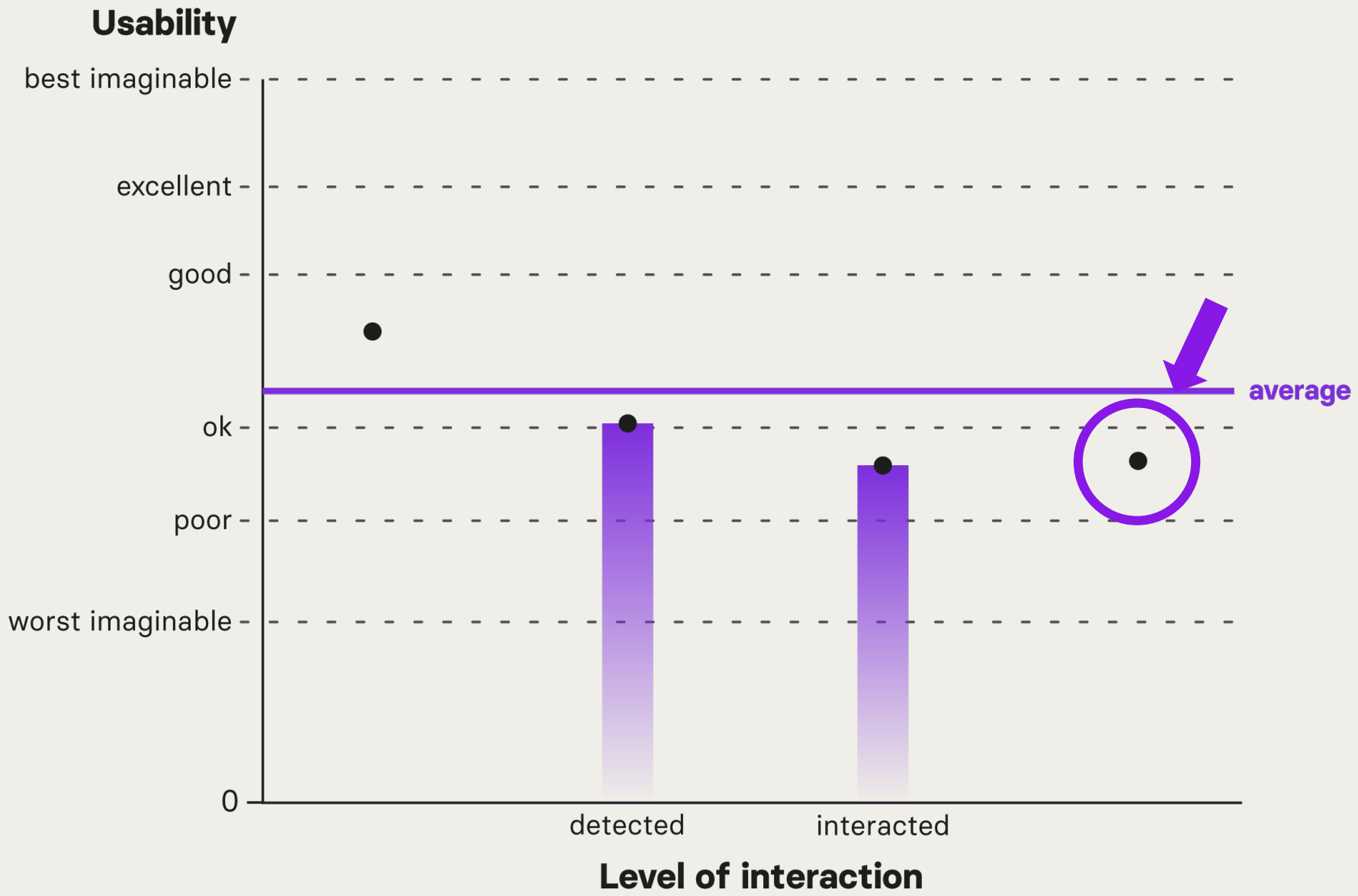
Usability



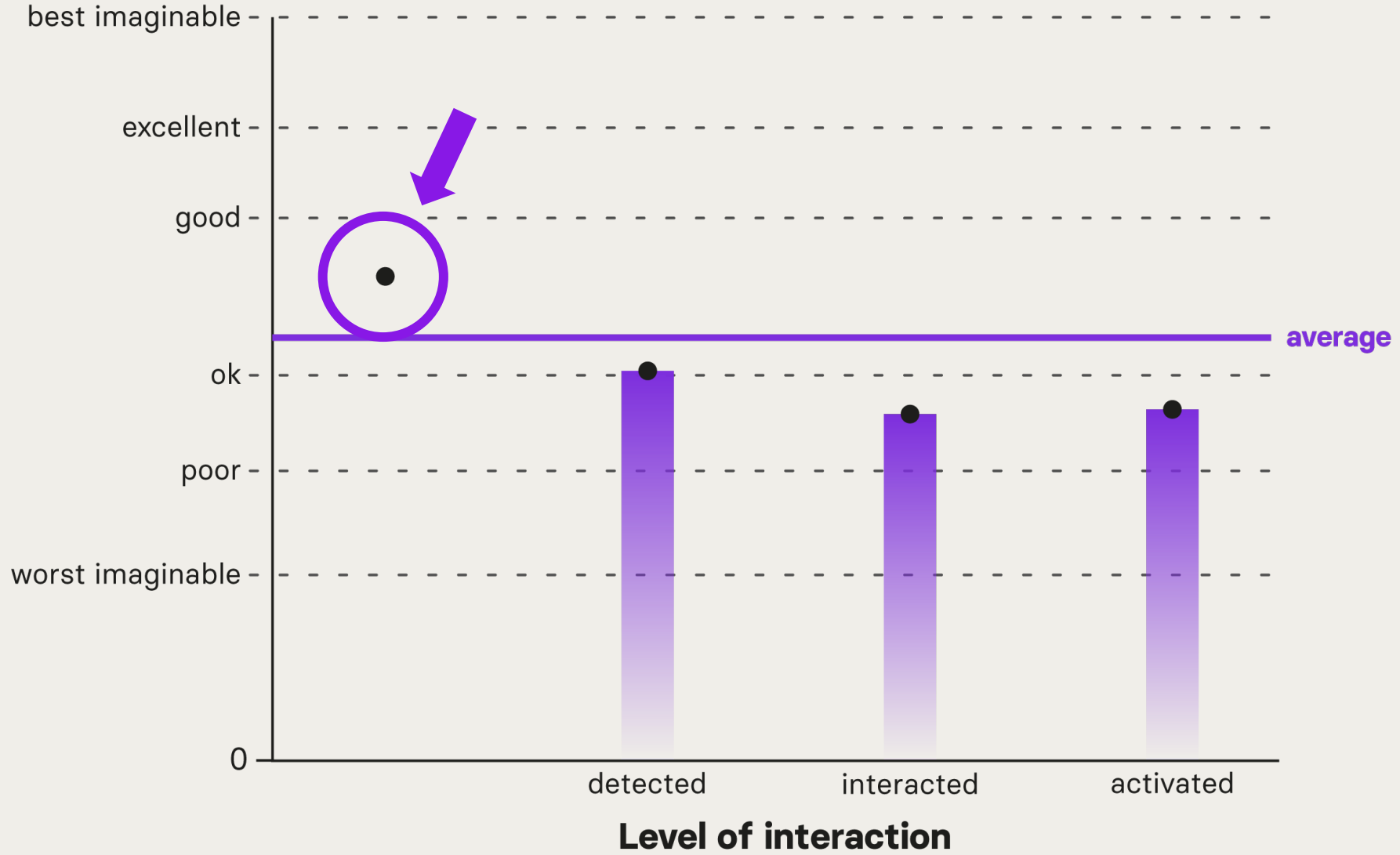
Level of interaction

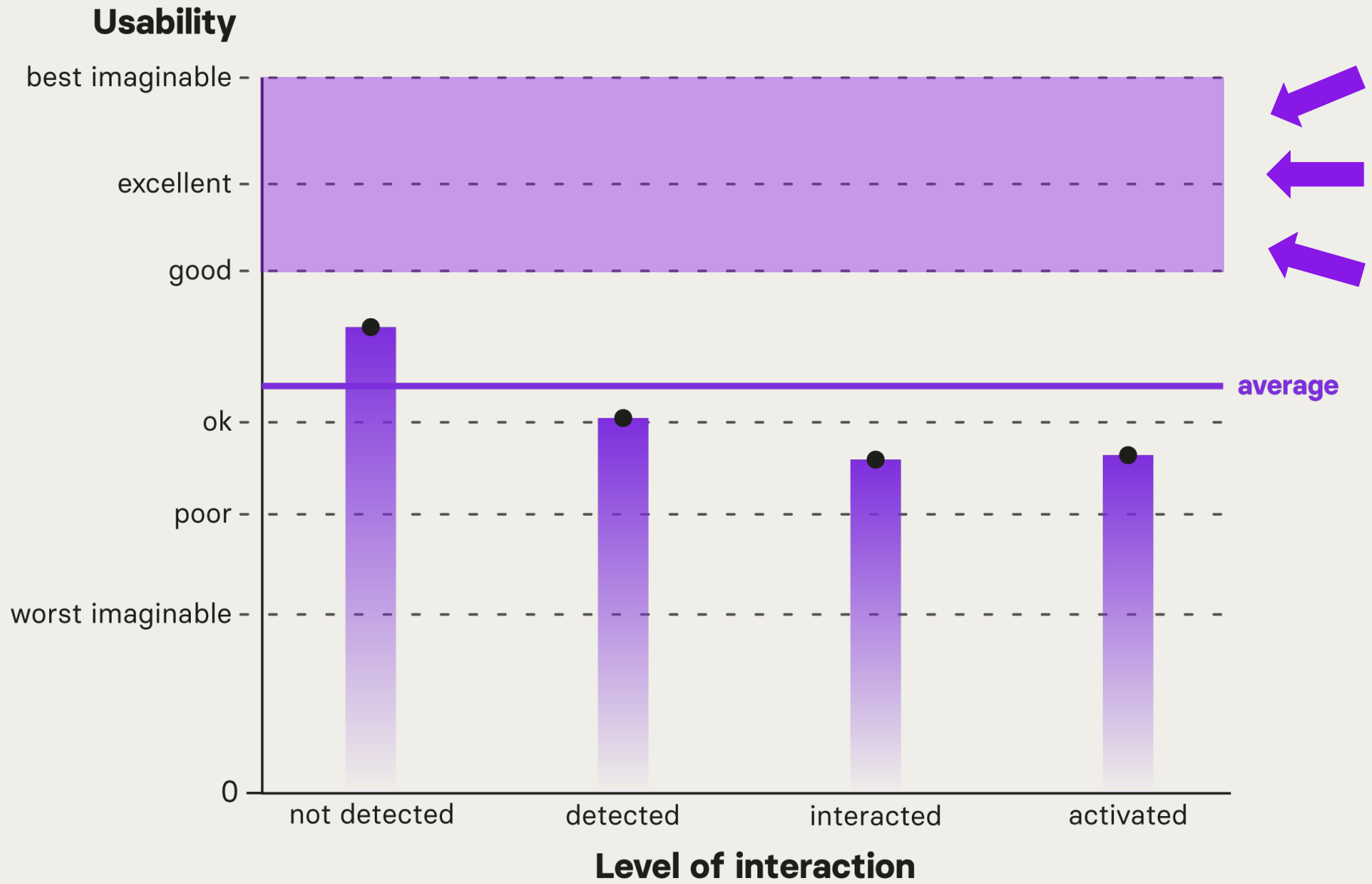






Usability





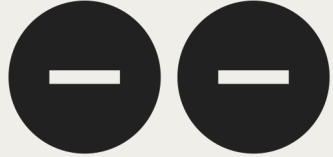
Opinion

“I wonder how such an overlay would really work, how can software do that? [...] A website is such an individual product that I think it's almost impossible to put something clever on top of it.”

– Participant T10

Post-Study

Navigation Preferences



No comment



Browser/System Settings +
Access Device



Opinion

“After a brief investigation, I haven’t found anything suitable for me. When I’m surfing a website, I don’t want to spend half an hour going through a list of what I can activate.”

– Participant T10



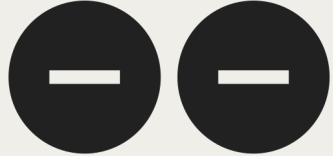
Opinion

“Personally, I prefer to use system and browser options because then it is simply a global setting and does not have to be readjusted from website to website.”

– Participant T11

Post-Study

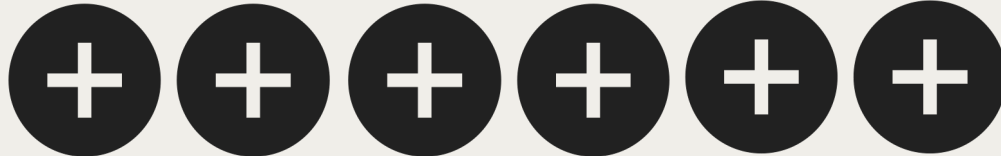
Navigation Preferences



No comment



Browser/System Settings +
Access Device



Browser/System Settings + Access Device
+ Accessibility Overlay



Opinion

"I have set my accessibility settings so that it works for me. But when navigating websites, I sometimes change these settings or use accessibility overlays because then I don't have to change my system settings again when I go to another website."

– Participant T21



Opinion

“For example, if I’m in a hotel on someone else’s computer, I can imagine using the accessibility overlay [...] but I think I’ll fail because not everything is so intuitive. However, it’s probably better than nothing. But I don’t see any point in using it on my computer now.”

– Participant T4



Opinion

“If I’m only looking for a single piece of information then it would be too complicated for me to take an extra look at the accessibility overlay. But if there’s an accessibility overlay on a site that I use often, then I’d be up for it straight away if the website itself isn’t quite optimal yet.”

– Participant T8


Post-Study

Navigation Preferences

 No comment

 Browser/System Settings +
Access Device

 Browser/System Settings + Access Device
+ Accessibility Overlay

 Accessibility Overlay



Opinion

"I would like it if [the accessibility overlay] was on every website. That would be a help. I could imagine that. Then I can also make settings quickly on other devices. You're not necessarily always on the same device."

– Participant T2

Disclaimer: This participant has never noticed an accessibility overlay on any of the websites.


Post-Study


Navigation Preferences

  No comment

           Browser/System Settings +
Access Device

      Browser/System Settings + Access Device
+ Accessibility Overlay

 Accessibility Overlay

 Unsure



Opinion

“It always depends on how much energy I have and what I have planned for the rest of the day. Sometimes it’s just too hard for me to click through and search, especially if every accessibility overlay is different. Then I’m also disappointed when I stumble across one that doesn’t work so well.”

– Participant T14

**Individuals with impairments
must be incorporated into the
design, development and
decision process.**

Opinion

“Maybe I’m just not very experienced, but then [Accessibility Overlays] have to be so good that I can use them intuitively and don’t have to take an extra course to be able to use them.”

– Participant T18

3.

**The debate about
Accessibility Overlays should
not only exist in a vacuum.**

why?

Result

In Favor of Accessibility Overlays

1. Positive response bias
2. Strong desire to explore new solutions
3. Desire for access

What can we do?

The Different Discourses

The **legal** discourse

The **web accessibility** discourse

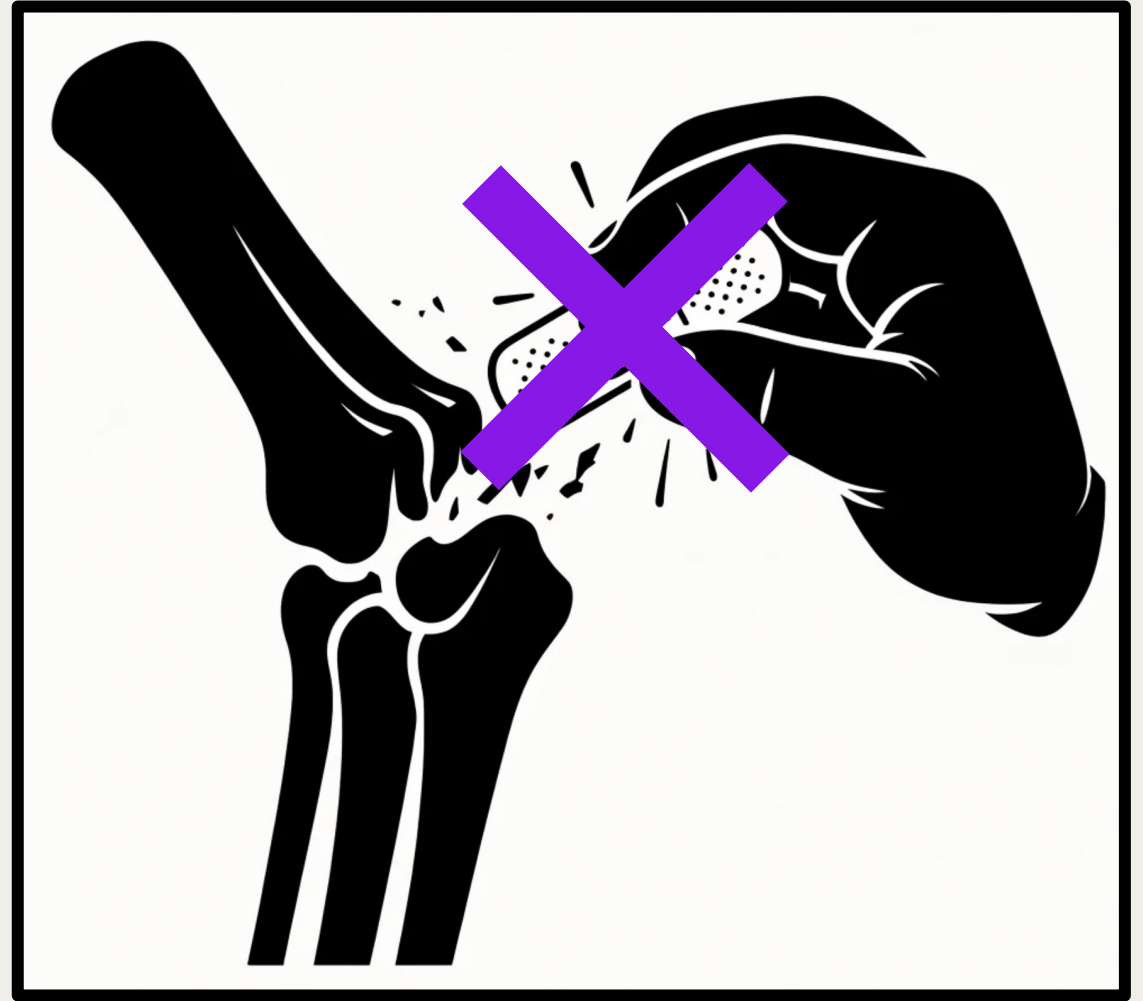
The **digital divide** discourse

The **social construction of disability** discourse

It is the responsibility of society to ensure that the internet and web are accessible.

While there may be a general desire for a more equal and fair society, the deeper social and cultural structures that contribute to inequality are often overlooked.

Summing up.



- 1. Do not prioritise some users' experience over the deterioration of others.**
- 2. Nothing about us, without us!**
- 3. The debate about Accessibility Overlays should not only exist in a vacuum.**

Find me on

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Thanks to



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Scaling digital accessibility

CAAT..REPORT