Final Exam is on: December 19th, at 6:00PM

**First Person Shooters**

* Evolved from early days of games
* Enabled and improved by technical achievements
  + Both on hardware, software, and human computer interactions
* Origins
* Maze War
  + Steve Colley, 1973, Arcade,
  + You navigated a maze, trying to see someone before they aw you
  + Started in NASA, moved to MIT
  + Even in its rudimentary form, it included the idea of being in a shared space with someone else.
  + Not much in terms of aiming, BUT there’s a
    - **Mini-map**
    - **3D space**
  + WHY
    - It’s the origin of FPS
    - The experience of being in a shared 3D space that isn’t real
* Battlezone
  + 1980, Atari Games/Ed Rotberg, Arcade, USA
  + 3D Arcade SHMUP
  + The player tank gets shot once and you’re done
  + Standard arcade bonuses (UFO for extra points!)
  + It’s own type of mini-map to give you a spatial awareness
  + A hint of the world at the bounds of the space
    - The landscape was so evocative that people tried to drive into it
  + You put your face into a VR-Like headset
  + They used cellophane overlay to get different colors
  + This was used as a military trainer
    - Bradley Trainer
      * Trained people to use Bradley fighting vehicle
      * Dev agreed only because he said it would be the last time
* Other arcade shooting games
  + Operation Wolf (Taito, 1987)
    - There’s a story
    - Unique light gun interface
    - Two central parts of FPS (aim and move)
    - Standard shooting gallery style with upgrades and pickups
    - Each section bookended in narrative
* Doom
  + 1993, id software, PC, USA
  + Released same year as Myst
  + Horror-ish sci-fi game
  + Very little in terms of story
  + The desire is to place you in the role of an unnamed space marine, and you are *Doomed* to fight in a world without heros
  + Had deathmatch and multiplayer
  + Introduced mods and wads (where is all the data)
  + Released as a shareware game, could get it for free or download, and then buy more levels
  + Has traps, hazards, different monsters with different behaviors, learning the map, etc
  + Didn’t have separate aiming from moving
  + Id software all met in 1992
    - John Carmack,
    - John Romero
  + Could run on super low-tech machines
  + Did engine licensing, licensing their engines to other companies
  + Wolfenstein was their first game
  + **Ray-Casting (allows 3D ideas in a 2D space)**
    - **Camera shoots rays**
    - **Rays hit stuff, or not**
    - **Sample is returned to the camera**
    - **If lots of rays hit, pretty picture returned**
    - **Whenever an object is hit, part of the object hit is returned**
    - **Hugely influential and massively computational**
  + Also based on ultima underworld
  + Wolfenstein had a few amount of texture maps that allowed for rich textures with not much power
  + Wolfenstein, unlike Doom, has even greater level restrictions
  + **WHY DOOM**
    - **All of this work to simulate the real world is to give a better sense of “immersion”**
    - **Created a new kind of experience, of being there, of presence.**
    - **Immersive in the sense of “phenomenologically” being there(lol no)**
    - **Super influential for VR**
* Our desire to explore 3D spaces didn’t start with Doom
  + Probably begins in Renaissance Italy with “Linear Perspective”
  + Beterleski is using a mirror and a painting and a whole in the painting and mirror
  + He’s looking at a building, and looking at particular places.
  + Visual mediums prospered from Linear Perspective
  + We like to recreate reality
* Gun Culture!
  + ⅓ of Americans own at least 1 gun
  + We’ve always fetishized guns
    - The cowboy in the west
    - The intense engineering effort and money investment
    - Cops and robbers
    - Cowboys and indians
    - Paintball
  + Not unique to the U.S., and still seen as a means for accomplishing sport
  + From an American perspective, we have a different relationship with guns
    - This western fetish and the role of firearms in the revolutionary war
  + Sport!
    - Kim Rhodes (Rodey)
      * She’s the most successful shooter at the olympics
      * Marksmanship is a thing
      * Still difficult to divorce the notion of gun from killing
  + Columbine shootings and Mass shootings seen as being a symptom of gun culture
  + Interestingly, with the dawn of FPS, violent crime has declined
    - Correlation is not causation, but violent crime has not gone up because of FPS
  + Why Shooting?
    - There’s a lot of our own history in shooting
    - An expression of important aspect of interactions with games
    - Shooting is a choice, an action, a skill, complex consequences
    - Uniquely doable in a 3D space
      * Tracking moving objects, line of sight
    - Ray Casting is necessary for shooting
      * You are choosing to cast on particular ray in one particular connection
    - Violence is also a reason, there’s a cathartic ritual, and abstract beauty
    - Related to the notion of Pointing
      * We know someone pointing conveys some kind of information
      * We all understand pointing (even animals)
        + Dolphins understand pointing by raycasting
    - Machinima
      * Diary of a Camper
      * John Romero is camping and dies
* Doom clones, birth of a genre
  + Notable clones, Duke Nukem3D
    - Over the top action movie send up
    - Rigged up the world around it to be more interactive
      * This will be repeated over and over
    - Level design was created to tell a story here, less to create increasing difficulty
    - Being able to turn off and on lights was useful
  + Quake
    - Sequel to Doom
    - Also by id
    - Hugely forward in terms of graphics
    - Quakes release coincides with release of graphics cards
    - Also coincided with rise of internet connected computers
    - You could play online competitively
    - Trent Reznor designed the sound
    - The first digital e-sport
    - Red Ferrari went to the winner (Dennis ‘Thresh’ Fong won)
    - WASD and mouse freelook was insituted here
    - Rocket jumping, bunny hopping, and others were player creations here
  + Marathon
    - Most widely played MAC version of a FPS
    - Developed by Bungie
    - Ported to the Pippin, an Apple console
      * An open standard for games
      * Like VHS or DVD
      * One console for all
      * Allowed for the for instance of dual joystick controller
* PC Oriented controls
  + WASD and mouse
  + Set a standard for game literacy
* GoldenEye 007
  + 1997CE, Rare, N64, UK
  + Terrible design
  + But awesome for local multiplayer
  + You can play with your friends on the N64
  + You had 4 different ways to control the game
  + WHY?
    - **It’s terrible**
    - **But it’s multiplayer at home**
    - **Key point in the console FPS**
    - **Customizable multiplayer experience**
* Half-Life
  + 1998, Valve Software, PC, USA
  + Made on Quake engine
  + Heavy narrative and well done
  + Had a different sense of narrative and player experience
  + Called it Chapters, not levels
  + Fair amount of puzzles and other sequences to get through
  + No cutscenes where camera and control taken away
    - Though lots of scripted sequences
  + Very subtle manipulation of behavior (more like waiting in line at Disneyworld)
  + Crowbar resonates as a central object for character
  + It’s a level meant to usher you through a linear story and learn/evolve
  + WHY
    - **Phenomenology of space**
      * **Going after these different ideas of space**
      * **Half-Life insists on this**
    - **Gabe Newell, Valve Founder**
      * **He wants you to get a sense of the character, of yourself, of the world**
    - **The intro sequence is super good example of storytelling through the environment**
* Counterstrike
  + 1999, Mihn Le, Jess Cliffe, PC, Canada
  + Paintball in China is called Counterstrike
  + **A mod of half-life**
  + Made by two students and solely a team based experience
  + Tactical shooter
  + Defuse bombs, escort VIP, terrorist modes
  + Hugely high skill ceiling
  + Counterstrikes addition of additional objectives beyond capture the flag and an economy make this a mainstay
  + Super iconic level design
  + Counterstrike defines a very particular dynamic, but there isn’t any clear conception of why they are in conflict, and no one is evil or good
  + **WHY?**
    - **Culture is weird**
    - **The most prominent image of war is counter-terrorist and terrorist**
      * **This game just kinds of puts you in one**
    - **De\_dust,**
      * **The most amazing multiplayer level design**
      * **You’re doing two things, you’re creating a sense of semi-realistic space, but also an arena.** 
        + **So an obstacle course and a narrative**
      * **So widely known and loved that players could just draw it**
* **Looking Glass Legacy**
  + **First person shooters becoming drama, a base for a game that can have things put on top of it**
* Deus Ex
  + Not directly a looking glass game
  + Focuses on player choice and emergent strategies
  + You could evolve different strategies and builds for characters
  + Very RPG like, but with an FPS
  + There’s some Adventure game tropes in terms of hovering your cursor over something and prodding the environment
  + Taking aspects of Duke Nukem and Half-Life and making it work for storytelling
  + Players are collaborators with the game
  + About gamer expression, leave it up to the player
* Bioshock
  + More artful and unique representation
  + This was a game that pushed forward narrative
  + Exploring an Ayn Rand-ian dystopia
  + Make bunch of decisions
  + Commits 100% to immersed first person visual storytelling
  + Camera is rarely taken away from you
* Far Cry 2
  + Similar game in its attempt to tell stories
  + Emergent strategies
  + Player solutions
  + Dynamic weather system
  + Enemy AI reacts to everything
  + Increasingly realistic interactions
* These looking glass games focus on player choice, emergent strategies, multiple solutions, and sophisticated environmental storytelling
* Creators of Thief and System Shock working on these as well
* Pippin
  + By Apple Bandai
* Halo
  + 2001-Now, Bungie/343, Xbox (360/One)/PC, USA
  + Brought in shooting and driving
  + Intelligent enemy behaviors
  + You usually never died
  + Regenerating shields
    - Set the norm
  + Halo launched with Xbox
  + Had good physics engine, and best graphics for its time
  + First console to come with internet port already installed
  + Online multi-player gaming
  + Control scheme is also super standard now, totes great
  + Helped set a language for FPS play
  + Refined in Halo 2
  + **WHY**
    - **Dawn of the console FPS**
    - Especially in regards to the longform single player FPS
    - 77% who purchased an Xbox360 purchased CoD2
    - The lateness of Halo3 is responsible for CoD
* CoD Modern Warfare
  + 2007-present, infinity ward, et. al, Xbox 360, PS3, PC, USA
  + A game where you are rank and file military soldier
  + Wanted to start with Modern Warfare, but made WW2 games instead when they finally got to MW
  + 3 different studios that alternate development, like child custody
  + Started as a Medal of Honor clone
  + Over time CoD developed into bonker multiplayer instead of a grounded military game
  + Treyarch and Infinity Ward
  + World at War had the Nazi Zombies (Treyarch)
  + Sledgehammer studio, and Gray Matter Studio come to chock out these games
  + Treyarch added the ridiculousness.
  + WHY
    - **A game with multiple faces and multiple faces behind those faces**
    - **Contemporary franchise with no signs of stopping**
    - **Ideas that are super revolutionary can quickly become the norm due to success**
* Portal
  + 2007, Valve, XB360, PS3, PC, USA
  + Metaphysical science fiction
  + Puzzle rooms
  + Problem solving
  + Rules and space
  + It’s perfect
  + WHY
    - **It’s about space and not shooting**
    - **It’s unique and a sign of FPS and shooters branching off in different directions**