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# Empathy Up

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**Abstract**

Nowadays, Syrian refugees are facing major challenges to mingle with the social life of German society. The purpose of this on-going study is to create support and increase empathy of German youths towards Syrian refugees with the developed concept called “Empathy-Up” (EMP-UP). The concept aims at levelling the playing field for them through a mobile game. The research done has shown two main critical problems faced by refugees (Syrian): (1) they do not get in contact with locals (Germans), and (2) they feel that Germans do not want to interact with them or accept them in their society.

The study shows that when combining a geo-location based mobile game that addresses cultural differences within the game scenario, it's more likely to connect players emotionally with these different cultures. This resulted in minimizing prejudices by locals, increasing their willingness to get to know refugees, and making the first contact with a refugee simpler and more positive. The empathy is created during the game while players are going through the story scenario and when the game ends, both players (locals and refugees) surprisingly meet face-to-face in reality.



Figure 1: The Syrian refugees recorded their everyday lives with the use of diaries and single-use cameras.



Figure 2: Learning German takes place in refugee classes only, although the students would like to practice it with German students.

### Author Keywords

refugees; empathy; mobile games; cultures; location-based;

### ACM Classification Keywords

H.5.1 [Information Interfaces and Presentation]: Multimedia Information Systems---Animations, Evaluation/methodology, Hypertext navigation and maps; H.5.2 [Information Interfaces and Presentation]: User Interfaces---Prototyping, Screen design, Theory and methods; K.8.0 [Personal Computing] Games.

### Introduction

Currently, Germans are facing a challenge approaching the Syrian refugees. Germans are a bit afraid of getting closer to another very different culture. Their fear is increasing by the negative image exported by the media about the refugees and Middle Easterners in general. However, some Germans took the initiative to establish "The Refugees Help Center" (Flüchtlingshilfe e.V.) in Hamm (a city in North-Rhine-Westphalia, Germany). The center is an association that aims at giving comprehensive support and aid for refugees in order to lift up their emotional state and improve their social accessibility to the German society. Volunteers go to "The Refugees Help Center" and try to help refugees overcome their lack of connection to German social life. Although refugees are learning the German language, they do not use it often in their day-to-day life, because there are no Germans in their surroundings to talk to. Moreover, refugees feel very isolated, especially when the locals show no interest in communicating with them. For Syrians, it is important and crucial to have access to the social life of their new homeland and connect to the locals. One of the big obstacles however, is the amount of negative reports

about refugees in the media. Such reports cause a kind of negative generalization in locals' minds.

In this context, our understanding of leveling the playing field can be manifested by the trial of increasing the refugees' level of openness and communication to connect more to Germans. In addition to decreasing the level of uncertainty Germans feel towards refugees. Here comes the suggestion of creating a positive emotional connection between them to level the playing field.

### Engagement with an unfamiliar cultural setting

The project team joined "The Refugees Help Centre" in Hamm and started connecting to the majority of refugees, who are Syrians. The primary data gathering technique was in the form of interviews with refugees as well as German volunteers. The project team wanted to get closer and know more about the Syrian culture and behaviour, so they decided to gather data by observation too. Hence, the project team equipped 5 Syrians with single-use cameras and diaries (see Figure 1.) to record their daily routine. It was found in the evaluation that Syrian refugees were highly motivated to integrate with German society. The team found out that both volunteers and refugees had organized some recurring events, where locals and Syrians could meet, connect and exchange their cultures together. It was also found that only a few Germans were coming to the events and refugees would still like to get to know more Germans, but they did not know other ways to get in touch with them. Due to this, the problem continued to persist. The absence of communication between Germans and Syrians, made it difficult for Syrians to learn or use the German language (see



Figure 3: Sharing knowledge at the “openTransfer Barcamp” held in Düsseldorf in September 2016.



Figure 4: Marcel Neuenhaus is sharing his research results.

Figure 2.). The lack of contact between refugees and Germans, the language barrier and the weak acceptance of Germans to refugees are the biggest problems faced by the interviewed Syrian group. Moreover, refugees are afraid that media reports giving them negative publicity would affect their image because most people have a tendency to generalize refugees with the negative images presented by the media. The results made the project team think about the emerging problem and how to solve it, starting by questioning: How to help refugees? An inspiring quote stating “*Empathy as a door to another world*” [1], gives the answer, “Empathy”. Empathy is a term that describes a person’s ability and willingness to recognize and understand thoughts, emotions and motives of another person [1]. Putting ourselves in their position and understanding the situation of refugees was a core motivation for helping them.

The project team started thinking of a solution to the problem by creating empathy between the two parties (locals and refugees) in an innovative way. A tech-supported solution may help people get to know others from different cultural backgrounds more closely, rather than simply through superficial social networks. To achieve this, it was important for the project team to take a step further in the research and find profound data that would support the direction of the project.

Therefore, to get a broader view of the idea of connecting people from different cultures face-to-face, additional surveys were created and sent to people from different countries (Germany, China and Australia). The surveys ask them about their first experiences meeting and dealing with people from

another culture. The participants described their experiences as follows:

- Their first point of contact with another culture was already in their early childhood (at school for example and this was normal for them).
- They become familiar with foreign cultures, because it makes them feel that they broaden their horizons and more open to others. The overall feedback was: Getting to know people from other cultures is a positive experience.

Participants also stated why they think it is hard to build up empathy with people from different cultures:

- National problems and personal interests of locals are the number one priority for them.
- The refugees’ situation is too complicated to understand.
- Some prejudices and stereotyping about other cultures (negative media reports, their appearance, and their religion rituals are a few examples).
- Feeling empathetic can make them uncomfortable and could lead to personal stress or emotional pain.

Another survey was also conducted to reveal the differences between German and Syrian cultures, food, religions and traditions. Results indicated interesting variance. This encouraged us to exploit differences in a positive way that can harmonize the new societal weave. An example of a game scenario where cultural integration could occur, was how to get Germans to try the Syrian cuisine. It’s worthwhile mentioning that current available games portray refugees as mistaken running away from a chase. Such impression does not provide a fertile environment for building empathy.



Figure 5: A preview from Egufer's journey after entering the world of Syrdland.

### The Design Focus

Data gathering and analysis indicated the possibility to innovate a concept that creates empathy for Syrian refugees to resolve the encountered problems using technology. Research outcomes showed different results reflecting the actual situation. The project team identified the gaps where links are needed as follows:

- Traditional way of inviting Germans to get to know refugees in collaborative meetings is not working. Therefore, the project team started thinking of a mobile app as a different way of getting people in touch as it's a technology known for its widely-spread.
- Prejudices are preventing Germans from approaching refugees, thus they don't try their own experiences themselves meeting refugees. Therefore, it was crucial to think of ways to stimulate and encourage Germans to take that step approaching in refugees. A game to play would be an emboldening idea.
- Target group to be addressed would be youths, as they could be more open-minded and really interested in playing mobile games.
- Merging cultural aspects in the game story in an explorative sense (like finding a Syrian restaurant) may make it more exciting and may narrow the cultural gap of both parties.
- Make the game mirror the real world in the virtual world with similar context, like the known Syrian food in Germany, so players link game surroundings from virtual to real world.

These were the main primary design decisions that helped us imagine the solution spaces in order to level the playing field in this context.

### Discovering Solution Spaces

To get deeper into the specifics of the solution spaces, the project team joined a conference addressing refugees' topics for brainstorming where innovators and experts attended. Research results and primary design decisions were presented at "openTransfer Barcamp" in Düsseldorf city, Germany (see Figure 3). The "openTransfer" is a foundation that encourages exchange and development of knowledge transfer systems supporting social innovation [2].

"OpenTransfer" conducted a barcamp last September, themed "#Arrive". The barcamp had participants with different expertise sharing one goal: supporting young refugees to arrive safely to Germany. The project team presented the topic of creating empathy for refugees using technology (see Figure 4). The topic received the greatest attention among the parallel running sessions, which led to live and active group analysis. All participants agreed that developing a mobile app is the way to go, so as to reach as many people as possible. The brainstorming included the advantages and disadvantages of modern technologies like augmented reality and gaming concepts (like what Pokémon Go does). The rich discussion led to the suggestion of gaming and that it could stimulate curiosity and make people eventually want to explore more areas that are new. A participant stated that: *"Germans like to play and that should be as easy as possible, so how about making users discover their surroundings with a new cultural setting?"*

The discussion session ended up with significant design decisions which helped the formation of the new innovative concept, "Empathy-UP". It is the use of technology to create empathy for refugees through a



Figure 6: This is how the first reaction of one of the participants looked like when she got asked to describe her last contact with a Syrian refugee before the test.



Figure 7: This is the same participant as in Figure 6 showing her reaction to her last contact with a Syrian refugee after the test.

mobile game within a geographical context. It was suggested during the brainstorming that integrating cultural aspects in an explorative way is important to connect Germans and Syrians emotionally. The idea of making it a geo-based mobile game was inspired, so it would be something of a mix between “Pokémon Go” and “Geo Caching”. It is like “Pokémon Go” in moving from one place to another via a map copying reality, and like “Geo Caching” in finding certain geo-points to get in touch with different cultural characteristics then move to the next geo-point throughout the game story. Both Germans and refugees are supposed to play the game. Human memory associates things to locations, and for this reason maps element was chosen. Maps help players to explore their surroundings extensively by getting to know more about cultural locations (like restaurants and mosques), which helps dissolve the psychological barriers Germans have towards Syrians. This is supposed to happen through the game’s characters, scenario and story that encourages emotional connection between the two players (locals and refugees) until they meet in reality face-to-face at the end of the game.

### Building The Concept

The project team put together research outcomes to reach the final design decisions. The objective of this application is to smooth or level the differences between Germans and Syrians and to create emotional link or empathy between them. In order for both players to consistently play the game, they require the necessary motivation. If the game design fulfilled the need of Syrians to meet and approach more Germans and talk to them, then this would be an essential factor to motivate Syrians to frequently play the game. If this game offers the element of discovery with surprising

endings, it will be more appealing for Germans to play it frequently because they are seen playing games such as “Pokémon Go” and “Geo Caching” elsewhere. In the game, each player selects the original country where he/she comes from. The game then shows the player an automatic assigned co-player (from different country existing around) selected upon geographical proximity as the selection criteria, not matching by players’ profile. As a result of the analysis, the concept of “EMP-UP” was created. The decisive factor for empathy creation is the experience of a situation or storytelling [3]. The cultural features were the resources and components for the designed game story of the main game character, “Egufer” (read it backwards Refuge (e)) as outlined below:

Egufer chases a sparkling star on the mobile screen, (moving from one location to another) which takes him to the world of “Syrdland”, where citizens represent real refugees). Egufer cannot find his way back until he meets the virtual “Ziad” (Syrian refugee), who helps him through the game. At the end of the game the player discovers that he actually walked the way of Egufer to find the real Ziad (the player) who appears in reality surprisingly to the player who walks the streets while playing the game. Thus, the player jumps from the game into the real life meeting his co-player face-to-face.

According to Rupp [3] a traveling and returning type of storytelling provides a kind of narration that allows the player to jump into a parallel world where the player is able to learn, experience, solve problems and return to the reality with more knowledge and wisdom. This type of storytelling is optimal for developing the game because it gives enough information for a parallel



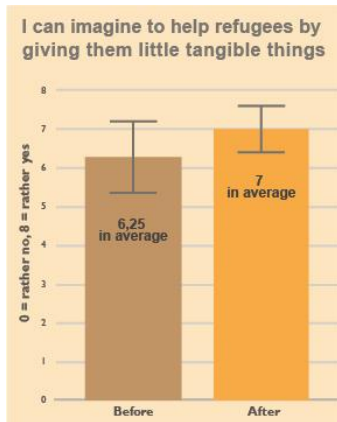


Figure 8: Visualization of the results of the participants' willingness to help refugees by giving them little tangible things.

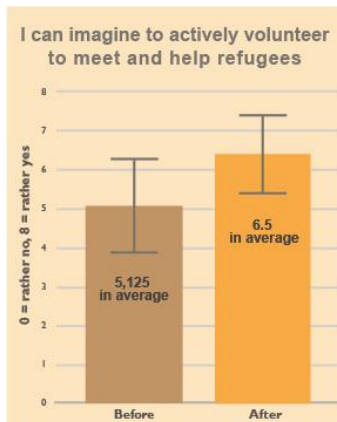


Figure 9: Visualization of the results for the idea of actively volunteering to meet and help refugees. volunteering to meet and help refugees.

world. It is also famous and meaningful seen in movies such as "Alice in Wonderland" [3]. Hence, Egufer's journey goes as follows:

- Player (Egufer) interacts with a star sparkling at any bus stop. The star takes the player to a parallel world called "Syrdland", with a view of a map like Google Maps (see Figure 5.).
- The Mentor advises Egufer to deal with Syrdland people to collect "points" for the journey back.
- The game steps range from obtaining Syrian food ingredients to praying. The player walks in streets (in the real world), visiting places in the story context (like in Pokémon Go). The player is asked to buy some food in the game, he walks in reality to the ingredients' supplier (e.g. Arabian shop). All game elements have been customized to Syrian culture.
- Egufer is about collecting enough points to go back. The digital Ziad offers him to get to know his people more closely. If yes, Egufer reaches the full score and is back, where Egufer is very close to the real "Ziad" (Syrian co-player). The game displays a thrilling notification to follow the last sparkle to find the surprising real Ziad face-to-face.

The real Ziad, is similar to the visual and vocal display in the game. This represents the transition from the digital world to the real contact with refugees.

This concept is assuming that the players would experience with Egufer the difficulties that are experienced in reality by the Syrian refugees. Each experience provides the user with interesting hints about the Syrian culture to start creating empathy.

## Test and Evaluation

The mobile app used in the field testing was the working prototype with one game scenario just as a proof of concept (creating empathy). Eight people participated in the test to identify their long-term empathy [4] in pre-game and post-game tests. The participants were asked about their knowledge and their first contact with a Syrian refugee (see Figures 6 and 7). The participants' reactions when meeting the Syrian person in reality were very positive. This event was mainly for almost all of them, their first contact with a Syrian refugee. The participants liked the surprise and were fascinated by the transition from the digital to the real world.

The "EMP-UP" concept also led to significant differences (using t-test) in the attitudes towards the willingness to help refugees by giving them little tangible things ( $p=0.047$ ) (see Figure 8), as well as the idea of actively volunteering to meet and help refugees ( $p=0.02$ ) both results are  $< 0.05$ , which is significant) (see Figure 9).

The results of user investigations show evidence and consensus of positive user feedback which indicates the creation of empathy to support refugees and level the playing field by the "EMP-UP" concept.

For future hypothesis testing of scaling and increasing motivation to play the game, it is being considered to test offering digital vouchers (when game ends) to players for restaurants they passed by during game play (e.g. each player gets 10% discount in the Syrian restaurant), Both players would be able then to sit, talk and eat after playing the game which would be real social networking!

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