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# The Disney Alternate Reality Game

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**Submitted By:** 

**Submitted To:** 

Julia Berg

Trish Cerrone, Sponsor Liaison

Joseph Strong

**Project Advisor:** 

Dan Tennant

Professor Dean M. O'Donnell

## TC Table of Contents

TC		Table of Contentsii
TF	7	Table of Figuresv
ΤA	A	Table of Authorsvi
ΑI	3	Abstractix
S		Executive Summaryx
1		Introduction
2		Prep Phase: Early Design and Pre-Planning
	2.1	Game Design Parameters
	2.2	Research and Preparation5
	2.3	Documenting DCA
3		Development Phase: The Narrative
	3.1	Early Concepts and Pitches
	3.2	Evolution of the Narrative
	3.3	Writing the Dialogue
4		Development Phase: The Website
	4.1	Building the Interface
	4.2	Building the Website
	4.3	Database Communication

5		Development Phase: The Puzzles	. 27
	5.1	The Online Experience	. 27
	5.2	The In-Park Experience	. 35
6		Conclusions and Recommendations	. 43
	6.1	What Went Right	. 43
	6.2	What Went Wrong	. 44
	6.3	The Next Step	. 45
AC	C	Acknowledgements	. 48
R		References	. 49
GL		Glossary	. 51
A		Appendix A: About Walt Disney Imagineering	. 53
В		Appendix B: What is an Alternate Reality Game?	. 54
C		Appendix C: Narrative – Initial Concept Pitches	. 55
D		Appendix D: Narrative – Muppet Dialogue	. 57
Е		Appendix E: Narrative – In-Park SMS Reference Sheet	. 65
F		Appendix F: Game Design Document	. 67
G		Appendix G: Online Experience Document	. 70
Н		Appendix H: In-Park Experience Document	. 89
I		Appendix I: Database Design Document	. 92
ī		Annendix I: Database API	95

K	Appendix K: Puzzle Pitch: Gonzo's Great Escape	. 97
L	Appendix L: Online Experience Reward: Kermit's Letter	. 98
M	Appendix M: PowerPoint: ARG Overview	100
N	Appendix N: PowerPoint: Art and Gameplay Overview	110

# TF Table of Figures

Figure 1.1	View of entrance, Disney's California Adventure2
Figure 2.1	Example puzzle-related theming, DCA Condor Flats
Figure 4.1	Early home page concept sketch
Figure 4.2	Early bulletin board concept sketch
Figure 4.3	Home page digital mockup, cluttered
Figure 4.4	Home page map, final
Figure 4.5	Mockup puzzle page with themed interface
Figure 4.6	Flash website structure visualization
Figure 4.7	Diagram of website's technical structure
Figure 5.1	Walt Disney's portrait, north wall, DCA Sorcerer's Workshop27
Figure 5.2	Original blueprint puzzle mockup30
Figure 5.3	Comparison of two blueprints from the Haunted Tower puzzle32
Figure 5.4	Symbols under Walt's portrait, DCA Sorcerer's Workshop38
Figure 5.5	Draft replacement for Sorcerer's Workshop puzzle41

## **TA** Table of Authors

T		Title Page	Tennant
TC	7	Table of Contents	Tennant
TF	7	Table of Figures	Tennant
ΤA	Λ	Table of Authors	Tennant
Αŀ	3	Abstract	Tennant
S		Executive Summary	Tennant
1		Introduction	Tennant
2		Prep Phase: Early Design and Pre-Planning	Tennant
	2.1	Game Design Parameters	Tennant
	2.2	Research and Preparation	Tennant
	2.3	B Documenting DCA	Tennant
3		Development Phase: The Narrative	Tennant
	3.1	Early Concepts and Pitches	Tennant
	3.2	Evolution of the Narrative	Tennant
	3.3	Writing the Dialogue	Tennant
4		Development Phase: The Website	Berg
	4.1	Building the Interface	Berg
	4.2	Building the Website	Berg
	4.3	B Database Communication	Berg

5		Development Phase: The Puzzles	ong
	5.1	The Online Experience	ong
	5.2	The In-Park ExperienceStro	ong
6		Conclusions and Recommendations	ant
	6.1	What Went Right Tenns	ant
	6.2	What Went Wrong Tenns	ant
	6.3	The Next StepStrong, Tenna	ant
AC		AcknowledgementsBerg, Strong, Tenna	ant
R		ReferencesBerg, Strong, Tenna	ant
GI		Glossary Tenna	ant
A		Appendix A: About Walt Disney Imagineering Tenna	ant
В		Appendix B: What is an Alternate Reality Game? Tenna	ant
C		Appendix C: Narrative – Initial Concept Pitches Tenna	ant
D		Appendix D: Narrative – Muppet Dialogue Tenna	ant
Е		Appendix E: Narrative – In-Park SMS Reference Sheet Tenna	ant
F		Appendix F: Game Design DocumentStrong, Tenna	ant
G		Appendix G: Online Experience DocumentBerg, Stro	ong
Н		Appendix H: In-Park Experience DocumentTennant, Stro	ong
Ι		Appendix I: Database Design DocumentBo	erg
J		Appendix J: Database API	DI)

K	Appendix K: Puzzle Pitch: Gonzo's Great EscapeStrong
L	Appendix L: Online Experience Reward: Kermit's LetterTennant
M	Appendix M: PowerPoint: ARG Overview Leung (WDI), Tennant
N	Appendix N: PowerPoint: Art and Gameplay OverviewBerg, Strong
	Report edited and compiled by

## AB Abstract

Disney's California Adventure Park will soon undergo a series of construction and renovation projects to re-theme content and introduce new attractions to Guests. Walt Disney Imagineering (WDI) is working to counter the expected lull in construction-period ticket sales by marketing the park in new ways. We were tasked by WDI to design and prototype an alternate reality game (ARG) that could determine the viability of cross-media marketing projects in generating excitement for the Park. This report describes our development process and provides a series of recommendations to WDI for future Disney-themed ARGs.

## **S** Executive Summary

Conceived as a modern complement to the oldest and most famous amusement park in the world, Disney's California Adventure (DCA) opened in 2001 opposite Disneyland Park. It boasted six themed lands and a variety of spectacular rides and attractions, and was supposed to help turn Disneyland Resort into the Walt Disney World of the West. Instead, due to several design flaws and layout problems, the Park has consistently underperformed. Today, DCA is among the least popular Disney Parks in America.

Fortunately for Guests, Walt Disney Imagineering (WDI) is planning a series of renovations and construction projects that should help to redefine the Park. A new theme, fresh rides, and the entirely new Cars Land—home to one of the most innovative and exciting attractions ever built—may well turn DCA from a shade-starved second cousin to Disneyland's rightful twin sibling.

All of this construction, of course, will take some time to complete, and the new Cars Land and re-theming of DCA's Main Street won't be finished until the year 2012. Between now and then, construction fences will blacken the Park's image, and Disney will be hard-pressed to keep ticket sales up. To combat the expected lull, WDI has begun to look at alternative marketing strategies. In particular, they're considering cross-media marketing: using interactive multimedia experiences called alternate reality games (ARGs) to spread excitement about the Park.

Before WDI could decide whether it was worth investing the manpower and financial capital to design, build, and run a full-sized ARG, they wanted to test a low-budget prototype on a small sample of Guests. The Imagineers turned to our project team and tasked us with designing and building an ARG for Disneyland Resort Annual Passholders, using a preexisting IP, with the goal of bringing Guests to the Park. By examining the number of Guests who played

the game's online component before going to DCA and finishing the prototype's narrative, WDI can determine the viability of ARGs as marketing devices on a much larger scale.

We proceeded to create an ARG that charged Guests with saving the Muppets, who had been inadvertently scattered across 1937 California by Dr. Bunsen Honeydew and his assistant Beaker. Targeted at families with children aged 8-14, the ARG would send Guests on individualized adventures with Kermit the Frog and have them save Miss Piggy, Fozzie Bear, Rowlf the Dog, Sam the Eagle, and the Swedish Chef. Once the Muppets were safe, Guests would then be asked to help one last time by bringing everyone home again. They would have to visit DCA and decrypt a code scattered throughout the Park in a sprawling scavenger hunt. Successful Guests would receive an exclusive reward for their trouble: a hand-drawn overhead map, called a "fun map," of post-construction DCA.

As of the writing of this report, the prototype we developed has not yet been run. Based on our experiences making it, however, we've drawn up a set of recommendations that could be applied to future Disney ARG projects. With these recommendations and the data that will be gathered once our prototype has been played, WDI can judge the viability of ARGs as marketing devices and decide whether or not they want to build their own.

#### 1 Introduction

In 1955, animator and entrepreneur Walter Elias Disney opened the gates of Disneyland in Anaheim, California. Conceived three years earlier as a merging of technology, history, and entertainment, Disneyland was the world's first modern amusement park, and the only Disney Park to be designed, constructed, and operated under the direct supervision of Walt Disney himself. The Park is commonly recognized as Disney's crowning living achievement, and is regularly marketed as "the happiest place on Earth."

Shortly before his death in 1966, Disney envisioned an East Coast, multi-park version of Disneyland that would build upon the lessons learned and technological advancements made in the first Park. Although he would not live to see his Magic Kingdom or EPCOT realized, both amusement parks were eventually built during the 1970s and 80s. Today, the Walt Disney World Resort in Florida is home to four Disney parks and multiple hotels and shopping attractions. It has the distinction of being the most popular and successful vacation resort in the world.

In the wake of Disney World's success, the Walt Disney Company began renovating the property around Disneyland in 1998, with a view to emulating the East Coast formula. By 2001, construction on the new Disneyland Resort was complete. Disneyland was renamed Disneyland Park, and it was complemented by three hotels and the Downtown Disney outdoor shopping mall. Most notably, a second amusement park was constructed opposite the Disneyland Park entrance. Opened in February of 2001, the new park was called Disney's California Adventure (DCA).

Designed to look and feel like a California postcard come to life, DCA showcases "Disneyfied" visions of Californian landmarks such as Napa Valley, Grizzly Peak, and the Long Beach Pier. Famous locations like Hollywood and the Mojave Desert are stylized and recreated as themed lands with their own rides and attractions. Hollywood, for instance, is represented as

the Hollywood Backlot, and features the infamous Hollywood Tower of Terror ride. Similarly, the Mojave Desert and its connections with California's history of flight are distilled into Condor Flats, which is home to the Soarin' Over California attraction.



Figure 1.1: View of entrance, Disney's California Adventure

Unfortunately, DCA has never achieved the same popularity as other Disney Parks. Its underperformance is the result of a variety of factors, including lack of shade, disconnected lands, dead-end paths, few must-ride attractions, and a mysterious absence of the quintessential "Disney" theming that has helped to make other Disney Parks so popular.

To combat DCA's sagging ticket sales, Walt Disney Imagineering (WDI) is extensively renovating the in-park experience. The entrance plaza, for instance, will be redesigned, and the Park's main thoroughfare will be themed with a 1930s Hollywood motif. Several generic rides and attractions will be re-themed with Disney characters, while underperforming rides will be replaced completely. Finally, the new Cars Land, featuring an authentic, full-scale version of *Cars'* Radiator Springs and several new rides, will be added to the Park's southeast corner.

As many of these changes will not be completed until 2012, WDI is looking for other means to attract Guests<sup>1</sup> to DCA. Alternate reality games (ARGs) are one such possibility.

ARGs are cross-media experiences that combine a developing narrative with both web-based puzzle solving and interactive, real-world gameplay. They are often used as a form of viral marketing, as the narratives are usually tied to a company's product, and the game's popularity often hinges on word-of-mouth.

Our project's goal was to create a low-cost prototype ARG for WDI to test the effectiveness of cross-media gaming on DCA's target demographics. If successful on a small scale, the ARG could then either be adapted by WDI into a larger-scale experience, or used conceptually in conjunction with our recommendations to build a long-term, fully-featured game with the full weight of the Walt Disney Company behind it.

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<sup>&</sup>lt;sup>1</sup> The term "Guest" is used by WDI in reference to any visitor to a Disney Park or website. For the purposes of this report, "Guest" is used interchangeably with "player" where appropriate. See the Glossary for more information.

## 2 Prep Phase: Early Design and Pre-Planning

The development of our alternate reality game (ARG) was prefaced by several weeks of planning. During this time, our team worked closely with Walt Disney Imagineering (WDI) to outline the prototype's design parameters. We also examined Walt Disney's personal history and that of his amusement parks, and researched the practicality of various technologies that could facilitate gameplay and player-character communication. Finally, we visited the Disneyland Resort, compared and contrasted both of its amusement parks, and photographically documented Disney's California Adventure (DCA).

## 2.1 Game Design Parameters

For the purposes of this prototype, WDI presented us with guidelines to follow during the game's design phase. These guidelines in turn suggested and informed gameplay requirements.

Together, they comprise the parameters by which we built our ARG:

- 1. *Online and in-park components*. Like many ARGs, our prototype included both webbased and real-world gameplay. Since the prototype's goal was to attract Guests to the Park, its real-world gameplay needed to occur within the park itself and serve as a capstone for the experience.
- 2. *Targeted to a younger demographic*. We were instructed by WDI to target the ARG at families with children aged 8-14. This demographic informed all aspects of our design, including narrative, puzzles, and the website's interface.
- 3. The family is the community. Although most ARGs rely on forum- or chat-based communities to facilitate puzzle solving and generate the social dynamics that make them appealing, such communities are player-driven and inherently unsafe for minors. To foster a community atmosphere while still granting Guests the safety and security

- common to all Disney websites, our prototype encouraged Guests to use their families as communities.
- 4. *An omnipresent hint system*. To account for cases in which younger Guests would be unable to ask family members for help, we implemented a hint system that was always available and made solving puzzles a simple and straightforward task.
- 5. Released to Annual Passholders only. For the purposes of the prototype, WDI wanted to keep the test audience comparatively small, and informed us that the game would be released to Disneyland Resort Annual Passholders via the AP website. This limiting of access encouraged us to keep the rabbithole obvious and puzzle-free, and made playing the final, in-park component of the ARG a reasonable option for families who already own annual passes.
- 6. *Game as a bonus, not a test.* Despite the nature of the ARG as a test and prototype, WDI wished to have it presented to Annual Passholders as an exclusive bonus to their membership.

## 2.2 Research and Preparation

While the bulk of our work on the prototype was practical, we performed some research in the project's early stages in order to properly prepare for development. This research was divided into two halves: an examination of the history of Walt Disney and his amusement parks, and an investigation into various technologies that could potentially be used in the game.

Although some of our research did not affect the final prototype, much of the data we gathered proved invaluable in fleshing out an initial design.

## 2.2.1 Disney History

It was vitally important for us to fully understand the history of Walt Disney and the company that bears his name, for several reasons. First, it allowed us to work more fluidly with WDI, as we could better understand the company's expectations, work ethic, narrative style, and audience, and alter our development processes to match. For instance, since WDI tends to work on projects iteratively, we scheduled weekly meetings and set objectives and milestones that allowed for iterative designs and periodical, conceptual mockups.

Second, understanding Walt Disney's history gave us material that we could use in the prototype's narrative. At the time of our research, the ARG's narrative had yet to be finalized, and incorporating Disney into the game as an interactive character was likely. While Disney's part in the narrative was eventually replaced, the prototype's final plot evolved directly from those early concepts that had him in a starring role.

Third, understanding the reasons behind Disney's unique designs for his amusement parks helped us to create a more user-friendly interface for the final game. Disneyland Park is one example: It was built with a hub-and-spoke layout that centered each of its four lands around Main Street, U.S.A. We emulated this design by building a website that allows Guests to play the game's puzzles in any order. Once they've completed a puzzle, they can quickly return to the home map "hub" and pick another puzzle to work on. This system makes site navigation an intuitive process, and always allows Guests the choice of how to proceed.

#### 2.2.2 In-Park Communication Technologies

Early in our project's design phase, we considered using radio frequency identification (RFID) to keep track of those Guests playing the DCA in-park experience. Our research showed, however, that RFID technology carries a significant setup expense and would require radical

modification of the Park itself, making it impractical for use in a short-term prototype. We then looked for other technologies that would allow us to track Guest progress while keeping setup costs cheap, and finally settled on SMS messaging.

SMS messaging has no impact on the Park; unlike RFID, receivers do not have to be planted throughout DCA in order for Guests to send and receive information. Similarly, there is no need to distribute expensive technology such as RFID tags to Guests to allow them to play, as a reliably high percentage of the population already has text-capable mobile phones. The costs involved are relatively small, and the process of texting with a mobile phone is one that most Guests in the target demographic would be familiar with.

Our research turned up several prospective services through which a bidirectional SMS messaging system could be set up. For the purposes of the prototype, WDI signed a contract with Telescope, a service provider that could handle the logistics of sending and receiving pre-defined SMS text messages for the duration of the game.

## 2.3 Documenting DCA

Near the end of the project's preparation phase, the team traveled to California and stayed at the Disneyland Resort for three days. The purpose of this trip was threefold: to experience both Disneyland Park and Disney's California Adventure firsthand; to meet with WDI and finalize a general narrative and overall game design; and to photographically document DCA.

We split our time on Day 1 between Disneyland Park and DCA. Parks and Resort Online employee Shan Prum gave us a behind-the-scenes tour of each, providing his insights into the their design decisions and helping to crystallize their differences. Thanks to his guidance, we gained a better appreciation for the effectiveness of Disneyland's hub-and-spoke design, and learned how WDI's planned improvements to DCA would buttress the overall Guest experience.

We documented our time with both photos and video, and took special note of DCA locations and theming that could be integrated into the in-park puzzle.



Figure 2.1: Example puzzle-related theming, DCA Condor Flats

On Day 2, we visited WDI headquarters in Glendale and Walt Disney Studios in Burbank. More so than any of our conference calls to that point had been, our face-to-face meeting with WDI helped us springboard out of design and into development. We finalized our general narrative and outlined our core gameplay mechanics, and were able to begin planning the game's finer details. Before we left, we were even given a complete overview of the many changes coming to DCA.

Our tour of Walt Disney Studios was equally helpful, as it gave us the chance to meet with Dave Smith, Founder and Director of the Walt Disney Archives. Mr. Smith graciously lent us his time and told us the story of Disney's early years in Hollywood—the period we would be targeting in our narrative.

We returned to DCA on Day 3 and systematically recorded every thematic detail in each of its lands. Although much of the data we collected was never used, our comprehensive coverage allowed us to pick and choose content for the in-park puzzle that was as fun and appropriate to the narrative as possible, weeks after the trip.

## 3 Development Phase: The Narrative

Before development of its puzzles or website could begin, our alternate reality game (ARG) needed an appropriate, fun, and engaging narrative. As we were working with Walt Disney Imagineering (WDI), we had access to the countless intellectual properties owned by the Walt Disney Company. Initially, we were limited in their selection by only two factors. First, the narrative had to fit the time period of the new, 1930s Hollywood theming that will be introduced at Disney's California Adventure (DCA) by 2012. Second, it had to fit within the DCA of today, as Guests would be visiting the Park over the course of the game and it needed to fill the role of a character in its own right.

Although several early plot concepts didn't quite fit the bill, the narrative we eventually settled on filled our needs well. Over the course of the development cycle, as the puzzles and website were steadily constructed and the dialogue for each non-player character was written, that narrative shifted slightly, and near the end of development, one of the core characters had to be completely removed from the story. The final result, however, was a tale suitable for all ages: an adventure into the past with Kermit the Frog and the rest of Jim Henson's Muppets.

#### 3.1 Early Concepts and Pitches

One of the many benefits of working with the Walt Disney Company was having access to Disney's lineup of franchises. We were encouraged by WDI to use one of these properties in favor of creating one from scratch, and devised three pitches early on, before we'd solidified our target demographic. The original pitches for "Who Framed Roger Rabbit Again," "The Pixar Parade," and "The Muppets Through Time" can be found in Appendix C.

#### 3.1.1 Who Framed Roger Rabbit Again?

"Who Framed Roger Rabbit Again?" revolved around the theft of Walt's Lost Journal.

The brainchild of WDI, Walt's Journal was a plot device they favored because it provided Guests with both a tangible goal and a recognizable reward. The goal was straightforward: to find the Journal's pages, each of which contained some of his notes and sketches. For every page of the Journal a Guest managed to find, they were rewarded with a personal copy of it that they could then download and print out.

This narrative fit perfectly within the ARG's core design parameters. The characters of Who Framed Roger Rabbit exist outside the bounds of the cartoon "stage," making their interactions with the real world plausible. Similarly, WFRR is set in Hollywood in a fictional golden age of animated filmmaking that parallels the early years of Walt Disney Studios. And, since WFRR already contains a melting pot of characters, we would have a wide variety of options to choose from in fleshing out the storyline.

Unfortunately, the *WFRR* intellectual property was among the few franchises that its turns out we could not use, as it is not solely owned by the Walt Disney Company. Given the prototype's time and budgetary restrictions, the "Who Framed Roger Rabbit Again?" storyline was canned.

#### 3.1.2 The Pixar Parade

The Pixar Parade pitch was a story of homecoming. In the narrative, one of the characters from each of Disney's Pixar animated movies was lost somewhere in southern California. It was up to the Guests to guide each character back to DCA in time for them to take part in the Pixar Parade.

The Pixar narrative was designed to mesh well with minigame-based puzzles, which could be easily contained within the bounds of a website, in turn helping to keep younger Guests from straying too far out into the Internet proper. It also integrated perfectly with present-day DCA, as the goal of the game was tied intrinsically to a daily Park event. There was, however, an inescapable problem with the concept: it had nothing to do with 1930s Hollywood, and thusly didn't lend itself to fitting with DCA's future thematic shifts.

The reasons behind each Pixar character's disappearance were also major plot holes, as the characters are, technically, already at DCA and taking part in the daily parades. Since the ARG was being made for Annual Passholders who would most likely have already seen those parades, the believability of the storyline was suspect.

## **3.1.3** The Muppets Through Time

From the start, our favorite narrative option involved the Muppets. Though the roles of each character shifted, some characters were dropped, and others were added, the general idea of having Dr. Bunsen Honeydew build a time machine and accidentally lose the Muppets in the past appealed to us. Working the Muppets into our narrative brought with it a whole host of benefits.

Chief among them was the appeal of the Muppets themselves. Jim Henson's creations possess a timeless humor that connects with fans of all ages, and Kermit the Frog is a universally-recognized figure—even among young children who didn't grow up watching the Muppet Show. The Muppets wouldn't just reach our target demographic; they would connect with our Guests' families and thusly help to build pseudo-player communities for the purposes of the ARG.

The Muppets were also useful in that they can interact regularly with humans. Many Muppets have been known to break character and speak directly with an audience, so if we

needed to break the fourth wall at any time (in order to effectively communicate puzzle instructions, for instance), we could do so and still retain believability. And, since many of the characters thrive on self-deprecating humor, we could write a story that placed the Guest in the heroic role of savior, without having the Muppets appear incapable.

By the same token, the time machine component of the narrative is perfectly plausible within the Muppet universe, and allows us to set the game in 1930s Hollywood, connecting it to DCA's new theming. As an added bonus, the Muppets already exist in DCA at the Muppet Vision 3D theater. They're a part of the present-day park, and the theater could be used as part of the final, in-park experience.

Most intriguing to WDI, however, was the timeliness of the pitch. The Muppets are currently passing through what the New York Times calls a "Fuzzy Renaissance." As a franchise, the Muppets are being readied to re-enter popular culture, with a new movie, television appearances, and parallel marketing with other major Disney brands in the works. With the Muppets at the core of the narrative, our prototype could be as helpful for them as their presence would be beneficial to the ARG.

#### 3.2 Evolution of the Narrative

Over the course of development, the Muppet narrative underwent numerous changes, from the minute to the radical. Some of these changes were made early on, when we effectively combined all three of our pitched concepts into one story, selecting the most appropriate parts of each and working them together.

Walt's Lost Journal, for instance, was plucked from the "Who Framed Roger Rabbit Again?" narrative. In his search for his lost friends, Kermit would ride around with Walt Disney,

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<sup>&</sup>lt;sup>2</sup> http://www.nytimes.com/2008/09/21/movies/21barn.html

who sketched in his journal over the course of the game. Once each puzzle was finished, its related journal page would be sent to the Guest as a token of thanks.

The idea of bringing characters home from disparate locations on a map came from the "Pixar Parade" pitch. By scattering the Muppets around California, we could showcase the real-world analogues of each of DCA's lands—Hollywood for the Hollywood Backlot, Condor Flats for the Mojave Desert, and so on—before physically sending Guests to those lands during the inpark experience.

Some changes were made during production, when puzzle development crystallized the roles of each character. One of the four online puzzles, for instance, takes place in the Hollywood Tower Hotel and originally starred Gonzo the Great. The puzzle's subplot had him diving off the roof of the building at the end of his subplot, which played well to Gonzo's daredevil characteristics. Miss Piggy was missing from the game, however, and the elegance of the Tower was too perfect for her to pass up. By the end of production, Miss Piggy had completely replaced Gonzo in the game.

The most sweeping change we made to the narrative came a matter of days before the project's end, when WDI informed the team that Walt Disney could no longer be a part of the game. Permission to use his name, signature, and likeness could not be obtained from the Disney family in time for the prototype's release, and everything related to his presence had to be removed and the story rewritten. Primarily, this meant rewriting his letter to the Guest—the downloadable document that served as a segue between the online and in-park components of the game. This call for aid, along with the instructions detailing how to bring the Muppets back home, were both rewritten in Kermit's voice. They can be found in Appendix L.

## 3.3 Writing the Dialogue

Due to the nature of its narrative, every piece of textual information that is communicated to the Guest during the ARG is spoken by one of the Muppets. The dialogue that we wrote for the Muppets thusly includes every line of text in the game. Since Guests spend most of their time working to find the Muppets, they only get the chance to interact directly with a handful of characters: Dr. Bunsen Honeydew, Statler and Waldorf, and of course, Kermit the Frog.

Although a writer from Disney's Muppets Team would eventually proofread all dialogue and rewrite it as appropriate, it was important that everything the Muppets said reflected each character's respective mannerisms and speech patterns. Kermit the Frog, for instance, tends to use filler words such as "you know," "well," and "mm-hmm" regularly. Dr. Bunsen Honeydew uses fewer contractions in his speech than most people and tends to be very deliberate with his word choice, while Statler and Waldorf fill their speech with gaffes, comments, chuckles, and insults. We took special care to insert these phrasings where appropriate without overusing them or making them feel out of place.

Of course, every piece of dialogue has an explicit purpose in the narrative, and is meant to convey a particular piece of information. We also took care to deliver exposition without making it feel flat or asynchronous.

## 4 Development Phase: The Website

As with most alternate reality games (ARGs), online gameplay formed the core component of our prototype. In the case of our ARG's website, our puzzles and site structure varied from that of stereotypical ARGs because of security concerns. Since Walt Disney Imagineering (WDI) had set our target demographic as families with children aged 8-14, we could not risk fostering the forum- or chat-based communities that populate other cross-media games without proper moderation. Providing such moderation is not financially feasible for a prototype.

In lieu of communities that could work together to solve puzzles, we elected to give each Guest an individualized play experience and encourage them to play with their families. We used a database to track Guest registrations, logins, and progress through the game. We also developed an omnipresent hint system to replace the puzzle-solving power of large communities. With this system, Guests at the upper bounds of our demographic could easily solve puzzles themselves, while younger Guests could do so with the help of their families. Children would not need to delve too deeply into the Internet in order to play the game.

#### 4.1 Building the Interface

Because our prototype's narrative dealt with the Muppets, their visual style permeated the game's interface. The site needed to be bright, colorful, and fun, while the interface needed to be appropriate to Dr. Bunsen Honeydew's character, with scientific notes and cobbled contraptions peppering each page.

## 4.1.1 Concept Art

The goal of our early concept art was to convey a visual representation of general design layouts and ideas for interactivity. Based on the feedback received from those sketches, team member Julia Berg translated the ideas into digital mock ups, and from there to more polished components of the website.

Julia began the concept art process with hand-drawn sketches of a potential registration page, multiple homepages, a puzzle-related miniworld, and a bulletin board. Initially, she came up with several ideas for how the website's home page would look. The team selected from those ideas a layout for a fake Muppet Labs, the inspiration being that the Guest was participating in a time travel experiment and could play along with Dr. Honeydew and Beaker at work.

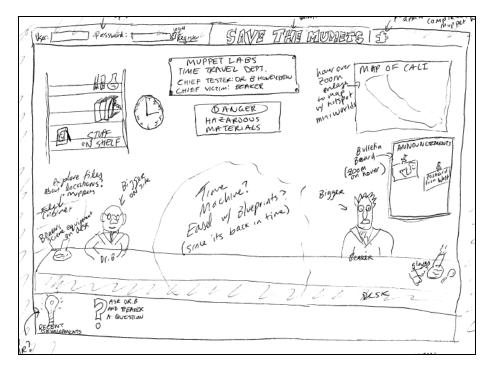


Figure 4.1: Early home page concept sketch

Parts of this home page would have been interactive, with various elements set up as clickable and navigation always chaining from the Muppet Labs screen. Proposed interactive objects included a bulletin board with announcements and puzzle progression; random gadgets

that would change color or animate when rolled over or clicked on; and a game entry puzzle that involved sorting through papers scattered across Bunsen's desk in a search for clues to where and when the Muppets had been lost.

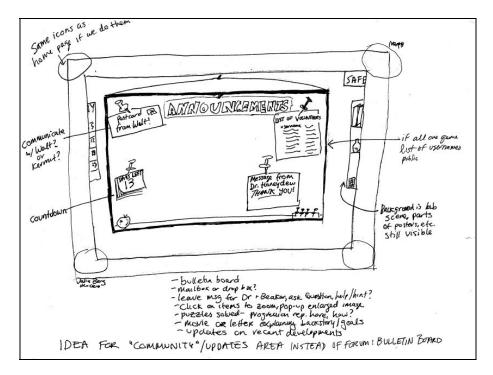


Figure 4.2: Early bulletin board concept sketch

Navigation would be accomplished via a map on the wall with tacks or photos of each Muppet's location. Clicking on the map or bulletin board would bring up an enlarged version of it on the screen that the Guest could then interact with. A variation on this idea placed a navigation bar beneath the Muppet Labs scene with icons for "Ask Dr. Honeydew a Question" and "Latest Muppet Developments." This concept and others were discarded, however, as they felt less interactive, too similar to computer games, and less likely to capture and hold the attention of our target demographic.

## 4.1.2 Mockups

After meeting with the team and collecting feedback on her homepage and miniworld concepts, Julia translated her sketches into digital mockups. These mockups were created in Adobe Illustrator CS3 using images collected on the Internet, and were meant to show off a variety of basic layout options. Two versions of the homepage, for instance, were sent to WDI for their critiques: one cleaner and one more cluttered. WDI preferred the latter mockup, as it more closely resembled the feel of the Muppets.



Figure 4.3: Home page digital mockup, cluttered

After numerous teleconferences with WDI and the integration of art assets generated by Wes Keil of Disney's Creative Interactive group, the concept art has evolved from the early sketches seen in Figures 4.1 and 4.2 to what appears on the final website, as seen in Figure 4.4. With WDI's input, our team decided to present the home page as the bulletin board itself, rather than a reflection of Muppet Labs with a bulletin board present on the wall. This change both

streamlined site navigation and assuaged WDI's concerns that the Muppet Labs we presented might differ from the one shown in the Muppet Show.



Figure 4.4: Home page map, final

## 4.1.3 Interactivity

While a great deal of thought was put into the development of the website's art assets, equal consideration was given to its interactivity and usability. The changes to the home page design, for instance, included the removal of an obvious tracking bar on the Muppet Labs wall. In its place, each of the photographs pinned to the bulletin board in Figure 4.4 change as that photograph's respective puzzle is solved. The index card in the bottom-right corner of the board also tracks Guest progress.

Every page of the website has an icon of Statler & Waldorf in its lower-left corner that the Guest can click on for hints, while every page except the home page map has a second icon

in the lower-right corner to go back to that map. Clicking on the Statler & Waldorf icon produces a pop-up speech bubble with a context-sensitive hint, while clicking the red X in the speech bubble closes the hint and returns the Guest to the previous page.

Upon arrival at a miniworld—the term our team uses to refer to each themed subsection of the game—Kermit the Frog appears with a note for the Guest. The note informs the Guest of the miniworld's backstory and previews the coming puzzle. The Guest can then click the note and continue to the puzzle page. This pop-up system allows us to deliver information to the Guest without forcing him or her to click on unnecessary buttons, simplifying the experience.

On the puzzle page, buttons are placed along a themed status bar at the bottom of the page. The status bar's theming changes on a per-puzzle basis; for instance, in the Midnight Swing Jazz Club puzzle page, the status bar is themed to look like a marquee:



*Figure 4.5: Mockup puzzle page with themed interface* 

In addition to the buttons that connect the Guest with Statler & Waldorf or send them back to the home page map, each puzzle page contains two more buttons: an icon of the puzzle's

respective miniworld, used to return to the previous page, and an icon for the Dial-a-Time Phone, used to "communicate" with Kermit and solve puzzles. Clicking on the Dial-a-Time Phone icon produces an enlarged version of the phone and a text input box. Every solution inputted into the box is verified or rejected with scripting, and an appropriate message is displayed upon each entry.

## 4.2 Building the Website

Before construction of the website could begin, we had to register an appropriate domain name and determine the type of site to be made. Once we decided to build the game in Adobe Flash, we could finally create working content.

### **4.2.1** Hosting and Domain Registration

Finding appropriate hosting for the website was the first step of the site's construction, since there were several options available to us. Our team could host the website on a WPI server, find and pay for external hosting, or ask WDI to upload it to Disney's servers. The latter option still offered us some choice as to the manner of the hosting, since the site could be made a subdomain of <a href="www.Disney.com">www.Disney.com</a> (thusly, TheMuppetExperiment.Disney.com) or be given its own domain name (<a href="www.TheMuppetExperiment.com">www.TheMuppetExperiment.com</a>).

Three of these four options were discounted fairly quickly. Hosting the site on a WPI server brought up questions of page longevity, as it would be difficult to guarantee extended server uptime. Hosting on an external service, meanwhile, brought with it security concerns, as WDI didn't want to risk leaking Guests' personal information. Finally, we felt that hosting on a Disney.com subdomain made the ARG feel more like a game and less like an interactive narrative. Thus, the ARG was hosted on Disney servers and given its own domain name.

Since our prototype has only one website to convey information to Guests, we only required one domain name. The idea for the eventual web address,

www.TheMuppetExperiment.com, was originally proposed by Karen Leung of WDI in a PowerPoint presentation she helped put together for Disney's Muppet Team. A version of this presentation, modified and updated by Dan Tennant, can be found in Appendix M.

Our team loved <a href="www.TheMuppetExperiment.com">www.TheMuppetExperiment.com</a> and requested its use of the WDI Legal Team, along with a variety of alternatives: MuppetTimeTravel.com, MuppetLabsOnline.com, SaveTheMuppets.com, HelpTheMuppets.com, MuppetsThroughTime.com, and KermitAndWalt.com. All of our requests were deemed available as of October 2, 2008, and WDI was successful in obtaining our first choice, TheMuppetExperiment.com. The URL was included in the e-mail rabbitholes and a featured online article on the Disneyland Resort Annual Passholders website.

#### 4.2.2 Adobe Flash

The decision to build the website in Adobe Flash CS3 was made by both WDI and Julia Berg, who headed the team's online effort. Flash provides a website with excellent interactivity and cohesiveness, and all other Disney websites are made in Flash anyways, making it favorable from WDI's perspective. However, building the website in Flash resulted in a stark increase in development time, as Julia's experience with the program did not match her experience with HTML. She had to teach herself how to script many of the site elements in Action Script 2.0, the standard at WDI for Flash development.

Once the site's publishing format was selected, Julia drew up a diagram to visualize the site's migration from "page" to "page":

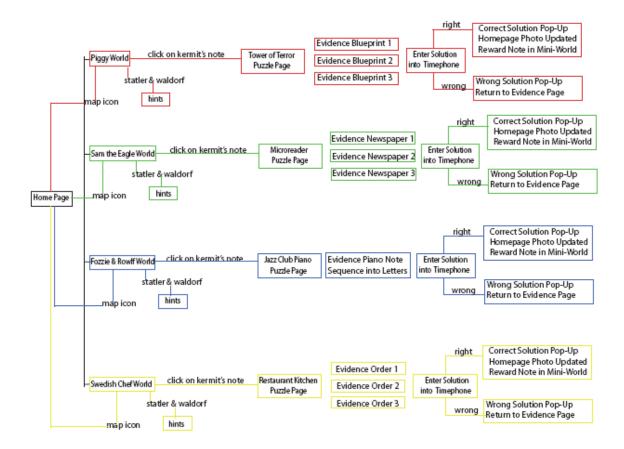


Figure 4.6: Flash website structure visualization

After discussing the diagram and the technical requirements with WDI, it became clear that the easiest approach would be to make the website a single Flash movie, beginning with the map of California on the "home page" and overlaying miniworlds and puzzle pages on top. Each puzzle was created as a separate SWF file for ease of editing in drafts, but was loading into the final Flash file as sub-movies for the purposes of release. With regards to database implementation, the Flash movies themselves were responsible for calling the API URLs to determine what puzzles had been solved and indicate when they had been completed.

## 4.3 Database Communication

To properly track puzzle progress through the game and maintain individualized experiences for each Guest, we implemented a database. As outsiders, however, we weren't

allowed to interface directly with Guest information because of privacy concerns. WDI devised a system whereby Guests would register and login on the Disneyland.com website with their Annual Passholder account information. Once logged in, they could then visit the prototype site and perform a simple registration there to customize their play experience, before continuing on to the puzzles. The same database that the Disneyland.com website uses to track user registration would be used to track state for every puzzle.

Because the code that tracks completion of puzzles is part of the prototype's website, and the website needs to update itself according to the individual progress of each Guest, we needed a way to access their saved states without also having access to their personal information. WDI accomplished this by setting up a series of web addresses that our website could ping. Depending on whether the ping was a query or an update, these addresses would either return a state or update the database as appropriate.

# WDPRO/ Auth Svc.

END

**WDI Muppets ARG Test** 

Online

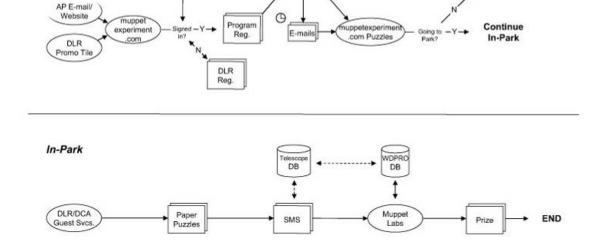


Figure 4.7: Diagram of website's technical structure

In addition to saving a Guest's state, the database needed to be able interface with two other systems: an email mailing system to send out mailers at timed intervals, and an external SMS service that Guests would use to complete the final puzzle. Julia wrote up extensive explanations of each of the database's requirements in the Database Design Document, which can be found in Appendix I.

Robert Michel and WDI took on the responsibility of maintaining the tracking for all states connected with e-mail delivery, as well as providing different URLs to "hit" from inside the Flash files in order to mark tasks as complete. This meant that the WPI team would not have to save state on our end. Both the accepting of the terms of use at the beginning of the game and the completion of the puzzles were deemed generic "tasks."

Robert then wrote an API that gave Julia the ability to mark each of the tasks as complete and query the database to determine which tasks had already been completed. The API can be found in Appendix J.

# 5 Development Phase: The Puzzles

Ultimately, the goal of our alternate reality game (ARG) was to bring Guests to Disney's California Adventure Park (DCA) and give them an enjoyable experience while there. To this end, we wanted the puzzles to be more explorative than challenging, and allow Guests to find new meaning and interest in a place they, as Annual Passholders, may have seen many times before.



Figure 5.1: Walt Disney's portrait, north wall, DCA Sorcerer's Workshop. An example of the many hidden features of DCA that Annual Passholders may not already be familiar with.

# **5.1** The Online Experience

As soon as time travel was solidified as the narrative's theme, we decided we wanted Guests to be able to see the effects of the characters' actions on the timeline, and to use evidence of those effects to help them solve puzzles. Doing so required two sections to every puzzle: first,

the discovery of the evidence, and second, the determination of how to use that evidence to solve the puzzle.

# **5.1.1** Gathering Evidence

Initially, we planned to create the evidence-gathering portion of puzzles by planting said evidence on the Internet, in popular sites such as Wikipedia, eBay, or pages of the Disney websites. Since the Internet is primarily a means for sharing information, it is a natural location to hide the information that needs to be found. However, using existing websites presented several problems:

- Planting fictional information would prove difficult. Free access resource sites like
   Wikipedia are heavily moderated and cannot be relied upon to keep planted information,
   particularly if that information is not verifiable. More professional websites such as
   Disney.com would require wading through many layers of bureaucracy for approval and
   would likely require significant finances in order to insert changes in a timely and
   streamlined manner.
- 2. Making newly-planted information easily findable can also be difficult. It is hard to trick a search engine into displaying a site in the top results for particular queries. While sponsored results can appear above normal search results, they are recognized by web users as advertisements. Guests cannot be relied upon to click them unless specifically instructed to, which would break their suspension of disbelief.
- 3. Forcing Guests to search through the unfiltered Internet could present security issues, particularly with a target audience that includes minors. Unless we could ensure that a Guest would always navigate to the intended page on the first try (i.e. via a direct link,

which would remove the magic of discovery), we could run the risk of inadvertently directing minors to unsafe websites.

For these reasons, we decided to keep the discovery of evidence strictly in-site.

Inspired by the Disney Parks and Resorts Online "Tour Disneyland Dream Suite" page<sup>3</sup>, we decided to integrate the evidence-gathering portion of each puzzle into an exploration of a puzzle-related scene. By clicking on various hidden hotspots in the scene, the Guest would discover progressively more evidence. Once all the evidence is discovered, the puzzle can then be solved.

Such techniques have been effective in various online ARG-like games, including ABC's LOSTscape<sup>4</sup>; and several other Disney sites, including the aforementioned virtual Dream Suite tour, and the Disneyland Resort Paris Tower of Terror website<sup>5</sup>. In previous cases, however, the collected hotspots were normally tracked by the game and the game was solved simply by visiting all the relevant pages. For our prototype, we wanted the Guests to actively engage the evidence they would be collecting, make it an integral part of the solution of a puzzle, though not the solution itself. In this way, each puzzle in the game could have its unique element, while still being thematically connected to the others by this similar act of collecting evidence.

# 5.1.2 The Haunted Tower

The first area of Disney's California Adventure that immediately grabbed our interest as a puzzle setting was the Hollywood Tower Hotel, known in the park as the Twilight Zone Tower of Terror. The Tower's story brought our characters back to 1930s Hollywood, which matched

<sup>4</sup> http://a.abc.com/primetime/lost/lostscape/lostscape

29

<sup>&</sup>lt;sup>3</sup> http://disneyparks.disney.go.com/disneyparks/en\_US/index?name=

YOMD2GiveAwayLandingPage

<sup>&</sup>lt;sup>5</sup> http://www.disneytowerofterror.com/

the re-theming of DCA. We wanted one of our characters to end up trapped in the tower, needing the Guest to help them escape.

In the Tower's backstory, three of its upper floors mysteriously disappeared into the fourth dimension. We wanted to answer the question of what that meant by presenting blueprints of the tower, which would reflect the tower as it exists in the real world as well as in the Twilight Zone. Our original design involved a set of blueprints that changed dynamically as through it were being influenced by the Twilight Zone. As the guest would direct the character to move through rooms in the hotel toward the exit, doors and hallways would change, altering the paths available to the character. The pitch for this design can be found in Appendix K.

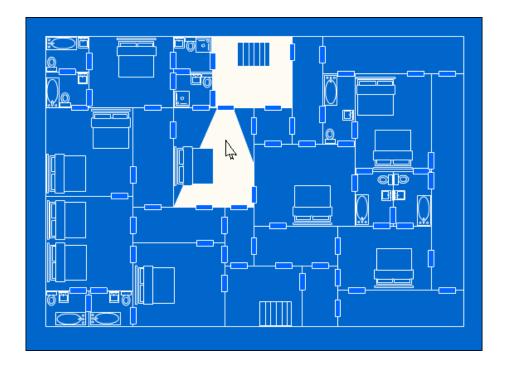


Figure 5.2: Original blueprint puzzle mockup.

The player-character interaction would have consisted of a web-based game which showed the Guest the blueprints of the tower, highlighting the character's current location and allowing the Guest to click adjacent rooms to direct the character to move there. On each move,

some doors would disappear and some might reappear, changing the paths the character would be able to take.

Because this concept didn't incorporate any ARG-like elements into its design, such as drawing the Guest away from the central site or requiring the use of outside knowledge, it was ultimately rejected. However, the idea of haunted blueprints remained through the puzzle's final iteration.

### **5.1.3** The Haunted Tower (Take 2)

The next version of the Hollywood tower Hotel puzzle took into account the clear goal of taking the Guest away from the main page and requiring them to do some work outside of the website. Instead of using a fully-interactive set of blueprints to guide the character out of the hotel, the Guest would be presented with incomplete information, which they had to save and manipulate outside of the website. The Guest was tasked with unifying three parts of a dimensionally-shifted blueprint. Each piece of the blueprint showed certain areas of the hotel's floorplan that were inaccessible, having "fallen" into the Twilight zone, but these pieces were different from blueprint to blueprint. Only one path lead from the character's starting location to the exit without intersecting any walls or "fallen" areas.

WDI suggested using actual blueprints of the Hollywood Tower as a basis for the puzzle. Due to confidentiality issues, the original blueprints could not be released to the public, so our puzzlemaster, Joseph Strong, traced over the relevant areas in Adobe Illustrator, omitting unnecessary details and modifying the drawing to look more like a hotel lobby and less like a ride staging area. Once this process was complete, a path was drawn on a grid overlay, and any squares not on the path were split up over three layers such that no single layer indicated the full path, but all three layers together left no other options.

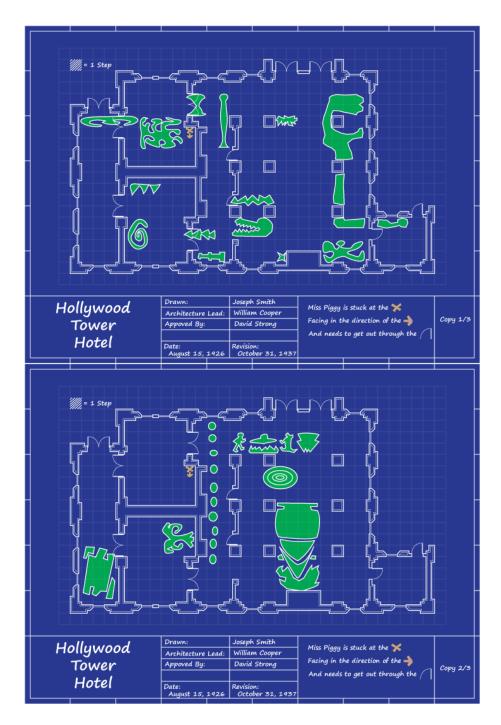


Figure 5.3: Comparison of two blueprints from the Haunted Tower puzzle. Note the differences in the shaded green areas denoting impassable Twilight Zone locations.

### 5.1.4 Soarin' Over California

The team wanted Sam the Eagle to explore California as though he were experiencing the Condor Flats ride, Soarin' Over California. The puzzle Joseph designed involved mapping his flight patterns. Since the easiest type of information to plant in a map is a location, the goal of the puzzle became finding where Sam ended up after his travels. We ultimately decided that the most recognizable symbol on a map is a sort of "X marks the spot," diagram, so the flight patterns were designed to intersect at a particular location: the puzzle's solution.

Next, Joseph devised a way to convey Sam's flight patterns as pieces of evidence. After some thought, he realized that Sam's character presented the answer. Since Sam tends to be a loudmouth and make a big show of things wherever he goes, it was appropriate that he would cause enough of a ruckus to make the local news. The evidence would be delivered in newspaper clippings.

Neither ZIP codes nor area codes existed in the 1930s in the same manner as their present-day forms, so instead of using them as markers, we chose a large region for the destination—Edwards Air Force Base. Joseph then plotted three flights between two cities each, with each flight crossing over the region. The cities had to be present on today's maps but still have been established by 1937, so the flights could be fictionally documented in the local papers.

Each city in the area around Edwards AFB was researched. Once Joseph found three pairs of cities that fit the criteria, a final flight path was mapped out. This path was described in newspaper clippings written by Dan Tennant. Fortunately, two of the cities lay along the historic Route 66, the road signs of which are featured prominently throughout DCA.

## **5.1.5** Strange Ingredients

One of the key distinguishing features of the Paradise Pier and Pacific Wharf areas in DCA are the myriad dining options there. It is for this reason that the Swedish Chef was chosen for this location, and why the Santa Cruz Beach Boardwalk puzzle was themed around food.

One of the prototype's earliest rabbithole concepts involved having the Swedish Chef soliciting Guests to help him assemble the ultimate recipe book. Once he had collected recipes from enough Guests, he would publish them, in slightly altered form, with the changes in each recipe comprising part of a puzzle. Although this idea was scrapped when the ARG's target demographic was selected, we eventually worked off a similar concept for the final online puzzle.

The Swedish Chef has demonstrated many of his own creative alterations to traditional recipes in his appearances on the Muppet Show. Most of these are well-documented on sites such as Wikipedia and the Muppet Wikia, and several of the sketches themselves are available on YouTube. We wanted to make his alterations part of the puzzle, so we presented the Guest with the names of three recipes the Chef wanted to prepare: a home cooked meal, bouncy meatballs, and rubber chicken. The Guest was then charged with finding the right ingredients for each, all of which were featured prominently in their Muppet Show appearances: vitamins for the home cooked meal, a tennis racket to serve the bouncy meatballs, and a coconut for hatching rubber chickens.

#### **5.1.6** Musical Password

For Fozzie & Rowlf's puzzle, we wanted to incorporate music. Ultimately, we decided to use the letters that denote musical notes to spell out a message the Guest would have to decrypt. The trick in designing this puzzle was finding a message that could be recognized as such, that

only contained the letters A-G, and that could only be read from beginning to end in one order that would still make sense. Dan came up with the handy phrase "GABE FED DAD A BAD EGG," which happened to fit the criteria, so it stuck.

The puzzle presented a development challenge, as it required animating a piano without a pianist. Photos were taken from the same angle of the piano's keyboard, both in resting position, and with the relevant keys depressed from the bottom of the keys and from the top of the keys. Each pairing of the latter photos were combined into one using Adobe Photoshop, removing the fingers holding down the keys from the image. Finally, these images were animated in a sequence that spelled out the message.

## 5.2 The In-Park Experience

Among the many reasons WDI wanted us to build a prototype ARG was to help offset the visual damage that construction will do to DCA over the next few years. To this end, we wanted to allow Guests to get more out of those parts of the Park left untouched by construction. This was a goal for two reasons: first, we wanted to divert attention from those areas under construction; and second, since the construction would occur in phases, parts of the game that incorporated construction areas would eventually become obsolete once construction was completed.

### **5.2.1** Original Concept

The first concept for the in-park puzzle was simple exploration. We wanted to reward Guests for exploring as much of the park as possible. At this point in design, we had not visited the park, but knew some basic information about its functioning. In particular, we knew how the FastPass system operated.

Most popular rides at Disneyland Resort have two lines. While standard lines queue up in the normal fashion, FastPass line allow Guests to swipe their FastPasses into a reader. If you have less than two FastPass tickets in play, the reader prints one out with a time range stamped on it. At any time within that range, you can come back to the ride, hand your ticket to the Cast Member running the lines, and skip right to the front.

Since Guests were going to be spending time in-park playing our game rather than waiting in line for rides, we wanted to reward them with the rides they were missing. The original puzzle concept rewarded Guests with FastPass tickets that were effective at any time, on any ride.

The implementation of this concept would have involved some method of tracking a Guest's position in the park. Various methods were explored, chiefly RFID, barcodes, and Bluetooth messaging. In each of these cases, there are two components: the reader and the tag. The Guest would carry a tag, while readers would be placed at key areas throughout the park. Whenever the Guest would find one of these Hotspots, either their carried tag or the Hotspot itself would record that they had visited that location. Once the Guest had visited enough locations, he or she could then use their tag in the same fashion as a FastPass ticket.

Unfortunately, such a design required the use of additional, expensive technology which might not serve any purpose after the game's completion. The reward would also have required a change to the FastPass system and the associated retraining of all cast members manning rides. The implementation was scrapped, but one element of the concept remained: having Guests explore the normally unseen areas of the Park.

## **5.2.2** Revised Concept

Once we visited the Park, we saw that much of the decoration around the Park could be interpreted as preexisting code. We documented many of these decorations and planned to integrate these "codes" into the game's story in a meaningful way. By the time of our visit, we had narrowed down the narrative of the online experience to cover four regions in California, each of them associated with areas of the Park which would exist both before and after construction:

- 1. Hollywood, associated with DCA's Hollywood Backlot and the Tower of Terror,
- 2. San Francisco, associated with DCA's Sunshine Plaza and the Golden State,
- 3. The Boardwalk, associated with DCA's Paradise Pier and the Pacific Wharf, and
- 4. The Mojave Desert, associated DCA's Condor Flats.

We also devised preliminary concepts for using A Bug's Land in DCA, but it was thematically difficult to tie into the story, as there is no real-world analogue for that area of the Park.

Using our photographs from the visit as references, Joseph scoured every nook and cranny of those areas of the park to find interesting bits of data with which to create meaning for use in the final, in-park puzzle.

# **5.2.3** Creating New Meaning

The narrative for the in-park puzzle dictated that since the time machine was stuck in the past and the controls were in the future, the Guest would need to recover the machine's location and time in order to bring the Muppets back. Thus, we wanted to "plant" a place and a time within the park's decorations. Joseph looked for words which could describe locations—street names, city names, counties, and the like—and matched them to actual locations using Google Maps. We finally decided on the city of Avalon on Catalina Island. Both "Avalon" and

"Catalina" are easily visible on Park decorations, at Paradise Pier and the Hollywood Backlot, respectively. Furthermore, Avalon was established as a city well before 1937, so it would have existed in our narrative's timeline.

Along with the two other park lands we wanted Guests to explore in their search for clues, a particular location caught our eye as puzzle makers during our visit to the Park. Inside the Disney Animation building, the walls of the first room in the Sorcerer's Workshop attraction are covered with symbols and etchings. In particular, a portrait of Walt Disney himself is placed in a dark corner of the ceiling, behind guests as they enter the room. At this stage in our narrative's development, Walt Disney and his vision of California were central to our plot, and we wanted to make sure that this hidden portrait was part of the Guests' experience.



Figure 5.4: Symbols under Walt's portrait, DCA Sorcerer's Workshop.

Directly beneath the portrait was a series of eight symbols, the fifth of which was clearly an ampersand with a dot above it. Originally, we wanted to use this to key Guests to a website like Time.com, but as the in-park experience was going to be the culmination of the online experience, we could not expect Guests to be able to access a website from inside the park in order to complete the puzzle. Instead, we decided to have the symbols spell out a street name,

like Race Ave. Unfortunately, there are very few four letter street names. The only one in Avalon, CA is Hill St., and that has a two-letter suffix. Furthermore, all eight symbols on the wall were unique, so the street name with suffix included would have to have no repeat letters. We decided to let the dot/ampersand represent a letter in the code and go with a road whose name totaled eight unique letters: Beacon St.

Now that the location was narrowed to the street, the last two pieces of data remaining were a more precise location such as a street number, and the time. For the street number, it happened that an area in the Park's Golden State section had a row of townhouses whose addresses formed a mathematical sequence: progressive powers of two. Number 256 was missing from the sequence. This seemed a very simple and thematically appropriate way to encode the street number, so it was selected.

By process of elimination, the final piece of data that had to be deciphered by the Guest as the time, and it had to be in Condor Flats. Fortunately, there is a fence in Condor Flats that is hung with road signs and license plates of all sorts. Unfortunately, every license plate with a year stamp was dated 1922, 15 years earlier than the date we had set in our story. Thus, it would have been difficult to use the numbers straight off the plates to make a sensible date and time. While a key could have been developed to turn the numbers and letters into something that would make sense to the Guest as an actual time, the process of getting there might seem too contrived and could have run the risk of spoiling the fun.

Fortunately, when dealing with addresses of time, there is no universally-acknowledged and simply-understood format. Taking into account differing time zones, daylight savings time, leap days, and the myriad other ways calendars are arbitrarily modified to favor present conditions, addressing a time using the modern calendar system would be terribly inaccurate. If a

time machine were to actually be built, it would need a format for time addresses that would be invariable and independent of calendars. In this case, it would appear as a code.

In the end, two license plates were chosen which stood out from the others. These plates were entirely numeric, easily identifiable, and could feasibly describe an encoded date and time.

## 5.2.4 Playtesting and Revisions

Instructions for finding each of these data points were written in the voice of the character Walt Disney, as the fictional inventor of the Park, and they were given to WDI to review. Fortunately for us, a few members of the WDI team were able to go to the Park to playtest the instructions, and they provided us with some constructive feedback to improve the wording of the instructions. The WDI team discovered that the symbols on the walls of the Sorcerer's Workshop were actually part of a real code spelling "Walt & Roy" in the Atlantean alphabet, from the Disney animated film *Atlantis: the Lost Empire*.

The puzzle for the street name could no longer be a simple symbol-letter substitution, since confusion might arise if Guests were aware of the original code. The first response was to change it two a two-layer substitution, having the Guest translate from Atlantean to Roman characters and then substitute new characters for the originals. As the one who wrote up the original set of instructions, Dan created a key that could be used to transcribe Atlantean characters, through their actual meaning, and into their contrived meaning.

In the end, this substitution was deemed too confusing, as the meaning in the intermediary step, "Walt & Roy," is completely discarded once the final answer is uncovered. The puzzle had to be changed completely, though the Imagineers agreed that the Sorcerer's Workshop was still a good location for a "magical" puzzle.

## 5.2.5 The Final Workshop Puzzle

There were still plenty of symbols arranged on the walls of the Sorcerer's Workshop besides the Atlantean runes. Particularly, there were many images of characters and icons from Disney animated films. Several such images were arranged in a recognizable sequence. Joseph looked into the names of these images and their respective movies to find a letter sequence that would result in the name of a street in Avalon, CA. It was no longer a requirement that the street name have eight letters in total or that the letters be unique from each other, since the encoding would no longer be a direct symbol-to-letter translation. Instead, we wanted to use information about the relevant Disney films to guide the Guest to the answer.

Again using Google Maps as a resource, Joseph began by looking at the first symbol in each sequence and matching a letter in a word, name, or phrase associated with that symbol with the first letter of a street in Avalon. Proceeding sequentially, street names were eliminated from usability until Metropole Ave. was selected. Joseph wrote up instructions on how to find each

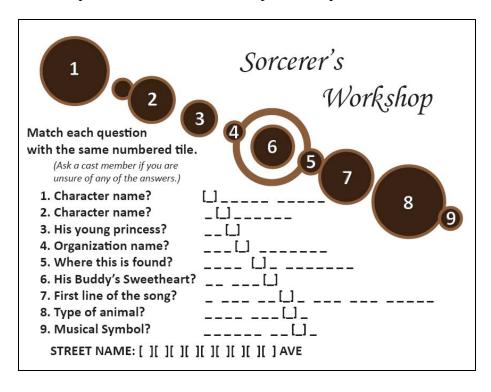


Figure 5.5: Draft replacement for Sorcerer's Workshop puzzle

letter in the street name by using basic Disney trivia knowledge and the symbols on the Eastern wall of the Sorcerer's Workshop. The instructions were approved by WDI, and the in-park experience was finally complete.

#### **6** Conclusions and Recommendations

The months we spent working with Walt Disney Imagineering (WDI) have been markedly educational and, we hope, successful in the eyes of the Imagineers. Despite the short time frame for development and occasional obstacles encountered along the way, we have designed and prototyped an alternate reality game (ARG) for play by our target demographic, using a preexisting intellectual property with decades of history and countless fans around the world.

That said, several of the steps taken during our development were missteps. We believe much can be learned from analyzing our mistakes and improving early-stage interactions between future ARG development teams and WDI.

## 6.1 What Went Right

The successful completion of this prototype is chiefly attributable to three factors, the first of which was the clear division of roles between our team members. Our progression was very slow during the project's first week, as each team member had yet to fall snugly into his or her respective role: Puzzlemaster, Webmaster, and Writer. However, once we had set ourselves individual, achievable milestones, we were able to meet them and keep the workflow constant.

The second factor in our success was communication. In the mid and late stages of development, our constant teleconferences and e-mail discussions with various individuals at WDI helped us better understand what they wanted from us, in turn making it easier for us to design and produce appropriate deliverables.

Most contributory to the prototype's success, however, was the design of the game itself, which was modified and reworked constantly to better fit WDI's requirements, respond to their suggestions, and adhere to their recommendations. Core elements like the website's hub-and-

spoke navigation system were adapted from Walt Disney's own designs, and those that were original were vetted through WDI several times before being finalized.

# 6.2 What Went Wrong

Unfortunately, due to legal restrictions, departmental oversight, and other circumstances beyond our control, the prototype has yet to be run as of this report's writing. As a result, we cannot conclusively state whether this project, despite its successful completion, has netted WDI informative data. Nevertheless, we have identified several impediments that, if removed, may well smooth production of future student-made, Disney-themed ARGs.

The most difficult problem we faced and were forced to overcome during this project was the lack of a dedicated design phase before actual development of the prototype began. We could not solidify even the core of our design until several weeks into the term, when we flew out to California and were able to meet with WDI. This made development secondary to proofing and concept work for much of the term, which saw the final deliverable suffer in quality.

We would likely have been able to better handle the workload if our development team had a fourth member: a dedicated webmaster whose job would be to handle the production and coding of the website. Our webmaster had to fill the roles of both artist and coder, which meant neither component of our game could be polished to a level we would have preferred.

Finally, despite the extremely helpful interactions we had with WDI in the mid and late stages of the game's development, our teleconferences in the early weeks were largely inconsequential to the final product. Similarly, our trip out to California was the turning point of our ARG's design. This turning point came much later in the term for us than we believe it should have.

## 6.3 The Next Step

We remain hopeful that once the prototype is integrated into Disney's lineup of websites and released for public consumption, it will successfully draw Guests to Disney's California Adventure. Within the next two months, after the game has been run and the results gathered, our team plans to write an addendum to this report, breaking down those results in detail and providing our analysis of the data. Our goal will be to determine whether ARGs are a viable means of marketing Disney's amusement parks to the masses.

Recognizing that this prototype is only a first step in the development of cross-media marketing at WDI, we have compiled the following recommendations for the future development of ARGs. These recommendations reflect what we believe went right and wrong over the past two months and what we have learned from our time on this project:

- 1. Design before development. The process of prototyping allowed us to quickly build a playable mockup, but it was difficult to make and implement intelligent design changes once development had already begun. Incorporating a separate design phase (e.g. in the summer preceding an A-term project) would allow the development team and WDI to hammer out a design document before production commences.
- 2. *Meet the team quickly*. The time our team spent in California was invaluable, and the trip marked a turning point for our prototype's development. If WDI meets directly with a development team at the very beginning of a project's timeline, especially at the beginning of its design phase, we think the team would be able to start off running.
- 3. Streamlined visual effects for the website. All Disney websites seamlessly mesh video, photography, imagery, graphics, and audio into a singular user experience. While this is difficult to accomplish within the time, resource, and experience constraints that students

face, direct WDI involvement in the development of all resources could lead to a much more polished end-product. Students, meanwhile, could be tapped as puppet masters, puzzle masters, writers, moderators, and the like.

In addition to those above, we have also compiled a series of recommendations pertaining directly to the continued growth and development of this prototype, from a small-scale test into a full-scale alternate reality game:

- Incorporate additional puzzle modules. In its current state, the game's hub and spoke
  mechanic allows for the easy addition or replacement of puzzles, characters, miniworlds,
  etc. Additional characters could be lost in 1937 or at any other points in time, in the past
  or the future.
- 2. Diversify for replayability. Instead of requiring the Guest to complete all online puzzles in order to access the in-park experience, allow the ultimate reward to scale based on the number of puzzles completed. This would result in greater interactivity and replay value, since Guests would be able to better fit the game around their schedules and puzzlesolving abilities. Older siblings could play and enjoy puzzles that fit their ability level while younger siblings do the same.
- 3. *Incorporate live action Muppet video and audio*. ARGs have greater impact on their players when created characters can interact directly with the player base, rather than through text. Having Bunsen explain the game's starting plot in a video or having Kermit leave voice messages for Guests on the Dial-a-Time Phone's answering machine would be far more engaging for the Guest than simply reading text on a screen.

- 4. Use technology in the in-park experience. Once construction fences have been raised, ultraviolet "graffiti" would serve as an excellent way to communicate information to the Guests while keeping it a "secret." RFID tags could be used to literally connect the Guests with various sections of the park. Technology opens up options for in-park interactivity.
- 5. *Use Cast Members as actors*. Members of the Cast could act in-character for the purposes of the ARG's narrative, providing even more interactivity to the experience. For example, Sweetums could make an appearance every day outside the MuppetVision3D Theater, introducing uninformed Guests to the Muppets' time-travelling tribulations.

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## **GL** Glossary

**ARG:** Alternate Reality Game. For more information on what comprises an ARG, see Appendix B.

**DCA:** Disney's California Adventure Park. DCA opened in February 2001 as part of the restructuring of the property around Disneyland into Disneyland Resort, a West Coast amalgam to Florida's Walt Disney World Resort. This project was done with the explicit intention of drawing ARG players to DCA.

Guest: A term used by Walt Disney Imagineering, Guests are visitors to any Disney park, resort, hotel, cruise, or website. The players of this project's ARG are referred to in this report as Guests, as they are visitors and active participants in Disney websites and Disney's California Adventure Park. When used thusly, the term "Guest" is always capitalized.

Home page map: The prototype's primary interface and home page of the website, the home page map is a large map of California with photographs pinned on it in various locations. Each photograph marks the location of one or more lost Muppets, and clicking on the photograph brings the Guest to the miniworld.

Miniworld: A term used by the development team to identify a portion of the prototype's website, a miniworld is the section of the site that serves as a connection between the home page map and that miniworld's puzzle page. It contains a photograph of the miniworld's location, and is where the Guest can read Kermit's introductory message describing which Muppet is in trouble there and what is needed to get them out and safe.

**Park:** Referring to any of Disney Parks and Resorts' amusement parks, the term "Park" is capitalized whenever it is used to specifically reference one or more parks, e.g. "Disneyland Park."

**Puzzle page:** A sub-section of the miniworld, the puzzle page is the page of the website where evidence needed to save a Muppet can be found, and the Dial-a-Time Phone can be accessed to input the puzzle's solution.

**WDI:** Walt Disney Imagineering. For more information about WDI as both a part of the Walt Disney Company and as this project's sponsor, see Appendix A.

## A Appendix A: About Walt Disney Imagineering

According to the Walt Disney Company's website, Walt Disney Imagineering (WDI) is "the master planning, creative development, design, engineering, production, project management, and research and development arm of The Walt Disney Company and its affiliates. Representing more than 150 disciplines, its talented corps of Imagineers is responsible for the creation of Disney resorts, theme parks and attractions, hotels, water parks, real estate developments, regional entertainment venues, cruise ships and new media technology projects."

As one of WDI's "new media technology projects," this alternate reality game was developed in direct cooperation with several departments of the Walt Disney Company, including Disney Parks and Resorts Online, the Disney Muppets Team, and of course, Walt Disney Imagineering.

# B Appendix B: What is an Alternate Reality Game?

Commonly referred to as an ARG (pronounced "arg"), an alternate reality games is an interactive story that blends fictional narratives and real-world events across various forms of media. A given ARG can extend to as many unique media types as is required to progress the story; however, all ARGs are chiefly web-based games. Their narratives and gameplay may reach beyond the scope of the Internet, but ARGs will always use one or more websites as vehicles for progression.

In ARGs, websites are conduits that allow players to interact, directly or indirectly, with the game's developers. The most common form of this interaction is between the player base and a developer-created character, which presents the players with puzzles it order to advance the narrative. Puzzles constitute an ARG's core gameplay.

Stereotypical ARGs are massively-multiplayer games with social communities as the player base. These communities often form around the game in question, giving the players an intellectual network that can work together to solve puzzles and progress the story. The larger an ARG's player base, the more reliably it can be counted on to solve particularly difficult puzzles.

However, the most enticing element of ARGs is not the massively-multiplayer component, but the interactions the game's fictional characters have with the real world. Often, in order to solve certain puzzles, players are encouraged to visit non-ARG websites or even to leave their computers and venture to real-world locations.

In the case of our project's ARG prototype, real-world interactions were designed to serve as the capstone of the gaming experience. After all the online content has been enjoyed by our players, they can complete the game by venturing into Disney's California Adventure and solving one final puzzle.

#### $\mathbf{C}$ **Appendix C: Narrative – Initial Concept Pitches**

## Who Framed Roger Rabbit Again?

Story: Walt Disney's Journal has been stolen, and its pages scattered! Many of the residents of

> Toontown think that Roger Rabbit is behind the theft, but the inhabitants of DCA are on Roger's side. They think that someone else is responsible, and they need help to track down the Journal pages! With the players at their side, they eventually learn that several pirates from the Pirates of the Caribbean ride took the Journal and fled to DCA. With Jack Sparrow helping from Disneyland, the players have to eventually travel to DCA,

find the pages, and clear Roger Rabbit's name.

Kids: If the game is targeted at kids, the players are helped by a Disney Vault archivist:

> Professor Arnold Hackfeld. Hackfeld first let Roger into the Vault to examine Disney's history, and doesn't believe that he stole the Journal, but can't figure out who did! So

he's turning to his young prodigies to help him solve the matter.

Adults: If the game is targeted at adults, then the first missing page of the Journal is found by an

> Imagineer or construction worker walking one of the new construction sites at DCA. The journal page contains evidence of who took it, but the person who discovered it is no detective. Knowing the passion of Disney fans, he/she has posted the page online,

looking for assistance.

#### The Pixar Parade

Story: Characters from each of the Disney-Pixar movies are headed to Disney's California

> Adventure to take part in the Pixar parade. Each has their own reasons for making the journey. Some got lost and are trying to find their way back to DCA; others have never been to DCA and want to visit! Some meet up with their fellow characters on the road and decide to tag along. All want to take part in the Pixar Parade at DCA. There's only one problem: they don't know the way! Players will have to guide the characters through

obstacles big and small in order to successfully help them reach their rightful home.

Kids: If the game is targeted at kids, puzzles will be simple, focused primarily around games.

For instance, players might have to guide WALL-E across a variety of highway

crossings, Frogger-style.

Adults: If the game is targeted at adults, the primary storyline will remain intact; the chief

difference will be in puzzle difficulty and type, with more emphasis placed on

community and location-based puzzles.

### The Muppets Through Time

Story: Dr. Bunsen Honeydew has successfully created a time machine that can send anything

you want through time! Unfortunately, his assistant Beaker left the door to the time machine unlocked, and a bunch of the Muppets have accidentally been sent through time—some forward, others backward. After discovering what's happened, the players have to fix the time machine and bring the Muppets back home, doing their best to make sure they don't change history while they're at it. Miss Piggy and Kermit are stuck in the past and meet up with Walt Disney himself; Animal and Fozzie are in the future and get to ride the rides still under construction today at DCA; and Gonzo heads up the team that's working to bring them all home.

*Kids:* If the game is targeted at kids, then Gonzo contacts Disney's fans, explains what has happened, and asks for help in fixing the time machine.

Adults: If the game is targeted at adults, then (among other rabbitholes), the Swedish Chef is holding a recipe contest, looking for new recipes. Anyone who sends in a recipe gets added to a list, and Chef sends them information on an old, bound recipe book. If the players can help him open the book, they find recipes inside for frog legs and roast pork, and an encoded message from Kermit, explaining where and when in time he and Miss Piggy had traveled to.

# D Appendix D: Narrative – Muppet Dialogue

## **Dr. Bunsen Honeydew**

Rabbithole: Annual Passholder Website Article

Greetings, Disneyland Resort Annual Passholders! I am Dr. Bunsen Honeydew from Muppet Labs, where the future is being made today.

Here at Muppet Labs, we have nearly completed work on our most fantastic invention yet: the Time Rewinder! Thanks to this machine, we'll soon be able to send you back in time! Of course, we do need to test it first, and for that, we're turning to you.

The Disneyland Resort Annual Passholders have been specially selected as our exclusive test group. If you're interested in time travel, visit our website at <a href="https://www.The.MuppetExperiment.com">www.The.MuppetExperiment.com</a> and fill out our volunteer questionnaire! We'll be selecting our lucky team in just a few days, so please, visit us soon.

Thank you, ladies and gentlemen! See you in time,

Dr. Bunsen Honeydew

Rabbithole: Post-Registration E-mail 1

Hello! This is Dr. Bunsen Honeydew, e-mailing you from Muppet Labs, where the future is being made today.

Our latest invention, the Time Rewinder, is complete! My assistant Beaker has already taken his first trip, exactly five minutes into the past. He tells me that our history is just like the present day! Extraordinary. It was an excellent test, but we still have many more to do, and for that we'll need our test subjects, chosen from among thousands of applicants:

- Kermit the Frog
- Miss Piggy
- The Swedish Chef
- Rowlf the Dog
- Fozzie Bear
- Sam the Eagle

If you aren't part of our first round of testers, don't worry! More volunteers will be selected every day, so keep an eye on your inbox. Next stop: the past!

Dr. Bunsen Honeydew

Rabbithole: Post-Registration E-mail 2

Hello again! Dr. Bunsen Honeydew here. We've had a slight accident at Muppet Labs: it seems our test subjects have gone missing!

We were preparing to embark on our maiden voyage when Kermit suggested we photograph everyone inside the Time Rewinder. Instead of the camera, my assistant Beaker accidentally picked up the Rewinder controls and sent everyone back through time! Since I hadn't finished readying the machine for the voyage, it appears to have malfunctioned. Kermit and his friends are now scattered across California in the year 1937!

Thanks to the Rewinder's attached Dial-a-Time Phone, Beaker and I are in contact with Kermit, but we could use your help to track down the others. If you can, head over to <a href="https://www.TheMuppetExperiment.com">www.TheMuppetExperiment.com</a> to learn how you and your family can work with us to bring our lost friends home again.

Thank you very much for your help!

Dr. Bunsen Honeydew

Registration Page (not logged in)

Hello and welcome to the website for Muppet Labs, where the future is being made today. We are currently in the midst of a time travel experiment. If you are interested in volunteering, we could use all the help we can get!

In order to participate, you must first be logged in to your Disneyland Online account at <a href="https://www.Disneyland.com">www.Disneyland.com</a>. Once you've done that, come back here. You'll be able to fill out our questionnaire and put yourself on my assistant Beaker's contact list.

Thank you for your interest in helping us here at Muppet Labs!

Registration Page (logged in)

Hello and welcome to the website for Muppet Labs, where the future is being made today. We are currently in the midst of a time travel experiment. If you are interested in volunteering, we could use all the help we can get!

Some of our tests will be run here at our website, while others will be run at our facility in Disney's California Adventure Park. No matter how you and your family would like to help us out, we just need you to answer these three simple questions:

- 1. Are you interested in time travel? [Yes / Very Much So / Extremely / Yay!]
- 2. Do you want to join Muppet Labs in making the future today? [Yes / Quite / Woohoo!]
- 3. Can you visit, or are you planning on visiting Disney's California Adventure between now and [game end date]? [Yes / Hopefully / No]

Hit the "submit" button and I'll have my assistant Beaker put you on our volunteer list. We'll let you know the moment you're selected to join us here at Muppet Labs!

Website Before 2<sup>nd</sup> Email

Welcome to the website for Muppet Labs, where the future is being made today! Our Time Rewinder's maiden voyage will happen in just a few days. Keep an eye on your email inbox for updates, and check back soon to see the results of our first major test!

### Puzzles Start / Note from Bunsen

Ah, a Muppet Labs volunteer! Thank goodness you've come. We have a slight problem.

Our test subject team—Kermit the Frog and his friends—has been lost in 1937. Thanks to my Dial-a-Time Phone, we're still in contact with Kermit and can text messages back and forth. However, none of his friends arrived with him!

Beaker and I are scouring old newspapers for clues to where Kermit's friends might be. We've learned that they're scattered across 1937 California, at the locations I've marked on this map. Kermit is hitching rides around the state, but every time he meets up with one of his friends, he finds that they've gotten themselves into some sort of trouble.

Could you examine each spot on the map and help Kermit gather his friends? With you by our side, I'm certain we can bring them all home. Let Operation Timesearch begin!

Bunsen

Puzzles Ongoing / Note Card near Map

**Operation Timesearch Checklist!** 

Get Miss Piggy out of the Hollywood Tower Hotel
Find Sam the Eagle in the Mojave Desert
Reach Fozzie and Rowlf in the Midnight Swing jazz club
Write Kermit a shopping list for the Swedish Chef's orders

### Puzzles End / Note from Bunsen

Hello again, Bunsen here! For a volunteer test subject, I must say you have done an amazing job for Kermit and his friends! I am positive that they're thankful to you for all your hard work. You should know, however, that we've hit one last snag.

On his way back to the Time Rewinder, Kermit's Dial-a-Time Phone ran out of batteries! I must have the precise location and timecode of the Time Rewinder in order to bring it back home, but without the Dial-a-Time Phone, Kermit can't get it to me.

How do I know this? Well, it seems Kermit was clever enough to mail us a letter and have it postmarked 2008, so I only just received it! He couldn't simply mail us the data, of course—Kermit knows that if anyone were to find it before us, the space-time continuum could explode like one of Gonzo's cannons! Instead, he came up with another solution, but it involves travelling to Disney's California Adventure.

Can you go to the park? We don't have much time before my connection with the Time Rewinder fails completely on [game end date]. We must get the data before then!

If you can't go, don't worry; Beaker and I are planning a trip out on [game end date]. But the sooner we get Kermit and his friends back, the better! If you can help us, read Kermit's letter for yourself and print out his instructions. Once you arrive at the Park, text "Operation Timesearch [unique ID]" to me at [short code], and I'll help you get started.

Good luck, my heroic friend! Operation Timesearch is almost complete!

Bunsen

#### **Kermit the Frog**

Miss Piggy: Introduction

Hi-ho! Kermit the Frog here in Hollywood, California. I've tracked Miss Piggy to the Hollywood Tower Hotel, but she's stuck in the lobby, and well, she's karate-chopping mad!

I don't know how to get her out. All the doors are locked from the inside, and no matter which way Piggy turns, she falls right through the Twilight Zone and ends up back where she started!

You know, these hotels can have libraries inside them with all sorts of information about the building. I can't get inside to check, but in 2008, you could! If you find something, send me the directions with the Dial-a-Phone and I can shout to her which way to go.

In case you get desperate, you can probably convince Statler and Waldorf to give you some hints. Good luck!

Miss Piggy: Bad Solution

Oh dear. I don't think that worked, Miss Piggy's back where she started! Double-check each turn, and make sure you're giving me the right number of steps.

Miss Piggy: Victory

Yaaaay! You did it! Miss Piggy is out of the Tower!

Thank you, friend. I took a picture of Piggy in front of the Hollywoodland sign and mailed it to Muppet Labs, with special instructions to have it delivered in 2008. It's yours! We're hitching a ride out of Hollywood, so we'll see you at the next stop.

Swedish Chef: Introduction

Hi-ho! Kermit the Frog here at the Santa Cruz Beach Boardwalk! I've found the Swedish Chef cooking in a seaside restaurant called The Grotto, but he says he can't leave until he's finished his orders. Well, he's stuck on three of them!

Chef's left notes on the orders that say what he needs, but I don't understand them! Could you go inside and try to figure them out? If you let me know what to get him with the Dial-a-Time Phone, I can handle the rest.

You know, I'm sure he's made those recipes before, but you might have to do some research on the internet to find what Chef's missing. If you do, be sure to ask your parents' permission! Oh, and see Statler and Waldorf if you need hints. I know they're old and grouchy, but they might be helpful anyway!

Swedish Chef: Bad Solution

Uh-oh. I got those ingredients for Chef, but I don't think he can use them all. He's still frustrated with [order #s].

Swedish Chef: Victory

Yaaaay! Chef was happy, and with the tennis racket, coconut, and vitamins, he was able to finish those orders. You did a great job!

I took a picture of Chef here at the boardwalk and mailed it to Muppet Labs. It's postmarked for 2008, so you should have it by now! Enjoy it, friend. We're rolling on to the next stop!

Sam the Eagle: Introduction

Hi-ho! Kermit the Frog here at Death Valley National Monument. I think this is where Sam arrived, but he's already flown off, and I have no idea where he went!

You know, if you could do a bit of research, we might be able to learn where he's gone. I'm sure he's giving speeches in his travels, so he's probably in the local news. Could you try and find some old newspaper articles that mention him?

An archive would be a great place to start, I think. If you have a map to trace his movements, I bet you could find him with the clues in the newspapers! If you have trouble, grumpy Statler and Waldorf might be willing to give you a hint or two.

Once you find Sam, tell me where he is with the Dial-a-Time Phone. Thanks very much!

Sam the Eagle: Bad Solution (Edwards Air Force Base)

Ummm... nobody here knows how to get to Edwards Air Force Base. They say it doesn't exist! Are you sure it was called that in 1937? You might have to look it up in an encyclopedia.

Sam the Eagle: Bad Solution (anything else)

Well, we can't find Sam; are you sure you triangulated his location? If you can figure out where he's been, I'll bet you can figure out where he is now!

Sam the Eagle: Victory

Yaaaay! We found him at Muroc Air Field! Thank you, friend.

I snapped a photograph of Sam at the airfield and mailed it to Muppet Labs. Since it's marked for a 2008 delivery, you should get it any time now! Keep up the excellent investigating. I'm moving on!

Fozzie and Rowlf: Introduction

Hi-ho! Kermit the Frog here in beautiful San Francisco. I've found Rowlf and Fozzie Bear: they're on the radio! I've learned they're broadcasting from a jazz club called The Midnight

Swing, but the club is packed! The bouncer won't let me in unless I can prove I'm with the crew by telling him the secret passphrase.

Now, every time Fozzie tells one of his jokes, Rowlf plays a series of notes that sound terrible together. I don't think it's music, but it might have something to do with getting into the club! Could you take a look? If you can figure out the passphrase, send it to me with the Dial-a-Time Phone and I'll go get Fozzie and Rowlf!

Oh, and if you're having a tough time figuring it out, ask old Statler and Waldorf for help. I know they can get cranky, but they've been around a long time! I'll bet they can give you a hint or two.

Fozzie and Rowlf: Bad Solution

Well, I don't think that's the secret passphrase. The bouncer bounced me right out! Try double-checking your translation of the notes into words.

Fozzie and Rowlf: Victory

Yaaaay! The bouncer let me in! Thanks to you, I've met up with Rowlf and Fozzie Bear.

We visited the Golden Gate Bridge together, and I took their picture. You should see it! I've had it mailed to Muppet Labs, with special instructions to not be delivered until 2008. It's all yours, my friend! We're catching the bus to our next stop. See you there!

Mailed Letter Page 1 (Note)

Hi-ho, friend!

Kermit the Frog here, writing to you from the year 1937! I've spent the past several days searching for my friends, and with you guiding me from the future, we've brought everybody together! You know, I couldn't have done it without you, and I just want to say thank you, from the very bottom of my heart. We all do!

Bad news, though: we're not done yet. My Dial-a-Time Phone has run out of batteries, and as you can see, I can't text you anymore! Now, the Time Rewinder says I need to give Bunsen its exact location and timecode. I'm worried about sending that to you in a letter like this, because it could be found by someone between now and 2008. I don't want to think about what could happen to the universe then!

It's okay, though. I think I've figured out a way to solve our problems! In the future, you know, I'm friends with several Walt Disney Imagineers. They're the people who build the Disney Parks. Well, I've sent a letter to my future self explaining what's happened. I've given him strict instructions to pass on to the Imagineers. If I'm right, my future self will get the letter just before Disney's California Adventure is built. He can ask the Imagineers to help us out by hiding the data in the Park itself!

My friends and I should be safe with the Time Rewinder, but we need you to go to the Park. Use my instructions on the next page to find the hidden data! Then send each piece to Dr. Honeydew with the Muppet Labs phone number: [short code].

Good luck, my friend, and thank you again! With you at our side one last time, I'm sure we'll all be home soon!

#### Kermit

Game Completion / E-mail after In-Park Experience

Hi-ho! Kermit the Frog here, e-mailing you from the year 2012! If Dr. Honeydew's Time Computer is working properly, then you should be getting this in 2008, right after you helped me and my friends get back home.

That was a really nice thing you did for us, and we've wanted to do something for you in return. It took a few years, but Dr. Honeydew has fixed his Time Rewinder, and we used it to send something special back in time: the map! I hope you got it from Muppet Security. That map shows what Disney's California Adventure has become. All the construction was worth it!

Our journey took us from 1937 to 2012. That's 75 years, and we wouldn't have made it without you. You saved us! So thank you, dear friend. We will never forget you!

Kermit & Friends

#### Statler & Waldorf

Homepage Map

So the melon-headed scientist needs your help to find Kermit's friends, eh? He must have lost his eyes! Ahahaha! Well, we'll be here if you need help fixing his mistakes.

# Miss Piggy

- **Miniworld:** Ha! I know Miss Piggy puts on a bad show, but she must have been awful. Parts of the building are walking out!
- Evidence Page: I know what I need whenever I'm around Miss Piggy: an exit strategy! See if you can find the hotel's floor plans.
- Evidence:
  - 1. Those green splotches look nasty. Almost as nasty as Miss Piggy does! Ha!
  - 2. Hey, these blueprints are numbered! I bet if you find all three of them, you'll be able to see a clear way out. Let's hope it's wide enough for the pig!
  - 3. You might try printing all three blueprints out, stacking them, and looking at them through a light to find a clear path. Too bad Piggy can't karate-chop through the Twilight Zone!
- **Time Phone:** You'll have to spell out each step for Piggy. One square is one step. Count carefully for her, because she sure can't! Ahaha!

### Swedish Chef

- Miniworld: A chef who doesn't know his own recipes? It's a nightmare in the kitchen! Heh!
- Evidence Page: You'd best look at those orders yourself. There's no way we'll be able to understand him if he reads them to us!

#### • Evidence:

- 1. The last time I tried one of Chef's home-cooked meals, I needed a drink of water to wash it down! Too bad it wasn't chewable. Heehee!
- 2. That Swedish meatball can't figure out how to serve himself? Ho ho! He must need something special to serve bouncy meatballs, but what?
- 3. Kermit will never find a rubber chicken at the grocery store, but he might be able to find something Chef can use to get one. Maybe he'll find some common sense for Chef while he's at it! Ha!
- **Time Phone:** Kermit needs precise directions, just like when he's up on stage! Write down those items as though you're making a shopping list.

### Sam the Eagle

- **Miniworld:** Bunsen and Beaker must have missed something in their research. Figures! Looks like you'll have to pick up the slack.
- Evidence Page: So many newspapers for one little brain! You'd best start looking around.
- Evidence:
  - 1. That bird might think he's sensible, but Sam refuses to sit still! We'll have to track his movements ourselves.
  - 2. It makes a difference whether Sam flies or follows a road. Even he knows how to fly in a straight line! Too bad his speeches don't do the same thing. Ha!
  - 3. A "familiar location"? Must be someplace he's seen more than once in his travels. That bird has no imagination!
- **Time Phone:** Kermit only needs the name of the place. He can get directions from the locals. Remember, it needs to be a name that someone from 1937 will recognize!

### Fozzie & Rowlf

- **Miniworld:** Wait, why are they trying to save Fozzie? We could be rid of that bear! Brace yourself, and hope we don't have to listen to one of his jokes!
- Evidence Page: Ah! What terrible noise! I hope Rowlf is trying to tell us something by playing specific notes. If he's not, he's the most overrated musician I've ever heard! [Stuck? Click for more help.]
- Evidence Page (second hint): I think the notes spell out the passphrase. Each note is a letter in the sentence! [Still can't get it! Click for one more hint!]
- Evidence Page (final hint): Someone in your family might know which piano keys are which notes! If not, ask for their help in searching the internet.
- **Time Phone:** Unlike Rowlf's playing, wrong answers here aren't "good enough for jazz." You have to be precise!

# **E** Appendix E: Narrative – In-Park SMS Reference Sheet

Global Response to Unintelligible or Improperly Formatted Message (after player login):

Which clue is that for? Remember to say what each piece of data is at the beginning of each message. For instance: 'Street Number ###'

Response on Game Complete:

IT'S WORKING! You've done it, volunteer, you've brought the Muppets home! Now go to the security desk at MuppetVision 3D. I've left something for you there!

# **Login Messages**

Correct from Player:

Operation Timesearch <Player ID Number>

Incorrect from Player:

<anything else received prior to successful player login>

Response on Incorrect:

I'm sorry, but I don't recognize that access code! Login by texting me 'Operation Timesearch [your volunteer ID number]'

Response on Correct:

You made it! Go to Guest Relations near the park entrance to pick up the instructions Kermit left for you!

#### Clue 1

Correct from Player:

Street Number 256

*Incorrect from Player:* 

Street Number <anything else>

Response on Incorrect:

Oh no, my instruments tell me that's wrong! Try looking again. The number should be missing from a mathematical sequence.

Response on Correct:

Yes, 256 is correct! Now we have the street number where the time machine is waiting. Well done!

### Clue 2

Correct from Player:

Street Name Metropole Ave

Incorrect from Player:

Street Name <anything else>

Response on Incorrect:

Umm, according to my equipment, that's not right. If you're having trouble answering the questions, ask a cast member.

Response on Correct:

You did it! My equipment says that Metropole Avenue is the correct location. Good job, volunteer!

### Clue 3

Correct from Player:

City Avalon

*Incorrect from Player:* 

City <anything else>

Response on Incorrect:

That city isn't registering! Try looking again. Remember, you're looking for the murals on the side wall, not the name of the restaurant.

Response on Correct:

YES! According to my instruments, Avalon is right! We're one step closer to bringing the Muppets home.

#### Clue 4

Correct from Player:

Island Catalina

*Incorrect from Player:* 

Island <anything else>

Response on Incorrect:

Uh-oh, I don't think that's right. Here's an idea: Kermit said that Minnie 'knows the way.' Try looking where her nose is pointing!

Response on Correct:

That's the place! Catalina Island is off the coast of California. It's a good place to hide the time machine. You did it, volunteer!

### Clue 5

Correct from Player:

Timecode 41572-32769

*Incorrect from Player:* 

Timecode <anything else>

Response on Incorrect:

Oh no, my instruments say that timecode is invalid. Check again, and remember: you want the numbers that are hung on the wall twice.

Response on Correct:

You did it! According to my instruments, that is the valid timecode. Great job, volunteer!

# F Appendix F: Game Design Document

### **Plot Summary**

Dr. Bunsen Honeydew has created the world's first time machine at Muppet Labs and gathered a group of Muppet volunteers to test it. Unfortunately, his assistant Beaker accidentally sent all the Muppets back in time! Though the Muppets all made it to 1937, the year of Snow White's release to theaters, only Kermit arrived where he was meant to, in Walt Disney's office.

Walt offers to help Kermit find his lost friends, and together they set off on an adventure across California. Using Dr. Honeydew's specially-designed time phone to communicate with the future, they learn where each Muppet is. They soon find, however, that all are in trouble. Looking for help, Kermit turns to a Muppet Labs volunteer who's still in the future: the player. It's up to the player to solve each Muppet's problem and text Kermit the solution.

Walt, meanwhile, is captivated by the adventure. Always drawing, he sketches pictures of fantastic lands his journal, transforming the places that he and Kermit visit into magical, adventurous scenes with his imagination. He calls his sketchbook creation Disney's California Adventure—and now, so do we!

#### **Chief Interface Elements**

- **E-mail as Rabbitholes:** The player's initial entry into the game is accomplished via a series of three e-mails that describe the Muppet's evolving time machine, culminating with the news that they've been lost in the past and need the player's help to bring them back.
- Website as Game Hub: Once in the game, the website is the means by which the player can access each puzzle and its related narrative. While all puzzles are self-contained, the tools to complete certain puzzles may only be found beyond the scope of the website.
- **SMS Mechanic:** Whenever a puzzle solution is found, players have the option to text that solution to Kermit in order to mark the puzzle as complete. During the final, in-park puzzle, they must text Dr. Honeydew the solution in order to win the game and learn how to claim their prize.

# **Muppet Puzzle Summaries**

Miss Piggy's Escape from the Tower: Miss Piggy has fallen into the glamour and prestige of Hollywood's newest and finest retreat: the Hollywood Tower Hotel. But to her horror, in turns out sections of the hotel are shifting in and out of the Twilight Zone. Now, Miss Piggy is stuck in the shifting hotel lobby with no idea how to find a safe way out. The player will need to:

- find the blueprints for the Hollywood Tower lobby in its present-day library;
- determine the path Miss Piggy must take to get around the shifting sections; and
- text or send the proper directions to Kermit, who can in turn pass them on to Miss Piggy.

Sam the Eagle's Historic Flight: Sam the Eagle arrived in 1937 at Death Valley National Monument, but he's not there anymore! He's flown around California, stopping at various towns and delivering patriotic speeches before flying off again. Local newspapers have reported on those speeches and even interviewed him at his various stops, but no one knows where he's at now. Since it's much easier for us to find those newspaper articles nowadays than it was back then, Kermit asks the player to find any evidence of Sam's whereabouts. The player will need to:

• read through microfilm copies of newspaper clippings;

- plot the sightings of Sam the Eagle on a map to triangulate his current position; and
- text or send Sam's current location to Kermit: Muroc Lake, an area now known as Edwards Air Force Base.

Sheet Music Delivery to Fozzie Bear and Rowlf the Dog: Fozzie and Rowlf landed in 1937 San Francisco and quickly found their way to one of the city's many jazz clubs. A local radio station is broadcasting from the club, and Walt and Kermit can hear Rowlf and Fozzie playing music and telling jokes from in their car! Unfortunately, because of the broadcast, the jazz club is packed, and Kermit can't get inside to meet up with his friends: the bouncer keeps asking for the backstage passphrase. Rowlf keeps playing an odd series of notes after Fozzie's punchlines, and Kermit thinks they're trying to say something through their music. The player will need to:

- listen to or read the sheet music version of Rowlf's musical solos;
- decipher the backstage passphrase from the sheet music; and
- text or send the passphrase to Kermit so he can get into the club and meet up with Fozzie and Rowlf.

**The Swedish Chef's Recipe Memory:** The Swedish Chef was sent by the time machine to the Santa Cruz Beach Boardwalk and immediately found a job at a fine seaside restaurant. The problem is, he can't remember any of his recipes, and he refuses to leave the restaurant with Kermit until he's cooked one of his signature meals for each of his customers. The player must:

- track down the recipes Chef uses by searching the internet for the answers, and
- text or send them to Kermit so that he can convince the Chef to come with him.

### **Final Puzzle Summary**

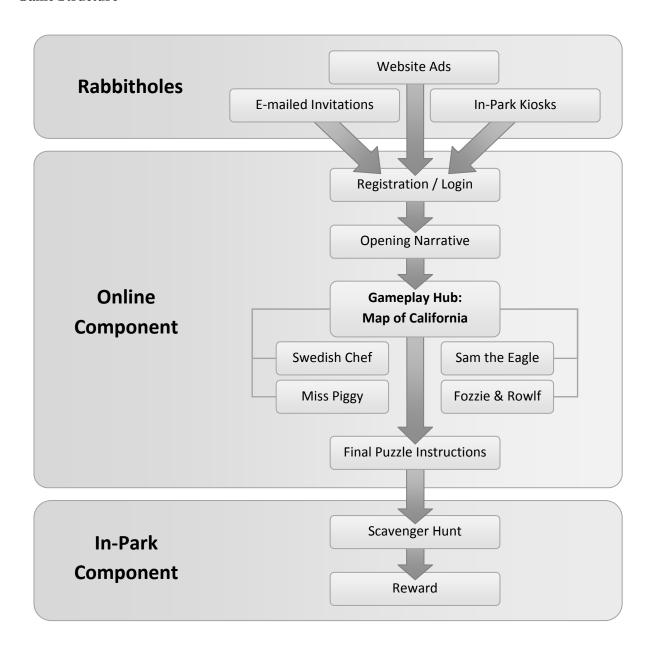
By the time Kermit and Walt have found the lost Muppets and arrived back in Burbank, the time phone has run out of power. In order to bring them all home safely, Bunsen needs the exact date, time, and location of the time machine so he can target it and pull it forward in time.

In a flash of inspiration, Walt promises to hide the data in pieces throughout his planned amusement park: Disney's California Adventure. Worried that the time machine data, if it gets out to the general public, could irrevocably change the future, he instead mails Bunsen's lab ("Do not deliver until 2008") with instructions on how to retrieve the data from the park—a park that won't be operational for another 64 years.

Once Bunsen gives Walt's instructions to the player (a downloadable, printable file), he or she can travel to DCA to help with the second part of the mission. Hidden across the park are slivers of the data that Walt made sure his Imagineers built into the environment. From the numbers on the Condor Flats license plate wall to the names of Hollywood Backlot storefronts, the clues are everywhere. The player must:

- scour the park for the clues Walt had hidden in the scenery;
- piece together the time machine's precise location, date, and time from the clues;
- text the data back to Bunsen so that he can bring the Muppets home; and
- stop by Muppet Vision 3D to claim their reward: a heartfelt thank you from the Muppets, and an exclusive fun map of the new DCA.

# **Game Structure**



# **G** Appendix **G**: Online Experience Document

#### Overview

Introductions
Basic Puzzle Walkthrough
Miss Piggy's Escape from the Tower
Sam the Eagle's Historic Flights
Fozzie Bear & Rowlf the Dog's Musical Code
The Swedish Chef's Recipe Memory
Segue to In-Park Finale

#### **Introductions**

#### Lab Doors:

The first page the Guest will see on entering the website is the closed door of Muppet Labs. On this door is a note from Bunsen Honeydew. If the Guest is not logged in to Disneyland.com, the note will read as follows:

Greetings! Dr. Bunsen Honeydew here. Welcome to the website for Muppet Labs, where the future is being made today. We are currently in the midst of a time travel experiment. If you are interested in volunteering, we could use all the help we can get!

In order to participate, your first step must be to log in to your Disneyland Online account at www.Disneyland.com. Once you've done that, come back here! You'll be able to fill out our volunteer questionnaire and put yourself on my assistant Beaker's contact list.

Thank you for your interest in helping us here at Muppet Labs!

If the Guest is logged in at Disneyland.com, the note will read as follows:

Greetings! Dr. Bunsen Honeydew here. Welcome to the website for Muppet Labs, where the future is being made today. We are currently in the midst of a time travel experiment. If you are interested in volunteering, we could use all the help we can get!

To volunteer, just answer the following three simple questions, and I'll have my assistant Beaker put you on our contact list!

- 4. Are you interested in time travel? [Yes]
- 5. Do you want to join Muppet Labs in making the future today? [Yes]
- 6. Can you visit, or are you planning on visiting Disney's California Adventure between now and [game end date]? [Yes / No]

That was easy! All you need to do now is hit the "submit" button. I'll have my assistant Beaker put you on our volunteer list, and we'll let you know the moment you're selected to join us here at Muppet Labs!

Each question in the questionnaire will have a check box or drop-down menu, and there will be a button to submit the questionnaire. After submitting, the two introductory emails are triggered to be sent out to the user after a certain time, and the message from Bunsen will change to the following:

Volunteer, our Time Machine's maiden voyage will happen in just a few days. Keep an eye on your e-mail inbox for updates, and check back soon to see the results of our first major test.

Thank you for visiting Muppet Labs, where the future is being made today!

Once the Guest has received the third email, Bunsen's message will disappear, and the doors to the lab will become a button. Clicking on them will bring the Guest to the **Home Map**.

### **Home Map:**

The Home Map is an image of a bulletin board with a notecard and a map of California tacked onto it. Tacked on the map of California are four postcards with location names. There is also an icon of **Statler & Waldorf** in one of the corners.



Home Map with Statler & Waldorf Icon Mockup

Each time the Guest enters the Home Map from the Lab Doors, there is a pop-up of the following note from Bunsen overlaying the bulletin board:

Volunteer, thank goodness you've come in! I have terrible news.

Our test subject team—Kermit the Frog and his friends—has been lost in 1937. Thanks to my Time Phone invention, we're still in contact with Kermit and can text messages back and forth, but it seems that none of his friends arrived with him in Walt Disney's office.

It turns out that Mr. Disney is quite the gentleman. Kermit's explained to him what's happened, and he's offered to help us bring the Muppets home! However, the two of them still need our help.

Beaker and I are scouring archives and old newspapers for clues to where the Muppets might be. We've learned that they're in various parts of 1937 California, at the locations I've marked on this map. Kermit and Walt have driven to each location, but they keep running into snags—those Muppets just can't keep themselves out of trouble!

Take a look at each spot on the map and read Kermit's text messages about the Muppets. Please, do what you can to help him! We must get the Muppets home again.

Bunsen

The Guest must close the pop-up to continue to the Home Map.

The notecard on the Home Map contains the following note from Bunsen, which has check marks next to each section of the game which is complete:

Save the Muppets Checklist!

Get Miss Piggy out of the Hollywood Tower Hotel
Find Sam the Eagle
Get Kermit into the Midnight Swing jazz club
Write shopping list for the Swedish Chef's orders

Thanks for your help, volunteer!

Bunsen

Also, each of the postcards on the homepage corresponds to one of the four missing Muppets. If the Guest has completed his or her corresponding puzzle, that Muppet is present in the postcard. Otherwise, it is just a photo of the location. Clicking on a postcard will bring the Guest to the corresponding **Miniworld** page.

The icon of Statler & Waldorf will have an animated speech bubble over it (initially just "...") to draw attention to them on this first page. Clicking on their icon or the speech bubble will expand the speech bubble to give the following message:

So the melon-headed scientist needs your help to find the Muppets, eh? He must have lost his eyes! Ahahaha! Well, we'll always be right here. Whenever you could use some help fixing his mistakes, just ask!

Clicking on them again will close the message.

# **Basic Puzzle Walkthrough**

#### Miniworld:

When a Guest clicks on one of the postcards tacked to the map on the homepage, they are taken to a page with a zoomed-in view of that photo. The icon of Statler & Waldorf remains in the same position on this page as it was on the Home Map, and there is an additional button now which is an icon of the bulletin board. Pressing this button will return the Guest to the Home Map.



Example Miniworld with Icon Mockups

After a couple seconds, Kermit appears with a message. If the Guest has not yet saved this Muppet, the message is a call for help and instructions for the puzzle, which is reached by clicking a button to continue to the **Evidence Page**. If the Guest has saved this Muppet already, the message is a thank you note, and there is a button which links to the reward for that puzzle.

#### **Evidence Page:**

The photo in the Miniworld is replaced with an image of the puzzle environment. The border from the Miniworld retains the icons of Statler & Waldorf and the Home Map, which have the same functionality, but now there are two more buttons, for a total of four:

- **Home Map** A reduction of the bulletin board. Clicking returns the Guest to the Home Map.
- **Miniworld** A reduction of the Miniworld. Clicking returns the Guest to the Miniworld, where they may review Kermit's letter with the instructions for the puzzle.
- **Time Phone** An icon of the Time Phone. Clicking this brings the Guest to the Time Phone page.
- **Statler & Waldorf** Clicking this opens up a different hint depending on what the Guest is currently viewing.

In the Evidence Pages for Miss Piggy, Sam the Eagle, and the Swedish Chef, there are three hotspots on the central image. Hovering over these hotspots will produce an animation to indicate that the player should click on them, and clicking on them will bring the player to the corresponding **Evidence Pop-Up**.

# **Evidence Pop-Up:**

The evidence pop-up is a themed document containing clues for the puzzle. The content of the evidence depends on the puzzle, but in all cases there are two buttons: one to close the pop-up, returning the player to the evidence page, and one to download the document, allowing the player to print it out or save it for reference as they look outside of the website for the solution.

#### Time Phone:

This pop-up contains a text entry box where the player can submit the solution to a puzzle and send it to Kermit. It also contains directions on how to correctly format the solution, so it can be read and interpreted. A correct solution brings the player back to the Miniworld page (with the puzzle now complete, thus Kermit's victory text appears), while an incorrect solution returns a text message from Kermit explaining that the solution didn't work.

## Miss Piggy's Escape from the Tower

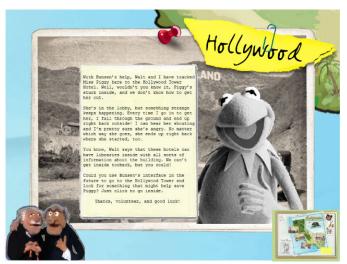
# **Kermit's Introductory Note:**

Hi-ho! Kermit the Frog here in 1937 Hollywood. Walt and I have tracked Miss Piggy to the Hollywood Tower Hotel, but she's stuck inside. We don't know how to get her out!

She's in the lobby, but something strange keeps happening. Every time I go in to get her, I fall through the ground and end up right back outside! I can hear her shouting and I'm pretty sure she's angry. No matter which way she goes, she ends up right back where she started, too.

You know, Walt says that these hotels can have libraries inside with all sorts of information about the building. We can't get inside to check, but you could! Could you click through to the Hollywood Tower and look around for something that might help save Piggy? If you can find a way to lead her out, send the directions to me using Bunsen's Time Phone.

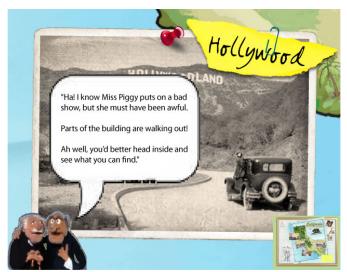
Remember to ask Statler and Waldorf for help if you need it. Thank you, dear volunteer!



Kermit's Note Mockup

### Statler & Waldorf's Hint for Miniworld:

Ha! I know Miss Piggy puts on a bad show, but she must have been awful. Parts of the building are walking out! Ah well, you'd better head inside and see what you can find.



Statler & Waldorf Hint Mockup

# **Evidence Page:**

The lobby of the Tower of Terror. There are three pieces of evidence hidden on this page, each a different copy of the ground floor blueprints.



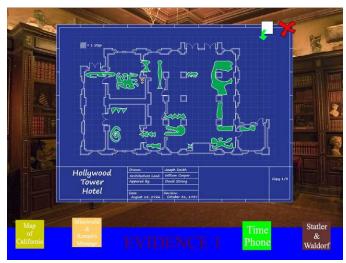
Evidence Page Screenshot with Thematic Interface

# Statler & Waldorf's Hint for Evidence Page:

I know what I need whenever I'm around Miss Piggy: an exit strategy! See if you can find the hotel's floor plans.

# **Evidence Pop-Up:**

Each blueprint is a copy of the same floorplan with a grid over it and Miss Piggy's location marked. Several cells contain a graphic ("green splotch") indicating they have fallen into the Twilight Zone. These cells are different on each blueprint, but there is one path from Miss Piggy to the exit which does not cross any such cells on any of the three blueprints. The blueprints are numbered 1/3, 2/3, and 3/3.



Example Evidence Pop-Up, Interface to be Replaced

### Statler & Waldorf's Hints for Evidence Pop-Ups:

- 1. I don't trust those green splotches. You should lead Miss Piggy into them! Ha! Okay, maybe not.
- 2. Hey, these blueprints are numbered! I bet if you find all three of them you'll be able to see a clear way out. Let's hope it's wide enough for the pig!
- 3. If your printer lets you, you might try printing all three blueprints on the same piece of paper and see which spots stay clear! Or you could try coloring in the shapes from two of the copies onto the third copy.

#### **Time Phone Instructions:**

Use this Time Phone to call Kermit and let him know which way Miss Piggy must go to exit the tower safely. Use the code: L = left turn, R = right turn, # = take # steps. (Example: 3R2L1 = take 3 steps, turn right, take 2 steps, turn left, take 1 step.)

# **Time Phone Solution:**

2R5R2L4L6L6R4L6L8R9R7L8L

#### **Time Phone Response on Bad Solution:**

MESSAGE FROM KERMIT: Oh dear. I don't think that worked. Miss Piggy says she's back where she started! Try double-checking your directions, and be sure to follow the directions on the Time Phone so there's no confusion on our end. Use the code: L = left turn, R = right turn,

### **Statler & Waldorf's Hint for Time Phone:**

You'll have to really spell out each step for Piggy. One square is one step, so count carefully for her. She sure can't! Ahaha!

# **Kermit's Victory Note:**

Yaaaay! You did it! Miss Piggy is out of the Tower!

Thank you, dear volunteer. Walt says thank you, too. In fact, he has a gift for you! He's put it in the mail with special instructions to have it delivered to Muppet Labs in 2008, so it should have arrived. Click through and take a look! It's a sketch Walt did in his journal while we were waiting, and he did it just for you.

We've moved on to the next destination. See you there!



Victory Miniworld with Mockup Icons, Note

### Sam the Eagle's Historic Flight

# **Kermit's Introductory Note:**

Hi-ho! Kermit the Frog here at Death Valley National Monument. Walt and I think this is where Sam arrived, but he's already flown off. We have no idea where to!

You know, if you could do a little bit of research for us, we might be able to learn where Sam is now. I'm sure he's been giving speeches wherever he goes, so he's probably in the local news. Could you try and find some old newspaper articles mentioning him?

A good place to start would be a library's microfilm reader. Click through to the reader and see what you can find! If you have to follow Sam's trail, then using a map of some kind to draw where he's been could be really helpful!

Send me a message with Bunsen's Time Phone once you know where Sam is, and ask for hints from Statler and Waldorf if you get stuck. Thanks, volunteer!

#### **Statler & Waldorf's Hint for Miniworld:**

Bunsen and Beaker must have missed something in their research. It looks like you'll have to pick up the slack! Click through to the microfilm reader when you're ready.

# **Evidence Page:**

A library's microfilm archive reader, with strips of newspaper microfilm. Three frames of the film strips are evidence hotspots.



Evidence Page Background Mockup

#### **Statler & Waldorf's Hint for Evidence Page:**

So many tiny newspapers! It's too bad there're no tiny Muppets to read through them. Best start looking around.

## **Evidence Pop-Up #1 – The Hollywood Headlines:**

### Sunday, October 10, 1937: "TALKING BIRD CHARMS STUDENTS"

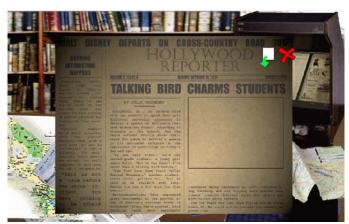
An uncanny bird with the ability to speak flew into Hollywood yesterday afternoon to deliver a speech at Hollywood Central Elementary School. According to students at the school, Sam the Eagle arrived shortly after their break for lunch to deliver a speech to his astounded audience on the importance of patriotism in today's day and age.

"He was very stern," said one second-grade student, a young girl named Molly. "But he was funny! I've never seen a talking bird before."

"Sam flew down from Death Valley National Monument," another student, named Jacob, pointed out, "but he told us he couldn't stay long. Seeing him was a lot more fun than school!"

Environmentalists have expressed great excitement at the arrival of one of America's national birds in Hollywood. Since Sam's arrival, bird watching rates have reportedly increased among residents by 237%. Conversely, dog fetching and cow tipping have become less common, causing distress among dog owners and much relief among farmers.

Sam the Eagle was last seen flying north, following Route 99. He could not be reached for comment at press time.



Evidence Pop-Up Mockup: Hollywood Headlines (name to be changed)

### Statler & Waldorf's Hint for the Hollywood Headlines:

For all Sam's patriotism, that bird has no common sense! He won't sit still. We'll have to track his movements ourselves.

#### **Evidence Pop-Up #2 – The Barstow Daily:**

Tuesday, October 12, 1937: "NATIONAL MASCOT COUNTS 50 STATES"

Citizens of Barstow were wowed yesterday with the sighting of an American bald eagle at the Harvey House hotel and train station. To their surprise, the bird could speak, identifying himself as Sam the Eagle.

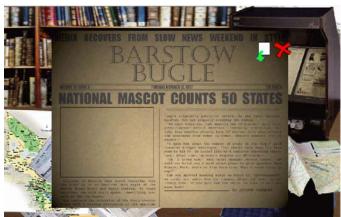
Sam captured the attention of the train station crowd with a rousing discussion of the American flag's singularly patriotic nature. He was later heckled, however, for not properly counting the states.

"He kept insisting that America has 50 states," said local schoolteacher Arnold Hackfeld. "Patently ridiculous. Not only does America clearly have 48 states, it's also covered the continent from coast to coast. There's nowhere left to expand!"

"I made him count the number of stars on the flag," said traveler Bridget Macintyre. "You should have seen his face when he hit 48! He looked like he'd realized something important. After that, he didn't dispute our 48 states!"

"Oh, I loved him," said hotel manager Jessie Turner. "He said our hotel was a much nicer place to give speeches than Frazier Park, where he flew here from. What a sweet thing to say!"

Sam was spotted heading south on Route 66. Unfortunately, we could not reach him for comment about his stay in our lovely town. If you spot Sam the Eagle, be sure to call our news desk!



Evidence Pop-Up Mockup: Barstow Bugle

### Statler & Waldorf's Hint for the Barstow Daily:

It makes a difference whether Sam flies or follows a road. Even he knows how to fly in a straight line! Too bad his speeches don't do the same thing! Ha!

### **Evidence Pop-Up #3 – The Tehachapi Times:**

Thursday, October 14, 1937: "BIRD, TO MINERS, WAXES POETIC OVER DAM"

Sam the Eagle, an American bald eagle hailing from parts unknown, visited Tehachapi yesterday on what he called his "tour of California." The bird made quite a ruckus at our Monolith Mine, congratulating the miners on a job well done. According to one of the miners, he was most impressed with our contribution to the construction of the Hoover Dam, and said so many times.

"He kept telling us all how patriotic we were for making the dam," said mining foreman John Tuttle. "I don't know about that. We just dig for rock. But he sure was a nice bird."

Tehachapi is only the most recent of Sam's stops on an extensive tour of southern California. The night before he flew here, the eagle apparently stayed in Hesperia, and has purportedly been to at least two other towns across the state over the past few days.

Foreman Tuttle's daughter Jessica was spending the day at her father's work and spoke with Sam before he left Tehachapi.

"He told me he's been looking for his friends," said the young Jessica, "all over California. But he can't find them! So instead of searching, he's going to wait for them to come to him."

We asked Jessica if she knew where Sam was headed next, but she was unsure. "He mentioned going to a 'familiar location' to wait," she said, "but I don't know exactly where that is."

Wherever Sam turns up next, it will undoubtedly be all the more patriotic because he was there.



Evidence Pop-Up Mockup

### Statler & Waldorf's Hint for the Tehachapi Times:

A "familiar location"? Must be someplace he's seen a lot in his travels. That bird has no imagination!

#### **Time Phone Instructions:**

Use the Time Phone to text Kermit and tell him the name of the place where he can find Sam the Eagle now.

#### **Time Phone Solution:**

**MUROC** 

### **Time Phone Response on Bad Solution:**

MESSAGE FROM KERMIT: Well, we can't find Sam; are you sure you pinpointed his location? Figure out where he's been. Once you know that, I bet you can figure out where he is now!

# Time Phone Response on Partial Solution ("EDWARDS"):

MESSAGE FROM KERMIT: Ummm... nobody here knows how to get to Edwards Air Force Base. They say it doesn't exist! Are you sure it was still called that in 1937? You might have to look it up in an encyclopedia.

## Statler & Waldorf's Hint for Time Phone:

Kermit only needs the name of the place. He can get directions from the locals. Remember, it needs to be a name that someone from 1937 will recognize!

#### **Kermit's Message (Miniworld, puzzle complete):**

Yaaaay! We found him! Well done, friend, and thank you.

Walt sketched something for you in his journal after we got to Muroc Lake and met up with Sam. He told me he mailed it to Muppet Labs, and since it's marked for a 2008 delivery, it should get to you any time now. Click through when you're ready to see it. It's quite the special gift!

Keep up the excellent investigating! We'll see you on the next leg of our trip.

### Fozzie Bear and Rowlf the Dog's Musical Code

# **Kermit's Introductory Note:**

Hi-ho! Kermit the Frog here with Walt Disney in San Francisco. We're in quite the pickle, dear volunteer. Walt and I spent the past several hours driving around, listening to Rowlf and Fozzie Bear play music and tell jokes on the radio. We've learned they're broadcasting from a jazz club called The Midnight Swing, but the club is packed! The bouncer isn't letting anyone else inside unless they can prove they're with the crew by saying the secret passphrase.

Well, Walt has been listening to the radio, and he's convinced that Fozzie and Rowlf are trying to tell us something through their music. Fozzie keeps telling jokes, and Rowlf keeps playing an odd series of notes on the piano after each one. Walt thinks that there's something special about those notes! You know, I think he's on to something.

Can you help us? Click through and take a look at the notes. We're sure there's something funny about them, we just don't know what! If you can figure out the passphrase, send it to me with Bunsen's Time Phone. Don't forget that Statler and Waldorf can give you hints if you need them!

#### Statler & Waldorf's Hint for Miniworld:

Wait, why are they trying to save Fozzie? We could be rid of that bear! Ah well, it's for Kermit. Brace yourself, and hope we don't have to listen to one of his jokes!

### **Evidence Page:**

The evidence page shows a player piano with a looping animation of a sequence of keys being struck: GABE FED DAD A BAD EGG. There is a pause between each word, and at the beginning and end of the phrase, a light flickers.



Evidence Page Background Mockup

### Statler & Waldorf's Hints for Evidence Page:

Here there are no pieces of evidence to collect, so the three hints will be given in sequence on the Evidence Page itself:

- 1. Ah! What terrible noise! I hope Rowlf is trying to tell us something by playing specific notes. If he's not, he's the most overrated musician I've ever heard! [Stuck? Click for more help.]
- 2. I think the notes spell out the passphrase. Each note is a letter in the sentence! [Still can't get it! Click for one more hint!]
- 3. Someone in your family might know which piano keys are which notes! If not, ask for their help in searching the internet. You're sure to find what's what!

### **Time Phone Instructions:**

Use the Time Phone to text Kermit and let him know the pass phrase to get into the club.

### **Time Phone Solution:**

GABE FED DAD A BAD EGG

### **Time Phone Response on Bad Solution:**

Well, I don't think that's the right passcode, dear volunteer. The bouncer laughed at us! Try double-checking your translation of the notes into words. Keep going, I know you're close.

#### **Statler & Waldorf's Hint for Time Phone:**

Unlike Rowlf's playing, wrong answers here aren't "good enough for jazz." You have to be precise!

### **Kermit's Victory Note:**

Yaaaay! The bouncer let us in! Thank you so much, friend, we've gotten inside and have met up with Rowlf and Fozzie Bear.

Walt's been enjoying his time in San Francisco. He sketched a beautiful picture of the city in his journal, and he tells me that it's for you, to thank you for your hard work! I've had the page from the journal mailed to Muppet Labs, with special instructions to not be delivered until 2008. You should be able to click through, see it, and even download it and print it! Enjoy it, dear volunteer. It's all yours.

We've headed off to our next stop. See you soon!

### The Swedish Chef's Recipe Memory

# **Kermit's Introductory Note:**

Hi-ho! Kermit the Frog here at the Santa Cruz Beach Boardwalk! Walt and I found the Swedish Chef cooking in a seaside restaurant called The Grotto. We've asked him to come with us, but Chef won't leave until he's finished all his orders. He's stuck on three of them!

He's left notes on the orders that explain why he can't finish them, but I still don't understand what he needs. Could you click to go inside and try to figure it out? They're famous Swedish Chef recipes that I'm sure he's cooked before. If you send me a shopping list with Bunsen's Time Phone, I can get him what he needs.

You may have to do a little research on the internet to find what Chef wants. If you do, be sure to ask your parents' permission! And remember, you can always ask Statler and Waldorf for hints, or your family for help. Thanks, volunteer!

#### **Statler & Waldorf's Hint for Miniworld:**

A chef who doesn't know his own recipes? It's a nightmare in the kitchen! Ha ha ha! He's probably waiting for you, so go on in.

## **Evidence Page:**

The background image here is of the restaurant kitchen, with three order notes visible.

### Statler & Waldorf's Hint for Evidence Page:

You'd best look at those orders yourself. There's no way we'll be able to understand him if he reads them to us!

#### **Evidence:**

Each piece of evidence is an order from a patron, with table number 1, 2, or 3, and the Chef's notes on what he needs for the recipe.

- 1. **Table 1:** An order for the Daily Special, under which the Chef has scribbled, "homecooked meal."
  - **Statler & Waldorf's Hint for Order 1:** What does Chef usually get when he tries for a home-cooked meal? Besides unhappy customers, I mean. Ha!
- 2. **Table 2:** An order for Bouncy Meatballs, and a note saying Chef needs the serving utensil.
  - **Statler & Waldorf's Hint for Order 2:** That Swedish meatball can't figure out how to serve himself? Ho ho! He must need something special to serve bouncy meatballs, but what?
- 3. **Table 3:** An order for chicken, which the chef has crossed out and replaced with "rubber chicken," with a comment that chickens are too difficult to catch.

**Statler & Waldorf's Hint for Order 3:** Kermit will never find a rubber chicken at the grocery store, but he might be able to find something Chef can use to make one. Maybe he'll find some common sense for Chef while he's at it! Ha!

#### **Time Phone Instructions:**

Use the Time Phone to tell Kermit what is required for the Chef to fill each order.

#### **Time Phone Solutions:**

- 1. VITAMIN
- 2. TENNIS RACKET
- 3. COCONUT

## **Time Phone Response on Bad Solution:**

MESSAGE FROM KERMIT: Uh-oh, volunteer. I got the ingredients you said, but I don't think the Chef can use them all. You know, he's making a very big commotion! We'll still need the ingredients for orders [order #s].

#### **Statler & Waldorf's Hint for Time Phone:**

Kermit needs precise directions, just like when he's up on stage! Write down those items as though you're making a shopping list.

# **Kermit's Victory Note:**

Yaaaay! Chef was happy, and with the tennis racket, coconut, and vitamins, he was able to finish the orders. You did a great job, dear volunteer!

Even Walt agrees! He's been spending his time sketching out a special version of the Boardwalk. I think he just mailed the page from his journal to you, postmarking it for 2008. You know, if you click through, you should be able to see it and even print out a copy for yourself.

We'll see you at the next stop!

## **Segue to In-Park Finale**

After completing the final puzzle and reading Kermit's note, when the Guest clicks the button to return to the Home Map, he is presented with a pop-up message similar to the introductory letter from Bunsen at the beginning of the game. The text of this message reads:

Volunteer, you have done so much for our test subjects! I'm certain that they're thankful to you for all your hard work. Unfortunately, we've hit one last snag.

On the drive back to Walt Disney's office and the waiting Time Machine, Kermit's Time Phone ran out of batteries. You see, I must have the precise location and timecode of the Time Machine in order to bring it back home, but without the Time Phone, Kermit can't get me that information! We can't even have him mail it to us like he did those sketches. If someone were to find the data before we do, the entire universe could explode like one of Gonzo's cannons!

But all is not lost. I've received a letter from Walt Disney himself! It seems that Mr. Disney was quite level-headed, and came up with a solution. He has specific instructions for us, and it involves going to Disney's California Adventure!

Can you travel to the park? We don't have much time before my instruments' connection with the time machine fails completely. According to my calculations, that will be on [game end date]. We must get to the park before then!

If you can go, read Mr. Disney's letter for yourself before you leave. Once you've arrived at the park, you'll need to contact me via your mobile phone's text messaging feature. Text "Operation Timesearch [player ID here]" to me the moment you go through the gate so I can confirm that it's you, and I'll help you get started. My text number is [number]—you should probably save it in your phone, because you may need to text me several times.

If you can't go, don't worry; Beaker and I are planning a trip out on [game end date]. But the sooner we get the Muppets back, the better, so if you can help us, click through to Mr. Disney's letter! He'll explain everything. Good luck, my heroic volunteer!

#### Bunsen

At this point, there is a button linking to the letter from Walt with the first of the in-park instructions.

# **H** Appendix H: In-Park Experience Document

### **Segue from Online Experience:**

Upon completion of the online portion of the game, the players are presented with the following note:

Hello again, Bunsen here! For a volunteer test subject, I must say you have done an amazing job for Kermit and his friends! I am positive that they're thankful to you for all your hard work. You should know, however, that we've hit one last snag.

On his way back to the Time Rewinder, Kermit's Dial-a-Time Phone ran out of batteries! I must have the precise location and timecode of the Time Rewinder in order to bring it back home, but without the Dial-a-Time Phone, Kermit can't get it to me.

How do I know this? Well, it seems Kermit was clever enough to mail us a letter and have it postmarked 2008, so I only just received it! He couldn't simply mail us the data, of course—Kermit knows that if anyone were to find it before us, the space-time continuum could explode like one of Gonzo's cannons! Instead, he came up with another solution, but it involves travelling to Disney's California Adventure.

Can you go to the park? We don't have much time before my connection with the Time Rewinder fails completely on [game end date]. We must get the data before then!

If you can't go, don't worry; Beaker and I are planning a trip out on [game end date]. But the sooner we get Kermit and his friends back, the better! If you can help us, read Kermit's letter for yourself and print out his instructions. Once you arrive at the Park, text "Operation Timesearch [unique ID]" to me at [short code], and I'll help you get started.

Good luck, my heroic friend! Operation Timesearch is almost complete!

### Bunsen

This note will appear on the front page of the website for any logged-in user who has completed the game. There will be a link to Kermit's letter from the past, reading as follows:

Hi-ho, friend!

Kermit the Frog here, writing to you from the year 1937! I've spent the past several days searching for my friends, and with you guiding me from the future, we've brought everybody together! You know, I couldn't have done it without you, and I just want to say thank you, from the very bottom of my heart. We all do!

Bad news, though: we're not done yet. My Dial-a-Time Phone has run out of batteries, and as you can see, I can't text you anymore! Now, the Time Rewinder says I need to give Bunsen its exact location and timecode. I'm worried about sending that to you in a letter like this, because it could be found by someone between now and 2008. I don't want to think about what could happen to the universe then!

It's okay, though. I think I've figured out a way to solve our problems! In the future, you know, I'm friends with several Walt Disney Imagineers. They're the people who build the Disney Parks.

Well, I've sent a letter to my future self explaining what's happened. I've given him strict instructions to pass on to the Imagineers. If I'm right, my future self will get the letter just before Disney's California Adventure is built. He can ask the Imagineers to help us out by hiding the data in the Park itself!

My friends and I should be safe with the Time Rewinder, but we need you to go to the Park. Use my instructions on the next page to find the hidden data! Then send each piece to Dr. Honeydew with the Muppet Labs phone number: [short code].

Good luck, my friend, and thank you again! With you at our side one last time, I'm sure we'll all be home soon!

### Kermit

The next page is a list of instructions with fill-in-the blanks slots for the following information:

- Street Number 256
- Street Name Metropole Ave
- City Avalon
- Island Catalina
- Timecode 41572-32769

Each of these is a text message the player must send to Bunsen in order to complete the puzzle.

The clues given on the letter are as follows:

1. A block of townhouses in the park's Golden State section will have street numbers that spell out a mathematical sequence. One number in the sequence will be missing. That number is the street number where we are waiting with the Time Rewinder.

Street Number \_ \_ \_

2. Sorcerer's Workshop Match each question with the same numbered tile. (Ask a cast member if you are unsure of any of the answers.) 1. Character name? 2. Character name? 3. His young princess? 4. Organization name? 5. Where this is found? 6. His Buddy's Sweetheart? 7. First line of the song? 8. Type of animal? 9. Musical Symbol? STREET NAME: [ ][ ][ ][ ][ ][ ][ ][ ] AVE

3.	A bayside restaurant in Paradise Pier will be modeled after the Grotto. Several murals will decorate the restaurant's outside wall. Look for the Cove "Where Feast Meets West", the first word on that mural is the name of the city where the Time Rewinder is!
	City
4.	In the courtyard of the park's Hyperion Theater, a series of billboards will feature Disney cartoons. Follow Minnie's gaze to the name of the island the city is on. She knows the way!
	Island
5.	Finally, next to Fly'n'Buy in Condor Flats, I will have the Imagineers erect a wall of license plates. The first half of the timecode will be printed on two identical plates, hung one above the other. The second half will be printed on two identically-numbered plates, but they'll be from different counties. Combine them to get the timecode!
	Timecode

These clues will also be handed out at Guest Relations in-park with a slightly different narrative to players who are joining for the first time.

**Solution:** If the players text all the correctly formatted solutions to Bunsen, they will receive a victory note via SMS with instructions to see the DCA cast member at the MuppetVision 3D theatre to complete the adventure.

# I Appendix I: Database Design Document

#### Core Requirements

#### **Domain**

For the online ARG only one domain is necessary; we would like TheMuppetsExperiment.com which is listed as available on 10/02/08. If it is to be listed as a sub domain under Disney.com than anything related to "The Muppets Experiment" would be suitable based on availability.

#### Data Collected and How it will be Used:

**Registration Information:** We would like an online registration that would gather the following information from the player: Name, Cell number (if SMS is possible), Email (to send rewards if possible), and login information with a username and password. The registration information gathered would be used for gathering statistics and communicating winners to the in-park crew. As discussed with members from the Online Attractions group, this could be done with an iframe containing Disney.com's registration form and would go into a Disney owned and maintained database to protect personal information.

**Login:** The reasoning behind the user login is that because this ARG does not have a community aspect such as a forum, nor does it have a set timeline, so each player has an individualized experience. Based on the player's progress throughout the game different elements are tracked with a database or saved objects. Using the login also enables a save game feature for usability when they leave and return to the site.

**Player Information for In-Park:** As suggested in a previous meeting, it would be helpful if the Disney registration database containing each user's personal information could be communicated to the in-park crew once an individual player has completed the online game. This information would ensure that the deserving players would receive an award, allow the crew to track who solved the in-park puzzle, and to help estimate how many rewards would be printed for distribution.

As mentioned in our last Disney meeting 10/2 was to have players who begin their ARG experience in-park should have their information also recorded. This would be separate from those who had played the online experience and finished at the park. I am assuming we would need a different table with the same fields to accommodate this, and that the crew could access the database to enter information from the computer at the kiosk.

Target Audience and Rabbit holes: The rabbit hole system we outlined in our Design Doc is a series of three emails inviting players to participate in a Muppets Experiment, it consists of text outlining the background story along with an image of Dr.Honeydew and Beaker, as well as provides a link to the site. The link would bring these users to either the registration page or the home page with login. We would like the ability to send one aggregate email to all Disneyland Resort annual passholders (and anyone else WDI would like us to include in the target audience). This would require the permission of accessing these passholders information; this would not require the WPI ARG Group to personal use the data, if possible Disney could send the email and avoid legal conflict. We are also speaking with Jeff Voris about having clickable ads placed on Disney.com and on the Annual Passholders site saying "Muppets Need your Help" and would link to the ARG Site for registration.

**Tracking Puzzle Completion:** We would like integrate tracking each puzzle's completion with the user IDs in the Disney database, such as if the player has solved Puzzle A, Puzzle B, the whole game, etc. It would also be useful for Disney's statistics to track the overall number of users that solved each puzzle. Every time a player completes a puzzle it will be reflected on the home page on the map. Either the "postcard" images of the Muppets in their locations would now be visible on the map or they would change, either way it would be changing the state of an image overlaid on the background bulletin board.

Player Rewards and Assets: We would like permission to allow players to download and/or print certain assets from the site (by PDF, etc). These assets would be the reward sketches that could either be emailed out to the player, or the player could enter a code into a textbox on the page and when verified be presented with a click-to-save file or a file to be viewed in the browser. Either option is fine, but the email idea would need to implement the database by checking a player's completion of the puzzle, as well as access to the person information in Disney's database.

## Wish list Requirements

The following is a list of ideas that could be used for a future extended ARG or for this prototype based on permissions, time and technology available.

#### Email:

- the ability to receive and interpret emails from players and respond intelligently
- the ability to receive and interpret emails and directly change the state of their game data based on their email address and the content of the email they sent (would require access to a registered email address on their account)
- the ability to email players based on their current position in the game

#### SMS:

- the ability to receive and interpret SMS from players and respond intelligently
- the ability to receive and interpret SMS from players and directly change the state of their game data based on their phone number and the content of the SMS (would require access to a registered mobile phone number on their account)
- the ability to send SMS to players based on their current position in the game

## **Database Requirements:**

- Registration database containing personal information and login information (Disney end). The fields required are: Name, Cell number (if SMS is possible), and Email (to send rewards if possible). The login information consists of a username and password.
- User Tracking database containing user ID and state of each puzzle the user has completed (4)
- The User Tracking database would need to connect with Disney's to collect the unique User
- Table for overall puzzle and game completion for Disney statistics, updated based on user DB.
- Depending on the format of the site the puzzle state would change based on a verified user entry in a textbox with scripting. The evidence states would change when a user clicks on a hotspot.

- Based on the puzzle states, the homepage map would reflect the successful rescue with the Muppet "postcards" on the respective locations or the image would change in some way (black in white to color, etc.)
- If possible, the ability to access a player's email in Disney's registration database to send rewards based on puzzle completion state in the database.
- If possible, the ability to access a player's email in Disney's registration database to send messages from a Muppet Character.
- If possible, the ability to access a player's cell phone number in Disney's registration database to text message a code to then enter on the site. The correct code would change the database state for the respective puzzle.
- Tracking whether or not a player has already completed a puzzle would determine if instructions were repeated upon visiting the miniworld again for replay. This would apply for each miniworld (4) and would switch between two different files to display based on a Boolean query.

J **Appendix J: Database API** 

**HTTP Service calls** 

1. Determine if a guest is logged in

This call can be used to determine if a guest is logged in. Guests who are logged in should be granted access to the web site. Guests who are not logged in should be directed to a location

where they can log in.

http://parklink.disney.go.com/muppets/dis/isGuestLoggedIn

Parameters: (none)

Return value: true if the guest is logged in. false if the guest is not logged in.

2. Indicate that a guest has completed a task

The guest must perform a series of tasks on the web site. The first task is that they accept the terms of use. Subsequent tasks include completing puzzles. The guest's unique ID will read from

cookies, so it does not need to be included as a parameter.

http://parklink.disney.go.com/muppets/dis/setTaskCompleted?task=<task name>

Parameters:

• task: string containing the name of a task performed by the guest

Return value: true if this call is successful, false if this call fails.

3. Query the status of a given task

To determine if a guest has already completed a given task, the Flash application may call this function. The guest's unique ID will read from cookies, so it does not need to be included as a

parameter.

http://parklink.disney.go.com/muppets/dis/getTaskStatus?task=<task name>

Parameters:

• task: string containing the name of a task to be queried

95

Return value: complete if the task has been completed. incomplete if the task has not been

completed.

4. Query the number of tasks completed by a guest

A quick way to determine if a guest has completed all tasks would be to query how many tasks

are complete and if that number is equal to the total, the guest has completed the web portion of the game. The guest's unique ID will read from cookies, so it does not need to be included as

a parameter.

http://parklink.disney.go.com/muppets/dis/getNumberOfCompletedTasks

Parameters: (none)

Return value: a string representation of the number of tasks completed

5. Begin the process of sending e-mail to a guest

When guests first visit the site, they "sign up" for the experiment and the site begins delivering

e-mails to the guest on a timed basis. This function can be used to tell the WDPRO environment

to begin sending e-mails.

http://parklink.disney.go.com/muppets/dis/beginSendingEmails

Parameters: (none)

Return value: true if this call is successful. false if this call fails.

96

# K Appendix K: Puzzle Pitch: Gonzo's Great Escape

# Gonzo's Great Escape

Entering the game, the player is presented with a floorplan of the fictional Hollywood Tower Hotel. One room is lit up, indicating our hero's current position. The player must navigate the floor room-by-room in order to reach the stairs. Since our hero started out above the vanished floors, he'll be trying to get to the roof rather than the ground floor.

All rooms connected to the hero's current room by a door are clickable buttons. Clicking on such a room will move the hero to that room (lighting it up), and the floorplan will change according to which door was moved through. Each door, when moved through, switches doors from its own preset list between the real world and the Twilight Zone (doors in the Twilight Zone are invisible and rooms through those doors are inaccessible).

There will be at least one programmed path to the goal stairwell, but the game will allow for many different paths as the player discovers the patterns which arise.

(Screenshot shows a lit-up room indicating the player's current position, and a pointer hovering over an adjacent open room, with the light flooding in, indicating that the door is open and the room is accessible.)

#### L Appendix L: Online Experience Reward: Kermit's Letter

Hi-ho, friend!

Kermit the Frog here, writing to you from the year 1937! I've spent the past several days searching for my friends, and with you guiding me from the future, we've brought everybody together! You know, I couldn't have done it without you, and I just want to say thank you, from the very bottom of my heart. We all do!

Bad news, though we're not done yet. My Dial-a-Time Phone has run out of batteries, and as you can see, I can't text you anymore! Now, the Time Rewinder says I need to give Bunsen its exact location and timecode. I'm worried about sending that to you in a letter like this, because it could be found by someone between now and 2008. I don't want to think about what could happen to the universe then!

It's okay, though. I think I've figured out a way to solve our problems! In the future, you know, I'm friends with several Walt Disney Imagineers. They're the people who build the Disney Parks. Well, I've sent a letter to my future self explaining what's happened. I've given him strict instructions to pass on to the Imagineers. If I'm right, my future self will get the letter just before Disney's California Adventure is built. He can ask the Imagineers to help us out by hiding the data in the Park itself!

My friends and I should be safe with the Time Rewinder, but we need you to go to the Park. Use my instructions on the next page to find the hidden data! Then send each piece to Dr. Honeydew with the Muppet Labs phone number: ((INSERT SHORT CODE HERE)).

Good luck, my friend, and thank you again! With you at our side one last time, I'm sure we'll all be home soon!

Kermit

Fill in the blanks next to each clue to decipher a piece of the data. Send each piece to Dr. Honeydew! A. A block of townhouses in the park's Golden State section will have street numbers that spell out a mathematical sequence. One number in the sequence will be missing. That number is the street number where we are waiting with the Time Rewinder. Street Number \_\_\_\_ B. In the Sorcerer's Workshop, match each question below to the right tile on the west wall using the diagram I've drawn. Put the boxed squares in order to find the name of the street where we're waiting. If you need help with any of the questions, ask a Cast Member! 1. This character's name? 2. This character's name? \_ \_ \_ \_ 3. His young princess? \_ \_ \_ 4. This organization's name? \_ \_ \_ \_ 5. Where this was found? \_ \_ \_ 6. His best friend's sweetheart? \_ \_ \_ 7. First line of their song? \_ \_ \_ \_ 8. Type of animal? \_\_\_\_\_ 9. Name of this musical symbol? \_ \_ C. A bayside restaurant in Paradise Pier will be modeled after The Grotto. Several murals will decorate the restaurant's outside wall. Look for the Cove "Where Feast Meets West": the first word on that mural is the name of the city where the Time Rewinder is! City \_ \_ \_ \_ \_ D. In the courtyard of the park's Hyperion Theater, a series of billboards will feature Disney cartoons. Follow Minnie's gaze to the name of the island the city is on. She knows the way! Island \_\_\_\_\_ E. Finally, next to Fly'n'Buy in Condor Flats, I will have the Imagineers erect a wall of license plates. The first half of the timecode will be printed on two identical plates, hung one above the other. The second half will be printed on two identically-numbered plates, but they'll be from different counties. Combine them to get the timecode!

#### M Appendix M: PowerPoint: ARG Overview





# HIGH CONCEPT

- Scavenger hunt-like game
- Uses real world elements as the tools of engagement
- Drives players to Disney's California Adventure
- Culminates in park with final challenges and reward

STRUCTURE OF THE ARG

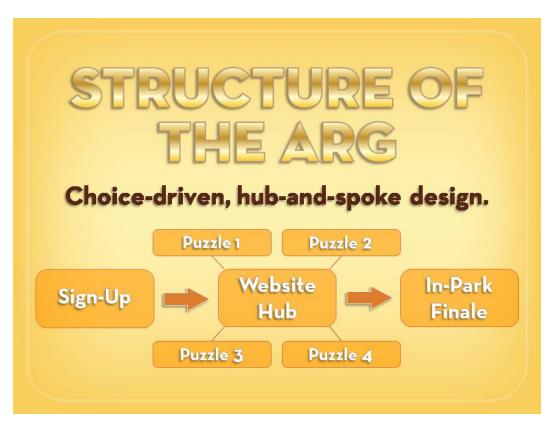
Players can join at any point.

At Home



In Park

- Email Invitation
- Disney Web Sites
- In-Park Kiosks





# THE STORY

Dr. Bunsen Honeydew and Beaker have created a time machine.

When they test it, they succeed in sending their Muppet test subjects back in time, but have lost them in 1939 California.

It's up to you to bring the Muppets home!

# HOW IT WORKS

Dr. Bunsen Honeydew invites you to participate in a special time-travel experiment.

To Qualify
CLICK HERE

Guests learn about the experiment via:

- ·Emails sent to Annual Passholders
- •Notes in Disney magazines, websites, online ads
- In-park Kiosks, maps, time guides

#### Guests receive an email...

"Thank you for signing up for our experiment. Although you weren't chosen at this time, but please join us in congratulating our test subjects.

To follow their progress, go to

MuppetLabsIC.com"

# A short time later, guests receive another e-mail...

"We've lost our test subjects and need your help! You have now been selected to participate in a once-in-a-lifetime, time travel experience. Here's what we need..."

- People at home to track down clues left by our friends stuck in that past.
- People to go to Disney's California Adventure in the next four weeks to help bring the Muppets home.

Kermit has landed in 1939 - in Walt Disney's office. Unfortunately, his friends are nowhere to be found.

According to Bunsen and Beaker, the Muppets have been scattered around California. With Walt as his driver, Kermit has gone in search of them. But each Muppet has gotten into trouble!

You have to help Kermit get the Muppets out of their jams and back to the time machine.

Meanwhile, Walt sketches out his ideas for an amusement park based on his travels with Kermit: Disney's California Adventure. When it's time to get the Muppets back to the present, you must go to the park and use Walt's own clues to solve one final puzzle – and bring the lost Muppets home!

# REWARDeee

- Walt's sketches of his vision of DCA, sent forward through time with his instructions for completing the final puzzle. (Downloadable, printable images)
- Walt's fun map of DCA, given to Imagineering by Kermit and passed on to you after the final puzzle, as a promise of what's to come. (Handout in park)
- Muppets send you a thank you e-mail when you get back home. Mysteriously, it has a picture of you!





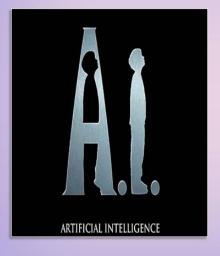
"Dear Friend, umm...
we've had another incident..."

Traditionally referred to as Alternate
Reality Games (ARGs)

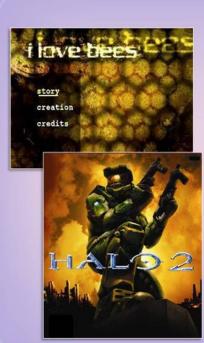
RECENT ARG

EXAMPLES

### "THE BEAST"

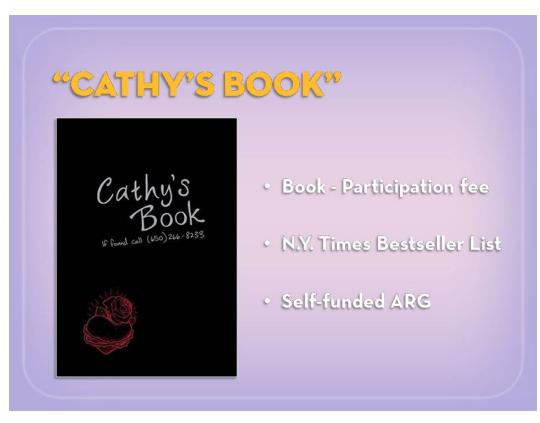


- 3 million participants
- · Promoted "A.I."
- · Launched Microsoft games
- · Online, voicemail and fax



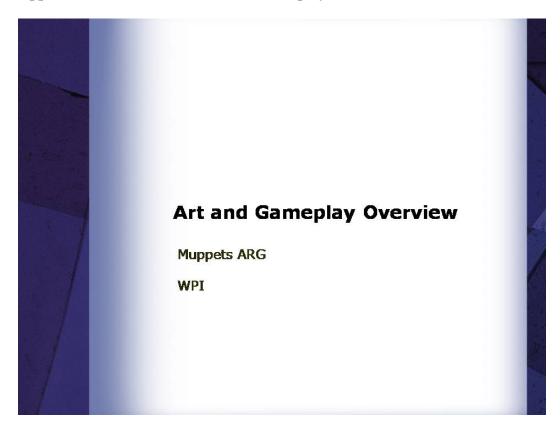
## "I LOVE BEES"

- · Launched "Halo 2"
- · 2 million participants
- · 10 million site hits
- Online, player created content, real world locations





#### N Appendix N: PowerPoint: Art and Gameplay Overview



#### **Presentation Outline**

- Homepage Overview
- Homepage Mockup
- Mini-world Overview
- Step-by-step: Miss Piggy mini-world
- Puzzle Pages Overview
- Step-by-step: Miss Piggy puzzle

#### **Homepage Overview**

- Map of California with hotspots on photos of 4 different locations that link to the 4 different mini-worlds.
- The photos are of only location and after the respective Muppet is "rescued" then it will appear in the photo on the homepage.
- The note card in the bottom right corner will be click-for-popup with Bunsen's introductory message and for his final message.



Map by Wes Keil



Statler & Waldorf, click for pop-up hint on how to navigate homepage

Note card has Bunsen's intro message when player first comes to site and has final message when puzzles completed. Click for pop-up. Also once intro message read, bullets will replace, ex. 3 Muppets left to find!

#### **Mini-World Overview**

- Background is enlarged version of location hotspot photo on homepage
- Kermit will appear holding note w/ instructions after 2 seconds on page
- User clicks on note to continue to Puzzle Page
- Statler & Waldorf icon click for hint (on rollover highlight border)
- Map icon click to return home (on rollover highlight border)

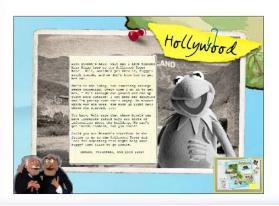
#### Miss Piggy Mini-World Mockup 1/5

- Background images by Wes Keil
- Below is what the user will see immediately after they click on the location hotspot photo on map.



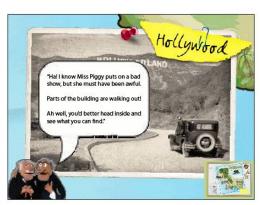
#### Miss Piggy Mini-World Mockup 2/5

 After a small pause, allowing the user to see the background image, Kermit will appear holding the note w/ instructions (below). Clicking on the note will go to the Puzzle Page.



#### Miss Piggy Mini-World Mockup 3/5

 If the user clicks on the Statler and Waldorf icon, the image will highlight around the border and produce a pop-up on click.



#### Miss Piggy Mini-World Mockup 4/5

Below is after solving the puzzle.
 Now the Muppet is in the background picture.



#### Miss Piggy Mini-World Mockup 5/5

 There will be a slight pause so the user will notice the Muppet now "rescued" and in the picture, then the thank you note will appear. Click on note to download reward.



#### **Puzzle Page Overview**

- After clicking through Kermit's message on the miniworld, arrive at a "scene" from the story.
- Scene has same border as Mini-World, but with two additional buttons:
  - Time Phone: To enter the puzzle solution.
  - Kermit's message: To return to the Mini-world and review the introduction.

#### Miss Piggy Puzzle 1/9

 The scene here is the library of the Hollywood Tower Hotel



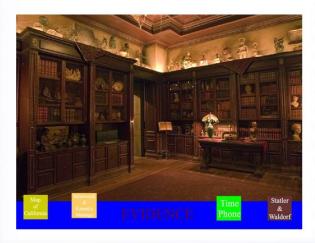
#### Miss Piggy Puzzle 2/9

 Clicking on Statler & Waldorf will present a pop-up with a helpful hint.



#### Miss Piggy Puzzle 3/9

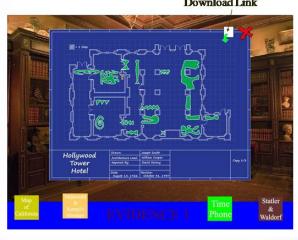
 There are three hotspots hidden in the page. They reveal themselves when moused over.



#### Miss Piggy Puzzle 4/9

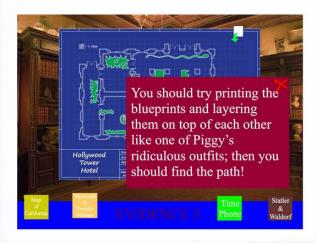
 Clicking a hotspot will pop-up the piece of evidence related to the puzzle, with a clue to the solution.

Download Link



#### Miss Piggy 5/9

 Clicking Statler & Waldorf from any evidence pop-up will produce a different hint for each.



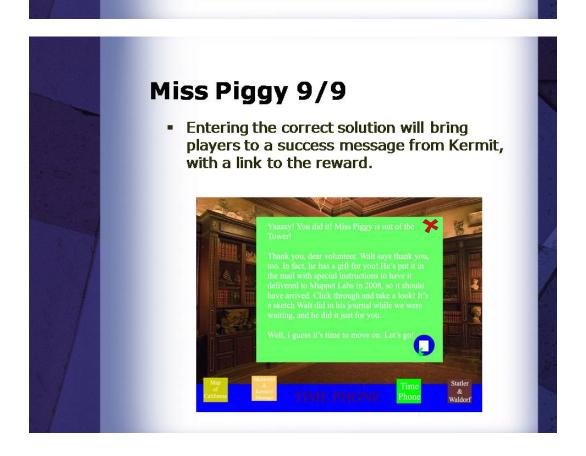
#### Miss Piggy 6/9

 Once a player has all the clues, he can solve the puzzle by clicking on the time-phone icon to bring up:



# Miss Piggy 7/9 Statler & Waldorf provide additional support here as well. Use this timephone to call Kermit and let him know which way Miss Piggy must Use Spell out each step for Piggy. One square is one step, so count carefully for her. She sure can't! Ahaha!





#### **Other Puzzles**

- Sam the Eagle is technically similar.
- In the Swedish Chef puzzle, there is one solution for each piece of evidence, so the Time Phone has three text entry boxes, and will inform the player which one is correct.
- In the Fozzie & Rowlf Puzzle, there are no hotspots or evidence popups, and the background "scene" is an animated piano playing the notes which spell out the solution.

#### **Additional Comments**

 In this powerpoint on the puzzle pages, the icons are just color block placeholders. The following icons will replace them (plus an image of each mini-world shrunk down):





