CMPS 80K
Genre Studies

Intro & SHUMPS
To Date

• Focus on what makes a game
  • Formal and closed systems
  • Games require conflict.
  • Systems are composed of mechanics
  • Players engage with these systems to create the dynamic of play and feel the designed aesthetic
Genres

- A game genre represents a collection of games which share a similar collection of mechanics, goals/narrative wrapping or visual style.

- Developed over time
  - By players
  - By retailers
  - Gradually, by developers and publishers.
Players needed a means to discuss what they were playing and find like titles.
Retailers needed a means to recognize trends and group like products together.
Publishers need a means to identify trends and opportunities.

You’re going to make me a game just like GTA, got it?
BEST-SELLING VIDEO GAME SUPER GENRES BY UNITS SOLD, 2007

- Strategy: 4.7%
- Adventure: 4.3%
- Fighting: 4.5%
- Family Entertainment: 17.6%
- Role Playing: 7.6%
- Shooter: 12.1%
- Action: 22.3%
- Sport Games: 14.1%
- Racing: 8.3%
- Other Games/Compilations: 2.3%
- Children’s Entertainment: 1.0%
- Arcade: 0.5%
- Flight: 0.7%

Source: The NPD Group / Retail Tracking Service
Do not attempt to memorize this slide.
Three Major Categories

• Action Games: Require quick player response ("twitch") to dynamics of play

• Strategy Games: Require player to plan and carefully consider moves often without same time pressure as action game.

• Adventure Games: Require player to follow story through exploration or narrative.

Our genres are a mashup of these core things + exploration/conflict.
Our Goal in Genre Studies

- Identify seminal games in formation of genre.
- Identify common core mechanics and play dynamics.
- Identify key developers.
Shmups
Action Games
Puzzle Games
Educational Games
Adventure Games
Simulations
RPGs
Platformers
Turn-based Strategy / RTS
FPS/Shooters
Multiplayer & MMO
Art Games
Social/Casual Games
SHMUPS

“SHOOT ‘EM UP”

ACTION GAMES
Shmups

- Oldest and most prolific genre
- Early Years: 1961-1979
- Golden Age: 1980-1995
- Evolution & Renaissance: 1996-Present
SPACEWAR!

PLAYER 1: W, A, S, D
PLAYER 2: I, J, K, L

PRESS ANY KEY TO START.
Spacewar!

- 1961
- Steve “Slug” Russell
- 2-player game
- Created at MIT to show off computer’s potential.
- Receives Lifetime Achievement Award at GDC this year.
- Some times considered to be a pure action game vs. a shmup. Shoot them up refers to hordes of enemies. Here, it is just your opponent.
Spacewar! is at the Computer History Museum in Mountain View.
Spacewar!
Space Invaders

- 1978
- Considered to be the game that gave rise to the Shmup genre
- Fixed play space
- Tomohiro Nishikado
- Released by Taito
- Rescued the arcade industry from its first crash in 1977 and sparked a renaissance for the video game industry
Caused coin shortage in Japan
Space Invaders

SCORE<1> HI-SCORE SCORE<2>
0090  0000

CREDIT 04
Space Invaders Trivia

• Used aliens to escape moral concerns about the killing of humans

• Used spaceships because the developers were unable to render aircraft movement.
Key Facts

- Player lives introduced with Space Invaders.
- First game to save player score thus popularizing the concept of getting a high score.
- First game in which targets fired back at player.
- Sets standard for genre
Galaxian

- 1979
- Kazunori Sawano (沢野和則)
- Published by Namco
- Variation on Space Invaders: Enemies “charge” player
Galaxian / Galaga
Key Facts

- *First game where enemies had individual personalities - before Pac-Man*
- *Enemy behavior significantly advanced over Space Invaders. Diving, formations, etc.*
Asteroids

- 1979
- Concept: Lyle Rains,
- Design & Code: Dominic Walsh, Ed Logg
- Free-roaming play field like Spacewar!
- Results in creation of bigger coin box. Popularity forces Atari to send fill several hundred Lunar Lander cabinets with Asteroids games.
- Atari’s best-selling game of all time (70,000 arcade cabinets sold)
Asteroids
Ozma Wars

- 1979
- SNK
- 2nd ever vertical shmup
- First game to feature a supply of energy, now common in action games.
- First game to feature disparate levels.
- Featured virtually scrolling backgrounds and enemies.
Sheriff (Bandido)

- 1979
- Nintendo R&D1
- Designed by Genyo Takeda
- Art by Shigeru Miyamoto
- Multi-directional shooter
- Dual-stick controls (one for moving, another for aiming)
Early Design Patterns

- Shoot targets for high score
- Waves of enemies
- Increasing rate of speed
- Increasing difficulty of enemies
- Player relies primarily on speed to survive, memorizing enemy attack patterns
- Most prominent companies: Taito, Namco, Atari.
Golden Age of Shmups

• Introduction of side-scrolling shooter. Up to this point, most had been fixed screen.

• Became a successful genre and one of the top genres of all time

• Prominent companies: Taito, Namco, Atari, Konami, Irem
Defender

- Revolutionary - popularized the concept of scrolling screens
- Protecting people from aliens
- Player’s ship can move left AND right
- Mini-map was essential, not just fluff
Defender
Scramble

- Forced scrolling
- First scrolling shooter to offer multiple, distinct levels
- Only 6 levels – very difficult to beat
- First game of the Gradius series (Konami’s first shmup)
Scramble
Vanguard

- The first horizontal and vertical scrolling shooter
- Player can shoot in 4 directions
- Early dual-control game that uses 4 directional buttons instead of a 2nd joystick
Vanguard
Bosconian

• Non-linear, free-roaming gameplay
• Player’s ship can move in any of 8 directions
• Radar tracks enemy positions in space
Bosconian
• Five missions which were mimics of other games such as Galaxian
• Basically playing 5 games in 1, which is rare (Tron does this)
• One of the first boss enemies, the mothership in mission 5
Tempest

• Tube shooter subgenre
• The first game of its kind
• Vector graphic shmup
• Enemies come up at you in 3D
• Went on to influence rail shooters
Tempest
Golden Age Design Patterns

- Multiple levels
- Expanded range of movement in multiple directions
- Extremely fast gameplay
- Lots of color
- Introduction of dual controls
Era of Refinement

- 1985-1995
- 85: Space Harrier – rail shooter
- 85: Gradius series – choice of weaponry
- 87: R-Type – slower-paced, more difficult
- 87: 3-D WorldRunner – stereoscopic 3D (Nasir)
Today’s Shmups

• Extremely large numbers of enemies and powerups to deal with onscreen

• Complex graphics, also 3D

• So difficult to play it is a very niche genre now

• Developers and publishers are financially embattled because the games are too difficult to play, very few buy shmups nowadays
Bullet Hell Shooters

- Niche appeal
- Also called Manic Shooters
- Player must dodge an overwhelming number of enemy projectiles
- Even faster gameplay than any shmup before
- Arose from the need for 2D shmup developers to compete with 3D games
Geometry Wars

- 2003
- Stephen Cakebread
- Retro style
DonPachi

- 1995
- First bullet hell shooter
- Developed by Cave, published by Atlus
- Title literally means “Leader Bee” but really stands for the sound of firing guns
- Introduced combo scoring system to shmups
DonPachi
• Not a shmup

• The control is not arcade-style

• The attacks are determined by stats and dice-rolls, not by projectile collision with ships on screen

• Player doesn’t control ship movement to dodge enemies – relies on stats for that and is not visually represented
Reading

• The Origin of the Shmup Genre: An Historical Study