

We will get started at 3:15 (just this time!)

1 - Video Game

Well behaved. Violent / non-violent.
Short. Can be inexpensive (\$7) and
played on your phone.

1.1 - In-Class Discussion with grade

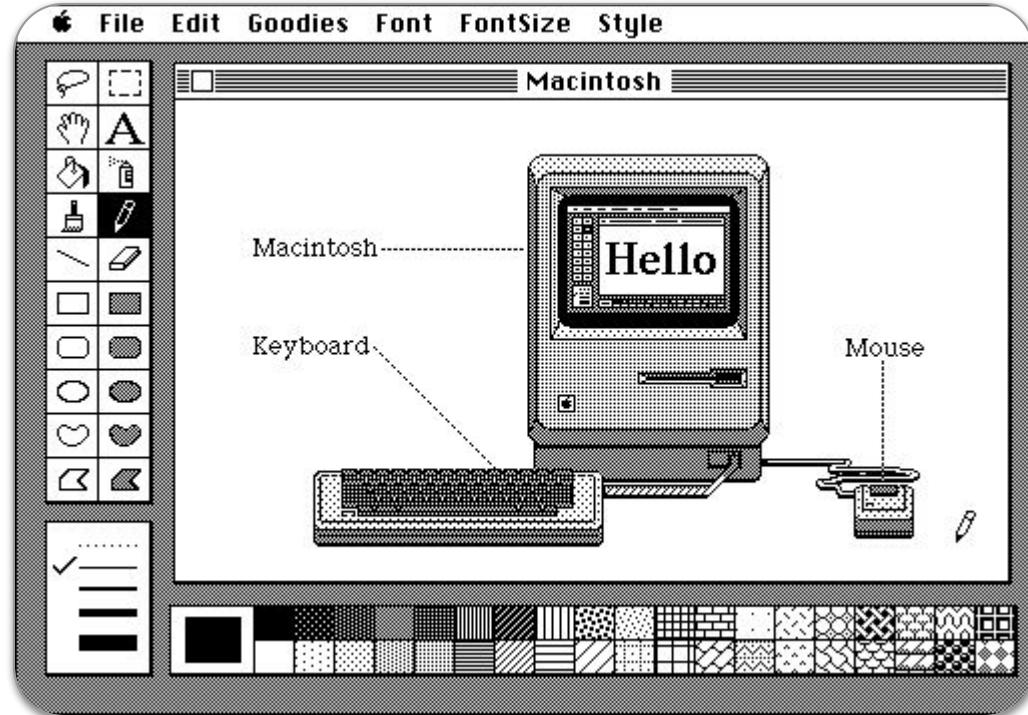
1.2 - Zoom Discussion with grade
(will be on a Friday 3pm)

2 - Essay

4 different interactive
visualizations with 4 sentence
response to each prompt.

No cost, browser only needed.

Tell me which option, which game, and which discussion via Zulip!



The Reader as User

A Samuel Pottinger
Stat 198: IDSV
Mar 19, 2025

Why formalize the role of the user?

Today I want to identify **different ways of thinking** about the role of the user as lenses that you can use to understand your design.

Seeing your visualizations from **multiple perspectives** can help your pieces be more successful.

Today

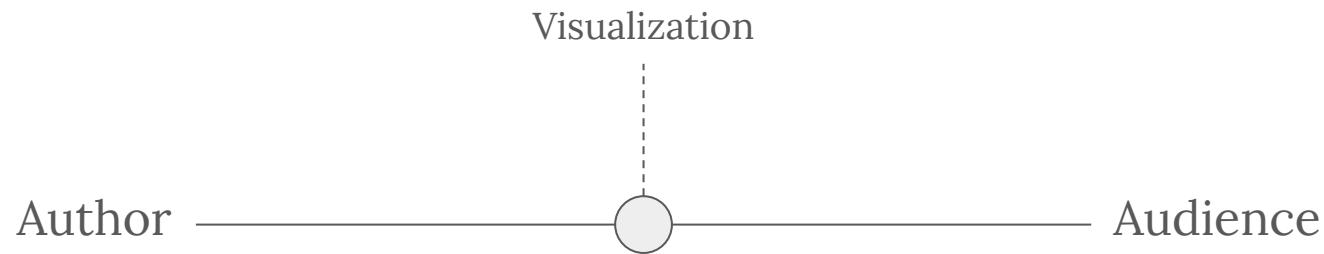
> **Audiences:** interrogating our lenses.

Group activity: examine an interactive data visualization.

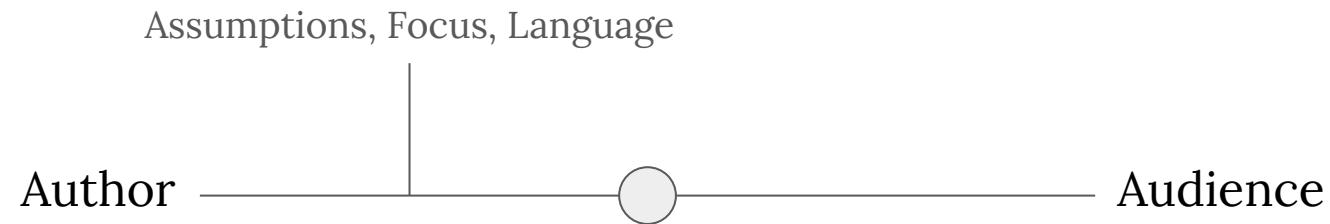
Waves of HCI: affordances and ergonomics, dialogue, context.

Something else: games and media for thought.

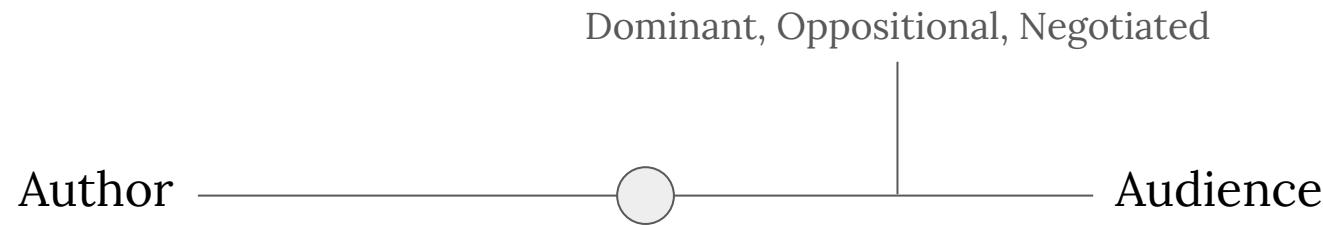
Audiences



Audiences



Audiences



Stuart Hall: Reception Theory

Today

Audiences: interrogating our lenses.

> **Group activity:** examine an interactive data visualization.

Waves of HCI: affordances and ergonomics, dialogue, context.

Something else: games and media for thought.

Review a data visualization



<https://www.theguardian.com/us-news/2022/mar/13/how-covid-shook-the-us-charts-graphs>

- Dominant reading
- Oppositional reading
- Negotiated reading

Today

Audiences: interrogating our lenses.

Group activity: examine an interactive data visualization.

> **Waves of HCI: affordances and ergonomics, dialogue, context.**

Something else: games and media for thought.

What is the user?

Wave 1

Ergonomics

Wave 2

Information

Wave 3

Context



What is the user?

Wave 1

Ergonomics

Wave 2

Information

Wave 3

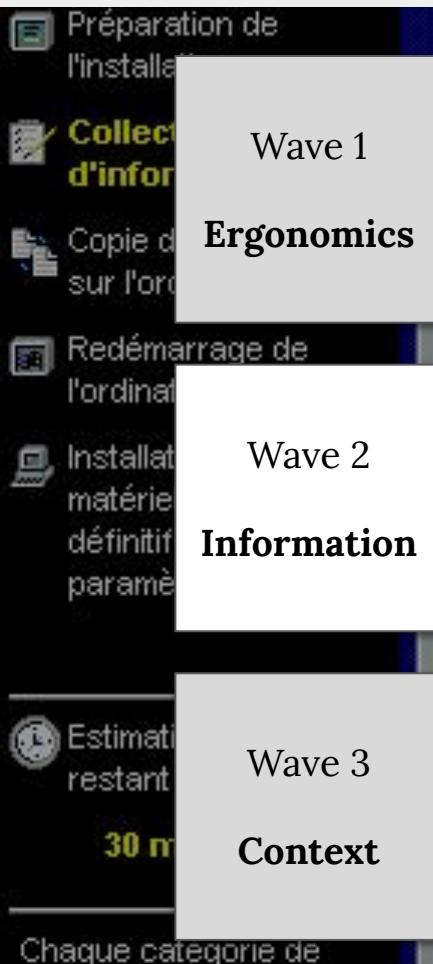
Context



What is the user?



What is the user?



Assistant Installation de Windows 98

Sélection des composants

Pour ajouter ou supprimer un composant, cliquez sur la case à cocher lui correspondant. Si cette case est griseée, le composant ne sera installé que partiellement. Pour voir ce qui est inclus dans un composant, cliquez sur Détails.

Composants :

<input checked="" type="checkbox"/> Accessibilité	4,6 Mo
<input checked="" type="checkbox"/> Accessoires	1,4 Mo
<input checked="" type="checkbox"/> Carnet d'adresses	1,7 Mo
<input checked="" type="checkbox"/> Communications	9,6 Mo
<input checked="" type="checkbox"/> Multimédia	11,4 Mo
<input checked="" type="checkbox"/> Outils Internet	11,4 Mo
<input checked="" type="checkbox"/> Outils système	7,7 Mo

Description

Contient des accessoires permettant de vous connecter à d'autres ordinateurs et services en ligne.

8 composants sélectionnés sur 9

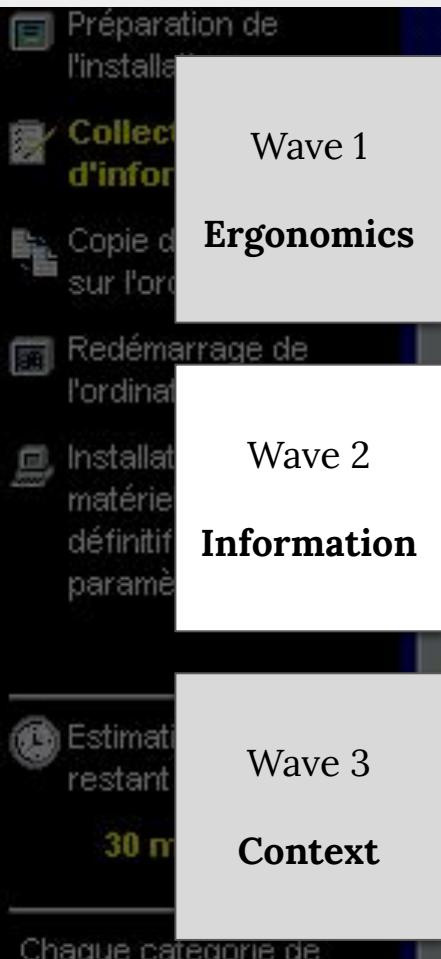
Espace nécessaire pour l'installation : 338,3 Mo

Espace disponible sur le disque : 8158,3 Mo

[Détails...](#)

[Réinitialiser](#)

What is the user?



What is the user?

Overview + Add new

Task name

Recurrent pieces

Considerations

Content

Add task...

New forms

Work-life balance blog post

Add agenda

Create

Editor

PDF P

Press

Wave 1

Ergonomics

Wave 2

Information

Wave 3

Context

Add task...

1

2

Set status

Edit project details

Set color & icon

Copy project link

Save layout as default

Duplicate

Save as template

Add to Portfolio

Import

Export/Print

Move to another team

Archive

Delete project

Incomplete tasks

Filter

Sort

Public to web: On

Customize

Alejandro L... 1 Nov

Blake Pham 17 Dec Med priority 20%

SUM 20%

Alejandro L... 2 Oct Med priority

Daniela Var... 19 Sep – 12 Oct Med priority

Nicole Kap... 6 May, 2021 – 1 Nov, 2022 Low priority 5%

Blake Pham 16 Dec Med priority 10%

Blake Pham 11 Dec Low priority

Alejandro L... 30 Nov Med priority

SUM 15%

Share

Search

+

8

Public to web: On

Customize

What is the user?

1

Wave 1
Ergonomics

Recurrent pieces

Wave 2
Information

New forms

Work-life balance blog post

Add agenda

Create

Editor

PDF PDF

Press

2

Global 2050 Plastics Projections

Mismanaged Waste 120.9 Million Metric Tons

Incinerated Waste 167.9 Million Metric Tons

Landfill Waste 270.9 Million Metric Tons

Gross GHG 3348.1 Million Metric Tons

Policies

- High > Reduction in Single Use Packaging
- 90 > % Reduced Additives
- Ban Polystyrene Packaging
- Ban Waste Trade
- Cap to 2020 Virgin Production
- 40 > % Min Recycle Collection Rate
- 80 > % Packaging Reuse / Life Extension
- 40 > % Min Recycled Content
- High > Packaging Consumption Tax
- 100 > Billion USD for Plastic Recycling
- 50 > Billion USD for Waste Infrastructure
- Custom

Add Save Load Share Reset

Customize Details Export CSV

Global Annual Rate of Mismanaged Waste as Million Metric Tons

Year	Mismanaged Waste (Mt)
2011	~40
2016	~50
2021	~55
2036	~80
2046	~100
2050	~120

Explore detailed projections

SUM 15%

Today

Audiences: interrogating our lenses.

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> **Something else:** games and media for thought.

Media for thought

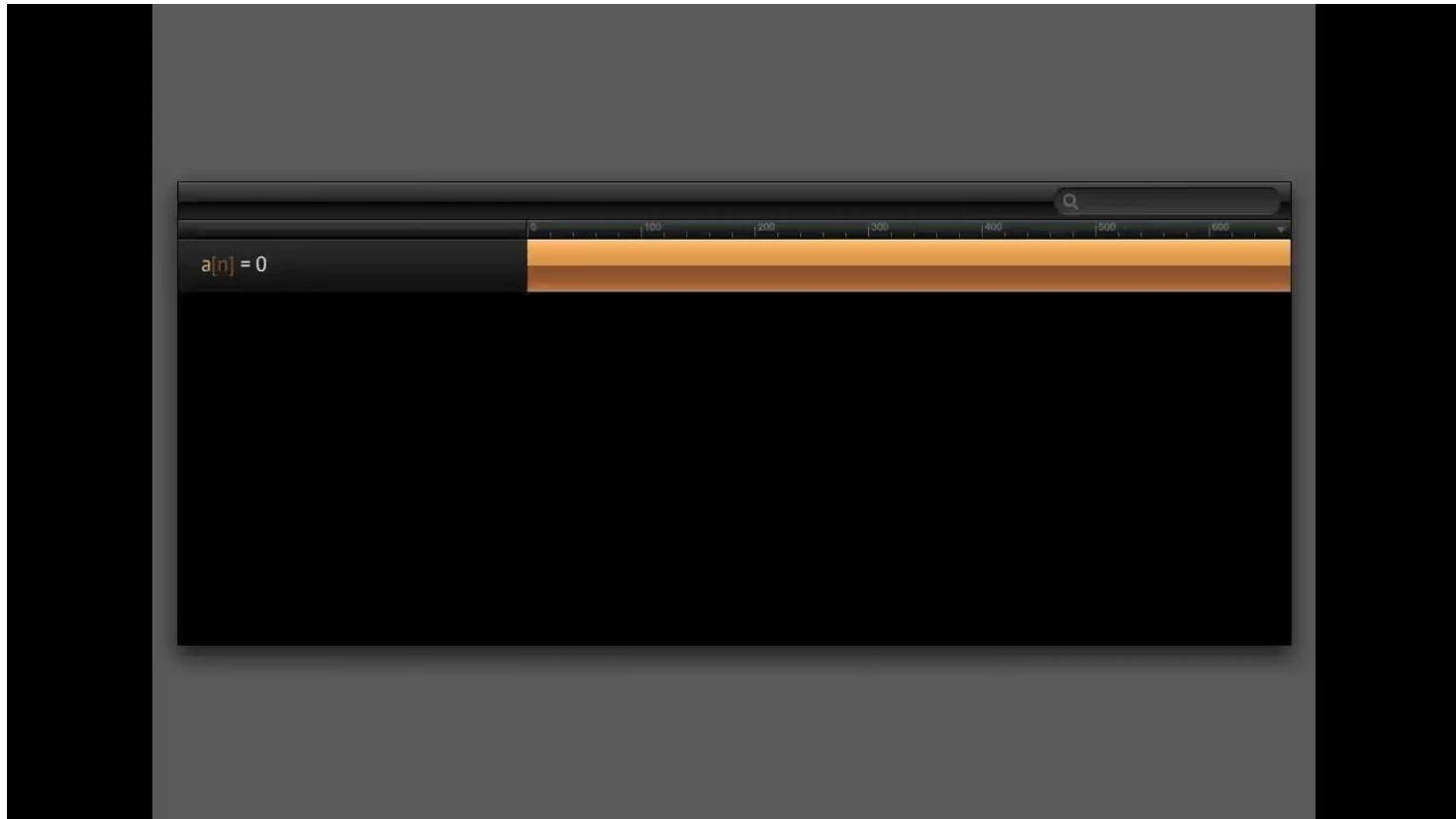
What is the square which when taken with ten of its roots will give a sum total of thirty nine? Now the roots in the problem before us are ten. Therefore take five, which multiplied by itself gives twenty five, an amount you add to thirty nine to give sixty four. Having taken the square root of this which is eight, subtract from this half the roots, five leaving three. The number three represents one root of this square, which itself, of course is nine. Nine therefore gives the square.

Media for thought

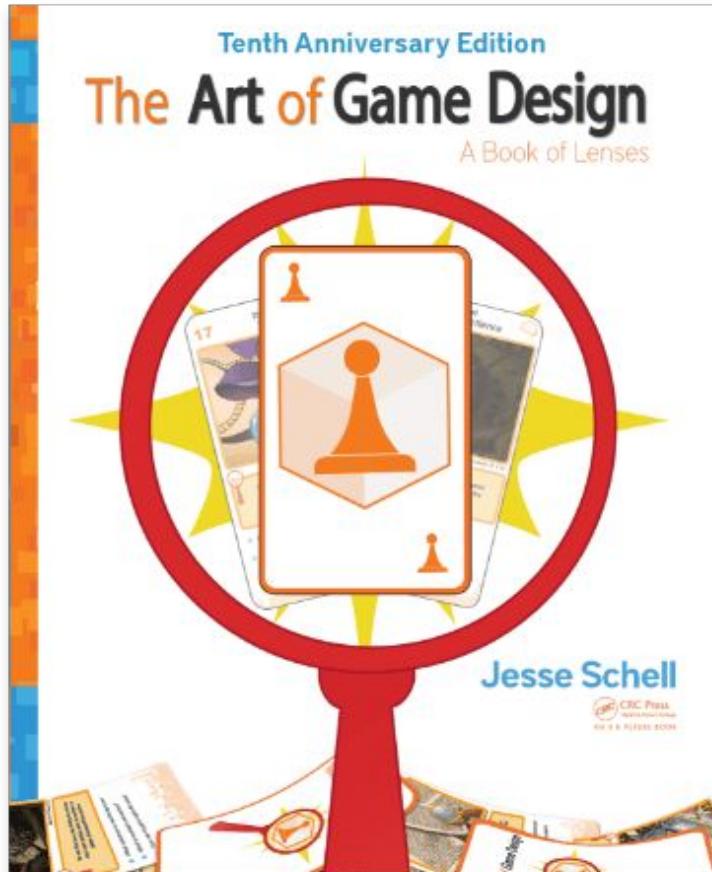
What is the square which when taken with ten of its roots will give a sum total of thirty nine? Now the roots in the problem before us are ten. Therefore take five, which multiplied by itself gives twenty five, an amount you add to thirty nine to give sixty four. Having taken the square root of this which is eight, subtract from this half the roots, five leaving three. The number three represents one root of this square, which itself, of course is nine. Nine therefore gives the square.

$$x^2 + 10x = 39$$

Media for thought



Games



Games as a co-created experience between the player and piece of technology / designer.

Games



Recap

What is the user within data visualization?

- A robot which interprets through a mechanical system.
- A conversation with a series of questions for which a series of learnings complete a task.
- An entity with thought interpreting the work through a series of personal and cultural lenses within a social system.
- A co-creator of meaning, using the work as a way to think new thoughts and create sometimes uniquely individual experiences.

Recap

What does this mean?

- Make it clear how a data visualization should be used and fine tune the mechanisms through which a person “mechanically” interacts.
- Think about the flow of a user (user loops) and how we support a series of questions or tasks.
- Critically interrogate the context of this visualization and how it may interact with the graphic.
- Create spaces that can be activated by the user to see, feel, do, and think new things.

Citations

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- J. Tong, "Diagrammatic thinking and audience reading of COVID-19 data visualisations: A UK case study," Convergence, 2024. doi: [10.1177/13548565241309886](https://doi.org/10.1177/13548565241309886).
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