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ARG Relevance as a Marketing Strategy in a Museum

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ARG Relevance as a Marketing Strategy in a Museum

Interactive Qualifying Project Proposal

Submitted to the Faculty

of the

WORCESTER POLYTECHNIC INSTITUTE

In partial fulfillment of the requirements for graduation

By

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Abstract

This project explored the use of alternate reality games as a marketing strategy in a museum environment. An alternate reality game is a largely web-based virtual scavenger hunt where the players find information and solve puzzles to uncover a story. The setting for the game was the Higgins Armory Museum. The project created and ran an ARG, analyzing what tactics worked or did poorly in stirring interest in the museum.
Contents

Abstract.......................................................................................................................................................... 2

Introduction ................................................................................................................................................ 5

Chapter 1 - Digital Media .......................................................................................................................... 7

Introduction ................................................................................................................................................ 7

Virtual Digital Media .................................................................................................................................... 7

Examples of Non-Virtual Digital Media .................................................................................................... 13

Media and Museums .................................................................................................................................... 16

Possible Paths for ARG Media .................................................................................................................. 20

Implementation and types of puzzles .......................................................................................................... 24

Chapter 2 - Story ....................................................................................................................................... 30

Mythology .................................................................................................................................................. 30

Archeology .................................................................................................................................................. 42

Exploration .................................................................................................................................................. 48

Professor Bell ............................................................................................................................................. 53

Chapter 3 - Alternate Reality Games ....................................................................................................... 59

ARGs and Marketing ................................................................................................................................... 59

ARG Structure ............................................................................................................................................. 66

Materials Organization of ARGs ............................................................................................................. 79

Conclusion .................................................................................................................................................. 82

Team Bios................................................................................................................................................... 87

Works Cited ................................................................................................................................................. 89

Appendices ............................................................................................................................................... 93

Appendix A – Design Document ............................................................................................................. 93

Game Overview ......................................................................................................................................... 93
Appendix B - ARG Content ........................................................................................................................................... 99
Critias Research Bio....................................................................................................................................................... 99
Staffing Paragraphs ......................................................................................................................................................... 99
Journal Entries............................................................................................................................................................... 104
Appendix C - Professor Bell’s Website .......................................................................................................................... 121
Appendix D – Atlantis ...................................................................................................................................................... 128
Appendix E – Mayan Calendar ........................................................................................................................................ 129
**Introduction**

This project created an ARG or alternate reality game for the Higgins Armory and studied its effectiveness as a marketing tool. An ARG is a virtual scavenger hunt where the players find information and solve puzzles to uncover a story. In some cases, ARGs traverse into the real world, constructing for the player, an augmented reality from what the player knows and believes to be true. Typically ARGs are used to advertise movies and games before their release, but in this case, the ARG would advertise an existing exhibit in the museum, something which had not been done previous to the project.

Players usually begin the game by finding something called a “Rabbit Hole” which is an entrance to the world the game is set in. Rabbit holes are generally things that link the player to a website or bring them to some sort of installment in the real world specifically made for the game. Once inside the world the players will find puzzles and other sorts of hurdles that they must overcome in order to uncover more of the story associated with the game.

*Missing Poster “Rabbit Hole”*
Our rabbit hole leads players into the world of Rufus Excalibur Bell. Professor Bell is a fictional character playing the role of Curator of Curiosities at the Higgins Armory. His job is to bring back artifacts representing the mythical and unbelievable of our world. Such artifacts include Medusa’s head, and the wings of Daedalus. The temporary exhibit “Beyond Belief” located at the Higgins Armory exemplifies who Professor Bell is, and what he has been doing over the past several years. The exhibit consists of two rooms full of Professor Bells “findings.”

Professor Bell Business Card

In the following research document, we broke up the information into three sections. The first section talks about digital media used in today’s highly technological world and how those uses are sometimes not the original intended purpose including the possibility of being used in an ARG. The second section talks about the story of Professor Bell as well as several myths and legends including information about the Mayan calendar. The last portion goes into further depth on the construction and inner workings of an alternate reality game.
Chapter 1 - Digital Media
Researched and Written by Tyler Berg

Introduction

Digital media is a vast pool of devices and virtual ideas that concatenate to form a culture. This culture creates a piece of our society today that not only affects the world around us and how we interact with it, but also affects our future, and, technologically, where our planet is headed. If we can understand the digital media of today, maybe we can track where it is headed, and find other possible benefits and uses for digital media.

Virtual Digital Media

Instant Messaging
Instant messaging is usually a free online service that allows for users to send text based messages to other users. Instant messaging was actually born before the internet and used on multi users operating systems, but today, instant messaging is associated with the internet. Some instant messaging applications include Pidgin, and America Online Instant Messenger, as well as the aforementioned Skype.

Blogs
Web logs, commonly referred to as blogs, are websites that function usually as online journals or diaries. Blogs are not limited to what information they can contain, and as such, while many blogs a doors into someone else’s life many more blogs a sources of information on a certain subject. Blogs tend to follow a similar type format, and usually contain a common theme between the other logs created by the same person.
**Microblogging**
Microblogging would be considered the succinct version of blogging. Microblogs tend to also be more focused on the most recent post or entry, while blogs apart from microblogs tend to be a continuation of a previous post or idea. Microblog posts are also shorter in comparison to blogs. An example of microblogging would be a website called Twitter. Twitter lets the user display to the world what they are currently thinking. While a lot of microblogging tends to be very self-promotional, or pointless babble, some microbloggers use the service to pass along news. In a crisis where someone needs to be updated on a very quick basis, for an example, an incoming natural disaster, microblogging can become a very important source of information.

**Podcasting**
Podcasting is an audio/video form of blogging. Podcasting is one of the only blog types that is meant to be downloaded to the user’s computer rather than streamed online. While most video type blogs are uploaded to a repository, podcasts are uploaded and downloaded usually from a specific program. These programs include iTunes and Winamp, and were originally used as music distributors and organizers. As podcasts became more popular both programs moved to be able to handle video, and allow for streaming or downloading from the program.

**Video blogging/Videosharing**
There are two types of videos shared on the internet. The first is serially inducted videos containing something similar which is also referred to as video blogging. Video blogging is a type of web logging that takes the form of video passages. The other type is where the videos may not have a
common link, so are not logs upon each other, but are still shared on the internet, for either entertainment, educational, or even sometimes unknown purposes. Both types are hosted on a video repository site called YouTube. YouTube acts as a site where users can upload, under certain agreements, certain videos to share with the rest of the world. It can also act as a form of social networking where friends can be requested, and videos by a certain user can be subscribed to and watched closely. Recently, YouTube has been used by many companies to self promote themselves through their videos.

**Photosharing**
The term photosharing, like videosharing, is the sharing of digital photos typically across the internet. To do this the user digitalizes the pictures he wants displayed then uploads them to a photosharing website. The website then, depending upon preference, displays the photos either to the public or only to friends and family. A popular site for photosharing is called Flikr. It allows for not only the ability to share photos with the public, but the ability to construct what would be considered a “photoblog” type presentation. Flikr also works as an online community so users can get feedback on their photos, and even find people of similar interest.

**Audio and Music Sharing**
Myspace, while originally being a website for social networking where users can add friends and write on other peoples pages, has in recent years become used less for individuals and more for upcoming and already existing bands. Myspace music is one of the largest growing music sharing sites if not considering websites with illicit material.
**Social Networking**

Facebook, like Myspace, is a social networking site, but is different in the fact that instead of declining in the number of users, it has been increasing rapidly over the past several years. Talking about a reason for this Tom Anderson, co-founder of MySpace told The Guardian. “A lot of people thought it was too hard to use, they thought it was a music site, or a content site. Privacy was a concern, or they’d say it was a site for teenagers.”

**Wikis**

A wiki is designed for a large community to edit a number of linked webpage’s, usually containing information on a certain subject, easily. An obvious extension of this definition would be for encyclopedia type wikis, and example, Wikipedia. Wikipedia is a collaborative website that allows anyone with access to the site, the ability to edit its contents or add pages that don’t exist. In this case the site doesn’t contain information on a certain subject, but information on a wide array of topics. The form of editing is usually a text editor, and when submitted, is translated into HTML, or Hypertext Markup Language. Although the power of the people accessing the internet is substantial to say the least, the editing of public sites doesn’t not come without virtual vandalism.

**Forums**

A forum, is a site where users are able to contribute methodically to a topic or discussion. The first user might post an idea, or a question, then every user after that contributes to the idea, or answers the question.

Many types of abuse can come from a forum. These include trolling, sock puppeting, spamming, and double posting. Someone who trolls a forum repeatedly posts messages that are not appropriate or
derogatory. The idea of trolling is that a lot of people will be angered by what the poster said, and reply to the message. Two possibilities for this would be because a user’s status could be based on how many replies the user received from his post, resulting in a higher level of clearance than the other users. The other reason is purely destructive, and to see a rise out of other people. Sock puppeting is where a user creates several accounts so he can agree or even disagree with himself. This would be used in cases where a side is very hard to argue, or that side is very controversial. It could be also used to spark discussion in a topic. Spamming is where a user consistently writes messages that are off topic or just in all capital letters. Spamming can be used for advertisement opportunities as well as trolling. Double posting is done, sometimes on accident, by users who supply the same post twice. The reason for this is to boost the amount of posts that users has on the website, in turn, increasing the status of the user giving them a higher level of clearance or credibility.
Example of Forum; This one eventually used in the Project

**Virtual Worlds**

Virtual worlds exist as an environment or simulation, where users can make virtual characters and explore and grow. One of these virtual worlds, Second Life, allows users to buy and sell items in game at a real world cost. Money can be put in or taken out of the game, which allows for a possible business opportunity. Items can also be created at the cost of money, and added into the game, so much of the games development is done by the users. Baseline, a business management site explains that "Real-world companies such as American Apparel, IBM, Starwood Hotels and Toyota
are exploring whether 3D virtual communities can be adapted to serve business – and whether they are an effective place to do market research, collaborate on projects, and sell goods and services.”

**Game sharing**

Game sharing sites, much like any other sharing site of different media, allows for the distribution of games. In most cases these games tend to be small and are meant to be played in the web browser. The games are usually developed on an application called Adobe Flash. Flash provides an easy way for developers to combine programming and art, seamlessly. Kongregate is one of the most popular game sharing sites at the moment. Unlike other forms of media sharing, game sharing on Kongregate allows developers the ability to earn money back based on the game. A well made game would be paid for by the site, then have the chance to earn extra money by popularity, and finally receiving money based on ad revenue.

**Examples of Non-Virtual Digital Media**

Digital media breaks up into two categories, the second being non-virtual digital media. This is media that physically exists, and although there may exist not appropriate application to the alternate reality game, here are a few examples.

**RFID**

What it is

In today’s society Radio Frequency Identification or RFID can be used anywhere from gaining access with a security card to tracking an individual with an RFID chip located on them. RFID tags can send out a signal at high frequency to transmit data in a small area.
**How it works**

There are three types of RFID tags; Passive, Active, and Semi-passive. A passive RFID tag only sends a signal when another signal is being sent to it. The power required to activate such a signal is sent through the original device trying to read the RFID tag so no battery is required on the device. This allows the tag to be very small and even fit between the pages of a book without being noticed.

Active signals require a battery because they transmit data all the time. Active RFID tags have a larger range than passive tags by about eighty feet. The other upside to active tags is that they don't need a signal to transmit and send out their information. An example of an active RFID would be the E-ZPass tag many commuters on the eastern coast of the United States. The system uses a large tag on the front area of the car to read the ID of each of the cars passing through a toll. The cost of the toll is then added to a bill and sent to the owner of the car. The RFID system increases the speeds that cars can go through the toll instead of conventional stop and go pay system. Semi-passive tags work in much the same way that a passive tag works in that it requires a signal to activate, but it also contains a battery for a strengthened signal and further range.

**Asset Tracking**

Some companies utilize RFID's power to keep track of products in a warehouse. As some of the merchandise leaves the warehouse, it is scanned with an RFID reader and logged in the system. This tells the company when they need to reorder and restock some of the products. This could also tell a company what types of products a customer is buying, and with that information possibly improve sales. Samsung Tesco a company with a hand on the food industry developed something similar in 2004. The company equipped, in one of their grocery stores, all the shopping trolleys and baskets with RFID chips giving the company the ability to track its customers as they traveled through the store. With this information they were able to see what types of foods the customers were buying, and with that, start grouping objects of similar frequency in the same aisles.
Security/ Privacy Issues
With all the information provided by RFID traveling in the open air, many people are concerned with the security of data, and the privacy that they have. Within the past couple years RFID has been used in credit cards to speed up transactions, but in October of 2006, researchers announced that they successfully cracked the RFID security of the cards. The RFID signal can not only be read but also copied and repeated by another source.

IDTech, manufacturer and distributor of RFID, believes the RFID market will reach 26.2 billion by the year 2016.

VoIP
Voice over Internet Protocol, or VoIP, is used to translate analog sound into digital information, then transmit that information across the internet. There are several applications and devices that are widely used to help in the translation of data. These include specifically made VoIP phones as well as programs that convert voice directly on the computer. The phones transmit digital data, so they are able to be plugged directly into a network. For a company, cutting a phones bill down to zero can be exponentially beneficial. The other type are application placed on a computer that transmit the already converted digital data across the internet. One of these programs, Skype, can also transmit video as well as voice and allows for instant text type messaging. VoIP can be used from a business conference to a group of friends trying to reconnect.
**Media and Museums**

In today’s ever shifting world, it seems that in most cases, if something doesn’t rise to meet the changes in technology and the transformation of our society, that thing will be forgotten. An exception to this rule is museums. As the world moves on, people look back at museums not only to gaze at pieces of priceless art but they also come to museums to remember and enjoy where they came from and the history associated with it; but can technology help improve a museum? Nina Simone explains that technology, in her case the idea of web 2.0 “can provoke significantly greater repeat visitation, more personalized, meaningful visitor engagement with content, and perhaps most importantly, the opportunity for communication and sharing among visitors.”7 Web 2.0 is the idea that the internet used to be very static, much the same way that a museum is static. It doesn’t allow feedback, or communication. Instead it is a designed space that relies on only input from other members of the museum. Web 2.0 is considered to be the next step in the progress of the internet. Everything is dynamic instead of previously designed, and everything is dependent on the users “who grant each other authority at will.”1 Nina Simone has the idea that it does not take the actual use of digital media in a museum but just the use of how digital media is used today to construct a logical template of improved interactivity.

**Blogs**

Blogs can be used to benefit museums by allowing users to provide feedback on events and exhibits. Two museums that continually uses blogs to communicate with the community are the Science Museum of Minnesota and the Ontario Science Centre. Both the museums use the blogs to allow users and visitors to contribute ideas about the museums. Without feedback from the audience that it is serving, a museum can fail. Feedback creates a well of information that helps a
museum construct an idea of what people are enjoying, and with that information is able to create an updated exhibit of constantly more interest grabbing material. Although there are several other ways to get this information from the community, direct feedback is the easiest way to gather this information, and is also usually the hardest to misinterpret.

**Wikis**

Wikis are idealized as collaborative content, and for the most part are not created by one person. The internet is one of the most powerful tools, because it brings together the brain power and thinking of roughly a quarter of the world. Wikis are one way to try and harness this massive amount of data and power. In a discourse of the blogosphere it exclaims that “Several museums have created short-term timeline or map projects in which visitors can contribute, via post-its, pushpins, and note cards, their own personal histories and memories.” 7 This allows other people to socially network in a way that’s engaging and educational at the same time.

**Tagging**

The idea of tagging something is that it is inscribed with metadata, and with this data, can be found later. Take for example looking for a picture on Flikr. The search engine takes in certain words provided by the user and finds images with metadata that matches those words. The pictures returned by the search engine would be those resembling what the user was searching for. This idea could be extended to museums. This would allow for self guided tours, or even generated tours on searched metadata. Take for an example if the keyword was 17th century. The user might be generated with a tour of Rembrandt paintings.
**Unique Identifiers**

Unique Identifiers can be used to represent a person traveling through a museum. These could be RFID tags to track a visitor, or even something as simple as a guest book with feedback. The RFID tag could be used for both generating a unique exhibit as well as collecting information about visitors, and their interests. An interactive museum in New York, Sony Wonderlab, allows each visitor to have a museum about dedicated to them. Initially when the visitor walks in they are registered with information about themselves, which is installed into an RFID chip. They can then continue on into the exhibit and visit interactive stations where they can alter aspects about themselves. The idea of tracking visitors could be extended further. Let's assume the average visitor spends roughly ten seconds at any item in an exhibit. Tracking visitors and their basic information (age, gender), the museum can get a rough idea of where interest is generated in the museum, i.e. who is staying at a certain item for more than ten seconds. With that information they can tailor a new exhibit to a specific age group, or even produce an exhibit that increases repeat visitation as well as new visitors.

**Guided Audio Tour**

Some of the most prevalent types of digital media in museums are seen in the form of guided audio tours. A visitor, in some museums, can rent some sort of handheld audio device that when a number is typed in, an audio track is played. This is to allow numbers to tag an item in the museum, so the visitor can find specific information they are looking for. In this case, the visitor is allowed to see what they want to see, and get information about what they want to hear. There are also line of sight systems being developed that will tell a user information about an item when they get close, and depending on their interests, there are told more or less about the item. The interest of an item is calculated by previous items visited, or the length of time visiting those items. These types of
tours are also extended to cell phone tours, where the media is using a device already in possession by the visitor. Outside of the museum, this idea again extends into GPS tours, for tourists wanting to more about an area.

**Other**

Google Earth, a product developed by Google, is a virtual representation of the world. It has been used by several museums including the U.S Holocaust Memorial Museum to lets users explore accounts and other resources and references consider genocide in Sudan. Looking at items in other museums it could have the same application. Items could be cataloged and placed on the virtual worlds in many factors of their life, from birth to where they stand in the museum today.

There are many other types of digital media that could be used to benefit museums that are yet tapped. A non-profit organization called the New Media Consortium is trying to find this untapped media. They describe themselves as dedicated individuals “exploring and developing potential application of emerging technologies for learning, research, and creative inquiry.” Just as an example of their use of new media, they have a large meeting place in the virtual world called Second Life. In today's society, there are innumerable amounts of digital media, and with the help of the New Media Consortium, there is hope that the media will be able to be used for other beneficial purposes. If used correctly, nearly all of this media could help a museum thrive with visitors.
Possible Paths for ARG Media

Websites
Websites are areas on the internet that house interactive media to display and share information. Information is one of the main resources of an ARG, and a website can definitely help get needed information out to players of the game. The website could contain many things, including puzzles and forums that would help progress the game in the right direction.

Forum Development
Forums are used in many different sites to allow its users to contribute ideas to the development of the site itself. Sometimes, the forum is the site itself, and contribution to the forum will create its success. Contribution can be from users answering other users questions, or even just presenting interesting information for other users to read and digest. Looking at forums from an ARG standpoint, they would create a good place for users to communicate about the different puzzles with each other. It can be assumed that not all the players of the ARG will be on the same page as other players, and if events based on the time are placed in the ARG, a lot of people could fall behind quickly. The forum allows the players to get help with the puzzles, or even just brainstorm ideas with each other to come up with an answer. Forums from the ARG standpoint could have another application. The internet houses what is considered the largest mind in the world. It has the knowledge of all the people existing on the internet at any moment, and forums help harness that power. Other people being allowed to contribute to the direction of where the ARG should go could in fact make it more immersive and believable?
**Flash in web development**

Flash is a program released by Adobe that uses vector based graphics to present an animation with some level of interactivity. The range of interactivity allows developers to utilize the full potential of their website. For example a flash animation with no interactivity would be considered a movie or video, and although highly entertaining, it doesn't present a unique experience each time the user visits the website. As the user is allowed more input into the animation, the experience because more exclusive, and can be different for each visitor. Animations can be embedded into a webpage as a means to navigate the site. Flash creates a very high level of immersion because there is one platform where all the information is being held. In conventional web development many different programming languages are used to sort various levels of information. One language might control the basic text, while another controls the look and feel of the site, and even a third controls server side interaction. Even a site with three different programming languages such as explained above may not be as dynamic as required. Allowing for several different types of programming in one language creates a very high level of immersion because of the seamless interaction between the different sections. Another benefit of using flash is its ability to create a common ground for both programmers and artists. A lot of games have been created for websites using flash because it is easy, fast, and reliable.

Flash, from an ARG standpoint, would allow for a very immersive site, online game or interactive movie. Immersion seems to be one of the many factors that can make a good augmented reality game, and as web development goes, immersion and the ability to tie someone in can create a prefect alternate reality that will be successful.
**Providing and closing loopholes in web security (Faux Hacking)**

Most people like knowing things that other people do not. It provides a feeling of superiority and increases self esteem. With this in mind, secrets are one way, from an ARG standpoint, to hook people in. There are several ways to release “secrets” but one that has been successful in the past in several occasions is faux hacking. Faux hacking, or fake hacking, allows the creator to set up purposeful loopholes, or even make a game that pretends to provide intentional loopholes in security to allow people to find information that they publicly should not have, but secretly are led to. Several puzzles take ideas from basic web hacking knowledge, for example, one of the earlier puzzles in an ARG called notpron makes the user “hack” the url to go to the next level. This only really consists of changing one letter from 2 to 3 in the url but still allows the user to feel like they accomplished something. Another successful game that presented faux hacking was called Enter the Matrix. Enter the Matrix was a game for the PC based around the move The Matrix. One of the interesting game play mechanics was that it allowed users to try to “hack” to get more information in that game. Hacking the game allowed users to find passwords to get into secret areas in the actual game to acquire better items, and be all around stronger.

**Virtual Robots**

Robots go back as early as sketches from Da Vinci in the late fifteenth century and have evolved ever since. Robots have even gone completely virtual in the sense that they don’t physically exist. Some of these robots help people find things (search engines) while others can hold somewhat logical conversations (instant messaging bots). While there are many uses for robots, there are many that have yet to be discovered.
Instant Messaging Robots

Instant messaging has been around for many years. About seven years ago, America Online came out with robots to interact with other users for their instant messaging program. The robots are given a keyword or phrase and from that word they interact with real people. “The Wall Street Journal robot lets users set up news alerts to be delivered via AIM, as well as request stock prices.”¹

The whole idea of the ARG is to make an augmented reality which, as stated before, needs to be very immersive, or people will not play it, and it will not be successful. Fictitious characters will be played by real people most of the time. When we explore the internet, there is no proof that the other people we communicate with are real, and taking that step even further, we could be able to preprogram some of the people that “exist” on the internet.

Email Robots

Email robots are considered much the same as instant messaging robots. They pretend to be an actual person writing an actual message to someone else. Again there is little to no proof that tells another user that this robot is not a real person. Although email robots are much more simple in the idea that they are sending a very simple message (unlike the instant messaging robots trying to have real conversations with real people), they are harder to send out, and without the right information, email servers will see mass amounts of similar data as spam. One obvious way around this is to have the user sign up for the email robot, something similar to a newsletter, so that the information or whatever the email contains can be read.
Implementation and types of puzzles

Types of puzzles
Alternate reality games tend to use many puzzles to add complication into the path of the player as they slowly uncover the story. Puzzles are only limited by the imagination, logic, and creativity of their creator. As such, most puzzles fall into one of several broad categories including math, picture, word, logic, tour, guessing, and mechanical puzzles. Although many other types of puzzles exist, these seem to be some of the larger categories.

Number Puzzles

Math Related
Math puzzles are puzzles that use math. Although it could be argued that all puzzles with logic use some form of mathematics, the idea of math puzzles is that they directly use math in the solving of the puzzle, with the solution only available with the use of math. Other puzzles may use math to be solved but it is not a requirement or a necessity in the solving process. Starting with algebra and traveling into more complicated areas of math, riddles can be easily created from evaluating equations. Algebra for example is using numbers to figure out given variables. This in itself could be considered a riddle.

Number Box
Number box puzzles are some of the most popular puzzles seen today. This category includes puzzles like Sudoku and Fillimino. Sudoku can be seen in newspapers and books that contain nothing but Sudoku. Both the aforementioned puzzles were created by a company called Nikoli, located in Japan. The object of Sudoku is to fill every square in the puzzle with a number, one
through nine. Every row, column, and box must have each number once, one through nine. Although many variations exist of the game, it is still most popular in its original form. The other game mentioned Fillimino, is a lot less popular in American culture. The idea of Fillimino is that all the square again have to be filled with numbers, and that a grouping of numbers can only have the amount of squares that exists the number on those squares. For example a two on a square means it has one adjacent square in its grouping while a one on a square will be left alone.

*Picture Puzzles*

**Hidden Object**
Although not being as logically applicable as the other puzzles, hidden object puzzles are still quite popular. A Hidden object puzzle is where a picture has, as implied with the name, several hidden objects. The goal of the puzzle is to find all the hidden objects. Usually seen on the back of cereal boxes, hidden object puzzles are directed towards an audience of smaller children.

**Jigsaw**
Jigsaw puzzles are the largest staple of the puzzle industry. A jigsaw puzzle, usually physical in form, has many pieces, cut out from a jigsaw, where when the pieces are put together, creates a picture. A type of jigsaw puzzle is with a photo mosaic picture. Photo mosaic is a larger picture created by smaller pictures. A photo mosaic jigsaw puzzle could then be considered a puzzle inside a puzzle.

*Word Puzzles*

**Crossword**
Crossword puzzles are found in the shape of a square with several squares inside. The idea is to read given clues to try and figure out words that exist by placing each letter of the word in a line in
the designated spot. The crossing of words among other words provides more hint at the possibility for the other words. Crosswords are quite famous and are seen in most newspapers.

**Anagrams**
Anagrams are puzzles where words are scrambled up from their original state. The goal is to unscramble the words so that they are readable and understandable. These puzzles, like crosswords are quite famous and are also seen in newspapers across the country.

**Ciphers**
Ciphers have been around for thousands of years. A cipher is defined as a message written in secret code. As this is a very broad statement, a cipher can range from a basic word with its letter shifted over to an encryption with a salt changing the values of the original message. Although most encryption would be inappropriate for our current application (MD5) the idea of decrypting an ancient language, similar to the findings of the Rosetta stone, would be much more applicable. The Rosetta stone was an ancient tablet uncovered in Egypt with hieroglyphics written along one side. Most of the credit of translation is given to Jean-Francois Champollion, revealing that the text was a tax relief for temple priests.

**Logic Puzzles**

**Dissection puzzle**
A dissection puzzle, also called a tiling puzzle, is where several differently shaped tiles are used to create different shapes. An example of this type of puzzle would be a Tanagram. Tanagram puzzles are given by providing the player with a shadow of the finished shape. The shadow allows the player to be provided with some of the answer, without being told how to complete the picture. The tiles must be places accordingly to reproduce the basic shape of the picture.
**Induction Puzzle**

Inductive reasoning is where a conclusion is made from a set of given facts. In math this is called a proof. Induction puzzles are as such given puzzles that must be completed with a set of given facts through inductive reasoning.

**Tour Puzzles**

**Maze**

Mazes are some of the oldest puzzles still around today. Seemingly originating in Egypt around 4000 years ago, puzzles were used for both entertainment and design and have managed to work their way through history in the architecture of many civilizations.¹ The idea of a maze is that there is a start and a finish, and between the two, many impassible walls. The player has to follow the path until, from the start, the end is reached. There are many types of mazes ranging from some with only one solution, to others that cannot be solved by obeying the “left hand rule” The first type of maze is a unicursal maze. This maze has a single path and is sometimes called a labyrinth. A maze with a single path denotes that the “left hand rule” can be used, which is that someone walking through the labyrinth could finish the maze by just keeping their left hand on the wall and walking the entire maze, taking any left turns where they appear. Another type is a weave maze. The idea of a weave maze is that it is a multiply-connected maze, having many paths to the finish. A weave maze also can have paths going over and under other paths, foiling most maze solving tricks. Finally, a logic maze takes a more active approach to problem solving. Instead of just finishing the puzzles, a logic maze needs to be completed in a certain order, or with a certain set of rules applied.

**Transport Puzzle**

The goal of transport puzzles is to get several things from one side to the other with several large rules applied. A famous example of the puzzle is where a farmer must cross a bridge only sturdy
enough for him to take one item with him each time. The items include some bread, a duck, and a fox. The rules that are applied are that the bread cannot be left alone with the duck, else the duck would eat the bread, and that the duck cannot be left alone with the fox, else the fox will eat the duck. Taking a physical view of the same puzzle is the famous tower of Hanoi. The tower of Hanoi is a set of three pegs located adjacent to one another with several discs sitting on top each other on the first peg. The player must get all the discs from one side to the other. The rules are that to move a disc, all other discs must be on pegs, and that only a smaller disc can sit on a larger disc, not vice versa. The same basic logic applies to the tower of Hanoi as the bridge crossing farmer puzzle.

**Guessing Puzzles**

**Riddles**

Riddles are some of the most popular puzzles in literature. A riddle sometimes requires a different approach called lateral thinking because the answer is not wholly obvious. “What has roots as nobody sees, Is taller than trees, Up, up is goes, And yet never grows?” This riddle was originally seen in JRR Tolkien’s *The Hobbit* and makes the player think laterally. Thinking laterally means that someone is broadening their mind to encompass a wider range of answers, and is not an actual chemical process of the brain, just a term coined by Edward de Bono, thinking outside the box. The answer to the riddle although alluding to a tree for most of the puzzle, is actually a mountain.

**Mechanical Puzzles**

Mechanical Puzzles are puzzles that take physical objects and place use them in the creation and solution of the puzzle. In most cases the puzzle is actually physically created, for example getting a knot undone could be considered a disentanglement puzzle, but in some situations the puzzle can
just use representation and provide no actual physical puzzle. An example of this would be a match puzzle drawn on a piece of paper.
Chapter 2 - Story
Researched and written by Adam Pastorello

Mythology

Mythology: A Definition

What are myths? In short, myths are stories. These stories, for one reason or another, managed to survive over the ages while being told over and over again. What sets myths apart from every day stories is that they are about extraordinary characters and extraordinary places. They explain the unexplainable and pass down cultural history.

*Myths permeate every culture, and are borrowed, retold, and live again in fresh imaginings. They are the stories of cultural beginnings, of how people’s lives and ways of thinking came to be shaped, and they still help to shape the way that many people understand themselves and the world.* (Mythology: Myths, Legends and Fantasies)

Everyone knows a myth and has more than likely been taught some moral lesson by it. Myths teach people how to act, how to behave, and how severe the consequences can be if they “defy the gods”. Sometimes these myths arise to reinforce cultural laws with fear of consequences, while other myths reinforce good behavior with stories of rewards.

Some myths are brought about to try to explain how things happen such as: eclipses, the constellations, the weather, and why mountains form. Others try to explain philosophical questions like: how did life begin? What happens after death? And how will the world end? (Mythology: Myths, Legends and Fantasies) Myths represent the human imagination and how it can be used to make
sense of the world. They are not stories bred from one person; myths pass through each teller’s imagination, changing slightly each time.

Myths are the thoughts of generations and cultures in the form of a fantastical story. They give people a window into the minds of the past. Myths can hold the ideals, thoughts, and questions of cultures and are a great way to learn more about a certain people or people of a certain time period.

**What makes a Myth Successful?**

There are some myths that everyone knows, and more that no one has ever heard of. So what is it that makes a myth popular and successful? Popular myths fall into four categories: Myths that explain how the world works, where the world came from, why the world is the way it is, and myths with moral lessons.

A lot of myths were originally created in someone’s imagination to explain how things in the world work, like rain, and wind. Before science found the explanation for these natural phenomena, they were explained by gods crying or fighting. Mankind like to have explanations and will look anywhere for them. The people that first told the myths could be looked at like early philosophers. They had the best explanation, so people believed their story. The more people that started to believe the story, the more it would get passed along. Myths change from time to time but as they get passed down the generations, the basic concept stays the same. This is what made the early myths about creation and natural phenomenon popular and successful.

As these myths spread, people begin to worship the gods and pray for rain or vengeance. This idea of gods controlling the world started a snowball effect where people could explain
anything with gods, and would make new gods or goddesses to explain something. Eventually cultures had whole societies of these mythical gods that they worshiped. This simplified life and is what made the myths about gods so successful. If someone was poor, they prayed to the god of wealth, simple as that.

Once these gods were created, they became an easy tool to teach children (and possibly adults) how to act. Stories of betrayal among the gods, and retribution for it came into being. More and more stories about bad behavior being punished and good behavior being rewarded were told. These are now the most successful myths because they can still be used today to teach children morals.

The fact of the matter is that people find myths useful. Whether it is to teach an infant a lesson, or to explain something in a person’s life that they need an explanation for, myths are useful. How successful a myth is can be linked directly to how useful it is, or was in the past. The ones that have the best explanations and the best lessons are the myths that made it through the test of time.

**Beyond Belief**

*Beyond Belief* holds many mythical artifacts and creatures from these myths and legends. Taking a few examples from the exhibit can help explain the four categories of myths. One Myth with a moral would be the story of the Wings of Daedalus. This myth is about not flying too close to the sun or the ocean with the gift of wings. Get too close to the sun and the wings melt, too close to the ocean and they get wet and pull you into the ocean. This myth personally taught me a lesson when I was a kid: if you have a gift, don’t try to overdo it or your “wings” will melt and you will crash back down to earth.
All the artifacts that reference myths in the exhibit refer to a myth in these categories, however; some artifacts in the exhibit are just fantastical creatures limbs or devices to capture them and do research. These artifacts and creatures are from no myth in particular but show up in many different ones. Dragons, goblins, and fairies are all quite popular, not because of the reasons stated about popular myths, but because they are popular characters in fantastical stories.

**Popular Myths from around the world** (broken down into the categories)

**North America**

Native American: How the buzzard got his feathers. *why the world is the way it is*

A long time ago when animals could still talk, birds had no feathers. They were embarrassed around the other animals because they had nothing to wear. They hid from other animals until they couldn't take it anymore. The birds called a great council of all the birds and decided to fly to the creator to ask him for something to wear. They chose the buzzard because he could fly the highest.

The buzzard began his long trip toward the sun. The journey was long, and soon the buzzard ran out of food that the birds gave him. He circled down to the water to eat some fish. He even ate dead fish because he was so hungry. He continued his trip and got closer and closer to the sun. Eventually his head became burnt red from being so close to the sun.

Finally the buzzard made it to the creator who said “I’ve been expecting you.” “I have heard the prayers of the birds and I made you all fine suits of feathers to wear,
and since you came all this way, I will let you pick your suit first. You can try any suit, but you can only try each one once.”

The buzzard tried on many suits and didn’t like any of them. After turning down many suits, the buzzard tried on an ugly brown suit, and unlike the others, it did not change size to fit him. His legs stuck out at the bottom and his neck and burnt head were completely bare. The buzzard said “this is the worst of them all!” but the creator told him “but buzzard, this is the last suit. You've made your choice.”

To this day the Buzzard wears his ill-fitting suit of feathers and eats things that have been dead for a while, but he does so proudly. He alone flew all the way to see the creator. *(Ramen, F.)*

**South America**

**Aztec: Creation** *where the world came from*

In the thirteenth heaven, the creator couple had four sons: Red Tezcatlipoca, black Tezcatlipoca, Quetzalcoatl, and Huitzilopochtli. These four brothers created fire, the heavens, earth, sea, underworld, first human couple, and the sacred calendar.

The black Tezcatlipoca, the son of earth, ruled the first world peopled by a race of giants that could rip trees out of the ground with their bare hands. Quetzalcoatl used a staff and strikes Tezcatlipoca into the sea. When he rises out of the ocean, he becomes a great jaguar and his race of giants is devoured by fierce jaguars.

Quetzalcoatl, the son of wind, is in charge of the next world. This world is destroyed by Tezcatlipoca who kicks Quetzalcoatl down. Quetzalcoatl and his race of people are carried off by fierce winds.
Tlaloc, the son of rain, rules over the third creation. This world is yet again destroyed, this time by Quetzalcoatl in a rain of fire. The rain of fire turned the race of people into turkeys.

The fourth world is ruled by Tlaloc’s wife Chalchiuhtlicue, goddess of streams and standing water. A great flood destroys this world, and the people were turned into fish. The flood was so powerful that the mountains were washed away and the heavens crashed down to the earth.

Two people survived this flood by hiding in a hollow tree and floating on the waters until the flood died down. (Taube, K.)

Europe

Norse: The death of Balder  
myths with moral lessons

One night, all the gods and goddesses of Midgard assembled at Gladsheim, the gods’ meeting place, for a celebration. After a few rounds of drinks, the gods decided to test the invulnerability of Balder, the god of light and truth. The gods started throwing pebbles and worked their way up to axes. Everything bounced right off of Balder.

That night, Loki, the trickster god, was in attendance. He was never known to be malicious, but liked to stir up trouble. Loki was disgusted by how happy everyone was and decided to do something about it. Disguised as an old hag, Loki approached Frigg, Balder’s mother, while she was taking a break from the festivities. Loki asked her about the celebration and why people were throwing weapons at her son. She
answered politely, but Loki kept asking her questions until she revealed that she hoped no one threw mistletoe at Balder.

With this new information, Loki went to the forest to get a branch of mistletoe and returned to the party. He found Balder’s blind brother Hod, the god of darkness, sitting in a corner. Because he was blind he could not aim and participate in the fun. Loki promised to help Hod aim so that he could participate in the festivities. Loki helped Hod throw the mistletoe right into Balder’s chest. He died instantly, and Loki fled.

The celebration turned into mourning because the most beloved of all the gods had died. Odin knew that Ragnarok, the end of days, was drawing near with the death of light and truth. (Gill, N.)

**Africa**

*Egypt: The Story of Re where the world came from*

Re is an all powerful god who can create anything and take any form. He arose out of the vast empty body of water called Nun. The secret of his power was a hidden secret name that no one else could learn, but if he spoke names other than his, that which he named came into existence. Re gave himself three names: Khepera at dawn, Re at noon, and Atum in the evening. After naming these, the sun rose and fell for the first time. He then named many other gods that controlled the winds, rains, earth, sky, and the river in Egypt.
After naming all things on the earth, Re named and created mankind. He then took the form of mankind and ruled over them as Egypt’s first pharaoh for thousands of years. This was known as the good Time of Re.

Eventually Re grew old being in the form of a human for so long and mankind began to disrespect him. Re called together all the gods that he created to ask them what he should do. The gods then agreed that mankind should be punished. Re created a daughter Sekhmet who gruesomely searched for men and killed them. She delighted in their slaughter. For many nights the Nile ran red with blood.

Soon Re began to pity mankind and decided to save them. He had gallons and gallons of beer brewed and dyed blood red. This beer was spread over the next land that Sekhmet would slaughter. When she arrived, she was pleased and started to drink the beer that she thought to be blood. She returned to Re after not killing one man that day, and Re renamed her Hathor and her nature changed to sweetness and love. Mankind was saved and Re continued to rule.

Eventually the gods and goddesses that he created had children, one of which was Isis, the wisest of them all. Her sole goal was to find the secret name of Re to prove how wise she was. Re was now quite old and drooled as he walked. His drool created mud on the earth. Isis took some of this mud and created the first cobra snake. The next day this cobra bit Re and injected him with poison. Re called all the gods to his aid. He did not know why he was hurting. Isis came to Re’s aid as the mystic healer of the gods. Isis told Re that she must use his name in the spell to cure him and asked for his secret name. Re told her the names that everyone knows and she repeated, tell me your secret name. Re made her promise not to tell anyone his
secret name but her son who she would pass it down to. She promised, and Re told her his secret name. With his name revealed he could no longer rule on earth, but he took his place in the heavens as the sun itself during the day, and at night passing through the underworld, carrying the souls of the dead with him. *(Ancient Egypt: the Mythology)*

**Africa: Ture brings fire.  How the world works**

Once upon a time, people did not have fire. Ture was a divine trickster who worked for his uncles in their forge. He blew the bellows all day, but one day decided he would try to steal fire for mankind. That day he left and told his uncles "I will return tomorrow and dance for you." The next day, Ture gathered worn out bark cloth. He wore it all over him and returned to run the bellows for his uncles. After blowing the fire for a long time, Ture arose and put his foot over the fire. It caught fire, but his uncles extinguished it right away. He then jumped over the fire and caught fire again. They tried to extinguish it again, but could not and Ture ran away into the dry grass. The fire spread everywhere in Ture's tracks as he continued running. Now people have fire. *(Answers.com)*

**Asia**

**China: The Ten Chinese Suns.  How the world works**

The Chinese had a ten day week, and believed there to be ten suns. They believed that the suns would travel to the Valley of the Light in the east with their mother Xi He. There she would wash her children and hang them on a huge mulberry tree called fu-sang to dry. Each day one sun would journey to mount Yen-Tzu in the far west. After time the suns became bored with this routine and decided to all make
the journey together. Their combined heat made life on earth close to impossible. The emperor Yao went to the father of the ten suns Di Jun and asked him to persuade his children to appear one per day. Di Jun could not convince his children, so he sent the archer Yi with a magic bow and ten arrows to his children in order to scare them. Yi shot nine of the suns and only one remained. Di Jun was very angry and condemned Yi to live out his life on earth as a mortal. (*Windows to the Universe*)

**Legendary Artifacts**

**North America**

Florida: The Fountain of Youth

When the new world was discovered, the myth of the fountain of youth became popular. The fountain is said to restore youth to anyone who drinks its waters. The fountain was never found.

**Europe**

Christian: Spear of Longinus

This is the spear said to have pierced Jesus after he was crucified to make sure he was dead. Many legends surround this spear such as one that claims its wielder shall become invincible. No one knows where it is today.

**Africa**

Egypt: The Book of Thoth
This book is said to contain powerful spells that will let the reader understand animals and enchant the earth and sky. It supposedly lies buried with Prince Neferkaptah in many concentric boxes whose keys are spread all over Egypt. It is said that if someone reads the book, they are punished by the gods and all their loved ones will die. (*Murray, M. A.*)

**Asia**

**Japan: Amenonuhoko**

Amenonuhoko is a naginata: A Japanese pole arm that is basically a pole with a sword on the end of it. Amenonuhoko was given to the creator gods of Japan, Izanagi and Izanami. They used it to create the first lands and then went to the floating bridge of heaven and used it to stir the waters. Salt water dripped from the tip and created the first island where they made their home. (*Wikipedia*)

**What it all comes down to: The ARG**

Mythology is a great topic for an ARG. These stories are right on the line between complete fantasies and almost believable which is great for an alternate reality. People want to believe that myths and artifacts are real, and will get very immersed into a game using them.

Professor Bell is already well connected to the world of mythology. He can travel through time and space to where the myths happen and can recover these legendary artifacts. Any myth will be easy to add into the story for this ARG and more can always be looked into for more content.

Right now Professor Bell is missing. This tells us that he is either hiding, sneaky, or in trouble. Any of these lead people to believe that he is after something big this time. The myth that
he is looking into should be particularly popular, dangerous, or contain a very powerful artifact. These are the feasible reasons for him to be missing. Any of the myths here could be used as part of Professor Bell’s story.

Also, the museum likes to have myths from all over the world. This should possibly result in a long journey for Professor Bell all over the world. Either following around clues to find some legendary artifact, or possibly hunting down some ancient beast.

Mythology will take little effort to connect to professor Bell’s story, as well as making an ARG based upon it. Players will be pulled into the alternate reality the game creates by their passion for mythology, and their hopes that these things exist. The story will be truly rewarding for players, and should be a lot of fun.

Artifact at the Museum
Archeology

A History of Archeology

In the very early years, Archeology was nothing more than treasure hunting and religious crusades. When old cities and monuments were excavated, a lot of the findings were just tossed aside in an attempt to “get to the good stuff.” It wasn’t until the second study of Pompeii, around 1738, that Archeology as we know it today was born. It was Charles of Bourbon, king of the two Sicilies, who hired the antiquarian Marcello Venuti to re-open the dig site at Herculaneum, a town lost to Mt. Vesuvius along with Pompeii. Here, instead of looking for treasure, the dig looked for scriptures and buildings in an attempt to prove that the city under all the ash was actually Herculaneum.

Archeology continued to develop as a science during the European age of enlightenment, the 17th and 18th centuries. There were not many major excavations at this time, but scientists made theories about human past. Scientists created a rating system of cultures where the top was European scientific culture. They considered every other culture inferior to them instead of seeing all cultures equally, but at different points in evolution. One great advance of this time was the discovery of hand axes near many animal bones discovered by Jacques Boucher de Perthes. He had the guts to go against the bible and declare that humanity was older than 6000. He was widely ignored until about twelve years later when two British archeologists found hand axes near elephant bones and published papers about how old the human race is. In the late 1800s, Heinrich Schliemann and other archeologists started excavations looking for answers to specific questions instead of digging where things are found. Schliemann wanted to find out if the stories of Homer were based on real events and began to search for evidence. This started a new trend in archeology.
This started a new age in archeology where archeologists searched for verification of ancient texts like the Bible and myths and legends. The question to this day that has pushed archeology forward is this: “Is the Bible fact or fiction?” This question also gets archeologists into the most trouble. Cultures do not want to find out that myths and stories that they are based upon are in fact false. A general understanding between archeologists is that:

Ancient texts are renditions of ancient culture, which may be partly reflected in the archaeological record, and partly will not be. Not "fact," not "fiction." "Culture." (Hirst, K. K. part 3 section: No planet wide floods)

The goal of archeology is not to prove ancient texts right or wrong, but simply to examine human-kind's past and to learn a bit about where we came from.

By the 19th century European museums were becoming overrun with unclassified ancient artifacts. Wealthy families would travel to places, dig them up, and bring back the best looking thing. Christian Jürgensen Thomsen decided that museums needed some sort of classification method for these artifacts, and so he came up with one. What he came up with was the three age system based on the theory that man first made tools of wood, then stone, then copper, and then iron. He classified artifacts into three classes, the Stone age, Bronze age, and the Iron age. Archeologists then set out to prove this theory and found verification.

It was also around this time that Darwin came up with the theory of evolution, which was probably greatly influenced by Charles Lyell’s theory of Uniformitarianism which states that earth modifying events that occur today, also occurred long ago and explains why civilizations move and are buried. Also, it implies that everything came to be how it is over time, and not in one single
moment. These thoughts changed the scientific way of thinking and allowed scientists to see how things developed over time, and not from one single moment when everything was created.

The late 1800s marked the beginning of archeology as it is known today. The focus shifted from trying to find fancy artifacts to the small find and plain artifacts. More importance was placed on strategic excavations, the use of field notes and photography, and plan maps of the excavation process. Digs were becoming more scientific, and not just thrown together. This time is when the idea of “Big Digs” emerged, digs to excavate entire cities to learn about the people, where artifacts became of secondary importance. Methods for excavating big sites became more refined over time until the archeology of today was born. *(Hirst, K. K.)*

**Atlantis: The line between Archeology and Legend**

Atlantis is a very controversial topic in archeology. Most archeologists believe it only to be a legend and will refuse to have anything to do with it, while others devote their lives to finding it. Some believe that Atlantis is where life and culture began and will answer all the questions that archeologists have. There is no proof today that Atlantis in fact exists, but hopefuls out there are still searching.

Atlantis was first found in a recorded account by Plato. He wrote that Atlantis was a large naval power that conquered most of Western Europe and that it lay in front of the Pillars of Hercules. The story ends with Atlantis sinking into the ocean in a single night after a failed attempt to capture Athens. Classical archeologists discounted this as just a story and that it couldn’t possibly exist, it wasn’t until recently that theorists and a small group of archeologists believed that Atlantis may have been a real place. Most other ancient texts that include Atlantis are believed to come after Plato’s and possibly are imitations. *(Gregory, A)*
From the 1600s to the 1800s more and more people published stories about Atlantis declaring where it was located. Some believed it rested west of the Americas, others tried to connect the culture to the Mayans and the Aztecs, while others still placed Atlantis in the Mediterranean and state that all civilization descends from Atlantis. In the 1900s more mythological theories arose. Slowly Atlantis turned into what everyone knows it as today, the legendary all knowing empire that sank into the sea, and with it, all the scientific secrets.

Theories in today's world are far from the original account by Plato involving Aliens and conspiracies that plot the end of the world. Some realists find these theories and expeditions appalling and believe Plato’s piece to be a work of fiction, and not history. Some people think that evidence lies hidden with the Aztecs, Mayans, and Egyptians. Most archeologists stay away from Atlantis as much as possible because of the controversy behind it and for fear that their reputation will be ruined, but Atlantis is still being looked at from an archeological point of view with a lot of expeditions to locations in theories and searching for clues in ancient civilizations for any major world power. Many who believe in Atlantis believe that as technology advances in underwater exploration, Atlantis will be found, but no one knows for sure. Until some concrete proof of this Ancient civilization is found, many Archeologists will not help in the search for Atlantis. (Schriber, J)

The Mayan Calendar: Doomsday?

The Mayan calendar has raised quite the turmoil recently in pop culture. People believe that the day the calendar ends, December 21st, 2012, marks the end of the world, but few people even know what the Mayan calendar is.

The Mayan calendar is a very sophisticated time keeping device based on astrology. (see appendix on calendar) By watching the stars, the Mayans could map out many of the cycles that the
earth goes through, cycles like days, seasons, years, and the wobble of the earth because of its tilted axis. The longest cycle of the calendar is what has the world in a fuss. Ancient Mayan texts refer to this cycle as the end of an era, or age, which people have translated into the end of the world. The truth behind the matter is that when this cycle would end, the Mayans would throw huge celebrations to bring in a new era, almost like new years parties. They celebrated that their civilization still lived on.

People have developed all sorts of theories about the end of the world such as: the calendar marks the astrological alignment of the earth, the sun, and the center of the galaxy. Astrologists confirm that this will happen around December 21st of 2012, but there is nothing major about this event, other then that it is rare. Theorists say that this will cause the magnetic poles on earth to shift which could cause massive earthquakes and floods, but the alignment is only happening from earth’s perspective, it is not actually “crossing the equator of the galaxy.” Although many of these theories are false, they need to be looked at from a different perspective when it comes to making the ARG. *(Tarpinian, G)*

*How this all fits in to the ARG*

Doomsday sells. All sources agree that the hype about 2012 is partially due to how many products can be sold with it. People love to read about the end of the world, and with so many prophecies leading to 2012, it has a good backbone to make people believe that the end is near. Whether it is fiction or reality, 2012 linked to the end of the world sells it over the past few years. Fitting the idea of 2012 into the ARG is a great idea and will bring in an entire audience separate from myth lovers and typical museum goers.
In a few instances, the Mayan calendar is linked to Atlantis. The most reasonable theory that links the two is that Atlantis was indeed a great super power, and the night that it sank into the ocean was the end of the cycle of the Mayan calendar. This is easy for the players to believe because of the current hype about 2012, the calendar marked the end of the rule of the Atlanteans. This could also give professor Bell a reason to be exploring Atlantis. Possibly he wants to find out what happened to Atlantis, and find out if it will indeed happen again.

Atlantis and the calendar offer many different opportunities for the ARG because all the myths behind them are just that, Myths. While there is evidence that supports that the Mayan calendar doesn’t mark the end of the world, popular culture has forced it so much into everyone’s minds that at this point, the truth in everyone’s minds is that 2012 is the end of the world. As for Atlantis, there is no proof of its existence or non-existence, and there are plenty of popular beliefs about Atlantis that can be used. As mentioned earlier, some people believe that in ancient times, aliens landed on earth and settled in Atlantis. This is a massive conspiracy theory where the aliens made colonies here and had ways to travel back and forth to their planet, but with the sinking of Atlantis, they lost all their technology. All this leads up to today where aliens are in charge of many secret organizations, leading humanity in all their technological advances, and pushing evolution faster than normal in an attempt to rebuild their ships and escape the planet before the apocalypse. This might be a little far fetched, but still an idea to be looked into.

Atlantis and the Mayan calendar have a shroud of mystery around them that is perfect for ARGs. Puzzles can easily be formed, and interesting storylines can progress. Atlantis will be a great setting for the ARG and correspond nicely to the water theme currently in the exhibit.
Exploration

Timeline of World Exploration by region

The age of discovery was when exploration boomed in history. Generally it is referenced as the 15th to the 17th century and includes discovering the new world and making trips around the world. These massive expeditions and discoveries came about because there was a need to find new trade routes and more land. Whoever owned the land trade routes owned the trade, so countries wanted to find new ways of trading with far away places. A few explorers began to search to the seas.

Portugal

Portugal wanted to open trade with Africa for gold and slaves, and Asia for spices and luxury items; however the trade routes and the Mediterranean ports were controlled by Muslim nations. This led to searching for a direct trade route to these places through the Atlantic. Time and money were invested in long voyages around Africa while trying to establish direct connections with western Africa rulers. Portugal’s early exploration was fueled by profit and the desire to lead a crusade against the Muslim nations, thus breaking their monopoly on goods from Africa.

Portugal saw weakness in the Moroccan government and took the opportunity to seize the Muslim controlled ports around the Mediterranean, thus ending Muslim control over the Mediterranean Sea lanes. Portugal also seized several ports along the Moroccan Atlantic coast. Seeing the trade and treasures that they were missing out on, Portugal planned to find sea routes to the African states south of the Sahara. This required a lot of planning and a royal sponsorship. This sponsorship came from the father of the age of discovery, Prince Henry.
Henry's crusades against Muslims and trading profits were not his only reason for exploration, he was also searching for great discoveries including the river of gold, a river in southeast Africa. It took a long time before voyages ventured around cape Bojador because of myths and legends spread about the southern Atlantic. After a few setbacks, Henry's voyages finally brought back slaves, thus proving that trade was now open with sub-Saharan lands. *(Love, R. S. pgs 9 – 18)*

Spain

Before the Age of discovery, Europe, like much of the world, was isolated from other civilizations. The world was divided with little communication and trade. As other nations began to open trade and diplomacy, Europe also began their exploration.

When the land passage to China and India became dangerous at the fall of the Mongol empire, Christopher Columbus developed his plan to reach Asia and India by sailing west across the Atlantic. He was able to gain funding for his voyage from desperate catholic monarchs that needed an advantage over the competition. He believed that there was no land between Europe and Asia and that the world circumference was quite small and set off on his journey to find a better trade route.

After sailing for five weeks, land was spotted. Columbus wrote in his log that the people he found on the island were peaceful and friendly and would make good slaves. *(The Log of Christopher Columbus, 1492 October 11th)* This land is believed to be an island in the Bahamas. The voyage continued to the east coast of Cuba and Hispaniola where Columbus kidnapped some natives to bring home. When he returned, news of new land spread quickly throughout Europe.

Columbus's second voyage west in 1493 resulted in the first western Spanish colony. Over the years, Spanish forts and colonies were constructed on the islands as well as some of the
mainland. During this time, Columbus always believed that this place he discovered was India. It wasn’t until 1507 that a new map was published calling the new land America.

**Trip around the world**

Ferdinand Magellan led the first voyage that would circumnavigate the world, and although he did not make it home, the ship did. After Columbus failed to make a trade route to Asia and India, Magellan proposed a plan to Spain that would open the trade routes. September 20, 1519 he set out on his voyage. He traveled southwest around South America, discovering the straight of Magellan, and finally made it to the land of spices. The ship returned to Spain and sparked a lot of interest in Europe. The full extent of the world was now realized along with the realization that the crew’s log was behind one day because they traveled opposite of the earth’s rotation. This voyage opened the seas to further exploration because a ship made it around the entire world safely.

**Famous Expeditions and Explorers**

After Columbus and Magellan, there was an entire new world to explore. Major exploration of North America didn’t happen until after colonies were well established, not until the Louisiana Purchase. This brought about the need to find out about the newly acquired land. Louis and Clark were hired to explore the new land.

Unlike older exploration, this was not to find trade routes and profit. The expedition was made to evaluate the land and start to map it. May 21st, 1804 they started their journey sailing up the Missouri river. They traveled across the new land taking note of all the different native tribes and their cultures as well as notes on animals and vegetation.
During the winter the expedition hired a French Canadian fur-trapper, whose Indian wife served as a translator and guide for the remainder of the journey. As winter ended, they continued their journey to the Pacific Ocean following the Missouri river. Some of the men were sent home with discoveries and maps before continuing on. The expedition reached the Pacific Ocean just before the next winter. After camping there for the winter, they began the journey back home, continuing to log everything they could.

Practices and Personality traits of Explorers

The most common practice of explorers is log keeping. Every explorer keeps a detailed journal of their journeys. Sometimes these are even just the explorers’ personal thoughts on the activities of the day, while others contain all the data of expeditions: longitudes, maps, and findings. These logs are usually very detailed and have entries for almost every day, excluding days where little happened.

Expeditions are not done by one person; there is usually a team involved. The Lewis and Clark expedition for example had 33 members. Along with a team, expeditions needed funding, and
were usually sponsored by royalty, leaders of nations, or rich nobles. No great adventures set out alone with no funding on their journeys.

**The ARG**

Professor Bell would be a rare case of an explorer. He is self funded, and his only companion is a penguin. This can be played upon in the ARG however. A journey without a team is much more dangerous and can lead to a much more interesting story. Also, without a team, if something happens to Professor Bell, no one will know or have his data, just clues from previous findings. This helps the ARG’s structure and gives meaning to puzzles and clues.

Making Professor Bell have a detailed log could also be beneficial to the ARG. This could make dropping clues as easy as revealing that a page from his log was discovered. This can also be used to advance the story or even provide some background information about professor Bell so that players can get to know him better. A log of Professor Bell’s adventures would be a great asset to the ARG.

In terms of the adventure itself, real expeditions will not be a great idea to base Professor Bell’s journey on. As stated, he has no team. Professor Bell’s adventure should have fantastical elements and based more upon adventure fiction. Professor Bell isn’t looking for trade routes and profit, just knowledge.
**Professor Bell**

*Professor Bell (From the Higgins Armory Museum website)*

Professor Rufus Excalibur Bell is the Higgins Armory Museum’s Curator of Curiosities, a staff position John Higgins established upon opening the museum, to be endowed in perpetuity. The Professor traveled the globe studying dragon-lore and mythology, encountering dragons and dragon-hunters along the way. His studies always focused on the creatures of mythology – harpies, griffins, and of course dragons – insisting that their existence is certain if one simply follows the evidence.

One day the Professor went on a walkabout. Perhaps it was something he learned in one of the several dragon-penned books he had found in a monastery in Spain, or on the Sumerian cuneiform tablet he unearthed at the foot of Mount Kuitarra in Asia. The people at the museum are unsure, since both sources have yet to be successfully translated. The Professor has not been back to the museum for more than a brief moment in anyone’s living memory, but the boxes and crates keep coming.

After unpacking a couple of boxes, it becomes clear that the professor is traveling both in time and space. His work, always wide-ranging, now encompasses a broad spectrum of natural and cultural history. Somehow, the professor has been freed from some of the boundaries of time and space that modern scholars and scientists must observe. The boxes and crates of specimens, artifacts, and equipment are evidence of this, as they seem to give credence to what is traditionally relegated to mythology and legend.
**Exhibit Themes**

Before Professor Bell went missing, he made a name for himself by investigating ancient myths and sending his findings back to the armory for display. The theme of the exhibit is imagination merging with fact. It shows how real findings can be found while investigating stories and myths. The exhibit brings imagination to life with mermaids and fairies. It merges mythology with archeology; fairy tales with science. Beyond Belief is a great way to explore the imaginations of humans throughout time through the stories they told.

The exhibit tells its story through the art work. Each piece is from a specific myth or fairy tale, or part of ancient lore. Some of these created artifacts have a story with them of how professor Bell obtained them, but some leave it up to the viewer's imagination. This develops his story in the viewer's minds. Professor Bell is a mysterious character that people learn more about as they progress through the exhibit and make their own conclusions.

The pieces on display all correspond to a myth, a few examples follow:

*Wings of Daedalus, Loki’s Spear of mistletoe, Medusa head, The golden fleece, and the Mayan doomsday clock.* These each have their own story that viewers can follow and use their imaginations to visualize Professor Bell’s interactions with the people in the myths to collect the artifacts. At this point it is not certain how the professor travels through time, but this just adds to the mystery. A character like this is perfect to help imaginations run free because everyone will try to fill in the blanks in their heads, even if they don’t notice that they’re doing it.
It is also important to note that professor Bell is not solely based on fantasy. He follows the paths of famous explorers and archeologists. While some of these objects may be from the time period, others may have been found in today's world by archeological means.

**Exhibit Goals**

Beyond Belief has three goals: exposing people to myths and legends of different cultures around the world, telling the story of Professor Bell to teach about exploration and archeology, and to show off the creative pieces made by Hilary Scott with a creative story about Professor Bell. These goals need to be remembered while the ARG is created so that the ARG can further them.

The Exhibit holds a wide selection of myths from almost every region of the world. As people explore the art done by Hilary, they can read about the myths each piece corresponds too. Telling these stories can teach a lot about different cultures and what they felt was important. The ARG should follow this example and continue to expose people to stories from around the world. The ARG can be used to widen the array of stories featured through the exhibit. This can add more coverage to regions that have little in the exhibit or in fact no coverage.

As well as exposing viewers to myths and legends, the exhibit exposes them to archeology and exploration. The lobby holds lists of the great explorers and archeologists. Within the exhibit, viewers may be inspired to look up the stories behind some of the finds such as the Mayan clock. The ARG must also inspire the viewers to pursue knowledge of archeology and exploration. Puzzles and riddles in the ARG may lead to knowledge of great archeologists that professor Bell is following or explorers lost long ago.
Above all else, the ARG must help further the story created by the Armory and Hilary, and encourage people to come and see the great art work. This will be achieved with a compelling story of mystery. The ARG should entice players to learn more about professor Bell by examining his study first hand and by doing research in the areas of archeology and mythology. The Exhibit’s goals must become the ARG’s goals.

**Exhibit Storyline**

Professor Bell is a master archeologist and explorer. His trusty penguin side-kick Benjamin is always by his side. Their story is told through the exhibit and could be different for each viewer, but some facts are written.

The companionship of Benjamin and Bell is shown right off the start by the diorama in the lobby. Benjamin goes on to finish the task at hand while a fallen professor Bell hopes for the best. This sets the mood for the story with danger and heart. As viewers move into the study they may see the globe that shows the travels of Bell and Benjamin. After seeing that they are well traveled and great explorers, they may move onto the desk. This begins to show Bell’s archeological side with logs of an adventure and specimens in his drawers along with equipment and books on his shelves.

From here, as viewer’s progress through the exhibit, they will see artifacts from various myths and fairy tales. They may imagine how professor Bell retrieved these objects and the
adventures that he and Benjamin may have gone through, most likely filled with danger. Viewers will be exposed to the stories of cultures other than their own and may learn a little bit more about how others saw the world. Continuing onward they will move into the storage / receiving / laboratory area.

This area holds more artifacts of legends, but has a different feel than the study. Viewers can come to the conclusion that the professor has not come back for quite some time because of the amount of packages in storage. They can see how professor Bell mails all of his findings to the exhibit to keep them up to date. To learn more about the story, the guests may have to dig a little. The story will always end the same way however: Professor Rufus Excalibur Bell is missing. This is where the ARG will begin and reveal more of the story of this great adventurer.

Where the story goes from here

After weeks of research and months of working with the exhibit, the most common direction to move seems to be towards Atlantis. Weather Professor Bell got caught up in research, caught in danger, or kidnapped; he was looking into the lost city.

Professor Bell quickly left his study in the museum after an important discovery. The last end of the long count on the Mayan calendar was the day that the great Atlantis sank into the ocean. He decided that to find out what is going to happen on December 23rd, 2012, he must research the past and see what exactly happened to Atlantis.

The exhibit already has a strong water theme: the dive suit, mermaids, Atlanteans, and more. These can easily be said to be the last things he sent to the museum before he stopped
communication. Also, the next addition to the exhibit will be a giant squid and another mermaid, so at some point Bell should encounter a giant squid.

The story will need to branch off into many directions depending on success and failure of players in the ARG. The story will need to remain somewhat open ended to account for different directions that the players may go.

Professor Bell is a great character for an ARG. His story is well developed, while at the same time being filled with mystery. There are so many questions unanswered and holes that players will want to fill. The ARG will make players want to learn every detail about professor Bell and his story. This will be a great tool to get more people interested in the exhibit as well as furthering the story of a great character. The ARG will also be a great way to teach players about archeology and exploration through riddles, puzzles, and intrigue. All is all; the ARG is a great tool to further this exhibit’s goals.
Chapter 3 - Alternate Reality Games
Researched and Written by Riley Brown

ARGS and Marketing

Ever since the first ARG was run commercially, (The Beast) ARGs have been used to market products such as movies and other video games. On a whole this form of advertising is pretty effective at getting the attention of a specific group of people, but in every advertising campaign it has not been the only marketing that is put into action. So the specific group of people that marketing ARGs target are people who know what ARGs are and play them. This creates a couple of problems:

- This is a very limited group of people who are seeing the advertisement (at this time that is, I am not sure how popular ARGs will be in the future).
- Most of the time, the person who is playing the ARG will not know what it is advertising or even if it is advertising something at all until the end of the game or when some major plot point is reached.
- The targeted demographic of our own ARG will most likely be high school and college age students (the way we will target this is by making most of our real world rabbit holes located on campuses/sites specific to these players).

Luckily both of these problems can be solved fairly easily with the same thing, to make the advertisement unavoidable and early in the game. What I mean by this is not that the advertisement will be shoved down the throats of the players but rather that they will not even know that they are seeing an advertisement, which is our overall goal. The player can be sent directly to a website or a phone number that is connected to what the ARG is marketing. In our case for instance the player could be sent to the website of the Higgins Armory and that would be the advertisement. This is because it
puts the armory in the back of the mind of the player or whoever chose to follow the link. If they see something that they really like there or if the game really pulls them in, they will connect the armory with enjoyment, which is what an ad sets out to do.

ARGs that market products are successful for this reason, because they connect an enjoyable and stimulating experience to a product, which makes a person think very highly of it. This works even better when there is some sort of reward system involved in the ARG, and it helps get people to realize what is being advertised in the ARG. For instance, in the ARG Why So Serious? (which was an ARG made to market The Dark Knight) one of the rewards that players got was a never before released picture of the Joker and a trailer that was not seen in other places. Not only does this give the player a reason to play the game, because they want more rewards, but it keeps the product in their mind.

In the past, many ARGs used to market products have been incredibly successful because they create both word-of-mouth hype but they are focused upon by huge communities of people. People may not necessarily talk about the product, but they will definitely talk about the game if they are playing it, and this is still good because it draws more attention to the game and ultimately the product.

Some examples of successful marketing ARGs are:

(ARG/Product [type of product])

- Vanishing Point – Windows Vista [software]
  This was an ARG that created hype for Windows Vista, it is filled with clues linking Microsoft to the game and mentions “the ultimate vista” several times but does not actually say what the product is. It was successful in marketing Windows Vista because clues were sent to notable
bloggers and many people heard about it very quickly. A prize system was also implemented into the game to give people incentive to finish it.

- **I Love Bees – Halo 2 [video game]**
  This was an ARG that was designed to market Halo 2, while it does not make it as obvious that this game is about the product it is advertising as Vanishing Point, I love bees was just as successful. Again clues were sent to notable people in both the blog and ARG community to build interest in the game, but there was no prize system. The story alone drove this game and people still played it because the fiction was so immersive.

- **The Beast – AI: Artificial Intelligence [movie]**
  This was an ARG that was made to market Stephen Spielberg's movie, AI. Much like I Love Bees this game was driven mostly through the story, but no major bloggers or specific ARG community members were initially contacted because ARGs did not exist yet. Instead the game was put into the publics eye through movie posters for AI and in the trailers for the movie, so the movie was marketed because the game gave a back story for it rather than telling about the movie itself.

- **Why So Serious? - The Dark Knight [movie]**
  This was the ARG that was made to increase hype for The Dark Knight. The game consisted of a site advertising Harvey Dent running for District Attorney as a rabbit hole and then a series of activities and puzzles that allow the player to unlock more content regarding the movie. This was successful because it gave people who were craving more information about the movie what they were looking for and made it beneficial to play the game for potential viewers of the movies.
• “Year Zero” - Year Zero by Nine Inch Nails [album]

This was an ARG that was created to promote the album Year Zero by the band Nine Inch Nails. It was successful because fans were able to discover songs from the unreleased album at concerts for the band, so it both created hype for the new album and gave fans a reason to go to the band's shows.

• Something In the Sea – Bioshock 2 [video game]

This is an ARG that is currently running to promote Bioshock 2. It is successful in doing this because it is expanding upon the preexisting blueprint of a world that was laid down by the original Bioshock. This is another story-driven game because it rewards players with new information about the game they either already like or a game that they are looking forward to playing.

NOTE: these ARGs were all successful in marketing their respective products, but there were still other ways that they were marketed conventionally.

There are many factors which determine what will make an ARG successful for different types of products, for example:

• If the product is a sequel to something, then the ARG will usually expand upon some information that is preexisting in the world that the product takes place in.
• If the product is something that has already built up some hype, then the ARG will serve to expand that, not create it entirely.
• If the ARG is lacking in story then usually there will be some sort of reward system that will either give the players content they cannot get anywhere else or items that are part of the product being marketed.

• If an ARG is marketing a well known organization then they will usually incorporate or reveal the organization early in the ARG.

• The product being marketed is usually not tied directly into the story, rather it is either used to expand upon the story, or the story is set within the world associated with the product.

ARGs that are used to market products are usually significantly different than an ARG that is made purely as a game. Certain elements remain the same, like the “This is not a game” mentality, the mix of both real and web based interaction with the players, and the basic way in which the story is revealed (through players discovering new content by completing puzzles or riddles). The rest relies upon what type of product is being advertised and what the target audience of the ARG and product is.

The biggest differences between an ARG used for marketing and an ARG that is made for play alone is that the ARG used for marketing will:

• Be set in a world that is not entirely original.

• Incorporate a product or a company that makes the product that it is advertising.

• Overlook storytelling in order to include a device or situation that might not work as well as another, so that they can advertise.

There are no significant differences in the amount of time the player must interact in the real world as opposed to the amount of time the player uses the web in order to play the game. But the artifacts that they must uncover in the real world in order to further the game in the digital medium, can
differ slightly. For instance a game that is made for marketing will have more intense funding than an independent game and therefore will have better resources. A good example of this is Microsoft’s Vanishing Point which was initiated when more than 10 well crafted puzzle boxes were sent out to notable bloggers and ARG players. An independent game would probably use paper goods or pictures in order to make a rabbit hole because they cannot afford to spend much money since usually it won't be remade.

Another difference that affects the amount of real world interaction and the type of the interaction is that a marketing ARG will usually try to draw the player to a spot where the player can see the product or end up going somewhere that is linked to the product. This is because the people funding the ARG will usually have some sort of conditions for the game to follow, in order to get the correct exposure for the product.

I have been thinking about ways to incorporate the museum and the new exhibit into our ARG and it will be mostly dependent upon what the final story ends up being, but for now I believe that it has something to do with Professor Bell going missing. Our target audience will be the surrounding colleges in Worcester as well as anyone who finds our rabbit holes on the internet, and hopefully if we have time colleges elsewhere in the state. Some ideas I have thought of are:

- Posting fliers at colleges depicting a missing crypto-zoologist/time traveler/etc. in the form of a missing pet flier, each of which will direct the finder either to the site we will be basing our operation in or our rabbit hole on the internet.

- Making a “commercial” for the Higgins Armory during which the viewer will see Professor Bell go missing (this will be posted on YouTube).
These are just a couple of ideas, once we have a better idea of what we are actually making this to be like we will be able to brainstorm and come up with a much better idea.

[Image: Front page of the ARG main website]
**ARG Structure**

ARGs are just like any other game, they tell a story and allow a player to live this story, but they differ in the fact that the player “really” lives the ARG whereas he is just playing the game. I am of course referring to the “This is not a game” principle that all good ARGs follow, the player must not think of the ARG and its characters and places like a game environment, but rather like it is happening in real life. This gives them a similar structure to a book, movie, or play, because these are also genres that try and incorporate the audience into them (ie. breaking the fourth wall), but since the player does not get the full experience unless they play along, it is more like participatory theatre.

Just like a book, movie, or play, an ARG must have:

- Setting
- Characters (protagonists/antagonists)
- Plot

This is not to say that video games in the conventional sense do not have this, but in many cases they are much more lacking in the plot category than ARGs, and in some cases setting. The reason behind this is because a conventional video game has many visual stimulants and much more human interaction, to make up for the sometimes lackluster display of story. The story in an ARG serves to keep the player interested and wanting more, and is also how they are rewarded in many instances. So therefore it must follow the framework of other story-driven genres of entertainment, like movies, plays, and books.
But how are these three things established in an ARG? Since the player cannot just directly read or see what the story is (which is the whole point of ARGs) they must be interpreted through different mediums. These mediums can vary, but it usually depends upon what part is being developed or revealed and what way the puppet masters (the people who run the ARG) want the game to go. In the following sections I will break down each category of the game and explain how each is conveyed in the game (the mediums) and what is done to make each one of them progress or develop.

**Setting**

The setting is essential for the player to get a feel for the game and what it is going to be like to play it. This is one of the easiest things to portray in an ARG though, since it is a simple matter of making up organizations, people, and histories that the players can easily find that will explain the world the game is set in. There are a number of ways to set these things up for players to find and easily understand, including:

- **Websites**
  - Websites are perfect for creating personae for organizations that will be involved in the ARG, whether they be a real thing, or a fictional club or other group the characters belong to.
  - They are also a good medium to set up places where the players can find out more about the characters they know about in the setting, like family histories, news articles, or biographies.
  - Events that have recently happened in the game world can also be conveyed through websites via news or updates on organization web pages.
• Email
  ◦ Emails that are initially sent to players are a good way to set up a situation that occurs during the setting or that triggers the player participating in the game.
  ◦ Later on they can be used to expand the setting in order to give the players a glimpse of something they may not have known before.

• Real World Installments
  ◦ These are great for kicking off a game and getting people to begin their journey as a player, because they create curiosity and give the soon-to-be-players a reason to investigate the setting of the ARG.
  ◦ Sometimes information about the setting can be expressed on these (a missing poster for example) and this knowledge can be called upon later.
  ◦ Sometimes the setting can just be the real world, in which case anything that is true in the world we know is also true in the game and literally anything in our world is the setting for the game.
  ◦ Locations can also play a big role in this, if the game is based around a real location (like ours) that location will be part of the setting and therefore a big thing for the players to research or go see.
  ◦ These installments can also create a more compelling story by drawing the game into the real world more that it would be if there were no element connecting the real world to the digital one.

The elements of the setting can mirror the elements of the game enough, to make the use of real world installments more feasible, and in turn this can strengthen the “this is not a game” element of the ARG.
**Characters**

Characters are one of the many parts of a story that drive the player to find out more or make them excited for what is to come. This is because they add a sort of humanity to the story either by telling it through their own eyes or by displaying emotions that will trigger reactions in the player. Again this is a little difficult to do in an ARG because in many cases the player is unable to interact or watch a character directly. This does not necessarily mean that the characters cannot be developed though, there are a few mediums that are perfect for the development of characters in ARGs.

- **Blogs**
  - These are great for getting the basic personality, recent history, and quirks of a character that make it what it is because it is essentially the character writing about themselves for someone else to read, which is a great way for players to see characters.
  - This can also help determine what sort of role the character will play in the story because the player can see what has been happening to them on a day to day basis (if they care to read that much) and see if there are any similarities between the character and what they already know to be true in the ARG.
  - Characters can also interact with each others blogs through comments, or through simply writing about others, which helps the player determine what relationships exist between characters in the game.

- **Social Networks**
  - Social networks were created for people to be able to show off who they are on the internet to people they do not even know, this makes them another perfect candidate for showing who the characters in an ARG are.
  - The players can get a sense of what the character looks like, which can help in some
.instances to make the player help that character because they see them as more human than a faceless blogger.

◦ In some cases the puppet masters may want to give the player information such as a character's location or age and this is a perfect way to convey that information because it is a normal thing to post on these sites.

• Email/Instant Messaging
  ◦ This is mostly only so that the player is able to “directly” talk to the character that is on this particular medium.
  ◦ The player can get a sense of the way the character talks/writes which furthers the humanity factor, also interacting directly with the character gives the player a better sense of immersion.

• Photos
  ◦ Photos make up a bulk of what the puppet masters will use to create the visual aspect of the game.
  ◦ These can strengthen the player’s relationship with certain characters or allow them to imagine what is going on in the game much more vividly.
  ◦ Photographic evidence is usually viewed as something that proves truth, so if there is photographic evidence of something, even if it is something that is fictional, then it can be true to the people who are using the media that implements the photo.

• Videos
  ◦ Videos work in much the same way as photos do to solidify what the player has already experienced, but they make things more tangible, because you can see the action unfolding
in real time.

**Plot**

Plot can be advanced through pretty much any sort of medium so I will not list every possible thing that could be used but I will mention a number of ways in which the plot is advanced.

- Players find a new site or location that contains more information which leads to more story.
- A character lets slip something that reveals more about what is going on.
- An event happens at a company web site or an organization site.
- Real life events are staged where actors talk to players or items are retrieved by players.
- Characters tell the players to meet them in some sort of location, in virtual reality or otherwise, and they give the players a clue or more story.

ARGS are much like mystery stories where the player is the detective and must interpret what they find in order to play the game, during which they will solve puzzles and riddles in order to further the plot and uncover more of the story.

The average ARG has a storyline that goes something like this:

- Introduction – this is the time during which the players find the rabbit holes and begin to learn about the background of the ARG.
- Escalation – this is the bulk of the ARG during which players gather clues to try and figure out what is going on in the game or trying to find something that the game calls for.
- Climax – the players find what they are looking for or have a sudden revelation about what is going on in the game world and decide they need to either stop something from happening or
help someone do something.

- Conclusion – all the blank areas in the player's knowledge of the game world and the characters that inhabit it will be filled in here and the problem that they were facing will be concluded in some way.

There is not any set formula for making a successful setting, plot, or characters. All that is required is that they are developed correctly and continuities are preserved so that the story is not undermined. Well developed relationships and backgrounds for each character and setting help to make the plot of the story overall more successful. These backgrounds allow for the writers to take from a library of knowledge that they have written beforehand to make it an easier task.

In the case of an ARG a background should be made for each character and setting as well, but there should be a few things added to this, such as:

- Pictures, for visual representations of the character or setting.
- Inscriptions or other notes that are related to the setting or character (such as a journal, or a translation or rubbing of characters or writing from a place).

These things would be included in the story appendix of the game design document.
Extension of the website that starts to encompass Professor Bells story
Design Documents

Design documents are an integral part of the game development process, not only do they help make the game, but it is almost impossible to do so without one. The design document has a description of almost anything that a person trying to make a video game could need to know about what they are making. Design documents can range in length from a few pages to a few hundred pages, usually depending upon the complexity and length of the game and the game engine. Some of the main elements of a design document are:

- Game Philosophy
- Game Design
- Feature Set
- Game World
- User Interface
- Game Mechanics
- Game Characters
- Simulations
- Artificial Intelligence
- Game Elements
- Levels
- Game Engine
- Art Portfolio
- Table of Contents

These are not all of the individual facets of a design document but they give a good picture as to what makes up this piece of writing. Each section of the document describes a different aspect of the game in depth so that the people who are working on the project have a blueprint for everything they do before they do it. In turn this makes it much easier and faster to finish and publish a game.

ARG design documents are, of course, much different than those of a conventional video game. This is because the environments that each is played in are much different. For instance, a conventional game has a pre-defined world that the player is able to interact with others in, and an ARG’s world can be totally adaptable depending upon what is going on in the story at the particular time. ARGs also do not use complicated programming such as artificial intelligence, and in most cases, a game engine. Simulations of the game are also out of the question since it would be fairly difficult to test whether or
not people are able to play the game; the only thing that can be tested is whether or not the puzzles are solvable.

In this paper I will explore what the contents of an ARG design document are and what it is for, what kind of information is found there, and whether or not we will be using that section. The sections that I will be exploring are: Game Philosophy, Feature Set, Game World, Characters, Story Appendix, and List of Assets.

**Game Philosophy**
This section of the design document is devoted to explaining why the game is being made, why the player is playing the game, how the game is played, how the player will win the game, and what happens in the game. Each of these are pretty straightforward and don’t vary too much between ARGs and conventional games, with the exception of why the player is playing the game. Since a player cannot see an advertisement for an ARG, there needs to be a little more pull, this is where a rabbit hole comes in. The rabbit hole is what first intrigues a player and gets them into the game world, hopefully it is curious enough that a lot of people look it up and begin to play the game. Without a good rabbit hole, there isn’t really a reason for someone to play an ARG, all they would see then are weird things that make no sense. The rabbit hole is what gives the game unison throughout it and makes it keep coming back to that big question that was originally posed to the player.

**Game World**
This section goes over the universe in which the game takes place and tries to establish a setting for the game. This can be done in a couple different ways, the locations can be described individually from each other or they can be listed and then described later. Many times this section will also include an overview of the world as a whole rather than just specific locations. This can include environmental factors like the seasons changing or the weather, but it can also encompass events that are man-made,
like houses that progressively build up. If it is needed a map can also be included in this section to give a visual aid for a better idea of the environment.

**Characters**
This section encompasses all the characters that there will be in the game (the main ones at least) and gives a description of what they are like. This will also give a short bio of the character so that the developer can get a better idea of where the characters are from and how they react to certain environments and situations. This section will not however describe what it is that the characters look like, because this is detailed in the art section of the design document with all the other concept art. Character relationships can described here, but usually if there is any sort of back-story to do with characters it will be outlined in the story appendix.

**Story Appendix**
In this section there are a number of things that will be outlined:

- **Back-story** – This consists of a detailed description of past events that might affect the way that the game progresses or looks. Certain character pasts can also be told here if need be because it falls in this realm. Anything else that helps the progression of the story can be put into this section as well as anything that might change how certain situations can turn out.

- **Setting** – This is a description of where the story begins with a brief mention to the world it is set in (because this should have already been explained) and what the characters are doing at the beginning of their adventure.

- **Plot** – This is the most important part of the story appendix since it describes how the game will work when the player is going through it, it also gives a better idea of how the flow of the story will go and what the developers can expect to be making at what time during the project. It can
also detail when certain content is introduced into the game which gives the developer a better control over when they reveal things to the players.

- Conclusion – This is basically a description of the win condition for the player and the epilogue of the story if there is one. This can detail end cinematic sequences and possible post credits activities and/or information that is given to the player.

**List of Assets**
This is something that many conventional games do not implement, because all of their assets are in the game or the engine itself. This is mainly an ARG sort of thing because they often span so many different mediums, and the developers need to have a list of what their game consists, or will consist of somewhere for easy reference. This will list the different applications, sites, programs, real world installments, and actors (if any) there are in the ARG. This list will also note where they are used and what time they would be appearing to the players and becoming part of the game itself.

I have been reviewing design documents for ARGs as well as conventional games in order to see what the major differences between these two types of games are. The most notable things that I have found so far are:

- ARG design documents also usually include a table that illustrates when certain parts of ARGs will be going live and what will be happening per week in the game.

- ARG design documents include a table that shows a day to day basis of the sort of coverage and launch details that will be released about the game a week or so before the game goes live.
ARG design documents include a flowchart that shows the links between each of the aspects of the game (different web sites and other assets of the game and their relationships to each other).

ARG design documents usually have some sort of section about how the developers feel the players should progress through the game and what order they should see content in (to get a better feel for how they want to piece it together).

**Timeline**
This section is an overview of what happens on a day to day basis during the run time of the ARG. This describes what content will be released and when and what sort of media coverage there will be. Estimates of the amount of time that it should take for a player to make it through the content that is currently active should be included in this section as well, for a better idea of how long the ARG will take.

Obviously there are more differences than just these but the most glaring ones are listed here.
**Materials Organization of ARGs**

In many games the materials are organized in the design document, this is true for ARGs as well, but there are some notable differences. This is due to the way that an ARG is structured as opposed to a conventional game, as a story that is revealed over a time period instead of through player exploration. As I mentioned in my previous paper an ARG document includes something called a list of assets. This list usually contains all of the various materials that will be used in the game, like artwork, platforms for game play, and possible content. This list is similar in its contents to one that would be used for an ARG; an ARG lists: images, videos, content, digital resources, story, and timeline.

The way that the materials are organized, in ARGs, is through lists and diagrams or tables that designate how they relate to content and when exactly they will be revealed. This functions as more of an appendix to the design document rather than a substitute, since there are many things such as game world that this does not cover. Nonetheless this is still needed just as much as the design document, because while the design document includes a basic overview of the assets being used for the game, the materials organization goes in depth into what the game calls for and how each thing will be used.

Depending on what is being detailed, each material will be organized differently, for instance a digital resource would focus more on the way it is implemented, whereas an image would focus more on when it is revealed and why it is being included. The following are the things that are included for each entry of an asset in the organization of materials:

**Images/Videos**

Obviously these are quite self-explanatory, but in each entry there are a number of things that must be discussed. First there must be something explaining how and where the particular media will be used and what the puppet masters are trying to accomplish by using the specific image or video. Then there
must be some sort of description about when it will be revealed to the players and through which medium (email, websites, posters, etc.).

**Content**
This section is similar to the images and videos section except that it deals more with the text based things that players will receive as well as other storytelling elements (such as audio sources, and physical artifacts). Again this section will detail how and where these things are used and when it is revealed, but this time there will also be a description of what the players should be learning when they see this content and what the main points they should take away from it should be.

**Digital Resources**
In this section there is an entry for each digital resource that will be used in the game. These will detail when and why each medium is used and what purpose it will serve in the game. What content will appear in each of the mediums is not a bad idea to include either but is not entirely necessary since the timeline/tables can show this more easily.

**Story**
This section is a sort of brief overview of the story that the game will incorporate, (much like an outline) in order to determine what sort of flow the story will have and what kind of things would work best in each part. This is sort of like the timeline, but it deals much more with the structure of the story than with the timing of the story and other events.

**Timeline**
The timeline is a detailed overview of what will happen during each week (or day depending on how detailed it needs to be) of the time during which the ARG runs. The descriptions will include what mediums are being used, which content is being revealed, and what the players are expected to get out of the time period (in terms of story and clues).
The organization of materials is a part of the design document. This will appear as an appendix of the design document and it will include the above descriptions as well as graphic representations of the story (flowcharts, etc.) and timeline. Hopefully the material in this section can either expand upon or help to produce the content for the other parts of the design document, such as the art library, or the story appendix.

The organization of materials is a big part of making a game, and as such care must be taken in writing it up because any oversights in this document can affect how the game comes together. This document is essentially a list of what the game will incorporate and as such it plays a large role in determining the style that the game will take on (if it is stylized at all). It limits what the team has at their disposal, making it easier to stay focused on a goal, which eventually leads to a better game being produced since more care is taken in the areas the game will cover. Less time is wasted on pursuing goals that ultimately will not serve what the game is attempting to accomplish because the goals have already been produced and expanded upon in this document.

Having a document that organizes the materials makes it easier for the team to be able to look up specific aspects of the game such as art or story elements. The lists of assets allow for more planning ahead and accumulation of materials prior to the beginning of work on a game. The charts and timeline included in this also give a fairly accurate representation of what the final product of the game will play like, and the sort of dedication of time that a player will be expected to make. Through this it can also be determined what age group the game will be targeting and make adjustments prior to production in order to keep it on track towards this audience. Overall this document is mostly just an addition to the regular game design document that is meant to streamline the process of production of the game.
Conclusion

IQP Process
The IQP process was a great experience and very informative learning experience. Our team worked closely with the Higgins Armory every week to develop an ARG that could expand the story of Professor Bell as well as experiment with ARGs in a museum environment. As a whole the process was very smooth. We spent the first term of the IQP doing research which was very helpful as the project progressed. Instead of constantly having to look up information when the team needed to generate ARG content, we could look through our research ad quickly found what we were looking for.

Weekly meetings were always incredibly helpful for feedback as well as brainstorming for story and ideas for the ARG. Each week, the team would meet at the Higgins Armory Museum to work closely with employees and the exhibit.

The second term of the IQP was spent creating the content and story for the ARG. Again, the weekly meetings were a huge help because we could make sure that the staff at the museum had a big input into the story of the ARG. The team is extremely proud of the story that we generated for the ARG. It truly follows the habits of Professor Bell and develops him a bit more as a character.

The final term in the IQP Process, was the “running” of the ARG. This consisted of posting the Rabbit Holes, and attempting to bring in players. We constructed a website to host all of the content for the ARG, and to allow players to communicate with each other to help uncover the secrets hidden within the depths of the website.

The IQP Process as a whole went well but we discovered too late that there were some fatal errors in the design and construction of the ARG. Our original target audience was incorrectly assessed, there was
close to no interest in the ARG, and the rabbit holes brought in very few players. We had hoped to make a fun ARG that people wanted to play, and even though it didn’t turn out the way we had hoped, we still compiled a lot of data on ARGs and some good reasons for why they can fail.

The ARG

*Rabbit Holes*

The rabbit holes for this ARG consisted of Professor Bell’s business cards, which were placed in the museum, and missing posters that we put up in various locations in Worcester. These were:

- WPI (on campus and in the IMGD pit)
- Clark
- Holy Cross
- Higgins Armory
- That’s Entertainment (although we suspect that they never posted it)

We had some problems when we were making the rabbit holes for our game, namely that many of the people in our target audience could not understand them or simply did not find them interesting enough. Others followed the rabbit hole and did not understand what the game consisted of (at that point a bunch of our characters had been posting on a forum about an expedition they were heading out on. Looking back, this was a really confusing entry point for players, instead if we had just had a site about the group itself, with the forums as a minor area for story development it would have been more understandable.

Obviously since our rabbit holes were not very effective we did not bring a lot of people into the game, but another reason why were unable to get much attention was because we misinterpreted our
audience. Originally we were trying to get college students and people who have knowledge of ARGs to play, but this proved to be the wrong people. In reality we should have targeted the family audience much more heavily. College students seemed to have little interest in some game about something they did not really know much about, since we were mainly targeting them at their schools and not the museum (so they did not have previous knowledge of Professor Bell in many cases). ARG players would probably not have found our rabbit hole interesting enough, and even if they did play they would probably not have found the content up to their standards (after all we do not have much experience in this field). The family audience would have been a much better option because they would have already been reading about the Professor himself in the museum and might think it would be fun to find out more about him and solve puzzles together.

Our medium for communication of this game to our players was another limiting factor that ultimately led to our game not working out as well as we had hoped. This medium was an internet forum, and we overestimated the amount that we could do in terms of interesting content generation with a medium like this. Originally we wanted to incorporate videos and pictures and cool browser puzzles into the game, but we ended up being pretty limited because of the combination of the story we chose, and the medium through which we would be telling it. Since the characters would be posting logs and similar text-based-inputs there was a lot to read, but there wasn’t much to look at, so it was probably a little boring for our players. This was likely due to one of two things (or both): When we originally wrote the story we were planning on using a number of mediums to communicate (email, AIM, real world installations, etc.) and the story ended up being pretty ambitious.

We limited our scope mostly due to a decision about what would make sense for a research team to use when in the field for communication. For example it wouldn’t make much sense for the team to be logging onto AIM all the time when the internet connection they have is limited and used for
only work related subjects. In the end we decided on the site because it made the most sense and forum posts were easy to manipulate so that they looked older than they really were and so they could be edited on the fly. The story however ended up being much too large to be contained only in the words of forum posts, so it ended up being pretty understated by the time it was put into reality in our forums. This made for a pretty mediocre experience on the player’s part even though we were still getting our story across.

**Recipe for Success**

From the errors that occurred in our project, we have uncovered some of what is needed to make a good ARG.

**Start Simple**

One of the problems with our ARG was the massive scale that we were thinking of. We had originally planned to make a short film to get people interested, as well as another short film down the road to keep the interest of players. Neither of these videos happened. This isn’t to say we didn’t do substantial work on either of the videos; in fact it’s the contrary. The first video we realized was implausible due to time constraints. The second video was canceled when we realized that if any of the other content was to survive and continue to be worked on, the video would have to be abandoned. The scope of our project had drastically simplified, and we focused our efforts on the website and the content that would be on it. We started from the top and worked our way down, occasionally building on the base. To create a successful ARG, the scope needs to start small, just the basics. Attention to detail is vital, one misspelled name, and the reality is broken. When the base is built, then you can start to spread out and grab a hold of the world. Create detail without focusing too much on any one thing.

**High-impact Visuals**
Losing something as large as a viral video from the original plan had created a hole we didn’t realize needed to be filled until it was too far down the progression of the ARG. All of our original content was text aside from the two planned videos. An ARG is not setup like a book, where you are given a straight path through the story. An ARG is setup more like a spider web where all the information is located at separate connecting points. To hold people in the web there needs to be some sort of visual stimulant.

**Create different paths to any one location**

One of the puzzles that we had in the ARG was leading the player to Professor Bells site. The phrase was “I dream therefore I am”, which when entered into the end of the website address would take the player to the Professors site. The mistake that we made was misjudging our audience. Instead of getting ARG players, our players were from the museum, something that should have been obvious from the deployment of the rabbit holes. We repeated the puzzle in the same manner, delivering the same phrase, but what we should have done was give hint to the fact of where to put the phrase.

So to future creators of ARGs, start off with a simple story, then a good base, and then start to spread out. Make sure the ARG is not fully based off of text and journal entries, make sure there are multiple paths to any one location, and don’t miscalculate the audience.
Team Bios

Adam Pastorello

Adam is an Interactive Media and Game Design major at Worcester Polytechnic Institute. He spends all of his free electives on art classes, but he is primarily taking classes in computer science. He excels in artificial intelligence programming and 3D modeling. He sees himself as a bridge between artists and programmers.

Riley Brown

Riley is a Junior at WPI who has taken part in the development of an ARG before, and has been realizing recently that even though he has done a ton of research into ARGs and worked on them before, he still has no idea how to make them.
Tyler Berg is currently going to WPI for a computer science degree. One day he hopes to move back to California, or at least someplace with more comfortable winters.
Works Cited

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Digital Media

5. http://searchsecurity.techtarget.com/tip/0,289483,sid14_gci1229781,00.html


13. Instant Messaging. AIM Site Map. September 6, 2009, from http://www.aim.com/sitemap.adp?icid=aiMDBFooter_24. Instant messaging in todays world provides more that just a message from one person to another. Although that could be used as a viable marketing strategy, Aim in itself can be used to make automated “answering machines” of which messages can be sent to and from phones and computers.


**Mythology**


Woodland, L. *Training for Beyond Belief: The Curious Collection of Professor Rufus Excalibur Bell*. The training materials to help employees show the exhibit to museum customers.

Woodland, L. *Kiosk Database*. The database with information about the entries in professor bells collection.
Appendices

Appendix A – Design Document

Game Overview

Philosophy

*Philosophical point #1*

This game is being made to create buzz for the “Beyond Belief” exhibit at the Higgins Armory in Worcester, MA. The overall goal that we will try to achieve is to get the word out about what is in the new exhibit is about and what is in it. In doing so we will try to attract a number of different age groups to this exhibit and the museum itself, these new age groups are college, high school, and middle school students (although in the last instance the game may be a little over their head).

*Philosophical point #2*

Our ARG will try to be as original as possible, although outside inspirations will probably be used, we will try to generate our own content for most facets of the game, including:

- Art
- Story
- Structure
- Writing

But since there is already preexisting content that can also be used, we will be implementing that to its fullest (these things are mostly story and stylistic related but existing photographs and other content are also good).

*Philosophical point #3*

This ARG will be made to be played in both the real world and the internet mediums, but for the sake of interesting the surrounding population of the museum and to bring people into it we will probably have more real world and site based content than most ARGs.

Common Questions

*What is the game?*
This is a game about the adventurer/historian/explorer Professor Bell and his adventure through time to find out about the end of Atlantis. Players will be helping him solve puzzles and riddles that will ultimately assist him, and the players, in discovering what they seek in Atlantis and the other venues of the game. This will involve them going to the museum and looking in both the kiosk and other exhibits throughout the museum while corresponding with Professor Bell over the internet and other mediums.

**Why create this game?**

We are creating this game because the Beyond Belief exhibit presents a great backdrop and story idea for a game such as this. In addition we are hoping to put the word out about the exhibit and hopefully get a lot of people to come see it.

**Where does the game take place?**

The game takes place in the real world that we know today, but with some slight differences, for example:

- Professor Bell’s time machine.
- The actual existence of all of the mythological artifacts in the exhibit.

**What do I control?**

The player will not be controlling anything, but rather assisting the main character of the story, like in most ARGs.

**What is the main focus?**

The player is ultimately supposed to assist Professor Bell in his quest and to rescue him from the past when he becomes trapped there. Along the way they will be accomplishing minor tasks that will lead up to this much larger one.

**What’s different?**

In terms of game mechanics there will be no big differences, but in terms of medium is where we will differ the most. The museum aspect of this ARG is a huge advantage because the addition and removal of artifacts could make for a very compelling plot and also reinforce the sort of “scavenger hunt” style of play that we are incorporating (along similar lines we will also have the kiosk at our disposal).

**Feature Set**

**General Features**

Altered reality in the real world (contains fantastical creatures and devices)
The classic pulp fiction/fantasy adventurer Professor Bell and his penguin sidekick
Games
Original Artwork
Museum Exhibits
Animation

**Multiplayer Features**
Forum for correspondence

**Game play**
Ciphers
Puzzles
Hidden Messages
Scavenger Hunts
E-mail/Instant Messaging robots
Blogs
A LOT of back-story
Museum exhibits
Interlocking Story Arcs

**Game Characters**

**Overview**

**Professor Rufus Excalibur Bell**
- The protagonist of the story
- He travels back in time to research Atlantis

**Research Group**
- Has aided Professor Bell in the past when he caught the Yeti
- More information about the group unknown.

**Nancy (possible)**
- A connection from the fictitious world to the real world
- Role in story unknown

**Benjamin the Penguin**
- Sidekick and trusted friend of Professor Bell
- Back container currently houses coordinates to Easter Island.
  - Possibility to change to Atlantis

**Enemies and Monsters**
Giant Octopus

- Currently the main Antagonist of the story.
- Hinders the movement of Professor Bell through time

Game play

Overview

Describe the single-player game experience in a few sentences. Here is a breakdown of the key components of the single player game.

Basic Story

The story begins with the professor missing, and the players, through research and problem solving must figure out where he is and help him.

Hours of Game play

The player will be presented with at minimum, one hour of content each week to ensure a continuing interest in the ARG.

Victory Conditions

The player will “win” the game when they assist Professor Bell through some final task that he must take care of before he returns to the museum.

Story

- Professor Bell is missing because:
  - He got up and left the museum to do his own research.
  - He got lost in time/in general.
  - He was kidnapped/captured by villain or one of his enemies (if he has any).
- He is in the past researching the fall of Atlantis so that he can have knowledge of the upcoming apocalypse in 2012.
- He somehow gets wrapped up in the fall of Atlantis and cannot return to the present, possible ideas are:
  - His time machine is damaged.
  - Natives have captured him.
  - His plan was sabotaged by the villain.
- He communicates with players by leaving artifacts/messages for people to find in the future.
- Players can help him by:
  - Time machine has a failsafe that returns it to the present and players must help repair it and send it back to professor bell.
  - There is another time traveler who is unknown to the players and they must find him and ask for his help.
Once the time machine is repaired Professor Bell will try to come back to the present but this will be disrupted by the villain, or some other event and he will be sent to the Mayan time period. In the Mayan time period he will discuss with them the way that they were able to predict the cycles of the earth ending, during this time players can be trying to help him decipher notes/etc. from Atlantis. Simultaneously the players and Professor Bell stumble upon some revelation which leads them towards the climax of the ARG.

**Timeline**

March 1, 2010
The team takes the plane to Tikal, at which point they meet up with Raul who has a GPS that updates with a new location when they arrive. The team decides to camp out near the park for the night and continue the journey in the morning.

March 2, 2010
The team discovers that they will not be able to begin travelling because the GPS does not show roads they should take, but rather just directions, so they must delay the journey another day to try to find a guide, but they eventually fail and must continue on their own the next day.

March 3, 2010
The team sets out on their journey to the destination which is supposedly 50 miles away, they notice early on that the GPS does not display landmarks such as water or land masses on it, but rather just shows the direction they must go. Obviously this causes some difficulty and it is only with Gordon’s experience that they are able keep the trail. The going is slow and the team should only make about 20 miles of progress this day, because they are taking frequent breaks for Gordon to gather himself.

March 4, 2010
Today is exactly like the previous day except that the group should eventually break down after 10 miles or so and they will sit on the trail waiting for help.

March 5, 2010
The team sets about fixing the jeep because they realize no one is coming, Stanley should know the most about this.

March 6, 2010
The jeep is fixed and the group can finally keep going on the trail, they should go 17 more miles before they can find no useable roads and realize they must hike the remaining 3 miles, which they decide to do the next day.

March 7, 2010

They decide to scout out the site before bringing up the rest of the equipment so they hike the 3 miles and find that it is a difficult road full of obstacles like rocky cliffs. Once there they will describe the site as [whatever I wrote in Jordon’s post], and decide that they should go back the next day to bring the rest of the equipment. But while they are there they will meet the Professor who has already been there for some time.

March 8, 2010

The team ferries the equipment today and promptly goes to sleep when they are done to get a early start the next day. The Professor has disappeared for the day and returned during the night, they have no idea where he was.

March 9, 2010

This day is spent mostly setting up equipment. Jordan will be supervising but James and Evelyn will begin to check out the site leaving the rest behind (thus they will not make entries this day). The Professor has done the same thing as he has done the previous day.

March 10, 2010

The team will make routine entries about the beginnings of the research with the Professor repeating what happened the first two days, but not returning at night.

March 11, 2010

Make short notes at the end of these entries about the day.
Appendix B - ARG Content

Critias Research Bio

Critias Research is all about investigating what others refuse to investigate. What we mean by this is that, we do not assume that any project is too absurd, and we will treat each one with the same respect regardless of the subject.

One of our main goals in taking more obscure jobs is to make new discoveries that would not have been made otherwise. We have the ability, to find what cannot be found, because we will look where others do not think of or cannot look.

When operating, we adhere to a set of rules:
• Investigate sites thoroughly, and leave no stone unturned.
• Look for clues in anything we find, no matter how inconspicuous.
• Share our knowledge with the world, through web logs and other communications avenues.
• Be open to the word of the public, we know that we cannot always find the answer alone, and thus invite anyone to contribute to our findings.

The most important thing is that our team is safe, and we will never risk one of our members, in the pursuit of knowledge, no matter how important a discovery we may make.

Staffing Paragraphs

Randall Marks

Randall Marks is a computer hacker and programmer who specializes in three dimensional mapping. He is also particularly adept at web development and is the new webmaster of the Critias Research site. Randall has not worked with Critias Research before, and is the first computer oriented member that has worked in the team. Randall has been living in Boston, MA and operating a computer repair shop called “Magic Fingers” (after his alias).

Jordan Monroe

Jordon Monroe is an archeologist and researcher from Worcester, MA. In the past he has worked on a few projects with Professor Bell, making this his fourth collaboration. He is one of the founding members of Critias Research and often plans and leads the projects that they work on. Recently he has become interested in Cryptology and Mythology, due in part to Professor Bell, and was part of the team that brought a frozen Yeti back from Nepal.
**Evelyn Harris**

Evelyn Harris is another veteran of Critias Research, who specializes in archeology and mythology. After the Yeti mission she was a bit shaken and took a leave of absence for some time, but is back now and excited to work on yet another project for Professor Bell. She currently operates out of Worcester, MA with James and Jordan.

**James Worth**

James Worth has been with Critias Research for some years now, and was one of the members of the team that brought back the Yeti for Professor Bell. He is sometimes reluctant to go on the more risky projects that are associated with the Professor but when the chips are down he always comes through. His specialties include archeology and cryptology. He is currently based in Worcester, MA along with some of the other members of Critias Research.

**Gordon Harper**

Gordon Harper is a cartographer specializing in ancient diagrams and texts. Based in Boston, MA he has been going from job to job for the past few years, working on a number of different projects with other research groups. Many of these projects involved Mediterranean exploration and excavation, but he has experience in other areas of the world as well. This is his first time working with Critias Research.

**Raul Villalobos**

Raul Villalobos is a linguist who specializes in Mezzo-American literature and hieroglyphs. Although he may not have worked with Critias Research before, he is a long time college and friend of Professor Bell, with whom he has worked with many times. He operates out of Guatemala because of its proximity to Mayan sites but makes many trips to the United States to lecture at museums and colleges.

**Stanley Burrwood**

Stanley Burrwood is an entrepreneur with an ex-military background. He has connections all over the world and can get his hands on all sorts of assets that are usable by Critias Research in the field. He is also a very talented diver and is in charge of all underwater excavation that should take place. Although he has not worked with Critias before his track record is fairly impressive and there is no doubt that he will excel in this team. He currently lives in New York, but is usually abroad on his most recent missions.
Pictures

Randall Marks

Jordan Monroe

Evelyn Harris

James Worth
Journal Entries

Randall Marks

February 20, 2010
So Jordon has told me that I need to keep a log if I'm going to be working at Critias research, I'm hoping this is what he means.

My name is Randall Marks, but I prefer my alias, Fingers (which I wasn't allowed to use on this site because it needs to be my real name). I've been hired because this group of people needs someone who is good with computers, and I'm the best. I'm not sure what I'll be doing but I'm sure my talent is going to be wasted on some sort of menial task, supposedly the group is doing some sort of research, archeology stuff.

In any case, they offered good pay, so I took the job.

February 22, 2010
I've tried contact the guys at Critias about the sort of work I'm supposed to do for them, trying to figure out if it's worth my time, but so far they've been dancing around this subject. I'm not really sure why, but I'm getting the impression that Jordon doesn't even know what we're going to be doing. Honestly I don't care as long as I get the money, but it kind of disturbs me that I'm working for someone who doesn't know what is going on.

February 23, 2010
I'm not sure how this is supposed to work or anything, but I was always under the impression that there was some sort of preparation that archeology teams went through before going on projects. Like background research or something, you know?

Critias hasn't done any research as far as I know, at least none that I've been told about as of yet. This kind of makes me nervous, given that I have no idea if they've even planned for where we will be living or what we will be eating, or if we will even be safe in where we are going.

From now on I'm just going to stop writing these entries, looking back all I've been doing is complaining about how I have no information, what help could that be?

March 1, 2010
I met the team at the airport today and just like me all the other guys have no idea what we are doing, in fact as far as I can tell most of the people in Critias are freelancers, who have only been hired for this one job. We got on the plane, which was a bucket of rust to say the least, and are now headed to the destination, which of course is still a complete mystery.
When we finally got to Tikal we met this old guy named Raul who I guess is part of the team, and he had a GPS which updated with a destination when we arrived. Some of the team wanted to begin our journey, which the GPS said was 50 miles away, but eventually we decided that since it was so late we would just camp on the edge of the park and begin tomorrow.

**March 2, 2010**
We figured out that the “GPS” was not what we thought it was. We assumed that it would tell us how to get to the site, but all it does is point in a direction, and we have no idea how the roads work around here so we tried to find a guide. But we couldn’t find one, so now we are planning on making our way as best we can tomorrow.

**March 3, 2010**
So far the project is not going very well, we have only gone about 20 miles today, when we were planning on making it to the site itself. The only reason that we were even able to make it this far was because Gordon was able to make most of our path on the fly using a map he had. I’m hoping we can get farther tomorrow.

**March 4, 2010**
Everything is going wrong, the jeep broke after 10 miles and now we are waiting for help.

**March 5, 2010**
This road is like a ghost town, no one has come by all day! Stanley is setting about fixing the jeep while we all sit around doing nothing.

**March 6, 2010**
Stanley was able to fix the jeep late last night, and we went about 17 miles today before Gordon couldn’t find any more roads. We’re going to scout out the site tomorrow by bushwhacking the last 3 miles.

**March 7, 2010**
The team went to the site, but I’ve stayed behind with Evelyn to guard our supplies in case anyone comes along. I don’t think they will be coming back tonight though, it is pretty late, and it sure is creepy out here...

**March 8, 2010**
We are now all at the camp, but we spent the entire day lugging our supplies across some pretty rough terrain, I am absolutely exhausted. Surprisingly though, it seems that the Professor himself has been at this site the entire time, although he disappeared during the daytime and only returned just recently tonight. I have to say I’m a little disappointed. I’m not sure what I was expecting him to be like, but I defiantly didn’t expect someone who looked like my grandfather.
March 9, 2010
We’ve been setting up camp all day today. I’m dreading tomorrow because I have to get the satellite uplink running.

March 10, 2010
I finally got the link up, but now Jordon has set me to work on an initial map of the site.

I don’t really have much to say about today, it was pretty standard compared to the rest. All we did was begin our actual work although the Professor has not returned since yesterday...

Jordan Monroe

February 10, 2010
Professor Bell contacted me recently about a job he needs help with, and it sounds quite extraordinary, although hopefully not as exciting as the Yeti project. Since I expect this may be somewhat similar to the Yeti expedition I am going to begin recording a journal, and ask that the rest of the team does the same. He hasn’t explained fully what he’s expecting of me and the team, but he mentioned something about researching Mayan ruins looking for unknown glyphs. He wasn’t very specific as to the location but knowing him I assume it will be quite unlike things we have seen before.

February 15, 2010
Talked to the professor again today, he said that I should assemble a team and ship out by next week. Not much notice but I think that I should be able to find personnel easily enough. Obviously I will be taking James and Evelyn, but I am sad to say that I do not think Larry will accompany us. He has been a little skittish about projects with the Professor ever since the yeti. I wish I could take John as well, but it would just be too much work dragging a wheelchair to each site.

I am always a little disconcerted when working with new people but regardless of the old team’s condition we would need new members. The professor tells me that I will need a guide who is good with maps of all sorts (I guess he is expecting that we will find Mayan navigational charts or something), a linguist, a computer expert (I can only wonder why), and someone with access to all sorts of machinery and other assets.

I must say that this is sort of a strange assortment of people for an excavation (at least that is what I assume we are doing). What puzzles me more though is why the Professor himself is being so cryptic. He refuses to divulge more information and we are to take a chartered flight, of which I have no idea what the destination is, out of the Worcester Airport.

March 1, 2010
We are now travelling to our unknown destination on the plane. The pilot too will say nothing as to where we are going, an old associate of the Professor's I would guess. The plane is an unmarked aircraft which is ancient, and the pilot could quite possibly be twice as old as the machine itself. Each time it shudders my life passes before my eyes.

The team was not as hard to assemble as I was expecting, in fact I think the Yeti mission must have given us quite the reputation as adventurers because people were flooding my e-mail with resumes seconds after I put out the word that we were looking for new members. Obviously many were unqualified and I had to wade through at least a hundred applicants before I found some people that I thought were good for the job.

Our guide and cartographer, Gordon is an interesting character, extremely bright but also very quiet, it seems as though he is always poring over some piece of paper and making marks with a compass, how he can do this already without knowing where we are going I have no idea. The linguist is a man named Raul who has had experience with Mayan texts and a smattering for codes and riddles. This man was personally recommended to me by the professor, because they have worked together before. Other than that I do not know much about him, because he is going to be meeting us somewhere on the way to our destination, because he is a previous associate of the professor maybe he knows something about where we are going, but knowing the Professor I would doubt if he had complete information. Our computer expert was a little bit harder to find, and eventually I ended up taking a man who calls himself Fingers. I’m not exactly sure what this means but he seems normal enough, we can probably use him to assist in the excavation when he doesn’t have anything to do on the computer (which I am still not quite sure what he will be doing yet). Finally we have the one member of the group I am more than slightly nervous about, Stanley, an ex-military adventurer. The only reason that I even considered him for this project is because of his ability to acquire assets and supplies, apparently his contacts in the military allow him to get almost anything dropped anywhere, I just hope he is not one of those overbearing types, that could really kill morale.

March 10, 2010
The last couple days have been exhausting, but they have also been enlightening.

Randall just finished setting up the internet connection and wanted me to test it because he is busy setting up his massive amount of equipment. I have no time to talk right now because we must set up camp as soon as possible, but I can say that we have traveled a long way from Tikal, and are now deep in the jungle and surrounded by Mayan structures that are in great disrepair, I’m not surprised that no one has discovered this until now. Speaking of which, where has the Professor gotten to...

I’ll have the team update their logs tomorrow, unfortunately I didn’t record anything on our journey but I know some of the other members did.

March 14, 2010
We’ve done a lot of great work today. After only clearing away some of the foliage around the area, we have found some amazing things. It’s clear that the ruins do indeed go deeper underground then
we first expected, but we haven't found any sort of entrance and no one wants to destroy the walls which have been perfectly preserved. Also, the walls have magnificent markings all over them. Evelyn is currently tasked with sketching the markings and trying to find some likeness with Mayan scripts.

We're all going a bit overboard working right now and no one is taking the time to sit at the computer and post their logs. I'm sure they'll all crash soon and take a break.

Professor Bell is still missing, I'm not exactly worried about him, but I wish he told us where he was going.

March 23, 2010
I apologize for the lack of activity, over the last weeks, but we have been pretty overloaded, our site is expanding each day.

To our surprise we discovered that our site is actually located atop a hidden step pyramid!

I will try to update more, but I have been handling most of the mapping work with Gordon, so I don't have much time.

Evelyn Harris

February 13, 2010
It seems that Jordon has been contacted about a new job recently, but he seemed very mysterious about it. He wouldn’t let on to who we were going to be working for or what the job was. With this little information I am already reminded of the Yeti expedition. I didn’t think that we would be working for HIM again anytime soon.

February 21, 2010
No new information has been given to me about our mysterious project. Jordon has given me a list of some new team members and a date, March 1st. I still have no idea where we are going or what we will be doing. Whoever is employing us must be in a rush, I don’t think we’ve ever left this soon after a job has been taken.

February 28, 2010
It would seem that my first intuitions were correct. The whole team seems to be in agreement that our employer is indeed Professor Bell. I had hoped that I was wrong. I’m excited to see him again and to be working in his field, but...
I just hope we don’t have anymore accidents.

We are leaving tomorrow and everyone is a little on edge. I’m sure there is nothing to worry about.
March 2, 2010
The suspense of this type of project always gets me, we met Raul yesterday, and he had in his possession a GPS. But today we found that the GPS does not display roads or any other sort of landmarks on it, but rather it just shows an arrow pointing where to go. So now we need to find someone who knows the roads around here, which is doubtful, because many of the other people we have seen are either tourists or researchers like us. I just wish we had some more answers.

March 3, 2010
We made some progress today, but it was very little because we have no guide, luckily Gordon is with us, I’m starting to think having a cartographer is not as crazy as I originally thought...

March 4, 2010
Our jeep has given out, and now we are stranded and trying to find help on the road. I may just be a pessimist, but it doesn’t look like this road has been travelled in a while.

March 5, 2010
We’re in the process of trying to fix the jeep at the moment, but I’m not sure it can be done, especially if something too serious has happened.

March 6, 2010
Stanley is a lifesaver! Somehow he has gotten the jeep running again and we are currently driving to the site, it will calm my nerves to begin our work.

March 7, 2010
We were unable to make it all the way to the site yesterday, so now most of the party is scouting ahead to find it while Randall and myself sit with the equipment to make sure it is not stolen, by who I’m not sure. I hope they come back quickly, so we can hear the news about our site.

March 8, 2010
The trek to the site was very difficult, made harder by the burden of all our equipment, and by the end we were all very tired and needed rest. But I was too excited to see the Professor to let that bother me, he seems well, but he has somehow eluded us today. I wonder where he could be.

March 10, 2010
Yesterday James and I began to survey the site, it is fairly small, just a small temple it seems, but the Professor always has his reasons for choosing these things. Today we went back, and I was hoping we could get the Professor to show us what he was doing but he has escaped us again. What’s worse is that it seems like he is not coming back this time...

Our work has started and like I expected I feel more calmed, I am looking forward to the coming days. But it is also much work and James and myself have been working nonstop today, and I think that this will continue for the duration of this journey.

March 25, 2010
It’s been a while since I made an update to this page, and from the looks of it everyone else has been just as busy as I have. Let me fill you in on what has been happening...
The team has been excavating the site, which we thought at first was a temple on top of a large hill, but we soon discovered that the so called "hill" was actually a gigantic pyramid that had been concealed by the jungle and a thin layer of vines and dirt on the ground. We have found an entrance into the temple and the pyramid itself, but it appears to be blocked by a collapse of some kind. The blockage looks like it occurred a long time ago, which is relieving because when we first happened upon it we thought maybe the Professor was stuck inside!

Speaking of which we still have had no word from him, but we are continuing with the project anyway, because it is fairly normal for him to vanish spontaneously.

We have found very little glyphs as of right now, but Raul has busied himself with Randall and Gordon cataloging the information about the site, which is a fairly daunting task considering the newly discovered scale of what we are excavating. James and myself have found a fair number of idols that are pretty generic, although they are mostly all related to water in some way... (mostly Chaac and Chicchan, gods of rain and thunder)

I will try to post anything of note that we find but I cannot promise because we seem to get more and more work every day!

_James Worth_

_February 12, 2010_

It seems that as a member of Critias Research, exploration is always just over the horizon. I am unsure about our benefactor at the moment, but we [Critias Research] could always use a bit more funding, and at the rates we’re getting, questions about the project are not needed. I may be crazy for continuing to research through Critias, but it seems like there is always something that brings me back from the brink of my leaving. Maybe its my greed for knowledge. It is amazing at what can be learned from a few ancient remnants.

_February 14, 2010_

I had lunch with Evelyn today, and she brought up some unusual theories about our expedition. She believes that there are only a few people who would hide their identity and the job destination from us. She concluded that our benefactor and employer is either active in illicit actions or is none other than one of our previous employers, Professor Rufus Excalibur Bell. We have had.... Problems...... with expeditions in the past, and members of the group may be reluctant to join if the job could go dreadfully wrong. Hmm, there is no reason to consider such theories at the moment.

_February 28, 2010_

We are meeting up with the other members of the group and will leave tomorrow by plane to some remote location. I can’t say I always enjoy working with new people but this is all very exciting, and not knowing is distracting me far more than the idea of being harassed by a few post grad students.
insatiable to the fruits of knowledge.
I don’t know what to pack! I can only assume a few usual tools, but some information on the journey ahead would have been WONDERFUL! Are we going to the tropics, or is this a trip looking for death back in the yeti caves.

March 1, 2010
It seems our bearing is South. Warmer weather looks to be arriving.

March 2, 2010
Our adventure has been delayed because we must wait to see if we can find a guide to take us to our site, apparently a GPS that was supposed to guide us there has given us incomplete information.

March 3, 2010
We have begun our journey to the site, but I suspect that there will be fairly large delays still because we are doing so without a guide.

March 4, 2010
Again we are slowed down because our vehicle has died on us, now we are sitting by the road waiting for someone to come along so we can ask for their help.

March 6, 2010
No one came on the road so we spent yesterday repairing the car, Stanley eventually got it running again and now we are headed to the final destination.

March 7, 2010
We are approximately three miles away from the site, but we are currently preparing to make our way over there, we can only pray the terrain is kind enough to get our instruments over.

March 9, 2010
We found the Professor at the site already, which was strange enough. But when we awoke this morning he was gone again. In any case we are in the process of bringing all our equipment to the site and hopefully we can start working soon.

March 10, 2010
Evelyn and I have been looking around the site and it looks pretty standard, I’m starting to doubt if the Professor has found anything here, but this may explain why he keeps slipping away each day, and has not yet returned.

Work is now underway, and this ruin has started to become more interesting. It seems like there is more below the surface...
Gordon Harper

February 19, 2010
I recently got in touch with Critias Research about an upcoming project they will be doing about the Mayans. In the interview the man I met with did not give anything away about where we are going and what we will be doing, which I thought was strange, but I need this job anyway. The man asked me to start keeping this log so that if something goes wrong in the project there could be clues as to what happened, although I am not sure how my personal log would help. Apparently they are planning on following some old Mayan maps or something because he asked if I would be able to read something of this nature. Of course I can read it! But I found this odd because I had assumed it would be some sort of excavation and they would only need me to lead them to a site and then assist in the cataloging of artifacts, but they are expecting more...

February 25, 2010
No word from Critias Research, and the day of departure is nearing. I don’t even know what supplies I should bring! This just keeps getting stranger and stranger. I still have no idea where I am going and what I will be doing, all I have received is a dossier about the other members of the team, most of which seem to be freelancers like myself. If I didn’t know better I would say that Critias Research themselves don’t know what we will be doing.

February 28, 2010
I am getting nervous about this project. There is still no information and it is the eve of our departure to god knows where. If I didn’t need the money so much I would just drop out right now.

March 1, 2010
This is just ridiculous. We are on the plane now, and it is clear to me that my earlier suspicions about Critias not knowing where we are going are true. They look just as baffled as the rest of the team does, looking at the foliage zooming by below, trying to get a bearing on where we are. All I know is that it’s going to be a jungle we’re dropped into, and I’m guessing it’s not one of those places where you can just walk into a town and get supplies because we have a palette of stuff in the back of this cargo plane with us. I’m trying to busy myself with my maps, marking off where we absolutely could not be, and where I think we might be headed. I think I might have been better off just passing up this job and staying at Kinko’s, at least its predictable there.

We met another contact at Tikal (Raul I think) who had a GPS but we decided not to go any further today.

March 2, 2010
Something strange is going on with the GPS, apparently it doesn’t show the roads and terrain or something, so we are looking for a guide of some sort. In the event that we cannot find someone to take us to our destination it looks like it’s going to fall on my shoulders to get us through this. I’m
going to start trying to find some more maps of this area just in case.

March 3, 2010
We couldn’t find a guide, so I’ve been taking us East on whatever trails I can find. The going is extremely slow and we were only able to make it about 20 miles today. I’m hoping I can get the hang of this quickly so maybe we can start making some real progress towards our goal.

March 4, 2010
I was able to navigate us about 10 miles today before one of the jeeps gave out on us and now we’re stranded until it can be fixed or someone comes along and helps us. Hopefully this isn’t going to be a constant theme on this expedition.

March 5, 2010
Stanley has started working on the jeep because we have pretty much given up hope that someone is going to come along. I’ve started looking at my maps again so I can try to plot us a route for when and if the jeep gets fixed.

March 6, 2010
Stanley was able to work his magic on the jeep and we made it about 17 more miles before I ran out of options. Now with 3 miles left we are planning on walking the rest of the way, needless to say this is going to be a nightmare, especially with all Randall’s equipment!

March 7, 2010
We’ve made it to the site, and lo and behold Professor Bell was there! I guess he’s been checking this place out for a while. Even so, it will be horrible to try and bring the equipment by the route we took to get here. It was filled with small rock faces and other obstacles that will make carrying large loads much more difficult. I am not looking forward to this journey at all.

March 8, 2010
This day has been incredibly long, and I’m sure we’re all exhausted, but at least we have all our equipment now. Strangely though Professor Bell was missing all day...

March 9, 2010
We set up the equipment today, which was a challenge to be sure. For some reason James and Evelyn left to check out the site (possibly with Professor Bell?) and left the rest of us to do the grunt work. I hope this isn’t going to be a constant thing as we work.

March 10, 2010
I have been put to work as Randall’s assistant today (which is pretty much what I was expecting to be doing this entire project now that the section of the expedition that I specialize in is over) which was not too bad, but I was hoping to at least get to see some of the Mayan artifacts we will be finding. I’m sure once we are fully under way I will be getting more important jobs.
I spent most of today, helping with the process of mapping the site, which is fairly small, but I expect has more to it than it appears.

**Raul Villalobos**

**February 10, 2010**

Rufus recently contacted me about assisting some of his peers in auxiliary research for a project he is working on. Obviously he did not say what we would be working on but I suspect that it might have something to do with the Mayans because I am set to meet the rest of the team at Tikal National Park.

As per usual I need to write a log in order to keep track of my activities day to day, and to make sure there is a record of what happened if something should happen to us. In my experience nothing has ever gone wrong with Rufus at the helm, although I know that the group I will be working with had a little trouble with a yeti they were bringing in for Rufus, so anything could happen.

**February 17, 2010**

I've been trying to get some information out of Rufus but he is proving to be extremely cryptic in his answers to my questions. Even so I have confirmed that we will indeed be looking at Mayan artifacts or ruins because Rufus said that I should review my Mayan characters. I'm not sure what he thinks we'll be encountering, but apparently there might be something I have never seen before, as is often the case with his projects.

**February 19, 2010**

I have been preparing for this project for 9 days now and I have not been able to figure out what Rufus could have an interest in. Considering the amount of texts on the subject that I have gone over, this project must be geared towards something extremely obscure. I plan to continue my research until I figure out what he is after.

**March 1, 2010**

I'm at a small airstrip near Tikal waiting for the group now, hopefully they can shed some light on what we will be doing and where we will be going. I found a GPS with our vehicles when I arrived at Tikal, but there was something off about it. It showed nothing until the other members of the group arrived, and then it promptly began to show a direction in which to go. I found this very odd, but I suppose we will not discover the site until tomorrow because it is 50 miles away and night is coming soon, so we are camping here.

**March 2, 2010**

This device does not seem to be a normal GPS, all it does is show a direction in which you must travel, so we are currently looking for a guide, because none of us know the roads around here well enough to navigate with just a direction. Hopefully we can find one before the day is out so that we
March 3, 2010
We have not made much headway today. We had to abandon the plan to find a guide because it was becoming too difficult, so we had Gordon plot the route as we drove, which slowed down progress significantly. We have had to double back a couple of times and find new roads, because of this we have only made minimal progress, hopefully our luck tomorrow is better.

March 4, 2010
After a short while today one of our vehicles broke down and we had to stop, which we thought was a better choice than abandoning equipment. Right now we are trying to flag down anyone who comes along this path, but so far we have had little luck. If something is not done soon we will most likely have to leave the broken car.

March 5, 2010
We have set Stanley to work on the broken vehicle, but I have no way of telling if he is making headway, he just keeps swearing and continuing his work. If he can’t fix it then we are out of luck.

March 6, 2010
Miraculously Stanley got the car running again, and we started on our journey once more, but we were eventually stopped by a lack of drivable roads. I’m told that we are only a few miles off, why do we not just walk there I wonder?

March 7, 2010
We have decided that scouting a road to the site would be the best decision, because we have a fair amount of equipment to carry and we want to find the easiest path before we begin it’s transfer.

March 8, 2010
Yesterday we discovered Rufus at the site, but what was stranger was that when we returned with our equipment today he was gone! I will have to talk to my old friend later and figure out what is going on.

March 9, 2010
Today we set up the equipment, and I was looking for a chance to talk to Rufus, but he was gone again. I will have to be quicker next time...

March 10, 2010
I caught Rufus as he was leaving today, and tried to figure out what he was doing, but all he told me was that he had “pressing business elsewhere.” I have no idea what he meant by that but afterwards he disappeared again, and has yet to return tonight.
Rufus is still not back, this is worrying me somewhat.

March 29, 2010
I’ve been looking at the shards of stone that Stanley handed off to me and there are some fairly glaring anomalies that I’ve detected.
- First, there are a few glyphs that I am not familiar with, they are:
  > Something that appears to be a body of water, with fish jumping from the surface.
  > A glyph that depicts what I assume is an Island
- Second, there are a couple passages that are pretty cryptic:
  > One that describes a man from a far off land who taught the people about various things, like medicine and farming.
  > Another references "travelers" who visited these people and used small boxes that help them find their home again.
  > And a last passage that talks about the burial of one of these travelers, North of the site.
- Third, I have found an image of some sort of deity I have never seen before.
  > He has the shape of a human, except for the head, which appears to be a gilled serpent of some sort.
  > In his hands he holds 2 swords, the one on the right is a typical weapon of the Mayans, but the handle is in the shape of a fish tail. In the other he holds what appears to be a Greek Gladius, which is extremely strange, since there is no recorded contact between the Greeks and the Mayans.

I will keep trying to find more answers but with the stone so pulverized it is hard to piece together what is being said.

I am beginning to understand why the Professor wanted us to come to this place.

April 4, 2010
We found another strange glyph today which depicted two temples and the "travelers". The temples were above and below the travelers, and there also seemed to be another symbol that we did not recognize. We came to the conclusion that it may be the device. The lower temple seems very similar looking to the temple here in Tikal, although we do not recognize the upper placed one.

Stanley Burrwood

February 21, 2010
This log is being recorded so that if something should happen to one of my team members or myself during the coming project, people will know what we were doing and what happened to us.

Critias Research contacted me recently with an offer for a job. This job was quite cryptic in description but I was intrigued. When I talked to Jordon Monroe, he mentioned something about an interesting colleague of his, a Professor Bell. Supposedly this man is an adventurer of some sort,
specializing in mythological and fantastical artifacts and research. My curiosity was piqued, and I took the job immediately, but I still had questions about this Bell character.

I did as much research as I could on the man but I could not find anything, just “I dream, therefore I am.” I have to admit that the mystery of this situation excited me, it is not often that I find someone like this professor Bell.

**February 23, 2010**

I have begun to look into the sort of people who are involved with this project, and what I have come up with does not shed much light on what is going on here. There are three members of the team who are permanent members of Critias Research: James Worth, Evelyn Harris, and Jordon Monroe. All three are archeologists with experience in cryptology and mythology. It was the backgrounds that interested me, such a strange mix, like they were trained to look for clues in the fantastical stories of the old world. If this is any indication as to what the Professor himself does, then I wish very much that I could meet him sometime during the stead of this project.

The other members are somewhat of a motley crew: Gordon Harper, a cartographer, Raul Villalobos, a linguist, and Randall Marks, a computer expert. What Critias Research needs with these three is beyond me, for that matter I’m not sure what they could possibly need with myself, an independent research group couldn’t have much use with my connections and hardware.

As I find out more about these people I wonder more and more what we will be working on...

**February 28, 2010**

The day of travel to the site comes closer and closer. After all these days of waiting I can barely contain my excitement, I’ll finally know where we are going.

**March 2, 2010**

Yesterday was quite an adventure! We finally got to Tikal and met Raul face to face, but unfortunately we do not have much more information about the adventure we have undertaken. All we have is a GPS that seems to have activated upon our arrival, but for some reason it only shows a direction, nothing else, and Professor Bell still has yet to show is face.

Today we searched for a guide to help us reach our destination, although I’m sure Gordon would be able to handle it. But I guess speed is the name of the game in this business and a local would certainly have more knowledge of the terrain than us.

**March 3, 2010**

We are finally on the road to the site, and although we are making very slow progress I have high hopes that we will eventually make it to the destination and begin working, and hopefully make some big discoveries.
March 4, 2010

One of our vehicles has broken down, but my hopes remain intact. At the moment we are waiting for someone to come along and assist us, otherwise I'll have to take a crack at it, back in my military days I used to be quite handy at fixing up our hummers.

March 5, 2010

I've been working on this thing all day, and it looks like there is some sort of problem with the fuel line, but I'm not sure what I'm going to fix it with. Things usually work out though, so I'm not too worried, something will turn up.

March 6, 2010

Again we made slow progress today, but we are within reach of our goal, there are only about 3 miles left. Unfortunately we are going to have to walk the rest of the way because we have run out of road. I'm going to suggest scouting out the location first so that we do not shlep all the equipment that distance for no reason.

March 7, 2010

We have found the Professor! And I must admit he is quite an interesting man! Supposedly he has been at the site for weeks now searching (although I'm not sure for what) I'm hoping he will fill us in later. For now though we need to plot a path by which to bring up the equipment.

March 8, 2010

Bringing the equipment to the site was an ordeal, many of the group are practically passing out as we speak (the more out of shape members that is). But at least now we can get down to some real work! Curiously the Professor slipped away during the day and returned just now, without a word about what he was doing. I am going to make it my goal to get in on what he is doing...

March 9, 2010

Our equipment is all up and running now, except for the extraneous things like the satellite connection, which will be up tomorrow. Now we are preparing to work on the site tomorrow, I'm not exactly sure what I will be doing, but it will be interesting enough!

March 10, 2010

I spent my day today preparing the satellite and helping Jordan with our later excavation plans,
which I will detail when work begins. I am very excited to begin!

At last research has begun! It is all pretty standard as of right now, but for some reason no one can find the Professor. I hope he is okay, I wish to talk to him about what he is doing.

March 28, 2010

I have been working on moving all the rubble that we discovered near an entrance to the underbelly of the pyramid, and I have begun to uncover some glyphs, of which we have not found many. I’ll be handing these off to Raul as soon as possible (most of them are on broken pieces of rubble) for analyzing. As for progress down the passage, it’s extremely some of the rocks are much too large to move and I have explosives but I am not allowed to use them until I have assured that we gathered all the information from the things that we will be destroying.

April 4, 2010

After moving away some more rubble today we found some more decipherable glyphs. Raul has some ideas on what they could mean saying something about another temple to the north that have some relation to the travelers. The sense I’m getting is there’s a lot of temple in the area, and they have to map the friends and the foes somehow.

Final Outcome of story

Critias Research is contacted by Professor Bell about a project in an unknown location, the only clues they have come from the type of people that he suggests to recruit, they are: A computer expert, a Mayan linguist, a cartographer, and someone with access to all sorts of machinery and other assets. Knowing the Professor to be a strange companion to work with, Jordan, Evelyn, and James, form a team including the members that the Professor suggested (Gordon Harper [cartographer], Randall Marks [computer hacker], Raul VillaLobos [linguist], and Stanley Burrwood [connections]). Since none of the members really know anything about what they are doing the new members of Critias are naturally curious and anxious about this project.

Eventually the team meets at a secluded airstrip and travels to an unknown location that a GPS given to them by the Professor leads them to. After a few hardships on the journey to the site the team finally arrives and begins to excavate, which eventually leads to them finding the Professor and then losing him again, after which they will find glyphs that tell the location of where he has vanished to.

The Professor has travelled to a second temple, which he begins to explore, finding that it is gigantic. In his exploration he becomes trapped and discovers that he must solve a few puzzles in order to escape (a Stomachion, and a Mayan/Greek puzzle box). In his adventure in the temple he faces the threat of traps and almost perishes in a room that floods with water as he tries to solve the Stomachion. Eventually he finds his way out of the temple with the puzzle box, which he solves soon after escaping, and thus begins his adventure to Atlantis.
Professor Bell encounters a Giant squid on his journey to the lost city when it is within sight. His exo-suit has a video camera on it which broadcasts to his personal website, and the video depicts him trying to escape from the squid and accidentally jumping back in time, at this point all communication with him will be lost.

Critias will now be the communication between Professor Bell and the public as he leaves notes and journals hidden through the ages for the research group to find. The team discovers that the professor is trapped in the past, and the only way that he can return is to touch an artifact in Atlantis that still exists in present day.

The final segment of the ARG will be the team discovering that one of the artifacts on exhibit in the museum was in Atlantis before the fall. The team's final duty is to get this information to Professor Bell somehow. The ARG will end with Professor Bell grabbing the artifact and traveling to the museum as Atlantis is sinking into the ocean. Professor Bell will then share his findings with the general public.
Appendix C - Professor Bell’s Website

Somewhere in Scandinavia 10 December

I have become separated from my expedition team, a blizzard blew me from a narrow mountain pass, and while the fall knocked me unconscious, I have sustained no major injuries. I seem to have fallen in an odd place surrounded by an incomplete wall covered in snow and ice. I picked myself up and began to explore the place in which I had landed.

After a bit of wandering, I came across a grand structure, where there appeared to be a party going on. Naturally I was curious and approached the source of the noise. As I got closer, I heard the clanging of mugs and cheers and laughter. I cautiously continued and soon found myself in a grand hall filled with very large, muscularly built people. Many sat around drinking and talking, but there was one area of the party that seemed to have everyone’s attention.

I moved closer to see what all the fuss was for and witnessed someone attacking another man with a great axe. I recoiled in horror and quickly turned my gaze from the scene, but heard cheers and more laughter. I looked up and noticed that the man was completely un-injured. How strange! More people were lining up with weapons to attack this man like some sort of game. Intrigued, I wandered around the party, to get a closer look and came across an odd site. An old hag was sitting at one of the tables and looked completely out of place in this room of perfect people. She was talking to a great beast of a man, and my curiosity pushed me to move closer.

“Frigg, is there nothing that can harm your son? Aren’t you nervous with everyone hurling their weapons at him?”

“Balder is invincible, nothing will harm him.”

“You’re not worried in the slightest?”

“As long as no one throws mistletoe at him, he’ll be fine.”

More roars of laughter filled the room, and I turned just in time to see a giant hammer bounce off of the man called Balder, it didn’t seem to bother him much more than a mosquito bite! I turned back again, but when I looked for the hag, she was gone.

I decided to hang around a bit longer and participate in the festivities, but the night took a grim turn. Balder’s brother, Hod I heard someone say, stepped up to throw a spear so that he too could participate. The spear flew true and pierced Balder’s skin killing him instantaneously. Everyone began to mourn their lost friend except for one man. In all the commotion, he grabbed the spear and fled for the door. Someone screamed “Loki!” as I chased after him and once outside he turned to me and said:

“Take this and leave here, I know you do not belong here.”
He gave me the spear and fled off into the forest. For fear that I would be accused of the terrible deed that was done, I too fled.

**Regarding Time Travel**

My time machine is much less of a machine, and more of an anomaly. It seems that I can walk through the temporal aspect of our world, much like you would walk through space. My knowledge of the mechanics regarding this gift are quite limited, but here I shall list what I know in the hopes of figuring it all out some day, and maybe, you the person who is reading this can shed some light on what is at work here.

**Travelling to the past:**

In order to travel back in time, there are a couple of things that are in order.

- I must be able to see where I want to go. For instance if I wanted to travel back in time to uncover the secrets of Stonehenge, I would first need to be there, for although my powers over the flow of time are great, this does not have any effect upon my location geographically.

- I must know what I am seeing. The times seem to fade into one another almost without my knowledge. If I were not aware of what should be, and what should not, the past sometimes seems like the present.

The sight of where I am travelling back in time is crucial because it acts as a catalyst to my knowledge of the place I am at and propels me to the period which I desire. This is quite logical, because all historical sites are home to a great many different time periods of existence, so for example being in a place like Jerusalem could take me to the time when it was but a fledgling town, or when it was a fortified castle during the crusades.

**Returning to the present:**

Returning to the present is somewhat harder than going to the past; it is much more fickle and potentially dangerous.

- Primarily one of the things that must be done before I can return to the present is that I must have completed the task that I set out to do in the first place. This is because, while I may want to return, my brain subconsciously wants to stay and finish the work that I have set out to do, so one of my main problems when returning to the present is working on something that is far too ambitious.
- Second, I must be in possession of a link to the world which I am traveling to. This means that I must know about or possess something that exists simultaneously in both worlds which I belong. This has been the biggest hurdle for me thus far because it dictates that I must plan exhaustively in finding artifacts in museums and then their locations in the past world, and once I am there actually coming into possession of them. The danger in this, is that I may not be able to get my hands on something of this nature once I am in the past, and hence become trapped there.

Thus far I have had few problems returning to our own time, and hope to continue this streak of luck, but in the unfortunate event that I become lost or trapped, I hope my knowledge of the past and present will pull me through.

**Travelling to the future:**

Travelling to the future is quite simply against my moral character to do, the possibility of abuse of the knowledge gained there is too great. This would also be extremely dangerous since I have no way of knowing what sort of artifacts will exist in the future as well as what state the world will be in (for all I know it could be destroyed or poisoned!). For these reasons I have not conducted research into this matter, and do not have immediate plans to do so.

**CAUTION:**

In rare cases of extreme danger, time travel has occurred spontaneously and without warning. This has the possibility of hurling me in any direction in time, and is probably the greatest risk of me becoming stranded in time so far. I have no idea of how to prevent this phenomenon since I have no knowledge of the future, but in the past I have been able to avoid certain extreme situations in which danger and harm of myself are a real possibility.

-known occurrence: Scandinavian expedition.

**Athens, Greece**  
20 August

After a long day of excavation at the ruins of the Temple of Athena, I decided to take a walk and relax. I walked through the Propylea past the throngs of tourists surging up the steps into the Acropolis. I wound my way through the streets of the city until eventually I found myself in Plaka. I’m not partial to extremely tourist ridden areas, as I am more of an adventurer, so I looked for a quiet spot to sit and rest. I spotted a park but unfortunately there were many people already there, as if they got the same idea as myself. The park was surrounded by tourist sites and gift shops, but there did not seem to be many people poking around in them, so I decided to take refuge inside. As I drifted past the many tasteless recreations, my nostrils filled with the stench of cheap deodorant and sweat, something caught my eye. It was a book with a boy in winged sandals fighting a woman with snakes for hair, the story of Perseus and Medusa. I recalled the tale instantaneously and thought to myself, “What fun, to watch the
battle of Perseus and Medusa!” I burst from the shop and made my way to the harbor to take a ferry to the isle of Seriphos, the setting of the story. My excitement propelled me down the street, almost at a run, until finally I arrived at the harbor, exhausted and out of breath.

**Seriphos** 21 August

I arrived on the island at dawn, and immediately set to work searching for the court of Polydectes. Upon finally arriving at the court I heard raised voices in the distance. As I entered the court, a man ran past me in quite a hurry. One of the guards shouted after him, “Perseus!” I followed the man and overheard his conversation with one who I can only assume was king Polydectes.

“Perseus! What are you doing back here? Have you slain the gorgon medusa?”

“Of course I have! I would not return with my task incomplete.”

“Liar! No man could slay the gorgon. Guards! Arrest him!”

“But I have proof!”

I immediately turned away and shut my eyes, for I knew what was coming. I kept them shut and heard only silence after that, the court was completely silent. I then heard footsteps fading away. When I opened my eyes I found that everyone in the court had been turned to stone, and I knew by what means. I raced outside to see where Perseus had gone, but found that he was the one I heard leaving.

**Athens, Greece** 22 August

Disappointed with my failure yesterday, I returned to the excavation site at Athens and found quite a surprise. Atop the stairs was a familiar looking man with a blood soaked canvas pouch. As I approached him and he turned to me, and threw the bag at my feet. “This is a burden I wish not to bear. It is yours now,” he said. I knew better then to look inside the bag and watched as Perseus sailed away on his winged sandals.

**The Second Temple**

I have had quite the adventure of late. I met the team and set them about their task a few weeks ago, but while we explored the site a little more thoroughly I noticed something curious. There was a mention of another temple aside from where we were in a bit of rubble that I found. Naturally I could
not contain my curiosity and had to investigate. I set out immediately upon my quest and after a week or so of bushwhacking in the jungle I happened upon a small outcropping of rocks, which were arranged a little too precisely. After a little bit of investigation I was able to find a crude entrance that opened up behind a moveable rock. I must say, by this point in the adventure I was getting pretty excited, so I practically leaped inside. Imagine my dismay when the door snapped shut behind me!

Having nothing else to do I decided to start exploring my new prison, and quickly found that it was much larger than I had originally anticipated. I descended a staircase, which eventually opened up into a much larger room lined with giant statues depicting what I can only assume were gods, only they were not gods that I was familiar with. One of these figures had the head of a fish, the other a tail, and yet another was holding what I believe was a gladius. So curious these figures were, but I had to tear myself away and keep exploring the cavernous depths of the temple.

A large archway was at the other end of the chamber, flanked by two immense statues of Mayan warriors. The next room was filled with five sarcophaguses, two pairs and one that was set aside from the rest. The pairs were engraved with pictures of what I believe were the contents, an engraving of a person was on each. On the left of each was a man, and the left was a woman, but they were not royal as far as I can tell, but they must have had a higher social ranking in most to be buried this way! The fifth was what really interested me though, the engraving depicted a man wearing a necklace that had a curious device hanging from it. At first glance I believed that it was some sort of crude rubix cube, but I soon realized that it must be more than that, because light was shown emanating from it.

Even as I gaze upon it now, I am not sure what it means. I will keep this journal updated regularly as I discover more, but for now I cannot wait any longer to explore this strange place!

The Second Temple: Part II

There is a seemingly endless number of rooms in this place, each time I think it will end I find another path that leads onward. But what I find most intriguing are the objects which I found in what appears to be the furthest room from the entrance in this complex. They are fourteen individual slabs of rock of varying sizes and shapes (the average size being close to that of my head); I have attached a drawing of what they look like.
(sorry for the crudeness of my drawings, my pencil has broken and I am reduced to writing with the tip)

Upon the wall there is an indentation of a different shape, a much larger one. From what I can tell, I need to assemble the smaller shapes into this hole, and then something will happen. The only problem is, I have no idea how to do it. I am posting the information about both of these for all to see, in the hopes of finding help out of this situation. Here is the indentation of the wall:
Appendix D – Atlantis

Plato’s account of Atlantis in the Timeus:

Many great and wonderful deeds are recorded of your state in our histories. But one of them exceeds all the rest in greatness and valour. For these histories tell of a mighty power which unprovoked made an expedition against the whole of Europe and Asia, and to which your city put an end. This power came forth out of the Atlantic Ocean, for in those days the Atlantic was navigable; and there was an island situated in front of the straits which are by you called the Pillars of Heracles; the island was larger than Libya and Asia put together, and was the way to other islands, and from these you might pass to the whole of the opposite continent which surrounded the true ocean; for this sea which is within the Straits of Heracles is only a harbour, having a narrow entrance, but that other is a real sea, and the surrounding land may be most truly called a boundless continent. Now in this island of Atlantis there was a great and wonderful empire which had rule over the whole island and several others, and over parts of the continent, and, furthermore, the men of Atlantis had subjected the parts of Libya within the columns of Heracles as far as Egypt, and of Europe as far as Tyrrhenia. This vast power, gathered into one, endeavoured to subdue at a blow our country and yours and the whole of the region within the straits; and then, Solon, your country shone forth, in the excellence of her virtue and strength, among all mankind. She was pre-eminent in courage and military skill, and was the leader of the Hellenes. And when the rest fell off from her, being compelled to stand alone, after having undergone the very extremity of danger, she defeated and triumphed over the invaders, and preserved from slavery those who were not yet subjugated, and generously liberated all the rest of us who dwell within the pillars. But afterwards there occurred violent earthquakes and floods; and in a single day and night of misfortune all your warlike men in a body sank into the earth, and the island of Atlantis in like manner disappeared in the depths of the sea. For which reason the sea in those parts is impassable and impenetrable, because there is a shoal of mud in the way; and this was caused by the subsidence of the island.

(Plato, 11-12)
**Appendix E – Mayan Calendar**

The Mayan Calendar

The Mayan calendar is made up of four calendars: The Tzolk'in calendar, the Haab calendar, the calendar round, and the long count.

The Tzolk'in is a 260 day cycle based on important numbers to the Mayans: 20 and 13. 20 is the number of digits (fingers and toes) that people possess and 13 is the number of major joints in the body. These two numbers make the cycle because there are 20 names and 13 numbers.

<table>
<thead>
<tr>
<th>Tzolk'in Calendar Day Names</th>
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<tr>
<td>1. Imix'</td>
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<td>2. Ik'</td>
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<td>3. Ak'b'al</td>
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<td>4. K'an</td>
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<tr>
<td>5. Chikchan</td>
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<td>6. Kimi</td>
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<td>7. Manik'</td>
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<td>8. Lamat</td>
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<td>9. Muluk</td>
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<td>10. Ok</td>
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<td>11. Chuwen</td>
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<td>12. Eb'</td>
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<tr>
<td>13. B'en</td>
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<tr>
<td>14. Ix</td>
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<tr>
<td>15. Men</td>
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<tr>
<td>16. Kib'</td>
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<tr>
<td>17. Kab'an</td>
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<tr>
<td>18. Etz' nab'</td>
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<tr>
<td>19. Kawak</td>
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<tr>
<td>20. Ajaw</td>
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The way this calendar works is by going through all 20 names over and over at the same time as the numbers repeating, so after getting to 13 B'en the next day is 1 Ix then 2 Men. Repeating this will create 260 days before 1 Imix' again. This calendar was useful to keep track of growing crops because corn needed to grow for 260 days before being harvested. The Tzolk'in did not measure a solar year however, so the Mayans needed another calendar.

The Haab calendar is very similar, but instead of using 13 numbers, there are 18. This brings the cycle up to 360 days. This still wasn’t a solar year and astronomers wanted the calendar to be as accurate as possible, but mathematicians wanted everything to be in increments of 20. To compromise, 5 nameless days were placed at the end of the year. These days was called the wayeb and was believed to be extremely dangerous because their gods rested these days and left earth unprotected. These days were filled with ceremonies and prayer in hopes that their gods would return. This calendar recorded a solar year now, but the Mayans wanted to record even more time.

The calendar round is a combination of the Haab and Tzolk'in calendars. The way it works is very similar to the first two; it pairs them together like the names and numbers creating a cycle of
18,890 days. (About 52 years) This calendar let the Mayans record history better because it measured more than a year, but they wanted an even longer cycle to record data through millennia and generations. This desire lead them to the long count. The Long count is a bit more complicated than the other calendars. The long count consist of 5 numbers written like this: #.#.#.#.#. From left to right the numbers correspond to these terms: 144,000 days - baktun, 7,200 days - katun, 360 days - tun, 20 days - uinal, One day – kin. Combining these numbers will give you the number of days since the beginning of the long count. This calendar creates what the Mayans called the Great Cycle which lasts for about 5,125.36 years. Here is an example of how to read the long count: 12.5.12.7.2 translates to 13 baktun + 5 katun + 12 tun + 7 uinal + 2 kin.

1728000 \( (12 \times 144000) + 36000 \ (5 \times 7200) + 4320 \ (12 \times 360) + 140 \ (7 \times 20) \) + 2

This comes out to 1768462 days (4845 years) since the beginning of the long count.

Almost all researchers in this area agree that August 13, 3114 BC, was the beginning of the most recent long count, plus or minus two days.

This chart shows how the Mayan number system works. This can be used in puzzles.

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Another dot over the first line of dots would represent 20 making larger numbers look like this:

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27