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# Beyond Balancing:

Using Five Elements of Failure Design to Enhance Player Experiences

*AKA: A video game does not stop at the edge of the screen.*

- » Jesper Juul
- » [www.jesperjuul.net](http://www.jesperjuul.net)

- » Singapore-MIT GAMBIT Game Lab, MIT
- » [gambit.mit.edu](http://gambit.mit.edu)

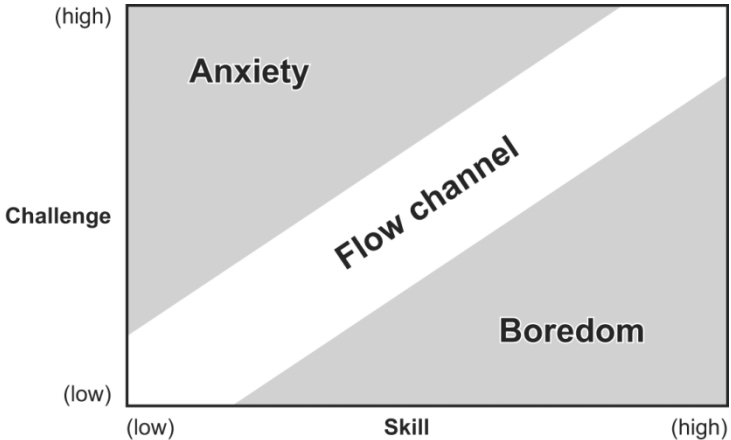


# Takeaway from this Talk

- » **Beyond Balancing: From Failure Count to Failure Cost**
- » A **toolbox** for designing failure in games
- » **Failure definition:**
  - Game presents challenge to the player. (jump over chasm / avoid getting hit by monsters / finish before time runs out)
  - Player fails at challenge. Game sets back the player. (loses energy / loses life / lose capabilities)
- » **Failure design:** How failure is **communicated**, what **setbacks** the player is given, **total failure cost**

# Traditional View of Balancing

- » Balance game to keep player in flow state
- » **Balance** = amount of time the player fails
- » *"Hardcore players like to fail, casual players don't like to fail."*



# Does the Casual Player Dislike Failure?

- » Survey conducted via Gamezebo site. 183 responses. 93% female. Average age 42.
- » Which is **worse**, a game that is:  
Too easy: 30%   Too hard: 17%   Equally bad: 48%
- » Quotes:
  - “I will quit any game that I can master in under ten minutes and doesn't introduce any more complications to the gameplay. Difficult games will frustrate me, but I'll keep playing.”
  - “Level 12 of *Zuma* is really fast. I think I gave up after 50 attempts.”
    - 🕒 -Downloadable casual games players

# The Failure-Averse Casual Player is a Myth

- » Wrong: ~~Casual players dislike failing.~~
- » Right: **Match failure design to the time constraints of players.**
- » Right: **Communicate failure appropriately.**
- » "Having a baby really changed my game playing habits. When she needs my attention the game must stop. This is why *World of Warcraft* has been hard to play as of late."  
⊕ -Downloadable casual games player

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# The Danger of Failure: Learned Helplessness

Why did I fail?

	Bad	Good
<b>Internal or external</b>	It is only me	Everybody has this problem
<b>Global or specific</b>	I am stupid	I am bad at this specific task
<b>Stable or unstable</b>	I will never solve this	I will do better next time

(Source: Abramson, Seligman, Teasdale: *Learned Helplessness in Humans*)

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# Power pill (eat enemies)

Score: 40

Lives: 3

Length: 6

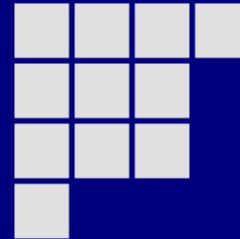
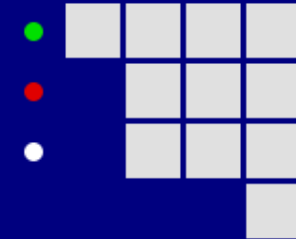
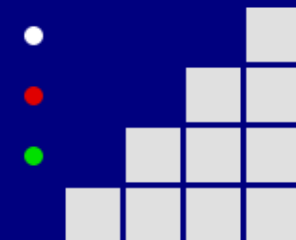
Level: 1

You

Enemies (avoid)

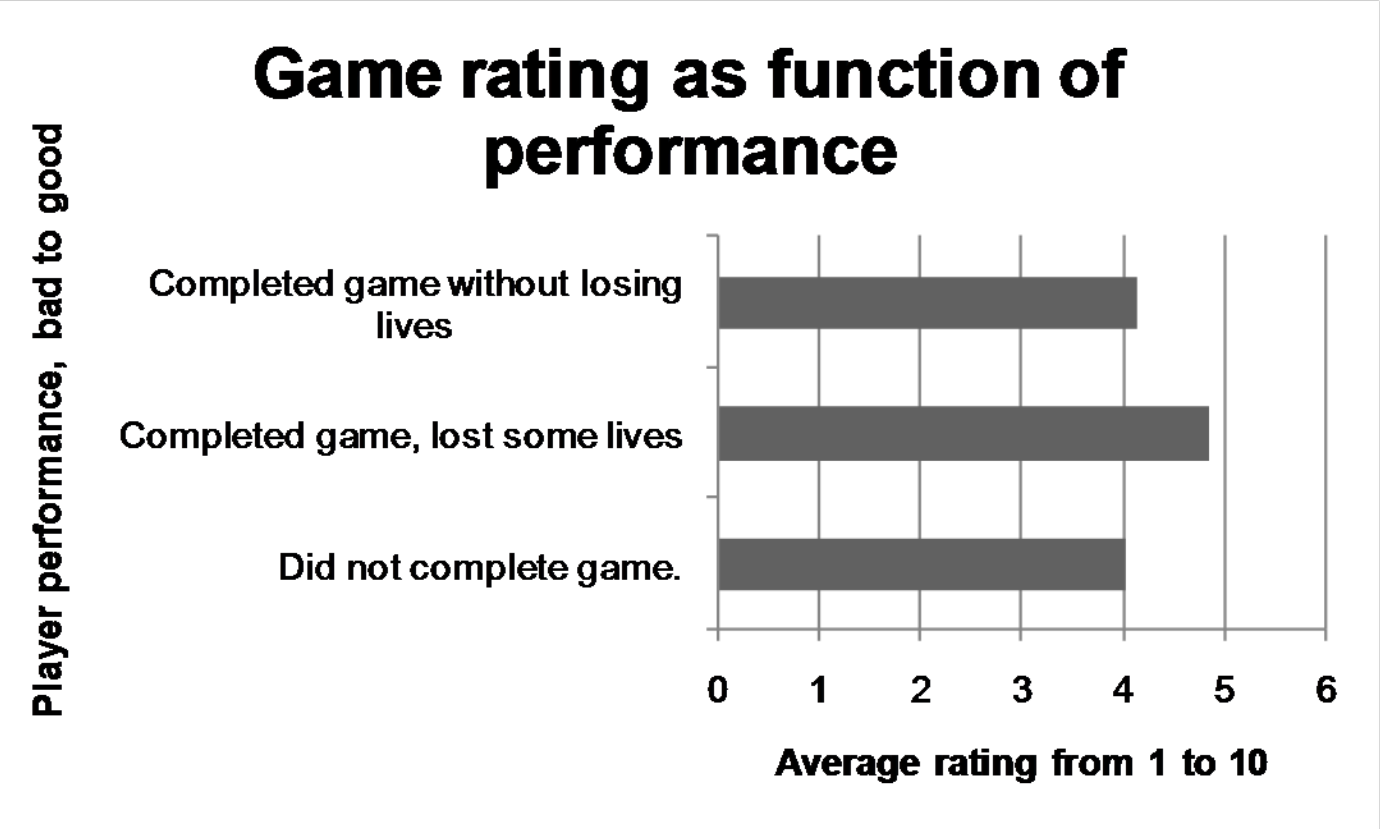
Pills (pick up)

Quit





# Failure is Good



# What Is the Function of Failure?

**Q: How do you know that a game is too easy?**

A: Too easy if not forcing me to use creative thinking or use my reflection.

A: You never have to adapt your strategy.  
-Interviewed players

» **Failure makes it obvious for players when they improve.**

» **Failure adds content.**

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# 1. Failure Count

- » The traditional measure of balance
- » # of times players reach a fail state

**Tool:** Make game easier or harder.

4830

HIGH SCORE  
20000



## 2. Failure Awareness

- » “Knowing that you might as well have lost, makes you feel good when you make it through the level.”

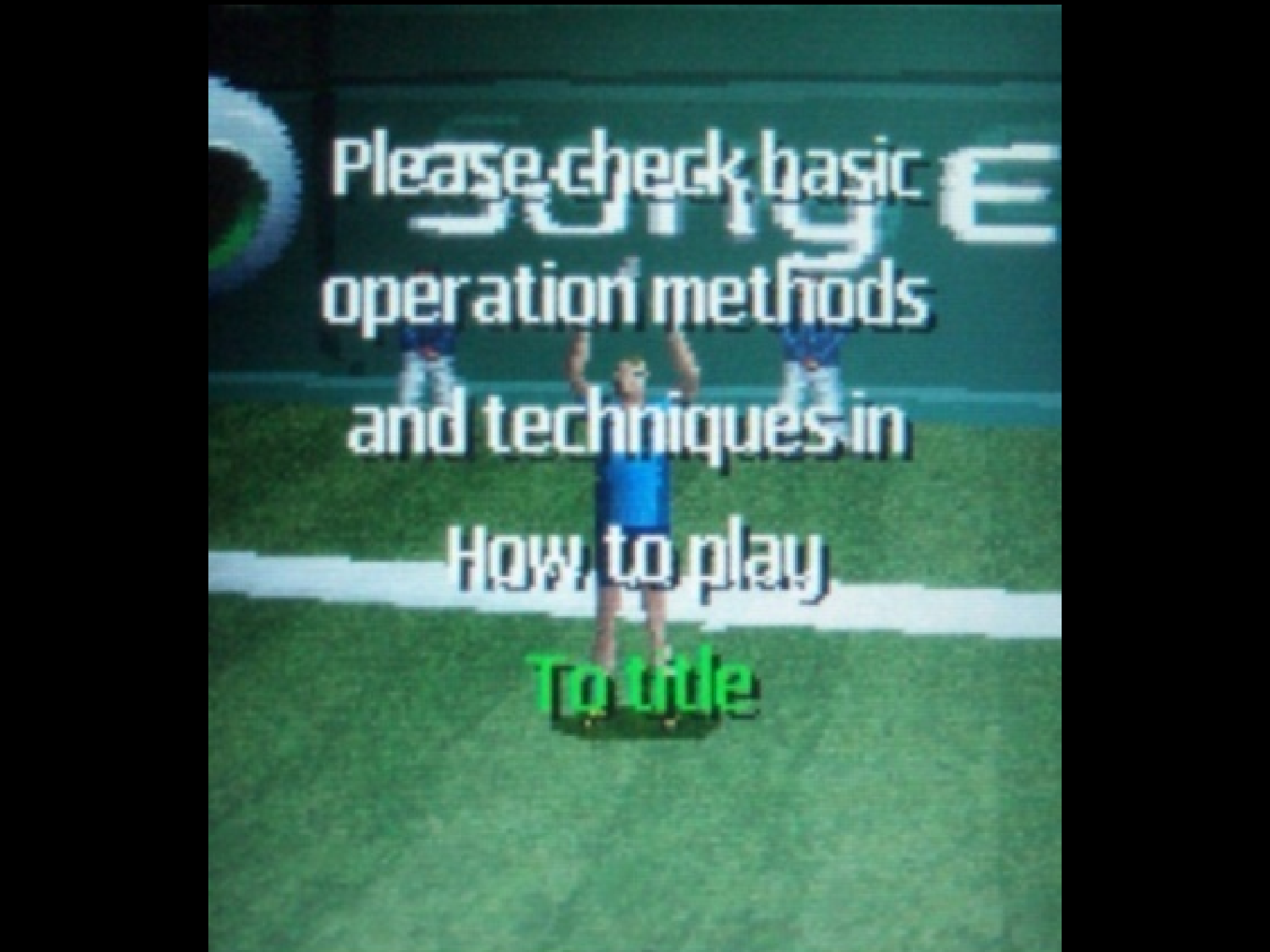
-Interviewed player

- » Player can see that they *could* have failed

**Tool:** Make player aware of possibility of failure, even when unlikely.



**More are coming two clicks to your right! Can you suppress? Over.**

A person in a blue shirt and shorts is performing a high jump on a green field. The person is in the middle of the jump, with their arms raised and legs bent. The background is a green field with a white line. The text is overlaid on the image.

Please check basic  
operation methods  
and techniques in

How to play

To title

## Measure your brain age

Just keep up your **daily training** until your big brain is young again!



Next

Your brain age  
is  
**48**

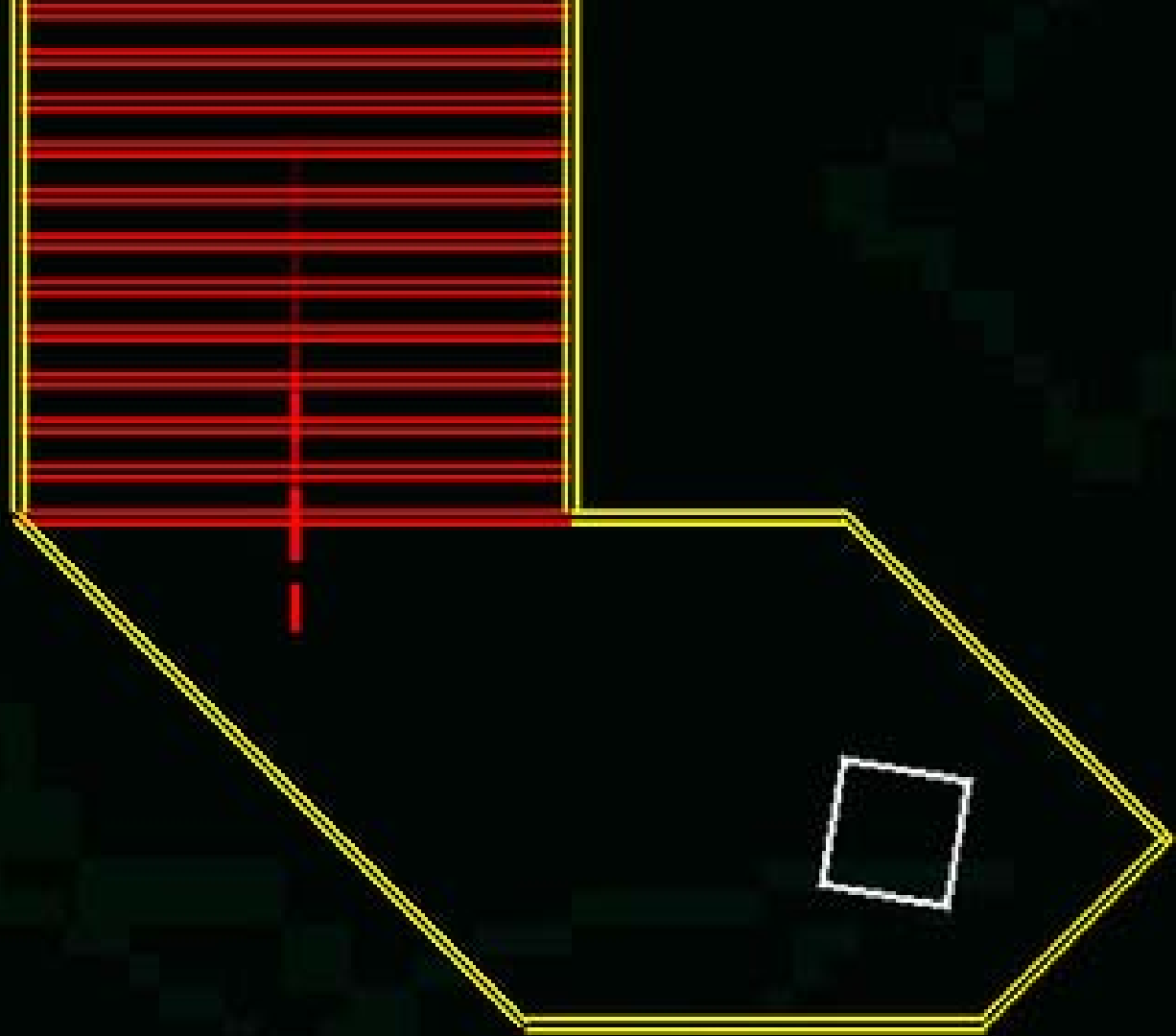


# 3. Failure Communication

- » Game objects
  - » *or*
- » Addressing the player

**Tools:** In-game objects or external voice.

Compare player to other players?







16:14

Trade District

Drella

Health 1654 / 1654

Mana 3646 / 3646



42

64

Corpse of Youloveme

[2. Trade] [Step]: WTS [Shot Launcher Shotgun] 30g 10g cheaper than an  
[2. Trade] [Iritath]: WTS [Book: Gift of the Wild II]-2g!!  
Changed Channel: [1. General - Stormwind City]  
Changed Channel: [2. Trade - Stormwind City]  
Changed Channel: [5. Local Defense - Stormwind City]  
Changed Channel: [3. LookingForGroup - Stormwind City]

XP 104742 / 106300



## 4. Failure Setback

- » “Snatched moments are far more child-friendly than hour-long *Mass Effect* sessions. ... I can have a game of *Mario Kart* or *Smash Bros* and it’s literally five minutes while my daughter entertains herself.”

-Game player

- » What is the failure cost in a play session, measured in **time**?

**Tool:** Tweak the setback of each failure to match time constraints of players.



**CENTRAL CAVERN**



**HIGH SCORE 000100**

**SCORE 000200**



11500

2

MENU

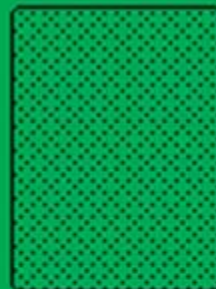
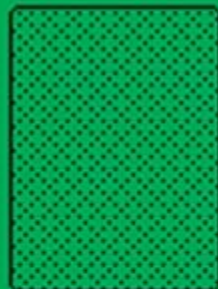
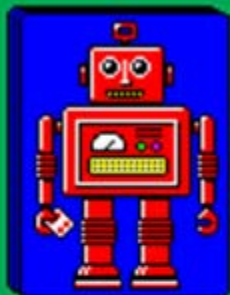
HINT





Solitaire

Game Help



Score: 0 Time: 0

## 5. Failure Repetition

- » Randomization minimizes repetition.
- » Does the player have to replay *exactly* the same thing after setbacks?

**Tool:** Randomization of levels makes retrying more interesting.

# Total Failure Cost

- » **Failure cost to the player, not to the avatar!**
- » **Total failure cost =**
  - Failure count x
  - failure communication x
  - failure setback x
  - failure repetition
- » **High cost:** Frequent failure, unfavorable comparison to other players, large setbacks, repetitive replaying. (*Mega Man*)
- » **Low cost:** Occasional failure, favorable comparison to other players, small setbacks, randomized replaying. (*Peggle*)

# Toolbox Sum Up

» **Failure adds content.**

1. **Failure Count:** Traditional view of balancing.
2. **Failure Awareness:** Making player see how they *could* fail.
3. **Failure Communication:** Communicate internally vs. externally, compare to other players.
4. **Failure Setback:** How much *time* does the player lose?
5. **Failure Repetition:** Are replays identical or different?

» **Failure Cost** = failure count x failure communication x failure setback x failure repetition.

» **The expanded audience is not averse to failure *count*, but to high failure *cost*, in emotion and time.**

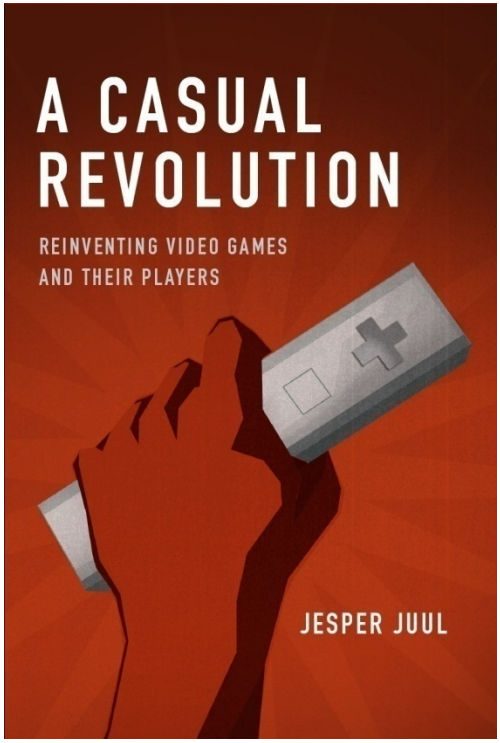
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# Questions?

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Jesper Juul  
[www.jesperjuul.net](http://www.jesperjuul.net)

Singapore-MIT  
GAMBIT Game Lab  
[gambit.mit.edu](http://gambit.mit.edu)



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