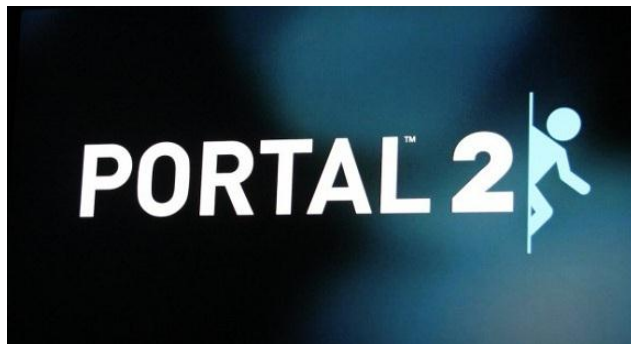


Breaking the Rules of Game Design: when to go against Autonomy, Competence, and Relatedness

Kaitlyn Burnell

Programmer, Naughty Dog (ideas for this talk developed at CCP)

Spoiler Warning



Glossary

Autonomy



Competence

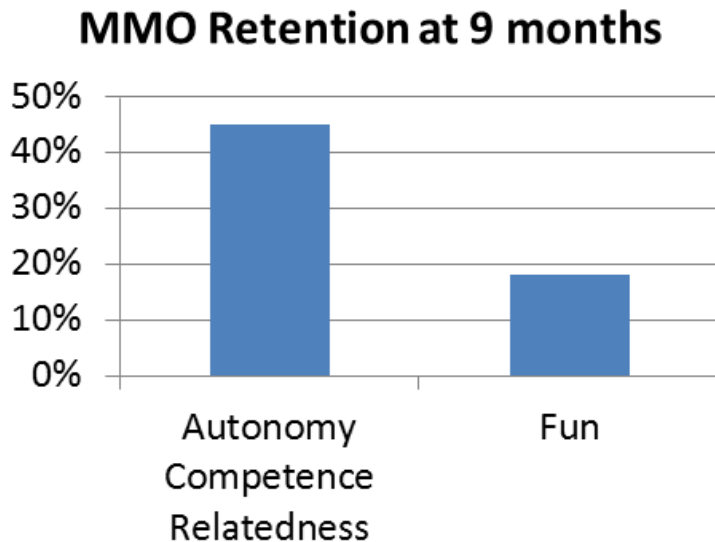


Relatedness



Why These

- Autonomy, Competence, Relatedness



•(Stats from Immersyve)

Effective everywhere

Education



Autonomy, competence, and relatedness in the classroom

Applying self-determination theory to
educational practice

CHRISTOPHER P. NIEMIEC AND
RICHARD M. RYAN
University of Rochester, New York, USA

ABSTRACT

Self-determination theory (SDT) assumes that inherent in human nature is the propensity to be curious about one's environment and interested in learning and developing one's knowledge. All too often, however, educators introduce external controls into learning climates, which can undermine the sense of relatedness between teachers and students, and stifle the natural, volitional processes involved in high-quality learning. This article presents an overview of SDT and reviews its applications to educational practice. A large corpus of empirical evidence based

Sports



European Journal of Sport Science, vol. 1, issue 4
©2001 by Human Kinetics Publishers and the European College of Sport Science

The Effect of Coach's Task- and Ego-Involving Climate on the Changes in Perceived Competence, Relatedness, and Autonomy Among Girl Handballers

Philippe Sarrazin, Emma Guillet, and François Cury

Adolescents, especially females, have been identified as a group at risk of poor health due to their declining level of physical activity. To prevent sporting attrition, several researchers highlighted the importance of the fit between the motivational context provided by the coach and the socio-emotional needs brought by adolescents. This study concerns the role of the coach's task- and ego-involving climate on the changes in 3 fundamental perceptions underlined by the self-determination theory (8): perceived competence, autonomy, and relatedness. Contrary to the cross-sectional nature of the former studies, this one used longitudinal survey data from 236 French girl handballers. The 3 perceptions were measured by a questionnaire at the beginning and the end of one season. In the middle of the season, perceptions of coaches' motivational climate were also evaluated. Results showed that at the end of the season, feelings of competence, autonomy, and relatedness were both positively predicted by a task-involving

Autonomy

- Having options
- Feeling in-control
- Feeling responsible for your own actions

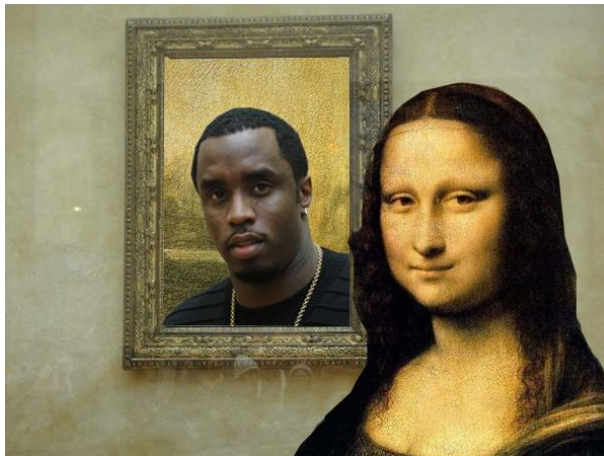


Autonomy

GTA



Photoshop



LEGO



Competence

- I'm up to the task
- The controls do what I intend
- Mastery



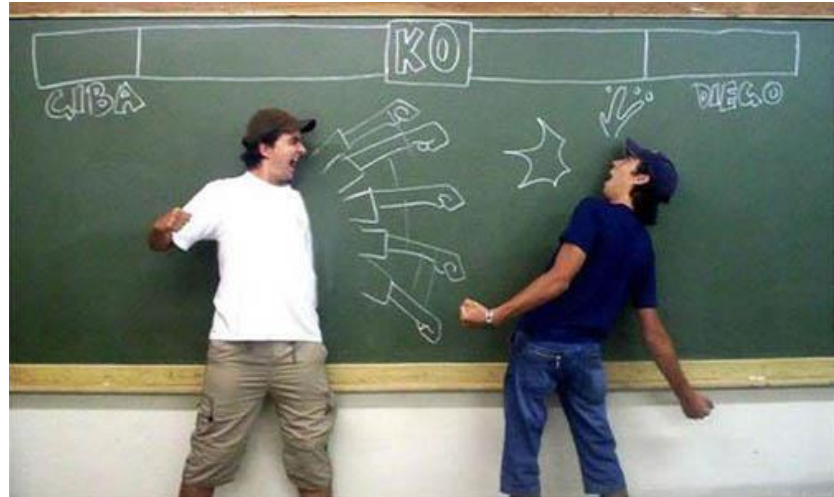
Competence

- Self-perception



Competence

- ONLY effective when combined with Autonomy



Relatedness

- Relationships
- Belonging
- Part of something bigger
- Peers
- Responsibility for well-being of others



Relatedness

- NPCs Effective



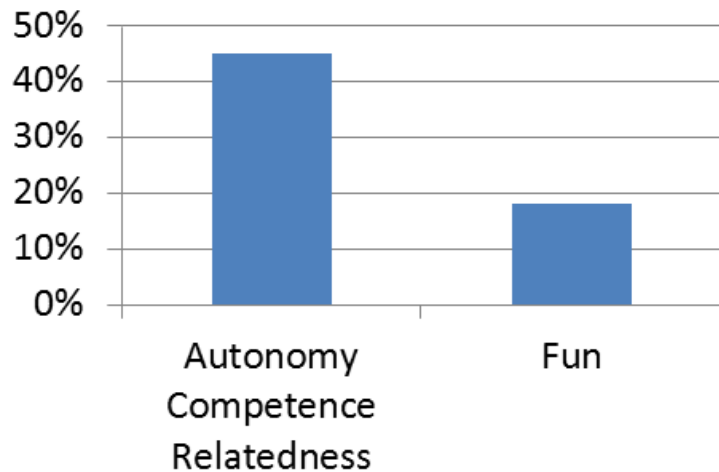
Glossary

- Autonomy = "I have options"
- Competence = "I can do it"
- Relatedness = "I have peers"

Max Out A/C/R?

Max Out A/C/R?

MMO Retention at 9 months



Max Out A/C/R?

- Farmville
 - Plant Anything (Autonomy)
 - No Failing (Competence)
 - Friends Need (Relatedness)

Pinnacle of Game Design???



Breaking Autonomy



Portal

- (Villain): "You must destroy this box."



Portal 2

- (Story): “You must put the villain back into power”



Breaking Autonomy

- People love Portal's scene:



- People hate Portal 2's scene:



Breaking Autonomy

- "The villain made me do it"



- "The designer made me do it"



Breaking Autonomy

- “The villain made me do it”
 - I **HATE** this villain
- “The designer made me do it”
 - I **HATE** this game designer



Breaking Autonomy

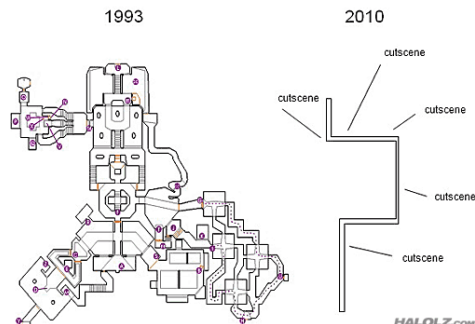
- “The villain made me do it”
 - I **HATE** this villain
- “The designer made me do it”
 - The main character isn't me



Hold on...

Autonomy

FPS map design



?

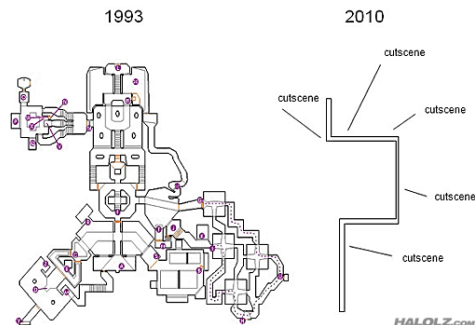
Villains



Hold on...

Autonomy

FPS map design



?

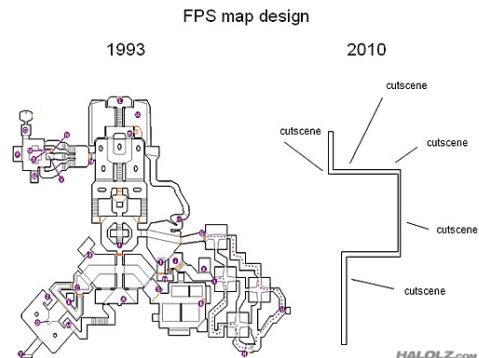
Villains



Game Design

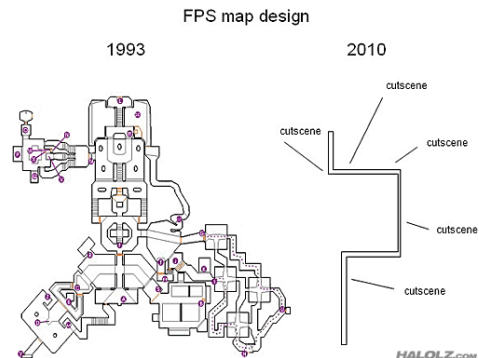
Narrative

Emotional Transfer



Game Design

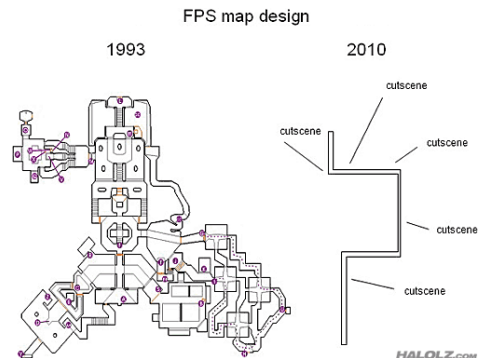
Emotional Transfer



Game Design

Player Emotion

Emotional Transfer



Game Design



Player Emotion



Narrative

Emotional Transfer

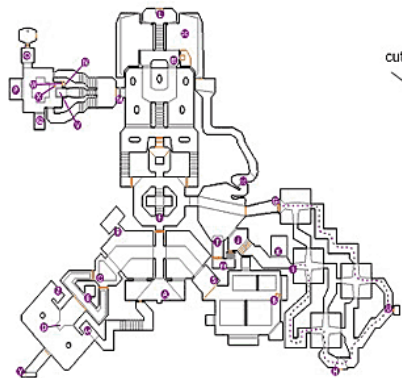
- Narrative tool that no other medium has



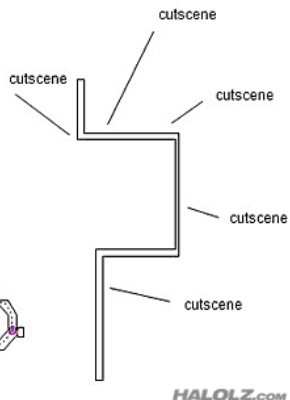
Is this the only way?

FPS map design

1993



2010

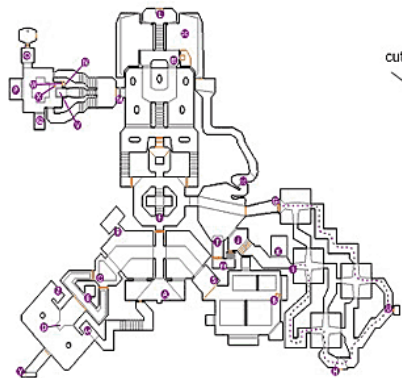


Is this the only way?

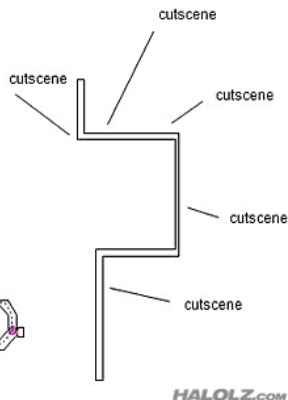
- Do we have to take away Autonomy?

FPS map design

1993



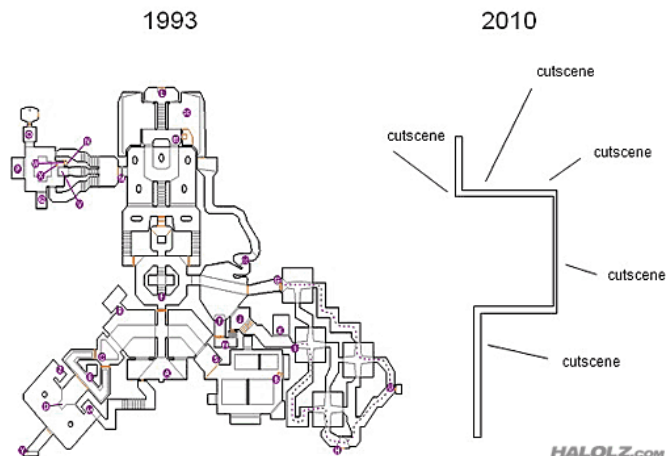
2010



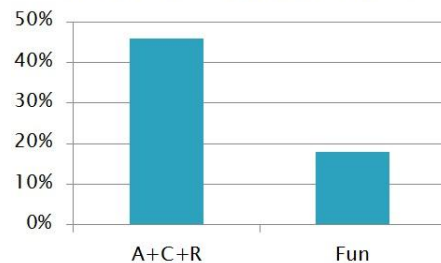
Is this the only way?

- Do we have to take away Autonomy?

FPS map design



MMO Retention After 9 Months



Is this the only way?

- Secret way to save the cube?



Is this the only way?



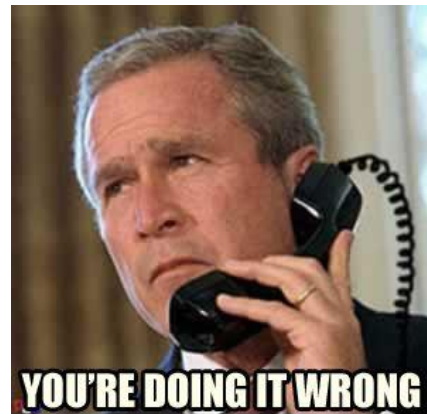
- Secret way to save the cube...Problems:
 - Newbies.



Is this the only way?



- Secret way to save the cube...Problems:
 - Internet
 - Now Competence+Autonomy



Is this the only way?

- Do we have to take away Autonomy?

Is this the only way?

- Let people keep the cube—no secrets.



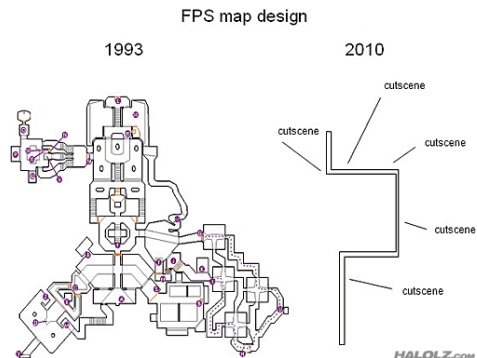
Is this the only way?

- Let people keep the cube...problems:
 - Why be angry with the villain now?



Is this the only way?

Break rules!



Game Design



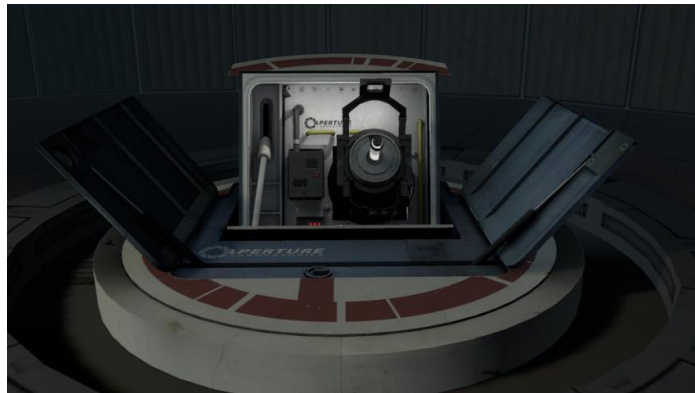
Negative Emotion



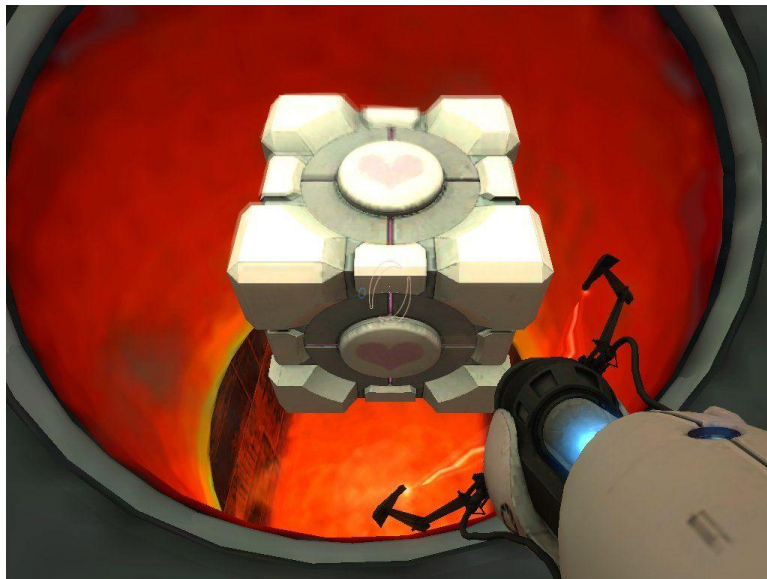
Story

Fix Portal 2's Scene

- ~~Resistance is credible~~
- Orders you can't refuse



Improve the Portal Scene?



Improve the Portal Scene?

- Make sure people CARE about the cube



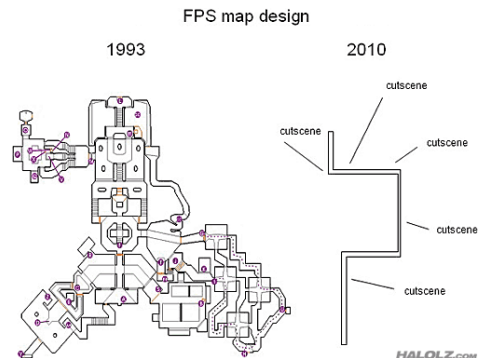
Improve the Portal Scene?

- Autonomy over small things



Bigger Picture

Could we impact non-narrative



Game Design



Negative Emotion

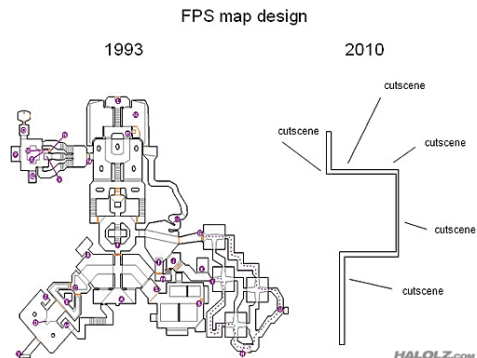


???????

???

Could we impact non-narrative

Yes!



Game Design



Negative Emotion



Lesson

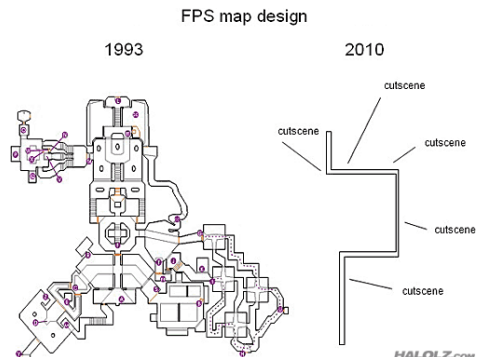
History Lesson

- Brenda Brathwaite's board games
 - Experience historical atrocities



Could we impact non-narrative

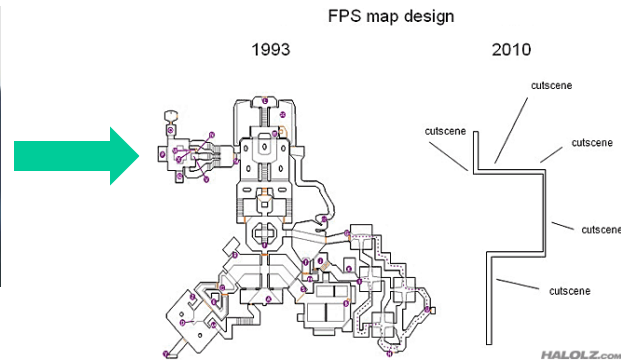
Yes!



Game Design



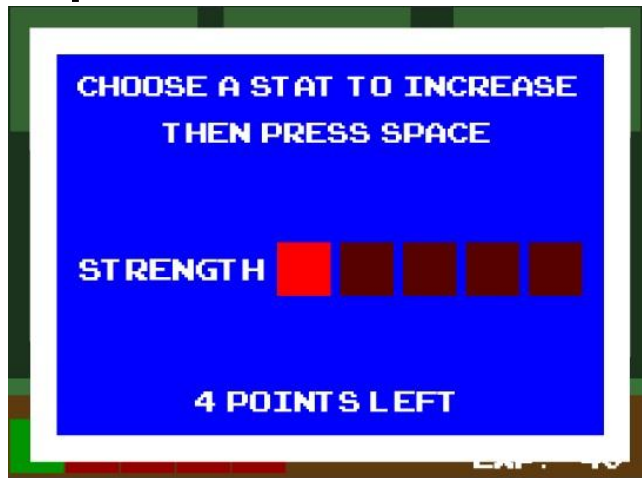
Negative Emotion



Thesis

Thesis

- Super Press Space to Win RPG



Thesis

- Super Press Space to Win RPG
 - Thesis(?): Linearity is bad.



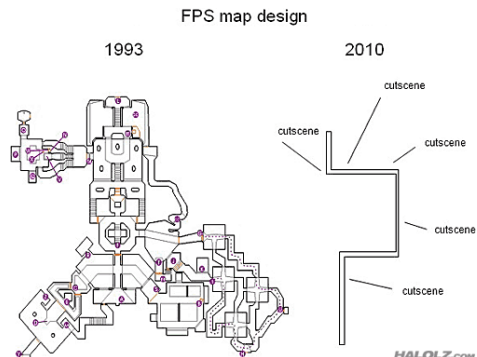
Thesis

- Super Press Space to Win RPG
 - Thesis(?): Linear RPGs have plenty Autonomy



Could we impact non-narrative

Yes! But the tricks are the same



Game Design

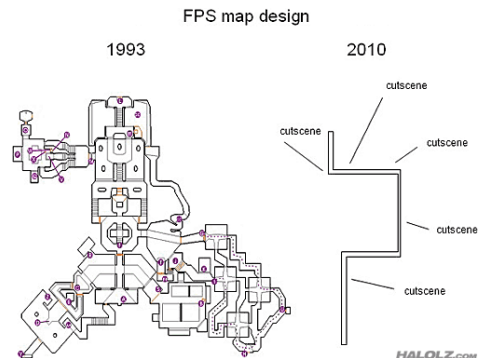


Emotion



External Idea

Could we impact non-external?



Game Design



Emotion



Game Design

Could we impact non-external?

- Yes...

Could we impact non-external?

- Yes...You could make people dislike a well-made part of your gameplay!



Could we impact non-external?

- Yes...You could make people dislike a well-made part of your gameplay!
- But...why?



Other Negative Emotions...



Other Negative Emotions...

- Autonomy
- Competence
- Relatedness



Breaking Autonomy

- Controlled
- Like a Pawn
- “I have to do this”



Breaking Autonomy

- Controlled
- Like a Pawn
- "I have to do this"
- Rebellious



Breaking Competence

- Helpless
- "I can't do it"
- Give up



Relatedness

- Opposite of loneliness

Breaking Relatedness

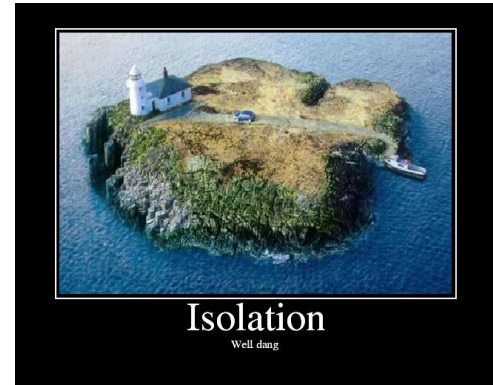
- Loss
- Grief
- Homesick



Breaking Relatedness

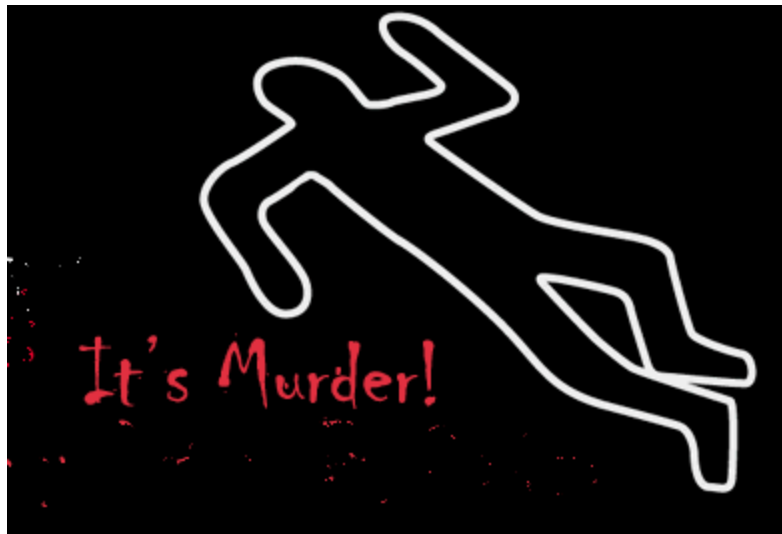
Breaking Relatedness

- Kill Character
- Isolate
- Rejection
 - Reject Them



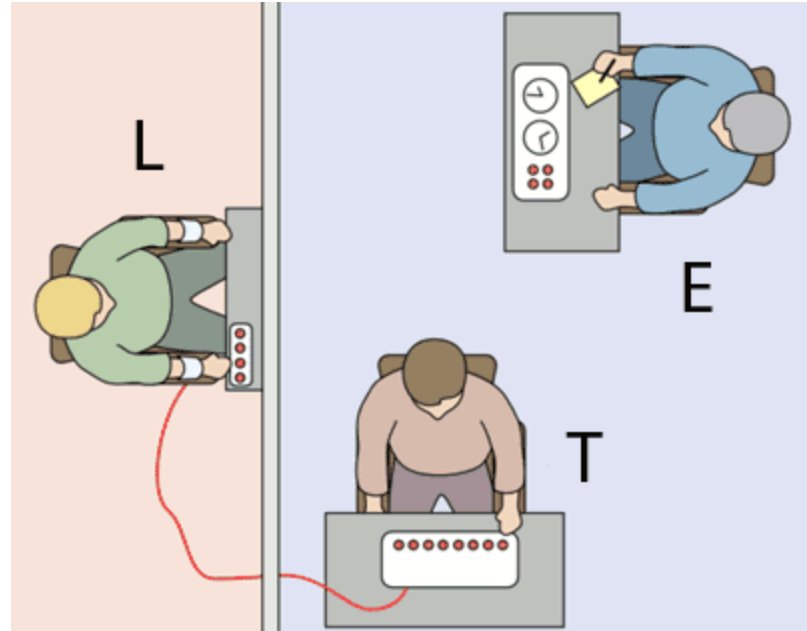
Breaking Relatedness

- Murder



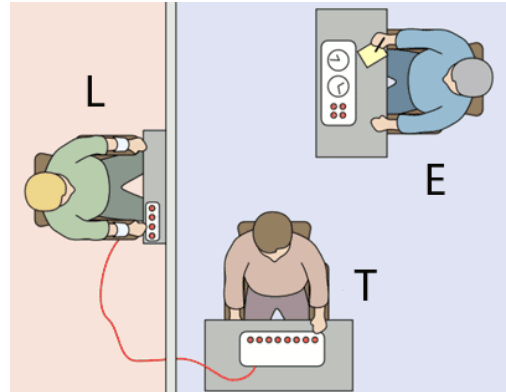
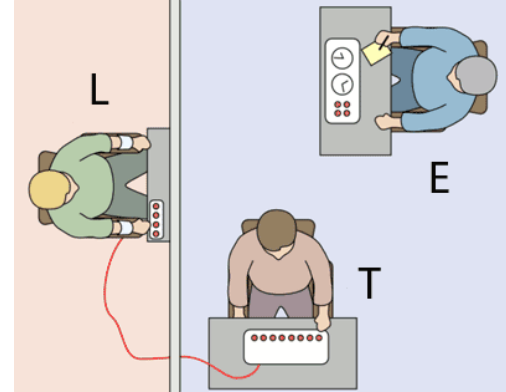
Experiment

- Shock test subjects



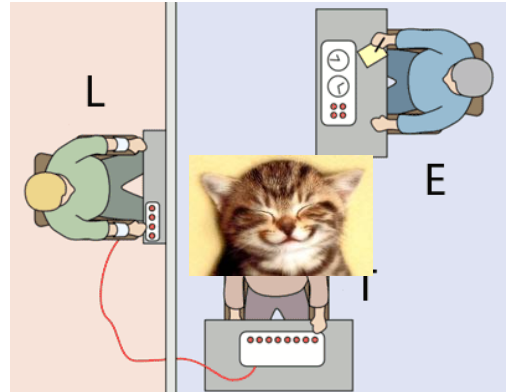
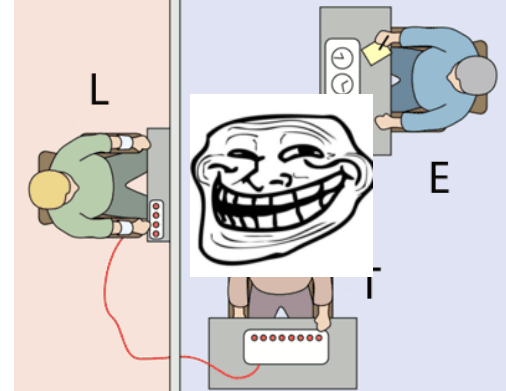
Experiment

- Shock test subjects



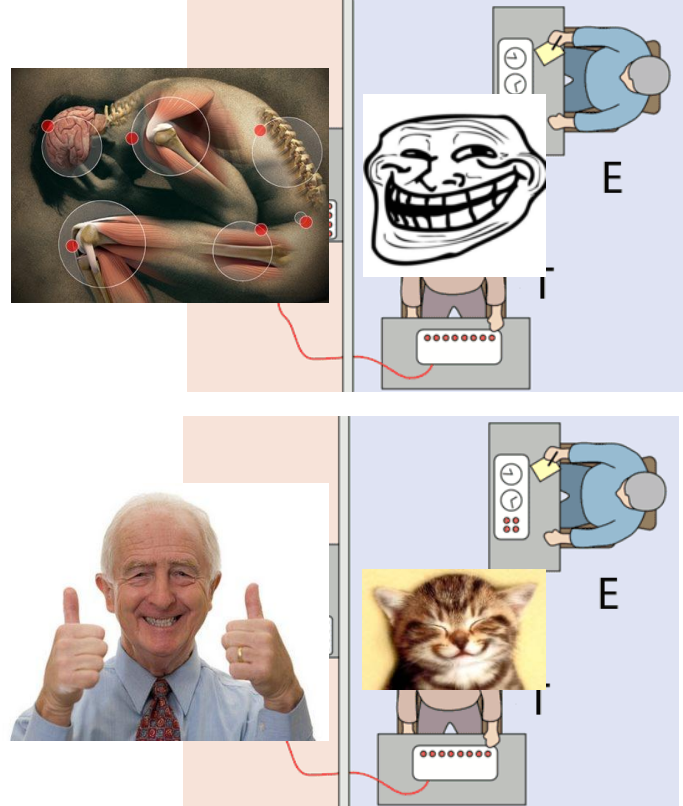
Experiment

- Shock test subjects
 - Malice
 - Innocent



Experiment

- Shock test subjects
 - Malice
 - **HURTS**
 - Innocent
 - Doesn't



Breaking Relatedness

- Murder
 - It's Malicious



Breaking Relatedness: Murder



Breaking Relatedness: Murder

- Care About Victim



Breaking Relatedness: Murder

- Care About Victim
 - Use Narrative
 - Use Gameplay



Game Mechanical Relatedness

- Trust
- Inter-reliance
- Peer
- Part of something bigger



Game Mechanical Relatedness

- Aeris



Game Mechanical Relatedness

- Aeriis
 - Lore
 - Goals



Game Mechanical Relatedness

- Aeris
 - Lore
 - Goals
 - Your Help
 - Healer



Game Mechanical Relatedness

- Aeris
 - Lore
 - Goals
 - Your Help
 - Healer
 - Dies while relevant



Care About a Character

- Used: Relatedness
- Autonomy
- Competence

+Caring (from Autonomy)

- Created Characters

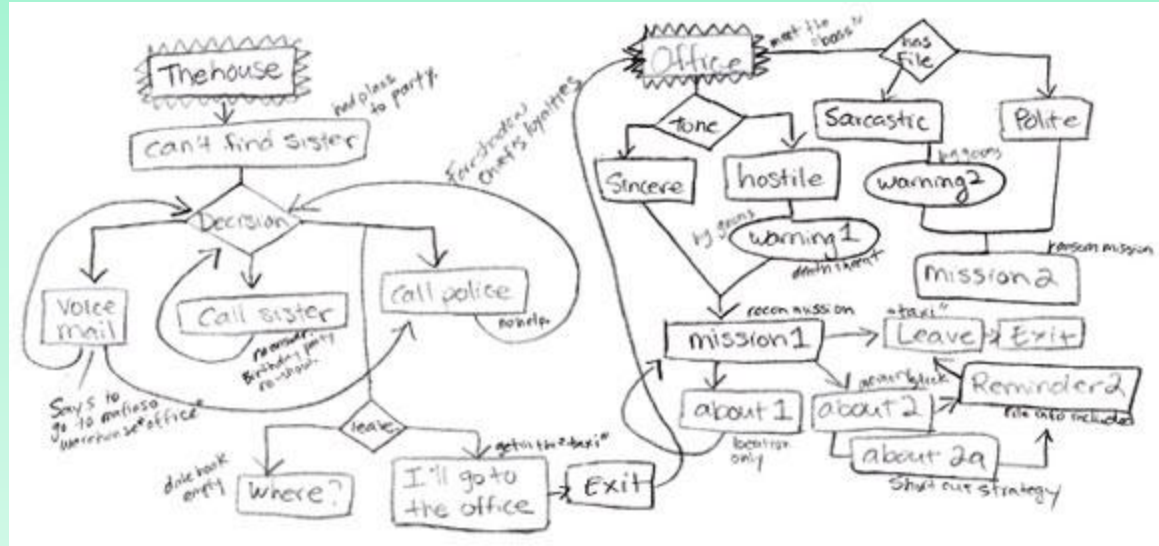


+Caring (from Competence)

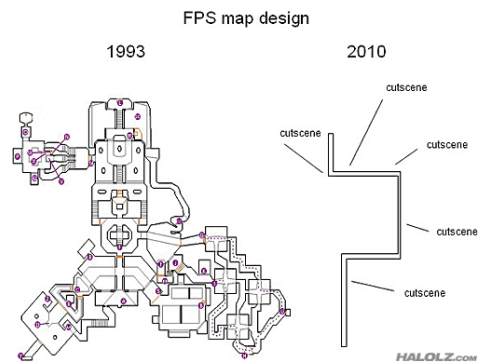
- “My strategies are based around this character.”
 - Aeris
 - Healing
 - Lose Gear, EXP



Nonlinear Narratives



Nonlinear Narratives



Game Design



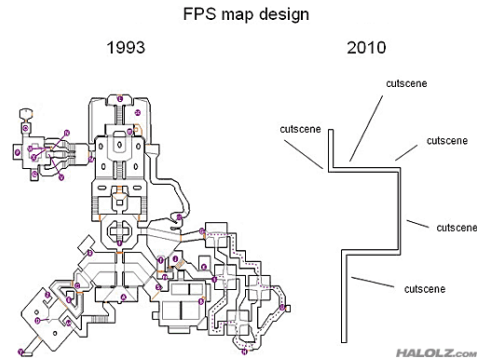
Negative Emotion



Story

Nonlinear Narratives

- Game Design chunk
- Narrative chunk



Game Design



Negative Emotion



Story

Nonlinear Narratives

- Mix and Match!



Game Design



Negative Emotion



Story

Nonlinear Narratives

- Mix and Match!
 - (One of each)



Game Design



Negative Emotion



Story

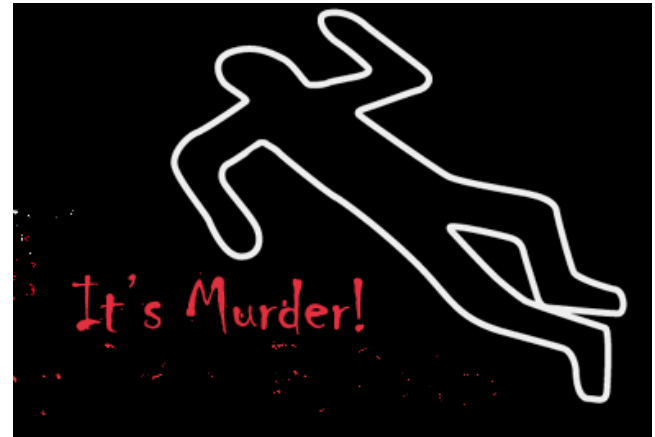
Nonlinear Narratives: Examples

- Murder



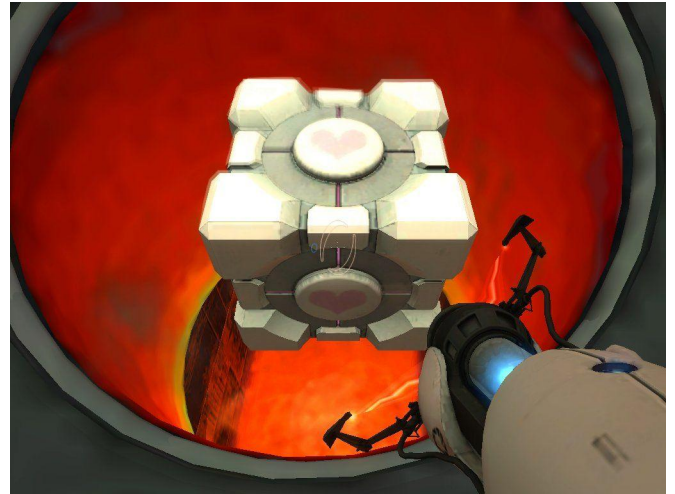
Nonlinear Narratives: Examples

- Murder
 - Game Mechanical Relationship



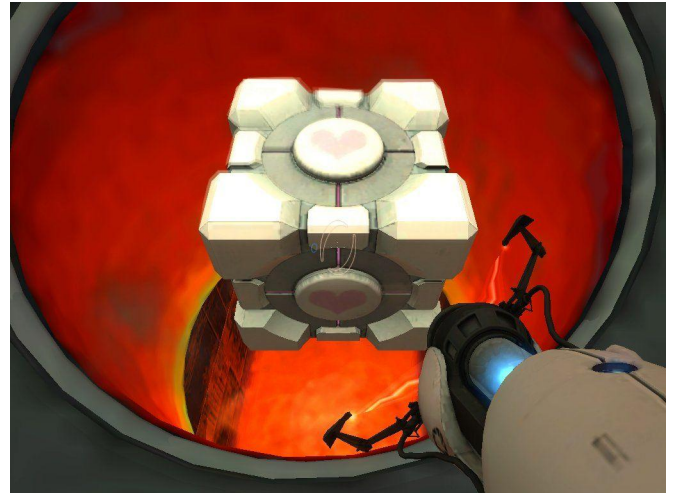
Nonlinear Narratives: Examples

- Coercion



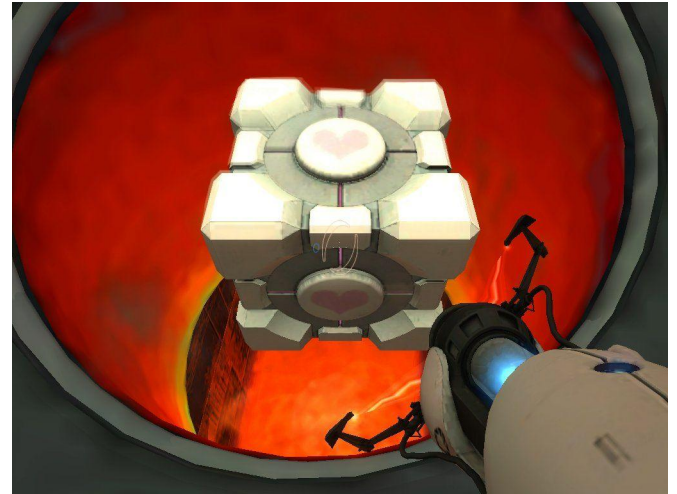
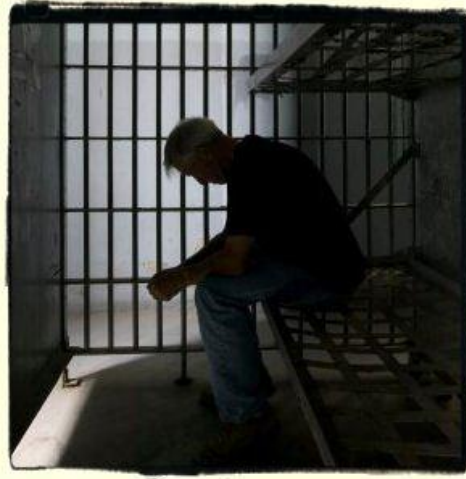
Nonlinear Narratives: Examples

- Coercion
 - Removes Autonomy
 - = Linear?????



Nonlinear Narratives: Examples

- Coercion
 - **Capture** triggered



Nonlinear Narratives: Examples

- Slow Buildup...

Nonlinear Narratives: Examples

- Slow Buildup...
 - Loneliness



Loneliness

- Portal
 - "Robot won't let me leave"



Loneliness

- Portal
 - "Robot won't let me leave"
 - Blame 



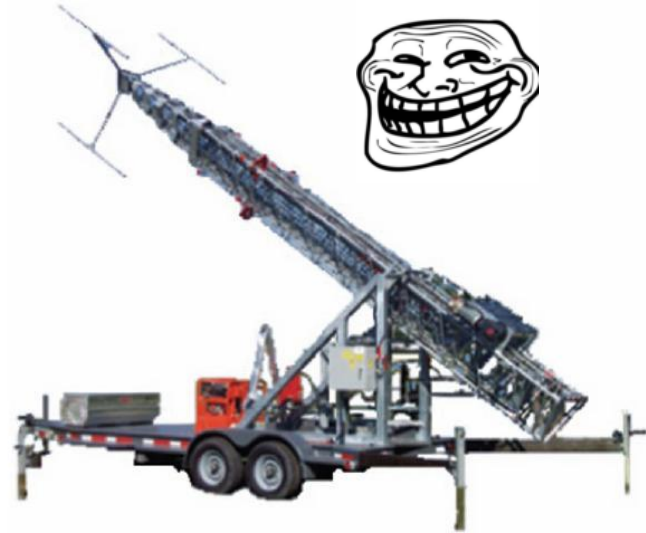
Loneliness (Nonlinear Narratives)

- Radio Jammed



Loneliness (Nonlinear Narratives)

- Radio Jammed
 - Blame



Nonlinear Story: Detect Emotion

- Notice player is frustrated
- Play scene



Breaking Competence



Breaking Competence...Problems

- Need Autonomy
- Quitters
- Skill Levels



Breaking Competence

- Brenda Brathwaite's Passage



Mommy, we are not going to make it

Hope people don't die,
or put people in the water

We are not going to make it

- Brenda Brathwaite's Passage
 - Autonomy
 - Drowning
 - Starvation



We are not going to make it

- Other Games
 - ~~Autonomy~~



Breaking Competence

- Skill
 - Luck-based failure



Breaking Competence

- Quitters
 - GM

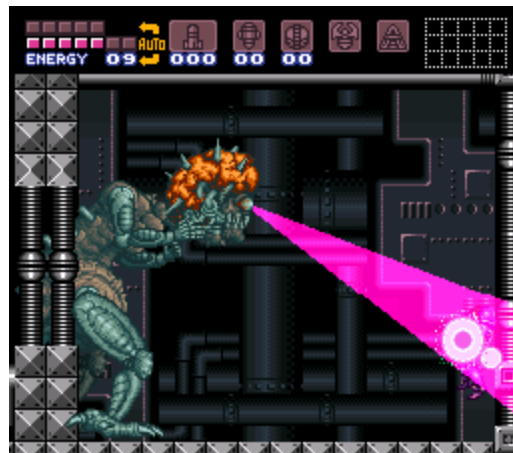


Breaking Competence

- Quitters (electronic)
 - Guess

Breaking Competence

- Quitters (electronic)
 - Guess
 - Drag the scene out



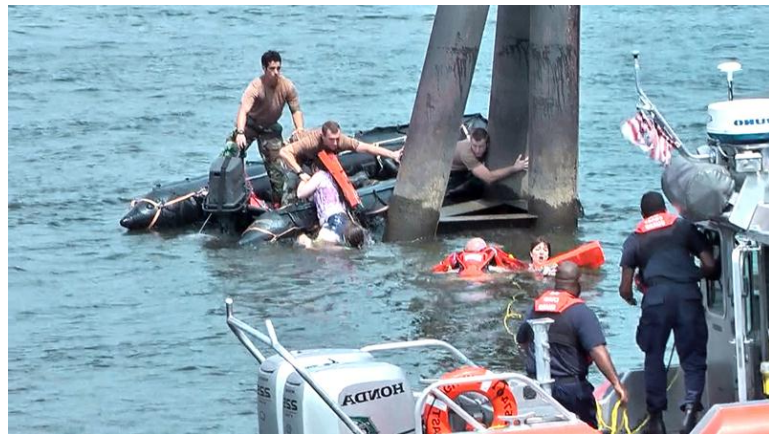
Breaking Competence

- Modifications



Breaking Competence

- Modifications
 - Rescue



Breaking Competence

- Modifications
 - Rescue
 - Gratitude



More Psychology

How many of these scenes?

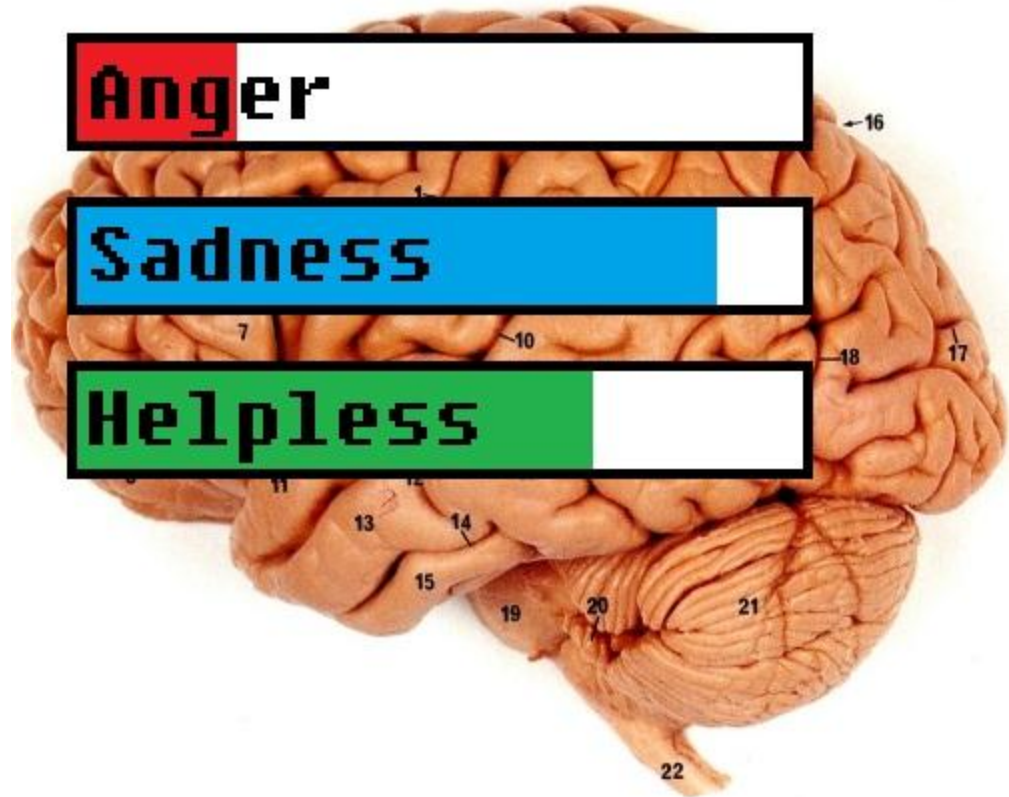
At what point in the game?

More Psych

- Don't Overuse

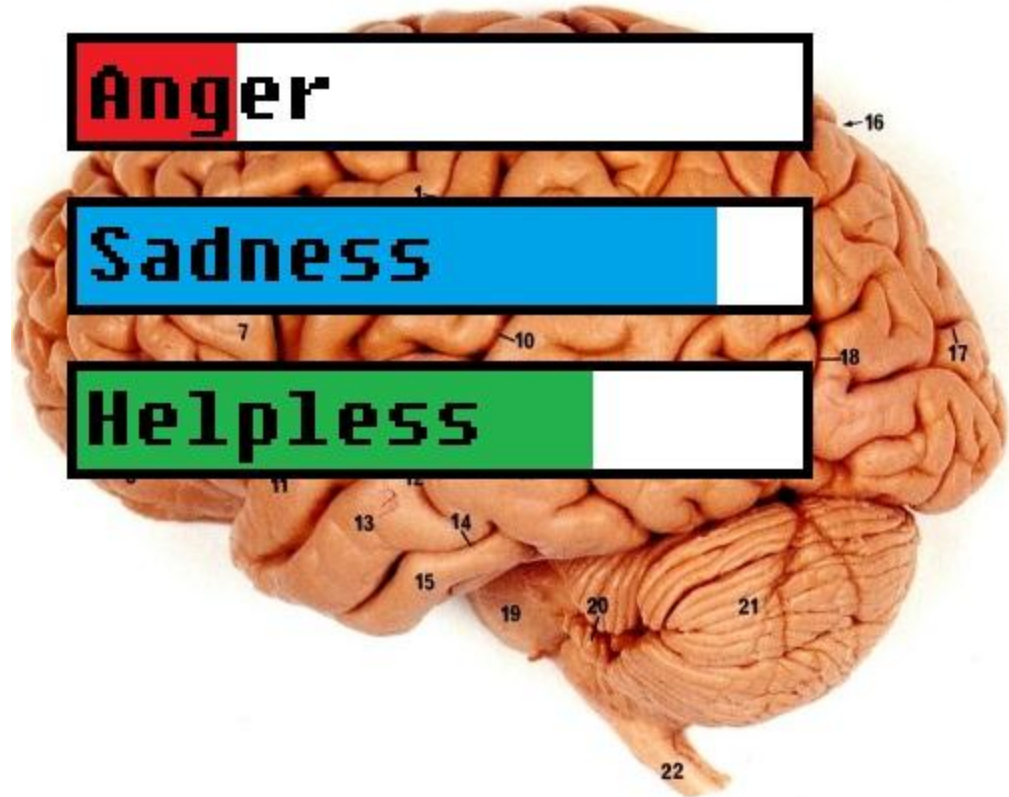
More Psych

- Don't Overuse
 - Limited Supply of Chemicals



More Psych

- Don't Overuse
 - Limited Supply of Chemicals



More Psych

- Human Memory = Mutable



More Psych

- Human Memory = Mutable
 - Liked last scene = liked movie
- Negative Emotion
 - Not Last Scene?
 - (Except for Tragedies)



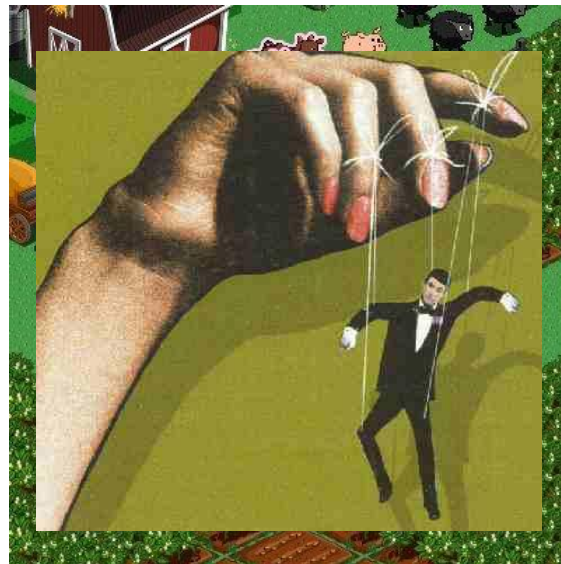
More Psych

- Autonomy = most impact



More Psych

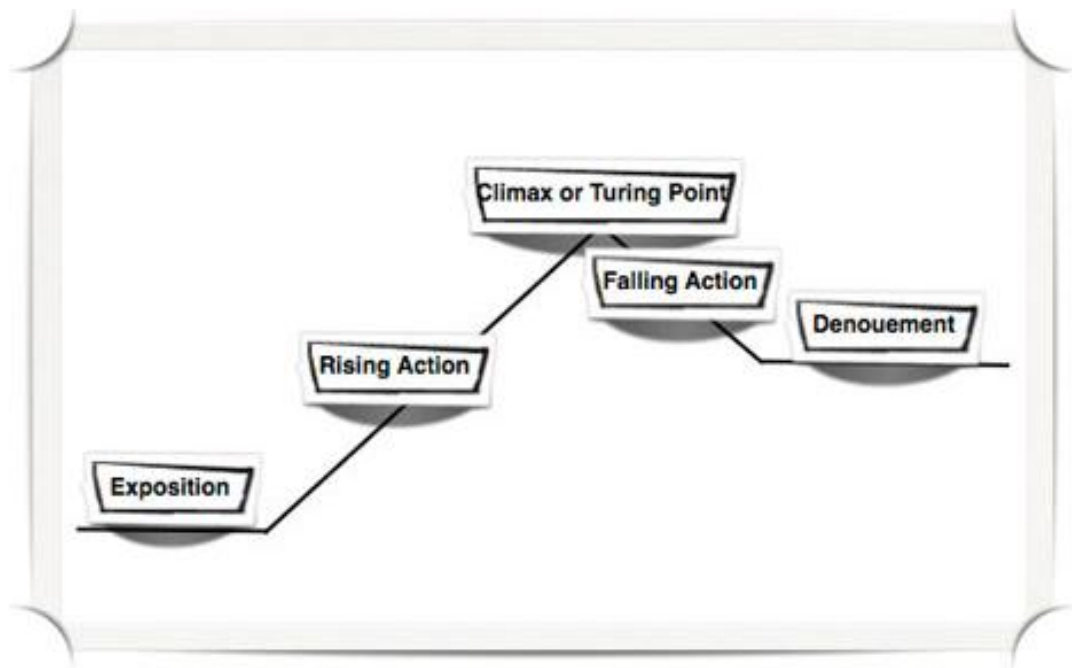
- Autonomy = most impact
 - Most missed?



Big Picture

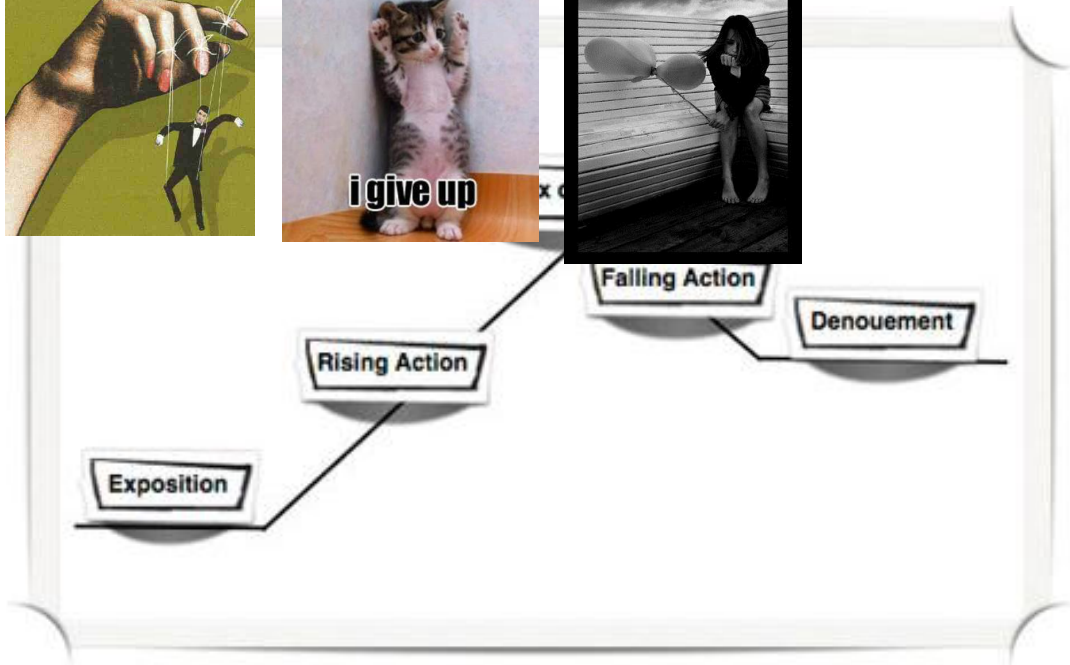
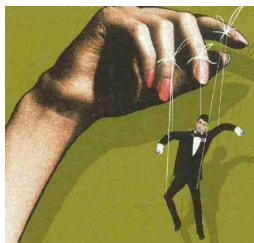
Big Picture

- Story



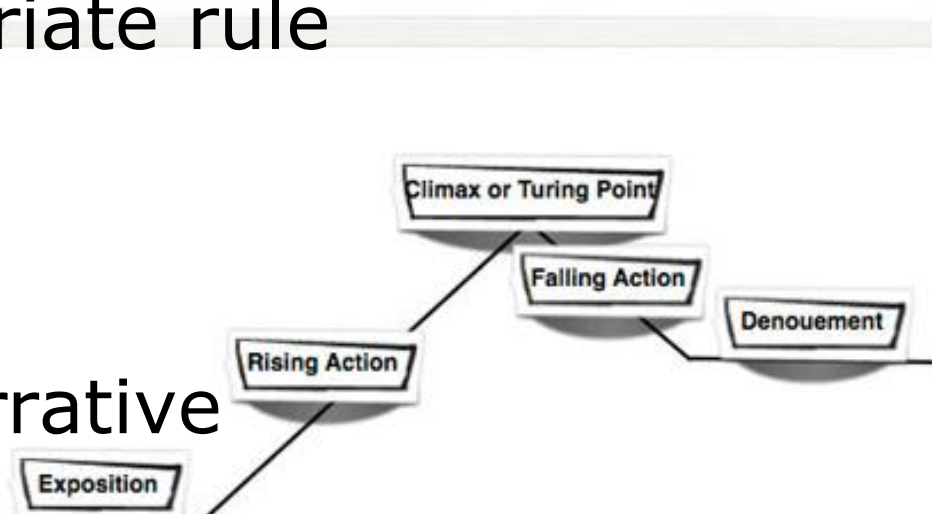
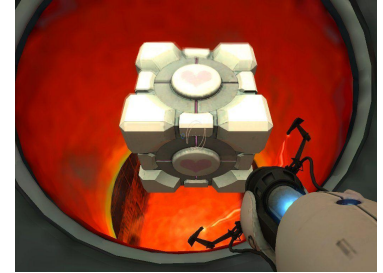
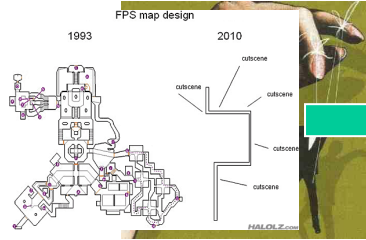
Big Picture

- Story
- Emotion



Big Picture

- Story
- Emotion
- Break appropriate rule
 - Autonomy
 - Competence
 - Relatedness
- Enhanced Narrative



Questions?



P.S.

NAUGHTY DOG

is hiring!