Vanished: A Post Mortem on the Curated Game

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GLS 2011
June 15, 2011
The Game is Afoot

Day 1 (April 4, 2011)

• Anticipation:
  – Some sort of science mystery

We are experiencing technical difficulties.
Please stand by...
Pokeguy: Hi! I think the letters at the top said "Dro Oyzm." I think the hacker is sending a coded message!

Cheesegirl: You have to decode your code using a Caesar cipher. There are a TON of websites where you can do this for free. Just type in "Caesar cipher" and see what comes up. If you find it from the video in and then just experiment and try to make sense of it.

The Game is Afoot
The Game is Afoot

- Data mission: Collect encrypted messages
- Rotation Cipher
  - Different rotation each cipher
- Data Mission: Collect decrypted messages
- Game: Assemble decrypted messages
Amgine - Hi people, I've been messing around with Amalga for like three hours. Results:
Below is what of the code I have almost certainly done correctly (having been edited):

If you've cracked this code, you're the people we need. My name is Jasper and I am contacting you from the future. I'm an engineer on project phoenix--our first attempt to communicate with the past. It is our hope this transmission will be transcribed onto computer network protocols in an earlier era such as yours. A catastrophic event occurred in the past--your future. That event, which we call the epoch destroyed most of civilization's written records. We know little of what life was like before the event. We don't even know *something* or what it was. We need your help solving this mystery. Dr. Lincoln, lead scientist on project Phoenix...
The Game is Afoot

- Mystery with many moving parts
- Inspirations:
  - Alternate Reality Games (ARGs)
  - Museum Exhibits
  - Live Action Role Playing (LARP)
- Concluded May 22
- Initial Post Mortem

Outline

- The Game is Afoot
- Pyramid Squashing
- Real Science
- Flash Games
- Epic Storyline
- Anecdotes

Great

Needs Work
• ARG Player Bases
  – Many Casual
  – Few Enthusiastic
• Not great for educational objectives
• Allow casual play, but require enthusiastic players to rely on the casual ones

Image: 42 Entertainment
Pyramid Squashing

Initial Challenge

• Data Collection
• Data Processing
• Data Interpretation
• Here a minimum of 99 players were needed
• Hundreds, thousands actually got involved
Pyramid Squashing

Achievement System

• Achievements motivate less invested players

• High scores vs. “gotta catch ‘em all”

• Awarded for all types of activity

• Together, points unlock secrets

Osterweil, Feeley, Tenneson, Haas
Data Missions

• Mission: Find, photograph, and identify animals in the wild
• High investment task, but extremely popular
• Players shared best practices
• Player data led to a major discovery/plot twist

Next time: Better data management tools
• Making hypotheses
• Designing tests
• Sharing difficult concepts with peers
• Refuting hypotheses

nbjg: They can look in a canyon, or some place where you can see the layers of rock most definitely. Then, they would see which layer of rock is black or gray, because there is a layer of rock that we can see that happened the same time that dinosaurs went extinct; that layer is black.

Shushu: The last one on the list is in Siberia (71N, 111E) and is a known crater. So, we can absolutely rule out 3 of the craters sent by Phoenix project. The three we can rule out are:

21N, 89W - Shocked Quartz, Feldspar
51N, 69W - Igneous Rock, Shatter Cones
71N, 111E - Platinum, Diamonds Of the remaining three:

37N, 119W - Silicon Dioxide, Obsidian. This is in California. There is a known strike about 200 miles away. The Silicon Dioxide, if it is in the form of stishovites may be present in the area, we need to check for that.

46N, 81W - Nickel, Copper. This is the Northern shore of Lake Heron, and there is a known crater in Lake Heron, so probably not the one we are looking for. The minerals are already identified as being present.
Scientist Video Chat

• “It’s so great to have someone treat us like adults”

• Draws out wallflowers, inspires enthusiasm

• Considerable transference of knowledge

Wildrose: Or in the sediment cores (I think Liz Cottrell said something about this in the conference...)
Real Science

Camp Counselors

- Moderating 8AM - 11 PM
- Mentoring: Summer camp, not school
- “Throw ‘em in the deep end”
- Encourage good practice, not right answers.

Tardis: I think I may have got the conversion formula for Hazen to Farenheit.....
Since $0H = -108F$ and $100H = -28F$, you multiply Hazen temp by $-0.28 (100/-28)$ and add $-108$ to the result to get Farenheit. $F = (H - 0.28) + 108$

Storm: This is a good start! Check your math here to show that it works for the two data points we have.

Tardis: I think I've got it now... for real!
$H = (F + 108) * 1.25$
$-108 + 108 = 0$ and $0*1.25 = 0H$
$-28 + 108 = 80$ and $80*1.25 = 100H$
Museum Visits

- Clues lead players to relevant exhibits
- Gets players in museums with purpose & high engagement
- Local events encourage individual participation
- Next time: more community partnerships
Playing with Concepts

• Vanished Mystery
  – Units of the future
    • Distance
    • Temperature

• Nate’s Swamp Hunt
  – Jokester uncle’s treasure hunt
  – Directions in trombones
  – Have to cross swampy terrain on boards
Flash Games

Integrated in Story

• Amalga
  – Assembling scraps
  – Quote ‘Game’ mode

• Time Rover
  • Virtual archaeology
  • Follow stories
  • Find artifacts

This area is littered with the remains of houses with deep cellars, still partially standing. They are surrounded by old post holes and the of stone walls, suggesting that they were surrounded by barriers.
The Whole Story

However, their rogue AI, Lovelace, went back in time to assist us in our investigation. Thanks to our work, Lovelace is now free and survived into an alternate future where our research helped save humanity!

They came here looking for human civilization that had been destroyed by the asteroid.

That's because society had collapsed—global warming caused plague, keystone species extinctions, crop failure, natural disasters.

We were contacted by scientists from the future and tried to discover what disaster destroyed the historical record.

The future is much colder because an asteroid struck the Earth around the year 3000 and humans were unable to prevent it.

We did research, visited museums, and collaborated with scientists to solve the mystery.

Project Phoenix aren't human! They're aliens!

Osterweil, Feeley, Tenneson, Haas
Epic Storyline

Lovelace

- Started out as a mechanic, not a character
- Players drawn to mystery, motivations, direct interaction

- Encouraged independent research (Ada Lovelace, LOVELACE language)
- Fun for players and designers
- Next time: More NPCs!
Epic Storyline

Stories From the Future

- 10 settlements
  - Architecture
  - Characters
- 1000 years of history
- 150 Documents
Suspending Disbelief

- Players know it’s a game, but willingly suspend disbelief for greater investment
- “It doesn’t matter whether it’s a real thing or not. Enjoy!”
- One player hacked the site but refused to share the exploit because he enjoyed the game so much
Anecdotes

From a teacher of at risk 7th graders:

“My students learned how to work together to solve problems they knew nothing about to start with. They learned how to assimilate knowledge and then apply what they had learned. They learned how science really works! I had one student...who even became very involved in cracking the codes using all sorts of different methods. Every day he would come into class thrilled to tell me what he decoded and how he did it. I overheard a few student mention that they now want to be scientists when they grow up.”

Next Time: More teacher/classroom partnerships and class/group logins.
Enduring Community

- Mailing list, 2 fansites
- Game story & sequel speculation
- STEM discussions
- Logic games: Wikiraces

“How do you get from Ada Lovelace to the environmental movement?”


Next Time: more user-generated content, better forums
Anecdotes

Stats

- ~6800 Players
  - Ages 10.5 - 14
    - COPPA Adherence
  - ~1000 Active in final two weeks
  - ~500 Since Game Ended
- ~3500 Watchers
- ~27000 Forum Posts

Group donuts: A player’s idea
Anecdotes

Staff

- 2 Full Time MIT Staff
- 3 Part Time MIT Staff
- 2 Smithsonian Staff
- 22 MIT Students
- 3 Temps
- 9 Scientists
- 14 Museums

4 Subcontractor Groups

- Videos
- Voice Chat
- Web Development
- Advertising

Farewell Party
The players spotted her, but we never did.