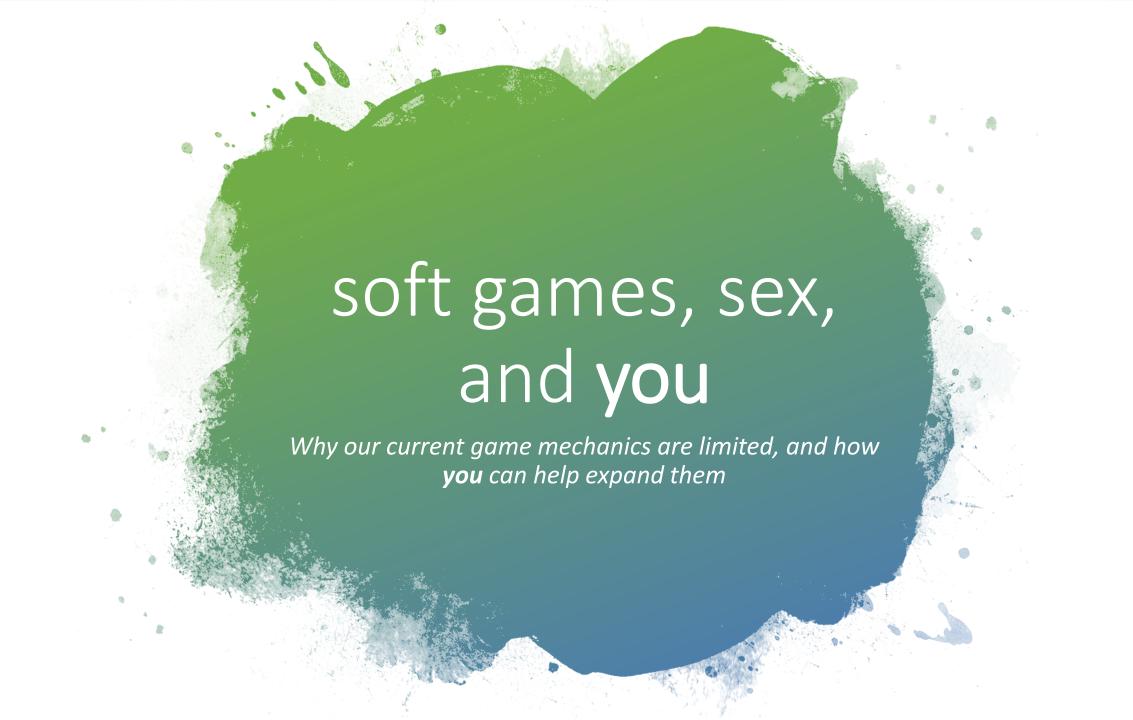
hello!



super cool thesis slide:

- I think more talks should have a thesis
- What do I want to cover in this talk?
 - Our game mechanics are predominantly based on a binary model
 - This model leaves a lot of interesting and atypical ideas unexplorable
- What do I want you to take away from this talk?
 - A better understanding of the limits of our popular game mechanics
 - Some basic tools to get you started with going beyond binary
 - Maybe inspiration to try something new or tackle a problem from a different angle!

"CRED CHECK"

Why should you listen to anything I say?

- Taught myself programming to make games at 13
- Went to DePaul University for Game Design in 2010
- Made some weird stuff there, got talked into being a programmer





Programmer @ Iron Galaxy Studios (2012-Present)

Worked on... just a whole mess of stuff

On the side helped make critically acclaimed* indie darling**

REAL WINNERS: VICTORYBALL

*my mom said it was "really neat, honey"

**sold 160 units (only 10 of which were our moms)



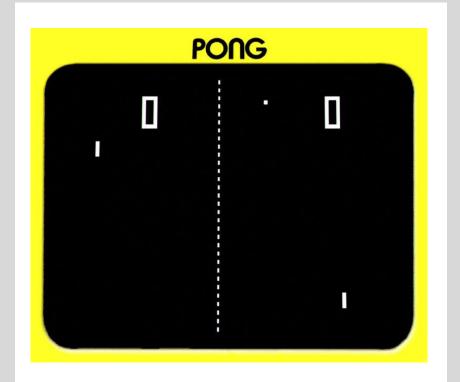






Preface: What's a "hard game"?

- Doesn't relate to difficulty!
- "Hard" or Binary Mechanics: "success" and "fail" outcome states
- Hard games focus on winning
- Few games are exclusively success/fail based, but their systems are built around this principle
- Natural evolution from IRL physical games and the nature of Magic Circle Rules





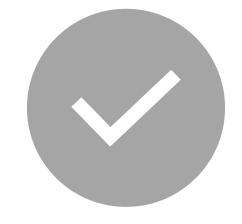




Components of a "hard mechanic"



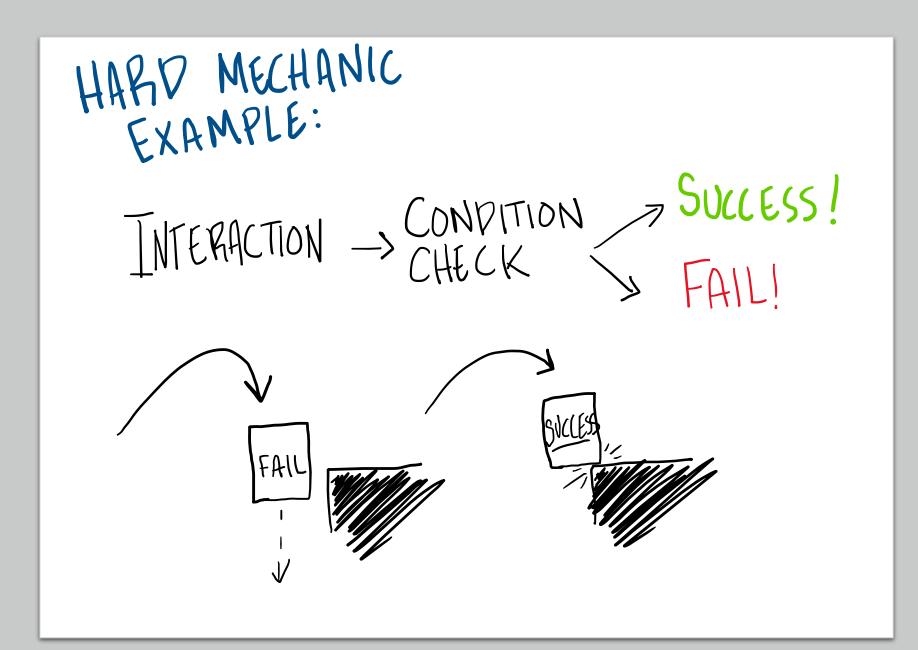






CONDITION CHECK "SUCCESS" OR "FAIL"

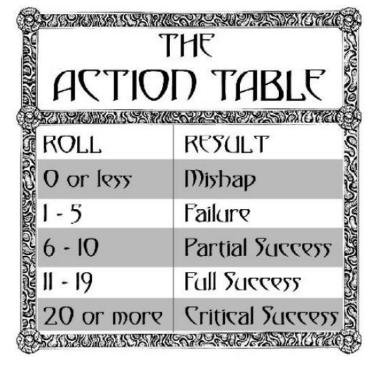
Graph time!



So... what's a "soft game"?

- Soft (Non-Binary) Mechanics: 3+ outcome states
- Soft games focus on goals and consequences
- Goals can be partially achieved, met, or even exceeded
- Methods taken to accomplish a goal can have positive and negative progress towards the goal
- Not a new concept board games have had them for a while*
- Multiple outcomes means more uncertainty and nuance





Components of a "soft mechanic"







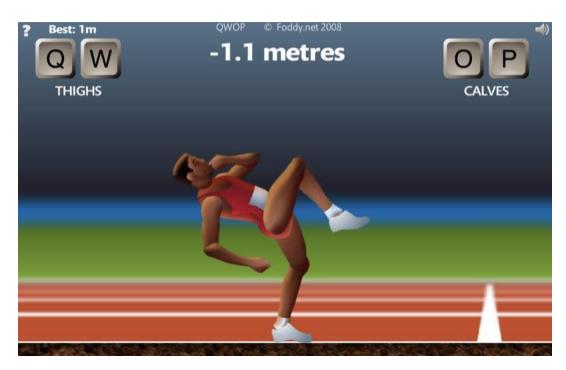


CONSEQUENCE(S)
(3+)

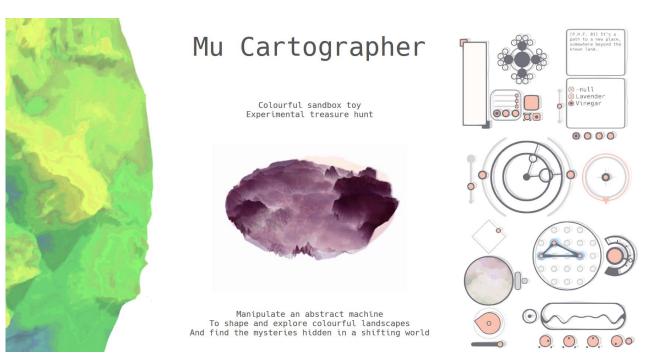


GOAL(S) %

*They've been the main mechanics in some games before, too!



QWOP: goal-based (how far can you go!) and the mechanics (moving your legs) create consequences that impact your goal – are not directly success/fail oriented

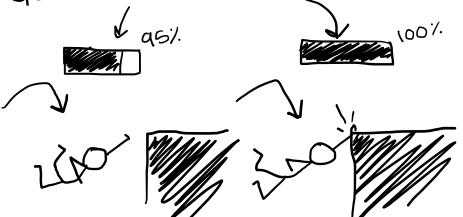


Mu Cartographer: Manipulate machines (with no inherent success/fail mechanics) to influence the world around you and uncover artifacts and logs

SOFT MECHANIC EXAMPLE:

INTERACTION -> EVALUATION -> CONSEQUENCE 2 -> CONSEQUENCE 3 ->

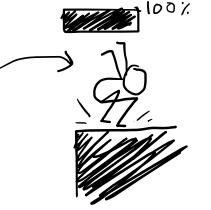




Consequence:

DEATH

Consequence: Delay, extra stamina cost prolly a cracked rib tbh

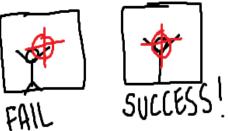


Consequence: Maybe a confidence boost?



Consequence: **BROKEN ANKLE**

HARD: HITS CAN



HARD: PROJECTILE W/DROP







SUCCESS!

Exercise: How can we take a hard mechanic and make it a bit softer?

MOSTLY HARD: BATTLEFIELD 3'S DOPE SUPRESSION MECHANIC







SUCCESS!

BLURS VISION

· IN CREASES HIP FIRE SWAY

·Etc.

...this seems pretty easy

- You just add more possible outcomes to game interactions!
- Counterpoint: **NUH-UH!!!!!1!**
- Hard (binary) interactions are much simpler to write and control than soft (non-binary) interactions
- Making soft games have 2 immediate inherent hurdles
- how to design them
- how to write them

So... how do we do that?



Let's try a "case study"

- Games are based on human experiences and interactions (write what you know)
- There's lots of human experiences and interactions that are not represented well (or at all!) in our video games
- Partially because we don't have good tools / historical references for making those experiences "fun"
- I think soft games can help represent our missing experiences

CONTENT WARNING:

- In the next few slides I will be talking about sex as an example of a human experience that soft mechanics could model better than binary mechanics
- I approach this at a high-level, with no explicit text and no explicit content
- I understand that sex is a complicated part of human nature and everyone's experience with it is different, I wish to approach this topic with the utmost respect

Why is sex a good case study for soft mechanics?

- Sex is undeniably popular & common in our media (presently and historically)
- HOWEVER: Video games have very few engaging interactive sex experiences*
- (Porn games are just choose-your-own adventure games if all branches ended in the exact same way with zero consequences)
- (FITE ME)
- Sex does not have "success" and "fail" states
- Sex's "goal" is a fulfilling experience for those involved
- Sex is a nuanced and layered experience, different each time, theoretically unsolveable

*this is an excellent time to note that there are a handful of games that have done a great job with making sex games that are more interactive:

Fingle







(these are just examples)

Quick Rules:

• For the purposes of this exercise this game is not explicit

• I think this is more interesting as a game development premise

• (Is a sex game fun or engaging without explicit content?)

How do you design soft sex mechanics?

- How does the player interact?
 - Touch
 - Rhythm
 - Verbal Communication
- How are those interactions evaluated?
 - Do they feel good? Too much, too little? Too fast, too slow, too erratic?
 - Does it match the current "mood"? (set of expectations)
- What are the consequences of your actions?
 - Interactions can increase or decrease Arousal, Pleasure
 - Interactions can set the "mood" drastic changes in those patterns can ruin a mood or alter it
 - Partner can climax! Or stop the experience altogether.

How do you design soft sex mechanics? PART II

- How do you communicate goal progress to the player?
 - Can be "boring" and include a meter but could be distracting, still puts the focus on achieving or not achieving goal, instead of playing and experimenting
 - Haptic feedback! Players know the difference between a "good" rumble and a "bad" rumble
 - Visual feedback (could be explicit, but personally I think it can be just as interesting if not more so to try to abstract-ly represent growing arousal / pleasure)
 - Audio feedback (also could be explicit, but there is precedent in games to dynamically shifting music based on intensity or rhythm)

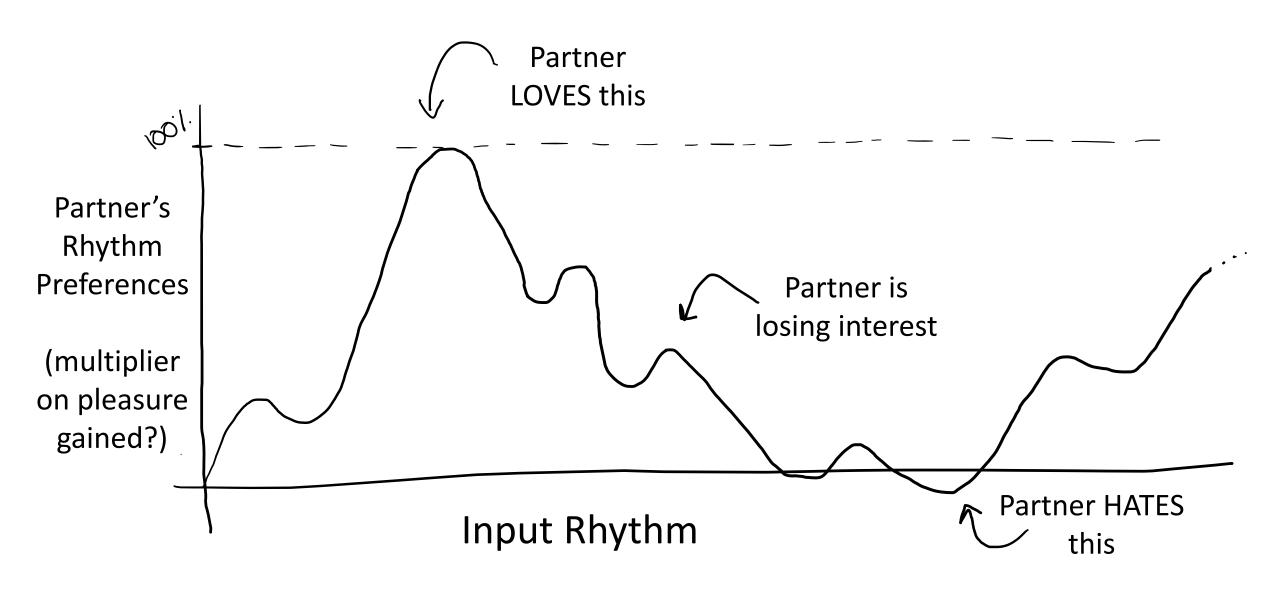
How do you write soft sex mechanics?

- What inputs map well to Touch?
 - Touchscreens! Joysticks! Triggers!
- What about Rhythm?
 - Evaluating the pace, intensity, and repetition of Touch
- How do we evaluate those inputs?
 - A virtual partner that has "preferences" what is the range of rhythms that is acceptable?
 - What is their favorite rhythm(s)?
 - Where do they like/dislike to be touched? Do they have types of touching patterns they like?
 - Different "moods" can change what your partner is looking for

How do you write soft sex mechanics? PART II

- What are the consequences?
 - If you find what your partner likes, it will increase their (Arousal, Pleasure)
 - If you can't find what they like, they will lose interest (Arousal)
 - If your find what they don't like, they will be upset (negative Pleasure, could end the experience)
 - If your touch and rhythm patterns change, it can shift your partner's mood and expectations
 - If the shift is too drastic, it can kill the mood (resetting arousal)
- How is the goal achieved?
 - If pleasure reaches the threshold, climax can be achieved!

Example: How can we evaluate shifts in Rhythm?



What do we end up with?

- A sex game about exploration and experimentation
 - Changing partners' preferences or moods alters the requirements for achieving your goal
 - Engaging and Replayable
- A sex game that represents the work necessary to be a good partner
 - Not focused on self-fulfillment
 - Emulates empathy and attentiveness
- A sex game that more accurately represents the spectrum of a sexual experience!



Soft Game Design Tips:

- Ask Questions:
 - What are the player's goals?
 - What are the potential interactions?
 - What consequences can those interactions have?
 - How do you evaluate those results compared to the goal?
- Look for how one interaction can result in multiple (or simultaneous) consequences
- Provide constant feedback RE: goals / gamestate
- (doesn't have to be easily discernable, as long as it's consistent)

More concrete design advice

- Don't punish failure or setbacks (within reason)
- Celebrate personal bests / improvements
- K.I.S.S.:
 - I lied you TOTALLY can just add additional states to interaction outcomes! (very common, lots of games do this!)
- Study simulation games
 - Lots of interdependent systems, driven by starting variables (MATH!)
 - Encourage play and experimenting, creative problem solving

Soft Game Logic Tips:

- Imagine writing a shader or simulation
 - Be intentional about using conditionals (always binary results!)
 - Study data-driven paradigms
- Interactions are not single-purpose
 - Interactions can be evaluated more than once, or by multiple different systems
 - Consequences of input can generate their own interactions (Touch input generates a Rhythm)
- Avoid conditional / dead inputs
 - "Well you're not near anything so pressing square does nothing..."
- Form goals out of multiple variables, or allow multiple ways to progress towards a goal

Why should we even try to make these new-fangled Soft Games?

- People are attracted to novelty
- Soft games have already proven they can be popular (think: QWOP!)
- Soft games stand out from the sea of genre games
- Soft mechanics naturally lend themselves to a higher level of mastery
- Because you're ARTISTS and you want to PUSH THE LIMITS
- Because



Q&A



Various Sources

- Blitz3D is still around! Released for free on itch.io: https://blitzresearch.itch.io/blitz3d/
- Zombie Yoga: https://deepgameslab.com/projects/zombie-yoga/
- Groovy Tuesday: https://www.indiedb.com/games/groovy-tuesday
- Real Winners: http://realwinnersgame.com/
- Asexuality: https://health.usnews.com/health-news/health-wellness/articles/2015/05/04/asexuality-the-invisible-orientation
- Fingle: http://gameovenstudios.com/fingle/
- Luxuria Superbia: http://luxuria-superbia.com/
- Mu Cartographer: http://titouanm.com/mucartographer/
- Qwop: http://www.foddy.net/Athletics.html
- If you want to prove me wrong about our current sex games, look through Nutaku. I don't want to, but it's possible there's some very engaging sex games that I overlooked.
- If you want to chat more, contact me! https://twitter.com/FiveOutOfKevin