Character Design

"Live Coding, Virtual Reality and the Oculus Rift"

- Wednesday, February 4th @ 6pm
- Gerstein Library
- http://libcal.library.utoronto.ca/event.php?id=903487

Characters vs Levels

- Characters and levels are elements of user interface and game experience.
  - Levels present the challenge or problem to solve,
  - Characters provide the means to solve them.

Main Goal: Communication

- As with any user interface, the characters and levels you design should make it clear what the task is to do, and (to some extent) how you're supposed to do it.

Visual & Auditory Cues

- How does the character or level design help the user understand what to do?
  - The perfect character and level design should be a marriage of both form and function.

Designing Characters

Designing Characters

- Character design involves the creation of a game's characters, and elements of those characters that enhance the gameplay experience.

Character Design Discussion

Case Study: Mario

- Sometimes, a character's appearance has historical origins.
  - Why is Mario a plumber?
  - Why does he wear gloves and boots?
  - Why does he have a hat and a large nose?
  - Why does he have a mustache?

Case Study: Lara Croft

- In modern games, character designs convey meaning and utility.

- Questions:
  - What impressions do you get of Lara's character, based on her appearance?
  - What is good and bad about this character?
  - Is Lara a positive role model?
  - How has her character changed over the years?
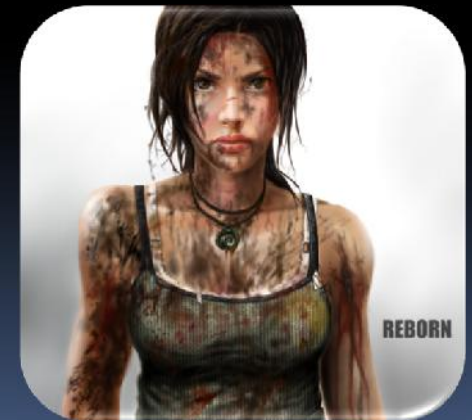
What makes effective characters?

Major goals of characters

Connecting with the player

Conveying information

Empowering players

Factors for Character Design

- Many tools are available for creating effective characters:
  - Realism
  - Intuition
  - Distinction
  - Interaction

Steps in Character Design

- **Technical aspects**
  - Starts with concept art, presented to producer/marketing
    - Reference material needed.
    - Producer & marketing team will veto elements.
  - Modeling team
    - Final character sketch is shown from different views.
    - Starts with solid shape, vertices drawn to fit general shape of concept art.
      - Sometimes physical models are used
  - Rigging & Animation

How does a character's appearance convey information?
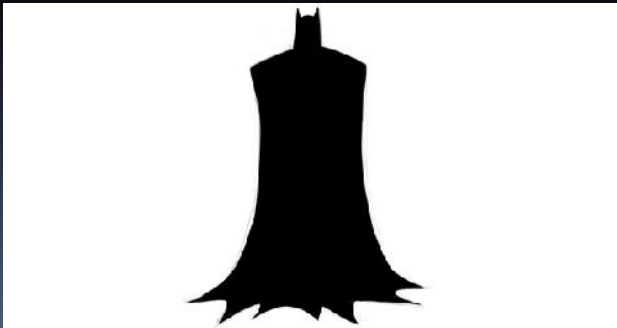
Sly Cooper

Team Fortress 2

The Importance of Intuition

- Characters are interface devices. Therefore, they must be easy to understand and to use.
- A few basic principles to keep in mind:
  - Characters should be recognizable
    - Silhouette & key features.
    - Voice acting

Understanding the Character

- Useful to give characters "personality", to let the player know the possible motives and actions.
  - Despite the benefits of attractive main characters, flaws are also necessary → connection to player.
  - Try to aligning player and character motivations.
    - Aligning character to player's internal motivations
    - Aligning player to character's motivations
  - These motives must then be reflected in the appearance.

Understanding the Character

- Other personality issues
  - Voice acting can be key (e.g. Portal)
    - Or a complete lack of voice acting works too (e.g. Half-Life)
  - Some backstory can help, but is largely unnecessary
    - Key motivations needed.
- Remember two things:
  - Make a plan for your character and your game.
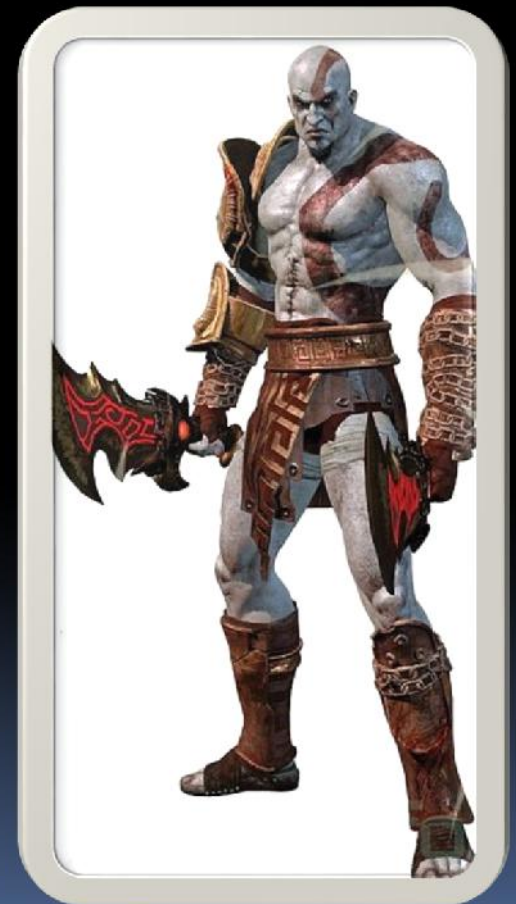 - Accept that you characters and their design will change over the course of the development process.

Example: Portal & GLaDOS

How do you recognize the main character?

How do make a player connect with the main character?

Characters with Character

- Make hero characters "attractive"
  - Attractive people considered more successful, confident, etc.
  - "Average" appearance has wider appeal/connection.
- Player layers
  - Players feel cognitive, visceral, social and fantasy connections to the game through the(ir) character.
  - Role examples:
    - Minion, rescuee, pet, sidekick, ally, guide, mentor
    - Obstacle, enemy, competitor, boss, archenemy
    - Audience, informant/trader, host

Character Issues

- Cultural considerations
  - Previous concepts only apply when evaluating social roles within a single culture.
  - <u>Discussion topic:</u> America vs Japan.
    - High-context vs low-context
    - Individualist vs collectivist
  - Easiest to draw from media norms, or to use characters with no human connection to cross borders.
  - Cultural "norms" can change suddenly (e.g. Pokemon)
  - Changing a character to suit foreign audiences is common, but can cause problems with the cinematics
  - "Safe" character designs (both for culture & gender)
    - Gender-indeterminate people
    - Animals & animal-like creatures

Can a character's actions convey information?

How important is realism?

*Courtesy of EA Sports

Realistic Characters

- The character design should reflect the type of character being created, while also adhering to the world in which it resides.

- Characters also need to reflect the intention of the designer, to connect with or distance one's self from the character one controls.

- This applies to the way the character looks, and the way the character is animated.
  - Facial symmetry enhances appeal.
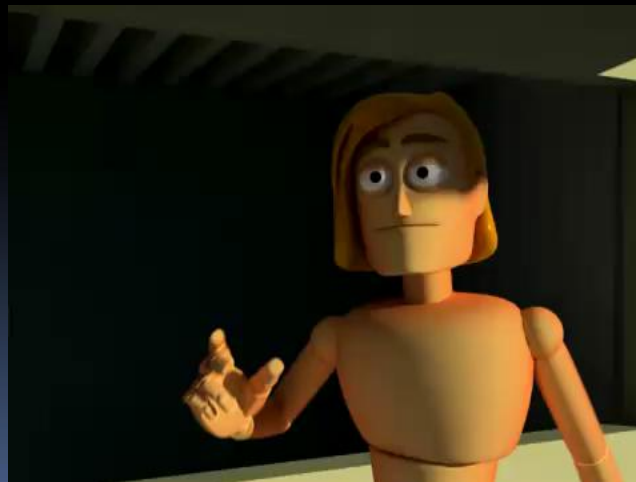   - Asymmetry → must be intentional and carefully done.
  - Avoid the "uncanny valley"
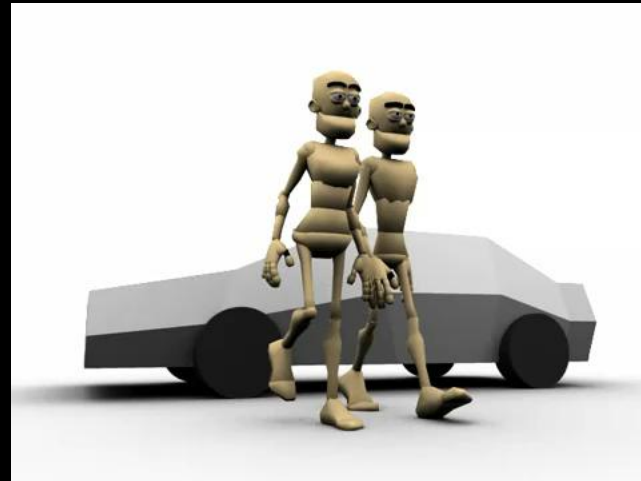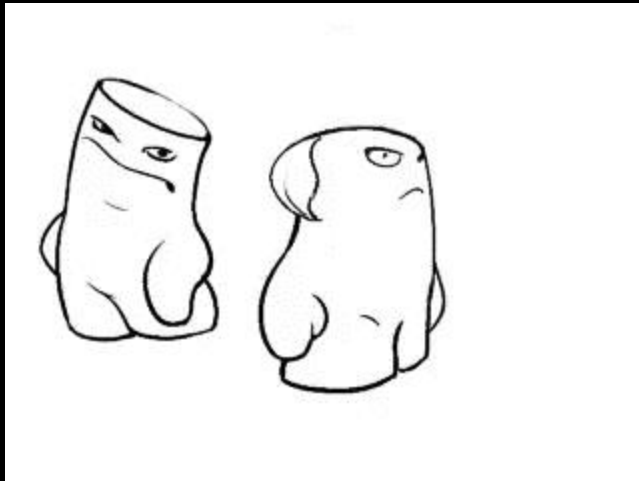
Beware the Uncanny Valley
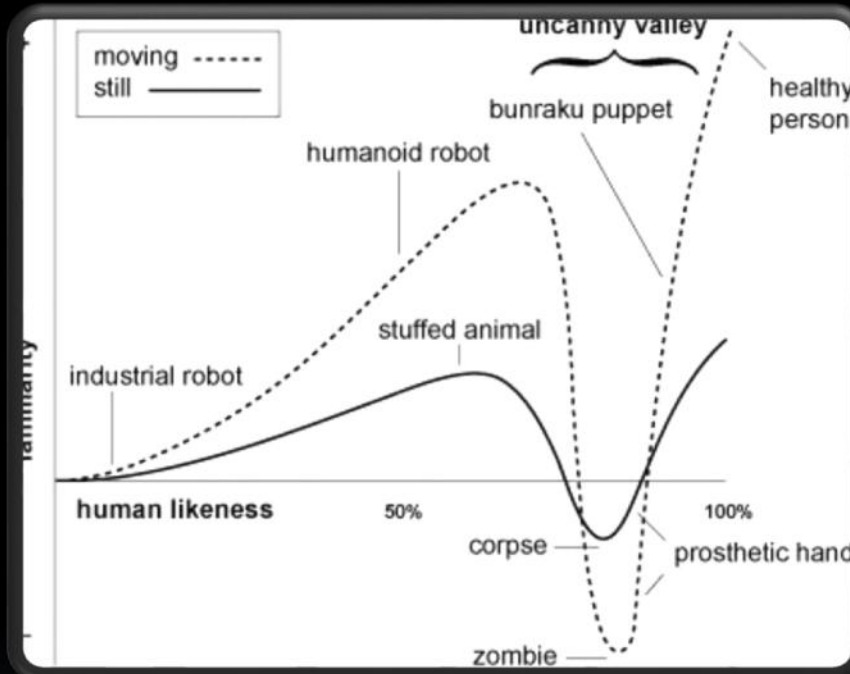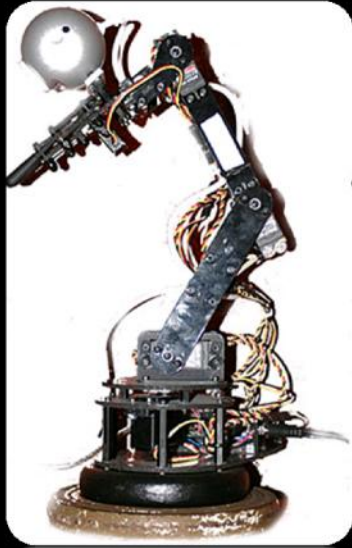
Movement: The 11 second club


MICHAELCAWOOD.com

More of the 11 second club

How do you design a first-person character?

Interactive Characters

- How characters interact with the player and the other characters gives useful player feedback.

    - Good to establish social roles of each character, relative to the main character and each other.

        - Two main axes: friendliness & dominance.

        - Conveyed by facial expression, posture and vocal cues.

        - Making the roles and appearance conflict can lead to humour (or confusion, if taken too far).
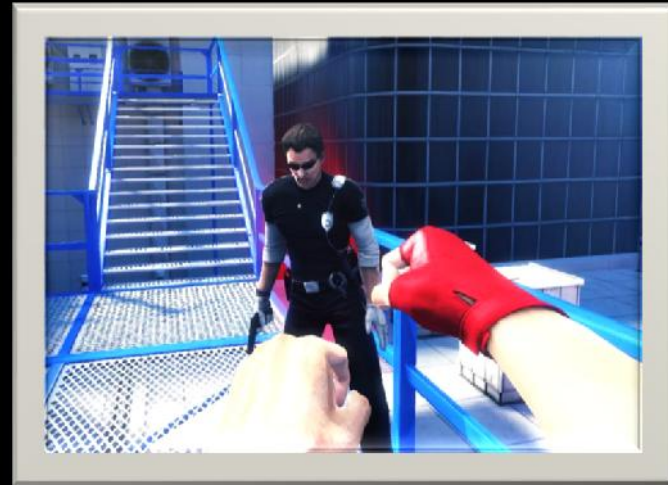
Example: Half-Life

# How do you make a connection with non-player characters?

Case Study: Bioshock Infinite's Elizabeth

- Keep companion character interesting and active, without being annoying.
  - "Look at" markers
  - "Smart terrain"
  - Movement within cone along "golden path".
- Combat:
  - Higher positive weight for cover positions,
  - Higher negative weight for "line of fire" positions
- Better to be entertaining than algorithmically complex.

Intuitive Characters

- **General rule: Exaggerate**
  - Enhancing strong vs. weak features.
    - E.g. strong chin & brow, nice smile, symmetrical strong body.
  - Indicate "innocent" characters
    - "Babyface bias" → child-like features enhance warmth & trust, reduce strength and responsibility.
      - Short, large eyes & mouth, small nose & chin, high brow.
  - Costumes help differentiate characters, give them particular characteristics → should stick to KISS principle
    - Easily-identifiable logos or appearance.
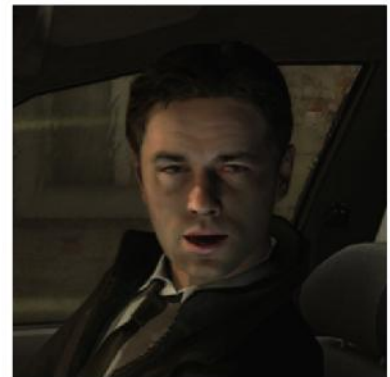
Intuitive Characters

- Acting rules for conveying in-game information:
    - Faces create "social synching" → empathy
    - Posture can convey emotional states, such as interest, boredom, anger, respect (through imitation)
    - Interpersonal distance → establishes intimacy or dependence of one character on another.

Intuitive Characters

- Other design principles:
  - Adhere to expectations.
    - Breaking expectations can cause a break in the immersion of the game, and can cause resentment in the player.
    - Basic appearance should indicate characteristics of the characters in the game.

    - Stereotypes work, for better or for worse.
      - Games adhere to gender, race, age and occupation stereotypes out of familiarity.

Interactive Characters

- Interaction theory often focuses on character personality elements:
  - **Open** = adventurous, daring, creative
  - **Conscientious** = thorough, responsible, planner
  - **Neurotic** = worrisome, self-conscious, moody, dramatic

- Helpful to make a relationship diagram to illustrate where characters stand within the first two axes.

When can a character break from reality?

A note about "twists"

- Twists can add large impact on story, if withheld and not overdone
  - General rule: 90% familiar, 10% new.
- Example: Harry Potter
  - Magical world (new), real people (familiar).

- Example: Indiana Jones 3
  - Sidekick that double-crosses the main character so often that his alliances are never clarified.

Case Study: Last of Us

Characters evolve over time

- Pokemon

- Homework:
  - Look up "*Tropes vs Women in Video Games*"

2015 Group Assignments

- The final groups will be available at:
  - http://www.cs.utoronto.ca/~sengels/csc404/announcements.shtml