Ethics

A Samuel Pottinger
Stat 198: IDSV
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Today

> Lenses on the World

Encodings

Possibility Space (Action)

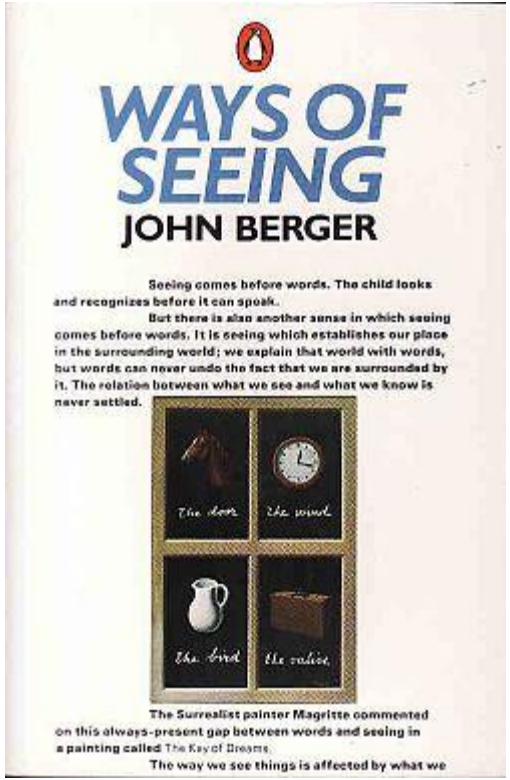
Possibility Space (Narrative)

Agency

Pause

Today might be a little rough and a little fast. This is a space to explore complex feelings about difficult questions.

Why discuss ethics in data visualization?



We are creating a “way of seeing” in which we necessarily must make decisions about how others are represented and how users interact with an audience which may not be present.

This seems at first to be just about visual representation but this is deep in the heart of technology, including AI.

It’s everywhere

Digging in deeper: Jones

“It is tempting to think of data and visualization as a neutral actor, with a single ‘correct’ set of design choices that ‘truthfully’ report the data. However, outside of egregious errors (e.g., when dates are sorted incorrectly or the y-axis is not scaled uniformly), we see that ‘ground truth’ in data is much more contextual and situated. Design choices we make give visualization a rhetorical power that influences what a reader concludes and remembers about the data, and blurs the line between persuasion and deception.”

Digging in deeper: Jones

We have a certain degree of power as designers.

Digging in deeper: Foucault

CLT

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systematically form the objects of which they speak'.[1] Discourse is, thus, a way of organising knowledge that structures the constitution of social (and progressively global) relations through the collective understanding of the discursive logic and the acceptance of the discourse as social fact.[2] For Foucault, the logic produced by a discourse is structurally related to the broader episteme (structure of knowledge) of the historical period in which it arises. However, discourses are produced by effects of power within a social order, and this power prescribes particular rules and categories which define the criteria for legitimating knowledge and truth within the discursive order. These rules and categories are considered *a priori*; that is, coming *before* the discourse.[3] It is in this way that discourse masks its construction and capacity to produce knowledge and meaning. It is also in this way that discourse claims an irrefutable a–historicity.[4] Further, through its reiteration in society, the rules of discourse fix the meaning of statements or text to be conducive to the political rationality that underlies its production.[5] Yet at the same time, the discourse hides both its capacity to fix meaning and its political intentions. It

Digging in deeper: Victor

Think back to Media for Thinking the Unthinkable: the medium changes what is possible to think altogether.

Digging in deeper: Edelman

You can’t be what you can’t see.

Digging in deeper

Unlike some other forms of technology, these choices in data visualization are often more explicit.

We have outlined the steps in which these choices are made: encoding devices, user actions, ludonarrative, possibility space.

However, we are choosing reality. We are choosing representation.

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Why do we choose certain encodings?

Go back to Cleveland and McGill.

We originally framed encoding devices as a series of mapping where we put the “most important” variables in the highest encodings.

However, what are the most important variables? What leads you to making that decision?

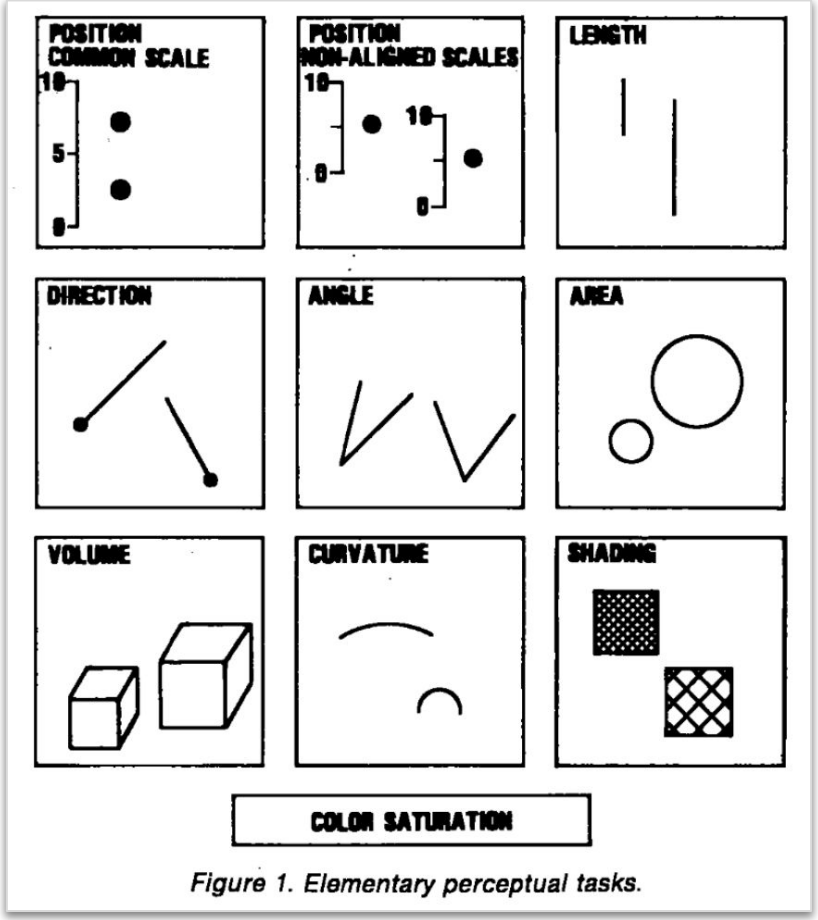

Figure 1. Elementary perceptual tasks.

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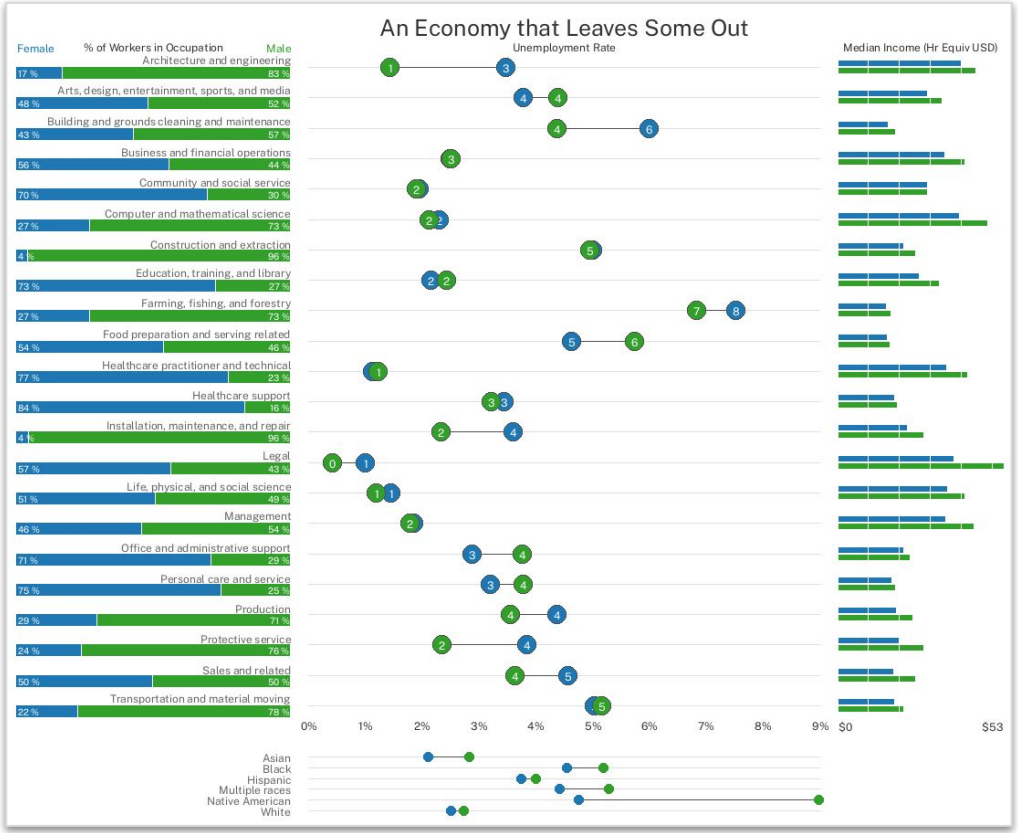
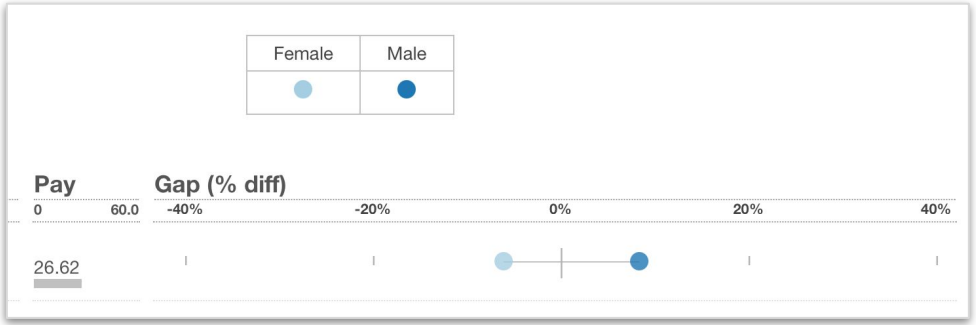
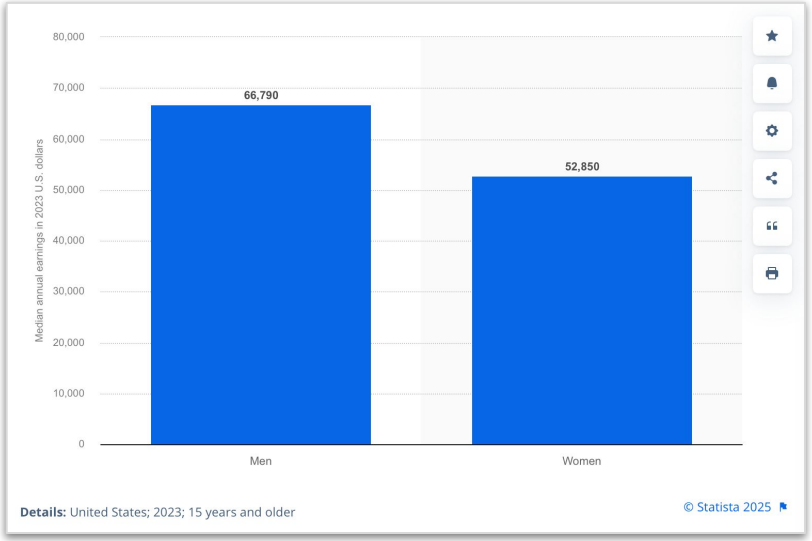


How are we choosing the baseline?

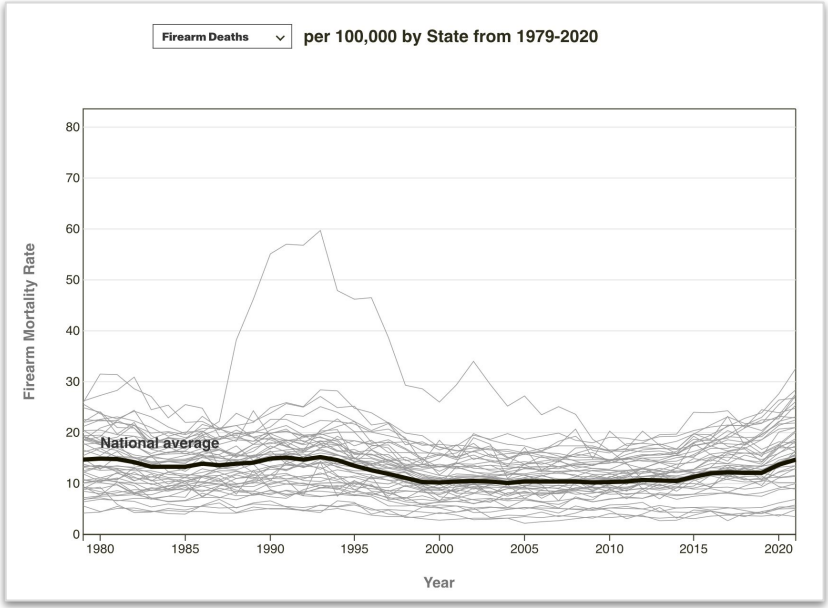


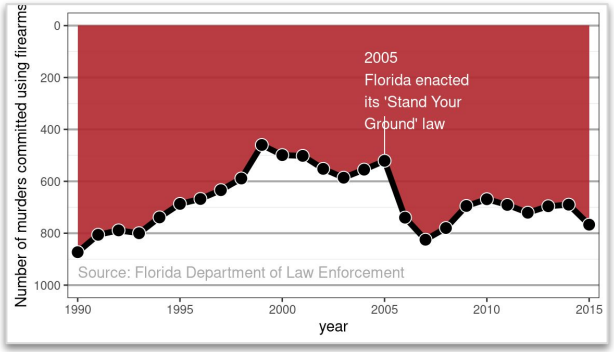


We've spoken about issues with broken axes before but why is that a problem? What choice is embedded in doing something other than distance from zero? Is that always the right choice?

Visual design isn’t neutral.

Let’s revisit three treatments of gun deaths? **Which is the most ethical?**





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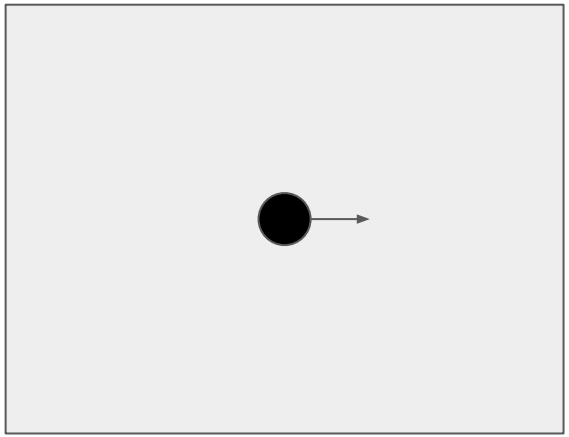
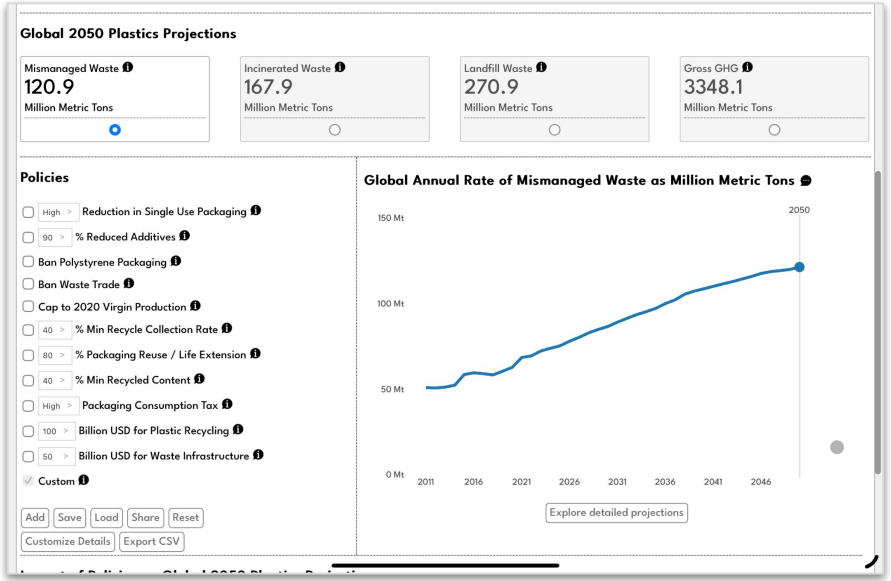
What actions are allowed and why?

Let’s reconsider possibility space: it defines what questions we can and cannot ask.



What is the possibility space?



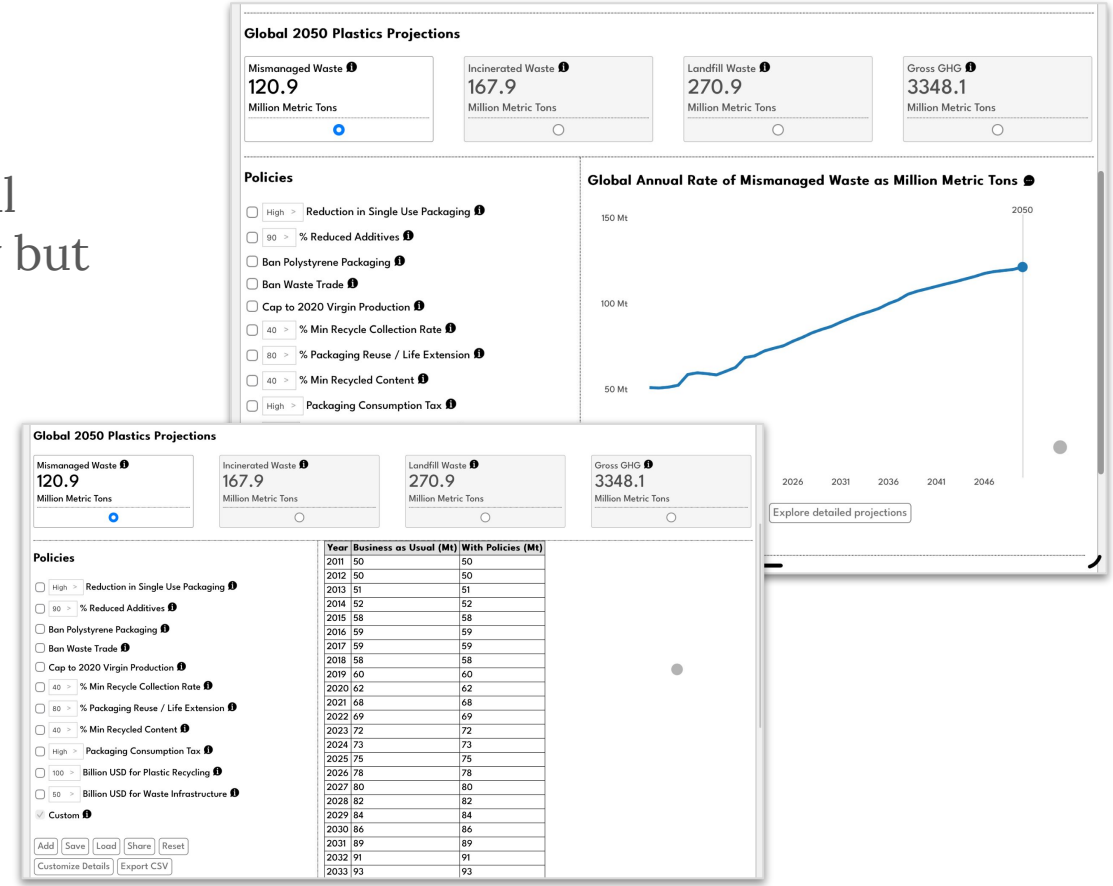
Think about your visualizations as well. Why did you choose your actions?

These choices are unavoidable.

Is the full possibility space accessible?

We skirted some deep ethical questions about accessibility but let's take those head on.

How we are warping the possibility space in our accessibility profile?



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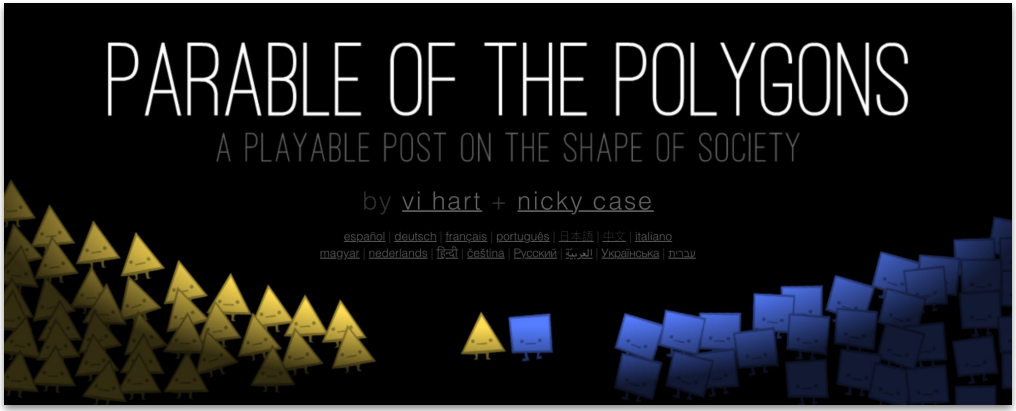
A look at games

Discussion of Parable of the Polygons

What is gained and what is lost through abstraction?



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What does user agency mean?

How are we choosing what is good and what is bad?

How are we choosing what is visible and what is invisible?

How are we choosing what is possible to think?

How would those we are representing feel about that representation?

One last resource

https://designjustice.org/read-the-principles

This doesn’t need to be negative

Broaden the perspective of who is an author.

These choices are essential, make them wisely.

Think about which narratives are elevated or diminished.

There is no formula to get to a right or wrong answer. We have think critically. We have to do the work.

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