

G54GAM - Games

- Defining Play, Games and Genres

Last Week

- http://www.cs.nott.ac.uk/~mdf/teaching_G54GAM.html
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Last Week

- A Brief History of Computer Games
 - Origins of Computer Games
 - The Golden Age of the Arcade
 - 7 Generations of Consoles
 - 8bit Home Computers
 - The PC Era
 - Big franchises, mobile, indie, physical games

A Language for Defining Games

- What is a game?
- What does it mean to play?
- What is a computer game?
- How can we begin to articulate the difference between games?





Huizinga (1938) Homo Ludens

- A free activity standing quite consciously outside “ordinary” life as being “not serious” ... absorbing the player intensely and utterly ... connected with no material interest, and no profit can be gained by it

Roger Caillois (1958)

- Free
 - Playing is not obligatory
- Separated within prescribed limits
 - Defined space and time in advance
- With an uncertain outcome
 - Left to the player's initiative
- Which is unproductive
- Governed by rules
- Contain make-believe

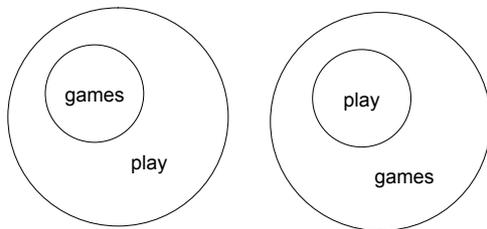
Avedon and Sutton-Smith (1971)

- Games are an exercise of voluntary control systems, in which there is a contest between powers, confined by rules in order to produce a dis-equilibril outcome

Costikyan (1994)

- A game is a form of art in which participants, termed players, make decisions in order to manage resources through game tokens in the pursuit of a goal

Play and Games



Games are a subset of Play

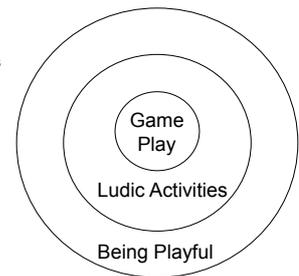
- Typological / descriptive approach
- Examples of Play
 - Dogs chasing each other in a park
 - A child on a swing
 - A group of role-players
 - A football match
- Only some of these would be thought of as a game
- Forms of play that are formalised are often considered to be games
- Most forms of play are looser and less organised than games

Play is a component of Games

- A more conceptual approach
- Situate games and play within the field of design
- Play is a component of games
 - Games contain play
 - The experience of play is one of many ways of looking at and understanding games
- Play represents one aspect of games
- **Play is free movement within a more rigid structure**
- (can you have a game without play?)

Play is a component of Games

- Game Play
 - Formalised interaction that occurs when players follow rules of a game and experience the system through play
- Ludic Activities
 - Non-game behaviours that we think of as "playing"
- Being Playful
 - A playful state of mind
 - The spirit of play is injected into some other action
 - Telling a joke



Huizinga on Play

- All play moves and has its being within a play-ground **marked off beforehand** either materially or ideally, deliberately or as a matter of course
- The arena, the card-table, the magic circle, the temple, the stage, the screen, the tennis court, the court of justice, etc. are all in form and function play-grounds, i.e. forbidden spots, isolated, hedged round, hallowed, **within which special rules obtain**.
- All are temporary worlds within the ordinary world, **dedicated to the performance of an act apart**

Huizinga on Play

- The Magic Circle of Play
- A voluntary, contractual structure that is limited in time and space
- Defined before the game, or changed as part of the **social** gaming process
- "We are going to play a game"
- "I would like to join your game"

Huizinga on Play

- Games are played...
- In certain **spaces**
- At certain **times**
- By certain **players**

Salen and Zimmerman (2004) Defining a Game

- A **system** in which **players** engage in **artificial conflict**, defined by **rules** that results in a **quantifiable outcome**

Defining a Game

- System
 - a set of parts that interrelate to form a complex whole
- Players
 - one or more participants actively play the game
 - players interact with the system in order to experience the play of the game
- Artificial
 - games maintain a boundary from “real life” although they occur in the real

Defining a Game

- Conflict
 - all games embody a contest of powers
 - against others, against “the system”, “the rules”
- Rules
 - provide the structure out of which play emerges, by delimiting what the player can and cannot do
- Quantifiable outcome
 - at the conclusion a player has either won or lost or received a numerical score
 - distinguishes games from less formal play activities

Properties of Computer Games

- Immediate but narrow interactivity
- Manipulation of information
- Automated complex systems
- (Networked communication)

Immediate but narrow interactivity

- Immediate
 - Games offer immediate, interactive feedback
 - Systems of actions and outcomes where the game responds seamlessly to a player's input
 - Real time game play that shifts and reacts dynamically to player decisions
- Narrow
 - Restricted to mouse and keyboard input or a motion controller
 - Compare a football simulation to a real game
 - Input control often provides enough combinations for a wide variety of moves and the development of unique styles of play

Manipulation of information

- Text, images, video, audio, animations, 3d content
- Beyond graphics and audio games also manipulate internal logic, memory management
- Digital games can manipulate information in a way that is unique
 - it is possible to learn the rules as you play

Automated complex systems

- Allow people to play games that would be too complicated in a non-computerized context
- In non-computer games players are responsible for moving the game forward
- In computer games the procedures can be automated, the game can move forward without direct input from the player

Networked communication

- Many digital games are able to facilitate communication between players
- With digital games the distance over which communication can occur is vast (both physically and socially)
- But communication in a digital game is not limited to text or voice (e.g., the split second decisions made in a game of Modern Warfare)

Rules

- Rules make up the inner, formal structure of games
- All games have rules
- Rules are a defining quality of games but are not the experience of play

Rules

- Rules limit player action
- Rules are explicit and unambiguous
- Rules are shared by all players
- Rules are fixed
- Rules are binding
- Rules are repeatable



Tic-tac-toe

- Play occurs on a 3 x 3 grid of 9 empty squares
- Two players take turns marking empty squares, the first player marking Xs and the second player marking Os
- If one player places three of the same marks in a row, that player wins
- If the spaces are all filled and there is no winner, the game ends in a draw
- *The rules describe the formal system of the game but not the experience, the history or the culture of the game*

The Core Mechanic

- How do we define the “experience”?
- The essential play activity players perform again and again
 - A single activity
 - Bash the fire button, use the joystick
 - A compound activity
 - Move, aim, fire, manage resources, strategize
- The experiential building block of player interaction

The Core Mechanic

- Core mechanic leads to patterns of behaviour = experience for players
 - How a player makes meaningful choices
 - Leads to meaningful play
- Poor core mechanic = poor game play
- Game design is the process of creating activities for players
 - Danger of focusing on content / narrative / franchise
 - Need to create **activities** for players

The Core Mechanic of Quake

- Moving
- Aiming
- Firing
- Managing resources
 - Ammunition
 - Health
 - Armour



The Core Mechanic of Quake

- Immersion in a 3d environment
- Being the best player, getting the most kills
- Hiding, running, getting all the stuff, taunting the opponents



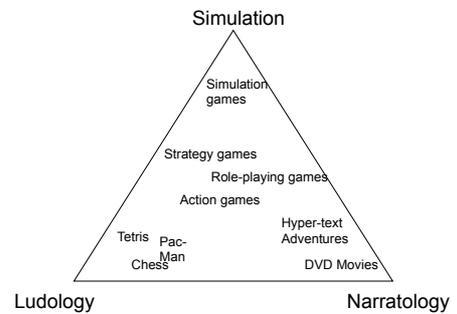
Varying the core mechanic

- A common practice with early arcade games
 - Pacman, Breakout
 - Repetitive core mechanic, easy to complete, then you do it again, and again...
 - Slight variations of core mechanic provide a “new” game
 - Add time limit, powerups, different levels
 - Same interactivity, different **experience**
 - Some successful, some not
- Arguably few pure game mechanics

How is this different?



Lindley (2003)



Funk and Buchman (2002)

- General entertainment
 - no fighting or destruction
- Educational
 - learning or problem solving
- Fantasy violence
 - cartoon characters that must fight or destroy things
- Human violence
 - like fantasy violence, but with human characters
- Non-violent sports
 - no fighting or destruction
- Sports violence
 - fighting or destruction involved

Genres

Action Games

- Real-time games in which the player must react quickly
- Require quick reflexes and timing to overcome obstacles
- Emphasis often on combat

Arkanoid (1986)



Action Games - Shooters

- First Person Shooters (FPS)
- Shooting and combat from the perspective (3D) of the character controlled by the player
- Give the player the feeling of “being there”

Wolfenstein 3D (1992)



Doom (1993)



Action Games - Shooters

- “Shmups” – Shoot-em-ups
- Control a character or vehicle
- Destroy large numbers of enemies
- Fixed or horizontally/vertically scrolling landscapes

Space Invaders (1978)



R-Type (1987)



Action Games - Platformers

- Jump to and from floating platforms and over obstacles
- Traditionally 2D
 - Although sometimes 3D and Isometric
- Fixed or scrolling viewpoint

Donkey Kong (1987)



Super Mario Bros (1985)



Action Games - Fighting

- 1-on-1 combat
- 2 characters
 - Computer controlled
 - 2 player
- A few basic inputs can be combined to create sophisticated moves (“combos”)
- Traditionally 2D, newer fighting games are often pseudo-3D

Street Fighter (1987)



Tekken 5 (2004)



Adventure

- Solve puzzles by exploring and interacting with people or the environment
- Text-based “interactive fiction” or graphical
- 1st, 2nd or 3rd person
- Often non-confrontational
- Appeal to people who do not normally play video games

Myst (1993)



Action-Adventure

- Combine elements of action and adventure genres (!)
- Long-term obstacles and challenges
 - Exploration
 - Item gathering
 - Puzzle solving
- Many smaller challenges
 - Combat

Tomb Raider (1996)



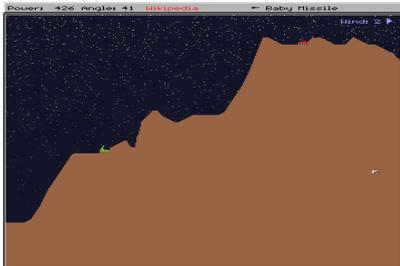
Resident Evil (1996)



Strategy

- Similarities with board games
- Require careful thinking and planning to achieve victory
 - management of a limited set of resources
 - deciding which units to build and where and when to deploy them
- A godlike view of the game world
- Indirectly control semi-autonomous units
- Real time (RTS)
- Turn based (TBS)

Scorched Earth (1991)



Age of Empires (1997)



Role Playing Games (RPGs)

- Based on traditional role-playing games
 - Dungeons and Dragons
- Choose to play one of a number of different characters
 - Elf, dwarf, wizard, thief
- Focus on gradually increasing abilities of the character by completing quests
 - Experience
 - Skills, equipment, special abilities
- Turn-based or real-time combat

Angband (1990)



World of Warcraft (2004)



Simulation

- The emulation of real world operating conditions to varying degrees of accuracy
- Construction and management simulation
 - City-building games
- Life simulation
 - Social simulation
- Vehicle simulation
 - More realistic
 - Less fun?

SimCity 2000 (1993)



Gran Turismo 5 (2007)



Woodcutter Simulator (2009?)



Others

- Music/party
 - Karaoke or rhythm based
- Traditional games
 - Chess, Mahjong
- Puzzle
 - Logical, abstract, mazes
- Sports

Others - Purposeful

- Serious
- Educational
- Christian
- Adult
- Advertising
- Casual
- ...

Homework

- Play a game
 - What are you doing – what is the **core mechanic**?
 - How would you explain the difference to another game? What is the **genre**?
 - How does it give you the freedom to **play**?
- <http://www.quakelive.com>