Cuphead

Everyone 10+ (ESRB, n.d.)
Fantasy Violence, Mild Language, Use of Alcohol and Tobacco
Tim Huynh

1. Game Settings

I played the PlayStation 4 (digital) version of *Cuphead*. After 11 hours of playing, I completed 48% of the game. I selected the Regular difficulty level whenever applicable, but I tried the Simple difficulty level for 30 minutes. I used the default control scheme and the default audio and visual settings.

2. Game Description

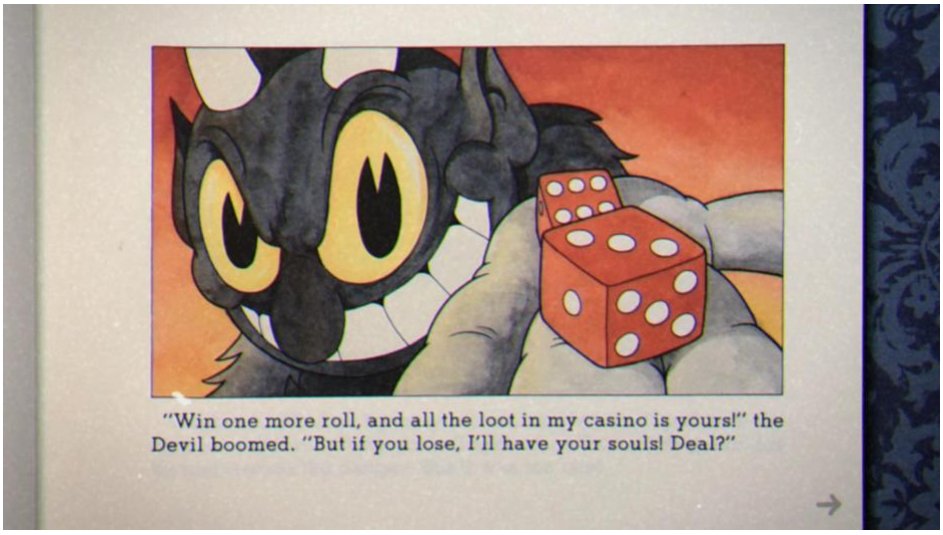
2.1. Genre

Cuphead is a 2D "run and gun" action game (Studio MDHR, n.d.). "Platformer," "Bullet Hell," and "Shoot 'Em Up" are popular user-defined tags on Steam (n.d.-a). It is described as an "indie" game because its developer, Studio MDHR, is a small, independent company.

2.2. Premise

The narrative premise is that foolish sinners are inevitably punished. Cuphead, the titular character, becomes indebted to the Devil because of his greed. Players, meanwhile, can be humbled by this game because of their pride (i.e., overestimating their success because of the game's appearance).

Figure 2.1



The game's subtitle is "Don't Deal with the Devil."

2.3. Pillars

Chad Moldenhaeur (2015) explained his studio's design principles:

> Remove any and all bloat from the game. Keep the player playing the game rather than watching or listening to the game. Keep the mechanics simple to grasp but with enough variance and technique to allow player mastery and expression. And, a sufficiently skilled player should be able to potentially defeat every challenge on the first try; no trial by death or cheap hits.

These pillars were evident during my time with the game. I would include frustration-elation and nostalgia as intended emotions. Players must tolerate the frustration of repeated failure to enjoy the elation of eventual success. They can also experience nostalgia if they enjoy the 1930s cartoons and/or the 1990s games that have inspired *Cuphead* (Moldenhauer, 2016).

2.4. Story

Cuphead foolishly loses a wager against the Devil and forfeits his and his brother Mugman's souls. As a reprieve, he and Mugman must collect the souls of the Devil's many debtors. The duo will ultimately confront the Devil, though. Like the cartoons that have inspired it, the story is simplistic and somewhat moralistic (Barboza, 2019).

2.4.1. Camera

Players never directly control the camera. Stages have a 2D perspective and the larger, outside world has a top-down perspective. The camera is fixed for boss-fight stages, even when the background scrolls to imply movement (Figure 2.2). The camera scrolls with players' movement in platforming stages and in the outside world (Figure 2.3).

Figure 2.2



Some stages are air-based. They create the impression that players are always moving forward.

Figure 2.3

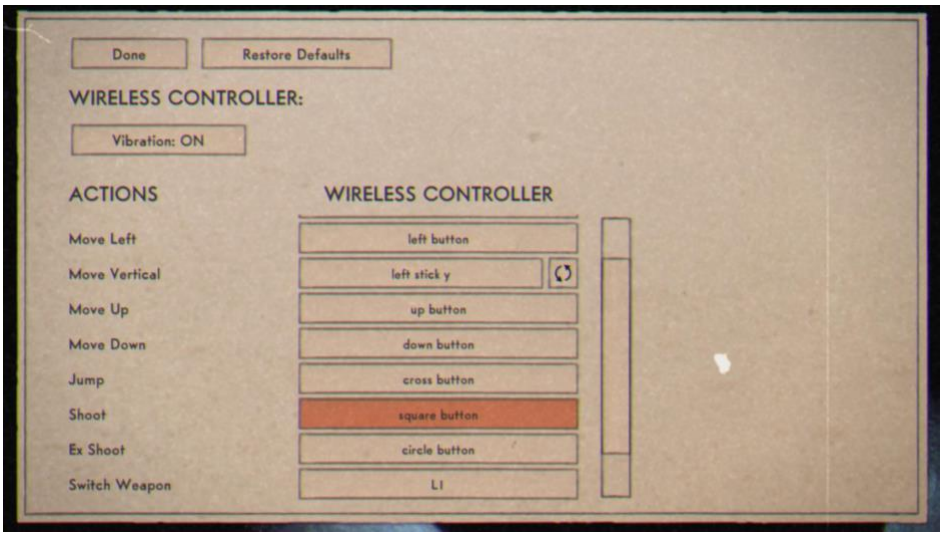


The world outside of stages has a different, semi-overhead view.

2.4.2. Controls

The core actions are mapped to single buttons and have total customization. These actions include shooting, jumping, ducking, switching weapons, and using special attacks. Dashing is a relatively unique action.

Figure 2.4



The Controls menu does not explicitly convey that every mapping can be changed.

2.4.3. Character

Cuphead and Mugman resemble early iterations of Mickey Mouse, like in *Steamboat Willie*. Their facial expressions convey excitement or determination (Figure 2.5). Their movements are brisk, their intros are non-threatening, and their wins are non-lethal. Their playfulness and innocence are more salient than the underlying sinisterness that they represent (Barboza, 2019).

Figure 2.5



Cuphead (left) and Mugman are anthropomorphized vessels for drinking liquids.

3. Core Mechanics

3.0. Game Loop

Players confront powerful "bosses" in standalone stages that confine movement to one screen. Each confrontation is a protracted fight. Bosses often assume a different form or state in each phase. The fight ends when players defeat the boss (i.e. reach a threshold of inflicted damage) or vice versa. Two to three boss-fight stages can be available at a time. Platforming stages are less common and optional. In these stages, players traverse from a starting point to an ending point. They can collect coins and defeat enemies along the way.

3.1. Learning & Exploiting Patterns

Most dangers are enemies and projectiles. They all have patterns that involve triggers, paths, sequences, and/or animations. These patterns are unique, but they can have some similarities.

Player Requirements

First, identifying patterns requires observation and concentration. Next, recognizing patterns requires prior memorization. Then, exploiting learned patterns requires strategy and tactics. Because every stage is unique, payers often need to change their approaches. Cleverness is also required because the game does not offer textual hints. Success can involve actions or items that players do not regularly use.

3.2. Evasion & Traversal

Evasion and traversal are important for exploiting learned patterns. Shooting is important too, but bosses cannot be easily defeated with shots. Other dangers have temporary or permanent invulnerability to shots anyway. Besides running away, players can jump, duck, and drop to lower ground. They can dash across a limited distance on the ground and/or in the air. In air-based stages, players can fly in any direction as well as morph into smaller planes (Figure 3.1).

Figure 3.1



Shrinking into a smaller, faster plane is useful for moving into tight spaces.

Player Requirements

Evading and traversing requires precision and timing. Often, safe spaces are small and safe intervals are short. Boss-fight stages require endurance because they involve repetition. Reacting to dangers requires reflexes, but learning patterns can mitigate this requirement.

3.3. Shooting

With most types of Shots (i.e. projectile weapons), players can hold the Shoot button. The default Shot requires some precision to use because its shooting trajectory is narrow (Figure 3.2). Players can buy and keep the other five Shots. Most of them require less precision because of their shooting trajectories.

Figure 3.2



The default Peashooter is the most straightforward Shot.

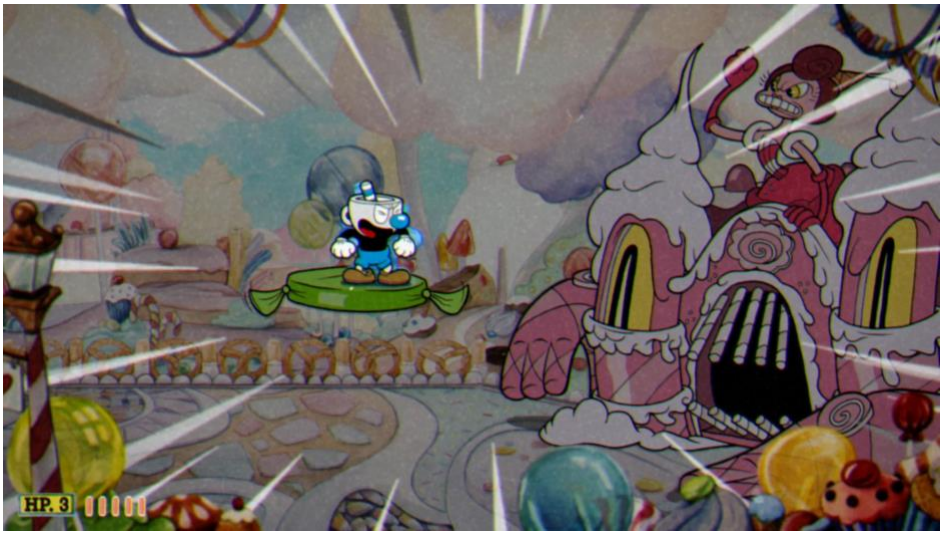
Player Requirements

All shooting requires observation and anticipation, especially of movement. Few dangers are stationary. Some cases involve tactics because *not* shooting can be more helpful.

3.4. The Super Meter

Players build their Super Meters by shooting dangers and parrying objects. The Super Meter is represented as playing cards. Each card signifies an available Ex Shot (i.e., a stronger, single-use variant of the current Shot). A hand of five cards is the maximum, and it signifies an available Super Art (i.e., a short-term transformation that can inflict major damage). If players have not equipped a Super Art (Figure 3.3.), then five cards signifies having five separate Ex Shots.

Figure 3.3



Player Requirements

Using Ex Shots and Super Arts requires precision and timing. Though powerful, they can be partially or totally negated if mis-aimed and/or mis-timed. Players can also be harmed shortly after using them. Efficient buildup and usage of the Super Meter requires management, strategy, and tactics. This efficiency is important for players who want to maximize their end-of-stage grades.

3.5. Parrying

Players can parry objects that have a distinct pink color. Parrying involves pressing the Jump button while airborne and nearby. Successful parries are useful because they usually earn Super Meter cards for players. In land-based stages, players can parry to reach otherwise-unreachable heights. In co-op mode, players can parry the ghost of their fallen partners to revive them. Parrying is risky, though, because these objects are usually enemies or projectiles. Also, they are often among other dangers. The highest end-of-stage grade requires three successful parries.

Figure 3.4



Parrying is often a risk-vs-reward proposition.

Player Requirements

Parrying requires considerable precision and timing. Anticipating the random presence of parryable objects requires some reflexes, memorization, and concentration. The game's creators have assumed that all players have typical perception of color.

3.6. Shop & Customization

Players can buy and keep five Shots (Figure 3.5) and/or six Charms. The latter are perks that have automatic benefits. These benefits can be persistent or situational. The Heart, for example, gives four health-points to players instead of three. The Smoke Bomb, by contrast, makes players invincible while dashing. Players use gold coins to buy Shots and Charms from Porkrind's Emporium shop (Figure 3.6). Gold coins are limited and most are collected

in the platforming stages. Most Shots and Charms cost four and three coins, respectively. Some items are only buyable after players buy a certain number of other items (Cuphead Wiki, 2021a).

Figure 3.5



The menus for equipping available Shots and Charms is somewhat confusing.

Figure 3.6



At any given time, the selection of wares in Porkrind's Emporium is limited.

Player Requirements

Players can only equip two Shots and one Charm at a time, so selection requires strategy and tactics. The shop does not offer trials or refunds. Also, it only has qualitative descriptions for items. For these reasons, and because coins are limited, buyer's remorse is possible. Some setups are better suited for different stages, so experimentation might be beneficial.

4. Strengths

4.1. Artistic Direction

The game's art and music set it game apart from almost every other game and multimedia product in recent memory. Its particular style is hardly original, but it is unique among contemporary entertainment.

4.2. Player Expression

Players can express themselves through their setup customization and playing tendencies. For solo players, there are 72 possible two-Shot, one-Charm setups. Between co-op players, there are 5,184 possible setups. Most games in the genre do not enable this much autonomy and variety. Players can also have different preferences for parrying and evasion (Figure 4.1).

Figure 4.1



Players can use unconventional approaches discovered by daring or by accident.

4.3. Surmountable Difficulty

The game is notorious for being difficult, but it can be surmounted. It often presents two or more dangers that force players to divide their attention. Also, there can be randomness in the order and presence of sub-bosses in some boss-fight stages. The game can have instances of unfairness as well. As mentioned, though, all dangers have underlying patterns. The game often seems difficult because its patterns can be subtle (Brown, 2017). Nonetheless, this difficulty can motivate players who enjoy mastery (e.g. system-level trophies).

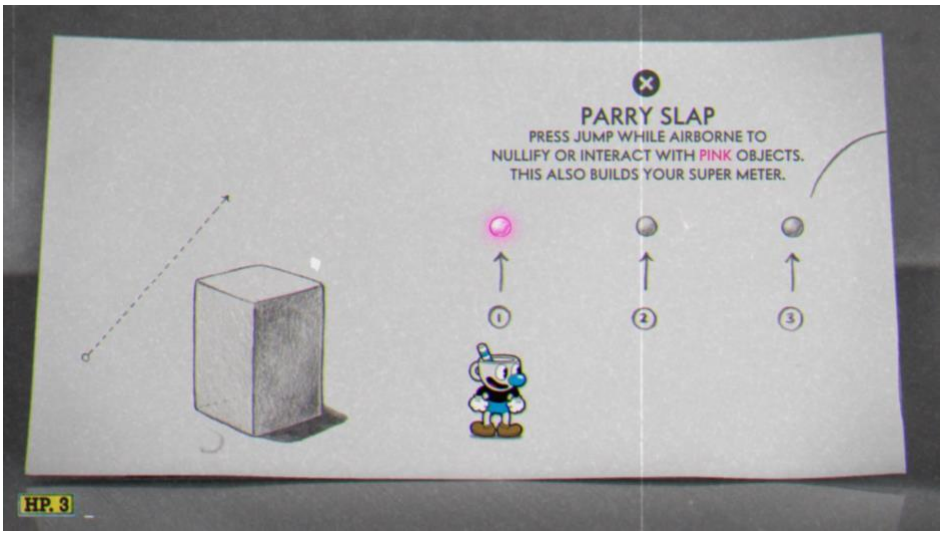
5. Weaknesses

5.1. Tutorial (Parrying & Super Meter)

The tutorial stage has inadequate information about parrying and the Super Meter. First, its three examples of parryable objects are atypical of the game. The examples are identical, stationary, and safe (Figure 5.1). Second,

the tutorial does not specify that a successful parry will earn a Super Meter card. Third, the indicators for successful parries lack indicators themselves. The tutorial should highlight the visual changes to the Super Meter and the sound cues that play. Last of all, the tutorial does not state that scoring hits by shooting will build the Super Meter. Players might struggle if they do not understand how and when Ex Shots become available. I only understood these mechanics after watching 45 minutes of my gameplay footage.

Figure 5.1



The parrying and Super Meter section of the tutorial does not replicate in-game situations.

5.2. Player Feedback

The game provides minimal feedback to players. It only shows gauges to help players estimate their failed progress upon death (Figure 5.2). Bosses and sub-bosses do flash whenever players score hits, but they lack health bars and visual degradation. The latter is less practical to include because the art is hand-drawn. Still, boss fights can seem to have abrupt endings whenever players win.

Figure 5.2



The progress gauges for boss-fight stages are only accompanied by crude taunts.

For the most part, the game has the same approach to player feedback as the classic games that have inspired it. These games include *Contra III: Alien Wars* (Studio MDHR, n.d.). So, players who expect contemporary norms for feedback might feel even more frustrated. They might not have the motivation to consult sources that are outside of the game.

5.3. Reward System

The game's reward system is limited and disproportionate. The boss-fight stages comprise about 75% of the game (Studio MDHR, n.d.). They involve the most time and effort to complete, yet they have no concrete rewards. Because boss-fight stages are so unique, progression becomes a series of trial-and-error cycles. As a result, success in these stages can start to seem fleeting and futile. By comparison, the six platforming stages comprise about 25% of the game. They are optional and less taxing, yet they have 30 of the game's 40 coins (Cuphead Wiki, 2021b). So, the viable way to earn coins is to complete platforming stages and collect their coins in the process. As mentioned, players use coins to buy Shots and Charms, which are the game's only concrete rewards.

6. Proposed Improvement

To improve player feedback, I would provide optional hints. These hints would appear at the same screen as the failed-progress gauge. Players would press a button to see a message from the Elder Kettle (Figure 6.1), who is Cuphead and Mugman's guardian and mentor.

Figure 6.1



The Elder Kettle is said to be wise. Hints from him would fit the narrative.

Playtesting would help determine the optimal threshold for hints to be available. Intentional failure, as a strategy to get hints, is not the intended outcome. Also, frequent and/or early failure might be the result of players being focused on learning. Levels of hint-specificity would be a factor for consideration. For the Simple difficulty level, hints could be more accessible. They could have lower thresholds and/or automatic showing.

This change would undermine the game's homage to classic 2D games, which are known for ambiguity. Optional hints are justifiable, though, because the game has a low rate of retention.

Table 6.1

Community	**Defeated one boss**	**Completed World 1 (defeated 5 bosses overall)**	**Completed World 2 (defeated 10 bosses overall)**
Steam	82%	56%	30%
PlayStation Network	89%	59%	28%

(Steam, n.d.-b; Sony, n.d.)

Within the Steam and PlayStation Network communities, less than a third of all players have defeated the first 10 bosses. The significant majority of players seem to lose interest by the midpoint of the game, which is in World 2. The intensive trial-and-error cycle and disproportionate reward system are likely reasons. Contextual hints might help such players continue with more efficiency and less friction.

References

Barboza, W. (2019, March 20). How ‘Cuphead’ resurrected the unsettling style of early cartoons. *Bloody Disgusting*. https://bloody-disgusting.com/editorials/3551082/cuphead-resurrected-unsettling-style-early-cartoons/

Brown, M. (2017, October 19). *How Cuphead’s bosses (try to) kill you | Game Maker’s Toolkit* [Video]. https://youtu.be/F8T6Ul4aHTI

Cuphead Wiki. (2021a). Porkrind’s Emporium. In *Fandom*. https://cuphead.fandom.com/wiki/Porkrind%27s_Emporium?oldid=62497

Cuphead Wiki. (2021b). Coins. In *Fandom*. https://cuphead.fandom.com/wiki/Coins?oldid=63152

ESRB. (n.d.). Cuphead. In *ESRB*. https://www.esrb.org/ratings/35333/Cuphead/

Moldenhauer, C. (2015, August 4). *Cuphead x Warren Spector* (W. Spector, Interviewer) [Interview]. GamesIndustry. https://www.gamesindustry.biz/articles/2015-08-04-cuphead-x-warren-spector

Moldenhauer, C. (2016, April 12). *Exclusive: See how Cuphead’s incredible cartoon graphics are made* (M. Peckham, Interviewer) [Interview]. Time. https://time.com/4123150/cuphead-preview/

Sony. (n.d.). Cuphead. In *PlayStation Network*.

Steam. (n.d.-a). Cuphead. In *Steam*. Retrieved February 14, 2021, from https://store.steampowered.com/app/268910/Cuphead/

Steam. (n.d.-b). Global gameplay stats: Cuphead. In *Steam*. Retrieved February 14, 2021, from https://steamcommunity.com/stats/268910/achievements

Studio MDHR. (n.d.). FAQ: Cuphead. *Studio MDHR*. http://studiomdhr.com/faq/