I Wish for an Animal:
A Multi-Player Mixed-Reality Game about Wildlife Conservation

Shaghayegh Ghassemian

A thesis
submitted in partial fulfillment of the
requirements for the degree of

Master of Design

University of Washington

2015

Committee:
Tad Hirsch
Dominic Muren
Karen Cheng

Program Authorized to Offer Degree:
School of Art
Abstract

I Wish for an Animal:
A Pervasive Game to Raise Awareness about Wildlife Conservation

Shaghayegh Ghassemian

Chair of the Supervisory Committee:
Tad Hirsch, Associate Professor
Dominic Muren, Lecturer
Karen Cheng, Professor

-Last night the Sheikh went all around the city, lamp in hand, crying, “I am weary of beast and devil, I wish for a man.”-

This verse is part of a long poem by Rumi, the Persian Sufi poet of 13th century. As a name for this project the last part of this verse is picked and slightly modified, to show that as he was looking for an uberman in the dark, we soon will be wishing for animals*.

“I Wish for an Animal” is a pervasive game designed to educate about the matter of wildlife conservation. Urbanites live in the concrete jumble they have built over centuries around a society in which the only species who have a say, are Homo sapiens. Lifestyle of city dwellers has made it so that their only daily exposure to nature would be interacting with their apartment plants and pets. This removes them from realities of the natural environment and creates this belief for the majority that preserving the environment is a job of environmentalists rather than that of each of them.

“I Wish for an Animal” tries to raise awareness about the impact of everyday city life on wildlife extinction and conservation. The game was experienced for four days in Tehran with 85 players, in April 2015.

* In Persian “I wish for an animal” rhymes with “I wish for a man”.
I WISH FOR AN ANIMAL

A MIXED-REALITY GAME ABOUT WILDLIFE CONSERVATION

MDES THESIS 2015 | SHAHAYEGH GHASSEMIAN
A multi-player mixed-reality game about wildlife conservation

I Wish for an animal is a game played in three days by a group of players and the goal is saving animals in the fictional city of the game. I describe the design and realization of the game showing how it is driven by a strong narrative that is crafted from destinations, times and events and yet supports interactivity through chat, the use of objects, health and dilemmas, all of which can be combined into more complex missions.
Iran is a developing country with a large population, which has increased by eighty percent in the past thirty-five years. The country is now facing the imminent extinction of many native flora and fauna species because of rapid alteration of their natural environment, coupled with poor management and over-exploitation. The IUCN contends that from the 1127 vertebrates living in the boundaries of Iran, 74 species are listed as vulnerable, endangered or critically endangered. Moreover, five species (Asiatic cheetah, leopard, Asian black bear, Persian fallow deer and onager) of this portion only live in Iran, which means if they become extinct they are gone forever, as did Persian lion and Caspian tiger more than sixty years ago.

More than three decades of exploitation have destroyed much of the country’s natural resources. The estimated rate of desertification is about two million ha per year. National parks and other protected areas have been the most hard-hit areas with the maximum destruction occurring between 1978 and 1990. The major cause of the rapid decline in the wildlife resources of Iran has been habitat disturbance. Overgrazing, defragmentation, droughts, industrial pollutants and deforestation have now altered about 96% of the natural habitat of the country. In addition to all of these causes direct killing and shooting of wildlife are a very straightforward reason of extinction for endangered species.
DISPERSION AND CAUSES

Wildlife conservation in Iran

194 Mammals
521 Birds
212 Reptiles
20 Amphibians
180 Fish

CAUSES:
- Land-use change
- Defragmentation
- Droughts
- Poaching
- Industrial pollution
- Agricultural pollutions
- Overgrazing
- Animal Trading
- Deforestation
- Food shortage
- Car accidents
- Overgrazing
- Animal Trading
- Deforestation
- Food shortage
- Car accidents

IUCN RED-LIST 2013
- 67 species

IUCN RED-LIST 2014
- 74 species

Persian lion
Caspian tiger
On average a person flushes the toilet 4.5 times a day. By putting a heavy water bottle in the toilet tank, about 5 liters of water can be saved every day per person. This has been a common method dating back to wartime rationing, when many people used bricks in the toilet to decrease their water usage.

To see how people would respond to this idea, I designed a label for empty water bottles and provided it online for download and at the same time printed a bunch of them and put them on the shelves of two supermarkets and asked the salesmen to hand them out to anyone who buys a bottle of water.
There are many direct and indirect stakeholders in wildlife conservation; almost every living creature is reliant on wildlife. From this wide range, I focus on connection between city dwellers and villagers in Iran and the importance of this correlation in protecting the wildlife. Villagers are directly dealing with the wildlife and at the same time they consist ninety percent of the poachers in Iran. This paradoxical situation arises from many environmental injustice issues combined with the demands from urbanites. Urbanites have the three main criteria of environmental justice by being provided with infrastructure (distribution), considered in the process of decision-making (recognition) and having a direct political impact (participation), while rural communities are disregarded in all three of them. At the same time because of their direct interaction with wildlife, rural communities are blamed for most of the problems that stem from this interaction, one of them being poaching.

Iran is a society in transition. It has been moving from traditions to modernism since 1900 with the emergence of Persian constitutional revolution. Because of many socio-political situations governing the society and culture of Iran, this progress has been very slow. This is creating a great gap between city dwellers and rural communities: city dwellers do not recognize a social status for those who are not “modern”, which means anyone living out of cities having non-modern jobs such as farming and ranching. And villagers feel a deep resentment towards urbanites who, they believe, benefit most from all the money gained from oil sold by the government. These perceptions drive these communities apart and take away the chance of collaboration for big problems of the country such as wildlife preservation. Along with the problem of false judgments and recognizing each other as the cause of the problem, which is shifting the burden of wildlife extinction only to the shoulders of the rural community; these groups have no access to actively engage in helping each other or knowing the living situations of the other group. So this conflict shows one social aspect of the problem of wildlife conservation, which this project will address. It will initially explore both ecological and cultural pieces of the problem in that region.
STAKEHOLDERS

Divided into two groups of allies and adversaries, there are many stakeholders in wildlife preservation. Starting from the local communities of species’ habitat to larger scales of tourists, citizens, organizations, industries, government and international groups, almost everyone is dependent on the wildlife.
A multi-player mixed-reality game about wildlife conservation

Among the three chosen stakeholders: Illegal hunters, local communities and urban communities; I found urbanites more promising for a design project considering the thesis project limitations. An audience who I had more accessibility to and used to be part of them: Youth from Tehran. Ethnographic research and expert interviews led to nine important insights and I chose five of them that resulted in a design statement.
<table>
<thead>
<tr>
<th>INSIGHTS</th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Disconnection Between Urban and Rural Communities</td>
<td>Wrong Beliefs about Environmental Issues</td>
<td>Poaching: Poverty, Pleasure and Revenge</td>
</tr>
<tr>
<td>Poaching: A Market Demand from Cities</td>
<td>Modernity vs. Tradition</td>
<td>Tech-Savvy Youth</td>
</tr>
<tr>
<td>Antagonism towards Government</td>
<td>Disconnected Consumption-Oriented Urban Lifestyle</td>
<td>Emotional Response to Environmental Issues</td>
</tr>
</tbody>
</table>
EDUCATING THE URBANITES ABOUT THE IMPACT OF THEIR LIFESTYLE ON WILDLIFE CONSERVATION
“Volunteers will commit more to volunteering for conservation activities if such activities meet their more pertinent personal and social goals of connecting with and giving back to their communities, social interacting with other volunteers and defending and enhancing their egos.”

- Stanley Asah, et. al

“I mean, that, you know, ought to be the ideal of teaching, anyway, whether it’s children or graduate students. They should be taught to challenge and to question. Images that come from the enlightenment about this say that teaching should not be like pouring water into a vessel. It should be like laying out a string along which the student travels in his or her own way, and maybe even questioning whether the string's in the right place.”

-Noam Chomsky
A game that would start a conversation about wildlife conservation
Phase one
Experiments to design a boardgame
Phase 2
Combining interactive fiction with the game
After experimentations and designing different boardgames and looking into existing games such as Day of the Figurines by Blast Theory, the game was born:

I WISH FOR AN ANIMAL

In any social activity in order for change to happen there should be physical interaction. Although I wish for an animal is played via text messaging and from anywhere in the city, it has a centerpoint where players can meet.
**REGISTER**

Create your statuette that represents you in the game
Provide your ID and phone number to receive messages

**LEARN**

Visit the centerpoint of the game where the maquette of the city and the protected area is set.
Get instructions on how to play the game.
PLAY

From the day after you’ll receive messages from the game on your phone. You can answer by a set of commands:

- Go
- Find
- Pick
- Use
- Drop

- Say
- Shout
- Update
- Leave Heemand

TRANSFORM

As you move through the city and make decisions; the city, the village and the protected area change.

The artist is transforming the model simultaneously.
UNDERSTAND

The last day is when all players can see the changes they have caused in the city and its environment: the wildlife and their own habitat.

Plus there are conservationists from an NGO [Persian Wildlife Heritage Foundation] who will answer questions and invite players to volunteer for conservation activities.
In the process of implementation three elements of the game were fabricated:

- Platform
- Content
- Space
The platform I created with the help of a developer, is a windows-based software and I had to work with it on a Mac computer. It consisted of 9 different data sections and after connecting to a server, would automatically reply to players based on their responses.
Creating the content, which were the scenarios and missions that happened in the city, was a 2-month process of reading, writing, test plays, feedback and rewriting. In the end the game held 47 different missions based on locations and time of the day. They varied from very easy to tough as game proceeded. Because it turned out that becoming familiar with the commands and ruleset of the game took some time and easy scenarios helped players get used to the logic of gameplay.
Space

RENT A SPACE
PREPARE THE TEAM
MAKE THE MATERIALS

- 2097 animals made from cardboard in 7 different species.
- 24 locations
- 500 buttons
- Booklets
- Posters
I travelled back to Tehran in early-April to test the game. I rented a space at a shopping mall and advertised a week prior to the game using this poster and also uploading a short video on Facebook and Instagram.

* Watch the video in supplementary materials
About 300 people visited the centerpoint in the opening. 85 of the registered to play. They gave us their phone numbers, customized their figure and put it in the “park”, where the game started.
As the game proceeds in the following days I am at the centerpoint changing the model based on the messages I receive from players: Tracking them in the city, destructing locations and killing players and animals.
Because of technical problems game collapsed many times: we sent 15000 messages in two days and the system overloaded. In one of these crashes when the server did not get connected, we understood that it was shut down by the police because apparently some inappropriate words were used in messages and after investigating we found out that the word is “the police”. So instead of calling off the game, I decided to ask players to come to the centerpoint in the last day and play physically around the model for 2 hours.
What I liked about it:
- Idea and concept
- Imagination
- Collaboration
- Physical model and animals
- Connecting technology, environment and daily life
- URLs referencing to real-life news
- Caring for wildlife
- Interactive nature
- Relativity of actions/decisions
- The story

What I didn’t like about it:
- Difficult and Complicated set of rules
- Short length of the game
- Too many messages
- Ambiguity
- Not deep enough
- Lack of visual content

TEHRAN
April 17
Sam Center Basement
Write a paper based on the experience

/ debug
/ test
/ run
/ publish
Conclusion

Environmental issues are an unspoken matter in Iran’s society. Although there are different NGOs and people actively engaged in the field, majority of population are uneducated and naive about it. Like almost every other society, people believe that dealing with environmental issues is a job of environmentalists. After the physical gameplay (watch the video), Amir and I had a 30-minutes conversation with players and answered their questions about the game and also wildlife conservations. Surprisingly the questions, were those I wished would be raised by playing this game and it showed that part of the goals of the game were met: starting the conversation in players’ minds and putting them in the place of decision makers.

The test-play revealed many problems of the game that need to be solved in the future before another test-play or launching the game. Players said that the scenarios could be deeper and at the same time wanted the game to be longer because they needed more time to get used to the rulesets and the mentality of the game.

The NGO that I worked with, Persian Wildlife Heritage Foundation, were amazed by the response that they received from visitors and players. They proposed to support the game in its future attempts.
Bibliography and related resources

Books


McGonigal, Jane. "Reality is broken: Why games make us better and how they can change the world". Penguin, 2011.


Stickdorn, Marc, and Jacob Schneider. "This is Service Design Thinking". New Jersey: John Wiley & Sons, Inc. 2011. Print.


Papers


Courses [Online]
Harari, Yuval Noah. “A Brief history of Human kind”. Coursera.org
Sachs, Jeffrey. “The Age of Sustainable Development". Coursera.org