Games are culture now

In other words, we spend less time on the things that once shaped our cultures.
More young people see game art than this art.
More young people know the stories of games than know the great writers.
More young people every year hear the music of games, rather than the music of their people.
As culture changes...

We in this room are shapers of culture.

We have a special kind of power.
Appearance and topology

Games are not what they look like on the surface.
Appearance and topology

Games are not what they look like on the surface.
Games are not their controls.

Input mapping:
The physical action

Input alias:
The suggested mapping

Command:
The actual input into the black box

Cmd table:
Map command to algorithm
This is what games are like

Input mapping:
The physical action

Input alias:
The suggested mapping

Command:
The actual input into the black box

Develop response:
Opponent’s turn (variable response happens here)

Model updates:
Change state based on input

Cmd table:
Map command to algorithm

Total state:
Current graph status, given imperfect information

State delta:
Signal of last input received

Info encoding:
Information packets

Client display:
Parse packets into representation

User parsing:
Mental model

Model updates:
Change state based on input

Develop response:
Opponent’s turn (variable response happens here)
Games are largely math problems.

Specifically, most games have NP-hard problems at their heart.
“Everything” is math

But the ways in which art, music, or writing trigger brain neurochemistry are different.
Neuroplasticity

All our experiences change our brains.
How Games Think = How We Think
Games invite categorization, quantification, and quantization. We used to experience the world in a more analog way.
Challenge

All games feature challenges to solve.
Conflict has been a part of much art, but not all.
Games are about action.
Goals

- Goals are made extremely clear.
- In many games, there is only one way to get to them.
You can keep trying. There is always another match, another life.
Games tell us there is something new around the corner.
Systems

Games are not about understanding the rules (though advanced players may).

Instead, they are about understanding the system.
Feedback

As the systems change, they tell us how.

But we are susceptible to feedback – our brain has bugs.
So how do games then make us think?

We now have a generation who grew up with them. We can see.
Reductionism

Games teach us to reduce and simplify, because they quantize.
Because games provide constant feedback, they undermine certain types of concentration.

They don’t need to...
Collaboration

They are profoundly collaborative.
Younger people entering the workforce seem to expect there to be rules for things that are usually unstated.
Cheating

There is also the notion that there must be a shortcut, "cheat code" or equivalent.
Buying past problems

In the microtransaction marketplace, we have taught people that you can buy your way out of problems.
In games, we use a classic rising action curve for difficulty.
But the real world does not work this way.
In games, we use a classic rising action curve for difficulty. But the real world does not work this way.
Optimizing our customers

- We treat customers as aggregated data.
- This is good business.
- But it means that we can run experiments to see what works, without understanding WHY.
- This can lead to ethically questionable choices.
The clockwork world & art

All of these effects sound like they may be negative.

But there is still scope for art and beauty.
Positive effects

People have gotten better at seeing the essential things that matter.
Systems thinking

At systems thinking, and seeing the interconnectedness of all things.
Teaching tractability

On the other hand, they also come in believing that every problem can be solved.

Games never give us impossible problems.

The real world sometimes does.
The science of happiness tells us that games are good at the things that make people happy.

- Gratitude
- Using your strengths
- Social connection
- Generosity
- Mindfulness: savoring your experiences
- Striving for goals
- Optimism

Don’t reduce the bad – increase the good
Game design is mind control

It can be easy to think of this as just business every day.

We have a tool of immense power.

We are makers of joy.