

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

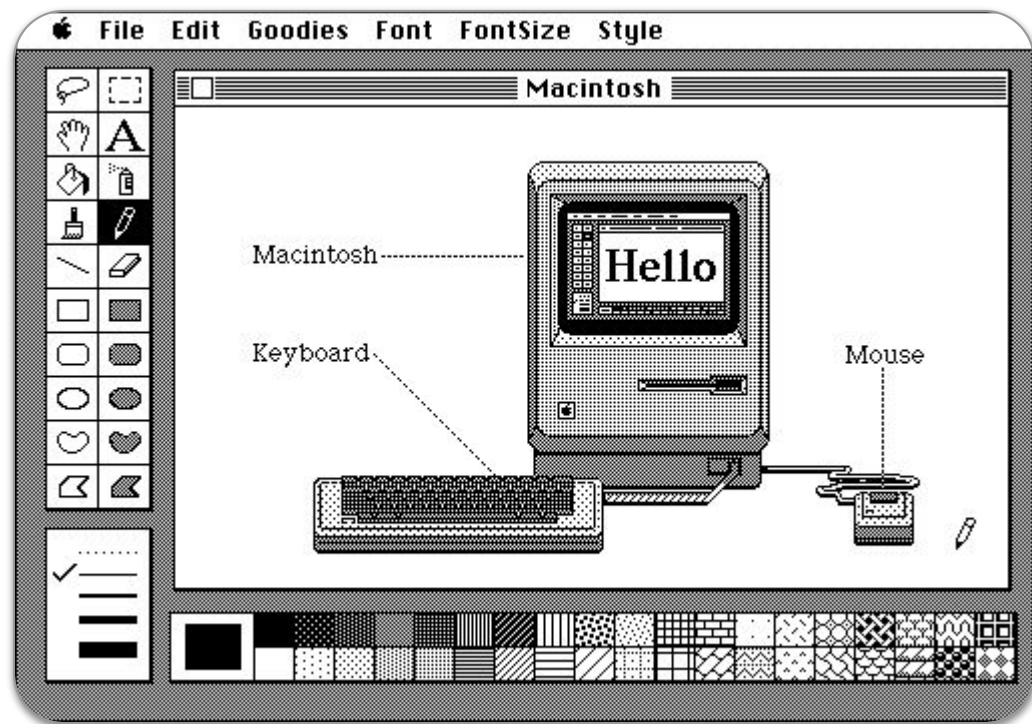
1.2 - Zoom Discussion with grade
(will be on a Friday 3pm)

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.

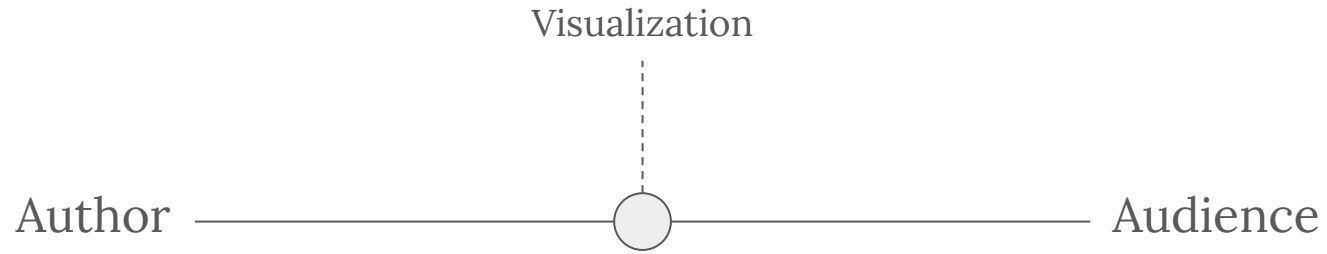
> Audiences: interrogating our lenses.

Group activity: examine an interactive data visualization.

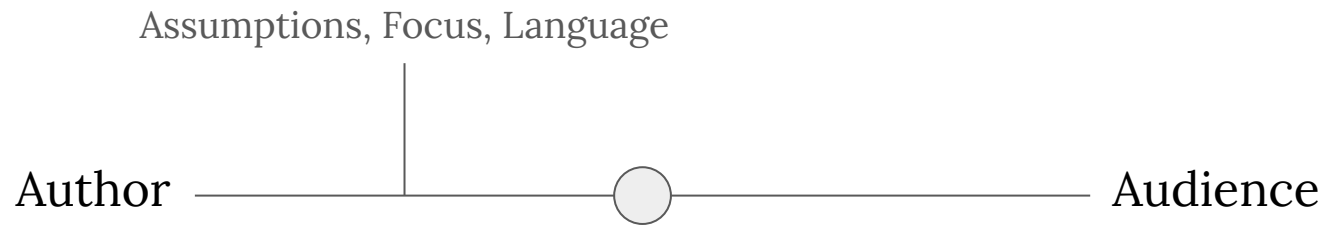
Waves of HCI: affordances and ergonomics, dialogue, context.

Something else: games and media for thought.

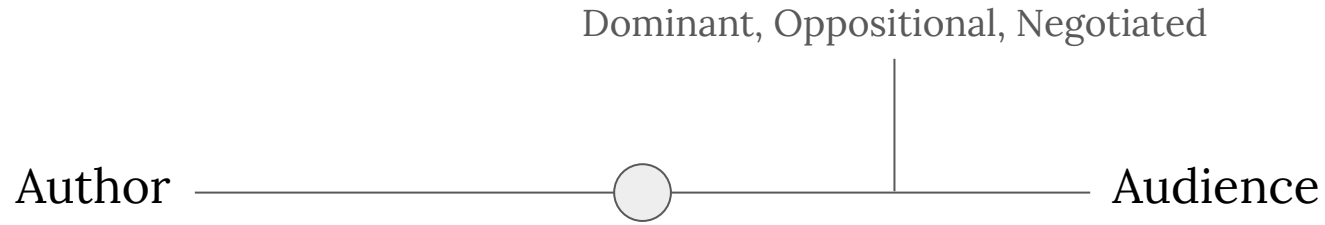
Audiences



Audiences



Audiences



Stuart Hall: Reception Theory

Today

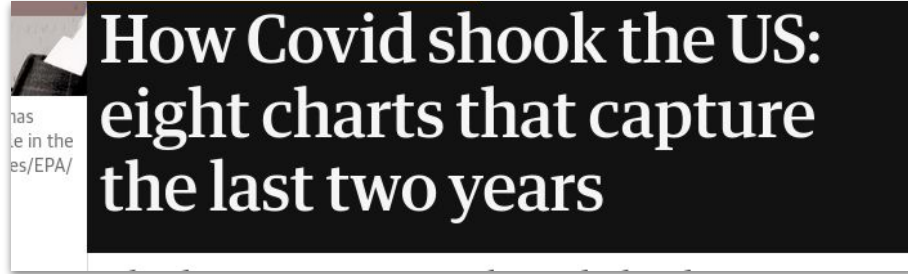
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Review a data visualization



<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?

Wave 1

Ergonomics

Wave 2

Information

Wave 3

Context

Fuel Standards from 1978 to 1985

27.5 mpg ECPA target



0.0 mpg

What is the user?

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Context



What is the user?

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What is the user?

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Context

The screenshot shows a project management tool interface. A context menu is open over a task list, displaying options such as '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', and 'Delete project'. The task list includes columns for 'Task name', 'Due date', 'Tags', 'Projects', 'Completion ...', and 'Dependencies'. Tasks are listed with names like 'Alejandro L...', 'Blake Pham', 'Daniela Var...', and 'Nicole Kap...', along with due dates and priority levels (e.g., 'Med priority', 'Low priority'). A summary row shows 'SUM' with a completion percentage of 20%.

Task name	Due date	Tags	Projects	Completion ...	Dependencies
Alejandro L...	1 Nov				
Blake Pham	17 Dec	Med priority		20%	
SUM				20%	
Alejandro L...	2 Oct	Med priority			PDF Proofing
Daniela Var...	19 Sep – 12 Oct	Med priority			Rewrite blog post
Nicole Kap...	6 May, 2021 – 1 Nov, 2022	Low priority		5%	Write blog post
Blake Pham	16 Dec	Med priority		10%	
Blake Pham	11 Dec	Low priority			Rew... Wor...
Alejandro L...	30 Nov	Med priority			
SUM				15%	

What is the user?

Wave 1

Ergonomics

Wave 2

Information

Wave 3

Context

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

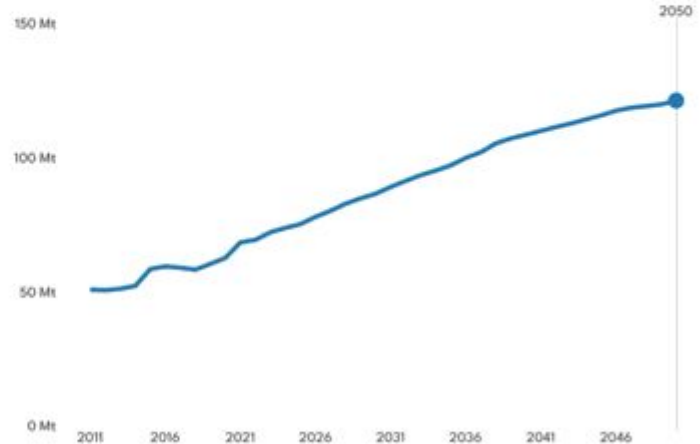
Policies

- ☐ Reduction in Single Use Packaging ⓘ
- ☐ % Reduced Additives ⓘ
- ☐ Ban Polystyrene Packaging ⓘ
- ☐ Ban Waste Trade ⓘ
- ☐ Cap to 2020 Virgin Production ⓘ
- ☐ % Min Recycle Collection Rate ⓘ
- ☐ % Packaging Reuse / Life Extension ⓘ
- ☐ % Min Recycled Content ⓘ
- ☐ Packaging Consumption Tax ⓘ
- ☐ Billion USD for Plastic Recycling ⓘ
- ☐ 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 ⓘ



Explore detailed projections

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.

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

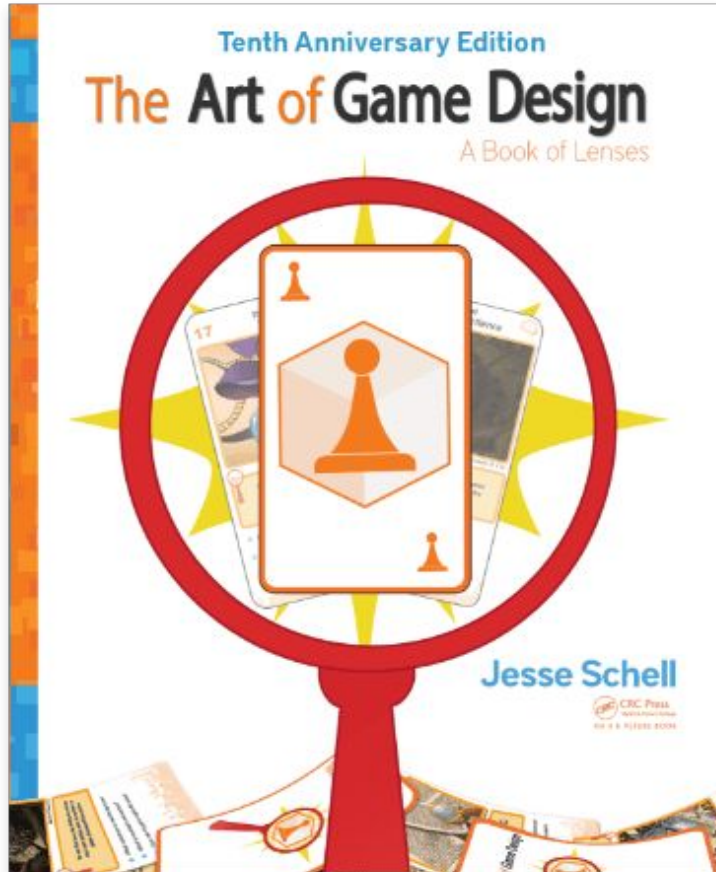
What is the square which when taken with ten of its roots will give a sum total of thirty nine? Now the roots in the problem before us are ten. Therefore take five, which multiplied by itself gives twenty five, an amount you add to thirty nine to give sixty four. Having taken the square root of this 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.



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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