Games 101 Notes

### 9/12/2016 roots - charles

Intro shit

* Class is to increase game literacy. Cus games matter (all of them regardless of form)
* Games as a cultural form
* Part of midterm & final is visually recognizing games
* Critical play reports are very important

Lecture

* Key game (the slides have a key in the corner): Knucklebones
  + Why? Cus it’s old
    - One of the earliest records of “play”. Evidence that humans enjoyed play like a gajillion years ago
  + It’s like that korean game of jacks. Or normal jacks i have no idea
  + Literally made out of knuckles. Also used for dice, etc, good for randomization
* Games - way earlier
* Homo ergaster - 1.8 million years ago (used tools)
* Burial rights - 300,000 yrs ago
* Homo sapiens - 200,000 yrs ago (aka us)
* clothing, jewelry, speech, material culture etc - ~150,000
* Us - right now
* Key Game Royal Game of Ur
  + Why? Relationship between dice, luck, and fate
    - Had a religious component, the gods controlled the dice rolls and your luck was a sign of how much they liked you
  + A sign of luxury since you had to actually own the game to play it
  + Shows dividing space into squares, each taken up by one piece
  + Played by both commoners and elites
  + Uses dice! 3-4 triangle dice, two points colored white and two black
    - Basically a coin toss. Introducing randomness
    - But with multiple dice, created ~probability~
  + Simple game but has a lot going on
* Key Game Senet
  + Why? Theme & Mechanics
    - Started out just nonsense pleasure, after years became specifically about journey of the soul to the underworld
    - Started being used as a teaching tool, showed what life was gonna be like
  + Played for pleasure, often buried with royalty
* Mechanics / game mechanics
  + Units of gameplay, re-combinable game actions that are often shared between games (e.g. roll dice)
* System
  + Overall game described as a collection of mechanics, the properties of the game as a well-defined set of rules
* Theme
  + Fictional or representational aspects of the game (e.g. game abt dragons, etc)
* Key Game Backgammon
  + Why? It’s fuckin immortal. We are still playing it i love this game
    - Connects us to the past in a very interactive way
  + Considered like a smart-person game, a lot of families who aren’t into games still have backgammon
  + Interesting dice useage!
  + It’s old as shit. Older than unification of china… the renaissance...pyramids
  + Often played for money, which they are still developing as a mechanic (the doubling cube! Invented in 1920s)
* Key Game Mancala
  + ALL OF THIS SHIT WAS EMAILED TO US WHAT AM I DOIN
  + Why? It qualifies as a “deep game”
  + There’s the two column version that we all know and love
  + Bao - another version, played in kenya etc
    - Similar to backgammon/chess, very complicated, people spend their lives mastering
  + Action of picking up/putting down is called *sewing*
    - Similar to putting seeds down! Woa!!
  + Setting it apart from backgammon
    - No randomness
    - No hidden information
    - Can have a “game tree”
      * Can map out all of the possible moves
      * But it’s still so vast that the game is still interesting
  + There are moves in this where it can take like 8 years to finish the whole move. “Perpetual sewing”
* Games having “depth”
  + Will support long-term play. Live devotion, serious study, across generations
  + People getting better and better at it, the knowledge is endless
  + Longevity
* Key Game Go
  + Why? Very elegant game
  + No one knows where it came from. Either fisherman or emperor yao
  + We have really good records of really old japanese imperial dudes playing it
  + Didn’t branch off into other games, all the other ones were worse. Not a lot of variants
* “Elegance”
  + Basically depth + simplicity
  + Simple rules -> complex situations
  + The idea of “emergence”
* Key Game Checkers
  + Initially a 5x5 board
  + 8x8 board introduced in 1100
  + Must capture rule introduced in 1500ish
  + Why? It’s “solved”
* A game being “solved”
  + The 8x8 version of checkers is ‘solved’
  + We know how it’s gonna go
* Key Game Chess
  + Starts in india → middle east → china etc, and europe
  + In islamic world it becomes much more abstract, no symbols for pieces
  + Why? Chess has “stuff”
    - Not as simple, it went into a lot of cultures when their level of literacy was higher so it got more complicated
    - Each piece is like a “class”, they have their own powers
  + Makes you think like a game designer, has a gajillion variants
  + Has left a very lasting effect on game design
* Key Game Snakes and Ladders
  + It’s from india, built as a teaching tool for hindu religious instruction
  + Based on virtue/vice stuff
  + Victorians got it from their imperial control over india but also they love it because they love that virtue/vice dynamic, around 1892
    - Decided it was mostly a children’s game
    - Then it got toned way down
  + Why? Meaning & Choice
    - Long history of moral instruction
    - But there’s no agency in the game ?\_\_?
    - Makes you think about choice. In this game you have none but it represents choices you make in the real life. Very confusing

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### 9/19/2016 sports - matt parker

* Sports combine best & worst qualities of community, society, religion
* Sports r games
  + Matt defines it as Always physical
  + Skill is a central factor
  + Large scale institution (has structure, governing bodies)
    - Has leagues, larger organizations, tournaments
  + Has a global, official shared language
* Example. Boston red sox lost and people were totally devastated over it, they lost with the LAST home run or whatever something
  + It was particularly sad cus it was the yankees who had stopped them so repeatedly
  + (they won the next year though so good job)
  + Teams are passed down thru generations of families
  + The winning/losing streak can affect the team and the fan’s identity
* Fans!
  + Comes from fanatic “excessive enthusiasm and often intense uncritical devotion
  + People invest their identity in something larger than themselves
* Sports mostly about competition
  + Who’s the best! What’s possible!
  + They’re contests. They want to measure something objectively
  + Usually competition for it’s own sake
  + But what athletes do we value the most?
* Experience vs spectacle
* Decision vs action
* You don’t even need to be watching it. Ppl follow just the scores
* Sometimes it’s just performance (professional wrestling)
* A moment within a game can outshine the actual game
* Key game Basketball
  + When: 1891 CE
  + Who made it: James Naismith
  + Kind: Ball game
  + Where: USA. in massachusetts. Springfield.
  + Why: We have such detailed information!!!! We actually have an old-ass interview of him telling us about the invention of basketball. And he lived long enough to watch professional basketball, wow
  + Started with beach baskets and 12 rules (we still have the orig written rules)
    - Starts with basic rules but allows for complex strategy
  + It’s extremely popular worldwide
  + Different roles/classes based on skill, size, strength
  + Action packed!! Fun to watch
  + Actually has a lot of strategy (picking?)
* Sports are living games! Rules changing!
* Fouls
  + Not like cheating, but just ppl breaking the rules cus they’re hardcore
  + Basketball
    - If you get enough fouls you’re out of the game
    - When you’re victim of a foul you get 3 chances to shoot a basket from the foul line
    - A team can also get fouls, resulting in other team scoring points
* It’s a competition, but you want to be going up against someone who’s at a high level so that you can prove your dominance over it
* Key game American Football
  + When: 1868 CE
  + Who: walter Camp
    - Introduced line of scrimmage (plays start from a certain line), the snap (turn based), distance requirement, modern scoring system
  + Type: ball game
  + Where: usa
  + Why: most popular american sport
    - Strategic, turn based like chess with people
    - Raw aggression vs aesthetic beauty
    - Violence, trying to get the balance with that
    - Super bowl takes over everyone’s lives. Most watched annual sporting event
  + Common strategies: pass play, run play
  + Appeal of football is its savagery
    - Made so that men could be MANLY even w/o any war
    - People were complaining that everyone was dying
  + Teddy roosevelt saved football
    - Eliminated some violent things
      * Like charging in a V
      * Flying pass or whatever to spread the game out
  + Ok but there are still problems with football
    - Concussions!!!!!!!!! Leading to personality changes, depressions
      * Leads to new disease called CTE
    - Your brain rolls around in your head. Welp
* Key game Olympics
  + When: 776 BCE
  + Who: unknown
  + Type: physical games (various)
  + Where: ancient greece
  + Why?
    - International
    - Amateurism (well, it used to be, but not anymore)
    - Nationalism
    - Sports as proxy for politics/war
  + Original sports: foot races, pentathalon (javelin, running, idk), boxing, various horse events and chariot races
  + The idea behind the games is “arete”
    - Achieve your best self, physical best self
  + National pride
    - Uhh bad point. Nazi olympics
    - They tried to use it as a way to show the superiority of aryan race
    - Jesse owens owned them tho
  + Eero mantyranta
    - Won several medals
    - Had a clotting disorder that actually made him be better at his sport (like natural doping??)
* Key game Soccer/Association football
  + When: 1848 CE
  + Who: unknown
  + Type: ball game
  + Where: england
  + Why?
    - Most popular sport
    - Team oriented
    - Very simple for a team sport
      * But as a result has weird rules. Offsides
    - Can have very beautiful plays!
  + Weird fouls
    - One red card, you’re out, you are not replaced.
    - Two yellow cards = red card
    - They’re very subjective…???
  + Hooliganism!!! With the fans!! Umm. aka gangs
* Key game Cricket
  + When: 1700s CE
  + Who: unknown
  + Type: bat and ball game
  + Where: england
  + Why?
    - 2nd most popular sport in the world
    - Team sport, very very individualized
    - Slow paced, long matched (5 days standard)
    - Spirit of the game (“that’s not cricket”)
      * Sportsmanship is more important than winning
      * Should be more about playing the game right instead of winning
  + Becomes national sport of england in 1700s
  + Don Bradman
    - Was the best sports dude of all time or whatever
    - Was too good so opposing team (england) adopted tactic of just trying to hurt the opposing players and people got angry cus booo sportsmanship
    - Was like the biggest controversy
  + Another controversy
    - Someone had to win in one pitch, so the team that was pitching just rolled it on the ground (aka impossible to hit a home run off that)
    - No one liked it
  + Mostly played in england’s former colonies lmfao
* Baseball (not key game)
  + Don’t know where it came from, various places in...europe...
  + Brought over to USA by irish ppl
  + Largely about stats
    - Like RPGs or whatever
    - And fantasy sports
      * A lot of luck is involved
* Hockey!!!!!! Jk we’re not talking about it GEEZ!!
* Key game Tennis
  + When: 1100 CE
  + Who: unknown
  + Type: ball & racket
  + Where: france
  + Why?
    - Rivalries
    - Popular for both men & women
    - Old sport
    - Defined by contemporaries
      * If there’s one good player at a time, that’s not good enough, it won’t show how good they are
      * Needs two to push each other
  + It was a game for royalty, ppl who have leisure time
  + Endless game, no clock
  + Women only play 3 sets but men play 5 sets?
    - Women have less of a chance to prove themselves
    - The less sets make randomness a bigger factor
  + Currently has a big problem with gambling. People are fixing the matches
    - What are they gonna dooooo!!!!!
* Boxing (not key game)
* Key game golf
  + When: 1400
  + Who: unknown
  + Type: ball and club
  + Where: scottland
  + Why?
    - Player vs physics instead of vs player
    - Player vs nature
    - Indirect competition
    - Nature modified to fit the game (level design)
  + Goal: get ball in hole in fewest series of strokes
  + Going for lowest score instead of highest (unlike a lot of games!)
  + Really quiet sport, meditative aspect
  + Babe didrikson
    - Probably greatest golfer of all time?
    - Got a bunch of olympic medals in other stuff like javelin or whatever then tried to do golf
    - Entered a men’s tournament because there are no women’s ones
    - Gets a lesbian lover ;-)
    - Started LGPA, ladies golfing league, only league started by women
  + Very precise! Mechanics!
    - Choosing equipment, how much of your skills to use, doing math
* Key Game Sasuke (aka ninja warrior)
  + When: 1997 CE
  + Who: ushio higuchi (producer of TV show)
  + Type: obstacle course
  + Where: japan
  + Total of 32 seasons in japan
  + Women compete on same course as men
  + Developing in TV world
    - Sport? Reality TV? Game show?
    - American ninja warrior pushing heavily at the sport angle
    - They only let people in after screening them and making their “story” good enough for TV or whatever
    - Also there are “wild card” where you don’t have to qualify but you still make it to the finals (cus your story is good??)
    - They also edit the footage to make it more exciting instead of to show the actual “sport”
    - One athlete said he was TV coached basically
* Volleyball
* Hippie sports
  + Specifically pushing against institutions, stuff like that
* Rock Climbing
* And some other stuff
* ~E sports~ oh boy. LoL,
* Key game Formula 1 Racing, from dylan mckenzie
  + When: 1946 CE
  + Who: Federation Internationale de l’automobile (FIA)
  + Type: motorsport
  + Where: western europe
  + Arguably the epitome of autoracing
  + Originated in grand prix, which was maybe testing more car abilities than racers
  + Started in wealthy cities. It’s also expensive
  + Tool assisted sport (ability of athlete is amplified by the tool)
    - There are mechanics, blahblah etc to help magnify the driver’s stuffs
    - Become a fused unit with the other human helpers and the machines to be able to cross the finish line first
* Key ideas
  + Context
  + experiences/spectacle, decision/action
  + Sports as drama
  + Arete
  + Statistics & noise
  + Sports as identity
  + Fans
  + Living games

### 9/26/2016 adventure - naomi

* Key Game Adventure
  + When :1975
    - Expanded 1977 then went to many platforms afterwards
  + Who: will crowther
    - Don woods modified the game, added a bunch to it like a bunch of fantasy stuff
  + Platform: pdp-10
  + Where: usa
  + Why?
    - First game of the genre, established a lot of common stuffs
    - Named the adventure game genre
    - Originated interactive fiction
    - Adapted into Zork, the first well known adventure game you could go out and buy
  + Made off cave system. Mammoth (?) cave system
    - Simulation of the caving that he used to do with his wife
  + Played command line, it’s all text
    - We played a little, ate the food
    - Responds to “get” and “pick up”
    - We tried to eat the keys and it didn’t let us
    - inventory. first time there’s an inventory?
    - “Look around” didn’t work but “look” did
    - Didn’t like “follow”
    - Travel by saying “go north” or other cardinal directions
    - The game loops on each other??
    - Xyzzy teleports you through first bldg and the one you were in
  + Such text based games work with several rooms connected to each other
  + A lot of exploring
  + Made on pdp-10
* Pdp-10 computer system
  + No display so everything was text based
* antecedents
  + riddles
    - Basically the first interactive fiction
    - But they’re kinda solved after you figure it out
  + Alsooo. Mystery novels
    - Whodunit!!
  + Tabletop roleplaying games
    - Between human players instead of with computer / parser
  + Choose your own adventure
    - Cave of time was first popular one, 1979
  + Eliza
    - A digital antecedent
    - Made in “madslip” (lisp) programing language
    - Made in response to turing test
    - Kind of like the first chatbot?
    - Always answered a question back, based on a type of therapy
      * Kind of simulates a conversation. ish.
    - Made for users who aren’t familiar with command-line systems
* Narrative in video game
  + Want to get fiction + interactivity together… like a reeses cup.
  + Putting narrative into games, like pacman
    - On the side of the box, cutscenes, abstract interpretations
  + Or like no abstraction, just put out there, like GTA
  + Fictional world + interaction + story, IT’S HARD
* So what’s an adventure game?
  + Player character, you have controls
  + Immersion in the world
* Zork
  + It was made at MIT, named this cus it was what MIT students called programs that weren’t ready to be presented yet (they got a copyright notice and had to name it this)
    - Had some inside-joke mit shit -\_\_-
  + 1980: Adventure game as packaged product
  + Huge sales in like 1985
  + Takes input/output to alter the state, and keeps track of that state
  + Has a little bit of randomness!
* Deadline (1982)
  + Genre expansion
  + added actual physical materials from the game (notebooks, etc)
  + Detective mystery stuff
  + Knew they had a group of players who were experts
* More experiments in 1989 with the types of the stories they were doing. Lots of sci-fi
* Key game Plundered Hearts
  + Put you as the heroine instead of like a grungy action hero
  + Some hot pirate kisses you maybe
  + She made the game cus she wanted to play that kind of game
  + Expanded audience to women
  + You don’t have the most agency, a lot of stuff happens not in your control
  + Several different endings
  + Why?
    - Created at height of infocom’s popularity
    - Complex protagonist, not necessarily player insert
    - First video game to explore romance (instead of just sex), played with romance genre ideas
    - One of the first games aimed at women, and made by women
    - Multiple good endings, not just always stereotypical romance stuff
* Mystery House (1980)
  + Made by roberta williams (with her husband ken)
  + One of the first graphic games
  + 4 lines of text + some visual
* Key game King’s Quest (series)
  + When: 1984-2015
  + Who: sierra ent. / roberta williams
  + Type: pc
    - Point & click adventure game, no text
  + Where: usa
  + Has many many different ways you can die
  + Lots of fairy tale inspiration
  + Why?
    - Most popular/longest series developed by sierra
    - The different titles show how it went from type/command to point/click
    - Made dying in a video game into an art
  + You ended up just clicking around looking for hotspots
  + Less spontaneous
* Key game Secret of Monkey Island (series
  + When: 1990-2009
  + Who: lucasarts (ron gilbert + others)
  + Type: PC
  + Where: USA
  + Insult swordfights
  + Clever word-based
  + Why?
    - Most popular & longest series developed by lucasArts
    - First game that didn’t really have a game over state, you could just explore the whole world
    - Excellent comedy writing
    - Model for modern point/click game
* Key game Myst
  + When: 1993
  + Who: robin miller and stuff
  + Create a 3d world players can explore
  + Still like a point & click
  + Why?
    - Became top selling game of all time until 1998
    - Best demonstration of how CD-ROM & larger storage could change adventure games
    - Used 3D graphics to render world even if gameplay is kinda 2D
  + Not as improvisatory or spontaneous or anything
  + Kind of like the casual game of its day
    - A lot of people played it who hadn’t played video games before
* Japanese adventure games!!
  + Portopia serial murder case (kinda like mystery house)
  + Policenauts (1994)
    - Dialogue becomes more important
  + Metal gear solid
  + Nobunaga’s ambition
    - Big strategy game
* Key game Angelique
  + Made by/for women since the company thought its image might be too stiff
  + 1994-2016
  + Giant fandom in japan, the voice actors do giant events
  + It’s a dating sim
  + Also has some weird battling things, history things
  + Why?
    - Launched otome game market
    - One of first dating sims (along with tokimeki memorial) and like, not porn
      * Tokimeki memorial is just you as a HS student deciding which one to date… focusing on unlocking characters etc whatever
    - Blend of resource management, empire simulation, in addition to relationship stuffs
* Visual Novels!
  + relationship theme, less actual gameplay
  + No rules really
  + You focus on dialogue choices
  + Kinda like phoenix wright haha everyone was like “yay”
* Key game rockett’s new school
  + Made in response to like, trying to make games for girls
  + It’s like a visual novel
  + Why?
    - Made especially for girls, to get girls back into games
    - Focus on values, mood, relationships, not just like dating people
    - Target marketing???? Girls have a specific type of game??
    - Setting is in everyday life, rare at that time
    - Episodic format, ends in cliffhangers
* Key game walking dead
  + Why?
    - Adventure game revival
    - New model of adventure game that focuses on choice + quicktime action
    - Transmedia!
    - Interesting questions about choice and outcome
  + Transmedia storytelling
    - Tells different story in same universe as the comic and show
  + Mandatory reactions (hitting zombie, etc) but also dialogue choices
  + Your choices change the story
    - npc will remember something you said, but it doesn’t affect anything in gameplay
    - Moral choices? A way players can express themself even if they don’t affect the game
    - It records the choices you made and shows you your choice relative to other people’s choices
* Big ideas
  + Fictional worlds + rules = narrative simulations
  + Technology can drive these things

### 10/3/2016 action - charles

* What ARE video games. New artform of the computer? Old? Videogame or video game?
* Pinball is inbetweel non-digital and digital games
  + Parlour games! Arcade games!!
  + Other ball/peg games like billiards, started out more large scale
  + Then more arcade-y, like a desktop version
    - Less actual interaction, you just pull the plunger thing and try to ring a bell
    - You can control ball arc with the plunger
    - Made by montegue someone based in NJ
  + C-c-c-combo between analog & digital
  + Humpty dumpty 1947 introduced flipper in pinball. Had like 6 of them and they were facing a weird way
  + Spot bowler 1948 had the flippers that we can recognize today
    - Based on a bowling game
    - Wayne neyens
    - Your skill can be more rewarded with this version, people got invested
  + Pinball was the most hip thing
* Key game spacewar
  + Why?
    - First arcade game
      * “Computer space” released on arcade cabinets but it did pretty badly lmao (the machine is weird looking)
      * People intimidated by the buttons and stuff
  + Came from a basement in MIT
  + People think of it as the beginning of video games
  + 2 player, control direction, accel, fire on each other
  + Originally the screen it was played on was meant for radar
    - Vector screen, used phosphor something to display stuff
    - The ships appeared brighter cus they were getting refreshed more
  + The gravity star in the middle engaged the players and got them to learn the controls right away
* Key game pong
  + Who: al alcorn
  + When: 1972
  + Type: Arcade
  + Where: Usa
  + Why?
    - Learning from mistakes from computer space.
    - One control: a knob! People are familiar with this cus it’s from stereos
    - The arcade cabinet is much less weird and futuristic. Tried to make it look extremely normal
  + Nolan bushnell started atari and this is when pong is created. It was nolan bushnell’s idea, created by al alcorn when he wasn’t even hired yet hahaha
  + Atari hire ups: ted dabney, nolan bushnell, fred marincic, al alcorn
  + They put the machine in this bar near atari and one time they had to go fix it cus it wasn’t working right
    - They opened up the back of it and quarters came pouring out. It was so popular the quarters were invading the electronics part of it
    - Then they knew it was popular
  + Ralph baer
    - Sued nolan bushnell and atari
    - Made a game “tennis for two” for mega box oddessey or w/e that was basically pong
    - But that wasn’t even the first
  + Willy higinbotham
    - Made an even earlier tennis game in 1958
    - Researcher for the air force and made this tennis game
* Key game space invaders
  + When: 1978
  + Developer: tomohiro nishikado for taito
  + Type: arcade
  + Where: japan
  + Why?
    - First colossally successful video game, like it would get articles about it in newspapers. Everyone played it
    - The lil characters made it a huge hit
    - Established japan as an important center for game design
  + First sign of an actual video game industry, and it’s international
  + The people in taito were all electronic engineers
    - Designed the game ANd drew schematics for the game machine circuit board thing
    - Also he did the character designs and pixel art
  + The increasing speed of the aliens as there are fewer of them is totally an accident due to the electronics of the game
    - Since there are less objects for the game to draw, it does it faster
  + Nishikado was already a respected game designer, made speed race and gunfight
  + Made 1bil dollars in the US from quarters alone. Most successful media property in the world
    - The myth that japan ran out of 100 yen coins because of space invaders is not true
* Common mechanics of action games
  + Avatar-based, manipulating a single object on the screen
  + Positional - you care about where the object is
  + AI controlled enemies
  + Dexterity and reflex intensive
  + Linear difficulty progression, level based
* Some more stuff. Pinball was the origin of evvverrrythinggg
  + A lot was based on pinball since they already knew that was popular
  + Themed (pinball - bowling, space invaders - space)
  + You get lives in pinball, multiple tries to throw the ball (extra shots)
* Evolution in the arcade
  + Humpty dumpty -> spot bowler -> triple action
  + Computer space -> pong -> breakout (important single player game)
  + Those two things merge into space invaders BOOM
* Key game pacman
  + Toru iwatani
  + Why?
    - Actually has decent AI. thinking machines
      * Blinky (follows u), pinky (tries to cut you off), inky (unpredictable), clyde (often ignores the player)
      * They’re all kinda dumb separately but together it’s hard
      * A lil more interactive, you’re fighting against something good
    - It had a kill screen that happened when you went past level 255 (8 bits lmao)
    - A lot of Firsts in the pop culture sense
* Key game centipede
  + 1982, dona bailey & ed logg, arcade, USA
  + Dona bailey
    - Display programmer for GM
    - Went to work for atari, probably most qualified programmer there
    - Idea came from “bug that winds down the screen”
  + As you get further in the game it gets harder cus the field fills with mushrooms
  + Why?
    - First great shooter
    - Four-way movement
* Home consoles
  + Atari would attempt to make their arcade game into home console games
* THE CRASH
  + 1983, mostly american console phenomenon
  + Several causes
    - Market glut
    - Lack of publishing control
    - Competition from home computers
    - But also ET. and the ugly game that came out with it
* Key game super mario bros
  + 1985, shigeru miyamoto/nintendo, NES, japan
  + Shigeru miyamoto
    - Very important. Super important
    - Made mario and zelda
    - Started out studying industrial design, but liked cartoon
  + Why?
    - Resurgence of consoles in US game market
      * NES credited with saving video games in the US
      * Nintendo seal of approval to prove it wasn’t atari and actually had quality control on its games
        + Established a publishing model for games
* Console generation
  + From arcade games
    - 0 lives = start over
    - Linear difficulty curve, series of levels that get harder
    - Dexterity and reflexes
  + New shit, since it was console not continuous quarter-giving
    - Can be completed
    - Checkpoints & continues to cushion the 0 lives fall
* Key game mega man
  + 1987-2010, keiji inafune with capcom, nes, japan
  + Orig developer team was 6 people
    - Inafune was an artist there and pitched his idea and they said no
    - Worked after hours with some friends for a couple of months to make it
    - Capcom liked it and released it, and then the original team got to work full time on mega man 2, more based on inafune’s original design
  + More precise than mario
  + Arm gun
  + Keiji inafune
    - Left capcom some years ago
    - Is dooone with the game industry and gives some good interviews on all the gossip and shit lmao
  + Why?
    - Action puzzle game
      * Giving people more meat, let them spend more time figuring out how to do things
      * Different kinds of bosses that require different weapons
    - Password system
      * Work as like checkpoints or whatever, let people walk away from the game without losing all progress
  + Still gots some legacy shit
    - 0 lives = start over
    - stages/levels
    - dexterity/reflex based
  + Newwww innovation shit
    - Password system
    - Non-linear stage order with the bosses/puzzle stuff
* Key game raiden
  + 1990, seibu kaihatsu, arcade, japan
  + “Shmup” = shoot ‘em up games
  + Why?
    - Parallel evolution, alongside nintendo stuff, arcade stuff kept going it was just home console stuff that died for a while
* Brief history of shooters
  + Space invaders 1981 - first shmup
  + Centipede 1981 - 4 way mvt
  + Galaga 1981 - the feint (enemies actually fire at your position on the screen)
    - Managing and dodging bullets
  + Defender 1981 - scrolling, horizontal
  + Robotron 1982 - twin stick shooter, movement and bullet aiming not connected
  + Gradius 1985 - cores, loop (vulnerable spots on an enemy)
  + Contra 1987 - platform, co-op
  + Raidn 1990 - genre solidifies
  + Battle garegga 1996 - bullet hell
* Super mario 64
  + Technical innovations, with the n64. ~3d world~
    - Analog stick - can go from 0-100, scale up gradually
    - Camera movement
      * Will make sure you can see where you are going to go
      * Miyamoto personified the camera so that the player would trust it
    - Open world
      * Exploreable, discover the stories and level puzzles yourself
    - Mario is really expressive and there’s a lot of variety with mario’s movement and control
  + Legacy stuff that it got from its predecessors
    - Dexterity and reflexes
  + New shit
    - Analog control
    - Non-linear stage order
    - Reactive camera (for the 3d world)
* Key game godhand
  + 2006, shinji mikami with capcom, ps2, japan
  + Shinji mikami
  + Why
    - It’s….bad???
      * Badly programmed
      * Offensive
    - You buy moves throughout the game and build your own combos
    - It’s an acquired taste
    - They don’t misrepresent it...it’s just what it says it is
* Key game super hexagon
  + 2012, terry cavanaugh, ios, england but released worldwide
  + Why?
    - History works both ways. It kind of goes back to arcadey
      * It’s a shooter with the bullets taken out!
      * Distillation back to beginning of arcade games
    - Ios games, good for indep games
      * Going back to essence of games (mario = when do you jump)
* Evolution in the arcade
* Engineering fallacy
  + Incorrect belief that the advancement of games is a purely technological process, and that therefore newer games are better than older games
  + It’s not!!!! Just like engineering!!!!!!!
* Big ideas
  + Origins of arcade
  + Common mechanics
  + The crash
  + Console design changes
  + Engineering fallacy

### 10/17/2016 first person shooters - matt boch

* Final exam 19th dec, 6pm in the same room as the lecture
* Key game maze war
  + 1973, steve colley, arcade
  + Project at nasa then went to MIT
  + Two player, both trying to go around maze and see each other before they see you
    - Sharing 3D space with others
  + Why?
    - Being in a shared 3d non-real space with other people
* Key game Battlezone
  + 1980, atari/ed rotberg, arcade, usa
  + Shoot ‘em up, you’re a tank and trying to destroy other tanks
  + Standard arcade bonuses
    - Like a flying saucer
    - min-map/radar thing to show enemies
    - You have one life/hit
  + The background pyramid landscape was really compelling. Some people tried to drive right into it
    - Most people tried to explore the space
    - Developers had to put in a if-you-go-too-far-you-die
  + In the arcade you put your face into it like VR (like peering thru the little window in your tank?)
  + Used fancy math processor to be able to do the 3d-ness
  + The red text on the top was just red cellophane overlay… wow technology
  + Used as military trainer
    - Rotberg didn’t like this idea so he only did it cus they agreed it was his last gig for the military
* Operation Wolf, Taito 1987
  + An arcade shooter thing
  + You can’t actually change the perspective/etc (looks side-scrollery)...
  + Move + aim
  + Gun kind of recoiled when you shot
  + Has narrative! Each shooting level has a slice of narrative in it
* Key game Doom
  + 1993, id software, PC, USA
  + Tried to insert YOU into the game (but it’s a pic of like an old white bald dude)
  + Network multiplayer
  + Also had modding. Packages, WADs (where is all the data)
  + Could get first few levels for free and then could buy more
  + universities/etc had to ban Doom from their networks because it took over their networks
  + Procedural level design
    - Traps, hazards, different monsters, doors, keys
  + Subtle up/down motion to imply walking and stuff
  + Didn’t have to aim up/down, if the enemy was in front of you then you hit them, there was no separate aiming
  + Super compatible with a lot of stuff
  + Why?
    - Give player sense of space
    - Immersion, sense of presence
* The guys who made that started patenting their technology
  + First time they’re like selling the technology/engine behind their game
* Castle wolfenstein, 1980 muse software
  + Topdown map traversing thing
* Led to > Ultima underworld 1991 blue sky productions
* Wolfenstein 3D 1992
  + Used texture maps and raycasting, and produced the 3d world without making the computer go overboard
  + Corridor oriented level design… it’s laid out on a grid and stuff
* Ray casting!!
  + Beam sent out from camera, if it hits object the object says where on its model its been hit and what color it is
  + If you send more rays you get a better picture
* VR
  + 90s had more VR optimism
  + That kind of crazy immersion is like aaaalways on the edge..or something i stopped paying attention
* Gun culture
  + A ton of americans have guns
  + A lot of funds go into making guns
  + FPS may be an extension of real world shooting games people play as kids, like paintbal of cops and robbers
  + Guns = sport?
  + Revolutionary war militias -> 2nd amendment -> cowboys with guns
  + It represents american individualism wow
  + Athlete called “rhodey” has won like 3 olympics and has a bunch of records and everything and is a really accomplished sportsperson, in guns
  + But columbine. School shootings??? Regulating guns??
    - Records show fps games probably aren’t the cause behind more gun crimes
    - Also violent crimes are going down
  + Why do we like shooting so much??? Aaa
    - Shooting is an action you’re taking, it’s a skill check
    - Shooting is like ray casting which is fun, might be part of the allure
      * Being in a space, caring about very precise things
    - Pointing!!!!!! So many animals like pointing, like elephants!!
* Machinima as means of expression
  + Using the 3d world to tell a story about the world
* Duke nukem 3D
  + Had more like exploratory things, like turning on lights and stuff
  + Less linear level design
  + Had weird strippers around that you could interact with
* Quake
  + Spiritual sequel to doom
  + Network play! Over the internet!
  + Competition!!!
    - Company offered a red ferrari to the winner (dennis “thresh” fong won)
  + Started the dominant FPS control scheme
  + Started a lot of the common terminology like rocket jumping and like weird spawn stuff idk
* Marathon, bungie
  + First fps that had mouse oriented looking by default
  + Looking using keyboard, movement with mouse
  + Ported to apple-bandai-pippin…
    - Controller had a trackpad on it o\_o
    - First time there was something that was like the 2 joystick control of FPS
* PC oriented control scheme, WASD + mouse
* Key game GoldenEye 007
  + 1997, Rare, n64, UK
  + A Pretty Bad Game, apparently
  + A game you could play against multiple people in the same room against each other (split screen)
    - Customizeable! Diff maps and items
  + D pad for movement, analog for aiming, but it was still kinda awk
  + Why?
    - Multiplayer at home
* Key game half-life
  + 1998, valve software, pc, usa
  + Built on the quake engine
  + Had better game writing than many of the previous games
  + Had puzzles, narrative but no cutscenes (you always had full control over the character)
  + You had a crowbar
  + Not as big on the shooting but wanted to focus on the space/story more
  + Why?
    - Level design emphasizing space. Phenomenology of space
    - Gabe newell specifically made it to show that fp games weren’t just like mindless shooty thingies…
    - Less cinematic tropes and focuses on gameplay and such instead
* Key game counterstrike
  + 1999, mihn le/jess cliffe, pc, canada
  + Made by two students
  + Started as a mod of half-life??
  + Always always always multiplayer
  + Tactical shooter
  + If you die you become a spectator since it had fixed time rounds
  + Has like an economy thing??
  + Rly popular e-sport
  + Makes people have to be really aware of the space around them (the level map) and their teammates
  + Why?
    - Culture is weird
      * There are terrorists + counter-terrorists and it doens’t really matter what role you get, it’s just like choosing color in chess or whatever
    - Level design… de\_dust level
* Looking glass legacy
  + FPS becoming a base for a game, that people add to
  + Deux Ex
    - Added a lot of like narrative/action game-y stuff on top of a shooter
    - Cinematic cutscenes
    - Part roleplaying game
    - Game player more control over what they do in the game
  + Bioshock
    - More morality stuff and story
    - Has weird puzzle elements (the pipe hacking thing)
    - You had many options on how to defeat the enemies
  + Far Cry 2
    - Set in some african nation, you have to assassinate some arms dealer
    - Weather system!
    - Enemy AI is aware of weather and time of day
  + Focus on player choice, emergent strategies, multiple solutions
  + Sophisticated story environments
* Key game halo
  + 2001-now, bungie/343, xbox/pc, usa
  + Fps on console!!
  + Xbox 360 with their new shiny controller
    - Xbox 360 is basically a PC hahahahaha
    - Also it had an ethernet port
    - First time there was a control scheme that felt good on a console for fps
  + Why?
    - The dawn of console FPS
    - Set a good control scheme
* Key game call of duty: modern warfare (series)
  + 2007-present, infinity ward, xbox 360/ps3/pc, USA
  + When xbox 360 came out, people bought call of duty because it was out already instead of halo, which was supposed to come out the next year to coincide with the ps3 and ruin ps3 sales
  + Make with quake engine
  + Military shooter from a soldier pov instead of a position of more authority
    - They wanted to make a game where you were just rank & file
    - Grounded human-level story (EA didn’t want it so they made their own studio)
  + wanted to do modern warfare but did WWII because the company said so
  + It’s basically an industry itself now. 3 studios alternate to make call of duty games
    - There’s like a million call of duty games dear god
    - One company, treyarch
      * Started making less realism things. They had nazi zombies in one
    - Sledgehammer games was made just to make new call of duties
    - So they can release them yearly since there’s 3 companies doing it and it takes 3 years to make
    - There’s a lot of lawsuits.
  + Started as a clone of medal of honor with a more grounded perspective
  + Went from serious shooter to a bonkers multiplayer game
    - Activision wanted more and more call of duties to something crazier
  + Why?
    - Has multiple faces
    - No signs of slowing down
    - Huge by happen-stance
* Key game portal
  + 2007, valve, xbox 360/ps3/pc, USA
  + The shooting is basically pointing, you’re not shooting enemies
  + Why?
    - It’s really good
    - It’s about space, not shooting
    - FPS going in different directions!

### 10/24/2016 strategy games - frank lantz

* Little Wars
  + It’s Miniature war game (THEY’RE PLAYING WITH DOLLS)
  + By hg wells, the inventor of scifi
  + 1913, first tabletop wargame
    - Hidden info, turn based, drama
* Key game Kriegspiel
  + 1812, george leopold von reiswitz, board game, prussia
  + Popular pasttime for prussian army
  + Starts out as a chess variant (they started just pushing some chess board together)
    - Then has a referee, which allows for hidden information
  + Ended up getting lots of custom made materials, etc
  + Why?
    - First OFFICIAL war game
    - First game that’s doing more with the idea of “war” than just have it as a theme. It’s trying to be a detailed simulation
    - Roots of dungeons & dragons
      * And thus the roots of all video games (because d&d is the source of everything apparently)
  + Kind of used as a training tool
    - But little wars was for PURE FUN, no pretenses
* Why war?
  + War is bad. Why do we like it so much when we want to get rid of it in the real world
  + War is based on a lot of uncertainty, all your actions are based on mostly uncertainty
    - “Fog of war”
    - Even if you don’t like war, you can appreciate the generals’ ability to make decent decisions while not knowing anything
  + We need the excitement of war because our lives are too peaceful
    - The stakes is high (life or death! Honor!)
    - Ummmmmmmm okay
* Strategy ←---------------→ tactics
  + Strategy = high level plans, abstract logic
    - Cerebral stuff, decision making
  + Tactics = low level operations, concrete actions
    - Moment to moment stuff, like shooting/dodging/etc
* 3 different ways to win a game:
  + luck/action/strategy
  + Aka being/doing/thinking
* Strategy games emphasize
  + Knowledge information calculation
  + Prediction & guessing
  + certainty/uncertainty
  + Heuristics (rules of thumb)
    - Searching through game tree to predict the outcome
    - But game trees grow exponentially
    - These advance as you become a better player
* Common features of strategy games
  + “Top-down” perspective
  + Resource management
  + Mutual decision-making (not puzzle-solving)
  + Often based on military conflict
  + Unit differentiation (strengths/weaknesses)
  + Terrain
  + Different lines of sight/lines of fire (obstacles in the way)
  + Games of repetition & emergence
    - You play over and over again to get good at it
  + Some examples of games:
    - Axis & Allies
      * A really big board game, they guy making it was wondering “what’s the possibility space of WWII?”
    - Computer bismarck
      * People who played tabletop strategy games and then made games based on them
    - Reach for the stars
* Key game M.U.L.E.
  + 1983, danielle bunten berry/ozark softscape, atari 400/800/c64, USA
  + Not actually about combat, but has all the strategy game trademarks
    - Resource management, supply/demand economics
  + 4 player, inspired by monopoly
  + 4 colonists on alien planet, you have to obtain the lands and then farm and use the resources to expand your territory
  + There’s a LIVE AUCTION phase wow
    - You move up/down the screen to set a price
    - Really clever!!
    - You can fake out people!! Walk up to raise the price and then duck down
    - Visualized them really great
  + Why?
    - Very respected and influential among designers. It’s a cult classic
    - Advanced ideas, STILL ahead of its time
      * Living board game! Digital but still like a strategy board game
      * Economic conflict
      * Deep multiplayer interaction
      * **Real time auction thing is cool as shit**
* Key game civilization (series)
  + 1991 - present, sid meier/microprose, pc, usa
    - Was first a board game made by francis treshcen
    - The creator of this and creator of mule were good friends and just like...chose different things to make idk
  + Example of 4X games
    - Explore Expand Exploit Exterminate
    - You start small, you don’t know what’s there, and then you take over
  + Why?
    - Deep, detailed, complicated, layered ruleset. Extremely complex.
      * Like chess. Many rules. Not like go where the complicated-ness is kind of hidden and emerges
    - Complex diplomacy
    - Multi-modal interface
      * Lots of different views. Information graph, a map, a text adventure screen, etc
    - Multiple paths to victory
    - Tech tree
      * Your decisions reverberate down the game tree
      * But it’s weird and simplified, like monothieisim will get you archery
  + Sid meier says “a game is a series of interesting choices”
  + CIV 6 is designed by ed beech
  + Usually considered one of the greatest games of all time
    - Maybe cus it’s based in real life and very Serious
* Key game x-com (series)
  + 1993, julian gollop/microprose/pc/england
  + Aliens invading the earth. You put together squads of human soldiers to fight them
  + Also usually considered one of the greatest games of all time
  + Why?
    - Beloved example of deep gameplay
    - Two-tiered experience: strategic & tactical
    - The units you control are named and you become attached to them
      * Emergent emotional attachment
* Key game fire emblem
  + 1990, intelligent systems, famicom NES, japan
  + Designed for console instead of PC!!
  + A good example of the japanese people exploring this idea
  + Putting together units and then going on a RPG style adventure
    - Everyone gets a backstory
  + Game is a story! The battles are the key moments of the plot
    - There are cutscenes between each battle
    - During battles, you move pieces around, different pieces encounter each other and it zooms in and you see the pixel art animation fights
    - Character’s backstory matters to what’s happening on the battlefield, putting two chara next to each other matters
  + Why?
    - Permadeath
      * The people you lose in battle, you actually lose them
    - Units have relationships
    - Best animation of all time in the combat animations
    - It’s a good example of the japanese version of strategy games, more welcoming to like younger people and stuff
* Key game populous
  + 1989, bullfrog/peter molyneux/pc/england
  + One of the first games where you play god, etc
    - You can CHANGE the TERRAIN!!!! ZOO TYCOON
  + One of the first real time strategy games
  + Why?
    - Great example of molyneux’ genius (yea yea whatever)
    - First “god game” (subgenre of strategy games)
    - Early real-time strategy
    - Isometric 3d terrain
* Herzog zwei
  + 1989
  + Usually considered grandfather of strategy genre
  + 2 player of 1p vs AI
  + You fly around, shoot at other units, you can also pick things up and move them
* Dune 2
  + Precursor to modern day rts
  + 1992
  + Based on david lynch movie dune
  + Wasn’t sequel to anything but ran into licenscing problems so it just became dune 2
  + Standard RTS stuff
    - Resource gathering
    - Base building
    - Tech dev (tech tree)
    - Indirect unit control (semi-autonomous units)
    - Context-sensitive cursor-based control (window/mouse interface)
  + Brett sperry
* Command & conquer: red alert
  + Queuing up commands
  + Competitive online play (beginnings of RTS as esport…)
  + Full motion video cutscenes (that are really bad)
* WarCraft 2
  + Blizzard’s start in this (they were rivaled with whoever was doing command & conquer)
  + charming/evocative world building! That’s why they won the rivalry
  + High polish!
    - Which is what blizzard is known for. They aren’t fast, or first, but they put out a good product when given time
* Key game starcraft
  + 1998-present, blizzard, pc, usa
  + They kinda made it just to be an expansion of warcraft
  + Warcraft but scifi. With three races
    - Protoss (high class aliens), terran (humans in robo suits?), zerg (aliens)
    - Probably ripped off of warhammer 40k
  + Why?
    - Greatest RTS of all time
    - Asymmetry between different races
    - Gets adopted as basically the national game of south korea, big cultural impact
      * Birth of e-sports
      * The players became celebrities like pop stars
      * They didn’t play a lot of japanese games (lol) and had like broadband internet structure everywhere
      * It’s like Go???? Which they did play????
    - After a while they made the game more spectator-y
      * Dustin browder, designing an e-sport
        + Make it clear so people can see while watching
        + Simple so players can predict each other’s moves and it doesn’t seem random
        + High skill ceiling, so you can watch the good players be crazy impressive
        + Uncertainty so game cannot be determined quickly
    - Macro vs micro
      * Macro: building base, bigger moves
      * Micro: actual battling, throwing punches, etc
        + Starcraft puts an “actions per minute” limit on this so you get people having crazy fingers
  + Starcraft is dying (well, as an esports or whatever)
    - Maybe cus blizzard went into korea and tried to control esports scene
* Homeworld
  + 1999, relic
  + Truly 3d space
* Desktop tower defense
  + One example of tower defense games, which started out as people modding strategy games
  + Blizzard released its tools to make the game so people used it and made this
* Key game league of legends
  + 2009, riot games, pc, usa
  + MOBA multiplayer online battle arena
    - Emerged out of people modding blizzard’s shit
  + Inspired by Defense of the ancients, DOTA
    - All MOBAs are basically clones of DOTA
    - LoL was the commercial version of dota which was just some mod on someone’s computer
  + Team based
  + Why?
    - Biggest, most popular videogame in the world??
    - Complex, deep, difficult, challenging, beautiful!
    - Team-based strategy game
    - Most successful e-sport, shows new direction for gaming
    - Most advanced expression of action RPG combat
    - The legacy of kriegspeil

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### 10/31/2016 modern non-digital games - jesse fuches

* Playing cards
  + No one knows where they stayed. China??? 8th century?? Betting games?? Money??
  + Migrated to europe 13-14th century
  + 4 suit deck formalized in france 1380
  + They’re still pretty regional
  + Hidden info - same info on one side, different on other
    - This is their main selling point!!!!!
  + They used to be expensive and the backs used to be plain white, if dirty or messed up you’d send them back to the workshop to get cleaned
  + Now elegant!!
* Key game poker
  + 19th century, folks (?????), 52-card deck, USA
  + Used to be 3 card hands and like one round
  + 5 card hands late 19th century in new orleans
    - Now they use 5 cards even if you only choose some to score with
  + Why?
    - Most popular skill based gambling game
    - Can be played for small or large stakes (at home, or big on TV)
    - Mind game of highest order
    - Still folk game with many variants (like texas hold-em is one popular form)
  + The hands
    - Straight flush > 4 of a kind > full house > flush > straight > 3 of a kind > 2 pair > 1 pair > high card
    - Ranked by probability
    - If you have the same, there’s like one card that determines winner
  + Straight poker
    - Deal all cards and bet, that’s it
  + Draw poker
    - Exchange cards for new ones
    - Mostly a family game, less betting strategy, bad for spectatorship (too much info not known to anyone)
  + stud
    - Each player gets 4 face up, one card face down
    - dealt in series of rounds and you bet on each round
    - Get more info as you go
  + Community stud
    - Most cards shared, communal set of cards (usually 5)
    - 2 cards face down that are for each individual
    - Bet each time you flip up a card
    - Rotating dealer
    - Ante
  + Poker hands are brittle and unforgiving, one card makes a huge difference
  + Strategy of luck
    - Poker is in-between these
    - That’s why it’s played with many rounds, to make it more of a game of skill instead of luck
    - Skill is based in evaluating probabilities
    - The luck makes it a lot more accessible to beginners
* Key game contract bridge
  + 1925, harold vanderbilt, card game, USA
  + Why
    - classic american trick game
    - Highly sophisticated bidding system
    - Wildly popular in mid 20th century
      * Even though it was mind bendingly complicated
    - Still played globally and competitively
  + Most of gameplay is on bidding, it’s most of the strategy
    - You bid your suits
    - Only the tricks you bid on are the only ones you get good points for
  + Rewarding risk
  + Communication and conventions
    - Bidding is the only way to communicate technically
    - But there are ways to send signals to your partner
    - Not allowed to have secret conventions, there’s even an ‘alert’ card so no one is really surprised by anything
  + No bluffing, purely tactical play with no secrets
  + Was pushed as a husband/wife game for you guys to form teams
  + Bridge is testing teamwork, how well you can read your partner’s mind
* tricks (like playing hands)
  + Generally 4 players, one person leads, usually 2 teams (people across each other are teams)
    - Following players have to play within the suit to win the hand/trick
  + Early 1400s - karnoffel (has a weird trump suit thing introduced)
    - Each card has a story/role attached (devil, etc)
  + Early 1400s - tarots (italy)
    - Started for card games then became for divining
    - Was the suit that beat everyone else’s suits
  + Early 1500s - Trump
    - Introduced trump suit
  + Late 1500s hombre
    - First game with opportunity to auction off trump suit by saying how many tricks you can take
    - 3 player game, with trump bidding, person who picks trump suit is the hombre
  + Mid 1600s - whist
    - Streamlined trumps
    - Last card dealt out is trump suit
  + Mid 1800s hearts
    - Bad trump suit cus it gives you points
  + Late 1800s bridge-whist
    - Partner of person who picks trump suit has to lay out all their cards so everyone can see
    - Makes it more strategic
* Key game monopoly
  + 1904-1933, lizzie magie, board game, USA
  + Started as folk game but then got commercialized
  + Why
    - Most influential folk roll-and-move game of 20th century (like snakes and ladders)
    - Most successful commercial boardgame of 20th century
    - A universal pop culture symbol
    - Most derided board game among modern game designers (usually used as example of bad game)
    - Case study of how one rule change can make all the difference
  + Started as landlord’s game
    - Kind of edu-tainment, propaganda
    - Land tax as only task
    - Was definitely trying to say something - land ownership is bad
    - Started out a lot less brutal
    - Not about bankrupting other people
    - This game spreads by word of mouth
  + Mutated to Arden Village, 1905
    - Introduced the idea of monopolies, “color groups”
  + Folk monopoly
    - Gets more brutal etc
    - Chips instead of small bills
    - Prices of house/hotel is equal to mortgage value
    - \*\*\* if player lands on unowned property, they do *not* have the option to purchase it at a set price. Instead, it immediately goes up for auction and sold to the highest bidder
      * More strategy! Too much strategy? Overly cerebral
      * Smart aleks start playing it
  + Turned into 1932 finance
    - Some guy tried to sell/whatever it
    - Can’t call it monopoly cus it’s in public domain
  + 1933 charles todd
    - Lots of atlantic avenue places
    - Set mortgage prices, no bidding
      * Easier to get into!!
      * More family friendly!!
  + 1933 Charles darrow steals todd’s game rules and ideas but gets a graphic designer and starts manufacturing them himself
    - Parker brother’s take it and start making it
      * They screw over lizzie magie’s patent and don’t really give her money or credit
  + Like battleship, mafia/werewolf. Started out as a really hard game, but then gets really, REALLY popular and simplified
* Key game diplomacy
  + 1958, Allan b. Calhamer, boardgame, USA
  + Self published 1959, owned by hasbro
  + Why
    - First probably best Influential politics boardgame that’s best with 7 players
    - Favored game of military strategists and game theorists
    - Few pieces, simultaneous turns, contingent outcomes
      * So you can tell people you’ll do a certain move but really be lying out ur ass
    - Classic example of “bleed” that presages RPGs and MMOs
      * You can get angry at the other players in real life outside of the game
    - Procedural representation of real-world multilateralism
  + All its content is not through the materials, it represents diplomacy through actual diplomay
  + Shared victory, make alliances
  + People play it by mail! Play it online!
  + Calhamer was a mailman for a long time
* Key game set
  + 1990, marsha jean falco, card game, USA
  + Created early but published later
  + Made to check if dog epilepsy was genetic
  + Why
    - Perfect intellectual abstract game
    - Archetypal ‘MENSA’ game
    - Can be played by all ages, a totally separate skill, although little strategy
    - Classic one-hit bullseye, the creator only had one good game
* Key game jenga
  + 1990, leslie scott, boxed game, ghana/england
  + Why
    - Perfect physical abstract game
    - Archetypal light family/party game
    - Can be played by all ages - a totally separate skill, although a little strategy
    - Classic one-hit bullseye
    - Arc of tension and drama that can be translated to other forms
  + Leslie scott calls herself a product designer, wants to spread her game
* Key game magic the gathering
  + 1993, richard garfield phD, trading cards, USA
  + Why
    - Most influential tabletop game since d&d
    - Allowed players to feel like game designers by customizing their deck
    - Mana as a system for balancing power and creating a dramatic arc
    - Five Colors of Magic
    - Maintains a vibrant culture of competitive and casual play
  + Influenced by cosmic encounter
    - Like diplomacy but with cards and stuff
    - Has roles/aliens that have crazy powers
  + Started CCG card collecting game craze
  + Three things magic made
    - Collecting cards/building your own deck
    - Five colors (organizing)
    - Mana
  + Three personality types
    - Timmy (young and inexperienced????????)
    - johnny (making the weirdest deck possible)
    - spike (trying to win tournaments)
  + aggro/combo/control cycle of play
  + Magic > netrunner > pokemon > yugioh
  + Digital version of magic isn’t that good cus the actual game has too many phases that are hard to do digitally but work really well non-digitally
* Living card games (LCG)
  + Paying a subscription to get new cards that come out
  + Netrunner gets rebooted as a LCG
* Key game hearthstone
  + 2014, blizzard, desktop/mobile, USA
  + Why?
    - Most successful digital collectible card game
    - Clear control/experiment on what works in digital vs non-digital
    - Appeals to casual players, but also successful as an e-sport
      * Can be spectator game
    - Thoughtful balance between free-to-play monetization and maintaining player experience
  + Started from world of warcraft card game in 2006
  + Good digital stuff
    - Has sfx so you can like chill out while it is your opponent’s turn and just listen to what their moves are
    - “Taunt” - set which one of your things will get attacked first, similar to being able to choose who on your side will get attacked which is what happens in magic
    - Trap cards like in yugioh
    - Very slick game like all blizzard shit. really great for touch screens
  + The money feels good to pay...
* Key game settlers of catan
  + 1995, klaus teuber, board game, germany
  + Why
    - The eurogame that started the eurogame boom of the last 20 years
    - Now popularly considered “the thinking person’s monopoly”
    - Updates familiar tropes with eurogame twists
      * no direct aggression or player elimination,
      * no player avatar,
      * constructive instead of destructive victory conditions
  + Originally a bigger game, releases other parts as expansions (so sheep feel underpowered)
  + Variety!! Randomly constructed board
  + You care about what happens on other people’s turns
  + You start with two points already
  + No super direct aggression unless you are the robber
  + Expansions!
    - Islands and boats, Cities and knights, traders and barbarians
    - A travel edition, a simple edition, etc
    - Skinned differently (space, bible, etc)
* Euro games
  + Acquire 1962 - Sid sackson (a game)
  + Spiel des jahres
    - A competition that popularizes games and makes them wildly successful
  + Coaster proclamation 1988 - designers declare they will not sell their games unless their name is on the cover so their identity is connected to the game
  + Especially in germany they don’t like aggressive war games because of WWII
  + Common qualities
    - “Interesting choices”
    - Some randomness, little luck
    - Moderate complexity and length
    - Constant multi-player interaction - sets it apart from digital games
    - Indirect conflict
    - Loose relation to theme
    - Attractive but abstract pieces
  + Ra 1999 - Reinier knizia (a good game, it’s an auction game)
  + Carcassonne 2000 - Klaus-jurgen wrede (laying tile games, everything simple but the scoring is extremely complicated)
  + Ticket to ride 2004 - Alan moon
  + Agricola 2007 - Use rosenberg (work replacement game)
* Ameritrash
  + American games - more of a fighting style type of game
  + Risk 1959- Albert lamorisse (he’s actually french)
  + Chaos in the old world 2009 - eric lang
  + Differences
    - More luck, lots of dice
    - More complex and longer
    - attacker/defender
    - Direct conflict
    - Tight relation to theme
    - Chrome/materials emphasizes theme
* Key game dominion
  + 2008, donald x vaccarino, card game, USA
  + Why
    - Introduced “deckbuilding”, the most influential new board game mechanic of the last 20 years
    - Winner of the spiel des jahres in 2009, now a classic gateway game
    - Combination of deckbuilding and “deadweight” victory cards creates a complex loop of cause and effect
    - Modular setup leads to endless expandability
  + Only the land cards matter, they’re the only ones that give victory points
    - They do absolutely nothing during the game so you have to time your moves well
  + Pros
    - Addictive basic loop with endless variations
    - Semi-hidden scoring
    - Low politics - no direct aggression
    - Set-ups generate puzzles
    - Everything’s (usually) in the cards
  + Cons
    - Bland and themeless - seems like a tech demo?
    - Semi-hidden scoring
    - Passive-aggressive
    - Front-loaded strategy
    - Endless shuffling/chaining
  + Lots of games stemmed off of this
    - Thunderstone, nightfall, trains, quarriors, puzzle strike, legendary
    - Use deckbuilding but not dominion knockoffs: Friday, a few acres of snow, mage knight
    - Ascension 2010 - justin gary
      * Another deckbuilding game that isn’t dominion
      * Less variety, easier setup, more tactical (conveyor belt of cards)
      * One of the earliest good iOS deckbuilding games

### 11/14/2016 action-adventure - charles pratt

* VERY LOUD UNDERGRAD
* Usually we don’t count hybrid genres but we’re including this one. It’s strange
* Key game Adventure (atari 2600)
  + 1979, atari/warren robinett, atari 2000, usa
  + Setting #1 is the tutorial setting, #2 is like actual gameplay, #3 is with randomized items (making some of the levels unbeatable)
  + Warren robinett
    - Now studies nanotech?
    - Wanted to make a game that had adventure-game stuffs for the home console atari
      * Atari console was made just so you could have arcade games in your house so it fit the idea
      * Since he had to work with atari console he put those action game elements in
  + Why?
    - First adventure game, first of its kind
    - You can pick up objects in it, they each have a function
    - Created the ability to pick up objects by running over them
    - Programming simple enemy AI
    - The maze loops back, non-euclidian space
    - First use of “fog of war” -- limited vision
    - First easter egg!
      * Atari didn’t put creator credit in so its creators wouldn’t be poached by other companies
      * Robinett put in this secret room with his credit in it
    - Had to explain screen wrapping in the instruction booklet cus it was the first time they did something like that
* Action games
  + Avatar based
  + Position
  + Reflex intensive
  + Ai controlled enemies
  + Linear progression
* Adventure games
  + Exploration
  + Collecting objects
  + Puzzles
  + Storytelling
* Action-adventure
  + It’s a set of mechanics and diff games emphasize different mechanics
  + It’s literally just the smash-up of action and adventure genres so it gets this hyphenated name
* Key game legend of zelda series
  + 1986-present, shigeru miyamoto/nintendo, NES
  + Basically an adventure game with fancy skin
  + Released on like every platform
  + Why?
    - Gold standard. The metric the video game industry judges itself on
    - All the good things of adventure + action games, including good story
* Key game another world
  + 1991, eric chahi, amiga, france
  + Eric chahi
    - V talented, enormous influence but not that prolific (unlike miyamoto)
    - Built every single aspect of Another World by himself while working as an artist on another game
    - Primarily an artist, not a programmer, did all the sound design/music
    - Early ancestor of indie game model (carries out his vision with no compromises and has to work alone cus no one else agrees AKA MAN BABY)
  + Why?
    - Cinematic platformer (forgotten genre)
      * More pulp influence, not like mario
      * Like prince of persia 1989, flashback 1992
      * Elaborate animation, just like a cartoon you play through
    - Influential in emphasizing visual storytelling and convincing game designers that visuals are important
      * Atmospheric communication
      * Visuals go beyond just communicating use, visuals are important
      * Influenced a lot of japanese developers
* key game tomb raider
  + 1996-present, core design, sega saturn, england
  + 3 eras of tomb raider games
    - Game 1-6, 1996-2003 released annually
    - Game legend, anniversary, underworld, 2006-2008 annually
    - Tomb raider, rise of tomb raider, 2013, 2015
  + Why
    - First time they have the idea of being in a puzzle box in 3D
      * You are working INSIDE a puzzle
      * Environmental puzzles
    - Laura croft - one of most recognizable video game chara of all time
      * Toby gard - creative director of first game, designer of croft
        + wanted to make a strong woman character, female indiana jones
        + The company wanted to make her a selling point, a sex symbol which made toby gard upset
        + They compromised. But the game was so successful, the company just pushed toby gard out of his position
        + Core design ran the franchise into the ground
      * First game passes the bechdel test
* Key game castlevania: symphony of the night
  + 1997, koji igarashi/konami, playstation, japan
  + All the concept art for it is by this one lady who did ACTUAL OIL PAINTINGS for the concept art
  + Usually side-scrolly games (the ones before symphony of the night)
  + Whip-wielding vampire hunters
  + Final boss is always count dracula
  + Symphony of night
    - Features alacard (dracula backwards ha ha) who has lost his vampire powers
    - Nonlinear
  + Why?
    - Sometimes a key isn’t a key--lock/key
      * Picking up keys for different places that you have already seen. Not linear
      * **Metroidvania**
        + Game with large world that is divided up into different sections that must be accessed with tools acquired in other sections of the world
        + Also it’s a platformer
        + Make players feel smart by showing them the problem then letting them to find the solution
* Key game GTA
  + 1997-present, rockstar games, houser, USA
  + Game I and II were 2D, 1997, 1999
  + Was big at the time because it was set in the modern world which was weird for the time it came out
  + But its core DNA is still just zelda. You go places, do quests, whatever
  + GTA III is really popular, then some san andreas stuff, then IV, and then V
  + Sam houser (producer) and dan houser (writer)
    - Some rich guys who wanted to make big epic gangster story game
    - Started the trend of making big grand stories that aren’t in perfect places
  + Open world?
  + Why?
    - Emergence + progression
      * Jesper juul. One of the most important video game scholars
      * Emergence
        + Rules lead to more exciting things
        + You could have a strategy guide but not a walkthrough
        + Meant to not be solved, since they originated in arcade games and they had to make money by replayability
      * Progression
        + You can have a walkthrough with these. The rules defines the game
      * GTA has BOTH!!!!!!
        + Using emergence to beat the progression
* Key game dark souls
  + 2011, hidetaka miyazaki/from software, xbox 360/ps3, japan and elsewhere
  + Hidetaka miyazaki
    - Studied social science, couldn’t find a job in that, so became an account manager at oracle (in-between for the client and the engineers)
    - Had Some Success
    - Saw the game Ico (i think???) and decided to make video games.
      * Has no relevant skills. What is he thinking
    - Goes to work at From Software which is known for low quality titles
    - Comes across a project abandoned by the company, Demon Souls
      * Transfers himself to the demon souls team
      * Starts to take over the development team for it
      * Could take risks with that project cus it was already a failure
    - Makes a game called Demon Souls that is like, pretty good
    - It gets popular and he gets to make another version which he calls Dark Souls which is basically the same as Demon Souls
  + It’s a pretty punishing game, you have to have smarts
  + There is a “roll” you can do that gives you a few frames of invincibility lol
  + Why?
    - risk/reward
      * The dark souls loop:
      * 1) Encounter enemy
      * 2) Die - you drop the currency you were carrying and go back to last checkpoint
      * 3) Find souls that you dropped, if you die on the way there, those are lost forever
      * You CAN’T GET STUPID!!
      * 4) retrieve souls
      * 5) repeat
      * Makes you worried to explore, but exploring is the point of the game
    - It is an action-adventure-rpg
      * Shows the spread of RPG mechanics (basically just levelling)
      * RPG shit is now casual games too!!
* Key game metal gear series
  + 1987-present, konami/hideo kojima, MSX 2, Japan
  + Stealth action game
  + Game 1 and 2, 1987, 1990
    - Modelled on zelda (sort of), open world base, get new weapons and keys etc etc blah blah
  + Original inspiration was castle wolfenstein (1981)
    - Secret most influential videogame ever!!
    - influenced metal gear series, zelda, doom
  + Metal gear solid 1-4 1998, 2001, 200dlkjfgsldkjf etc
  + MGS 5 which is good
  + Why?
    - No compromises
    - Hideo kojima
      * Became very incredibly influential for their work but works inside a big machine. He works in a big company
      * Has a very very distinct style
      * Much more influenced by film/tv than other video games. Wants to merge these two mediums
        + So his games have really elaborate cut scenes
    - Linear-ish to open world structure
      * A lot of story but not linear
    - Highly emergent gameplay
      * Camouflage
    - Gesamtkunstwerk
      * Theory made by richard wagner (who also like set how classical music is structured blah blah) (also he believed he was the greatest composer in history) (also he thought in an opera music should be subsidiary to the drama)
      * The idea of the “total artwork”
        + Opera was this cus it involved all of the art disciplines. All of culture
        + Tannhauser, one of wagner’s operas

We are listening to it

Recitative / aria; how they could get a great melody and also move the story forward

* + - * + Productive tension

The interesting thing is the tension between the two parts of the art (storytelling/music) not that that problem has to be solved

Like the games that are trying to solve the story + action + puzzle + everything part of the games

### 11/14/2016 simulation - mitu

* Ceci n’est une pipe stuff
* Simulation
  + Procedural (rule-based) representation of aspects of “reality”
  + 1. Simulations are representations
  + 2. They are process based
  + They have a particular relationship to “reality”
* Game of life
  + Jon conway 1970
    - His attempt to simplify some mathematician’s ideas
  + Explores cellular automata
  + Rules:
    - For every alive cell
      * 0-1 neighbors: dies
      * 2-3 neighbors: survives
      * 4+ neighbors: dies
    - For every dead
      * Each cell with 3 neighbors becomes populated
  + Couple diff common patterns:
    - Block, beehive, loaf, boat, blinker, toad, beacon, pulsar, pentadecathlon
  + ~emergent behavior~
    - Complex interactions arise from combinations of simple rules
* Simulation *game* ??? toy??
  + All games (to an extent) are simulations, not all simulations are games
* Ace of Aces
  + Designed by a history teacher
  + You have two blimps, simulates dogfight between 2 wwi aircraft
  + Rules simulate piloting the planes. Also it’s all in books
  + Each page of book has a view of what you’d see from the cockpit
* Simulation is tricky, you wanna simplify your idea… what you leave out tells more than what you put in
* Key game microsoft flight simulator (series)
  + 980, bruce artwick/subLOGIC, PC (apple2), USA
  + Like ace of aces but using power of computation
  + There’s a ton of sequels, most made by aces studio (within microsoft)
  + No goal/points/levels, you just fly around (the first version at least)
  + The controls are very complicated. Full keyboard. Crazy. Similar to actual cockpit controls (flaps, rudders, everything)
  + Why?
    - Simulation gains depth through limiting and abstracting the subject
    - Only takes the narrow idea of flying, didn’t try to take EVERYTHING about planes
* Simulators for teaching pilots how to fly stuff VS simulators for games/escapist fantasies
* Goat simulator?
  + It’s good because it’s not realistic
  + Same with surgeon simulator
* Key game oregon trail
  + 1971, don rawitsch, pc, usa
  + Designed to replicate trials/tribulations of that part of american history
  + Most people didn’t buy it, they just found it for free in their school computer lab
    - Then schools wanted it and apple2 got more popular something something stopped paying attention
      * Steve jobs was pushing the apple 2 a lot so people bought it
  + Why?
    - Clear example of successful educational game
      * Pairing with the apple 2 spread it to captive audience of school children
    - It’s really easy to die in this game and it’s pretty gruesome, no sugarcoating
    - Leaves out genocide :^)
* Key game lemonade stand
  + 1973, bob jamison, apple ii, USA
    - Ported to apple ii in 1979, was preinstalled when you got the computer, and that’s how it propagated
  + Why?
    - Vertical slice of really complicated system
    - Not trying to simulate something objective
    - Simulating capitalism!!!!
* Key game sim city
  + 1989, will wright/maxis, PC, USA
  + Will wright
    - Inspired by pinball construction set
    - Inspired by Christopher alexander’s book “a pattern language” (human centered architecture)
    - His first game Raid on Bungeling Bay
  + Orig developed for commodore 64 in 85 but didn’t get published until later
  + Publishers were reluctant about it cus it didn’t have clear win/loss stuff
  + Came out for mac and amiga first
  + Won a gajillion awards
  + Several other “sim” games (helicopter, etc)
  + Why?
    - People get really complicated about it.
    - magnasanti - weird setup thing that gets a PErfect Stable State for sim city but has like crazy human rules. Evil? Dystopia? Regulated? Stuff
* Chris crawford
  + This guy stormed out of developer’s conference announcing he was not in game dev anymore
    - Wanted to make Social simulations. People games! Not things!
  + Made Gossip (1982, atari) the telephone gossip games (“the pong of people games”)
* Simulations of people are always reductionist - important to be *consciously* reductionist
* Key game sims
  + 2000, will wright/maxis, pc, usa
  + Sims precedents
    - Turing test
      * Made a test for seeing if a machine is human
      * Originated out of a test of trying to determine an anonymous person’s gender based on asking them questions
    - Eliza
      * Simulates a therapist
      * Was really simple but had a big effect
      * “Eliza affect” - people getting attached to machines/programs just after short exposure to them
        + Like tamagotchi
    - Little computer people
      * Basically simulating a dollhouse, like a fish tank
  + You can create people. And also houses. And it joins to be a neighborhood
  + You have some control but not too much
    - Objects with affordances - they each have a list of things you can do with them
    - Sims also have their own independent needs (bladder)
  + No sexual orientations n such
* Shadow of mordor
  + Something about how orcs aren’t humans so they can act kind of crazy
* Simulation as building on (and augmenting) our existing mental models
* ~performance as simulation~
* Guitar hero
  + Created by relatively small team (20 ppl) but got WILDLY SUCCESSFUL
  + Made you actually feel like you were playing the instrument
* Key game rock band
  + 2007, harmonix, xbox 360/ps3, USA
  + My fav game
  + It’s accessible! Because it’s a familiar concept
  + Why?
    - Games as performance
    - Manipulates social dynamics between people, socially aware
    - Apex of music games + plastic instrument genre
    - Wide appeal to both hard-core and casual players
* Key game FIFA (series)
  + 1993 - present (annual releases), EA Sports (originally canada), sega genesis, canada (for release in europe)
  + Like the representative sports sim game
  + First started not connected to real life at all, but then entered a contract with FIFA
  + Special cus it was isometrical not top down (like predecessor sensible soccer)
  + You control one person at a time, can flip between diff players
  + why
    - They are trying to be more and more like actual reality - iterative tweaks
    - Best selling sports game in the world
    - They made a women’s soccer version of this and a bunch of fans got angry
* Key game gran turismo (series)
  + 1997-present, polyphony digital, playstation, japan
  + Focusing on gran turismo 2
  + These games keep evolving
  + Took 5 years to develop
* Key game elite
  + 1984, david braben/ian bell, pc (bbc micro), UK
  + Genre defining space training game
  + Space exploration
* Spore (goes from microbe > creature > civilization > space), no man’s sky
* \*\*\*The things we leave out of a procedural representation are just as important as the things we leave in
* Big ideas
  + Procedural representations
  + Simulations and reality
  + Building on existing mental models
  + Conscientious reductionism
  + Contexts for creative play
  + Cultural ideologies
  + Are simulations games

### 

### 

### 11/28/2016 rpg - eric

* d&d is the source
  + came from chaturanga + chess
  + Embodying characters
  + Kriegspiel
    - Kind of had a DM, third player who could see both boards
  + More war games
    - Little wars, diplomacy, tactics, rand corporation think tank
  + More direct (more storytelling):
    - Siege of brodenburg (had player avatar pieces basically, zoomed in on just attacking a castle)
    - Braunstein game (control characters in a town instead of armies)
    - Chainmail (set of rules for medival combat)
    - Black moor (open world)
* Early rpg game culture
  + Game conferences, zines
* d&d
  + 1974, gary gygax/dave arneson, tabletop, USA
  + Original was a 3 vol set that came in a box, which was very elaborate for its time
  + THE most influential game on modern video games
    - Players playing a character
    - Hit points, armor, class, level
    - Exploring, fighting, looting, leveling up
    - Level design as part of the game
    - Game rules as a simulation
    - Rolling dice to resolve situations
    - Game as a multi-session campaign
    - Fantasy narrative in games
    - Players creating game content
    - Game expansions & licensing
  + Crystallized these features of games, not necessarily invented all of them
  + Combo of:
    - Open world storytelling, you can do anything you want
    - Complex statistical systems. some of the most numerically complicated games with a gajillion charts and stuff
      * Prevents game masters doing stuff willy nilly
  + Gerhard von Scharnhorst
    - Started making the weird charts of stats that defined what could hit what
  + 6 main stats:
    - Strength, intelligence, wisdom, dexterity, constitution, charisma
    - d&d invented these concepts!!
  + Rules seem complete now but had to be “playtested” or modified by players
  + d&d as storytelling
    - Heavy influence from fantasy, pulp fantasy, heroic characters
    - Especially j.r.r. Tolkein. Lord of the rings shit
      * But some of it did not match gamer hippie culture
      * Tolkein liked war, black/white world, etc etc. hippies did not like these things
      * But he liked world design and stuff which is what d&d is about
      * There was some legal dispute cus tolkein didn’t like how similar it was to his stuff
  + WORLD - has a history, game lasts many sessions, rich fantasy
  + PLAYERS - take on a persona, use immersive voicHE SKIPPED THE SLIDE
  + HE SKIPPED THE SLIDE!!!!
  + People switch between reality & fantasy smoothly. Person vs player vs character
  + Robin’s laws player types:
    - Power gamer, butt-kicker, tactician, specialist, method actor, storyteller, casual gamer
  + Diff companies have bought and passed around d&d, it’s spawned different kinds of games
    - Reenactments, like civil war reenactments
    - LARPS (emerged from vampire tabletop game)
    - Modern tabletop indie games, one-time plays
    - CCGs, magic the gathering
    - adventure/colossal cave, computer version of d&d
* Key game wizardry: proving grounds of the mad overlord
  + 1981, sir-tech software, PC, USA
  + Established the computer “dungeon crawl” RPG
    - Classical elements: adventuring party, balancing diff classes/powers
    - Wandering thru a simulated 3D space
    - Brenda romero’s first game job (one of the more imp women game designers)
    - Influenced japanese RPG designers
  + The loop:
    - Recuperate > level up > adventure
    - Recuperate includes selling items and buying equipment
* Key game ultima (series)
  + 1981-1999, richard garriot/origin systems, pc, usa
  + Established computer dungeon crawl rpg
    - Influential designer: richard garriot
      * He’s the child of astronauts and is pretty dramatic. Has a very dramatic castle house thing
      * One of the first “game creators”
      * Put himself in his own game
    - Ethics based character system
      * When you create characters, you answer questions based on ethics and it matters
      * Your answers are kinda represented as tarot cards
      * This led to other games!
      * BUT ALSO IT’S FROM D&D JUST LIKE EVERYTHING IN THE ENTIRE WORLD IS
    - Multi-title series spanning decades
    - Generally, rich gameplay and deep worlds to explore
    - Embodies “classic” crpg
      * Wilderness times, but also dungeons
  + Ultima underworld - it was 3D!!!! Incredible
  + Ultima online - not the first MMO but it set the template for the future
* Key game final fantasy (series)
  + 1987 - present, hironobu sakaguchi/squaresoft, NES, japan
  + Prototypical JRPG
    - “Casual” approach to RPGs
    - But also deep and richly customizable
    - Pop culture sensibility
      * Bled into pop culture everyfuckingwhere
      * Creators had backgrounds in comics, shonen jump
    - Grinding as core mechanic
      * People have debates over how good this part of the game is
      * Yuji horii (orig designer of dragon quest) thinks grinding is good, you get rewarded for grinding thru
    - Attempt to bring emotional storytelling to games
    - Took japanese games to a global audience
  + Dragon quest. It influenced the first FF game
    - Overland exploration + semi-random monster encounters, turn based
  + Has “manga-like liveliness” but also sometimes more like an opera “for its epic scope”. Rich visual stuff
  + Main activities in the game are consistent across each game
  + The stupid skill tree thing
* Key game pokemon
  + 1996 - present, satoshi tajiri/game freak, gameboy, japan
  + Canonical creature-collecting game
    - Adventure game + modular battles
    - Encyclopedic system of creatures
    - Game-centric trans-media property
    - Solidly in the pantheon of pop culture
  + Satoshi tajiri
    - Collected insects as a boy
  + It’s like the only big trans-media thing that started from a game and is not narrative heavy
    - The TV show is kinda game-like...the early episodes can show how to play the game
    - But it has cool unique stories that are unique to games, like twitch plays pokemon
    - Eric says pokemon is the future of interactive storytelling
  + Pokemon go
    - First commercially big AR game
* Key game nethack
  + 1987, mike stephenson, pc, USA
  + Most important roguelike game
    - Massively emergent dungeon crawl
    - Deep and complex despite its graphics
    - Testament to open-source development
    - Constant unexpected situations
  + Was opened up to public, open source, after a while, so they are now a collaborative effort
  + Sol LeWitt and procedurality
    - Work of art where it’s the rules, and not primarily the outcome
    - So it’s diff at each museum, where each museum follows the given rules to make the art
  + The procedures/algorithms in NetHack make the experience and definitely contribute to replayability
    - Like representation of potions (what color they’re gonna be)
    - The pet that comes with you that helps you defeat enemies but can do weird random things
  + Since it’s all ASCII you get to invent what everything looks like in your head
* Key game fallout
  + 1997, tim cain/interplay, pc, usa
  + Smart and elegant computer RPG
    - Dark and ironic sense of style
    - Political messages in its post-apocalyptic setting
      * Gritty!!
    - Room for player expression
      * Complex character creation stuff, like sneak, barter
    - Attempts to balance procedurally & scripted/linear game design
* JRPG
  + Console
  + More linear
  + Non-spatial, turn-based combat
  + Pre-authored story
  + Gameplay then custcene
  + Brighter, poppier, cartoonier
* CPRG
  + PC
  + More open-ended
  + Tactical, positional, turn-based combat
  + Story affected by player choice
  + Gameplay woven into dialogue and story
  + Grimmer, heavier, more “hardcore”
* Key game diablo
  + 1996, blizzard north, pc USA
  + Iconic action-RPG
    - Character customization and evolution
      * Has skill trees
    - Emphasis on real-time combat action
    - Strips away story elements
      * Completely ‘non-literary’, no narrative
      * Doesn’t bother trying to create rich world to explore
    - Leveraged online community
* Key game world of warcraft
  + 2004, blizzard, pc, usa
  + The “gold standard” for modern MMORPG
    - Stylized but lush art direction (for its time, lots of polish)
    - Lots of attention to the beginner and to the single-player experience
      * One of the first games that paid attention to this
      * Scales to your level pretty well
    - Many community features likes guilds
    - Open source game client
    - Substantial elder game for advanced players
    - Complex economy with integrated virtual item auction house
  + Holy trinity: healer, tank, and something i missed it

### 

### 

### 12/5/2016 fighting - charles

* Key game boxing
  + 1743, jack broughton, combat sport, england
  + We watched a boxing match and they hug a lot and it’s weird. Ends in a left hook and the white guy just falls down it’s crazy
  + Specifically gloved fighting
  + The highest cause of death while fighting is just falling (crack your head, die)
  + Why?
    - Violence becoming more and more controlled as rulesets get added
    - Brawl → sport
    - He added rules because people were dying too much
      * Can’t hit downed fighter
      * If fighter is down for 30 sec then fight is over
      * No throwing
      * Encouraged ppl to wear gloves
  + Marquess of Queensbury Rules
    - The rules we are familiar with for boxing, came about after 100 years
    - -Must wear gloves
    - -3 min rounds
    - -Rest Periods
    - -10 Second Count
    - No wrestling (no grabbing, throwing, tossing)
  + Golden age of boxing (which is now over unfortunately)
    - Biggest era was like 20s-60s but was popular into the 70s
    - Gets a lot of people interested in it, spectator sport
  + Muhammed Ali
    - The most athlete of 20th century
    - Celebrity AND athlete, one of the first ones
      * (both very good at sport and very charismatic)
      * Outspoken abt civil rights
    - Refused the military draft
      * Ppl thought it’s cus he didn’t want to die overseas in a war
      * It’s actually because he didn’t want to be used as a performer to legitimize the us military
    - Made morals important for athletes
* Key game fencing
  + 1763, domenico angelo, combat sport, england
  + We watched a video. one guy gets stabbed
  + Swords are not good anymore but they are still a symbol of status
  + They started having uniforms
  + Fun fact: canes were fashionable cus swords became unfashionable, they were just a replacement
  + 20th century -- no more actual fights, it’s just a sport and past time, becomes for elite and wealthy
  + And also gets very international
  + Why?
    - It’s a future sport (or this is what charles cares about)
      * Uses a bunch of cyborg stuff
      * Fencing moves so fast that referee can’t judge, so electronics have to judge it
      * Human body is game controller -- you don’t worry whether or not you hit your opponent, the electronics will
      * Japanese fencing, kendo, uses high frame-rate cameras to judge who wins
      * HEMA (historical european martial arts) also being revived. German longsword and stuff
* Karate
  + No weapon. Literally means “empty hand”
  + Something about okinawa
    - Japan forbid okinawa people from owning weapons so instead they developed karate
    - Learned some stuff from chinese people coming over to trade
  + A lot of it is about form instead of about combat
* Key game kyokushin karate
  + ~1950, masutatsu ‘mas’ oyama, n/a platform, japan
  + Bare knuckle, no punches to the head, but they do allow kicks to the head
    - We watched a video and the white guy gets kicked in the head and starts bleeding
  + Mas oyama
    - Started out as a japanese nationalist, was a pilot in wwii
    - Studied some karate and would fight with the US soldiers but would get the “shit kicked out of him” -- charles
    - Trained in the mountains for about 3 years, just like all the stories
      * Waterfall, barefoot in snow, etc
    - Started his own dojo with kyokushin
      * Emphasizes the idea of inner strength and self discipline
      * Everyone who does kyokushin is Pretty Tough
      * Would go around and defeat other people from other karate schools to spread his fighting style
      * Would fight?!?! Bulls?!?
    - His attitude of just enduring the most was a good message for freshly defeated japan, after wwii
  + Why?
    - Renaissance of martial arts
    - Part of the reintroduction of tradition even though it’s not like industrially beneficial for the nation
    - Sonny chiba - japanese actor, (along with bruce lee) showed that action star could also be an actual martial art master
      * Starred in *The Street Fighter*, a fun segway that charles did
        + First/only?? film in US to receive X rating for violence alone
      * Showed martial artist has a place in modern world
* Ryu from street fighter is very mas oyama like
* Key game street fighter
  + 1987-now, capcom, arcade, japan
  + He’s showing street fighter 3 in class
  + Started single player, but someone else could join and then it’d be multiplayer?! HE IS NOT BEING VERY CLEAR
  + He made some racist thing about pronouncing ryu’s name right. This could have been easily avoided but instead he dug himself into a hole and now i like him even less
  + The fire ball
    - You can affect people at a distance. A big deal. Wow. fire balls
  + Why?
    - The fire ball (hadoken or w/e meme it is)
    - Special moves, like the fire ball
    - Combos - recovery of player’s move + stun of the opponent timing works out and you can do multiple hits in a row without letting opponent retaliate
      * A lot of these just kind of Emerged… and not totally intentionally programmed in
    - Language of games (like the words that the community uses)
      * “Salty” - when someone gets very angry after a match
      * “Scrub” - inexperienced player who blames their losses on everything but themselves
      * “Bodied” - to lose control of your character, you are so much worse than the other player that they just kind of shove you around
      * “On Tilt” - when someone has suffered a loss so huge that they can no longer think clearly
        + This comes from pinball
    - What’s valuable in the fighting community is commitment, self-discipline, getting better, so the “best” (whatever, something) players aren’t the ones with the most wins, they’re the ones who are around the longest
    - Tool-Assisted sports (like fencing, racing)
      * The controller that players use is extremely important
* Some old-ass fighting games
  + Karate champ 1984 (called International Karate in other countries)
  + Way of the exploding first 1985
  + They establish visual and mechanical language of fighting games (2d, side scroller, etc)
  + Not a lot of dynamism. Who can hit the button first?!?
* Honorable mentions for fighting games
  + Mortal kombat 1992, developed by some guys he kind of mumbled
    - Was a bad fighting game
    - But always outsells streetfighter?!
  + King of Fighters 1994, by snk
    - Does not sell out streetfighter. It is also just not as good as streetfighter
    - Rly popular in latin america
  + Marvel vs capcom
    - Key idea is you have several characters and you can swap them whenever
    - And characters have combos between them. And somehow never broke
* 2d vs 3d fighting games…. A lot of them happen at the same time
* Key game tekken (series)
  + 1994-present, NAMCO, arcade, japan
  + Why
    - No fireball, which is what ppl thought made fighting games work
      * No distance/area control over opponent?
      * Brings out the idea of Yomi (the japanese word)
        + Reading what your opponent is going to do
        + You only need 3 levels of yomi to really add depth

Like rock paper scissors

Attack > throw > block/dodge > attack, etc

* Honorable mention for 3d fighting
  + Soul caliber
    - Weird cus everyone has weapons but no one dies
* Key game bushido blade
  + 1997, lightweight co, playstation, japan
    - Squaresoft went to lightweight co to make them make the game
  + We watched a video
  + One hit kills, you can also get rid of their limbs
  + Not just one stage, you can roam around
  + Change character mechanics just by changing weapon, not changing character (all the characters were the same)
  + Inspired by an akira kurosawa film
    - Charles showed us a clip from a film where one guy spurts blood
  + Why?
    - A dead branch?
      * Only had one sequel and didn’t continue on
* Key game super smash brothers
  + Nintendo, japan, blah blah
  + Why?
    - Very successful innovation for fighting games
      * Made fighting games for people who don’t play fighting games, so they made a platformer fighting game
    - Weight
      * You can fly off the screen
      * Like sumo
      * No killing and no violence!
    - Edges
      * Like the idea of cornering your opponent
      * Brings up a whole different fighting style and techniques, etc
    - Stock
      * Lives!
    - Dynamic stages
      * Not used in competition but yea
    - APM actions per minute. Played at a REALLY fast rate
* Key game mixed martial arts
  + ~1920, carlos & helio gracie, et al, n/a, brazil
  + Combat sport between 2 fighters
  + Three 5 minute rounds
  + 4 ways to win: knockout, submission, ref stoppage, judges decision
  + Not scripted
  + Started as an experiment
    - Has different martial arts
    - No holds barred, no rules
      * Just kidding there are rules now, including:
      * No biting
      * No eye-gouging
      * No fishhooking (grab someone’s mouth)
      * Also there are weight classes and rounds now
  + First UFC was nov 12th, 1993
    - Winner was royce gracie, who is skinny and small
      * The gracie’s chose royce because he would be underestimated, and they knew he would win because their technique was tested the best one when there’s no rules
  + History of MMA
    - Konde koma (birth name mitsuyo maeda)
    - Set up a dojo in brazil
    - Two students: heli and carlos gracie
      * They were small so they knew they’d get thrown down on the ground, so they became the strongest fighters on the ground
      * Made their tradition, Vale Tudo
      * Vale tudo was basically MMA but the gracie’s would always win
  + Parts of MMA (there is a specific MMA fighting style)
    - Groundfighting
    - Crosstraining
  + Early MMA
    - No rules, focus on martial arts styles, royce gracie (less athletic, smaller, has secrets no one else knows)
  + Current MMA
    - Lots of rules, focus on athletics, ronda rousey (these super athletes)
  + Why
    - No rules
    - Athletics or technique over power, agility is important
    - Women in MMA - just as popular or more popular then the men’s
      * Ronda rousey - probably most famous MMA figher
        + Bronze medalist in wrestling olympics
        + Lost once in MMA, recently, to holly holmes and it was a big upset
        + Always won by submission or knockout, a lot of wins under 30 seconds

### 12/5/2016 puzzles - naomi

* Last lecture tomorrow, no recitation this week
* Final: 19th in this room at 6pm
* Riddles
  + Have rings but no fingers
    - Several diff answers: tree, bell, phone, saturn
    - Hang did not laugh at this riddle
  + Riddles are one-time play
* Scott kim
  + Made heaven and earth, obsidian, bejeweled 2
  + Defines puzzles: an activity that’s fun and has a right answer (at least one right answer)
  + At 8 years old he made some paper foldy puzzle that resulted in either L or F
    - Answer not immediately obvious, requires a little bit of cleverness, but you feel satisfied when you solve it
* Puzzle design
  + Could happen when you design an activity with at least one solution in mind
  + Puzzles often come out of level design
  + Puzzles that show up as a subcomponent of games (games with puzzles in them)
  + Puzzle games that are about one type of puzzle (puzzle games)
* Where do puzzles come from
  + A lot of the time: from doodling with the world around us
    - “Classical labyrinth” or 7-circuit labyrinth
      * Drawing a doodle and then connecting the ends clockwise and it makes a maze thing
      * Common across many cultures across the world, used as paths
        + World’s earliest “walking simulator” ?!?! grinding for leisure?!
        + Some spiritual meanings
        + Something about the TV show westworld, but it’s unrelated
      * Greek legend of the labyrinth/maze?? and minotaur
      * Labyrinth → one path, no choices
      * Maze → branching choices, dead ends
    - Doodling with letters - word square
      * Can read same words horiz or vertt
      * “Sator square” in ruins of pompeii, 79 CE
      * Used as magic wards/amulets
      * “Abra cadabra” comes from alphabetical letter pyramid
      * These things turned into just children’s activities, because everyone hates children (1800s)
      * Developed into crossword puzzles!!!!!!!!!
* Key game crosswords
  + 1880s, unknown, pen & paper, UK
  + Addictive like tetris
  + Started out treated like shit cus there was no barrier to entry, unlike sports
  + American crossword rules (example by david kwong who was very impressive)
    - Black squares symmetrical
    - No blank squares (???)
    - No two word answers
  + Typical crossword clues (quick and cryptic)
    - Fill-in clues
    - before/after clues (fits both word in front and word behind)
    - Puns
    - Abbreviations (e.g. clue: univ teacher; answer: prof)
    - Roman numerals - answer has to also be in roman numerals
    - Homophones
    - Concatenation (a couple clues for different words that combine into one word)
    - Backwards - the answer must be written backwards
    - Wordplay (THIS IS COMPLICATED)
    - Anagrams
  + Some complex crosswords have more than one answer
  + Why?
    - One of the most popular enduring widespread forms of puzzle and word-play, many regional variants
    - Revived disused words like “acute” “ooze” “smudge” “omit” and “sever”
      * Cus they were good for puzzle design
    - Most prevalent context for riddles today
    - Strongly authored form, you feel presence of puzzle designer
* Doodling with numbers
  + Magic square - sum is same across, down, diagonal
    - In newspapers around 1892
  + “Number place” aka sudoku, appeared around 1979
    - Got popular in japan, made by hand
    - And then some guy generated sudoku puzzles by code, got extremely popular
      * The japanese ppl felt like robot-created puzzles weren’t as good as hand-made sudoku
* Key game Tetris
  + 1984, alexey pajitnov, electronika 60, soviet union
  + Came from “doodling squares”, also came from a traditional russian puzzle game (pentominoes, tetrominoes)
  + Started out as an experiment, very mathy
  + Developed in russia, everyone who worked in the building slowly became addicted to it
    - Cus it only shows you negative feedback, your failures, and so you want to keep fixing them
  + A great casual game - anyone can play, on handheld devices
  + Alexey pajitnov
    - Started procedural design, making a system that generates problems to solve
      * Automation of puzzle design
      * Tetris makes like a constant stream of puzzles
  + Tetris spread a lot through academic networks
  + Was spread without creator’s permission, was cloned/pirated a lot
    - Nintendo was first to secure the rights from the SU
      * Popularized the gameboy
  + Also tetris reduces traumatic flashbacks! Helps with PTSD
    - It infiltrates your brain so you see it in your head even when you’re not playing
  + Why?
    - One of the first games that automatically generates endless “puzzle situations” - no final win state!
    - Highly intuitive, fast to replay, simple controls
    - Ported more than any game? Popularized handheld game devices
    - Cautionary tale about IP, cloning, royalties
    - Meditative, even therapeutic?
* Key game solitaire
  + 1990, wes cherry and susgan kare, PC, USA
    - We are using the digital version as the key game because it’s insanely popular after it got added to computers
  + Also called “patience”
  + Randomly generates the puzzle each time just by shuffling the cards
  + Got so popular that they started manufacturing teeny cards so people could play on smaller surfaces
  + Initially designed for two players
  + Was initially looked down upon because it was a “casual game”
  + Digital version initially made to get people used to using a mouse
  + Fun added juice when you completed the game when the cards bounced around
  + Has a “boss key”
    - A key combo you can hit that would show a fake spreadsheet or something to make it seem like you were doing work instead of playing at work
    - Shipped with a boss key because people were worried games would take over people’s work lives
  + Free-cell
    - Digitally-enhanced procedural generation
    - Freecell produces less “losing games” than klondike (typical windows solitaire)
    - However spider solitaire overtook klondike about 10 years ago
  + Why?
    - “Most used software application in the world” by some accounts, due to shipping with windows 3.0
    - Helped familiarize the personal computer
    - Classic “multi-tasking at work” game. Huge thread to office productivity? Not really
    - Roughly half the games are winnable!
      * You have to start over
* Key game lemmings
  + 1991, dave jones with DMA design, amiga, scotland
  + About autonomous behaviors of creatures
  + The lemmings enter the world and act by themselves, you can change their behaviors but you don’t directly control them
  + Use building/exploding lemmings to complete a level
  + Tweaked animation and stuff so it would have more emotional resonance with the player
  + Doodling with pixels!!
  + They did level design without code, just doodling with the pixels to create the levels
    - Each artist ended up with different styles, curves, lattice grids
    - Personality of each designer emerged
  + Physics games that came after
    - Artillery (Apple II, 1980)
    - Worms (Amiga, 1995)
    - World of goo (PC, Wii, etc, 2008)
    - Angry birds (iOS etc, 2009)
  + Why?
    - Early puzzle game with spatial level design, prior puzzle-platform games were more action oriented with active enemies
    - Starring iconic, autonomous characters, only controlled indirectly
    - Intuitively playable due to simple 2D physics
* Doodling with existing games
  + Making variants!
  + Tetris → chain shot
    - Contiguous areas of same color which are removed by player
  + → dr mario
    - Four or more of same color are automatically removed
  + → plotting
    - Contiguous areas of same color removed when player shoots,
    - you place the next block yourself but thru shooting mechanism
* Key game puzzle bobble
  + 1994, seiichi nakakuni with taito, arcade, japan
  + Has cute dinosaurs that shoot the bubbles (that actually come from a previous game, bubble bobble)
  + Designed levels, some randomness but maybe not ??
  + No timing, it’s based on number of turns taken
    - Music escalates but it’s not actually timed
  + Introduced 2 player competitive puzzle gaming
    - If you remove 4+ bubbles on your half, they’ll appear on your opponent’s screen
    - You can actually interfere! Actively interact!
  + Why?
    - One evolution of time-pressure matching game (turn based or real time)
    - Builds on a known franchise of characters
    - Introduces two-player competition into puzzle games that’s not just “side by side”
    - Another frequently cloned game
* Key game bejeweled
  + 2001-present, popcap games, pc, USA
  + Gravity is still a factor, there’s a puzzle mode from bejewelled 2 forward
  + Kicked off PC market, games sold online over the internet
  + Sold online at sites, like big fish
  + Started out being sold at $10 but now it went down to like $1-3… developers are not getting paid a lot
  + Why?
    - Next wildly successful evolution of tile-match games
    - Can be played with or without time pressure
    - Downloadable model heralds the rise of the “casual game” market, expands video game audience hugely
      * Audience for video game gets way bigger!!! Everyone play!!
    - Frequently copied, ongoing influence (e.g. candy crush)
* Indie games pop up due to expanded audience
  + Braid - made by one guy, jonathan blow, has rewind time mechanic
    - Blow designs puzzles… “designing to reveal the nature of the universe”
* Key game the witness
  + 2016, jonathan blow/thekla inc, PC/PS3/XBox 1, SA
    - Thekla was formed by blow just to make this game
  + Starts out on a mysterious island (like myst, steven’s sausage roll) very convenient. Anything can happen
  + All the puzzles use same interface board thing
    - Maze puzzles
    - Maze where you have to pass thru nodes (like math puzzle, seven bridges of kronenbourg)
    - Symmetrical maze walk, two simutaneous walkers
    - Two-color division, use a line to divide space (like math puzzle, cake cutting problem)
    - Shape enclosing (e.g. create tetris shape)
    - Paired division - slightly diff rules, figure out by playing - e.g. only two of each color in each space
  + Witness actually incorporates environment into the puzzles, by imitating an object, tracing, using light, shadow, perspective, sound and drawing a wav form, color filter, 3d to 2d
  + There are ALSO puzzles embedded in the entire 3D world around you… wowaoAwaOAWawowAaAA!!! Crazy!!
    - You find out when you get to the top of the mountain
    - Or you have to look at things at exactly the right perspective (some you have to descend an elevator. crazy)
    - There are several of these
    - Naomi is spoilering the game for us
  + If you find enough of the hidden puzzles you get to this locked off area with a movie theater which you can then watch some stuff on
    - Very confusing. No answers. Stay confused
    - But the last one shows how the patterns will infiltrate our daily live and you will try to find the puzzles in your real life
* Frank lantz calls these kindsa games “knitting games” and some people don’t like them because they don’t use your whole brain
* Big ideas
  + Puzzle shave one or more solutions in mind
  + Puzzles can be viewed as a form of *practice* by both designers and players
  + Patterns found in nature, mathematics and the human mind, turned towards play
  + Puzzles appear inside many kinds of games
  + Puzzle players can submerge their consciousness in a game system as it becomes second nature
  + A very widespread, pervasive form of culture!

### 12/5/2016 contemporary - bennett

* The return of small teams
  + Which is what game dev started out as (like space invaders, most arcade games)
  + Hovver bovver (steal your neighbors lawn mower) made by one person, shows experimental game dev feeling
  + Mid 90s, started getting harder to develop games in a small group (technology getting better, you need more people and money, consoles harder to get published on, etc)
    - Small teams went to like a “niche free-ware title” area to make their stuff, doujin games
      * Liero (scandanavia), GunRoar (kenta cho in japan)
      * Started out using existing sprites, ripping off existing games
* Key game cave story
  + 2004, daisuke ‘pixel’ amaya, PC, japan
  + Out of doujin game scene in japan
  + Made over 3 years by one guy who did everything, music, art, code in c++, engine
  + Kind of paid homage to past pixel games, retro style
  + Ambitious multi-year scope for a one-person project (unlike stuff like space invaders which was made over several weeks)
    - Inspired game dev across the world
  + Heart of the game is gun upgrade system, you get different functionality
    - Stuff dropped by enemies
    - Have other effects, area control, traversal, also of course killing people
    - Had ~new mechanics~ that made it diff from nintendo games
  + Way more polished than other indie-ish games, generated buzz and git taken seriously
  + Why?
    - Inspires new ambitions for makers of freeware games
    - Establishes the importance of the retro pixel aesthetic and inspires the western “indie” scene (creates that foundation)
    - Brings freeware games to mainstream attention
* Accessible tools
  + After cave story people starts changing motivation of people using accessible game making tools for people making freeware games
  + Pinball construction set (bill budge, 1983)
    - Gave you parts to construct a pinball table
    - You could export the game by itself and put it on a disc and distribute
  + Shoot-em-up construction kit (sensible software 1987)
    - Like the first all-in-one construction tool though you’re stuck in one genre
    - Do sprites, code behaviors, etc etc all without leaving the program
    - Good because you can’t switch between windows on computers at that time
    - Also good because it made pixel art digital instead of coloring squares on graph paper
    - Blitz basic (1993) started on commodore amiga computer
      * Like a programming language with game-making stuff built in
      * Made it easier for solo dev to make commercial game
      * Worms (andy davidson 1995) was made by blitz basic
        + One of the first big hit games made by accessible tools meant for beginners
    - Klik ‘n play (francois lionet 1994)
      * One of the most successful zero-code tools
      * Drag and drop icon based system, comes with huge library of art
      * Good for children and students
      * Destruction carnival (charles tumino 1997) made by klik n play, super polished and crazy
      * eternal daughter (derek yu & john perry 2002)
        + Made by klik n play’s successor, and is a polished game
    - Game maker (mark overmars 1999)
      * Biggest, most successful beginner friendly game making tools
      * Has sprite editor, code editor (but you can do code visually too)
      * You can make professional games in game maker. Still being used now for console games, wow
      * Seiklus (cly5m 2003) estonian game (seiklus translates to adventure), polished, giant open world, 6 months dev time
        + Inspired people, showed them what they could do
    - Unity (2005)
      * Publishes to eveeerrrryyy platform (computers, phones, consoles)
      * An attempt to let people make pro-level games
    - Macromedia director/shockwave (1995)
      * Not specifically made for games but was being co-opted
      * Eventually replaced with flash
      * Let developers put their games on the internet
    - Hypercard (bill atkinson 1987)
      * Parts of images/text linked to each other, so you can click one thing to get to another thing
      * Myst was made in this (Rand & Robin miller 1987)
      * Led to creation of HTML
* Key game spelunky
  + 2008/2013, derek yu, windows/xbox, US
  + Made in game maker
  + It’s a rogue game, randomized map, lots of enemies, etc
  + Inspired by spelunker (tim martin 1983) which is not like a roguelike
  + Solved a lot of problems with rogue-like genre by adding nintendoesque platforming games mechanics
  + First really big hit game for these sorts of platforms that uses procedural generation, where it’s the fundamental idea of the game
    - Saves a lot of level design time! Good for small teams
    - Let him make the game smaller since it has very high replayability
  + Why?
    - The apogee of games made in beginner-friendly all-in-one game making tools
    - Reinvention of the roguelike (showing they don’t have to be turn based tile games)
    - Best example of a game that uses procedural content to make a game replayable and deep
* Key game howling dogs
  + 2012, porpentine, web/html, USA
  + Made in twine (bennett says it’s the most accessible game making tool)
    - Uses hypertext, links
    - Brings game design to people who were traditionally left out of it
    - Generally focuses on narrative design and text
  + In a loop structure where the choices get narrowed down as you play it
  + Why?
    - Marks radical increase in accessibility, and corresponding increase in diversity of video game makers
    - Shows that strong ideas and writing are enough to make a videogame powerful
* Visual novels (VN)
  + Not that different from twine!
  + Frontier of romantic/erotic games in japan and korea
    - Prior to VN, they didn’t really make romantic/ero type games
  + Have very conservative gameplay and political tropes
  + Digital: a love story (christine love 2010)
    - Made using Ren’Py, tool for making doujin VN
    - Bends the engine away from being traditional VN, makes it into a fake operating system
    - You fall in love with an AI or something like that
* Analogue: a hate story
  + 2012, christine love, pc, USA
  + Also made in Ren’Py but looks like a standard VN
  + But goes against all the traditional VN tropes, more radical
    - It’s about going against future korean super patriarchal society
    - Pretty feminist game in an un-feminist genre (says bennett)
  + You act as a detective, go through records, etc
  + Why?
    - Commercial breakthrough for the queer games community
    - Bringing mechanics experimentation to narrative games
    - Upending and playing with traditional tropes in one of the most trop-filled genres
    - Christine love’s best game, in a career of games with long, detailed and excellently written narratives
      * She’s pretty famous and has a lot of good games
* Accessible distribution
  + Wizardry (andrew greenberg, robert woodhead 1981) had to distribute by themselves, deal with retail, copied the discs themselves, mail them out
  + Other options: developers send their code to a magazine and the magazine publishes the code, then players had to type in all the code (the stream of numbers) and hope it worked :^)
  + Or somehow you send the game over phone, … you can’t get any $ from this
  + Kroz (scott miller 1987)
    - Freeware!
  + Commander keen (tom hall, john carmack, john romero 1990)
    - Self distributed
  + Now you can put games on the web for free!!!!!!
    - Tucows, newgrounds
    - Had flash and shockwave fun stuff
    - Can’t sell them, maybe ad revenue though
  + Steam
    - Now everything is easy-peasy
    - Yay self publishing is easy, thanks internet
    - Rag doll kung fu (mark healy 2005)
      * first small team title on steam, first third party title
    - Ok but now we have like a gajillion games on steam, increased a LOT each year
  + App store, iphone
    - Accessible but curated and closed, like steam
    - Now you can make MONEY!!!! Even with a small team!!
      * So now there are a gajillion indie devs (aka small company)
    - Encourages one-button games
* Key game flappy bird
  + 2013, dong nguyen, iphone, vietnam
  + Platform is huge and successful, so it carries a lot of flappy bird’s success
    - Also because it didn’t take much to make it
  + Based on canabalt (adam saltsman 2009, flash > iphone) - started infinite runner genre (procedurally generated world, simple controls)
    - Good one-button game style
    - You don’t lose progress, rapid restart
  + People accused it of being a clone??? Of super mario bros?!
  + Lots of clones of flappy bird and similar one-touch rapid restart games
  + Why?
    - Distinction between casual and hardcore games is erased
    - Point at which the internet has erased geographic and economic barriers to game development (made by one person in vietnam)
    - Shows that mainstream players do not necessarily care about complexity or depth of content - just need one small mechanic that works
    - Starts a “gold rush” for tiny games (VERY STRESSFUL!!!)
* Commercial breakthroughs
  + No small team hits 1984-2004
    - Cus of great video game crash of 1983!
      * Consoles died!!
      * Publishers got really cagey about letting people release games
    - Cost of making 3D games was gigantic so you needed lots of $$
  + Braid (jonathan blow 2008)
    - Took 4 years to make and creator spent a lot of money to hire some famous webcomic guy to do art
    - Shows commercial viability for games that have high concepts
    - Released on xbox live arcade
  + Super meat boy (team meat 2010)
    - Started as newgrounds flash game, edwin mcmillan
    - Made polished version for xbox live arcade
* Key game alien hominid
  + 2002/2004, dan paladin, flash/gamecube, USA
  + Started as flash game made for newground, hyper polished, humorous
    - For its time and technology and one-person team, had super polished visuals and everything. juicy
  + Nintendo noticed and offered a chance to make it for gamecube
  + Why?
    - Games developed by small teams return to the living room and to mainstream success
    - Starts a wave of console games from small teams
    - First big crossover from internet publishing to traditional publishing methods
    - Individual artistic vision succeeds against a backdrop where total realism was king
* Key game journey
  + 2012, thatgamecompany, ps3, USA
  + Maybe the biggest console success by a small team (led by jenova chen)
  + Won a gajillion awards. biggest hit, out of indie and AAA and everything in 2012
  + Moves away from old retro aesthetics of cave story and everything
  + Focus on experience rather than mechanics
  + The only person-person interaction is the little singing thing, no violence
    - High concept of the game was to go against toxicity of multiplayer games
    - Ok there’s still some envy since there are rewards for how you beat the game etc
  + Why?
    - AAA aesthetics and production value produced by a small team
    - Overwhelmingly the critical success of the year, beating much larger projects
    - A multiplayer game that eliminates griefing and trolling by eliminating talking, tries to emphasize togetherness
    - Apogee of success for the “indie” aesthetic (beauty, simplicity, etc)
* User involvement
  + Lode runner (douglas smith 1983)
    - Shipped with a level editor built in!!
  + Zzt (tim sweeney 1991)
    - Founder of 3d realms, the unreal engine
    - Shareware game, shipped game editor with the actual game
  + knytt stories (nicklas ‘nifflas’ nygren 2007)
    - shipped editor with game
  + crayon physics deluxe (petri purho 2009)
    - the gameplay is actually maaaaking the game!!
* Key game minecraft
  + 2011, mojang games/markus ‘notch’ persson, pc/xbox/iphone, sweden
  + Most successful self-published game by a solo developer EVER
  + Sold to microsoft for a lot of money
  + It’s actually a clone!!! Of a game called infiniminer by zach barth
    - It was a mining game
    - Barth didn’t wanna make any changes to it
    - So notch took it and made it better
  + Platform for creativity, main mechanic is creating content of the world
  + Has a survivor mode but also a ~creative mode~ (aka legos)
    - Less like a game, more like a spectacle or artform
    - Some people like watching instead of playing
  + Why?
    - Sandbox: the game
    - An empty world that is procedurally generated
    - Where narratives (and objects) are user-generated
    - Platform for social play and Let’s Plays
      * Watching becomes more important that playing
* Social games
  + Sissyfight 2000 (eric zimmerman & word.com 1999)
    - Most popular shockwave game
    - Had in-game chat for people to talk to each other
* Key game farmville
  + 2009, zynga, facebook, US
  + Hooked into FB’s social database, uses it as a social database of the game
    - Uses that to make people want to play the game
    - Spectator game style
  + Critiqued as being a rip off of happy farm and farm town, both 2008
    - Turns out zynga is a jerk and clones first and asks for forgiveness later
  + Why?
    - First game that showed the potential of social networks for video games, creating a new industry and genre, kind of
    - Astounding success of virtual goods
    - Made women who were over 35 into visible players
* Indiecade 2005 (the trend, anyway)
  + Makes performance into a big deal
  + Pic of frank lantz and zimmermann playing ninja
  + Hit me! (kaho abe 2011) at babycastles
    - Hit button on other person’s head and it takes a picture
    - Babycastles is an art space for experimental games and stuff
  + Nidhogg (mark essen 2014) at wild rumpus
    - Fencing, a good spectator game
    - A europe thing. Alcohol fueled party for these kindsa games
  + Get on top (bennett foddy 2012) at gamecity
    - Game city, public festival in nottingham where games take over the big center part of the city
  + Tennnes (jw nijman 2012) at no quarter
    - Commissions games that are heavy on multiplayer spectator play
* Key game JS joust
  + Johann sebastian joust.
  + 2011, douglas wilson/copenhagen game collective, physical game with ps3 move controllers, denmark
  + It’s like the game controller is a candle/egg and you try to get the other players to jerk their controller
  + The music changes tempo and indicates how fast you can move
  + Video game with no video!!
  + Why?
    - Game where you look at your opponent instead of a screen (video game with no video)
    - Rules are mediated socially, works well in those new-arcade-y events
* Games as art ~\*~\*~\*~\*~\*~
  + You can make weird terrible art games without sacrificing all your money and time and life
  + Fluxus (1960s)
    - Movement of artists exploring a wider definition of art, including games
    - E.g. soccer on stilts :eyebrow emoji:
    - White chess (yoko ono 1966)
      * You play it to just get the idea of the art, not to actually play the game
      * But this is not a problem for good chess players. They dont need the color
      * Example of art appropriating games without understanding them
  + The marriage (rod humble 2006)
    - Kind of tries to use art in the game but fails
    - One of the first examples of art video game (well, it tries)
    - Humble provides an artist statement that actually explains the meaning of the piece (which is not what an actual artist would do) :high brow emoji:
    - Also it’s INCREdiBLY sexist and terrible :^) KILL IT
  + Passage (jason rohrer 2007)
    - Does a slightly better job than marriage
    - Shows one person’s lifetime with diff visual representation of stuffs
    - Uses aesthetic mechanics to express something about life
    - Gets shown in galleries
  + Proteus (ed key 2013)
    - Train emphasises mechanics but this goes the complete other direction
    - All you do is walk around
  + Endless forest (tale of tales 2005)
    - No mechanics. Rejecting idea that games have to be fun
    - A MMO space, can’t fight or communicate, no goals
    - You clip through the floor it’s amazing
* Key game train
  + 2009, brenda brathwaite, tabletop, USA
  + Brenda brathwaite
    - Veteran video game designer of traditional video games (guns! swords!)
    - Focused on making games where “mechanic is the message”
  + Takes place on a shattered window (tactile, kind of dramatic effect)
  + You move trains back and forth using cards
  + At end it’s revealed that these are nazi trains delivering jews during wwii
  + What is the message?!?! The mechanics are the message!??!?! Oh boy?!?!
    - Maybe the message is about games instead of war/war crimes/holocaust
    - What it means to follow rules in the context of a game
      * Player’s complicity in games?
        + Like call of duty being forced to massacre innocents
  + Why?
    - Ignites a discussion about what the boundaries are for games: are they just machines for producing fun? Are some topics off-limits?
    - Game about complicity, slightly predating “no russian” segment of COD
    - Emphasis on game mechanics as the medium for expression of an artistic idea
    - Breakthrough into art world - in museums
* Key game the graveyard
  + 2009, tale of tales, PC, belgium
  + You’re an old lady visiting a graveyard, all you can do is walk around and sit on a bench
  + Complete rejection of importance of mechanics
  + Not that impactful as a player, but had a big impact on video game dev
    - Started the “what’s a game” debate KILL ME
  + People got very angry at this game
  + Why?
    - Mainstream videogames start to take notice of art games and games that don’t involve mechanics and goals
    - Everything takes back seat to the artistic expression
    - Completely rejects most of the things that we think of constituting a videogame
    - Starts an international argument about what counts as a game
* Key game gone home
  + 2013, fullbright co, PC, USA
  + Big commercial hit!
  + Shows how narrative design, world building, mood, are taking over mechanics
    - Also AAA devs leaving the industry to work in small teams
    - Has a bunch of AAA feels without any of the mechanics and such
  + Player can only walk, look, listen
    - Walking simulator was first a criticism but now we like them haha
  + Why?
    - Marks a wave of games about everyday themes (anti bioshock)
    - Female characters only
    - Most successful walking simulator to date
    - Elimination of traditional mechanical elements reaches mainstream, with pure focus on narrative and environmental content
    - Best example of AAA flight
* Key game cibele
  + 2015, star maid games, pc, USA
  + Nyu alum! :O
  + Focuses on public performance of identity - confessional style
  + Takes place on a simulated computer, interspersed with live action video
    - You control her mouse, and you enter an MMO and start going out with this guy
    - You become the creator (nina)
  + Why?
    - Confessional, gonzo style of culture gets its first major piece
      * Like livejournal, post secret, tumblr
    - A new way of understanding games-as-performance
    - Mechanics are used to embody you in a real person’s identity and personal history
    - Brings together most of the themes in this lecture: a tiny team using accessible tools (flash/flixel), diverse voices, artistic and political aims, and games as performance
* To review
  + Return of small teams
  + Accessible development tools
  + Accessible distribution platforms
  + More experimental approaches
  + New genres
  + New communities
  + New audiences
  + New ways of playing
  + New forms of expression